



Dean Moor Solar Farm

Environmental Statement: Appendix 7.4 – Cumulative Assessment (1 of 4) on behalf of **FVS Dean Moor Limited**

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DEAN MOOR SOLAR FARM
ENVIRONMENTAL STATEMENT
APPENDIX 7.4 – LANDSCAPE AND VISUAL CUMULATIVE ASSESSMENT
PLANNING INSPECTORATE REFERENCE EN010155
PREPARED ON BEHALF OF FVS DEAN MOOR LIMITED

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1 Cumulative Effects

1.1 Introduction

- 1.1.1 The methodology used for the Cumulative Landscape and Visual Effects Assessment (CLVEA) is set out in detail at Appendix 7.1: Methodology **[REF: 6.3]**.
- 1.1.2 In summary, this Appendix assesses the potential effects of development proposals currently within the planning system (as listed in ES Chapter 2 – EIA Methodology, Table 2.6) **[REF: 6.1]**, which may give rise to cumulative effects with the Proposed Development. Identified developments beyond the 2.5km study area are not predicted to result in significant cumulative landscape or visual effects and these have not been considered further.
- 1.1.3 From the list within ES Chapter 2 – EIA Methodology, Table 2.6, two developments fall within the Proposed Developments zone of influence, the most notable of which is Lostrigg Solar Farm which lies directly north of the Proposed Development, and comprises the same type of development, i.e., photovoltaic solar panels and associated infrastructure. The other cumulative development considered within this Appendix is the Land at Lillyhall North (Ref. FUL/2021/0009) which comprises a hybrid application for transport infrastructure and industrial units.
- 1.1.4 This Appendix has considered combined effects, which are those which result from the combination of the Proposed Development and other committed developments (in this case Lostrigg Solar Farm and Land at Lillyhall North). This approach has been utilised as any identified effects are considered to effectively be worst case, i.e., resulting in a greater level of effect than if they were considered individually against the Proposed Development. The methodology behind combined cumulative effects is detailed within Appendix 7.1: Methodology Section 3.7 **[REF: 6.3]**.

1.2 Lostrigg Solar Farm

- 1.2.1 The draft Order Limits for Lostrigg Solar Farm (hereafter referred to as Lostrigg) cover an area of approximately 480ha and lies within the administrative boundary of Cumberland Council. Lostrigg would consist of a solar farm capable of producing over 50MW Alternating Current (AC) of electricity with a co-located BESS.
- 1.2.2 Lostrigg would comprise three Panel Areas in total within the wider draft Order Limits, namely the Northern, Central and Southern Panel Areas which would contain the PV panels. An on-site substation would be located within the Central Panel Area and two on-site pylons would be located to the west of the Central Panel Area to connect with the electricity distribution network. Connection with the electricity distribution network would be accomplished through underground cabling which would connect with the substation and pylons, and subsequently the PV panels.
- 1.2.3 Geographically, Lostrigg lies on predominantly agricultural land broadly between the villages of Little Clifton and Branthwaite, and east of the A595. The Southern Panel Area of Lostrigg (Area 5 as identified on Figure 7.4.5 Provisional Habitat Plan within Lostrigg Solar EIA Scoping Report – Figures) lies directly north of the Proposed Development, separated by Branthwaite Road.
- 1.2.4 A total of five PRoW run through the draft Order Limits of Lostrigg (illustrated on Figure 16.2 Rights of Way within Lostrigg Solar EIA Scoping Report – Figures). Two of these run through the Northern Panel Area (Footpath 241007 and Footpath 241005), one through the Central Panel Area (Footpath 230010); and two through the Southern Panel Area (Footpath 260003 and Footpath 260001). None of these PRoW subsequently encroach into land within the Proposed Development.

Potential indirect cumulative effects

- 1.2.5 Potential indirect cumulative effects have been considered during the construction and operational phases of the works. Although no resulting

significant indirect effects were predicted, the assessments have been included here for completeness.

LCT9: Intermediate Moorland and Plateau – Sub-type 9a: Open Moorlands (Cumbria LCA)

- 1.2.6 This medium sensitivity LCT Sub-type lies within the northern part of Area C of the Proposed Development and extends broadly southwest of Gilgarran to Moresby Parks. The Sub-type is considered to be of medium sensitivity. Key characteristics of this LCT Sub-type include the high mostly open landscapes, open rough moorland and undulating semi-improved and unimproved pasture. The ES assessed this LCT Sub-type as experiencing moderate adverse, direct/indirect and significant effects during the construction phase of works.
- 1.2.7 When considering the cumulative effects of construction on the key characteristics of LCT Sub-type 9a, although there is potential for limited views towards Lostrigg from high ground around Pica (see VL15), views towards the Proposed Development would be barely perceptible. The resulting cumulative impacts on the key characteristics of the LCT Sub-type and its associated experiential qualities would not cause any noticeable change. The resulting cumulative magnitude of effects during construction is therefore considered to be a no change scenario.
- 1.2.8 During operation, effects are predicted to be similar to those experienced during construction aside from its duration (long-term as opposed to short-term) as the introduction of Lostrigg would not alter its key characteristics to any notable level.
- 1.2.9 The significance of cumulative landscape effects during construction and operation for LCT Sub-type 9a: Open Moorlands is therefore assessed as being **No Change**.

LCT9: Intermediate Moorland and Plateau – Sub-type 9d: Ridges (Cumbria LCA)

- 1.2.10 The northern part of this medium sensitivity LCT Sub-type lies immediately east of Area C's eastern boundary within the Proposed Development and

covers Branthwaite Rigg, Branthwaite Edge and Jackie Plantation. The LCT Sub-type turns south to include the escarpment area within the southern part of Area C and then continues broadly south/southwest as far as Acrewalls Farm northwest of Frizington some 3.9km southwest of the Proposed Development. Key characteristics of the LCT Sub-type include its distinct ridges, extensive areas of heather moorland, improved pasture and woodland including small belts of trees that form prominent features.

- 1.2.11 The ES identified minor, short-term and not significant effects on the LCT Sub-type during construction, and negligible adverse effects during operation given that change would be limited within its overall footprint. Visibility in relation to the Proposed Development is illustrated on Figure 7.4 within the ES, and this illustrates limited or no visibility beyond the escarpment within Area C.
- 1.2.12 Given that the elements within the Proposed Development would largely be sited away from the distinct ridges associated with the LCT Sub-type, and the overall distance between Lostrigg and the LCT Sub-type there is not predicted to be any material impact on the key characteristics or experiential qualities in terms of cumulative effects. It is therefore considered the resulting cumulative magnitude of effect would be no change during both the construction and operation phases.
- 1.2.13 The significance of cumulative landscape effects during construction and operation for LCT Sub-type 9d: Ridges is therefore assessed as being **No Change**.

LDNP Areas of Distinctive Character (ADC) 8: Loweswater

- 1.2.14 This ADC lies approximately 2.3km east of the Proposed Development, extending beyond the western boundaries of the LDNP, and lies approximately 4.2km east of Lostrigg at its nearest point. Key characteristics associated with this ADC include the relatively low, smooth profile open moorland and heather clad fells in the north and south contrasting with the more enclosed wooded Loweswater Valley in central

parts, open views out to the coastal plain within its western area, and the tranquil landscape characterised by scattered settlements.

- 1.2.15 The ES identified minor, indirect experiential effects on this ADC as a result of the Proposed Development during the short-term construction phase. Visibility from this ADC was identified through VL12, VL13a/b/c, and VL14 which were all within its boundaries.
- 1.2.16 During construction, there would be visibility of activity within the Proposed Development and Combined Site simultaneously, particularly from the higher ground within the LDNP. The influence of construction activity would be less noticeable on lower ground around Mockerin for instance as a result of the undulating landscape. This would result in small scale change within the view from the LDNP towards the coastline as a result of the works, although the urban characteristics of Lillyhall Industrial Estate and Workington further west also influence the view. Ultimately for receptors experiencing the LDNP, it's Special Qualities and widespread views, the attraction is often to the east towards the other peaks, and therefore the cumulative effects of the Proposed Development and Lostrigg would do little to alter the experiential qualities of the Loweswater ADC and would not alter its key characteristics. The magnitude of cumulative effect for the Loweswater ADC is therefore considered to be negligible adverse.
- 1.2.17 The significance of cumulative landscape effects during construction for ADC 8: Loweswater is therefore assessed as being **minor adverse**, indirect, short-term, partially reversible/partially permanent, and **not significant** level of cumulative effect.
- 1.2.18 During operation, the scale of change experienced during the construction phase would remain, and consequently the elements associated with the solar farm would constitute a just discernible visual change in views towards the coastline. This would result in a very small change to the visual experiential qualities within the ADC, but no discernible change in its key characteristics. The magnitude of effect associated with the

potential cumulative change is accordingly considered to be negligible adverse.

- 1.2.19 The significance of cumulative landscape effects during operation for ADC 8: Loweswater is therefore assessed as being **minor adverse**, indirect, long-term, partially reversible/partially permanent, and **not significant** level of cumulative effect.

LCT I: Upland Limestone Farmland (LDNP LCA)

- 1.2.20 This LCT, regarded as being of high sensitivity to the proposals, lies approximately 750m east of the Proposed Development at its nearest point, and approximately 1.9km east of Lostrigg at its nearest point. Key characteristics associated with the LCT include the gently rolling topography, panoramic views as a result of the openness of the landscape, and occasional small copses of deciduous and coniferous woodland plantations towards the east.
- 1.2.21 The ES concluded that construction activity would result in a short-term and reversible negligible and not significant effect on the LCT as a result of the Proposed Development. This effect was as a result of a negligible change in the experiential qualities of the LCT given its openness is a key characteristic.
- 1.2.22 Cumulative impacts on the experiential qualities of the LCT during construction of the Proposed Development and Lostrigg would be limited to its northern part where there is potential to experience both developments simultaneously, ultimately increasing the overall scale within the view to small from very small as reported within the ES. Given the indirect nature of the change however, this would be negligible, and there would be no cumulative impacts across the remainder of the LCT. Overall, the resulting cumulative magnitude of change during the construction phase is considered to be negligible adverse for the Upland Limestone Farmland LCT.
- 1.2.23 During operation, effects are predicted to be slightly reduced from the construction phase as activity within both sites ceases. Change would

remain perceptible however, and although no physical change would occur as a result of either development, a negligible adverse magnitude of effect with regards to experiential change would remain.

- 1.2.24 The significance of cumulative landscape effects during construction and operation for LCT I: Upland Limestone Farmland is therefore assessed as being **minor adverse**, indirect, short-term/long-term, partially reversible/partially permanent, and **not significant** level of cumulative effect.

Assessment of Cumulative Landscape Effects

- 1.2.25 For the purposes of this assessment, it is considered that any cumulative effects resulting from the construction phase of works would be similar or reduced during the decommissioning phase but would be experienced in reverse as elements are removed from Site. Consequently, decommissioning effects are not considered within this cumulative assessment.
- 1.2.26 Both Lostrigg and the Proposed Development lie within LCT 5: Lowland, LCT Sub-type 5a: Ridge and Valley¹ to a greater or lesser degree. Almost the entire Lostrigg Site lies within it, with only a very small part of the Northern Panel Area lying within LCT Sub-type 5c: Rolling Lowland and a small part of the Southern Panel Area to the southwest within LCT Sub-type 5d: Urban Fringe. With regards to the Proposed Development and LCT Sub-type 5a, Area A and Area B lie entirely within it along with the northern extents of Area C.
- 1.2.27 LCT Sub-type 5c: Rolling Lowland and LCT Sub-type 5d: Urban Fringe are not considered for cumulative assessment as they are not present within both developments. Given the minimal intrusion into these LCT Sub-types by the committed development, and the extents of Dean Moor not lying within them, it is considered that any potential indirect cumulative effects

¹ Cumbria County Council (2011), Cumbria Landscape Character Guidance and Toolkit – Part 1 Landscape Character Guidance. Available at: https://www.cumberland.gov.uk/sites/default/files/2024-08/part_1-landscape_character_guidance_-_cumbria-landscape_character_guidance_and_toolkit_2.pdf Accessed November 2024

would not be significant. Consequently, only LCT Sub-type 5a: Ridge and Valley have been considered for cumulative assessment.

LCT Sub-type 5a: Ridge and Valley

1.2.28 Construction activity and operation of the committed development situated within LCT Sub-type 5a: Ridge and Valley will increase the amount of built form of a similar nature to the Proposed Development where urban influence is present (for instance industrial units, residential properties and wind turbines), but is not a key characteristic of the LCT. Key characteristics are listed below:

- *'A series of ridges and valleys that rises gently toward the limestone fringes of the Lakeland Fells;*
- *Well managed regular shaped medium to large pasture fields;*
- *Hedge bound pasture fields dominate, interspersed with native woodland, tree clumps and plantations;*
- *Scattered farms and linear villages found along ridges;*
- *Large scale structures generally scarce.'*

Construction Phase

1.2.29 There is potential for both the Proposed Development and Lostrigg to be under construction simultaneously (most likely an 'overlap' of activity) given the timing of the current applications. The Proposed Development is expected to be constructed over a period of 18 months, with potential completion in 2027. According to the Lostrigg Scoping Report, Paragraph 2.5.1.1, Lostrigg is predicted to take up to 24 months to complete, following the granting of the DCO if successful. Should construction times overlap, the following common activity could potentially be experienced simultaneously:

- Site enabling works, including the erection of perimeter fencing, task lighting and implementation of any required ecological/environmental protection measures;
- Implementation of temporary construction facilities, temporary security measures including Passive Infrared sensor lighting, and construction of internal access tracks;
- Deliveries and construction of the various elements associated with the solar farm including installation of mounting frameworks, solar panels, and ancillary units;

- Cable trenching, ducting and backfilling to connect the solar generating equipment to the Point of Connection (POC) equipment, and from the POC equipment to existing (or proposed) 132kV Overhead lines (OHL); and
- Implementation of landscape and biodiversity enhancements.

1.2.30 Simultaneous construction of both the Proposed Development and Lostrigg would have short-term partially reversible/partially permanent effects on LCT Sub-type 5a: Ridge & Valley, considered to be of medium sensitivity to the proposals. The construction phase of works would result in a partial change to the wider landscape character of the LCT Sub-type, which is considered to be small scale. Although the activity would result in conspicuous alteration of landscape character within the areas allocated for the Proposed Development and Combined Site, the combined development area accounts for approximately 12% of the entire LCT Sub-type, and therefore would not result in large-scale change overall. The cumulative magnitude of change as a result of Lostrigg and the Proposed Development is considered to be moderate adverse given that the proposals would result in a partial change to the key characteristics of the LCT Sub-type.

1.2.31 The resulting landscape impacts during construction would therefore give rise to a **moderate adverse**, short-term, partially reversible/partially permanent, direct and **significant** level of cumulative effect on LCT Sub-type 5a: Ridge & Valley.

Operational Phase

1.2.32 The resulting change to the overall character of the LCT Sub-type during operation, including the key characteristics of what is regarded as a landscape receptor of medium sensitivity would be noticeable; with large parts of currently agricultural land given over to solar development. The cumulative scale of change across the LCT sub-type would be considered medium given the substantial localised change to baseline conditions (most notably the pasture fields), and the solar developments forming a noticeable new feature in the landscape. With regards to geographical extent, the combined solar farms would result in a localised landscape

character level change, however both the Proposed Development and Lostrigg have sought to retain green infrastructure features such as hedgerows, which would in turn retain field patterns and boundaries: a key characteristic of the LCT Sub-type. Overall, the noticeable cumulative impacts associated with both developments would be localised, with little impact across the wider LCT Sub-type. The magnitude of cumulative change is considered to moderate adverse given the introduction of elements at odds with the receiving landscape.

- 1.2.33 The resulting landscape impacts during operation would therefore give rise to a **moderate adverse**, long-term, temporary, partially reversible/partially permanent, direct and **significant** level of cumulative effect on LCT Sub-type 5a: Ridge & Valley.

Cumulative Visual Effects

- 1.2.34 The LVIA has determined that visual receptors (aside from those utilising PRow within the LDNP) beyond 1km from Dean Moor may experience visual changes but that those changes are not likely to result in significant visual effects. For consistency and given that no visual assessment has yet been undertaken for Lostrigg, a 1km distance has also been assumed for the committed development. Users of PRow within the LDNP have the potential to experience views of both Lostrigg and the Proposed Development from as far as 4.5-5km distance.
- 1.2.35 Lostrigg is located directly north of the Proposed Development, and there is therefore potential for both sites to be viewed in combination with each other from a single location, or sequentially, where for instance road users would experience both developments as part of their journey, thereby increasing the impression of solar development as they travel through the landscape.
- 1.2.36 In order to understand the potential for combined or sequential views additional site survey and photography was undertaken in October 2024. The locations proposed for additional photography were ascertained following study of the view locations proposed within Figure 13.3: Visual

Receptors of the Scoping Report submitted by RWE for Lostrigg in combination with those reported in ES Chapter 7 – Landscape and Visual [REF: 6.1]. This provided an overview of where there would be potential visibility of both sites, and the additional view locations were chosen accordingly.

1.2.37 The additional view locations along with brief baseline descriptions and representative receptors are shown below in Table 1.1 and Table 1.2:

Table 1.1: Visual receptors and view locations for cumulative assessment

View Location Reference	Location	Distance from Closest Site	Reason for Inclusion and Type of Visual Receptor
VLC1	This 360° view is located along PRoW 20010 near Caple How, and lies adjacent to VL10 within the Dean Moor assessment. This view lies just south of the Northern Panel Area of Lostrigg, and as the view moves east and south it encompasses the Central and Southern Panel Areas, with Sheet 4/4 also looking towards the Proposed Development.	230m (Lostrigg)	This cumulative view has been included to represent recreational users of the PRoW and is in close proximity to Lostrigg, with both developments potentially visible to varying degrees.
VLC2	VLC2 is located at VL11 within the Dean Moor visual assessment. The view looks west across predominantly pastoral farmland. This view takes in the extents of Dean Moor and the Southern and Central Panel Areas of Lostrigg.	2.2km (Lostrigg)	This cumulative view is broadly representative of residents at the southern extents of Dean Village. From here there is potential for the Southern and Central Panel Areas associated with Lostrigg to be visible (the Southern Panel Area may be screened by intervening landform) in addition to Area C of the Proposed Development.
VLC3	Located on the southern boundary of the Proposed Development, adjacent to VL3 of the Proposed Development and VL13 of Lostrigg, this	Adjacent to southern Area Boundary (Dean Moor)	This cumulative view is representative of road users along Dean Cross Road. This view has been included to provide elevated views adjacent to the Proposed Development across an undulating landscape with large parts of both

View Location Reference	Location	Distance from Closest Site	Reason for Inclusion and Type of Visual Receptor
	location offers a panoramic view from high ground north across agricultural land. Both sites are visible from this location looking north.		the Proposed Development and Lostrigg potentially visible.
VLC4	This 360° view is located along Branthwaite Road adjacent to Wythemoor Sough residential property and Listed Building. This view is adjacent to VL9 of the Dean Moor Solar Farm PEIR and on the same road as VL7 from the Lostrigg Solar Scoping Report and provides views towards the Southern Panel Area of Lostrigg and parts of the Proposed Development.	175m (both sites)	This cumulative view is representative of nearby residents at Wythemoor Sough and Wythemoor House and road users of Branthwaite Road. The view is in the proximity of both sites and affords views of land to the north and south of Branthwaite Road which would contain solar panels.
VLC5	This view is located within the LDNP on Blake Fell and is adjacent to VL13c included in the Dean Moor Solar Farm ES. The view provides an extensive panorama looking west from the Fells across undulating predominantly agricultural land towards the coast.	5.9km (Dean Moor)	Representative of recreational users within the LDNP/WHS, this view is included as the majority of both the Proposed Development and Combined Site would be visible from a highly sensitive location.

Table 1.2: Sequential visual receptors for cumulative assessment

View Location Reference	Location	Distance from Closest Site	Reason for Inclusion and Type of Visual Receptor
VLSC1	Branthwaite Road	Adjacent to northern boundary of Area C (Dean Moor) and southern boundary of Lostrigg.	Road users of Branthwaite Road travelling in either direction would experience views of both sites for a short section of approximately 700m as they pass between Area C of the Proposed Development and the eastern Southern Panel Area of Lostrigg. Road users would also pass the larger western Southern Panel Area.
VLSC2	Dean Moor Road	Adjacent to southern boundary of Area C (Dean Moor)	Road users of Dean Moor Road would experience fleeting oblique views north as they travel east towards Branthwaite Edge Road. Solar panels associated with the Proposed Development would be the most obvious element within the view, however Lostrigg could extend overall visibility.
VLSC3	Branthwaite Edge Road	Adjacent to eastern Area Boundary (Dean Moor)	Road users of Branthwaite Edge Road travelling north would experience visibility of the Proposed Development potentially in combination with the Southern Panel Area of Lostrigg for a short stretch as they pass Area C.
VLSC4	PRoW 250002	Adjacent to eastern Area Boundary at nearest point (Dean Moor)	Recreational users of this PRoW travelling south west from Branthwaite towards Branthwaite Edge Road would experience cumulative views for a short period as they reach higher ground near VL8 from the Lostrigg Solar Scoping Report, and VL8b from the Dean Moor Solar Farm PEIR/ES.
VLSC5	PRoW 260003	130m (Lostrigg)	Recreational users of this PRoW would be in close proximity to the Central and Southern Panel Areas of Lostrigg, with potential cumulative visibility towards the Proposed Development.

Assessment of Cumulative Visual Effects

Construction Phase (combined visual effects)

- 1.2.38 At VLC1, construction activity would be at relatively close range with regards to the Northern and Central Panel Areas of Lostrigg. There is potential for combined visibility of construction activity to the south within the Proposed Development (largely within Area C) and with the Southern Panel Area of Lostrigg. This visibility would result in a large-scale change for a medium sensitivity receptor overall given the substantial change to the view, which would degrade the overall composition of the view given the wider views available towards the LDNP to the east along the PRow. The geographic extent of the view would be large, and during construction would create a short-term, partially reversible/partially permanent change, giving rise to a major adverse magnitude of effect.
- 1.2.39 The significance of cumulative visual effect at VLC1 therefore is assessed as being **major adverse**, short-term, temporary, partially reversible/partially permanent, and **significant** level of cumulative effect.
- 1.2.40 At VLC2, situated on the southern extents of the village of Dean, views west towards both sites would be available. Views towards construction activity within Lostrigg would be limited, with the settlement of Branthwaite and associated landform potentially screening much of the activity, while views towards higher ground within Area C of the Proposed Development would also be possible. Visibility towards other areas would be limited somewhat by intervening landform and vegetation. The resulting change in view for this medium sensitivity receptor would be small scale given that visibility of both sites would be predominantly screened by landform, vegetation and built form. The geographical extent would be moderate, though intermittent, over a short-term period, with the change being partially reversible/partially permanent, giving rise to a slight adverse magnitude of effect.
- 1.2.41 The significance of cumulative visual effect at VLC2 therefore is assessed as being **minor adverse**, short-term, temporary, partially

reversible/partially permanent, and **not significant** level of cumulative effect.

- 1.2.42 At VLC3, extensive views are available to the north, although these are foreshortened to some degree by an escarpment to the foreground which forms the southern extents of the Proposed Development. Receptors at this location are adjacent to an area of Open Access Land and are considered to be of high sensitivity. From here there would be limited visibility of construction activity within the eastern part of Area C within the Proposed Development, and visibility of construction activity within Lostrigg, largely limited to the Northern Panel Area would also be likely, although at some distance (approximately 5km). This would result in a small-scale change which would detract slightly from wider views but would not greatly alter its composition overall. The change would occur over a medium geographical extent over a short-term timeframe, giving rise to a slight adverse magnitude of effect.
- 1.2.43 The significance of cumulative visual effect at VLC3 therefore is assessed as being **moderate adverse**, short-term, temporary, partially reversible/partially permanent, and **significant** level of cumulative effect.
- 1.2.44 At VLC4, which lies adjacent to Wythemoor House and Wythemoor Sough, receptors of high sensitivity would be in the proximity of Area C within the Proposed Development, and the eastern Southern Panel Area of Lostrigg. These areas are separated by Branthwaite Road, and consequently views along this road would result in cumulative visibility of construction works. Visibility of Lostrigg would be confined to the eastern Southern Panel Area as the remaining areas are screened by the built form of Wythemoor House and its associated outbuildings, however in addition to visibility of works within Area C of the Proposed Development, wider views towards Area C would also be available, resulting in a relatively large geographical influence. The scale of visual change is considered to be medium, given the clearly noticeable change resulting in conspicuous new features and activity within the view, giving rise to a moderate adverse magnitude of effect.

- 1.2.45 The significance of cumulative visual effect at VLC4 therefore is assessed as being **major adverse**, short-term, temporary, partially reversible/partially permanent, and **significant** level of cumulative effect.
- 1.2.46 From VLC5 wide ranging panoramic views are available from within the LDNP towards the western Cumbrian coastline and across the Solway Firth to Dumfries & Galloway. At this location, receptors of very high sensitivity would experience views towards construction activity within Area C and Area B of the Proposed Development, and within much of Lostrigg. It should be noted that given the location of the view, receptors would not be focussed on views towards the coast given its panoramic nature. Construction would be difficult to discern at this distance over what would appear as a small geographic area and would likely not detract entirely from the wider view. Overall, the scale of change would be small when taken in perspective with the wider view. The resulting magnitude of effect is considered to be negligible adverse as it is not considered that the perceived change would be materially worse than that experienced during the construction phase of the Proposed Development.
- 1.2.47 The significance of cumulative visual effect at VLC5 therefore is assessed as being **moderate adverse**, short-term, temporary, partially reversible/partially permanent, and **significant** level of cumulative effect.

Construction Phase (combined sequential effects)

- 1.2.48 Branthwaite Road traverses east to west from Branthwaite to the A595 for approximately 3.7km. Given the predominance of agricultural land either side of the carriageway, field boundary vegetation is relatively well established, and at times screens visibility north and south. The undulating landscape also provides a series of open and enclosed views for road users, this also adding to variable levels of visibility. Upon leaving Branthwaite, for users of the A595 who are considered to be of medium sensitivity to the proposals, there would be some limited views available towards construction activity within Lostrigg, largely confined to the western Southern Panel Area. Views towards the Proposed Development would also be possible; however, this would be limited to the higher

ground within Area C which would not be under construction, therefore cumulative views would not occur. Visibility reduces as road users travel west towards the A595, until almost at the southern Area Boundary of the eastern Southern Panel Area of Lostrigg, whereupon users would become aware of both proposed developments either side of the road (although filtered to a degree by roadside vegetation) and of activity within the western Southern Panel Area. From here, road users would experience cumulative visual effects for approximately 300m, before passing Wythemoor Sough and Wythemoor House and ultimately the southern extents of the western Southern Panel Area of Lostrigg. Beyond this point there would be no cumulative effects travelling west along Branthwaite Road.

- 1.2.49 For road users travelling east, cumulative visual effects would be possible from Wythemoor Sough until passing the northern extents of Area C within the Proposed Development – approximately 570m in total. Beyond this the Proposed Development and Lostrigg would not be viewed in unison. Overall, therefore, this represents a short-term, small scale change over a relatively small geographical area as part of their overall journey. These factors result in a slight adverse magnitude of effect given that although there would be a perceptible change in views, these would be fleeting and would only encompass a small part route.
- 1.2.50 The significance of cumulative visual effect during construction for road users along Branthwaite Road is therefore assessed as being a **minor adverse**, short-term, partially reversible/partially permanent, and **not significant** level of cumulative effect.
- 1.2.51 For medium sensitivity road users traversing Dean Moor Road from the junction with Branthwaite Edge Road to the east west towards Pica, there is potential for fleeting cumulative views to the south as they pass the southern extents of Area C within the Proposed Development. These views are broadly represented by VL3c within the main visual assessment and VLC3 within this cumulative assessment. Views towards construction activity would be broadly similar in either direction and would be oblique

and small scale over a small geographical area. This would give rise to a negligible adverse magnitude of effect.

- 1.2.52 The significance of cumulative visual effect during construction for road users along Dean Moor Road is therefore assessed as being a **negligible adverse**, short-term, partially reversible/partially permanent, and **not significant** level of cumulative effect.
- 1.2.53 Branthwaite Edge Road runs in a broadly south to north orientation from the junction with Dean Moor Road in the south to the junction with Branthwaite Road to the north. Users of this road are considered to be of medium sensitivity to the proposals. From the outset, visibility of construction activity within both sites would be possible, although limited. Construction within Area C of the Proposed Development and within the western Southern Panel Area of Lostrigg would be visible on a medium scale, and these views would remain consistent as users travel north for a distance of approximately 1.3km, although activity within Area C of the Proposed Development would increase in prominence. As users progress past Rigg House, Lostrigg disappears from view, screened by intervening landform and vegetation, and only become partially visible at the end of the route, and not in combination with the Proposed Development. Overall, although there would be oblique visibility of construction activity within Area C of the Proposed Development, cumulative visibility would be limited, giving rise to a slight adverse magnitude of cumulative effect as worst case.
- 1.2.54 The significance of cumulative visual effect during construction for road users along Branthwaite Edge Road is therefore assessed as being a **minor adverse**, short-term, partially reversible/partially permanent, and **not significant** level of cumulative effect.
- 1.2.55 Recreational users of PRow 250002 (footpath) are considered to be of high sensitivity to the proposals travelling in a northeast to southwest orientation. Users travelling southwest to northeast would not experience change as the Proposed Development and Lostrigg would be behind their view. PRow 250002 extends from south of Branthwaite broadly southwest

towards Branthwaite Edge Road for approximately 1.2km, largely passing through agricultural land. Views from this PRoW are broadly represented by VL8a and VL8b of the ES, and VL8 within the Lostrigg Solar Scoping Report.

- 1.2.56 As users of the PRoW leave the southern extents of Branthwaite, visibility of construction activity within the Proposed Development and Lostrigg would limit by landform and to some extent vegetation. Glimpsed views towards higher ground within Area C of the Proposed Development is possible, but this area would not be subject to activity. As users move further southwest towards Branthwaite Edge Road, land rises slightly, affording wider views west and northwest. From this higher ground views of construction within the Proposed Development would be limited but possible, again only within Area C. Construction activity within Sites A and B of the Proposed Development would be screened by intervening landform and vegetation. There is potential for glimpses of construction activity within the western Southern Panel Area of Lostrigg given its slightly elevated nature, however it would not be so apparent as to detract from the wider views available. Views would lessen as receptors move further southwest as land falls away to meet Branthwaite Edge Road.
- 1.2.57 Overall, the scale of cumulative change for users of the PRoW during construction would be very small over a very small geographical area over the short-term, giving rise to a negligible adverse magnitude of cumulative effect.
- 1.2.58 The significance of cumulative visual effect during construction for recreational users PRoW 260005 is therefore assessed as being a **minor adverse**, short-term, partially reversible/partially permanent, and **not significant** level of cumulative effect.
- 1.2.59 PRoW 260003 runs broadly southeast from the A595 across agricultural land for approximately 1.5km before reaching Lucy Close Farm then turning south to terminate at Branthwaite Road. Recreational users, considered to be of high sensitivity, would experience relatively close views of construction activity within the Central Panel Area of Lostrigg as

they pass its southern extents. Much of the construction activity within the Southern Panel Area would be screened by intervening woodland between Cumberland Lodge and Lucy Close Farm. This same vegetation in combination with intervening landform would preclude views south towards the Proposed Development for much of the PRoW. As users near Lucy Close Farm views towards construction activity within the eastern Southern Panel Area and Area C would potentially appear as one, thereby increasing the scale of visibility, and the geographical spread. Upon reaching Lucy Close Farm wider visibility lessens as a result of intervening landform.

- 1.2.60 Overall, it is likely that cumulative short-term construction activity would be visible over a short section of the PRoW (approximately 400m), but over the remainder of the PRoW there would be no cumulative visibility. The resulting magnitude of effect therefore is considered to be slight adverse given the partial change in views.
- 1.2.61 The significance of cumulative visual effect during construction for recreational users PRoW 260003 is therefore assessed as being a **moderate adverse**, short-term, partially reversible/partially permanent, and **significant** level of cumulative effect.

Operational Phase (combined visual effects)

- 1.2.62 This section of the cumulative assessment has considered Year 1 of operation only, as no mitigation has been defined for Lostrigg, and this also provides for worst-case effects.
- 1.2.63 At VLC1, views towards the Proposed Development and Combined Site during operation would be altered from baseline conditions as solar panels and associated ancillary items replace areas of agricultural land. This would signify a clearly noticeable change for receptors of medium sensitivity over a large geographical area. The scale of change is considered to be medium given that some areas which contain solar panels would be screened by intervening vegetation around field boundaries so that only a proportion of the view would contain PV arrays.

This would give rise to a moderate adverse magnitude of effect, judged to moderately alter the appreciation/composition of the view over the long-term lifespan of the Proposed Development and Combined Site.

- 1.2.64 The significance of cumulative visual effect during operation at VLC1 therefore is assessed as being **moderate adverse**, medium to long-term, partially reversible/partially permanent, and **significant** level of cumulative effect.
- 1.2.65 For receptors of medium sensitivity at VLC2, there would be a change from baseline views in the form of the solar panels within both the Proposed Development and Lostrigg, however the areas which would not be visible would break up the overall view, lessening their combined visual effects. The geographical extents of the change would be large given the relatively wide extents within the view; however, the visible elements would amount to a small-scale change overall, resulting in a slight adverse magnitude of effect.
- 1.2.66 The significance of cumulative visual effect during operation at VLC2 therefore is assessed as being **minor adverse**, medium to long-term, partially reversible/partially permanent, and **not significant** level of cumulative effect.
- 1.2.67 At VLC3, receptors of high sensitivity would experience change largely as a result of Lostrigg, with only glimpses of the Proposed Development available during operation. Visibility of Lostrigg would however be largely at distance (approximately 5km), representing a small-scale change within the view over a small geographical area. This would ultimately give rise to a negligible adverse magnitude of effect given the cumulative visual change would be barely perceptible.
- 1.2.68 The significance of cumulative visual effect during operation at VLC3 therefore is assessed as being a **minor adverse**, medium to long-term, partially reversible/partially permanent, and **not significant** level of cumulative effect.

- 1.2.69 For receptors of high sensitivity at VLC4, given the proximity of Area C of the Proposed Development and the eastern Southern Panel Area of Lostrigg, it is likely that they would be viewed as the same solar development. For road users travelling east in particular (discussed within the Cumulative Sequential Effects section below), although the PV arrays would be broken up to some degree by woodland at the southwest corner of Lostrigg, it would appear as a clearly noticeable change in the view. Residents at Wythemoor House are most likely to experience cumulative visibility of the Proposed Development and Lostrigg given the slightly elevated eastern orientation of their views from the rear of the property. Residents at Wythemoor Sough are less likely to experience cumulative views given the southeasterly orientation of their views, which look towards the Proposed Development only. As a worst-case scenario (i.e. Wythemoor House) cumulative views would be of a medium scale over a medium geographical area, giving rise to a moderate adverse magnitude of effect.
- 1.2.70 The significance of cumulative visual effect during operation at VLC4 therefore is assessed as being a **major adverse**, medium to long-term, partially reversible/partially permanent, and **significant** level of cumulative effect.
- 1.2.71 Recreational users of the LDNP/WHS are represented by VLC5, and of very high sensitivity to the proposals. Cumulative views would be attainable at this location and given the proximity of the Proposed Development and Lostrigg, at this distance would be viewed as one. Although the change would be noticeable, the geographical extent would be small when considered against the extensive, wider views available. The magnitude of effect during operation is considered to be negligible adverse given there would be a barely perceptible change in views at this distance.
- 1.2.72 The significance of cumulative visual effect during operation at VLC5 therefore is assessed as being a **moderate adverse**, medium to long-

term, partially reversible/partially permanent, and **significant** level of cumulative effect.

Operational Phase (combined sequential effects)

- 1.2.73 For road users along Branthwaite Road, cumulative visibility would be restricted to a short stretch of the road as they approach the southern boundary of the eastern Southern Panel Area of Lostrigg, and the northern boundary of Site within the Proposed Development. There would be combined visibility of both Southern Panel Areas (east and west), and visibility of solar panels within Area C. This cumulative visibility would be largely oblique, aside from panels within the western Southern Panel Area, and relatively fleeting, for a distance of approximately 300m. This would give rise to a slight adverse magnitude of effect given the proximity of the view and partial change to composition.
- 1.2.74 The significance of cumulative visual effect during construction for road users of medium sensitivity along Branthwaite Road is therefore assessed as being a **minor adverse**, long-term, partially reversible/partially permanent, and **not significant** level of cumulative effect.
- 1.2.75 Road users at Dean Moor Road would experience glimpsed cumulative views of development as they pass the western area of Area C within the Proposed Development. Views would however be oblique and fleeting in nature, resulting in a barely perceptible change in the view. This in turn would give rise to a negligible adverse magnitude of cumulative effect for road users of medium sensitivity.
- 1.2.76 The significance of cumulative visual effect during construction for road users along Dean Moor Road is therefore assessed as being a **negligible adverse**, long-term, partially reversible/partially permanent, and **not significant** level of cumulative effect.
- 1.2.77 Users of Branthwaite Edge Road travelling north towards Branthwaite Road would experience cumulative visual effects as a result of the proximity of the Proposed Development (Area C) and distant visibility of Lostrigg's western Southern Panel Area. Overall, however the distant

views of Lostrigg would do little to increase the presence of solar development within the view given the close (although oblique) views of development within Area C. As users travel further north along the route, cumulative views would become slightly more prevalent as Lostrigg becomes closer in the view. As users approach Rigg House Farm, Lostrigg would no longer be visible as the road dips and landform and vegetation result in screening, and thereafter there would be no cumulative views.

- 1.2.78 Cumulative views of Lostrigg would result in a slight increase in scale and geographical spread from views of the Proposed Development, but this would be barely perceptible in the context of overall visibility, giving rise to a negligible adverse cumulative magnitude of effect.

- 1.2.79 The significance of cumulative visual effect during construction for road users along Branthwaite Edge Road is therefore assessed as being a **negligible adverse**, long-term, partially reversible/partially permanent, and **not significant** level of cumulative effect.

- 1.2.80 Recreational users of PRow 250002 would experience limited cumulative views as they travel southwest away from Branthwaite, with the most likely areas of visibility on the higher ground approximately half-way along the PRow. The solar panels would result in new elements within the view over a relatively wide geographical area, but the limited visibility would result in a very small-scale change overall and would not detract from the wider views available for recreational users, and therefore the magnitude of effect would be negligible adverse.

- 1.2.81 The significance of cumulative visual effect during construction for recreational users PRow 260005 is therefore assessed as being a **minor adverse**, long-term, partially reversible/partially permanent, and **not significant** level of cumulative effect.

- 1.2.82 For recreational users of PRow 260003 cumulative visual change would be limited as a result of intervening woodland and landform to the south of the view for most of the route from the A595 to Lucy Close Farm. For a

short (approximately 400m) there is potential for cumulative views of the eastern Southern Panel Area of Lostrigg and solar panels within Area C and Area C of the Proposed Development, and it is likely they would appear as one development stretching south. This would result in a medium scale change to existing baseline views, over a small geographical area as the change would appear linear (north to south) and would not be widespread. Overall, the cumulative change is considered to be slight, given that there would only be a partial change in views for recreational users of the PRoW, with only a small portion of the route affected. The resulting magnitude of effect therefore would be slight adverse.

- 1.2.83 The significance of cumulative visual effect during construction for recreational users PRoW 260005 is therefore assessed as being a **moderate adverse**, long-term, partially reversible/partially permanent, and **significant** level of cumulative effect.

Summary of Effects

- 1.2.84 This cumulative assessment has considered impacts on landscape and visual receptors resulting from Lostrigg Solar farm (Lostrigg) and the Proposed Development (Dean Moor Solar Farm). Direct cumulative landscape effects on LCT 5: Lowland LCT Sub-type 5a: Ridge and Valley were considered in addition to cumulative direct visual effects at 5 discrete view locations and four transport receptors. Indirect cumulative effects were considered across three landscape character areas and one Area of Distinctive Character.
- 1.2.85 The cumulative assessment found that for LCT Sub-type 5a Ridge and Valley there would be short-term moderate adverse and significant effects during construction, and long-term moderate adverse and significant effects during operation. For visual receptors at VLC1 – VLC5, only VLC2 would experience non-significant cumulative effects during construction, with VLC1, VLC4 and VLC5 experiencing major adverse and significant effects over the short-term, and VLC3 experiencing moderate adverse and significant effects short-term. During operation, major adverse and

significant effects would remain for receptors at VLC4 only, with VLC1 and VLC5 both reducing to moderate adverse and significant cumulative effects. Cumulative effects at VLC3 would reduce to negligible adverse and not significant effects, and VLC2 would remain minor and not significant.

- 1.2.86 With regards to sequential cumulative effects which would be experienced by receptors utilising local routes and PRow, it was found that only recreational receptors along PRow 260003 would experience significant effects. These moderate adverse and significant effects would be experienced over the short-term construction phase, and the long-term operation phase. All other sequential receptors were found to experience non-significant effects.
- 1.2.87 With regards to indirect effects, none of the identified receptors are predicted to experience significant cumulative effects, with LCT Sub-type 9a Open Moorlands and LCT Sub-type 9d: Ridges predicted to experience no cumulative change as a result of Lostrigg.
- 1.2.88 In conclusion, there are predicted to be significant long-term cumulative effects as a result of Lostrigg Solar farm given its proximity to the Proposed Development; most prominently for residential visual receptors along Branthwaite Road who would experience close views of both proposed developments during construction and operational phase.

1.3 Land at Lillyhall North

- 1.3.1 One other proposed development lies within the study area: Land at Lillyhall North, Branthwaite Road, Winscales, Workington (Ref. FUL/2021/0009). The development was approved with conditions in February 2021, lies within open agricultural land, and is a hybrid application consisting of the following:
- Full planning permission sought for construction of a new roundabout, Area C access and spine road and the extension to existing pedestrian/cycle path.

- Outline permission for the erection of a variety of industrial, storage, research and development and industrial process use buildings (Use classes B2, B8, E(g)ii E(g)iii); and
- Approximately 10.6ha employment area - 33,779sqm floorspace for industrial, storage, research & development, and industrial process use classes.

1.3.2 Land at Lillyhall North was not accompanied by a landscape and visual appraisal or assessment, however the assessment was informed by the Preliminary Ecological Appraisal ('PEA'), Indicative Site Layout prepared by Jefferson Sheard Architects in November 2020, and the Design and Access Statement Redacted prepared by Jefferson Sheard Architects in December 2020.

1.3.3 The 1.3.2 Land at Lillyhall North application shows that the scheme comprises three parcels of land bound to the west by a linear woodland belt which follows the A595, linear woodland to the south along Branthwaite Road with access to the land via a field gate entrance, an open boundary at the southern half of the eastern extents, a linear woodland belt to the northern half of the eastern extents, and linear woodland along the northern boundary. The fields are separated internally by linear overgrown hedgerow. The land parcels are consequently relatively well contained visually aside from the southern half of the eastern boundary; however roadside vegetation along Branthwaite Road is such that glimpses into the land parcels are very limited approaching from the east.

1.3.4 With regards to landscape character, the proposals lie within Type 5: Lowland, Sub-type 5d: Urban Fringe. This landscape type is characterised by extensive areas of lowland pasture and agricultural land influenced by urban fringe development, considered to be of medium sensitivity overall. The PEA lists the boundary woodland as Mixed Plantation Woodland, with intact species poor hedgerow to the eastern boundary, and defunct species poor hedgerow along internal field boundaries.

1.3.5 The Indicative Site Layout illustrates the retention of the existing linear woodland which bound the site, with interior field boundary hedgerow

planting lost to the development. Individual trees and groups of trees have been proposed within the site, along with a detention basin to the south of the site.

- 1.3.6 Given that no LVA or LVIA was submitted with the planning application, a high-level review of receptors which have the potential to experience cumulative landscape and/or visual effects was undertaken with relevance to the Proposed Development and Land at Lillyhall North by the Applicant.
- 1.3.7 No significant cumulative landscape effects were predicted given that although Areas A and B of the Proposed Development and Land at Lillyhall North lie within the same LCT (Type 5: Lowland) they lie within distinct Sub-types (5a: Ridge and Valley and 5d: Urban Fringe respectively), and it is predicted any change, including indirect effects, would not result in significant cumulative effects. Overall, the magnitude of effect on landscape was judged to be negligible, giving rise to a **negligible adverse**, direct / indirect, short-term / long-term, irreversible and **not significant** cumulative level of effect across all phases of works.
- 1.3.8 Visual receptors of relevance to both sites and with the potential for significant cumulative effects are people travelling along Branthwaite Road in either direction. Road receptors in this instance are considered to be of low sensitivity given the relatively high speed of travel 60mph past the Area C and 50mph past Land at Lillyhall North and oblique views.
- 1.3.9 No other visual receptors are considered likely to experience significant cumulative effects, including those identified by the additional view locations for the Lostrigg cumulative assessment.

Construction Phase

- 1.3.10 During construction, users of Branthwaite Road travelling east and/or west would experience a level of sequential cumulative effects should both developments be under construction simultaneously. Users would pass directly adjacent to both Area Boundaries in relatively short succession (a travelling distance of approximately 1.2km) and given that Land at Lillyhall North also includes road upgrades / construction of a new roundabout,

traffic management is likely to be in place. Overall, the magnitude of these sequential visual cumulative effects is considered to be moderate given that the combination of both proposals during construction would result in a clearly noticeable change in visual amenity over a short period of time, which is considered to be ‘frequently sequential’ (see Para. 3.7.10 in Section 3.7 of Appendix 7.1: Methodology). This would result in a **minor adverse**, indirect, short-term, reversible and **not significant** cumulative level of effect for users of Branthwaite Road during construction.

Operational Phase

- 1.3.11 During operation, sequential cumulative visual effects would reduce given that road management measures would no longer be in place and the developments are not similar in nature, therefore they would not be viewed as ‘cumulative’ but rather as unrelated, separate developments. Consequently, the magnitude of effect would reduce to negligible across all operational phases (nominally Year 1 and Year 15). This would result in effects reducing to a **negligible adverse**, indirect, medium / long-term, partially reversible/partially permanent and **not significant** level of cumulative effect.

1.4 Conclusions

- 1.4.1 Table 1.4 provides a tabulated summary of the predicted cumulative effects for all receptors.

Table 1.4: Summary of Receptor Assessments

Receptor	Sensitivity	Magnitude of change	Construction Phase Effects	Operation Year 1 Effects
Lostrigg Solar Farm				
LCT Sub-type 9a: Open Moorlands	Medium	No Change (Con)	No Change	No Change
		No Change (Yr 1)		
LCT Sub-type 9d: Ridges (Cumbria LCA)	Medium	No Change (Con)	No Change	No Change
		No Change		

Receptor	Sensitivity	Magnitude of change	Construction Phase Effects	Operation Year 1 Effects
		(Yr 1)		
LDNP Areas of Distinctive Character (ADC) 8: Loweswater	High	Negligible (Con)	Minor adverse (Not significant)	Minor adverse (Not significant)
		Negligible (Yr 1)		
LCT I: Upland Limestone Farmland (LDNP LCA)	High	Negligible (Con)	Minor adverse (Not significant)	Minor adverse (Not significant)
		Negligible (Yr 1)		
LCT Sub-type 5a: Ridge and Valley	Medium	Moderate (Con)	Moderate adverse (Significant)	Moderate adverse (Significant)
		Moderate (Yr 1)		
VLC1	Medium	Major (Con)	Major adverse (Significant)	Moderate adverse (Significant)
		Moderate (Yr 1)		
VLC2	Medium	Slight (Con)	Minor adverse (Not significant)	Minor adverse (Not significant)
		Slight (Yr 1)		
VLC3	High	Slight (Con)	Moderate adverse (Significant)	Minor adverse (Not significant)
		Negligible (Yr 1)		
VLC4	High	Moderate (Con)	Major adverse (Significant)	Major adverse (Significant)
		Moderate (Yr 1)		
VLC5	Very high	Negligible (Con)	Moderate adverse (Significant)	Moderate adverse (Significant)
		Negligible (Yr 1)		
VLSC1 (Branthwaite Road)	Medium	Slight (Con)		

Receptor	Sensitivity	Magnitude of change	Construction Phase Effects	Operation Year 1 Effects
		Slight (Yr 1)	Minor adverse (Not significant)	Minor adverse (Not significant)
VLSC2 (Dean Moor Road)	Medium	Negligible (Con)	Negligible adverse (Not significant)	Negligible adverse (Not significant)
		Negligible (Yr 1)		
VLSC3 (Branthwaite Edge Road)	Medium	Slight (Con)	Minor adverse (Not significant)	Negligible adverse (Not significant)
		Negligible (Yr 1)		
VLSC4 (PRoW 250002)	High	Negligible (Con)	Minor adverse (Not significant)	Minor adverse (Not significant)
		Negligible (Yr 1)		
VLSC5 (PRoW 260003)	High	Slight (Con)	Moderate adverse (Significant)	Moderate adverse (Significant)
		Slight (Yr 1)		
Land at Lillyhall North				
Landscape receptors	Medium	Negligible (Con)	Negligible adverse (Not significant)	Negligible adverse (Not significant)
		Negligible (Yr 1)		
Visual receptors	Low	Moderate (Con)	Minor adverse (Not significant)	Negligible adverse (Not significant)
		Negligible (Yr 1)		

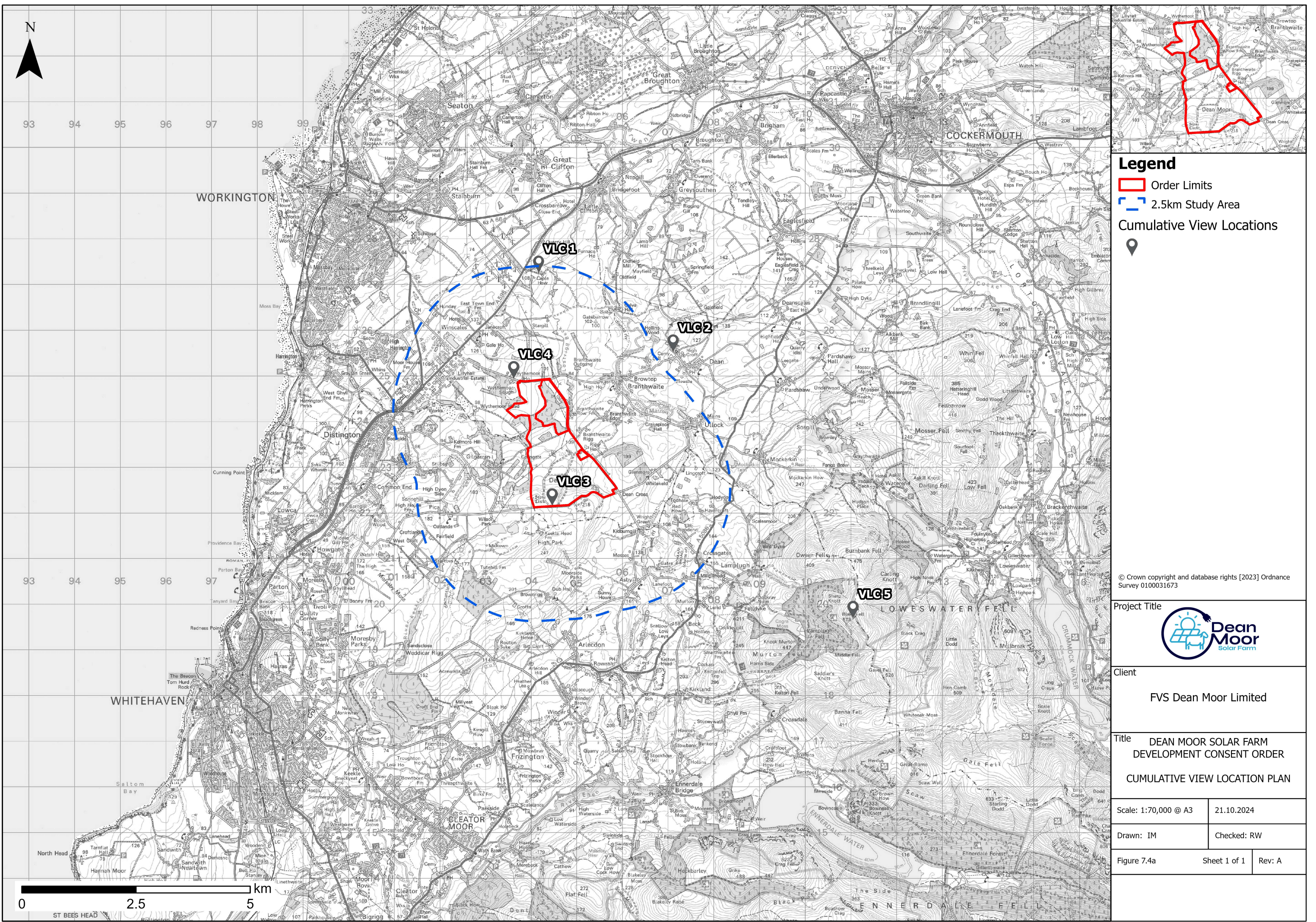
1.5 Overall Cumulative Assessment

1.5.1 The cumulative developments outlined above have also been considered in combination with the Proposed Development (i.e., potential effects of all developments considered above as a whole).

- 1.5.2 With regards to landscape character, given that Land at Lillyhall North lies within LCT Sub-type 5d: Urban Fringe, while Lostrigg and the Sites A and B of the Proposed Development lie within LCT Sub-type 5a: Ridge and Valley there are no additional cumulative effects predicted over any phase of works.
- 1.5.3 From a visual perspective, users of Branthwaite Road would experience the most prominent visual change as they pass to the south of Land at Lillyhall North and the initial southern boundary of Lostrigg in relatively quick succession travelling west to east, (with approximately 240m between the developments) before then reaching the northern boundary of Dean Moor / eastern Southern Panel Area of Lostrigg shortly thereafter.
- 1.5.4 Previously, cumulative effects for road users along Branthwaite Road which considered the Proposed Development and Land at Lillyhall North were considered to be minor adverse and not significant during the construction and operational phases. Decommissioning effects, should they occur, would be similar to those experienced during construction but in reverse. Effects would however be reduced to some degree given that the roundabout proposed as part of the application would likely remain and would not be part of the decommissioning process.
- 1.5.5 With the introduction of Lostrigg within the view for road users in tandem with Dean Moor and Land at Lillyhall North, there would be an increase in both construction activity and visibility of solar development, which would result in an increase in the associated magnitude of effect from slight to moderate across all phases of the works. This would largely be as a result of an increase in geographic extent (medium) and scale (medium).
- 1.5.6 During the construction phase this would result in a **moderate adverse**, direct, short-term, partially reversible / partially permanent and **significant** level of cumulative effect for users of Branthwaite Road.
- 1.5.7 During the operational phase of works this would result in a **moderate adverse**, long-term, partially reversible / partially permanent and **significant** level of cumulative effect for users of Branthwaite Road.

- 1.5.8 Cumulative visual effects for all other visual receptors is not predicted to increase from that identified in the individual cumulative assessments of Lostrigg and Land at Lillyhall North in relation to the Proposed Development, largely as a result of limited or no intervisibility between the three sites.

Appendix A Cumulative View Location Plan



Legend

Order Limits

2.5km Study Area

Cumulative View Locations

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Project Title		
Client		
FVS Dean Moor Limited		
Title		
DEAN MOOR SOLAR FARM DEVELOPMENT CONSENT ORDER CUMULATIVE VIEW LOCATION PLAN		
Scale: 1:70,000 @ A3	21.10.2024	
Drawn: IM	Checked: RW	
Figure 7.4a	Sheet 1 of 1	Rev: A

Appendix B Cumulative Photosheets



Photograph continued on following sheet

Dean Moor Solar Farm

NOTE: All photographs have been taken using a Canon EOS 6D Mk II full-frame digital camera using a Canon EF 50mm f/1.8 STM which is a fixed focal-length lens.

The image here is representative of a 90 degree panorama presented at a width of 820mm with an image sizing of 96%. Panoramas may have been cropped but have not been manipulated beyond basic image processing.

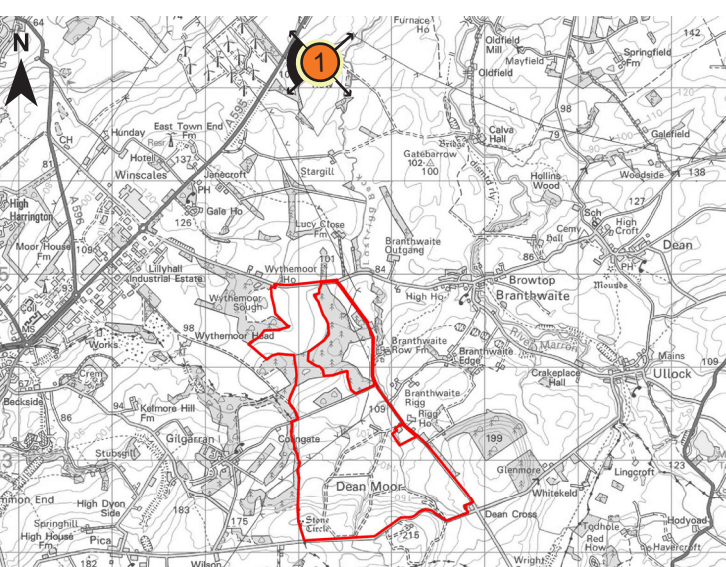
Summer photography is representative of a 'vegetation with leaf scenario, and winter photography a 'without leaf' scenario.

Each photograph identifies an indicative extent of the areas of development and the order limits. These are not representative of what may or may not be visible in the view and are provided to give context to the reader of where the Proposed Development is located and its theoretical maximum extent. In some views individual features are not labelled as either these will not be visible or the distance between the receptor and Site is considered to great to label individual features. The extents shown accord with the parameters identified on Figure 3.1 - Concept Layout.



Cumulative View Sheet 1 of 13

Viewpoint grid ref:	E 304217, N 527227	Ref:	Figure 7.4b
Sheet Size:	A1 Landscape	Rev:	0
Photographs taken:	10.10.2024	Date:	18/10/2024
		Drawn:	JRM
		Checked:	AC



Photograph continued on previous sheet



Photograph continued on following sheet

Cumulative View
Location

VLC1 2/4

Dean Moor Solar Farm

NOTE: All photographs have been taken using a Canon EOS 6D Mk II full-frame digital camera using a Canon EF 50mm f/1.8 STM which is a fixed focal-length lens.

The image here is representative of a 90 degree panorama presented at a width of 820mm with an image sizing of 96%. Panoramas may have been cropped but have not been manipulated beyond basic image processing.

Summer photography is representative of a 'vegetation with leaf scenario, and winter photography a 'without leaf' scenario.

Each photograph identifies an indicative extent of the areas of development and the order limits. These are not representative of what may or may not be visible in the view and are provided to give context to the reader of where the Proposed Development is located and its theoretical maximum extent. In some views individual features are not labelled as either these will not be visible or the distance between the receptor and Site is considered to great to label individual features. The extents shown accord with the parameters identified on Figure 3.1 - Concept Layout.



Cumulative View Sheet 2 of 13

Viewpoint grid ref: E 304217, N 527227
Sheet Size: A1 Landscape
Photographs taken: 10.10.2024

Ref: 0
Rev: 0
Date: 18/10/2024
Drawn: JRM
Checked: AC

Figure 7.4b

