APPENDIX 13-2

LCA ASSESSMENT TABLES

1. LANDSCAPE CHARACTER ASSESSMENT

This appendix comprises an impact assessment addressing the landscape effects of the Proposed Project upon each designated Landscape Character Area (LCA) scoped in for assessment in Section 13.4.3 of Chapter 13 of this EIAR.

The impact assessment for each LCA is set out in its own table below. In the tables, the discussion of theoretical visibility in each LCA refers to Zone of Theoretical Visibility (ZTV) mapping as outlined in Section 13.3 'Visibility of the Proposed Project' of the chapter.

It is recommended that the impact assessments in this appendix are read in conjunction with Figure 13-12: Landscape Character Areas with ZTV in Chapter 13. Figure 13-12 illustrates the boundary of each LCA and is overlain by the Half-Blade ZTV, which extends to the 15km LCA Study Area for the assessment of effects on designated LCAs; the brief and full methodologies for determining the LCA Study Area boundary are provided respectively in Section 13.2.2 'Scope of the LVIA and Study Areas' of the main chapter and in Section 1.4 of the same name in Appendix 13-1: LVIA Methodology. As discussed in Section 13.4.1.1.4 of Chapter 13, the Landscape Character Assessment of County Clare LCACC (ERM Ireland Ltd, 2004) have identified 21 no. distinct LCAs. These are also discussed within the CCDP Volume 6: Clare Wind Energy Strategy, discussing LCA's and their capacity for wind energy. Section 13.4.3 of Chapter 13 has scoped in 5 no. LCAs for assessment, which are discussed in the table below.

Regarding the 'Significance of Effect' ratings in the tables below: The definition of classification is taken from the 'Guidelines on the Information to be Contained in Environmental Impact Assessment Reports' of the Environmental Protection Agency of Ireland (EPA) (2022); refer to Section 1.7.5 'Landscape Effects Assessment Matrix' in Appendix 13-1.

1.1 Landscape Character Areas

1.1.1 LCA 17 – Sliabh Callan Uplands

LCA 17 – Sliabh Callan Uplands	
Distance from the Proposed Turbines to Nearest/Furthest Area of LCA	All 9 No. Proposed Turbines are located within the northwest area of this LCA. The LCA extends a further 5.6 kilometres to the north and 20.9 kilometres to the southeast, beyond the LCA Study Area.
LCA Key Characteristics *(As reported in the LCACC, which forms part of the CCDP 2023-2029)*	› *"Land rises to moorland hills of Sliabh Callan and Ben Dash.* › *Mix of pasture, silage and coniferous habitats.* › *Very little settlement, concentrated along communication routes and in outer parts of the area.* › *Areas become increasingly rural as one travels eastwards, away from the coast.* › *Communications is aligned along valleys.* › *Uplands very exposed, valleys contained but unenclosed. Long views south from Ben Dash towards Shannon Estuary".*
Landscape Sensitivity to Wind Farm Development	The Proposed Turbines are sited within a designated Strategic Area for wind energy development within this LCA. Large portions of the wider LCA designated are also designated as either 'Strategic Area' or 'Acceptable in Principle' for wind energy development. Notably, this LCA accommodates the

	majority of the 'Strategic Areas' designated for wind energy development in West Clare under the Clare Wind Energy Strategy. Table 4a of Volume 6 of the CCDP, which provides the strategic guidance on landscape capacity for wind energy developments within LCAs, identifies Sliabh Callan LCA has an overall "*Medium to Low"* sensitivity to wind energy development. This is the lowest landscape sensitivity classification to wind energy development in County Clare. It further states that it is capable to accommodate *"a number of* ***large or medium wind farms*** *subject to careful siting to avoid significant impacts on skylines".* Therefore, on balance, the sensitivity of this LCA to wind energy development is **'Low'**.
Visibility of the Proposed Project within LCA	There is primarily full theoretical visibility of the Proposed Turbines in this LCA, within 5km of the Proposed Wind Farm Site. There is a patch of no theoretical visibility and some partial visibility in the northwest corner of this LCA. The large landform of Slieve Callan to the southeast, and a ridgeline approximately 9km south, limits visibility from large areas of this LCA further to the south and south-east from the Proposed Wind Farm Site where there are some patches of full and partial theoretical visibility. VPs 03, 04, 10, 16, and 17 are located within this LCA.
Cumulative Baseline	This LCA contains all the 'Strategic Areas' for wind energy development in West Clare designated by the Clare Wind Energy Strategy in the Clare County Development Plan 2023-2029, as a result, there are 9 no. existing wind farms located within this LCA. The existing Cahermurphy I Wind Farm, existing Slievecallan Wind Farm, existing Letteragh Wind Farm, existing Boolynagleragh Wind Farm, existing Glenmore Wind Farm, existing Booltiagh Wind Farm, and existing Kiltumper Wind Farm are located within this LCA. Other existing wind farms in adjacent LCAs are also visible in parts of this LCA. The proposed Illaunbaun Wind Farm and proposed Cahermurphy II Wind Farm are also located within this LCA.
Cumulative Landscape Effects	The Proposed Turbines contribute to cumulative effects on this LCA, mainly the northern portion of the LCA where cumulative effects on landscape character occur with the existing Slievecallan Wind Farm, and potentially the proposed Illaunbaun Wind Farm in a future receiving environment. The contribution of the Proposed Turbines to cumulative effects in the southern and south-eastern areas of the LCA is very limited due to the visual screening and separation provided by large well defined landforms and ridgelines.
Magnitude of Change	**'Moderate'**: A small portion of the landscape within LCA 17 will be physically altered by the Proposed Project and the Proposed Turbines will alter the character of a localised portion of the LCA to the north-west of Slieve Callan.
Significance of Effect	**Low x Moderate = Minor = Slight (EPA, 2022)** *"An effect which causes noticeable changes in the character of the environment without affecting its sensitivities."*
Mitigation Factors	› This LCA has lowest sensitivity rating for wind energy development within Co. Clare and the Proposed Wind Farm Site is located in part of the LCA designated as a 'Strategic Area' for wind energy development. Therefore, a

	specific area of the LCA where turbines are envisioned within local planning policy. › The primary landforms of this LCA comprises of elevated ridges of mountain moorland, which are landscape units with a strong capacity for absorbing winds energy developments of this scale. › The Sliabh Callan Upland area, and other topography, visually screens views of the Proposed Project from many receptors in this LCA to the southeast of the LVIA Study Area. The majority of theoretical visibility is limited to the northwest of this LCA, and is from the elevated vantage points and upland area of Slieve Callan. › Siting and design were developed in accordance with the Guidelines (DoEHLG, 2006) for Mountain Mooreland landscape character types. › The proposed internal cable connection within the Proposed Grid Connection Site is entirely underground and thus will not affect key landscape character characteristics or have long-term effects.
Residual Effect	**Slight (EPA 2022)** *"An effect which causes noticeable changes in the character of the environment without affecting its sensitivities."*

1.1.2 LCA 3 – Cliffs of Moher and Lahinch

LCA 3 – Cliffs of Moher and Lahinch	
Distance from the Proposed Turbines to Nearest/Furthest Area of LCA	This LCA is approximately 2.9 kilometres away from the nearest proposed turbine, T1, at its closest point, and 19.1 kilometres at its furthest.
LCA Key Characteristics *(As reported in the LCACC, which forms part of the CCDP 2023-2029)*	› *"An area of coastal plateau and farmland gently sloping inwards towards the coast and rivers.* › *Liscannor stone walls with slatey appearance are highly distinctive and widely used throughout the area.* › *Popular tourist centres at Cliffs of Moher, Lahinch and Liscannor.* › *Extensive coastal views are afforded from bays and plateau.* › *Away from the coastal road, it is increasingly remote and an isolated sense is retained.* › *Character of sea strongly affects the area."*
Landscape Sensitivity to Wind Farm Development	The landscape sensitivity of this area is 'High' according to the CWES considering the value and importance attributed to the landscape of The Burren and Cliffs of Moher UNESCO Global Geopark, which is a landscape of national and international renown due to its geological and cultural values. The Wind Energy Strategy classifies wind farms as being 'Not Normally Permissible' along the coast of this LCA, however, this is in the designated 'Heritage Landscape' . Much of the inland areas (where there is most theoretical visibility of the Proposed Turbines) is designated as 'Open to Consideration' to wind energy development. Considering the LCA in its entirety, on balance, the sensitivity of this LCA to wind energy development is deemed to be **High**

Visibility of the Proposed Project within the LCA	Widespread visibility occurs from areas north-west of Lahinch and Liscannor, visibility ceases in all areas north of the highest elevation at the Cliffs of Moher. There is no visibility of the Proposed Turbines from a large area around Lahinch to Ennistimon, visually screened by vegetation, settlements and topography. Viewpoints 11, 12, 13 and 14, are located within this LCA.
Cumulative Baseline	There are no existing wind farms within this LCA. Existing wind farms in the Sliabh Callan Uplands LCA are visible from areas within this LCA. Other proposed wind energy development may be visible in an uncertain future receiving environment and may contribute cumulative effects on the character of this LCA.
Cumulative Landscape Effects	Overall, as illustrated by the Cumulative Comparative ZTV Map (Figure 13-16 of Chapter 13), there is mainly theoretical visibility of both the Proposed Turbines and cumulative wind turbines. The Proposed Turbines will add to the overall number of turbines visible from LCA 3, but will not change the characteristics identified above as a result of the number of turbines already in existence and proposed.
Magnitude of Change	**'Slight':** The key landscape characteristics of LCA 3 are not affected by any views of the Proposed Turbines, and at this distance, where views may occur, the Proposed Turbines will be viewed as smaller elements in the background of the view.
Significance of Effect	**High x Slight = Moderate/Minor = Moderate (EPA, 2022)** *"An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends."*
Mitigation Factors	› The Proposed Project is not located in this LCA and will not materially alter the physical fabric of this landscape. › The considered cumulative effects with the proposed Illaunbaun Wind Farm may only occur in an uncertain future receiving environment. › The Proposed Turbines are located in a landscape designated as a 'Strategic Area' for wind energy development in the Clare Wind Energy Strategy, an area of the landscape envisioned for wind energy development in local planning policy. › The Proposed Turbines are well set back from the areas designated as 'Heritage Landscape' in this LCA and they do not significantly impact the key characteristics, special qualities and sensitivities of these areas. › Siting and design were developed in accordance with the Guidelines (DoEHLG, 2006) for Mountain Moorland landscape character types.
Residual Effect	***Slight (EPA, 2022)*** *"An effect which causes noticeable changes in the character of the environment without affecting its sensitivities."*

1.1.3 LCA 15 – Kilnamona High Drumlin Farmland

LCA 15 – Kilnamona High Drumlin Farmland	
Distance from the Proposed Turbines to Nearest/Furthest Area of LCA	This LCA is approximately 7.74km northeast from the nearest proposed turbine, T2, at its closest point, and 17.09km at its furthest.
LCA Key Characteristics *(As reported in the LCACC, which forms part of the CCDP 2023-2029)*	› *"High drumlins with mosaic of land uses, including improved and rushy farmland, wetland, lough and forest.* › *Coniferous shelter belts are present across the area, reflecting the area's windy exposed characteristics.* › *Dissected with narrow windy roads, lined with hedgebanks and hedges.* › *Settlement is scattered with areas closest to Ennis revealing increased housing development.* › *This landscape can be disorientating as views are only available from higher drumlin tops and roads are typically twisting."*
Landscape Sensitivity to Wind Farm Development	The Wind Energy Strategy in this LCA is primarily designated as 'Open to Consideration' with areas of 'Acceptable in Principle'. Table 4a of Volume 6 of the CCDP, which provides the strategic guidance on landscape capacity for wind energy developments within LCAs, identifies Kilnamona High Drumlin Farmland LCA has an overall "*Medium to Low"* sensitivity to wind energy development. This is the lowest landscape sensitivity classification to wind energy development in County Clare Overall, on balance, the sensitivity of this LCA to wind farm development is deemed to be '**Low'.**
Visibility of the Proposed Project within the LCA	There are intermittent patches of full theoretical visibility throughout this LCA, however, onsite assessment showed considerable visual screening from vegetation, localised topography and winding roads which significantly impaired visibility of the Proposed Turbines. Photomontage Viewpoint VP02 is located within this LCA.
Cumulative Baseline	There are no existing wind farms within this LCA.
Cumulative Landscape Effects	Overall, as illustrated by the Cumulative Comparative ZTV Map (Figure 13-16 of Chapter 13), there is mainly theoretical visibility of both the Proposed Turbines and cumulative wind turbines. The Proposed Turbines will add to the overall number of turbines visible from LCA 15, but will not change the characteristics identified above as a result of the number of turbines already in existence and proposed.
Magnitude of Change	**Negligible:** The key landscape characteristics of LCA 15 are not affected by any views of the Proposed Turbines, and at this distance, where views may occur, the turbines will be viewed as smaller elements in the background of the view.
Significance of Effect	**Low x Negligible = Negligible = Imperceptible (EPA, 2022)** *"An effect capable of measurement but without significant consequences."*

Mitigation Factors	› The Proposed Project is not located in this LCA and will not materially alter the physical fabric of this landscape. › The Proposed Turbines are located in a landscape designated as a 'Strategic Area' for wind energy development in the Clare Wind Energy Strategy, an area of the landscape envisioned for wind energy development in local planning policy.
Residual Effect	**Imperceptible (EPA, 2022)** **"***An effect capable of measurement but without significant consequences."*

1.1.4 LCA 16 – Cullenagh River Farmlands

LCA 16 – Cullenagh River Farmlands	
Distance from the Proposed Turbines to Nearest/Furthest Area of LCA	This LCA is approximately 600m north from the nearest proposed turbine, T2, at its closest point, and 22km at its furthest. .
LCA Key Characteristics *(As reported in the LCACC, which forms part of the CCDP 2023-2029)*	› *"Drumlin farmlands drained by Cullenagh river catchment by a series of small loughs.* › *Buckthorn, more deciduous trees and more woody vegetation present with thick hedgerows in parts.* › *Drumlins orientated east-west.* › *Attractive intimate area with rural intact feel.* › *Main settlement at Inagh at crossroads, otherwise scattered."*
Landscape Sensitivity to Wind Farm Development	The CWES identified this LCA as having 'Medium' sensitivity to wind farm developments, where majority of this LCA is designated as being 'Open to Consideration'. Therefore, on balance, the sensitivity of this LCA to wind energy development is **Medium**.
Visibility of the Proposed Project within the LCA	There is predominantly full theoretical visibility indicated within 10km of the Proposed Turbines. The undulating landscape creates patches of no theoretical visibility, predominantly in the central and southern parts of this LCA.
Cumulative Baseline	There are no existing wind farms within this LCA.
Cumulative Landscape Effects	Overall, as illustrated by the Cumulative Comparative ZTV Map (Figure 13-16 of Chapter 13), there is mainly theoretical visibility of both the Proposed Turbines and cumulative wind turbines in the northern extent of this LCA. In the southern extent of LCA 16 (southeast of the Proposed Turbines) there are a greater no. of areas where theoretical visibility indicated is predominantly limited to the cumulative turbines only. The Proposed Turbines will add to the overall number of turbines visible from LCA 3, but will not change the characteristics identified above as a result of the number of turbines already in existence and proposed.
Magnitude of Change	**Slight:** A small portion of the Proposed Wind Farm Site falls within this LCA, including the turbine delivery route. Any landscape changes to the

	LCA will be highly localised to within the Site. Views within this LCA will be largely visually screened by mature vegetation along local roads, making full views of the Proposed Turbines intermittently obscured.
Significance of Effect	**Medium x Slight = Minor = Slight (EPA, 2022)** *"An effect which causes noticeable changes in the character of the environment without affecting its sensitivities."*
Mitigation Factors	› The Proposed Turbines are not located in this LCA and will not materially alter the physical fabric of this landscape. › The Proposed Turbines is located in a landscape designated as a 'Strategic Area' for wind energy development in the Clare Wind Energy Strategy, an area of the landscape envisioned for wind energy development in local planning policy. › Siting and design were developed in accordance with the Guidelines (DoEHLG, 2006) for Mountain Moorland landscape character types.
Residual Effect	**Slight (EPA, 2022)** **"***An effect which causes noticeable changes in the character of the environment without affecting its sensitivities."*

1.1.5 LCA 20 – Malbay Coastal Farmlands

LCA 20 – Malbay Coastal Farmlands	
Distance from the Proposed Turbines to Nearest/Furthest Area of LCA	This LCA is approximately 1.76m west from the nearest proposed turbine, T7, at its closest point, and 20.2km at its furthest.
LCA Key Characteristics *(As reported in the LCACC, which forms part of the CCDP 2023-2029)*	› *"Gently undulating pastoral farmland.* › *Indented coastline, with some wide sandy bays.* › *Strong Atlantic influence through the open and windswept character, reinforced by minimal tree cover and hedgerows.* › *Views to Sliabh Callan, often framed by shallow valleys and along the coastline.* › *Scattered but frequent settlement. Often individual houses but several small villages and larger settlements including Spanish Point and Milltown Malbay".*
Landscape Sensitivity to Wind Farm Development	The overall landscape sensitivity of this LCA is designated as 'High' in the CWES, this is in consideration of the coastal region as a high value and high sensitivity landscape receptor, and designation as a 'Heritage Landscape'. This inland area of the LCA is of relatively low sensitivity compared to the coastland due to its degraded nature and strong human influence. Considering the LCA in its entirety, on balance, the sensitivity of this LCA to wind energy development is deemed to be **High**
Visibility of the Proposed Project within the LCA	There is predominantly full theoretical visibility of the Proposed Turbines from this LCA, however, several areas to the west and south west of the Proposed Turbines will be screened from view by the intervening landform.

	Viewpoints 5, 6, 7, 8 and 9 are located within this LCA, see *Volume 2: Photomontage Booklet.*
Cumulative Baseline	There are no existing wind farms within this LCA. Most of the existing wind farms in the Sliabh Callan Uplands LCA are visible from areas within this LCA. Other proposed wind energy development may be visible in an uncertain future receiving environment and may contribute cumulative effects on the character of this LCA.
Cumulative Landscape Effects	Overall, as illustrated by the Cumulative Comparative ZTV Map (Figure 13-16 of Chapter 13), the majority of this LCA has theoretical visibility of both the Proposed Turbines and cumulative wind turbines. To the south to southwest of the Proposed Turbines, there are areas where theoretical visibility indicated is predominantly limited to the cumulative turbines only within LCA 20. The Proposed Turbines will add to the overall number of turbines visible from LCA 3, but will not change the characteristics identified above as a result of the number of turbines already in existence and proposed.
Magnitude of Change	**Slight:** The Proposed Project does not materially alter the physical fabric of this LCA. In terms of changes to the landscape character of this LCA, the greatest effects will occur within the northwestern most areas of the LCA, where it borders LCA 17. Effects on the character of the wider landscape within the LCA are limited due to set-back distances.
Significance of Effect	**High x Slight = Moderate/Minor = Moderate (EPA, 2022)** *"An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends"*
Mitigation Factors	› The high sensitivity landscape receptor - 'Heritage Landscapes' is located along the coast, visually and physically set back from the Proposed Turbines 5.4km at its closest point. The Proposed Turbines will not alter the physical fabric of this LCA or the Heritage Landscape. › The scenic views from the coastline are primarily directed westward towards the open ocean and wider coastal horizon, in the opposing direction to the Proposed Turbines. For example, Viewpoints 6, 7 and 8 were captured within the coastal Heritage Landscapes and shows the Proposed Turbines are visible as distant features in the background of the landscape and in the opposite direction of the key sensitivities on the coast. The Proposed Turbines will not significantly impact the key characteristics and sensitivities of this LCA. › The considered cumulative effects with the proposed Illaunbaun Wind Farm may only occur in an uncertain future receiving environment. › Due to roadside vegetation and localised undulations in topography, actual visibility will be significantly reduced in comparison to the theoretical visibility indicated on ZTV mapping.
Residual Effect	**Moderate (EPA 2022)** *"An effect that alters the character of the environment in a manner consistent with existing and emerging baseline trends"*