LANDSCAPE CHARCTER ASSESSMENT 1. **TABLES**

1.1 County Cork

LCT 2 Broad Bay Coas	st
Distance from Site to Nearest/Furthest Area of LCT	The closest proposed turbine is approximately 5.7 kilometres away from the closest point of this LCT, and approximately 32.4 kilometres away from the furthest point.
LCT Key Characteristics	 The coastline sweeps in broad bays flanked by low promontories, terminating along the shore with low cliffs, and a combination of rocky shores and long crescent shaped bays, such as Ballycotton Bay and Youghal Bay Inland, moderately sized fertile fields bounded by low broadleaf hedgerows, are used mostly for dairy pasture but also some tillage. Isolated cottages, two-storey houses and farmsteads are scattered across the landscape
Visibility within LCT	Of the parts of this LCT within the study area there is largescale full theoretical visibility in the south and one band in the north, west of Youghal. Viewpoint 9 is located within this LCT (although just outside the 15-kilometre landscape character study area. At this viewpoint, the residual visual effects are considered 'Not significant'.
Cumulative Baseline	There are no existing wind farms within this LCT and there appears to be no wind turbines visible from other areas.
Cumulative Landscape Status	1 - LCT with no wind turbines
Cumulative Landscape Effects	The cumulative landscape status remains unchanged. Therefore, cumulative landscape effects are considered Low .
Landscape Sensitivity to Wind Farm Development	The 2007 Cork County Draft Landscape Strategy states that 'this area is regarded as a "Strategically Unsuitable Area" for windfarm developments. The tame nature of this landscape would not lend itself to windfarm development. Such developments in this area would dominate the surrounding landscape.'
	Therefore, a Very High landscape sensitivity to wind farm development is assigned for this LCT.
Magnitude of Change	Slight - The loss of or change to landscape features of limited extent, or changes to landscape character in smaller areas. Changes would not affect key characteristics. The addition of any new features or elements to the landscape would only result in low-level changes to the overall aesthetics of the landscapes. Changes to the landscape are more evident at a local level and not over a wide geographical area.

LCT 2 Broad Bay Coast	
Significance of Effect	Very High x Slight = Moderate = Significant (EPA, 2017) An effect, which by its character, magnitude, duration or intensity alters a sensitive aspect of the environment.
Mitigation Factors	 In most areas of this LCT the primary focus of views will be towards the sea rather than inland. Landscape effects reduced by intervening distance (nearest part of LCA is nearly 6 km away) Residual visual effects at the viewpoint within this LCT are considered 'Not significant'. Greatest theoretical visibility within this LCT within the study area is indicated in the south, the area most distant from the turbines. Siting and design are in accordance with the DoEHLG guidelines (2006) with the Hilly and Flat Farmland landscape character types.

LCT 6b Broad Fertile Lowland Valleys (Cloyne, Castlemartyr, Killeagh and Environs)	
Distance from Site to Nearest/Furthest Area of LCT	The closest proposed turbine is approximately 8 kilometres away from the closest point of this LCT, and approximately 28.7 kilometres away from the furthest point.
LCT Key Characteristics	 River Womanagh and its valley are surrounded by low well-spaced ridges. Landcover comprises highly fertile, regularly shaped fields typically of medium size and with mature broadleaf hedgerows Fields are bounded mostly by mature broadleaf hedgerows but also by post and wire fencing. Lower hedgerows prevail further to the west on higher ground Scrub and areas of gorse are relatively rare, but groups of broadleaf trees and shelter belts are common, providing punctuation across the landscape or hinting at the presence of farmsteads
Visibility within LCT	Full theoretical visibility is indicated for approximately a third of the areas of this LCT within the study area. No viewpoints are located within this LCT.
Cumulative Baseline	There is one existing wind farm with two turbines in the most south-western corner of this LCT at a distance of approx. 25 kilometres from the nearest proposed turbine.
Cumulative Landscape Status Cumulative	2 - LCT with occasional wind turbines in it and/or intervisible in another landscape character area/s The proposed development will slightly add to the cumulative landscape
Landscape Effects	effects but not change the status identified above. Therefore, cumulative landscape effects are considered Low .

LCT 6b Broad Fertile Lowland Valleys (Cloyne, Castlemartyr, Killeagh and Environs)	
Landscape Sensitivity to Wind Farm Development	The 2007 Cork County Draft Landscape Strategy states that 'this area is not regarded as a "Strategic Search Area" or a "Strategically Unsuitable Area" for windfarm developments. In the majority of areas the relatively tame nature of this landscape with its broad valleys would not lend itself to Windfarm development as such developments may dominate the surrounding landscape.' Therefore, a High landscape sensitivity to wind farm development is assigned for this LCT.
Magnitude of Change	Slight - The loss of or change to landscape features of limited extent, or changes to landscape character in smaller areas. Changes would not affect key characteristics. The addition of any new features or elements to the landscape would only result in low-level changes to the overall aesthetics of the landscapes. Changes to the landscape are more evident at a local level and not over a wide geographical area.
Significance of Effect	High x Slight= Moderate/Minor = Moderate (EPA, 2017) An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends.
Mitigation Factors	 > Greatest theoretical visibility within this LCT within the study area is indicated in the south, the area most distant from the turbines. > Landscape effects greatly reduced by intervening distance (nearest part of LCA is 8 km away) > Siting and design are in accordance with the DoEHLG guidelines (2006) with the Hilly and Flat Farmland landscape character types.

LCT 6c Broad Fertile Lowland Valleys (Castelyons – Rathcormac)	
Distance from Site to Nearest/Furthest Area of LCT	The closest proposed turbine is approximately 3.6 kilometres away from the closest point of this LCT, and approximately 24.3 kilometres away from the furthest point.
LCT Key Characteristics	 Landcover comprises highly fertile, regularly shaped fields typically medium size and with mature broadleaf hedgerows Strong patchwork field boundaries are one of the main characteristics of this landscape Fields are bounded mostly by mature broadleaf hedgerows but also by post and wire fencing. Lower hedgerows prevail further to the west on higher ground
Visibility within LCT	Full theoretical visibility is indicated for the majority of the areas of this LCT within the study area. Viewpoints 13 and 14 are located within this LCT. For these viewpoints, the residual visual effects are considered 'Slight' and 'Not significant', respectively.
Cumulative Baseline	There are no existing wind farms within this LCT and there appears to be no wind turbines visible from other areas.

LCT 6c Broad Fertile I	.owland Valleys (Castelyons – Rathcormac)
Cumulative Landscape Status	1 - LCT with no wind turbines
Cumulative Landscape Effects	The cumulative landscape status remains unchanged. Therefore, cumulative landscape effects are considered Low .
Landscape Sensitivity to Wind Farm Development	The 2007 Cork County Draft Landscape Strategy states that 'this area is not regarded as a "Strategic Search Area" or a "Strategically Unsuitable Area" for windfarm developments. The tame nature of this landscape would not lend itself to windfarm development as such developments would dominate the surrounding landscape.' Therefore, a High landscape sensitivity to wind farm development is assigned for this LCT.
Magnitude of Change	Slight - The loss of or change to landscape features of limited extent, or changes to landscape character in smaller areas. Changes would not affect key characteristics. The addition of any new features or elements to the landscape would only result in low-level changes to the overall aesthetics of the landscapes. Changes to the landscape are more evident at a local level and not over a wide geographical area.
Significance of Effect	High x Slight= Moderate/Minor = Moderate (EPA, 2017) An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends.
Mitigation Factors	 Despite the nearest turbines will be located 3.6 kilometres from this LCT this LCT covers a large area and the turbines will be 24.3 kilometres from the furthest part of the LCT. Therefore, the landscape effects on the LCT as a whole are considerably reduced. Residual visual effects for the two viewpoints within this LCT are considered 'Slight' and 'Not significant'. Siting and design are in accordance with the DoEHLG guidelines (2006) with the Hilly and Flat Farmland landscape character types.

LCT 10b Fissured Fertile Middleground (Rylane east to Waterford)		
Distance from Site to Nearest/Furthest Area of LCT	The proposed turbines are situated within this Landscape Character Type within County Cork. The most distant part of this LCT is approximately 61.4 Kilometres from the nearest turbine.	
LCT Key Characteristics	 This landscape type has characteristics of both the flatter fertile farmland areas and the higher marginal hilly farmland Many of the rivers in the western parts extend beyond this landscape type and feed into the River Lee and Bandon River while those to the east head southwards to the sea This is an elevated landscape, which is fissured by fairly gentle slopes, with reasonably fertile agricultural land comprising a mosaic of small to medium sized fields with broadleaf hedgerows 	

LCT 10b Fissured Ferti	le Middleground (Rylane east to Waterford)
	Three sites have been identified to be worthy designation for protection within this landscape type. All three are woodlands that have retained a strong native character and a good diversity of species both in the canopy and in the ground layer
Visibility within LCT	Full theoretical visibility is indicated for approximately half of the parts of the LCT within the study area. Viewpoints 8, 10 and 12 are located within this LCT. At these viewpoints, the residual visual effects are considered 'Moderate', 'Slight' and 'Not significant', respectively.
Cumulative Baseline	There is one approx. 90m high turbine in the west of this LCT at a distance of approx. 50.5 kilometres from the nearest proposed turbine. No anticipated inter-visibility of the existing and proposed turbines
Cumulative Landscape Status	1 - LCT with no wind turbines
Cumulative Landscape Effects	The proposed development will slightly add to the cumulative landscape effects and change the cumulative landscape status from 1 to 2 an ' <i>LCT with occasional wind turbines</i> '. Therefore, cumulative landscape effects are considered Medium .
Landscape Sensitivity to Wind Farm Development	The 2007 Cork County Draft Landscape Strategy states that 'there are numerous areas that have been identified under the County Development Plan as "Strategic Search Areas". The majority of these areas are found to the northwest and west of this landscape type and the rest are scattered to the centre and east. Currently Windfarms are not a feature of the landscape but as much of the landscape is generally a preferred location for Windfarms, they may become more prominent in the future'. Therefore, a Low landscape sensitivity to wind farm development is assigned for this LCT.
Magnitude of Change	Slight - The loss of or change to landscape features of limited extent, or changes to landscape character in smaller areas. Changes would not affect key characteristics. The addition of any new features or elements to the landscape would only result in low-level changes to the overall aesthetics of the landscapes. Changes to the landscape are more evident at a local level and not over a wide geographical area.
Significance of Effect	Low x Slight = Minor/Negligible = Not Significant (EPA, 2017) An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.
Mitigation Factors	 ZTV mapping shows large areas with no visibility. Although the turbines will be located just within the eastern edge of this LCT the whole area of the LCT is vast and stretches up to approximately 61.4 kilometres west of the nearest turbine. Therefore, the landscape effects on the LCT as a whole will be Low. Residual visual effects for the three viewpoints within this LCT are considered "Moderate", 'Slight' and 'Not significant'. Siting and design are in accordance with the DoEHLG guidelines (2006) with the Hilly and Flat Farmland landscape character types.

County Waterford 1.2

Prov. LCA 1 South-We	stern Upland Plateau
Distance from Site to Nearest/Furthest Area of LCA	The proposed turbines are situated within this Landscape Character Area within County Waterford
LCA Key Characteristics	 > Upland plateau with levels between approx. 100 and 200 m O.D. > Due to the topography views are mainly restricted to within this LCA. > Mixture of coniferous forestry plantation and agricultural fields. Some wide bands of broadleaf forest along rivers and streams. Areas of scrub can also be frequently found. > Fields are bounded mostly by mature broadleaf hedgerows but also by post and wire fencing. Lower hedgerows prevail further to the west on higher ground. Hedgerow removal to enlarge field size is evident in many areas. > No settlements but frequent on-off houses by themselves or in clusters.
Visibility within LCA	Mixture of full and partial theoretical visibility with some areas of no visibility in the northern and eastern areas of this LCA. Viewpoints 2, 3 and 7 are located within this LCA. For these three viewpoints the residual visual effects are considered 'Slight' and 'Moderate'.
Cumulative Baseline	There are no existing wind farms within this LCT, however, the Barranafaddock turbines to the north and Woodhouse and Knocknamona to the east will be visible in the distance from parts of this LCA.
Cumulative Landscape Status	2 - LCA with occasional wind turbines in it and/or intervisible in another landscape character area/s
Cumulative Landscape Effects	The proposed development will slightly add to the cumulative landscape effects but not change the status identified above. Therefore, cumulative landscape effects are considered Low .
Landscape Sensitivity to Wind Farm Development	On the Waterford Wind Energy Strategy Map the vast majority of this Prov. LCA is classed as 'Preferred Areas' with some small areas 'No-Go Areas'. Therefore, a Moderate landscape sensitivity to wind farm development is assigned for this prov. LCA.
Magnitude of Change	Moderate A more limited loss of or change to landscape features over a medium extent which will result in some change to landscape features and aesthetics. Could include the addition of some new uncharacteristic features or elements that would lead to the potential for change in landscape character in a localised area or part of a landscape character area. Would include moderate effects on the overall landscape character that do not affect key characteristics.
Significance of Effect	Moderate x Moderate= Moderate/Minor = Moderate (EPA, 2017) An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends

Prov. LCA 1 South-Western Upland Plateau	
Mitigation Factors	 ZTV mapping shows some areas with no visibility and some of these coincide with the small areas with int the ZTV classed as 'No-Go Areas' on the Waterford Wind Energy Strategy Map Widespread screening by forestry and roadside vegetation Residual visual effects for the three viewpoints within this LCT are considered 'Moderate' and 'Slight'. Siting and design are in accordance with the DoEHLG guidelines (2006) with the Hilly and Flat Farmland landscape character types.

Prov. LCA 2 River Val	leys and Lowlands
Distance from Site to Nearest/Furthest Area of LCA	The closest proposed turbine is approximately 2.8 kilometres away from the closest point of the LCA, and approximately 16.9 kilometres away from the furthest point of the LCA.
LCA Key Characteristics	 This LCA is defined by the Blackwater and Bride River Valleys and their tributaries. The wide, lowland Blackwater and Bride River Valleys run in parallel east to west. A series of hills and ridges separates these two river valleys allowing no intervisibility between them. Away from the rivers the landscape is dominated by agricultural fields separated by hedgerows and treelines, although, hedgerow removal is evident in many areas. Alluvial forests are dominated by alder and willow on flood plains in a range of situations from islands in river channels to low-lying wetlands alongside the channels Oak woodland is well developed on sandstone around Ballinatray Includes significant settlements such as the towns of Lismore and Cappoquin
Visibility within LCA	Apart from patches of partial visibility there are two distinct bands of visibility running east to west. One is to the north of the River Blackwater and the other further south between the River Blackwater and River Bride Valleys. No viewpoints are located within this LCT.
Cumulative Baseline	There are no existing wind farms within this LCT, however, the Barranafaddock turbines to the north will be visible from many parts of this LCA.
Cumulative Landscape Status	2 - LCA with occasional wind turbines in it and/or intervisible in another landscape character area/s
Cumulative Landscape Effects	The proposed development will slightly add to the cumulative landscape effects but not change the status identified above. Therefore, cumulative landscape effects are considered Low .
Landscape Sensitivity to Wind Farm Development	On the Waterford Wind Energy Strategy Map there are 'Preferred Areas' 'Areas Open for Consideration', however, the majority of this LCA has been classes as 'No-Go Areas'. Therefore, a High landscape sensitivity to wind farm development is assigned for this prov. LCA.

Prov. LCA 2 River Valleys and Lowlands	
Magnitude of Change	Negligible A change affecting smaller areas of landscape character including the loss of some landscape elements or the addition of features or elements which are either of low value or hardly noticeable.
Significance of Effect	High x Negligible = Minor = Slight (EPA, 2017) An effect which causes noticeable changes in the character of the environment without affecting its sensitivities.
Mitigation Factors	 ZTV mapping shows large areas with no visibility, most of which coincide with areas that have been classed as 'No-Go Areas' in the Waterford Wind Energy Strategy Map. Large areas of Widespread mature vegetation screens the proposed turbines from most areas of this LCA, this is reflected in no viewpoints being selected in this area. Siting and design are in accordance with the DoEHLG guidelines (2006) with the Hilly and Flat Farmland landscape character types.

Prov. LCA 3 Drum Hills	
Distance from Site to Nearest/Furthest Area of LCA	The closest proposed turbine is approximately 6.4 kilometres away from the closest point of the LCA, and approximately 22.3 kilometres away from the furthest point of the LCA.
LCA Key Characteristics	 This LCA is dominated by the Drum Hills, an upland area in the northern part of this LCA. Other lower hills to the south add the upland character. The Licky River passes through the southern part of the LCA and is densely wooded with broadleaf and coniferous forests along the majority of its course Widespread coniferous plantation with some small areas of moorland in the upland areas. Lower slopes are characterised by agricultural fields surrounded by hedgerows No settlements, but widespread one-off houses and farmsteads.
Visibility within LCA	The ZTV shows that the majority of this LCA will have no visibility and the bands of theoretical visibility are concentrated mainly towards the west. Viewpoints 4 and 5 are located within this LCA, albeit Viewpoint 5 is not within the landscape character 15-kilometre study area. The visual effects at these viewpoints were 'Slight' and 'Not significant', respectively.
Cumulative Baseline	The existing Woodhouse and permitted Knocknamona turbines are located in the northern part of this LCA and the Barranafaddock turbines will be visible in the far distance from parts of this LCA.
Cumulative Landscape Status	2 - LCA with occasional wind turbines in it and/or intervisible in another landscape character area/s
Cumulative Landscape Effects	The proposed development will very slightly add to the cumulative landscape effects but not change the status identified above. Therefore, cumulative landscape effects are considered Low .

Prov. LCA 3 Drum Hills		
Landscape Sensitivity to Wind Farm Development	On the Waterford Wind Energy Strategy Map approximately half the prov. LCA is classed as a 'No-Go Areas', while the remainder is a mixture of 'Strategic Area' and 'Areas Open for Consideration'. Therefore, a High landscape sensitivity to wind farm development is assigned for this prov. LCA.	
Magnitude of Change	Slight The loss of or change to landscape features of limited extent, or changes to landscape character in smaller areas. Changes would not affect key characteristics. The addition of any new features or elements to the landscape would only result in low-level changes to the overall aesthetics of the landscapes. Changes to the landscape are more evident at a local level and not over a wide geographical area.	
Significance of Effect	High x Slight= Moderate/Minor = Moderate (EPA, 2017) An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends	
Mitigation Factors	 Intervening distance (in excess of 9km) Wind turbines already an element in this landscape Landscape effects reduced by intervening distance (nearest part of LCA in excess of 6 km) Most of the full theoretical visibility as indicated by the ZTV map falls into the 'Strategic Area' within this LCA shown on the Waterford Wind Energy Strategy Map. Residual visual effects at the two viewpoints within this LCA are considered 'Slight' and 'Not significant'. Siting and design are in accordance with the DoEHLG guidelines (2006) with the Hilly and Flat Farmland landscape character types. 	

Prov. LCA 4 Coastal	
Distance from Site to Nearest/Furthest Area of LCA	The closest proposed turbine is approximately 10.6 kilometres away from the closest point of the LCA, and approximately 33.6 kilometres away from the furthest point of the LCA.
LCA Key Characteristics	 The shoreline is predominantly steep and rocky with occasional sandy coves. The coastline includes the large bays at Youghal and Dungarvan Inland areas are dominated by medium to large agricultural fields that extend as far as the cliff tops Fields are most commonly bounded by hedgerows There are numerous setllements and one-off houses and farmsteads are regularly spaced between these settlements
Visibility within LCA	Just over half the areas of this LCA within the 15-kilometre study area will have full or partial theoretical visibility. Viewpoint 6 is located within this LCA, however, this viewpoint is outside the 15 kilometre landscape character study area. Visual effects from this viewpoint were considered 'Not Significant'.

Prov. LCA 4 Coastal	
Cumulative Baseline	There are no existing wind farms within this LCA and it is unlikely that any of the existing or permitted turbines within the study area will be visible due to screening by landform and distance.
Cumulative Landscape Status	1 - LCA with no wind turbines
Cumulative Landscape Effects	The proposed development will very slightly add to the cumulative landscape effects but not change the status identified above. Therefore, cumulative landscape effects are considered Low .
Landscape Sensitivity to Wind Farm Development	The Waterford Wind Energy Strategy Map shows that there are equal areas 'Strategic Area', 'Areas Open for Consideration' and 'No-Go Areas' as well as a smaller area of 'Preferred Areas'. Therefore, a High landscape sensitivity to wind farm development is assigned for this prov. LCA.
Magnitude of Change	Slight The loss of or change to landscape features of limited extent, or changes to landscape character in smaller areas. Changes would not affect key characteristics. The addition of any new features or elements to the landscape would only result in low-level changes to the overall aesthetics of the landscapes. Changes to the landscape are more evident at a local level and not over a wide geographical area.
Significance of Effect	High x Slight= Moderate/Minor = Moderate (EPA, 2017) An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends
Mitigation Factors	 In most areas of this LCT the primary focus of views will be towards the sea rather than inland. Landscape effects greatly reduced by intervening distance (nearest part of LCA in excess of 10 km) Residual visual effects at the viewpoint within this LCA are considered 'Not significant'. Siting and design are in accordance with the DoEHLG guidelines (2006) with the Hilly and Flat Farmland landscape character types.

Prov. LCA 6 Knockmealdown Mountains		
Distance from Site to	The closest proposed turbine is approximately 11.9 kilometres away from	
Nearest/Furthest Area	the closest point of the LCA, and approximately 22.5 kilometres away from	
of LCA	the furthest point of the LCA.	
LCA Key	 Linear range of mountains with dramatic topography,	
Characteristics	Knockmealdown is the highest at 794m Peat and moorland covered peaks Extensive coniferous plantations on the mid to lower slopes The foothills and lower slopes are dominated by agricultural land uses No dwellings on the upper slopes and sparsely populated on the lower slopes	

Prov. LCA 6 Knockmealdown Mountains		
	Araglin River forms an upland river valley is within the north-west of this LCA	
Visibility within LCA	Just over half the areas of this LCA within the 15-kilometre study area will have full or partial theoretical visibility. Viewpoints 1 and 15 are located within this LCA, however, both are outside the 15-kilometre landscape character study area. From both these two viewpoints the residual visual effects are considered 'Not significant'	
Cumulative Baseline	The existing Barranafaddock turbines are located in the western part of this LCA and the existing Woodhouse and permitted Knocknamona turbines will be visible in the far distance from parts of this LCA.	
Cumulative Landscape Status	2 - LCA with occasional wind turbines in it and/or intervisible in another landscape character area/s	
Cumulative Landscape Effects	The proposed development will slightly add to the cumulative landscape effects but not change the status identified above. Therefore, cumulative landscape effects are considered Low .	
Landscape Sensitivity to Wind Farm Development	The Waterford Wind Energy Strategy Map shows approximately equal areas of 'Preferred Areas', 'Areas Open for Consideration' and 'No-Go Areas'. Therefore, a Moderate landscape sensitivity to wind farm development is assigned for this prov. LCA.	
Magnitude of Change	Negligible A change affecting smaller areas of landscape character including the loss of some landscape elements or the addition of features or elements which are either of low value or hardly noticeable.	
Significance of Effect	Moderate x Negligible = Minor/Negligible = Not Significant (EPA, 2017) An effect which causes noticeable changes in the character of the environment but without significant consequences.	
Mitigation Factors	 Landscape effects greatly reduced by intervening distance (nearest part of LCA in excess of 12 km) Widespread mature vegetation in the areas within the landscape character study area screens the proposed turbines from most areas of this LCA. Residual visual effects at both the two viewpoints within this LCA are considered 'Not significant'. Full theoretical visibility as indicated by the ZTV map mainly coincides with area classes as 'Preferred Areas' on the Waterford Wind Energy Strategy Map within the landscape character study area. Siting and design are in accordance with the DoEHLG guidelines (2006) with the Hilly and Flat Farmland landscape character types. 	