

## APPENDIX 4: LANDSCAPE SENSITIVITY ASSESSMENT

The sensitivity of the landscape character areas which may receive significant landscape effects are assessed below. Landscape sensitivity is not absolute and can only be defined in relation to each development and its location. To assess the sensitivity of a particular landscape it is good practice to consider the value attached to the landscape and its susceptibility to the particular form of change likely to result from the proposed development. Assessment text relates to sensitivity of the landscape receptor as a whole, to the proposed development, with additional comments regarding the Site where relevant. This has been taken from the landscape character information within the Conwy and Denbighshire Landscape Sensitivity and Capacity Assessment For Wind Energy Development (quotes shown in *italics*) as well as from local sources and site assessment. The table below is based on guidance provided within LI TGN 02/21 - specifically table 1 within that document.

### Host Landscape: B1: Gritstone Hills (Graianrhyd)

| Factors affecting sensitivity       | Lower Sensitivity to Silica Sand Quarry                               | Higher Sensitivity to Silica Sand Quarry                                               | Explanation                                                                                                             | Judgement |
|-------------------------------------|-----------------------------------------------------------------------|----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------|
| <b>Value attached to Landscapes</b> |                                                                       |                                                                                        |                                                                                                                         |           |
| Designated scenic quality           | No specific designation                                               | National or regional designation                                                       | Partially within the Clwydian Range and Dee Valley National Landscape / Proposed Glyndŵr National Park.                 | National  |
| Natural Heritage                    | Low presence of ecological or geological / geomorphological interest. | High presence of ecological or geological / geomorphological interest.                 | Small amount of ancient woodland to the north-east and east, but few other natural heritage interests.                  | Community |
| Cultural Heritage                   | Low presence of archaeology or historical interests                   | High presence of archaeology or historical interests                                   | Little to no cultural heritage interest.                                                                                | Community |
| Landscape condition/ quality        | Landscape in a poor state of repair with incongruous elements         | Landscape fully intact in good condition with limited incongruous elements             | Historic field boundary loss. Influence of quarrying and pylons within the landscape, but some areas in fair condition. | Community |
| Cultural associations               | No strong associations with notable people, events or the arts.       | Strong cultural associations with notable people, events or the arts, which contribute | N/A                                                                                                                     | Community |

| Factors affecting sensitivity          | Lower Sensitivity to Silica Sand Quarry                                                                                                                              | Higher Sensitivity to Silica Sand Quarry                                                                                                                                                                    | Explanation                                                                                                                                                                                  | Judgement |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
|                                        |                                                                                                                                                                      | to perceptions of natural beauty.                                                                                                                                                                           |                                                                                                                                                                                              |           |
| Distinctiveness                        | Commonplace elements and features, or the landscape itself. Lacking distinctive and strongly expressed character and with no important relationship to a settlement. | Presence of rare elements or features or rarity of the landscape itself. Landscape with a distinctive and clearly expressed character and/or with an important relationship to a settlement.                | Strong association with the Clwydian Range and Gritstone Hills adds distinctiveness; although few rare features.                                                                             | Regional  |
| Amenity and recreation                 | Limited amenity/recreational function where experience of the landscape is important                                                                                 | Well used for recreation where experience of the landscape is important; or forms part of a view that is important to a recreational experience. May contain National Trails or other long-distance routes. | Handful of public rights of way within the LCA and limited amenity function.                                                                                                                 | Community |
| Perceptual (Scenic)                    | Landscape with no particular scenic / visual appeal.                                                                                                                 | Landscape with strong appeal to the senses, particular visual.                                                                                                                                              | Typically Moderate LANDMAP evaluation, with some areas Outstanding. Small part of the LCA lies within the Clwydian Range and Dee Valley National Landscape / Proposed Glyndŵr National Park. | Regional  |
| Perceptual (Wildness and Tranquillity) | Busy with evidence of human activity, well-lit.                                                                                                                      | Remote, peaceful or with a sense of wildness. Dark skies.                                                                                                                                                   | 'Attractive rural landscape with some modern development and human activity. The presence of a quarry lessens the sense of remoteness.'                                                      | Regional  |
| Function                               | No important blue/green infrastructure function or important relationship with national landscape designation.                                                       | Landscape with important blue/green infrastructure function or strong relationship that is important to a national landscape designation.                                                                   | Some limited green infrastructure function. Forms part of the Clwydian Range and Dee Valley National Landscape / Proposed Glyndŵr National Park.                                             | Regional  |

| Factors affecting sensitivity     | Lower Sensitivity to Silica Sand Quarry | Higher Sensitivity to Silica Sand Quarry | Explanation | Judgement                 |
|-----------------------------------|-----------------------------------------|------------------------------------------|-------------|---------------------------|
| <b>Overall Judgement of Value</b> |                                         |                                          |             | <b>Regional/Community</b> |

### Susceptibility

|                                     |                                                                                                                           |                                                                                                                                                                     |                                                                                                                                                                                        |        |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Scale                               | Landscapes where scale of development is similar to or smaller than scale of receiving landscape                          | Landscapes where scale of development is larger than scale of receiving landscape                                                                                   | Medium scale landscape, which is similar to the scale of the proposed development.                                                                                                     | Low    |
| Landform                            | Landscapes with similar existing landform features to integrate working but allow for restoration                         | Landscapes where restoration would be challenging / difficult to integrate                                                                                          | Gently undulating landform with disturbed character, which would allow for restoration.                                                                                                | Low    |
| Openness/enclosure                  | Enclosed and sheltered landscapes                                                                                         | Open and exposed landscapes with little enclosure                                                                                                                   | Typically enclosed landscape, but some openness which allows intervisibility with the surrounding Clwydian Range.                                                                      | Medium |
| Land cover, complexity and patterns | Complex, intimate or mosaic cover or irregular patterns which would disguise working and allow for a variable restoration | Extensive areas of simple or regular landcover or landscapes with sweeping lines or linear features/patterns which would be interrupted by workings and restoration | Mosaic land cover pattern comprising a mixture of pastures and broadleaved woodland.                                                                                                   | Low    |
| Built Environment                   | Contemporary masts, pylons, industrial elements, buildings infrastructure, settlements                                    | Established, traditional or historic built character                                                                                                                | Rural landscape with man-made influences including the 'local road network, scattered settlement pattern, pylon lines and quarrying activities'.                                       | Medium |
| Key Views and intervisibility       | Visually contained and have limited inward or outward views                                                               | Extensive views within or of the area from key views                                                                                                                | 'Views are typically enclosed and filtered by landform and vegetation. There are some longer views to and from the Clwydian Range and Gritstone Hills... There is a strong association | Medium |

| Factors affecting sensitivity                          | Lower Sensitivity to Silica Sand Quarry                                                                             | Higher Sensitivity to Silica Sand Quarry                                                   | Explanation                                                                                       | Judgement         |
|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-------------------|
|                                                        |                                                                                                                     |                                                                                            | between this landscape unit and the Clwydian Range and Gritstone Hills.'                          |                   |
| Landscapes that form skylines, backdrops, focal points | Landscapes which may be low lying or more elevated but do not form the skyline or are not backdrops or focal points | Landscapes which form the skyline or are backdrops or focal points that define the setting | 'This landscape unit is not seen as a skyline feature. Pylon lines interrupt skylines in places.' | Low               |
| <b>Overall Judgement of Susceptibility</b>             |                                                                                                                     |                                                                                            |                                                                                                   | <b>Medium/Low</b> |
| <b>Overall Judgement of Sensitivity</b>                |                                                                                                                     |                                                                                            |                                                                                                   | <b>Medium/Low</b> |

## Host Landscape: C2: Limestone Farmlands (Llandegla to Maeshafn)

| Factors affecting sensitivity       | Lower Sensitivity to Silica Sand Quarry                               | Higher Sensitivity to Silica Sand Quarry                               | Explanation                                                                                                                                                                                                   | Judgement |
|-------------------------------------|-----------------------------------------------------------------------|------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| <b>Value attached to Landscapes</b> |                                                                       |                                                                        |                                                                                                                                                                                                               |           |
| Designated scenic quality           | No specific designation                                               | National or regional designation                                       | Largely within the Clwydian Range and Dee Valley National Landscape / Proposed Glyndŵr National Park.                                                                                                         | National  |
| Natural Heritage                    | Low presence of ecological or geological / geomorphological interest. | High presence of ecological or geological / geomorphological interest. | Edges of several large Sites of Special Scientific Interest (although the majority of these designations are within adjacent LCAs); multiple large areas of ancient woodland and plantation ancient woodland. | Regional  |
| Cultural Heritage                   | Low presence of archaeology or historical interests                   | High presence of archaeology or historical interests                   | Some listed buildings and a scheduled monument but otherwise little to no cultural heritage interest.                                                                                                         | Community |

| Factors affecting sensitivity          | Lower Sensitivity to Silica Sand Quarry                                                                                                                              | Higher Sensitivity to Silica Sand Quarry                                                                                                                                                                    | Explanation                                                                                                                                                                                                                         | Judgement |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| Landscape condition/ quality           | Landscape in a poor state of repair with incongruous elements                                                                                                        | Landscape fully intact in good condition with limited incongruous elements                                                                                                                                  | Variable landscape condition. Some historic field boundary loss and influence of quarrying and pylons within the east.                                                                                                              | Community |
| Cultural associations                  | No strong associations with notable people, events or the arts.                                                                                                      | Strong cultural associations with notable people, events or the arts, which contribute to perceptions of natural beauty.                                                                                    | N/A                                                                                                                                                                                                                                 | Community |
| Distinctiveness                        | Commonplace elements and features, or the landscape itself. Lacking distinctive and strongly expressed character and with no important relationship to a settlement. | Presence of rare elements or features or rarity of the landscape itself. Landscape with a distinctive and clearly expressed character and/or with an important relationship to a settlement.                | Intervisibility with the adjacent upland landscapes of the Clwydian Range, Llantysilio Mountain, Bryn Alyn and Moel Gareog gives a sense of distinctiveness to this LCA. Ancient woodland is a rare feature.                        | National  |
| Amenity and recreation                 | Limited amenity/recreational function where experience of the landscape is important                                                                                 | Well used for recreation where experience of the landscape is important; or forms part of a view that is important to a recreational experience. May contain National Trails or other long-distance routes. | Strong network of Public Rights of Way including Offa's Dyke National Trail. Some areas of open access land.                                                                                                                        | National  |
| Perceptual (Scenic)                    | Landscape with no particular scenic / visual appeal.                                                                                                                 | Landscape with strong appeal to the senses, particular visual.                                                                                                                                              | Typically noted as High-Outstanding in LANDMAP evaluation; with scenic views towards Clwydian Range. Largely part of the National Landscape.                                                                                        | National  |
| Perceptual (Wildness and Tranquillity) | Busy with evidence of human activity, well-lit.                                                                                                                      | Remote, peaceful or with a sense of wildness. Dark skies.                                                                                                                                                   | 'The sense of remoteness and tranquillity varies across the area. There are some distinct pockets of remoteness and tranquillity, which in other places are reduced by the presence of settlement, the road network and quarrying.' | Regional  |

| Factors affecting sensitivity     | Lower Sensitivity to Silica Sand Quarry                                                                        | Higher Sensitivity to Silica Sand Quarry                                                                                                  | Explanation                                                                                                                                         | Judgement       |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|
| Function                          | No important blue/green infrastructure function or important relationship with national landscape designation. | Landscape with important blue/green infrastructure function or strong relationship that is important to a national landscape designation. | Largely within the Clwydian Range and Dee Valley National Landscape / Proposed Glyndŵr National Park; Alyn river valley is important blue corridor. | National        |
| <b>Overall Judgement of Value</b> |                                                                                                                |                                                                                                                                           |                                                                                                                                                     | <b>National</b> |

#### Susceptibility

|                                     |                                                                                                                           |                                                                                                                                                                     |                                                                                                                                                                   |        |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|
| Scale                               | Landscapes where scale of development is similar to or smaller than scale of receiving landscape                          | Landscapes where scale of development is larger than scale of receiving landscape                                                                                   | Landscape is medium to large in scale; similar to the proposed scale of development.                                                                              | Low    |
| Landform                            | Landscapes with similar existing landform features to integrate working but allow for restoration                         | Landscapes where restoration would be challenging / difficult to integrate                                                                                          | Landscape is strongly undulating, making restoration challenging. However, there are similar features within the existing landscape, including the existing site. | Medium |
| Openness/enclosure                  | Enclosed and sheltered landscapes                                                                                         | Open and exposed landscapes with little enclosure                                                                                                                   | Medium degree of enclosure within the landscape, some areas are exposed, whereas others are more enclosed.                                                        | Medium |
| Land cover, complexity and patterns | Complex, intimate or mosaic cover or irregular patterns which would disguise working and allow for a variable restoration | Extensive areas of simple or regular landcover or landscapes with sweeping lines or linear features/patterns which would be interrupted by workings and restoration | Land cover comprises complex mosaic of outcrops, woodland and fields.                                                                                             | Low    |

| Factors affecting sensitivity                          | Lower Sensitivity to Silica Sand Quarry                                                                             | Higher Sensitivity to Silica Sand Quarry                                                   | Explanation                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Judgement         |
|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|
| Built Environment                                      | Contemporary masts, pylons, industrial elements, buildings infrastructure, settlements                              | Established, traditional or historic built character                                       | Rural environment with some existing localised influence of quarries (including the existing site) and pylons.                                                                                                                                                                                                                                                                                                                                                 | Medium            |
| Key Views and intervisibility                          | Visually contained and have limited inward or outward views                                                         | Extensive views within or of the area from key views                                       | Variable views within the LCA, some views are open and elevated, with others more restricted by landform and/or woodland.<br><br>'Intervisibility between this landscape unit and the adjacent upland landscapes of the Clwydian Range, Llantysilio Mountain, Bryn Alyn and Moel Gareog is significant. These uplands form distinctive skylines and contain views from the unit; there are many opportunities for long distant views to and from these areas.' | Medium            |
| Landscapes that form skylines, backdrops, focal points | Landscapes which may be low lying or more elevated but do not form the skyline or are not backdrops or focal points | Landscapes which form the skyline or are backdrops or focal points that define the setting | 'This landscape is rarely seen as a skyline feature due to the surrounding higher hills, the majority of which form distinctive skylines in the backdrop of views from this landscape unit.'                                                                                                                                                                                                                                                                   | Low               |
| <b>Overall Judgement of Susceptibility</b>             |                                                                                                                     |                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Medium/Low</b> |
| <b>Overall Judgement of Sensitivity</b>                |                                                                                                                     |                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Medium</b>     |