Appendix 9.3 Landscape Sensitivity Appraisal





Introduction

This appendix considers the sensitivity of landscape character within the study area of the Proposed Development. The concluding judgements regarding landscape sensitivity are carried through into the preliminary assessment of effects presented in the Chapter 9 of the PEIR.

In the context of LVIA, landscape sensitivity as described in paragraph 5.39 of GLVIA3 is not absolute and is specific 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 type of change likely to result from the Proposed Development.

The appraisal of sensitivity in this appendix draws upon observations contained within National Character Area Profile 47 (NCA 47) and the North Kesteven Landscape Character Assessment (NKLCA) as summarised in Appendix 9.2; as well as observations made in the field during the baseline assessment of landscape character. Where relevant, extracts from the two documents above are reproduced in the appraisal below (in italics).

The landscape value criteria below are based on guidance contained within LI TGN 02/21; specifically Table 1 within that document.

The Proposed Development site falls across two Landscape Character Areas (LCAs), namely LCA 7 - Limestone Heath and LCA 11 - Central Clays and Gravels. These two LCAs are considered to be 'host landscape character areas'. It has been determined that there would be no greater than a negligible effect on any other LCAs and therefore the appraisal of sensitivity in this appendix focuses solely on the two LCAs identified above.

It should be noted that both LCAs extend considerably beyond the study area. Some of the descriptive text relating to these two LCAs in the North Kesteven Landscape Character Assessment is therefore not relevant and the discussion of landscape sensitivity below specifically focuses on the tract of the LCAs within the study area.

As noted above, part of the process of determining landscape sensitivity requires a judgement regarding the susceptibility of the LCAs to the specific type of change likely to result from the Proposed Development. It should be noted that whilst solar PV development is proposed across both LCAs, the project substation and BESS would all be located within LCA 7 - Limestone Heath approximately 5km away from LCA 11 - Central Clays and Gravels. At this distance, these taller structures would have a negligible effect on LCA 11.

The judgements below relating to LCA 7 therefore assume that the type of development is commercial scale ground mounted solar PV development only whilst the judgements relating to LCA 11 assume that the type of development also includes ancillary energy infrastructure typical of a project substation and BESS.



Factors affecting sensitivity	Indicators of Lower Sensitivity to Solar development	Indicators of Higher Sensitivity to Solar development	Explanation	Judgement
Value attached to La	Indscape			
Designated scenic quality	No specific designation	National or regional designation	There are no national or local landscape designations covering any part of the LCA within the study area.	Community
			Ecological interest is relatively limited and the landscape is primarily occupied by intensive arable farmland. Bloxham Woods (a local nature reserve) is a small pocket of ecological interest and other copses/plantations provide the main focus of attention locally.	
	Landscape with little evidence of ecological, geological,	Landscape with strong evidence of ecological, geological,	"Semi-natural habitats – including calcareous and neutral grassland and broadleaved woodland – are fragmented and sparsely scattered. (NCA 47)"	Community
Natural Heritage	geomorphological or physiographic interest which contributes positively to the	geomorphological or physiographic interest which contributes	<i>"Field boundaries are often absent, broken or delineated by a strip of rough grass" and a "lack of tree cover"</i> (NKLCA).	Community
	landscape	positively to the landscape	Underlying geology results in a gentle landform and there is no discernible evidence of geomorphological change. Dry valleys provide local interest but result in relatively modest variation in topography. The distinct cliff on the Lincoln Edge has no influence on the character of the LCA within the study area.	
			"gently undulating plateau with the gradient sloping down from west to east" (NKLCA).	



Host Landscape: LCA 7 – Limestone Heath					
Factors affecting sensitivity	Indicators of Lower Sensitivity to Solar development	Indicators of Higher Sensitivity to Solar development	Explanation	Judgement	
Cultural Heritage			Primary evidence of Roman activity is Ermine Street. There is some buried archaeological interest and there is a scattering of listed buildings throughout the landscape but the "latter half of the 20th century saw widespread agricultural intensification, involving removal of drystone walls" (NCA 47).		
	Landscape with little evidence of archaeological, historical or cultural interest which contributes positively to the	Landscape with strong evidence of archaeological, historical or cultural interest which contributes positively to	removal of drystone walls" (NCA 47). Settlements with historic cores with limestone buildings are typically <i>"surrounded by significan levels of 20th Century development</i> " (NKLCA) and have little influence on the character of the wide landscape within the study area.	Community	
	landscape	contributes positively to the landscapelandscape within the study area.RAF infrastructure is of local heritage interest does not contribute positively to landsca character.Heritage assets within Ashby de la Laun Bloxham, Brauncewell and Temple Bruer prov			
			Heritage assets within Ashby de la Launde, Bloxham, Brauncewell and Temple Bruer provide localised heritage interest but are not widely visible across the landscape as a whole.		



Factors affecting sensitivity	Indicators of Lower Sensitivity to Solar development	Indicators of Higher Sensitivity to Solar development	Explanation	Judgement
			Whilst managed effectively as a productive landscape, in terms of its landscape fabric and structure, this is a landscape generally in poor condition.	Community
Landscape	Landscape which is in a poor physical state both with regard	Landscape which is in a good physical state both with regard to individual	"Limestone dry stone walls are apparent along roadside and some field boundaries, but are generally in poor condition" (NKLCA)	
Condition	to individual elements and overall landscape structure	elements and overall landscape structure "Field boundaries are often absent, broken of delineated by a strip of rough grass or remnan- hedgerow or wall" (NKLCA) Individually, clusters of properties, farmsteads, farm		
			Individually, clusters of properties, farmsteads, farm tracks and tree belts are typically well maintained by estates.	
Associations	Landscape which has few recognised connections with notable people, events and the arts	Landscape which has well recognised connections with notable people, events and the arts	No known associations with notable people, events and the arts.	Community
Distinctiveness	Landscape that has a weak sense of identity or a sense of identify that is appreciated principally by local communities.	Landscape that has a strong sense of identity and is valued more widely by society.	The landscape has a strong sense of identity as an intensively farmed landscape but is not specifically valued as such beyond the local community.	Community



Host Landscape: LCA 7 – Limestone Heath				
Factors affecting sensitivity	Indicators of Lower Sensitivity to Solar development	Indicators of Higher Sensitivity to Solar development	Explanation	Judgement
Recreational	Landscape offering few recreational opportunities where experience of landscape is important	Landscape offering many recreational opportunities where experience of landscape is important	Landscape provides limited recreational offering except by informal consent of the estates. PROWs are sparse and not well connected, thus informally local residents frequently use field margins for walking. <i>"Publicly accessible routes and areas are less</i> <i>prolific than in some NCAs; there are only 0.9 km per</i> <i>km2 of public rights of way and no country parks or</i> <i>National Nature Reserves."</i> (NCA 47)	Community
Perceptual (Scenic)	Landscape that has little that appeals to the senses, primarily the visual sense	Landscape that appeals strongly to the senses, primarily the visual sense	A pleasantly rural, open landscape with long distance views and 'big skies', understandably valued locally by residents and appreciated by travellers passing through the landscape but no characteristics which elevate the scenic qualities of the landscape above other similar landscapes.	Community



Factors affecting sensitivity	Indicators of Lower Sensitivity to Solar development	Indicators of Higher Sensitivity to Solar development	Explanation	Judgement
Perceptual (Wildness and Tranquillity)	Landscape with a weak perceptual value notably wildness, tranquillity and/or dark skies	Landscape with a strong perceptual value notably wildness, tranquillity and/or dark skies	A working arable landscape; sparsely settled and remote with a sense of detachedness in places but not wild. <i>"The area is moderately tranquil; less-disturbed areas include the more remote parts of the sparsely settled areas and the open landscape of the dip slope" (NCA 47) but the A15 is a <i>"major transport link" and a "busy A road" (NCA 47). Views of and the audible sound of moving vehicles diminishes any sense of tranquillity locally.</i></i>	Community



Factors affecting sensitivity	Indicators of Lower Sensitivity to Solar development	Indicators of Higher Sensitivity to Solar development	Explanation	Judgement
Functional	Landscape which does not perform a clearly identifiable and valuable function, particularly in the healthy functioning of the landscape	Landscape which performs a clearly identifiable and valuable function, particularly in the healthy functioning of the landscape	The overriding function of this landscape is farming and food production, but it contributes little else beyond the local community in terms of other ecosystem services. "The primary ecosystem services provided by this area include food provision, biomass provision, water availability, sense of place and sense of history." (NCA 47)	Community
Overall Judgement of	of Value			Community



Host Landscape: LCA 7 – Limestone Heath				
Factors affecting sensitivity	Indicators of Lower Sensitivity to Solar development	Indicators of Higher Sensitivity to Solar development	Explanation	Judgement
			The landscape is large scale and predominantly open.	
Scale	Landscapes where scale of	of development is larger		
	development is similar to or smaller than scale of receiving landscape	than scale of receiving landscape	"It is predominantly an empty, open landscape with wide views to the skyline in all directions." (NKLCA)	Medium
			Large scale solar PV could reflect the scale of the landscape. Associated grid infrastructure and BESS of the scale proposed could be out of scale with other structures in the landscape depending on design.	
Landform	Smooth regular flowing, or	Dramatic and rugged	A gentle landscape with some undulations across dry valleys but no prominent landform, irregular topography or notables hill sides.	
	uniform landscapes	landscapes	"The landform consists of an open, gently undulating plateau with the gradient sloping down from west to east" (NKLCA)	Low



Factors affecting sensitivity	Indicators of Lower Sensitivity to Solar development	Indicators of Higher Sensitivity to Solar development	Explanation	Judgement
			An open and exposed landscape.	
Openness/enclosure	Enclosed and sheltered	Open and exposed	"A large-scale open landscape of arable cultivation with large, regular fields and few boundaries" (NCA 47)	
	landscapes	landscapes	"Its position on the upper reaches of the cliff's dip slope gives it a feeling of relative elevation and exposure" and "It is predominantly an empty, open landscape with wide views to the skyline in all directions." (NKLCA)	High
Land cover, complexity and pattems	Areas of simple or regular landcover, linear features and patterns or with a mosaic of vegetation cover	Complex, intimate or irregular patterns or with limited vegetation cover	Simple patterns in the landscape with notable linear features (eg the A15) and some woodland blocks/plantations which provide backdrop to development but overall limited vegetation cover. <i>"regular fields and few boundaries"</i> (NCA 47)	Medium



Host Landscape: LCA 7 – Limestone Heath				
Factors affecting sensitivity	Indicators of Lower Sensitivity to Solar development	Indicators of Higher Sensitivity to Solar development	Explanation	Judgement
	Contemporary masts, pylons, industrial elements, buildings infrastructure, settlements		A generally sparsely settled landscape but utilitarian farm buildings are frequent. The A15 is a prominent linear feature through the landscape and overhead pylons.	
Built Environment		Established, traditional or historic built character	"Utility Infrastructure, which although sparse, makes an impact on the landscape including prominent pylons and the main A15 running north to south" and "RAF installations have made a significant impact on the landscape sub-area with several large bases and training centres" and "Mineral working is a feature of the sub-area with several large limestone quarries." (NKLCA)	Medium
	Visually contained and have	Extensive views within	An open landscape enabling long distance views across exposed arable farmland but no clear vistas or focal points and no prominent horizon which is the focus of these long distance views.	
Views and intervisibility	limited inward or outward views	or of the area with distant horizons.	<i>"Its position on the upper reaches of the cliff's dip slope gives it a feeling of relative elevation and exposure" and</i>	Medium
			<i>"It is predominantly an empty, open landscape with wide views to the skyline in all directions." (NKLCA)</i>	



Factors affecting sensitivity	Indicators of Lower Sensitivity to Solar development	Indicators of Higher Sensitivity to Solar development	Explanation	Judgement
Landscapes that form settings, skylines, backdrops, focal points	Generally low lying landscapes without distinctive landform or horizon	Areas with strong features, focal points that define the setting or skyline	A low lying landscape with no distinctive horizon. Skylines are typically defined by distant woodland blocks. Energy infrastructure would generally sit below the tree lines formed by blocks of woodland and not define the skyline.	Low
Overall Judgement of Susceptibility				
Overall Judgement of Sensitivity				



Host Landscape: LCA	11 – Central Clays and	Gravels		
Factors affecting sensitivity	Indicators of Lower Sensitivity to Solar development	Indicators of Higher Sensitivity to Solar development	Explanation	Judgement
Value attached to Land	dscape			
Designated scenic quality	No specific designation	National or regional designation	There are no national or local landscape designations covering any part of the LCA within the study area.	Community
Natural Heritage	Landscape with little	Landscape with strong	Ecological interest is primarily focussed on blocks of woodland and hedgerows; otherwise habitats are largely limited to arable farmland and small areas of improved pasture.	
	evidence of ecological, geological, geomorphological or	evidence of ecological, geological, geomorphological or	"hedgerows are the predominant boundary and the landscape with more trees, woodland and parkland." (NCA 47)	Community
	physiographic interest which contributes positively to the	physiographic interest which contributes positively to the	"Small copses of broadleaved woodland throughout the sub-area" (NKLCA).	Community
	landscape	landscape	Underlying geology results in a gentle landform and there is no discernible evidence of geomorphological change or physiographic interest.	
			"A gently undulating lowland" (NKLCA).	



Host Landscape: LCA 11 – Central Clays and Gravels					
Factors affecting sensitivity	Indicators of Lower Sensitivity to Solar development		Explanation	Judgement	
Cultural Heritage	Landscape with little evidence of archaeological, historical or cultural interest which contributes positively to the landscape	Landscape with strong evidence of archaeological, historical or cultural interest which contributes positively to the landscape	Several villages designated in the local plan as Conservation Areas and several listed buildings scattered throughout the landscape. The settlements are typically enclosed by woodland and do not influence the wider landscape although some church towers and spires are visible in the wider landscape. In localised areas, farmland exhibits the characteristics of historic estate management. <i>"The spring-line settlements all have similar characteristics, with the original buildings constructed of honey coloured limestone walls with pantiled roofs. The streams often running beside the central village streets with adjacent greenspaces are an attractive feature of these villages." and <i>"Blankney has a distinctly different and strong identity as an estate village with dwellings built in dressed and coursed limestone in a pseudo-Elizabethan or Tudor style with mullioned windows and elaborate chimneys."" (NKLCA)</i></i>	Regional	



Host Landscape: LCA 11 – Central Clays and Gravels				
Factors affecting sensitivity	Indicators of Lower Sensitivity to Solar development		Explanation	Judgement
Landscape Condition	Landscape which is in a poor physical state both with regard to individual elements and overall landscape structure	Landscape which is in a good physical state both with regard to individual elements and overall landscape structure	Farmland management throughout the LCA varies. Locally, the farmland is well maintained and much of the landscape fabric is in good condition but elsewhere the hedgerows have been removed and agriculture intensified.	Regional
			"Well kept hedgerows along roadsides and sometimes between fields" and "The general impression of this sub-area is of a gentle, agricultural landscape which is well managed and settled." (NKLCA)	
Associations	Landscape which has few recognised connections with notable people, events and the arts	Landscape which has well recognised connections with notable people, events and the arts	No specific associations have been identified although there are local associations with the RAF throughout the 20 th century.	Community
Distinctiveness	Landscape that has a weak sense of identity or a sense of identify that is appreciated principally by local communities.	Landscape that has a strong sense of identity and is valued more widely by society.	The landscape has a strong sense of identity as agricultural farmland and locally there are associations with the Blankney estate but identity is valued primarily at a local to regional scale.	Regional/Community



Host Landscape: LCA 11 – Central Clays and Gravels				
Factors affecting sensitivity	Indicators of Lower Sensitivity to Solar development	Indicators of Higher Sensitivity to Solar development	Explanation	Judgement
Recreational	Landscape offering few recreational opportunities where experience of landscape is important	Landscape offering many recreational opportunities where experience of landscape is important	Landscape is relatively well served by PROWs and the Spires and Steeples Trail passes through the landscape from north to south. Whilst these are well used by residents/ communities in Lincolnshire there are no recreational opportunities which attract wider interest.	Regional
Perceptual (Scenic)	Landscape that has little that appeals to the senses, primarily the visual sense	Landscape that appeals strongly to the senses, primarily the visual sense	A pleasantly rural, landscape with a pleasing combination of farmland and woodland; understandably valued locally by residents but no characteristics which elevate the scenic qualities of the landscape above other similar landscapes.	Community
Perceptual (Wildness and Tranquility)	Landscape with a weak perceptual value notably wildness, tranquillity and/or dark skies	A working, predominantly arable landscape; sparsely settled and remote with a sense of detachedness in places but not wild. <i>"The area is moderately tranquil; less-disturbed areas</i>	Community	
		include the more remote parts of the sparsely settled areas and the more sheltered, enclosed, traditional landscapes of the claylands" (NCA 47) but "The main infrastructure feature in the sub-area is the main line Lincoln-Sleaford railway line." (NKLCA)	Community	



Factors affecting sensitivity	Indicators of Lower Sensitivity to Solar development	Indicators of Higher Sensitivity to Solar development	Explanation	Judgement
Functional	Landscape which does not perform a clearly identifiable and valuable function, particularly in the healthy functioning of the landscape	Landscape which performs a clearly identifiable and valuable function, particularly in the healthy functioning of the landscape	The overriding function of this landscape is farming and food production, but it also provides local recreational opportunities. <i>"The primary ecosystem services provided by this</i> <i>area include food provision, biomass provision, water</i> <i>availability, sense of place and sense of history."</i> <i>(NCA 47)</i>	Community
Overall Judgement of Value Susceptibility				Regional/Community
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	"This is generally a mid-scaled landscape. There are some very large fields but also fields of mixed shape and size." (NKLCA) Large scale solar PV could reflect the scale of the landscape. Blocks of mature planting provide vertical scale comparison but solar panels have the potential to impose on the existing scale of PROWs and lanes.	Medium
Landform	Smooth regular flowing, or uniform	Dramatic and rugged landscapes	A gentle landscape with some undulations but no prominent landform, irregular topography or notable hill sides.	Low



Host Landscape: LCA 11 – Central Clays and Gravels				
Factors affecting sensitivity	Indicators of Lower Sensitivity to Solar development		Explanation	Judgement
			Openness varies across the landscape but locally is relatively well enclosed due to woodland blocks and mature hedgerows.	
Openness/enclosure	Enclosed and sheltered landscapes		"Small copses of broadleaved woodland throughout the sub-area and larger areas of woodland on the eastern edge." and "Although generally flat and of low relief, this sub-area differs from its immediate neighbours, it does not have the same emptiness and exposure of the limestone heath nor the uniform flatness of the Fens." (NKLCA)	Low
Land cover, complexity and pattems	Areas of simple or regular landcover, linear features and patterns or with a mosaic of vegetation cover	Complex, intimate or irregular patterns or with limited vegetation cover	A mosaic of farmland and woodland copses which provides opportunities for existing natural screening. Solar development likely to fit within the existing pattern of the landscape.	Low



Factors affecting sensitivity	Indicators of Lower Sensitivity to Solar development	Indicators of Higher Sensitivity to Solar development	Explanation	Judgement
Built Environment	alamante hillidinde	Established, traditional or historic built character	Locally and away from the roads, a relatively sparse landscape.	
			<i>"the limestone villages following the spring lines coming off the limestone plateau"</i> (NKLCA)	
			"There are a few scattered agricultural buildings mostly associated with farmsteads and occasional poultry units. The only industrial and commercial uses are located on the edges of the larger settlements such as Metheringham and Ruskington."	Medium
			"The main infrastructure feature is the main line Lincoln-Sleaford railway line." And "High voltage power lines and pylons cross the area butare generally less prominent." (NKLCA)	
Views and intervisibility	Visually contained and have limited inward or outward views	Extensive views within or of the area with distant horizons.	A variable landscape; open in places enabling long distance views across arable farmland but there are no recognised vistas or focal points and no prominent horizon which is the focus of any long distance views. Locally views are foreshortened by woodland blocks.	Medium
			The claylands are "more sheltered, enclosed, traditional landscapes." (NCA 47)	
Landscapes that form settings, skylines, backdrops, focal points	Generally low lying landscapes without distinctive landform or horizon	Areas with strong features, focal points that define the setting or skyline	A low lying landscape with no distinctive horizon. Skylines are typically defined by woodland blocks. Energy infrastructure would generally sit below the tree lines formed by blocks of woodland and not define the skyline.	Low



Host Landscape: LCA 11 – Central Clays and Gravels				
Factors affecting sensitivity		Indicators of Higher Sensitivity to Solar development		Judgement
Overall Judgement of Susceptibility			Medium/Low	
Overall Judgement of Sensitivity			Medium/Low	