West Burton Solar Project

Technical Note on Cumulative Effects of Additional Schemes

Revision B (Tracked)

Prepared by: Lanpro Services

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West Burton
SOLAR PROJECT

Schedule of Changes

Figure Reference	Page	Description of Changes	Reason for Revision
A	26	Additional schemes shown: Fosse Green, Springwell, Beacon Fen, Meridien	Consideration of new schemes in cumulative assessment
B	26	Additional scheme shown: Steeple Renewable Project	Consideration of new schemes in cumulative assessment

All other changes made to text and to tables are shown as tracked changes.

Contents

Issue Sheet

Report Prepared for: West Burton Solar Project Ltd.
Deadline ~~5~~7

Technical Note on Cumulative Effects of Additional Schemes

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1 Introduction

1.1 Purpose of this Document

1.1.1 This report provides an assessment of the cumulative effects of additional schemes in support of the Application for a Development Consent Order for West Burton Solar Project (the 'Scheme') by West Burton Solar Project Limited (the 'Applicant').

1.1.2 The report identifies schemes that have not already been considered as part of the cumulative effects assessment (CEA) within the Environmental Statement **[APP-039 to APP-061, REP1-073, REP1-074, REP1-012, REP3-010, REP4-076, REP4-077]**, because at the time this was prepared, there was not sufficient information in the public domain for these projects to be considered as part of the CEA, which was undertaken in accordance with PINS Advice Note 17[1]. This report provides an assessment of potential significant environmental effects resulting from these projects cumulatively with the Scheme.

1.1.3 This report is produced in consistency with other NSIP schemes. Specifically, the Cottam Solar Project [**EN010133/REP4-059]**.

1.1.4 Question 1.1.9 of the Examining Authority's (ExA) First Written Questions **[PD-009]** asked the Local Planning Authorities to identify cumulative developments that should be included in the assessments of the Environmental Statement. West Lindsey District Council (WLDC) **[REP3-044]** requested that One Earth Solar Farm and Stow Park Solar Farm be included. Question 1.1.10 of the Examining Authority's (ExA) First Written Questions **[PD-009]** asked the Applicant to set out how the cumulative effects of solar development proposals in the surrounding area, other than those referred to in the Joint Report on Interrelationships between Nationally Significant Infrastructure Projects **[REP1-057]**, been considered.

1.1.5 ~~In~~Since the original version of this ~~revision, three~~document four schemes have been added for consideration~~:~~. The Fosse Green Solar Park, Springwell Energy and Beacon Fen Energy Park~~. These~~ schemes have been added to address representations made by 7000 Acres **[REP4-085]** at Deadline 4, and further referenced in Question 2.1.2 of the ExA Second Written Questions **[~~EN010132/EX5/WB8.1.34].~~ REP5-039].** Steeple Renewables Project has been added at Deadline 7 following submission of a scoping report to the Planning Inspectorate in April 2024.

1.1.6 This report addresses the ExA's questions and the Local Planning Authorities comments.

[1] Planning Inspectorate, 'Advice Note Seventeen: Cumulative effects assessment relevant to nationally significant infrastructure projects', August 2019 (version 2) [https://infrastructure.planninginspectorate.gov.uk/legislation-and-advice/advice-notes/advice-note-17/]

1.1.7 This report should be read alongside WB8.1.8 Joint Report on Interrelationships between Nationally Significant Infrastructure Projects **[~~REP4-059~~REP6-015]** which addresses the cumulative impacts of four Nationally Significant Infrastructure Projects: The Scheme (West Burton Solar Project), Cottam Solar Project, Gate Burton Energy Project and Tillbridge Solar Project.

2 Methodology

2.1 Introduction

2.1.1 The assessments of the additional schemes follow the methodology set out within ES Chapter 2: EIA Process and Methodology **[APP-040]** and used for the Environmental Statement, as well as the process described in PINS Advice Note 17.

2.1.2 The proposed schemes listed in Table 2.1 have been identified as constituting sites for the Long List in addition to the sites listed in ES Appendix 2.3: Cumulative Assessment Sites **[APP-069]**.

2.1.3 Following the methodology set out in ES Chapter 2: EIA Process and Methodology **[APP-040]**, ~~six~~seven additional schemes meet the criteria for assessment as part of the Long List: One Earth Solar Farm, Great North Road Solar Park, Stow Park Solar Farm, Fosse Green Energy, Springwell Solar Farm ~~and~~, Beacon Fen Energy Park~~.~~ ~~Three~~, and Steeple Renewables Project. Two further schemes have been excluded from consideration: ~~The Steeples Renewables Solar Project and~~ West Burton Power Station Finding STEP a Home ~~have~~has not yet submitted a scoping ~~reports~~report to the Planning Inspectorate; The North Humber to High Marnham project is an overhead power line rather than a solar park and is outside the zone of influence of the Scheme.

2.1.4 The locations of the additional schemes are also shown in Appendix A, which is an updated version of ES Figure 2.1: Cumulative Assessments Site Plan **[APP-140]**.

2.2 Tier Classification

2.2.1 The schemes identified in Table 2.1 are assigned a tier in accordance with the classification set out in PINS Advice Note 17. The three tiers are defined as follows descending from Tier 1 (most certain) to Tier 3 (least certain) to reflect a diminishing degree of certainty which can be assigned to each development being implemented:

Tier 1

- Under construction;
- Permitted application, whether under the Planning Act 2008 or other regimes, but not yet implemented;
- Submitted application, whether under the Planning Act 2008 or other regimes, but not yet determined.

Tier 2

- Projects on the Planning Inspectorate's programme of projects where a scoping report has been submitted.

Tier 3

- Projects on the Planning Inspectorate's programme of projects where a scoping report hasn't been submitted;
- Identified in the Development Plan (and emerging plan – with appropriate weight given as they move closer to adoption);
- Identified in other plans and programmes (as appropriate) which set the framework for future development consents/approvals, where development is reasonably likely to come forward.

2.2.2 At Issue Specific Hearing 5 **[~~EN010132/EX5/WB8.1.32~~REP5-037]**, Lincolnshire County Council stated that they considered that Meridian Solar Farm should also be considered as part of the cumulative assessment. The Scheme falls within Tier 3 as it appears on the Planning Inspectorate's programme of projects but a scoping report has not been submitted. It is located near Whaplode Drove which is approximately 70km southeast of West Burton 2. Given the level of uncertainty around the extent of the Scheme it is not considered any further in this Technical Note. If further information is made available during the examination of this Scheme, it will be considered further.

2.2.3 The emerging additional schemes considered support the Government's view that large capacities of low-carbon generation will be required to meet increased demand and replace output from retiring (fossil fuel) plants, and that "a secure, reliable, affordable, Net Zero consistent system in 2050 is likely to be composed predominantly of wind and solar" taken directly from EN-1 NPS.[2] ~~.~~ This support for large scale solar as part of the 'answer' to net zero and energy security has been repeated in its recent government energy strategy and policy publications.~~–~~

[2] (EN1 - National Policy Statements for energy infrastructure)

Table 2.1: Additional Schemes

Application Reference	Applicant and Description	Distance from Scheme	Status	Tier
West Lindsey DC 147710	Luminous Energy Ground mounted 49.9MW solar PV farm Stow Park Farm, Stow Park, Lincoln, LN1 2AN	0km from West Burton	Scoping Report submitted to LPA December 2023.	2
NSIP EN010159	One Earth Solar Farm Solar farm and battery energy storage system with a generating capacity exceeding 50MW	3.4km from West Burton	Scoping Report submitted to PINS. Submission of application expected Q1 2025	2
NSIP EN010162	Great North Road Solar Park Elements Green Trent Limited Solar farm battery energy storage system with a maximum generation capacity of 800MW	13.8km from West Burton	Scoping Report submitted to PINS. Submission of application expected Q2 2025	2
NSIP EN010154	Fosse Green Energy Fosse Green Energy Limited Solar farm and battery energy storage system with a generating capacity exceeding 50MW	10.6km from West Burton	Scoping Report submitted to PINS June 2023. Submission of application expected Q4 2024	2
NSIP EN010149	Springwell Solar Farm Springwell Energy Farm Ltd	Approx 21km from West Burton	Scoping Report submitted March 2023. Statutory consultation January and	2

	Solar farm and battery energy storage system with a generating capacity exceeding 50MW		February 2024. Submission of application expected Q3 2024	
NSIP EN010151	Beacon Fen Energy Park Beacon Fen Energy Park Limited Solar farm and battery energy storage system with a generating capacity exceeding 50MW	Approx 32km from West Burton	Scoping Report submitted April 2023. The application is expected to be submitted in Q3 2024.	2

NSIP EN010163	Steeple Renewables Project RES Limited Solar farm and battery energy storage system with a generating capacity exceeding 50MW	0km from West Burton	Scoping Report submitted April 2024. The application is expected to be submitted in Q1 2025.	2

3 Assessment of Cumulative Effects of Additional Schemes

3.1 Assessment

3.1.1 For each of the topic chapters of the Environmental Statement, the assessment of the cumulative effects of the additional schemes identified above in **Table 2.1** is set out in **Table 3.1**.

3.2 Conclusion

3.2.1 The review of the additional schemes for each topic found that there are no new potential significant cumulative effects.

Table 3.1: Assessment of Cumulative Effects of Additional Schemes

Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
Chapter 7: Climate Change		
Effects on climate change	The Schemes in Table 2.1 have been reviewed to consider likely additional impacts on climate change.	**No significant cumulative adverse effects.** No significant cumulative adverse effects are anticipated during construction, operation, or decommissioning.
Chapter 8 Landscape and Visual Impact		
Effects on landscape character and visual amenity/receptors	The Schemes in Table 2.1 have been reviewed to consider likely additional landscape and visual cumulative effects. Potential Cumulative Visual Effects associated with One Earth and Great North Road and the Scheme have been considered. Having reviewed the information currently available, there will be no intervisibility due to the distance between the schemes, intervening topography, built structures and vegetation. Given these reasons, cumulative landscape and visual effects resulting from simultaneous construction as well as during operation (year 1 and year 15) and decommissioning will not be significant. Potential Cumulative Effects associated with the Stow Park Solar Farm have been considered. Having reviewed the information currently available, it is considered that development of the solar array would not lead to an increase in the significance of effects identified within the LVIA undertaken for the Scheme. The only exception to this is in regard to views from Cowdale Lane. Viewpoint 44 of the Scheme's LVIA demonstrates views	**No Significant Cumulative Adverse Effects:** Based on the information currently available, in respect of One Earth and Great North Road, cumulative landscape and visual effects resulting from simultaneous construction as well as during operation (year 1 and year 15) and decommissioning will not be significant. **No Significant Cumulative Adverse Effects:** Based on the information currently available, in respect of Stow Park Solar Farm, cumulative landscape and visual effects would not lead to an increase in the significance of effects identified within the LVIA undertaken for the Scheme. There is a potential for cumulative effects as a result of the Stow Park Solar Farm at Viewpoint VP 44 but this will be dependent on the mitigation measures proposed by the developer. **No Significant Cumulative Adverse Effects:** Based on the information currently available, in respect of Fosse Green Solar Farm, Springwell Solar Farm and Beacon Fen Solar Farm, , cumulative landscape and visual effects would not lead to an

Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
	north across the Stow Park Solar Farm from an existing field access. It is anticipated that as a consequence of the development of the Stow Park Solar Farm, that this view would become dominated by solar panels associated with the Stow Park Solar Farm, which is likely to be considered Significant. Given the early stages of development of the proposals for Stow Park Solar Farm it is uncertain what approach the developer would be inclined to take to in any approach to mitigation in this location. Potential Cumulative Visual Effects associated with Fosse Green Solar Farm, Springwell Solar Farm and Beacon Fen Solar Farm have been considered. Having reviewed the information currently available, there will be no intervisibility due to the distance between the schemes, intervening topography, built structures and vegetation. Given these reasons, cumulative landscape and visual effects resulting from simultaneous construction as well as during operation (year 1 and year 15) and decommissioning will not be significant. There is a notable disconnect between the schemes, particularly attributed to the location of Springwell Solar Farm within the separate National Character Area NCA 47: Southern Lincolnshire Edge and Fosse Green Solar Farm within both NCA 47: Southern Lincolnshire Edge and NCA 48 Trent and Belvoir Vales National Character Areas.	increase in the significance of effects identified within the LVIA undertaken for the Scheme **[APP-046]**. **No Significant Cumulative Adverse Effects**: Based on the information currently available, in respect of the Steeple Renewables Project, cumulative landscape and visual effects would not lead to an increase in the significance of effects identified within the LVIA undertaken for the Scheme.

Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
	The Scoping Report for the Steeple Renewables Project (Solar NSIP) was submitted April 2024. The application is expected to be submitted in Q1 2025. The Steeple Renewables Project is located in the area to the west of the River Trent and surrounding the village of Sturton le Steeple. The Steeple Renewables Project is proposed for land located with the Cable Route Corrdor for the Scheme. Potential Cumulative Effects associated with the Steeple Renewables Project have been considered. Having reviewed the information currently available, it is considered that development of the solar array would not lead to an increase in the significance of effects identified within the LVIA undertaken for the Scheme. The initial SZTV demonstrates some small areas of potential intervisibility (beyond the 2km Study area) to the south of the village of Marton and along the western extents of the WB3 site for both the Solar Development and the Substation Development.	
Chapter 9 Ecology and Biodiversity		
Cumulative effects on ground nesting birds	With the publication of the EIA Scoping Reports for the One Earth Solar Farm, Stow Park Solar Farm, Great North Road Solar Park (GNRSP), Fosse Green Energy, Springwell Solar Farm ~~and~~, Beacon Fen Energy Park and Steeple Renewables Project it is assessed that already-identified cumulative effects upon ground nesting birds are likely to be exacerbated to a degree, although this is dependent on any mitigation to be provided within these schemes which are, as	**Significant adverse cumulative effect likely at District Scale**. This is also the same assessment significance and scale predicted to occur when considering the Cottam, Gate Burton and Tillbridge schemes with the Scheme and so is consistent with the conclusion set out in paragraph 9.9.11 of Chapter 9 Ecology and Biodiversity **[APP-047].** As such, no significant additional cumulative effects are

Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
	yet, undefined. However, as the Stow Park Solar Farm is relatively small scale, and the significant separation between the Scheme and the other projects (the GNRSP lies between 19.25km and 31.1km from the Scheme's generating stations, the One Earth Solar Farm lies between 8.2km and 22.8km, Fosse Green Energy 11km and Springwell Solar Farm 21km ~~and~~, Beacon Fen 36km from the Scheme's generating stations~~)~~ and Steeple Renewables Project 2km from the Scheme's generating stations)it is considered that the addition of these projects, even in the absence of mitigation, is unlikely to increase the scale at which the above cumulative adverse effect is felt beyond District level due to the considerable physical separation and situation of these schemes within more distant districts. No further potential cumulative ecological effects, or changes to any of those already described, were identified following review of the above schemes' EIA scoping reports.	identified during construction, operation, or decommissioning.~~–~~
Chapter 10 Hydrology, Flood Risk and Drainage		
Effects on Hydrology, Flood Risk and Drainage (Water Environment) receptors across all	The Schemes in Table 2.1 have been reviewed to consider whether any cumulative effects will occur to the water environment. Given there can be no detriment to neighbouring areas with regards to hydrology post development, and given all proposed developments are held	**No significant cumulative effects.** No significant cumulative effects are anticipated during construction, operation, or decommissioning.

Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
Schemes listed in Table 2.1 and Scheme	to the same standard by the planning authority no cumulative effects have been identified. In respect of the Stow Park Solar Farm, at this stage no cumulative effects have been identified based on the information available.	
Chapter 11 Ground Conditions and Contamination		
Effects on ground conditions and contamination receptors across all Schemes listed in Table 2.1 and Scheme	The Schemes in Table 2.1 have been reviewed to consider the potential for there to be additional ground conditions and contamination effects. Given the minimal level of effects and distance between the schemes One Earth Solar Farm, Fosse Green, Springwell, Beacon Hill ~~and~~, Great North Road Solar Park and Steeple Renewables Project, no cumulative effects have been identified. In respect of the Stow Park Solar Farm, at this stage no cumulative effects have been identified based on the information available.	**No significant cumulative effects.** No significant cumulative effects are anticipated during construction, operation, or decommissioning.
Chapter 12 Minerals		
Effects on mineral resources across all Schemes listed in Table 2.1 and the Scheme	The Schemes in Table 2.1 have been reviewed to consider the potential for there to be likely additional impacts on mineral resources. The Great North Road Solar Park ~~and~~, One Earth Solar Farm and Steeple Renewables Project proposals ~~both~~all affect large areas of safeguarded fluvial sand and gravel deposits associated with the River Trent. Part of the Steeple	**No significant cumulative effects.** No significant cumulative effects are anticipated during construction, operation, or decommissioning.

Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
	Renewables Project overlaps with the Cable Route Corridor for the Scheme within the area of safeguarded mineral deposits. The One Earth Solar Farm proposal within Lincolnshire also lies with an Area of Search for future sand and gravel supplies. The Fosse Green Energy proposal lies to the southwest of Lincoln, it also affects areas of safeguarded sand and gravel deposits and is within the same Area of Search for future sand and gravel supplies. The Fosse Green Energy proposal lies much closer to current areas of sand and gravel extraction than the Scheme. Any proposals for development that sterilises additional areas of these deposits has the potential to impact on the future supply of sand and gravel. The potential additional cumulative impact however is considered small as there is an extensive area of sand and gravel deposits extending well beyond the boundary the Scheme and the boundary of the schemes listed in Table 2.1. The additional area of safeguarded mineral affected by the schemes listed in Table 2.1 is relatively small and the impact is for a limited time. Although the Springwell Solar Farm proposal is located within an area of safeguarded limestone, it lies outside any area safeguarded for sand and gravel and therefore there are no cumulative mineral impacts arising from this proposal. The Stow Park Solar Farm and Beacon Fen Energy Park proposals do not affect any safeguarded mineral deposits	

Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
	and so there are no cumulative mineral impacts arising from either proposal.	
Chapter 13 Cultural Heritage		
Effects on heritage Assets across all Schemes listed in Table 2.1 and the Scheme	The Schemes in Table 2.1 have been reviewed to consider the potential for there to be likely additional impacts to heritage assets. Given the distance between the Scheme and One Earth Solar Farm, Great North Road Solar Park, Fosse Green, Springwell, and Beacon Fen, no cumulative effects have been identified. There is potential for the Scheme and the Stow Park Solar Farm to cause 'less than substantial harm' (in National Planning Policy Framework terms)– to the scheduled medieval bishop's palace and deer park, Stow Park (NHLE 1019229). Both schemes are proposed to occupy land within the former deer park. The Scheme identified large adverse impacts of a reversible nature to the scheduled medieval bishop's palace and deer park, Stow Park (NHLE 1019229). A setting impact assessment, as part of a request for a Screening Opinion Land at Stow Park (ref: 146938) concluded that while the study site forms part of the setting of the monument, "the remains within the setting have a contextual relationship, which is vested in the survival of associated physical remains, rather than in a visual appreciation of those remains".	**No significant cumulative effects** in respect of One Earth Solar Farm, Great North Road Solar Park, Fosse Green, Springwell, and Beacon Fen. **No significant cumulative effects** have been identified between the Scheme and the Steeple Renewables Project. The Steeple Renewables Project is located to the west of the River Trent, which is proposed for the Scheme's cable route. While it is acknowledged that depending on the design, there is a potential for Steeple Renewables Project to cause impact to the scheduled medieval settlement and open field system immediately south east of Low Farm (NHLE 1017741), which is located c.340m from the eastern edge of the grid connection works laydown area adjacent to West Burton Power Station, during the operation phase, any impacts are considered to be caused by the Steeple Renewables Project in isolation. The Scheme will only cause minor impact to the Scheduled Monument (NHLE 1017741) during the construction phase, and so no cumulative effects have been identified. In respect of Stow Park Solar Farm, the level of impact to the three constituent parts of 'The medieval bishop's palace and deer park, Stow Park' Scheduled Monument (NHLE 1019229) is a matter under discussion with Historic England.

Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
	As such the land for the Stow Park Solar Farm was assessed as not impacting upon the immediate setting of the medieval bishop's palace and deer park, Stow Park (NHLE 1019229), and instead was considered to have the potential to provide the opportunity to enhance the appreciation of the monument.	The Applicant believes that, while the Scheme would physically and visually isolate two of the three parts of the Scheduled Monument, post-medieval and modern activity has already adversely compromised the setting of these heritage assets in relation to the former landscape of the deer park, so that these can only be experienced individually. This coupled with the reversible nature of the Scheme has resulted in the Applicant's assessment that the Scheme would cause less than substantial harm (at the upper end) to the designated heritage asset. Full details of the Applicant's position can be found in the Statement of Common Ground **[~~EX5/WB8.3.3_A~~REP6-042]**. The proposed Stow Park Solar Farm is not considered to physically or visually isolate the Scheduled parts of the Deer Park to a greater extent than that which would occur as a result of the Scheme. Any potential cumulative impacts are considered to not increase the level of impact to that assessed for the Scheme. Therefore, there is not considered to be a significant cumulative effect.
Chapter 14 Transport and Access		
Effects on transport receptors across all Schemes listed in Table 2.1 and Scheme	The Schemes in Table 2.1 have been reviewed to consider the potential for there to be likely additional effects on transport and access. In particular, construction vehicle routes to each scheme have been considered. Stow Park Farm is located to the south of the A1500. Whilst the Stow Park Solar Farm EIA Scoping Report does not identify a construction vehicle route, an assumption has been	**No significant cumulative effects.** No significant cumulative effects are anticipated during construction, operation, or decommissioning.

Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
	made that it will use the A1500. If this is the case, there is the potential for overlap with construction vehicles accessing the Scheme, and the Cable Route Corridor, in the event that the construction timetables for the two schemes overlap. At Section 13.3, the Stow Park Farm EIA Scoping Report states, *"The trip generation assessment indicates that approximately 100 HGV deliveries are expected over the 34-week construction period, amounting to around 3 one-way HGV trips per week. No abnormal loads will be required for the development".* This low level of HGV movement will not result in any significant effect on the local highway network. Therefore, no significant cumulative effects have been identified. The One Earth Scheme is located to the south of the A57, which is likely to form the main construction vehicle route to it. No construction vehicles associated with the solar array element of the Scheme will use the A57. There will be a small number of construction vehicle trips on the A57 associated with the construction of the Cable Route. Given the nature of the A57, which already accommodates large numbers of HGV movements, no significant cumulative effects have been identified. Given the distance from the Scheme to the Great North Road, Springwell, Beacon Farm and Fosse Green schemes, no cumulative effects have been identified.	

Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
	Figure 14.1 of the Steeple Renewable Project ES Scoping Report sets out potential construction vehicle routes to this Scheme. There will not be any overlap with the construction vehicle routes to West Burton 1, 2 and 3. However, there may be an element of overlap with construction vehicle routes to some accesses on the West Burton cable route corridor, should the construction phases align. This overlap could occur on the following routes; • Gainsborough Road and Sturton Road (West Burton Accesses 100, 101, 102, 103, 104, 106, and 107); • Common Lane (West Burton Accesses 103, 105, 106, and 107); • Low Holland Lane (West Burton Accesses 104); • Laneham Road, Cocking Lane, Leverton Road (West Burton Accesses 108) At this stage, based on the information in the Steeple Renewable Projects ES Scoping Report, it is not possible to determine what effect the Steeple Renewables Project will have on the above routes if they are chosen as a preferred construction vehicle route. For the accesses associated with the cable route corridor for the West Burton Scheme, paragraph 5.17 of the Transport Assessment **[REP4-036]** states, "it is forecast that each access	

Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
	will generate up to eight arrivals and eight departures per day for the delivery of material and equipment. Around half of these will be HGV trips and half LGV trips. There will also be around 10 construction workers per access, arriving by car and shuttle bus". As set out in paragraph 5.19 of the Transport Assessment "each access will only be used for approximately 90 days during the construction phase". Therefore, given the very temporary nature of the West Burton Scheme works at these access points, and the low number of movements associated with them, it is unlikely that the cumulative effects will be significant if the construction phase overlaps with the Steeple Renewables Project.	
Chapter 15 Noise and Vibration		
Effects on noise sensitive receptors across all Schemes listed in Table 2.1 and the Scheme	The Schemes listed in Table 2.1 have been reviewed to consider the potential for there to be likely additional impacts to noise sensitive receptors. Given the lack of shared receptors and distance between the schemes One Earth Solar Farm and Great North Road Solar Park, Fosse Green, Springwell, and Beacon Fen, no cumulative effects have been identified. In respect of the Stow Park Solar Farm, at this stage no cumulative effects have been identified based on the information available.	**No significant cumulative effects.** No significant cumulative effects are anticipated during construction, operation, or decommissioning.

Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
	In respect to Steeple Renewables Project, at this stage no cumulative effects have been identified based on the information available.	
Chapter 16 Glint and Glare		
Effects on glint and glare effects across all Schemes listed in Table 2.1 and the Scheme	The Schemes in Table 2.1 have been reviewed to consider the potential for there to be likely additional glint and glare effects. Due to the distance and the lack of shared receptors between the schemes One Earth Solar Farm, Great North Road Solar Park, Fosse Green, Springwell, ~~and~~ Beacon Fen, and Steeple Renewables Project, no cumulative effects have been identified. In respect of the Stow Park Solar Farm, at this stage no cumulative effects have been identified based on the information available.	**No significant cumulative effects.** No significant cumulative effects are anticipated during construction, operation, or decommissioning.
Chapter 17 Air Quality		
Effects on air quality	The Schemes in Table 2.1 have been reviewed to consider the potential for there to be likely additional impacts to air quality. The distance between the schemes One Earth Solar Farm and Great North Road Solar Park, Fosse Green, Springwell, and Beacon Fen means there are no shared receptors and, as such, no cumulative effects have been identified.	**No significant cumulative effects.** No significant cumulative effects are anticipated during construction, operation, or decommissioning.

Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
	In respect of the Stow Park Solar Farm, based on an assumption made that the construction vehicle route will use the A1500, there will potentially be an overlap of construction vehicles accessing the Scheme and the Cable Route Corridor if construction timetables for the two schemes overlap. However, due to the low number of HGV movements stated in the Stow Park Farm EIA Scoping Report, no significant cumulative air quality effects have been identified. In respect to Steeple Renewables Project, based on the fact that there will be no overlap in construction vehicle routes for West Burton 1, 2 & 3, with any potential overlap with the cable route corridor being a low number of vehicles for a very short period, at this stage no cumulative effects have been identified based on the information available.	
Chapter 18 Socio-Economics, Tourism and Recreation		
Effects on the socio-economic, and tourism and recreation environments	The Schemes in Table 2.1 have been reviewed to consider the potential for there to be additional socio-economics, tourism and recreation effects. Potential cumulative effects are from Stow Park Solar cumulatively with West Burton are likely to be localised in nature. District-level socio-economic, tourism and recreation effects may potentially be increased by One Earth Solar~~.~~ and Steeple Renewables Project. Great North Road Solar, Fosse Green Energy, Springwell Solar Farm, and Beacon Fen Energy Park are all located outside the	Due to the smaller size of the Stow Park Solar Farm (<50MW) compared to the Scheme and the lack of additional tourism and recreation receptors likely to be affected, it is considered that there are only minimal changes to the socio-economic, tourism and recreation environment assessed, which do not result in any additional significant cumulative effects. During ~~its~~their operational ~~lifetime~~lifetimes, One Earth Solar Farm ~~is~~and Steeple Renewables Project are likely to increase the amount of energy employment and decrease the amount of agricultural employment in the Local Impact Area. No specific

Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
	Local Impact Area (Bassetlaw District and West Lindsey District) and so are not likely to result in additional cumulative effects, except at a regional level. However, these are not anticipated to be significant.	data has been provided in the ~~One Earth Solar~~ Scoping Report for the number of jobs generated by, or impacted by either of the ~~Scheme~~two schemes. Therefore, there is insufficient information to determine if there is likely to be any additional long-term significant cumulative effects in the Local Impact Area as a result of One Earth Solar Farm and Steeple Renewables Project during the operational phase of the Scheme. Due to its location, Steeple Renewables Project may lead to increased cumulative impacts on the Trent Valley Way and National Byways long-distance recreation routes during the operational lifetime of the Scheme and Steeple Renewables Project. No other socio-economic, tourism and recreation receptors are anticipated to experience changes in the level of effect significance identified in the cumulative assessment for the operational phase of the Scheme set out in Chapter 18 of the ES Socio Economics, Tourism and Recreation **[APP-056].** One Earth Solar has a projected construction timescale of 2027-2029, and projected decommissioning timescale of no earlier than 2074. This therefore may create an increased amount of cumulative effects during construction and decommissioning works. However, no changes to significant cumulative decommissioning effects are identified as likely due to the staggered timescales for this project in comparison to other NSIPs assessed in Chapter 18 of the ES **[APP-056]**. No projected construction timescale for Steeple Renewables Project has been published, however it can be assumed from the projected

Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
		timescales of other NSIPs in the Trent Valley area that this will be approximately 2028-2030. Therefore, there is unlikely to be a significant overlap in construction activities between the Scheme and Steeple Renewables Project. No other socio-economic, tourism and recreation receptors are anticipated to experience changes in the level of effect significance identified in the cumulative assessment for the construction and decommissioning phases of the Scheme set out in Chapter 18 of the ES **[APP-056]**.
Chapter 19 Soils and Agriculture		
Effects on Agricultural Land Resource, Soil Resource and Farming Circumstances	The Stow Park Solar Farm site is a single parcel of land approximately 48ha in extent. It has been subject to a detailed ALC assessment finding land in Grades 3a and 3b. One Earth and Great North Road sites are larger (1500ha and 2900ha respectively) and are broken up into several separate parcels of land. No detailed ALC assessment work has yet been submitted for these NSIP sites. The Springwell Solar Farm PEIR report includes ALC survey grade areas for 1,458.9ha. This survey found 23.8ha Grade 1, 164.9ha Grade 2, 593.2ha Grade 3a, 672.8ha Grade 3b and 4.2ha Grade 4 agricultural land. Approximately 53.6% of the site is best and most versatile agricultural land. Fosse Green Solar Park exhibition material showed interim ALC results of work that was still ongoing in August 2023.	**No significant cumulative effects.** have been identified for Soils and Agriculture. Agricultural land is not lost to or degraded by the temporary solar development. Soil resources associated with that agricultural land will experience minimal disturbance during construction/decommissioning works. Any soils on arable land will benefit from extended fallow period. A possible cumulative effect for Farming Circumstances could occur where an agricultural occupant owns or rents farmland on multiple separate sites. This is difficult to determine as the names of agricultural occupants are not disclosed between applicants for the schemes. However given the geographic separation between the different scheme sites, any common

Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
	The majority of the agricultural land was surveyed with approximately 30% being Grade 3a and 68% Grade 3b. No ALC survey results have yet been published for the Beacon Fen Energy Park site. The Scoping Report for Steeple Renewables Project includes an extract of Provisional ALC mapping (Scoping report fig 16.1). However this is 1:250k scale map data presented at 1:30k scale and should not be relied upon for any site specific assessment of ALC Grade. No information on agricultural occupancy is provided for any of these sites.	occupancy between Sites would strongly suggest large and diverse farm businesses, reducing the potential for there to be any adverse cumulative effects. There are therefore no significant adverse cumulative effects for farming circumstances.
Chapter 20 Waste		
Effects on waste and recycling handling	The Schemes in Table 2.1 have been reviewed to consider the potential for there to be likely additional waste effects. The consideration of potential cumulative effects is based on the likely increase in waste arisings from the schemes at all stages of development. This includes recycling handling and landfill capacity for construction, demolition and excavation (C,D&E) waste, and recycling and handling of waste electronics and electrical equipment (WEEE).	Due to the smaller size of Stow Park Solar Farm (<50MW) compared to the Scheme, it is considered that there are only minimal changes to the level of waste arisings identified in the cumulative assessment. Waste arisings from Great North Road Solar Park and Steeple Renewables Project are anticipated to increase the level of waste handling requirements in Nottinghamshire, while One Earth Solar Farm is likely to increase the level of waste handling requirements in both Lincolnshire and Nottinghamshire. Waste arisings from Fosse Green Energy, Springwell Solar Farm, and Beacon Fen Energy Park are likely to be predominantly handled

Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
		within Lincolnshire, thus increasing the level of waste handling requirements in Lincolnshire. However, no changes to the significant cumulative effects are identified at any stage of the Scheme's lifetime taking into an account an assessment of these additional schemes. This is due to the staggered prospective construction and decommissioning timescales for these developments. Therefore, there are **no new signficant cumulative effects** compared to those identified in WB6.2.20 ES Chapter 20: Waste **[APP-058]**.
Chapter 21 Other Environmental Matters		
Effects on electromagnetic fields	The Schemes in Table 2.1 have been reviewed to consider the potential for there to be likely additional EMF effects. Given the minimal level of effects and distance between the schemes One Earth Solar Farm, Great North Solar, Fosse Green Energy, Springwell Solar Farm, and Beacon Fen Energy Park, no cumulative effects have been identified. In respect of the Stow Park Solar Farm, at this stage no cumulative effects have been identified based on the information available. In respect of Steeple Renewables Project, any cumulative EMF effects will be limited to the National Grid Substation and potentially in instances where high voltage (400kV) cabling runs in parallel with the Scheme Grid Connection Cable.	**No significant cumulative effects.**

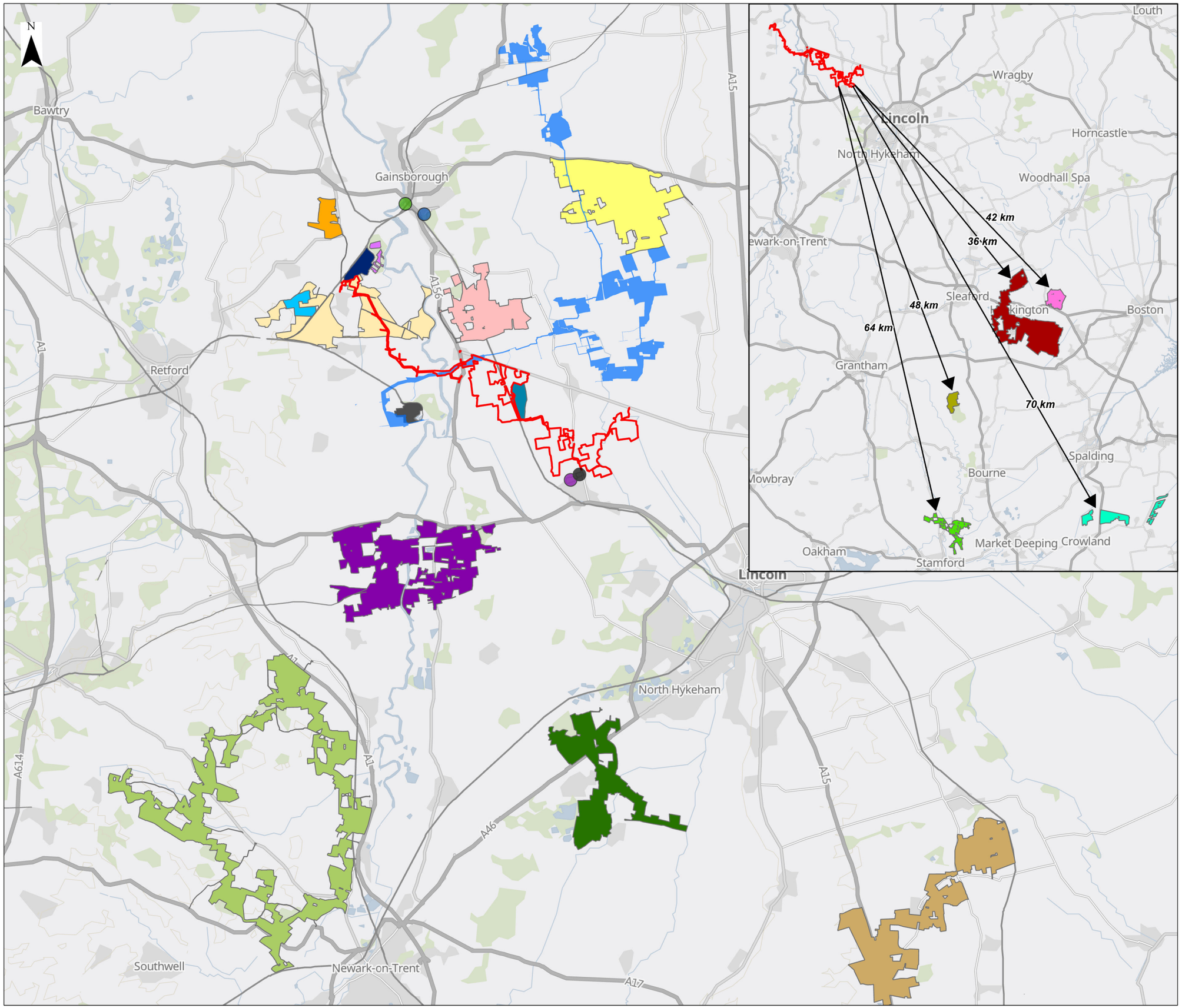
Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
	These effects would be highly localised and unlikely to have significant effects.	
Effects on telecommunications, utilities, and television reception	The Schemes in Table 2.1 have been reviewed to consider the potential for there to be likely additional telecommunications, utilities, and television reception effects. Given the minimal level of effects and distance between the schemes One Earth Solar Farm, Great North Solar, Fosse Green Energy, Springwell Solar Farm, and Beacon Fen Energy Park, no cumulative effects have been identified. In respect of the Stow Park Solar Farm, at this stage no cumulative effects have been identified based on the information available. In respect of Steeple Renewables Project, any cumulative effects will be limited to telecommunications and utility services affected by both the Scheme and Steeple Renewables Project. Subject to provision of suitable mitigation, these effects are not likely to be significant effects.	**No significant cumulative effects.**
Effects on light pollution	The Schemes in Table 2.1 have been reviewed to consider the potential for there to be likely additional light pollution effects. Given the minimal level of effects and distance between the schemes One Earth Solar Farm, Great North Solar, Fosse Green Energy, Springwell Solar Farm, and	**No significant cumulative effects.**

Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
	Beacon Fen Energy Park, no cumulative effects have been identified. In respect of the Stow Park Solar Farm, at this stage no cumulative effects have been identified based on the information available. In respect of Steeple Renewables Project, any cumulative effects will be limited to construction activity lighting where the Grid Connection Cable crosses the proposed Steeple Renewables Project Order Limits. These effects are temporary, and subject to provision of suitable mitigation, are not likely to be significant effects.	
Effects on human health and wellbeing	The Schemes in Table 2.1 have been reviewed to consider the potential for there to be likely additional impacts to human health and wellbeing effects. Potential cumulative effects are based on the likely localised health and wellbeing impacts from Stow Park Solar Farm cumulatively with the Scheme. District-level health and wellbeing matters may potentially be affected by One Earth Solar~~,~~ and Steeple Renewables Project. Due to the separation of Great North Solar, Fosse Green Energy, Springwell Solar Farm, and Beacon Fen Energy Park there are not anticipated to be cumulative health and wellbeing effects to the previously cumulatively assessed projects.	Due to the comparatively smaller size of Stow Park Solar Farm (<50MW), it is considered that there are only minimal changes to the human health and wellbeing impacts identified, which do not result in any additional significant cumulative effects. No additional significant effects are anticipated from Great North Road Solar Park, Fosse Green Energy, Springwell Solar Farm, and Beacon Fen Energy Park due to their distance from the Scheme. One Earth Solar and Steeple Renewables Project may bring an increase in employment and education and skills opportunities that will beneficially contribute towards deprivation in the Local Impact Area (Bassetlaw and West Lindsey Districts), however, it

Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
		is not anticipated that the level of significance of the cumulative assessment would change as a result. Therefore, there are **no new signficant cumulative adverse effects** to those identified in Section 21.5 of WB6.2.21 ES Chapter 21 Other Environmental Matters **[APP-059]** which are: • a major-moderate benefical effect on access to employment as an index of multiple deprivation during the cumulative construction period; • a moderate benefical effect on access to education as an index of multiple deprivation during the cumulative construction period; • a peak moderate adverse effect on the Trent Valley Way (long distance recreation route) during the cumulative construction period; • a moderate adverse effect on mental health and wellbeing to residents in the Till Valley area during the cumulative operational lifetime of NSIPs in the Till Valley.
Effects major accidents and disasters	The Schemes in Table 2.1 have been reviewed to consider the potential for there to be likely major accident and disaster effects. Potential cumulative effects are based on the likely localised major accident and disaster impacts from Stow Park Solar Farm and Steeple Renewables Project cumulatively with the Scheme.	Due to the comparatively smaller size of Stow Park Solar Farm (<50MW), it is considered that there are only minimal changes to the major accident and disaster impacts identified, which do not result in any additional significant cumulative effects. In respect of Steeple Renewables Project, any cumulative effects will be limited to impacts on utility services. Subject to provision

Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
	Due to the separation of One Earth Solar, Great North Solar, Fosse Green Energy, Springwell Solar Farm, and Beacon Fen Energy Park and the generally localised impacts from major accidents and disasters, there are not anticipated to be cumulative major accident and disaster effects to the previously cumulatively assessed projects.	of suitable mitigation, these effects are not likely to be significant effects. No additional likely significant effects are anticipated from One Earth Solar, Great North Road Solar Park, Fosse Green Energy, Springwell Solar Farm, and Beacon Fen Energy Park due to their distance from the Scheme. Therefore, there are **no significant cumulative effects** during the cumulative construction, operational, and decomissioning periods.

Appendix A – Plan of Additional Schemes



Island GREEN POWER

Lanpro

Key

- Order Limits

Cumulative Developments

- Saxilby Heights
- Land off Sturton Road
- Gainsborough SUE
- Gainsborough Riverside
- Cottam Solar
- West Burton A
- West Burton C
- Beacon Fen Energy Park
- Bumble Bee Farm
- Cottam Power Station Demoilition
- Land NW and S of Field Farm
- Fosse Green Energy
- Gate Burton
- Great North Road Solar
- Heckington Fen Solar
- Mallard Pass Solar
- One Earth Solar
- Springwell Solar Farm
- Stow Park Solar
- Temple Oaks Renewable Energy Park
- Tillbridge Solar
- Meridian Solar Farm
- Steeple Renewables

Layers: Lanpro, 2024
Base map: Contains OS data © Crown Copyright and database right 2023
Contains data from OS Zoomstack

0 2 4 6 8 10 km

Scale: 1:165,000@ A3

APFP Regulation: 5(2)(q)	Application Doc No. WB8.2.5_B
Ref: ?2983_LPR_ZZ_ON_DR_Z_0232	Date: 08/05/2024
Drawn by: AZ	Checked by: JC

Figure 2.1
West Burton
Cumulative Developments

WEST BURTON SOLAR PROJECT
EIA Process and Methodology
Environmental Statement (ES)