

# Stonestreet Green Solar

## Environmental Statement

### Volume 2: Main Text

### Chapter 17: Cumulative Assessment

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# 17 Cumulative Assessment

## 17.1 Introduction

17.1.1 This Chapter assesses the potential for effect interactions for the Project and also presents a summary of the inter-project cumulative assessment provided in the technical chapters (**ES Volume 2, Chapters 7 to 16 (Doc Ref. 5.2)**).

17.1.2 Cumulative effects can be categorised into two types:

- **Effect interactions** (also referred to as ‘intra-project effects’) - these occur when two or more different environmental effects from a development (e.g., dust, noise, traffic) act together to produce a different level of effect / impact experienced by a particular receptor. These combined effects can be ‘additive’ (meaning that the total effect is equal to the sum of the individual effects) or ‘synergistic’ (meaning that the total effect can be less or more than the sum of the individual impacts because they may exacerbate or neutralise one another).
- **Cumulative effects** (also referred to as ‘inter-project effects’) - these accrue over time and space from a number of different development activities and projects in geographical proximity to one another, which individually might be non-significant, but when considered together, could create a significant cumulative effect.

## 17.2 Legislative Context and Guidance

### Effect Interactions

17.2.1 Regulation 5(2) of the EIA Regulations refers to the requirement for an assessment of the effect interactions between types of effect, and states:

*“The EIA must identify, describe and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects of the proposed development on the following factors -*

- a) population and human health;*
- b) biodiversity, with particular attention to species and habitats protected under any law that implemented Directive 92/43/EEC and Directive 2009/147/EC;*
- c) land, soil, water, air and climate;*
- d) material assets, cultural heritage and the landscape;*
- e) the interaction between the factors referred to in sub-paragraphs (a) to (d).”*

17.2.2 The European Commission ('EC') has produced guidelines for the assessment of indirect, cumulative impacts and impact interactions<sup>1</sup> (i.e. effect interactions) ('EC

guidelines'). The EC guidelines recommend combining expert opinion with consultation to inform the assessment, with professional judgement being applied to evaluate the interacting effects. Matrices are recommended to assist with the identification of the interaction of effects. The assessment methodology has been developed with regard to the EC guidelines.

- 17.2.3 No further guidance or requirement beyond the need for the ES to include an assessment of the inter-relationships between types of effect is provided.

### Cumulative Effects

- 17.2.4 In relation to cumulative effects, Schedule 4, paragraph 5 of the EIA Regulations requires an ES to include:

*“A description of the likely significant effects of the development on the environment resulting from, inter alia: ( ...) (e) the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources”.*

- 17.2.5 The methodology for the assessment of cumulative effects has been undertaken in line with guidance on the assessment of cumulative effects published by the Planning Inspectorate (Advice Note Seventeen: Cumulative effects assessment relevant to nationally significant infrastructure projects<sup>2</sup>).

## 17.3 Assessment Methodology

### Effect Interactions

- 17.3.1 The assessment of effect interactions is based on the general methodology described in **ES Volume 2, Chapter 6: EIA Methodology (Doc Ref. 5.2)**. The assessment considers the potential for several direct or indirect effects arising from the Project to give rise to an effect on a single receptor that is greater than or different to the effects on their own. There is no specific, relevant guidance or standardised approach to the assessment of effect interactions. The assessment has therefore been undertaken on a qualitative basis, informed by professional judgement and general guidance provided by the EC guidelines.
- 17.3.2 The assessment has been informed by the sensitive receptors, their locations, and the results of assessments presented in the technical ES chapters, i.e. **ES Volume 2, Chapters 7 to 16 (Doc Ref. 5.2)**. Embedded Mitigation and additional mitigation measures, where proposed in the technical ES chapters, has been assumed to be implemented before consideration of the effects in this Chapter, i.e. only residual effects are considered in assessing effect interactions.
- 17.3.3 Only topics scoped into the ES and topics presented in **ES Volume 2, Chapter 16: Other Topics (Doc Ref. 5.2)** where assessment is undertaken, have been considered within the effect interaction assessment.

17.3.4 Some environmental aspects are not considered further in the effect interaction assessment presented in this Chapter. This is either because the ES chapter provides an adequate assessment of effect interactions or the environmental aspect could not interact with others. **ES Volume 4, Appendix 17.1: Effect Interactions, Section 2 (Doc Ref. 5.4)** provides further explanation of these aspects. The following topics are considered further in this Chapter:

- Landscape and Views;
- Water Environment;
- Land Contamination;
- Socio-Economics;
- Traffic and Access (construction phase only); and
- Noise.

17.3.5 **Table 17.1** sets out the four step approach to the assessment process for effect interactions applied for the construction, operational and decommissioning phases of the Project and how/where this is applied.

**Table 17.1: Effect Interaction Assessment Process**

Step	Description
Step 1: Identify receptors and receptor groups	<p>Sensitive receptors are listed for each technical topic and their locations based on each technical assessment. Receptors are listed or grouped according to the approach applied in the assessment.</p> <p>Based on the findings of the technical chapters outlined within <b>Paragraph 17.3.4</b>, it is considered that there are only two receptor types/groups where there is potential for effect interactions to occur within the ZOI of the Project. These are human receptors including local residents, PRow users, road users and the East Stour River.</p>
Step 2: Identify residual effects	<p>Residual effects associated with the sensitive receptor(s) are identified based on the final topic assessments.</p> <p><b>ES Volume 4, Appendix 17.1: Effect Interactions, Section 4 (Doc Ref. 5.4)</b> sets out the individual receptors assessed in each technical chapter. For completeness, all effects are included.</p>
Step 3: Identify potential effect interactions	<p>An initial assessment is undertaken to identify where potential effect interactions could occur. Where there is no temporal or spatial overlap, or the effects are assessed as Negligible or Neutral, these effects are screened out of further assessment as no potential effect interaction could occur. Where a potential for</p>

Step	Description
	<p>effect interaction(s) is identified, this is taken forward for further assessment.</p> <p>The last column of the tables in <b>ES Volume 4, Appendix 17.1: Effect Interactions, Section 4 (Doc Ref. 5.4)</b> sets out whether there is potential for effect interactions to arise or be experienced by individual receptors, as indicated by Y (Yes) / N (No). <b>ES Volume 4, Appendix 17.1: Effect Interactions, Section 3 (Doc Ref. 5.4)</b> informs the assessment and summarises the relevant study areas of the technical assessments this indicating where there could be spatial overlap of effects.</p>
<p>Step 4: Assess effect interaction and significance</p>	<p>Further assessment is undertaken together with a judgement of the significance of the potential effect interaction informed by professional judgement. This assessment is provided in <b>Table 17.2, Table 17.3</b> and <b>Table 17.4</b> of this Chapter based on the detailed matrix in <b>Appendix 17.1: Effect Interactions (Doc Ref. 5.4)</b>.</p>

- 17.3.6 Only receptors that are expected to incur more than one potential effect have been included in the assessment (e.g. noise and visual). Receptors predicted to be affected by only a single effect (e.g. only noise) are excluded as there is no potential for an effect interaction to take place.
- 17.3.7 Only beneficial or adverse residual effects identified in the technical chapters classified as being minor, moderate or major are considered in relation to the potential for effect interactions. Residual effects considered to be negligible, neutral or where there are no effects are identified are excluded, by virtue of their definition, they are considered to be imperceptible effects to an environmental / socio-economic resource / receptor.
- 17.3.8 **ES Volume 4, Appendix 17.1: Effect Interactions, Section 4 (Doc Ref. 5.4)** presents a detailed matrix of the receptors ('Step 1') and residual effects on the individual / grouped receptors ('Step 2') identified in each technical chapter of the ES. These are presented in separate tables for construction (**Table 17A.3**), operational phase (**Table 17A.4**) and decommissioning (**Table 17A.5**). The matrices in **ES Volume 4, Appendix 17.1: Effect Interactions, Section 4 (Doc Ref. 5.4)** also identify the potential for effect interactions ('Step 3') arising from the individual impacts.
- 17.3.9 **Table 17.2, Table 17.3, and Table 17.4** of this Chapter summarise the potential effect interactions identified in **ES Volume 4, Appendix 17.1: Effect Interactions (Doc Ref. 5.4)** for construction, operational and decommissioning phases respectively. These tables also assess whether the effect interactions are likely to be significant and if so, whether additional mitigation is required ('Step 4').

## Cumulative Effects

- 17.3.10 The methodology for assessing cumulative effects is set out in **ES Volume 2, Chapter 6: EIA Methodology, Section 6.9 (Doc Ref. 5.2)**. The methodology has adopted the process set out in the Planning Inspectorate's Advice Note Seventeen<sup>2</sup> which follows a four-stage approach:
- Stage 1 – Establishing the long list of ‘other existing development and/or approved development’;
  - Stage 2 – Establishing a shortlist of ‘other existing development and/or approved development’;
  - Stage 3 – Information gathering; and
  - Stage 4 – Assessment.
- 17.3.11 A focused long list of cumulative developments was discussed and agreed with ABC and KCC. This is provided in **ES Volume 4, Appendix 6.1: List of Cumulative Schemes (Doc Ref. 5.2)**.
- 17.3.12 Cumulative assessments are presented within each of the technical assessments presented in **ES Volume 2, Chapters 7 – 16 (Doc Ref. 5.2)** and supporting appendices (where relevant).
- 17.3.13 **Table 17.5, Table 17.6** and **Table 17.7** present a summary of the cumulative effects identified within each of the technical chapters (**ES Volume 2, Chapters 7 – 16 (Doc Ref. 5.2)**) for the construction, operational and decommissioning phases, respectively.

## Significance Criteria for Effect Interactions and Cumulative Effects

- 17.3.14 The effect interaction or cumulative effect is the effect over and above the individual effects assessed in each topic chapter. The assessment describes the effect interactions / cumulative effect and the difference between the impact on a receptor from one effect alone and the impact on that receptor from all effects combined or from all relevant cumulative schemes
- 17.3.15 Following the receptor-based assessment process set out above, a conclusion is drawn as to whether any individual receptor would be subject to additional significant effects in EIA terms because of effect interaction.
- 17.3.16 Significance of effect interactions or cumulative effects is determined by consideration of the general EIA methodology and descriptors stated in **ES Volume 2, Chapter 6: EIA Methodology (Doc Ref. 5.2)**, informed by professional judgement.

## 17.4 Assessment Summary - Effect Interactions

- 17.4.1 **Table 17.2, Table 17.3** and **Table 17.4** summarise the potential effect interactions on individual or groups of receptors during construction, operational phase and decommissioning respectively, drawing from the detailed matrix in **ES Volume 4,**

**Appendix 17.1: Effect Interactions, Section 4 (Doc Ref. 5.4).** Significant effects are shown in bold so these can be easily identified. These tables also provide an assessment informed by professional judgement on whether effect interactions are likely to be significant and whether additional mitigation is required.

17.4.2 All receptors with potential effect interactions are Human Receptors with the exception of the East Stour River.



Table 17.2: Effect Interaction Assessment – Construction Phase

Receptor	Residual Effect and Potential Effect Interaction	Effect Interaction Assessment	Additional Mitigation Measures
<p>Users of PRow within/adjacent to the proposed PV Array (PRow AE385, AE396, AE370, AE377, AE378, AE428, AE447, AE431, AE436, AE657, AE454, AE475 and AE455)</p>	<p><b>Visual Effect:</b> (Moderate Adverse)  <b>Socio-economic:</b> (Negligible to Minor Adverse)</p> <p>During the construction phase, construction traffic, plant, equipment and activities will be visible at a close range to users to PRow within / adjacent to the Site. Recreational users of the PRow network will experience temporary, significant adverse visual effects during the construction phase from the presence of construction traffic, plant, equipment and activities.</p> <p>Recreational users will also experience disruption during the construction phase from amenity effect and diversions. It is not anticipated that any PRow would be permanently closed during the construction phase (with the exception of AE 455 and AE 447 which are proposed to be permanently stopped up) without a suitable temporary or permanent alternative in-place, which in most cases would be the proposed alternative PRow for the operational phase.</p>	<p><b>No significant effect interactions</b> – this effect interaction is not expected to increase the significance of effects for these receptors.</p>	<p>No additional mitigation measures identified.</p>
<p>Users of PRow within/adjacent to the Site with open panoramic views towards the Kent Downs NL (PRow AE370 / AE377 and AE474)</p>	<p><b>Visual Effect:</b> (Moderate Adverse)  <b>Socio-economic:</b> (Negligible to Minor Adverse)</p> <p>During the construction phase, construction traffic, plant, equipment and activities will be visible at a close range to users to PRow within / adjacent to the Site. Recreational users of the PRow network will experience temporary, significant adverse visual effects during the construction</p>	<p><b>No significant effect interactions</b> – this effect interaction is not expected to increase the significance of effects for these receptors.</p>	<p>No additional mitigation measures identified.</p>

Receptor	Residual Effect and Potential Effect Interaction	Effect Interaction Assessment	Additional Mitigation Measures
	<p>phase from the presence of construction traffic, plant, equipment and activities.</p> <p>Recreational users will also experience disruption during the construction phase from amenity effect and diversions. It is not anticipated that any PRoW would be permanently closed during the construction phase (with the exception of AE 455 and AE 447 which are proposed to be permanently stopped up) without a suitable temporary or permanent alternative in-place, which in most cases would be the proposed alternative PRoW for the operational phase.</p>		
<p>Residents on Laws Lane, northern edge of Aldington and Station Road (Evegate Mill House)</p>	<p><b>Visual Effect:</b> Minor - Moderate Adverse</p> <p><b>Socio-economics:</b> Negligible to Minor Adverse</p> <p><b>Noise:</b> Minor Adverse</p> <p><b>Traffic:</b> Minor Adverse (Road vehicle driver and passenger delay)</p> <p>During the construction phase, residential receptors would experience Minor to Moderate Adverse visual effects on Laws Lane, the northern edge of Aldington and Station Road (Evegate Mill House). Negligible to Minor Adverse effects are identified on Local Residential and Community Receptors in the Socio-economic assessment which largely relate to amenity effects during construction (Negligible to Minor Adverse). Minor Adverse Traffic and Access effects (Road vehicle driver and passenger delays) would also be experienced by users of Station Road.</p>	<p>No significant effect interactions.</p>	<p>No additional mitigation measures identified.</p>

Receptor	Residual Effect and Potential Effect Interaction	Effect Interaction Assessment	Additional Mitigation Measures
	<p>A small number of NSRs (properties) would experience will experience temporary Minor Adverse noise effects during construction.</p> <p>The effect interactions would be of short duration. Construction road traffic, noise and other amenity effects would be subject to controls secured through the <b>Draft Development Consent Order (Doc Ref. 3.1)</b>. The effect interaction is therefore not expected to increase the significance of effects anticipated at these receptors.</p>		
<p>East Stour River</p>	<p><b>Water Environment:</b> Minor Adverse (Pollution), and Negligible (Change in Surface Water Runoff)</p> <p><b>Land Contamination:</b> Minor Adverse</p> <p>A potential effect interaction is identified for the East Stour River. This relates to increased surface water runoff from construction areas and water quality effects from pollution incidents during construction, via chemical spill or sediment laden runoff, combined with land contamination impacts (migration of leached and mobile contaminants from leakages or spills).</p> <p>These effects are similar in nature and are not expected to result in a significant effect interaction. Appropriate control measures will be secured through the <b>Outline CEMP (Doc Ref. 7.8)</b> to minimise the likelihood of such effects and avoid significant effect interactions.</p>	<p>No significant effect interactions.</p>	<p>No additional mitigation measures identified.</p>

Receptor	Residual Effect and Potential Effect Interaction	Effect Interaction Assessment	Additional Mitigation Measures
<p>Goldwell Lane motorists, residents and Aldington Eco Centre</p>	<p><b>Traffic and Access:</b> Minor Adverse</p> <p><b>Noise:</b> Minor Adverse (certain residential and commercial properties)</p> <p>Residents of Goldwell Lane will experience Minor Adverse noise effects due to noise due to cabling on Goldwell Lane. These include 1 Cromwell Close (representing Aldington Village Hall), , Goldwell Farm, Springfield</p> <p>Little Goldwell Farm and Woodleas Farm. Aldington Eco Centre will also experience Minor Adverse effects.</p> <p>Goldwell Lane users will also experience Negligible to Minor Adverse Traffic and Access effects (road vehicle driver and passenger delay) due to construction traffic using Goldwell Lane.</p> <p>These effects would be short term and would only be experienced over the likely duration of cabling installation work on Goldwell Lane. Appropriate controls are secured to minimise disruption and control noise and traffic through the <b>Outline CEMP (Doc Ref. 7.8)</b> and <b>Outline CTMP (Doc Ref. 7.9)</b>. Given the short duration of the works this effect interaction is not expected to increase the significance of effects at receptors on Goldwell Lane.</p>	<p>No significant effect interactions.</p>	<p>No additional mitigation measures identified.</p>

Table 17.3: Effect Interaction Assessment – Operational Phase

Receptor	Residual Effect and Potential Effect Interaction	Effect Interaction Assessment	Additional mitigation required
<p>Users of PRow within / adjacent to the Project and</p> <p>Users of PRow within / adjacent to the Site with open panoramic views towards the Kent Downs NL</p>	<p><b>Visual Effect:</b> Moderate Adverse / Major - Moderate Adverse</p> <p><b>Socio-economics: Negligible to</b> Minor Adverse and Minor Beneficial (n.b. no residual effects were reported in <b>ES Volume 2, Chapter 12; Socio-Economics (Doc Ref. 5.2)</b> for AE396 and AE474 and therefore no effect interactions are anticipated to occur on these receptors).</p> <p>Users of PRow within / adjacent to the Project as a result of close-range views of the Project leading to a Moderate Adverse (significant) effect. Users of PRow within/adjacent to the Site with open panoramic views towards the Kent Downs NL, as a result of close to medium range views of the Project, combined with the higher sensitivity of the receptor, resulting in a Major to Moderate Adverse (significant).</p> <p>The Project proposes a comprehensive strategy to minimise effects on PRow users which is set out in the <b>Outline Rights of Way and Access Strategy ('RoWAS') (Doc Ref. 7.15)</b>. The effects of the Project on PRow users is dependent on the PRow affected but range from Negligible to Minor Adverse and Minor Beneficial. Beneficial effects would arise where new PRow will be established and maintained throughout the operational phase which provide for improvements to wider connectivity and amenity.</p>	<p>No significant effect interactions.</p>	<p>No additional mitigation measures identified.</p>

Receptor	Residual Effect and Potential Effect Interaction	Effect Interaction Assessment	Additional mitigation required
	<p>The Project will alter the experience of users of the PRow network within and adjacent to Site, visually and through physical alterations to the network (resulting in adverse and beneficial effects). This effect interaction would be carefully managed and mitigated through the <b>Draft Development Consent Order (Doc Ref. 2.3)</b>, <b>Outline RoWAS (Doc Ref. 7.15)</b>, <b>Outline Landscape and Ecological Management Plan ('LEMP') (Doc Ref. 7.10)</b> and <b>Outline Operational Management Plan ('OMP') (Doc Ref. 7.11)</b>. This effect interaction is therefore not expected to increase the significance of effects for PRow users.</p>		
<p>Residents on Laws Lane, Frith Road and Bank Road (Becketts Green, Bow Cottage and Spring Cottage)</p>	<p><b>Visual Effect:</b> Moderate Adverse</p> <p><b>Noise:</b> Negligible to Minor Adverse</p> <p>The resident groups on Laws Lane and Bank Road are in close proximity to the Site. Residents on Laws Lane, would experience filtered short to medium range views of the Project. Residents on Frith Road, would experience open, medium distance filtered views of the Project. Residents on Bank Road (Becketts Green, Bow Cottage and Spring Cottage), would experience filtered views of the Project. The above receptors would experience Moderate Adverse (significant) visual effects.</p> <p>The Project incorporates measures such as distancing of noise sources away from sensitive receptors and use of noise barriers at the Project Substation and Inverter Stations. NSRs on Laws Lane, Frith Road and Bank Road (including Becketts Green) would also experience</p>	<p>No significant effect interactions.</p>	<p>No additional mitigation measures identified.</p>

Receptor	Residual Effect and Potential Effect Interaction	Effect Interaction Assessment	Additional mitigation required
	<p>Negligible to Minor Adverse operational noise effects. The effect of noise from typical operation of the Project is a Low or Very Low magnitude of impact at all identified receptors and therefore Negligible or Minor Adverse effect. An Operational Noise Mitigation and Monitoring Scheme ('ONMMS') will be prepared prior to the operation of noise generating infrastructure. The ONMMS will demonstrate that, with those noise mitigation measures and monitoring procedures in place, the authorised development is not likely to result in any materially new or materially different noise effects from those assessed within <b>ES Volume 2, Chapter 14: Noise (Doc Ref. 5.2)</b>. The ONMMS is secured by Requirement in the <b>Draft Development Consent Order (Doc Ref: 3.1)</b>.</p>		
<p>User of PRow AE377, AE370 – Outside of the Site, AE428, AE370</p>	<p><b>Visual Effect:</b> Moderate Adverse (near The Forstal)</p> <p><b>Socio-economic:</b> Minor Adverse</p> <p>Users of PRow will experience close-range and medium range views of the Project, resulting in a Moderate Adverse effect.</p> <p>The Project will alter the experience of users of the PRow network within and adjacent to Site. This effect interaction is not expected to increase the significance of effects for PRow users.</p>	<p>No significant effect interactions.</p>	<p>No additional mitigation measures identified.</p>

Receptor	Residual Effect and Potential Effect Interaction	Effect Interaction Assessment	Additional mitigation required
<p>Users of PRow within Fields 26-29 (AE 656 and AE 657)</p>	<p><b>Visual Effect:</b> Minor - Moderate Adverse</p> <p><b>Socio-economic:</b> Minor Beneficial</p> <p>Users of PRow will experience close-range and medium range views of the Project, resulting in a Minor to Moderate Adverse effect.</p> <p>The Project will alter the experience of users of the PRow network within and adjacent to Site. This effect interaction is not expected to increase the significance of effects for PRow users.</p>	<p>No significant effect interactions.</p>	<p>No additional mitigation measures identified.</p>



Table 17.4: Effect Interaction Assessment – Decommissioning Phase

Receptor	Residual Effect and Potential Effect Interaction	Effect Interaction Assessment	Additional mitigation required
<p>Users of PRow within /adjacent proposed solar PV areas and Users of PRow within/adjacent to the Site with open panoramic views towards the Kent Downs NL, including AE370 /AE377 and AE474.</p>	<p><b>Visual Effects:</b> Minor - Moderate Adverse and Minor Adverse</p> <p><b>Socio-economic:</b> Negligible to Minor Adverse</p> <p>During the decommissioning phase, decommissioning traffic, plant, equipment and activities will be visible at a close range to users to PRow within / adjacent to the Site. Recreational users of the PRow network will experience temporary, not significant adverse visual effects during the decommissioning phase from the presence of construction traffic, plant, equipment and activities.</p> <p>Recreational users may also experience disruption during the decommissioning phase similar to that of the construction phase.</p>	<p>No significant effect interactions.</p>	<p>No additional mitigation measures identified.</p>
<p>Residents at Broadbanks (Bank Farm) and Goldwell Lane</p>	<p><b>Visual Effects:</b> Negligible - Minor Adverse and Minor Adverse</p> <p><b>Socio-economic:</b> Negligible to Minor Adverse</p> <p><b>Noise:</b> Minor Adverse</p> <p>During the decommissioning phase, residential receptors at Broadbanks (Bank Farm) would experience Minor Adverse visual effects. Residents on Goldwell Lane would experience Negligible to Minor Adverse visual effects. This would be due the decommissioning activities and associated plant. Negligible to Minor Adverse effects are identified on Local Residential and Community Receptors</p>	<p>No significant effect interactions.</p>	<p>No additional mitigation measures identified.</p>

Receptor	Residual Effect and Potential Effect Interaction	Effect Interaction Assessment	Additional mitigation required
	<p>in the socio-economic assessment which largely relate to amenity effects.</p> <p>Residential receptors at Bank Farm and on Goldwell Lane would experience Minor Adverse noise effects associated with the decommissioning works.</p> <p>This effect interaction is not expected to increase the significance of effects for residential receptors in these locations. The effects outlined above would be of a short term, temporary duration and would be effectively managed through the <b>Outline Decommissioning Environmental Management Plan ('DEMP') (Doc Ref. 7.12)</b> and <b>Outline Decommissioning Traffic Management Plan ('DTMP') (Doc Ref. 7.13)</b>.</p>		

## 17.5 Assessment Summary - Cumulative Effects

- 17.5.1 **Table 17.5, Table 17.6 and Table 17.7** summarise the cumulative assessments for the construction, operational and decommissioning phases of the Project respectively. Assessment has been summarised from **ES Volume 2, Chapters 7 to 16 (Doc Ref. 5.2)** which should be referred to for further details.
- 17.5.2 Where 'No cumulative effects identified' is stated, it is considered that the cumulative effect of other developments would not increase the significance of effect above that already assessed for the Project.

Table 17.5: Summary of Cumulative Effects – Construction

Potential Impact	Potential for Cumulative Effect	Relevant Cumulative Schemes	Cumulative Effect
<i>Cultural Heritage</i>			
Direct effects – Archaeology	Assumed that planning approvals for each cumulative scheme for which consent has been granted and for those yet to be granted will include appropriate archaeological mitigation measures, including the requirement for investigation and recording. No cumulative effects are therefore identified for archaeological (non-built) remains.	ID No. 3 Pivot Power Battery Storage ID No. 4 Walsh Power Condenser Project ID No. 7 Land north of 1 Church View, Aldington ID No. 8 Land south west of Goldwell Court, Goldwell Lane ID No. 9 East Stour Solar Farm ID No. 10 Otterpool Park Development	<b>No cumulative effects identified</b>
Indirect effects – historic landscape character and off-site heritage assets	There is potential for temporary impacts to the historic landscape character; and off-site heritage assets, in terms of changes to their setting with cumulative schemes. The impact will be as a result of alterations to the existing agricultural land to energy infrastructure. These impacts are considered temporary and short term, limited to working hours and for the duration of the construction phase only.	ID No. 3 Pivot Power Battery Storage ID No. 4 Walsh Power Condenser Project ID No. 7 Land north of 1 Church View, Aldington ID No. 8 Land south west of Goldwell Court, Goldwell Lane ID No. 9 East Stour Solar Farm ID No. 10 Otterpool Park Development	<b>No cumulative effects identified</b>

*Landscape and Views*

Potential Impact	Potential for Cumulative Effect	Relevant Cumulative Schemes	Cumulative Effect
<p>Landscape effects: Landscape Character Areas ('LCA')</p>	<p>LCA 2C Postling Scarp and Vale would experience a Minor Adverse cumulative effect as a result of the construction phase of the Project and cumulative schemes should construction activities overlap. The effect is temporary and not significant.</p> <p>LCA Upper Stour Valley would experience a Negligible Adverse cumulative effect as a result of the construction phase which is temporary and not significant.</p> <p>The rest of the landscape receptors will not experience additional cumulative effects.</p>	<p>ID No. 3 Pivot Power Battery Storage</p> <p>ID No. 4 Walsh Power Condenser Project</p> <p>ID No. 7 Land north of 1 Church View, Aldington</p> <p>ID No. 8 Land south-west of Goldwell Court, Goldwell Lane</p> <p>ID No. 9 East Stour Solar Farm</p> <p>ID No. 10 Otterpool Park Development</p>	<p><b>No significant cumulative effects:</b> Negligible Adverse and Minor Adverse effect.</p>
<p>Visual effects: PRoW users (within /adjacent to the Site)</p>	<p>PRoWs users will experience visual effects in succession from the construction of the Project, and ID No. 9 due to the proximity of the sites. The visual effects are broadly the same as for the Project on its own, however the geographical extent of the cumulative effects will extend further to the east due to the location of ID No. 9.</p>	<p>ID No. 7 Land north of 1 Church View, Aldington</p> <p>ID No. 9 East Stour Solar Farm</p>	<p><b>Significant cumulative effects:</b> Moderate Adverse</p>
<p>Visual effects: PRoW AE 474 users</p>	<p>Users of PRoW AE 474 will experience visual effects from views of the Project and ID No. 9. In combination with ID No. 9 this receptor would be subject to a temporary, Moderate to Minor Adverse cumulative effect (not significant).</p>	<p>ID No. 7 Land north of 1 Church View, Aldington</p> <p>ID No. 8 Land south-west of Goldwell Court, Goldwell Lane</p> <p>ID No. 9 East Stour Solar Farm</p>	<p><b>No significant cumulative effects:</b> Minor to Moderate Adverse</p>

Potential Impact	Potential for Cumulative Effect	Relevant Cumulative Schemes	Cumulative Effect
<p>Visual effects: North Downs Way users (Kent Downs NL)</p>	<p>People travelling along the North Downs Way in the Kent Downs NL will experience adverse visual effects from views of the Project and the relevant Cumulative Schemes.</p> <p>The Project in isolation will cause a Negligible Adverse effect for the receptor. In cumulation with the other schemes, this would become a Minor Adverse cumulative effect which is temporary and not significant.</p>	<p>ID No. 3 Pivot Power Battery Storage ID No. 4 Walsh Power Condenser Project ID No. 9 East Stour Solar Farm ID No. 10 Otterpool Park Development (Phase 1A)</p>	<p><b>No significant cumulative effects:</b> Minor Adverse</p>
<p>Visual effects: Goldwell Lane and Users of PRow HE307</p>	<p>People travelling on Goldwell Lane and Users of PRow HE307 will experience Negligible Adverse cumulative effect during the construction phase.</p>	<p>ID No. 3 Pivot Power Battery Storage ID No. 4 Walsh Power Condenser Project ID No. 9 East Stour Solar Farm</p>	<p><b>No significant cumulative effects:</b> Negligible Adverse</p>
<i>Biodiversity</i>			
<p>Loss of arable grassland, and hedgerow habitats utilised by skylark, yellowhammer, and brown hare populations within the local and county areas. Temporary disturbance and</p>	<p>The potential for cumulative construction phase effects of each cumulative scheme is considered in detail in <b>ES Volume 4, Appendix 9.8: Cumulative Assessment (Doc Ref. 7.8)</b>. The predicted geographic significance of the adverse effect of the Project upon skylark, yellowhammer and brown hare is not predicted to materially increase when assessed in cumulation with the cumulative schemes described in the</p>	<p>ID No. 3 Pivot Power Battery Storage ID No. 9 East Stour Solar Farm ID No.10 Otterpool Park Development</p> <p>Other large cumulative schemes at distances beyond 1km will interact with skylark populations within the county but are less likely to directly interact with species populations using the Site. Other cumulative schemes are assessed when</p>	<p><b>No cumulative effects identified</b></p>

Potential Impact	Potential for Cumulative Effect	Relevant Cumulative Schemes	Cumulative Effect
displacement may occur.	right-hand column. No cumulative effects are therefore identified.	clear linkages with Project populations are apparent, due to the uncertainty when assessing long term interactions with the wider county species population.	
Potential for impacts on designated sites, habitats and species.	<p>The potential for cumulative construction phase effects upon the other important ecological features was assessed through review of the cumulative scheme ecological baseline and predicted effects, cumulative scheme size, distance from the Project, habitat connectivity, presence or absence of ecological barriers, works timings and mitigation within the Project (as part of the CEMP and LEMP) and the cumulative schemes.</p> <p>The predicted geographic significance of the adverse effects of the Project is not predicted to materially increase when assessed in cumulation with other cumulative schemes. No cumulative effects are therefore identified.</p>	<p>ID No. 3 Pivot Power Battery Storage</p> <p>ID No. 9 East Stour Solar Farm</p> <p>ID No.10 Otterpool Park Development</p> <p>Other cumulative schemes are assessed when clear linkages with Project populations are apparent, due to the uncertainty when assessing long-term interactions with the wider county species population.</p>	<b>No cumulative effects identified</b>
<b>Water Environment</b>			
East Stour River – potential for pollution	The Project will result in Minor Adverse (not significant) effects in the construction phase in relation to pollution to the East Stour River. Potential for Minor Adverse effects on the East Stour River to arise are also identified from the larger cumulative	<p>ID No. 9 East Stour Solar Farm</p> <p>ID No.10 Otterpool Park Development</p>	<b>No significant cumulative effects:</b> Minor Adverse

Potential Impact	Potential for Cumulative Effect	Relevant Cumulative Schemes	Cumulative Effect
<p>Water quality effects – pollution and changes in drainage characteristics</p>	<p>schemes within the East Stour River catchment including ID No. 9, and ID No. 10.</p> <p>It is considered possible that significant cumulative effects could occur if the Project and either of these larger cumulative schemes were constructed concurrently. Provisions for baseline monitoring and investigation of adverse water quality changes are secured through the <b>Outline CEMP (Doc Ref. 7.8)</b>. It is therefore not predicted that there would be any significant changes to the baseline conditions of the East Stour River or any significant cumulative effects.</p>		
<p><i>Land Contamination</i></p>			
<p>Potential for increase in the mobilisation of contaminants in the air, ground and groundwater through the disturbance of a larger area of potentially contaminated ground mobilising contaminants.</p>	<p>Given the mitigation measures secured through the <b>Outline CEMP (Doc Ref. 7.8)</b> it is not considered there would be an increase to the significance of effects assessed for the Project. No cumulative effects are therefore identified.</p>	<p>Substantive development within 250m of the Project within 250m of the Project:</p> <p>ID No. 3 Pivot Power Battery Storage</p> <p>ID No. 4 Walsh Power Condenser Project</p> <p>ID No. 9 East Stour Solar Farm</p>	<p><b>No cumulative effects identified</b></p>



Potential Impact	Potential for Cumulative Effect	Relevant Cumulative Schemes	Cumulative Effect
<i>Socio-Economics</i>			
Increase in construction related employment demand.	The cumulative effects of the Project and cumulative schemes on the construction labour market are likely to be beneficial, but Negligible Beneficial due to the size and mobility of the market.	All cumulative schemes listed in <b>ES Volume 4, Appendix 6.1: List of Cumulative Schemes (Doc Ref. 5.4)</b> .	<b>No significant cumulative effects:</b> Negligible Beneficial
<i>Traffic and Access</i>			
A20 Hythe Road Station Road Goldwell Lane: Construction traffic	It is not considered that the cumulative effect on these road user receptors would increase the significance of effect above that already assessed for construction of the Project. This applies to severance of communities; road vehicle driver and passenger delay; non-motorised user delay and amenity; fear and intimidation on and by road users; road user and pedestrian safety; and also dangerous/hazardous and large/abnormal loads. Effects would therefore remain Negligible to Minor Adverse (not significant). No cumulative effects are therefore identified.	ID No. 3 Pivot Power Battery Storage ID No. 4 Walsh Power Condenser Project ID No. 7 Land north of 1 Church View, Aldington ID No. 8 Land south-west of Goldwell Court, Goldwell Lane ID No. 9 East Stour Solar Farm	<b>No cumulative effects identified</b>
Church Lane: Construction traffic	There is potential for short term, Minor Adverse temporary cumulative effects along Church Lane if construction programmes from the Project and the relevant cumulative schemes overlap, as follows: <ul style="list-style-type: none"> <li>Road vehicle driver and passenger</li> </ul>	ID No. 3 Pivot Power Battery Storage ID No. 4 Walsh Power Condenser Project ID No. 9 East Stour Solar Farm	<b>No significant cumulative effect:</b> Minor Adverse

Potential Impact	Potential for Cumulative Effect	Relevant Cumulative Schemes	Cumulative Effect
	<p>delay;</p> <ul style="list-style-type: none"> <li>▪ Non-motorised user delay and amenity;</li> <li>▪ Fear and intimidation on and by road users; and</li> <li>▪ Road user and pedestrian safety.</li> </ul>		
<i>Noise</i>			
<p>Construction road traffic noise effect on all NSRs</p>	<p>Traffic from relevant cumulative schemes is included in the traffic data and the assessment found that the effects would be Negligible (not significant).</p>	<p>ID No. 1: Agricultural Barn ID No. 2 Goldwell Farm ID No. 3 Pivot Power Battery Storage ID No. 4 Walsh Power Condenser Project ID No. 7 Land north of 1 Church View, Aldington ID No. 8 Land south-west of Goldwell Court, Goldwell Lane ID No. 9 East Stour Solar Farm</p>	<p><b>No significant cumulative effects:</b> Negligible.</p>
<p>Construction noise effect on Woodleas Farm and Hogben Farm (NSRs 34 and 40)</p>	<p>Cumulative construction noise effects from the Project and ID No. 9 on NSRs are considered. The cumulative noise effect has been found to be temporary Minor Adverse (not significant) at Woodleas Farm and</p>	<p>ID No. 9 East Stour Solar Farm</p>	<p><b>No significant cumulative effects:</b> Negligible Adverse and Minor Adverse.</p>

Potential Impact	Potential for Cumulative Effect	Relevant Cumulative Schemes	Cumulative Effect
	temporary Negligible (not significant) at Hogben Farm.		
Construction noise from Goldwell Lane cabling with construction of small residential schemes (ID No. 2, ID No. 7 and ID No. 8)	With use of Best Practicable Means secured through the <b>Outline CEMP (Doc Ref. 7.8)</b> , cumulative effects on NSRs would be temporary Minor Adverse (not significant).	ID No. 2 Goldwell Farm  ID No. 7 Land north of 1 Church View, Aldington  ID No. 8 Land south-west of Goldwell Court, Goldwell Lane	<b>No significant cumulative effects:</b> Minor Adverse

*Climate Change – Greenhouse Gases*

Scoped out of the assessment.

*Climate Change – Climate Resilience*

Hotter Summer Temperatures and more Extreme Temperature Events	Effects associated with higher summer temperatures and more extreme temperature events could be exacerbated by cumulative developments if they result in a large increase in hard surfaces in the vicinity of the Project. However, the Project is not in an urbanised region and embedded mitigation has been included to minimise potential effects created by the Project.	All cumulative schemes listed in <b>ES Volume 4, Appendix 6.1: List of Cumulative Schemes (Doc Ref. 5.4)</b> .	<b>No cumulative effects identified.</b>
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*Other Topics*

No cumulative effects identified.

Table 17.6: Summary of Cumulative Effects – Operational Phase

Potential Impact	Potential for Cumulative Effect	Relevant Cumulative Schemes	Cumulative Effect
<i>Cultural Heritage</i>			
Direct effects – Archaeology	<b>ES Volume 4, Appendix 1.2: EIA Scoping Opinion (Doc Ref. 5.4)</b> confirmed that an assessment of the direct physical effects on below ground assets (i.e., archaeological remains) during operational phase and decommissioning could be scoped out of the ES as direct physical effects will only occur during construction phase of the Project.	N/A	<b>No cumulative effects identified.</b>
Indirect effects – historic landscape character and off-site heritage assets	Cumulative visibility of the Project and the relevant cumulative schemes from different heritage viewpoints.	ID No. 3: Pivot Power Battery Storage  ID No. 4: Walsh Power Condenser Project  ID No. 9: East Stour Solar Farm  ID No. 10: Otterpool Park Development	<b>No significant cumulative effects:</b> Neutral to Slight Adverse
<i>Landscape and Views</i>			
<i>Operational Phase (Year 1)</i>			
<b>Landscape effects:</b> Landscape Character Areas (LCA 2C Postling Scarp and Vale,	LCA 2C Postling Scarp and Vale will experience a Moderate-Minor Adverse cumulative effect which is not significant as a result of the presence of development within the LCA, and associated loss of intervisibility.	ID No. 3 Pivot Power Battery Storage  ID No. 4 Walsh Power Condenser Project  ID No. 9 East Stour Solar Farm	<b>No significant cumulative effects:</b> Minor to Moderate Adverse

Potential Impact	Potential for Cumulative Effect	Relevant Cumulative Schemes	Cumulative Effect
LCA Upper Stour Valley)	LCA Upper Stour Valley will experience a Minor-Moderate Adverse effect which is not significant as a result of the operational phase at year 1 due to the direct changes affecting eastern parts of the LCA.	ID No. 10 Otterpool Park Development	
Users of PRow (within/adjacent to the Site)	<p>Users of PRow will experience adverse visual effects due to the sequential views of the Site and scheme ID No.9 in quick succession.</p> <p>Whilst the effects identified for this receptor are the same as for the Project on its own, the geographical extent of the cumulative effects will extend further to the east.</p>	<p>ID No. 7 Land north of 1 Church View, Aldington</p> <p>ID No. 9. East Stour Solar Farm</p>	<b>Significant cumulative effect:</b> Moderate Adverse
Users of Goldwell Lane	<p>People travelling along Goldwell Lane will experience adverse visual effects, due to views of the Project and close views of the relevant cumulative schemes.</p> <p>In isolation the receptor will experience a Negligible Adverse effect. In combination with the other schemes, the receptors will be subject to a Moderate Adverse cumulative effect which is significant.</p>	<p>ID No. 7 Land north of 1 Church View, Aldington</p> <p>ID No. 8 Land south-west of Goldwell Court, Goldwell Lane</p> <p>ID No. 9 East Stour Solar Farm.</p>	<b>Significant cumulative effect:</b> Moderate Adverse
Users of PRow AE474	Users of PRow AE747 will experience adverse visual effects due to views of the Project on its own, and ID No. 9 on Bested Hill. The Project in isolation is identified as	ID No. 9. East Stour Solar Farm	<b>Significant cumulative effect:</b> Moderate Adverse

Potential Impact	Potential for Cumulative Effect	Relevant Cumulative Schemes	Cumulative Effect
	resulting in a Negligible Adverse effect, in combination with the other scheme the receptor will experience a Moderate Adverse cumulative effect which is significant.		
People travelling along the North Downs Way in the Kent Downs NL	<p>People travelling along the North Downs Way in Kent Downs NL will experience adverse visual effects due to views of the Project and nearby cumulative schemes.</p> <p>Views of the Project on its own are identified as likely to have a Minor-Negligible effect, in cumulation with the other schemes the receptor is identified as likely to have a Moderate Adverse (significant) effect.</p>	<p>ID No. 3 Pivot Power Battery Storage</p> <p>ID No. 4 Walsh Power Condenser Project</p> <p>ID No. 9 East Stour Solar Farm</p> <p>ID No.10 Otterpool Park Development (Phase 1A)</p>	<b>Significant cumulative effect:</b> Moderate Adverse
Users of PRow HE307	<p>Users of PRow HE307 will experience adverse visual effects due to views of the Project in its operational phase Year 1, combined with partial views of the relevant cumulative schemes.</p> <p>The Project on its own is identified as having a Negligible Adverse effect on the receptor, in cumulation with the other schemes the receptor will experience a Minor-Negligible cumulative effect which is not significant.</p>	<p>ID No. 3. Pivot Power Battery Storage</p> <p>ID No. 4. Walsh Power Condenser Project</p> <p>ID No. 9 East Stour Solar Farm</p>	<b>No significant cumulative effects:</b> Negligible to Minor Adverse

*Operational Phase (Year 15)*

Potential Impact	Potential for Cumulative Effect	Relevant Cumulative Schemes	Cumulative Effect
<p>Landscape Effects: LCA Aldington Ridge</p>	<p>The Project on its own will result in Moderate Adverse and Beneficial effects. LCA Aldington Ridge will experience a combination of Moderate-Major Adverse effects and Moderate Beneficial Effects as a result of the Project in combination with the entirety of scheme ID No. 10, assumed to be in place by Year 15.</p>	<p>ID No. 7 Land north of 1 Church View, Aldington ID No. 8 Land south-west of Goldwell Court, Goldwell Lane ID No. 10 Otterpool Park Development</p>	<p><b>Significant cumulative effect:</b> Moderate-Major Adverse and Moderate Beneficial</p>
<p>Landscape Effects: LCA 2C Postling Scarp and Vale</p>	<p>The receptor LCA 2C Postling Scarp and Vale will have adverse landscape effects due to the presence of the Project in its operational phase at Year 15, combined with the presence of the relevant cumulative schemes, and the associated loss of intervisibility within the setting of the LCA.</p> <p>The Project in isolation would result in a Minor Adverse (not significant) effect on the receptor, in combination with the cumulative schemes the receptor would experience a Moderate Adverse cumulative effect which is significant.</p> <p>It is considered that without ID No. 10, the cumulative effect would be less than or equal to Moderate-Minor and below the threshold for significant effects.</p>	<p>ID No. 3 Pivot Power Battery Storage ID No. 4. Walsh Power Condenser Project ID No. 9. East Stour Solar Farm ID No. 10 Otterpool Park Development</p>	<p><b>Significant cumulative effect:</b> Moderate Adverse</p>

Potential Impact	Potential for Cumulative Effect	Relevant Cumulative Schemes	Cumulative Effect
Landscape Effects: LCA Upper Stour Valley	<p>The presence of the Project in combination with the relevant cumulative schemes will cause the receptor LCA Upper Stour Valley to experience a combination of adverse and beneficial cumulative effects as a result of the presence of built form, alongside planting proposals.</p> <p>The Project on its own would have a Minor neutral effect on the receptor, in cumulation with the other schemes the effect would become a combination of adverse and beneficial effects which are Moderate (significant).</p>	<p>ID No. 3. Pivot Power Battery Storage</p> <p>ID No. 4. Walsh Power Condenser Project</p> <p>ID No. 9. East Stour Solar Farm</p> <p>ID No. 10. Otterpool Park Development</p>	<b>Significant cumulative effects:</b> Moderate Adverse and Beneficial
PRoW Users (within/adjacent to the Site)	<p>Users of PRoW will experience adverse visual effects as a result of sequential views of the Project in its operational phase at year 15, and ID No.9 East Stour Solar Farm in quick succession due to their proximity.</p> <p>The effects identified for the receptor are broadly the same as the Project on its own, but the geographical extent of the effects will extend further to the east.</p>	<p>ID No. 7 Land north of 1 Church View, Aldington</p> <p>ID No. 9 East Stour Solar Farm</p>	<b>Significant cumulative effects:</b> Moderate Adverse
Users of PRoW AE474	<p>Users of PRoW AE474 will experience adverse cumulative effects as a result of views of ID No. 9 on Bested Hill in</p>	<p>ID No. 9 East Stour Solar Farm</p>	<b>Significant cumulative effects:</b> Moderate Adverse



Potential Impact	Potential for Cumulative Effect	Relevant Cumulative Schemes	Cumulative Effect
	<p>combination with distant partial views of the Project in its operational phase at year 15.</p> <p>The Project on its own is likely to result in non-significant Negligible neutral effects for the receptor, however in cumulation with the other scheme this would become a significant Moderate Adverse effect.</p>		
<p>People travelling on North Downs Way in the Kent Downs NL</p>	<p>People travelling along North Downs Way in the Kent Downs NL will experience adverse cumulative visual effects due to the presence of the Project in its operational phase at Year 15, and views of the relevant cumulative schemes.</p> <p>The Project on its own is identified as likely to result in a Negligible – Minor effect on this receptor. In cumulation with the other schemes this becomes a Major - Moderate Adverse effect which is significant.</p> <p>It is considered that without ID No. 10, the 15 year cumulative effect would reduce to Moderate-Minor and would be below the threshold for significant effects.</p>	<p>ID No.3. Pivot Power Battery Storage</p> <p>ID No.4. Walsh Power Condenser Project</p> <p>ID No.9. East Stour Solar Farm</p> <p>ID No.10. Otterpool Park Development</p>	<p><b>Significant cumulative effects:</b> Moderate to Major Adverse</p>
<p>Users of PRow HE307</p>	<p>Users of PRow HE307 will experience adverse visual effects due to views of the Project in its operational phase at Year 15,</p>	<p>ID No.3 Pivot Power Battery Storage</p> <p>ID No.4 Walsh Power Condenser Project</p>	<p><b>No significant cumulative effects:</b> Negligible to Minor Adverse</p>

Potential Impact	Potential for Cumulative Effect	Relevant Cumulative Schemes	Cumulative Effect
	<p>along with partial views of the relevant cumulative schemes.</p> <p>The Project on its own is identified as likely to result in Negligible effects for the receptor. The cumulative effect for the receptor is Negligible – Minor Adverse, which is not significant.</p>	ID No.9. East Stour Solar Farm	

*Biodiversity*

Impact on designated sites, notable habitats and species	<p>The potential for cumulative operational phase effects of each cumulative scheme is considered in detail in ES Volume 4, Appendix 9.8: Cumulative Assessment (Doc Ref. 7.8). The predicted geographic significance of the adverse effects of the Project is not predicted to materially increase when assessed in cumulation with other cumulative schemes. No cumulative effects are therefore identified.</p>	<p>ID No.3. Pivot Power Battery Storage</p> <p>ID No.9. East Stour Solar Farm</p> <p>ID No.10. Otterpool Park Development</p> <p>Other large cumulative schemes at distances beyond 1km will interact with skylark populations within the county but are less likely to directly interact with species populations using the Site. Other cumulative schemes are only assessed when clear linkages with Project populations are apparent, due to the uncertainty when assessing long term interactions with the wider county species population.</p>	No cumulative effects identified
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*Water Environment*

Potential Impact	Potential for Cumulative Effect	Relevant Cumulative Schemes	Cumulative Effect
Effects on the Water Environment	The Project will result in Negligible effects. No cumulative effects are identified.	As listed for Water Environment in <b>Table 17.5</b> .	<b>No cumulative effects identified.</b>
<i>Land Contamination</i>			
Potential for increase in the mobilisation of contaminants in the air, ground and groundwater through the disturbance of a larger area of potentially contaminated ground mobilising contaminants	Embedded mitigation measures secured by the <b>Design Principles (Doc Ref 7.5)</b> and <b>Outline OMP (Doc Ref. 7.11)</b> for the Project have been designed to ensure a similar level of protection to identified sensitive receptors and prevent the potential for off-site migration of contamination. No cumulative effects are identified.	As listed for Land Contamination in <b>Table 17.5</b> .	<b>No cumulative effects identified.</b>
<i>Socio-Economics</i>			
Loss of agricultural land - impacting on food markets and the agricultural labour market	<p>The total estimated loss of agricultural land from the cumulative schemes equates to 0.7% of agricultural land in KCC, 0.11% in the region and 0.013% of England total. This is not considered to be not significant in relation to the ability of the UK to produce food products.</p> <p>The combined change in employment would equate to between 25 to 65 workers in</p>	All cumulative schemes listed in <b>ES Volume 4, Appendix 6.1. (Doc Ref. 5.4)</b> .	<b>No significant cumulative effect:</b> Negligible

Potential Impact	Potential for Cumulative Effect	Relevant Cumulative Schemes	Cumulative Effect
	agricultural sectors which is Negligible (not significant).		
Effects on PRoW and access	<p>Effects from diversions to PRoW falling within the sites of the Project and cumulative schemes are considered to be Negligible (not significant).</p> <p>There are potential beneficial cumulative effects from the Project interacting with large neighbouring developments such as ID No. 10 Otterpool Park.</p>	All cumulative schemes listed in <b>ES Volume 4, Appendix 6.1. (Doc Ref. 5.4).</b>	<b>No significant cumulative effect:</b> Negligible

*Traffic and Access*

Scoped out of the assessment.

*Noise*

Operational noise impacts generated from the Project and nearby schemes.	The cumulative effect of operational noise from the Project and nearby cumulative schemes (within 300m) on receptors will be Negligible (not significant). This is principally because the Project has no noise generating sources within 300m of cumulative schemes which also generate noise.	<p>ID No. 3. Pivot Power Battery Storage</p> <p>ID No. 4. Walsh Power Condenser Project</p> <p>ID No.9. East Stour Solar Farm</p>	<b>No significant cumulative effects identified:</b> Negligible
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*Climate Change – Greenhouse Gases*

Scoped out of the assessment.

Potential Impact	Potential for Cumulative Effect	Relevant Cumulative Schemes	Cumulative Effect
<i>Climate Change – Climate Change Resilience</i>			
Hotter summer temperatures and more extreme temperature events.	Effects associated with higher summer temperatures and more extreme temperature events could be exacerbated by cumulative developments if they result in a large increase in hard surfaces in the vicinity of the Project. However, the Project is not in an urbanised region and embedded mitigation has been included to minimise potential effects created by the Project.	All cumulative schemes listed in <b>ES Volume 4, Appendix 6.1: List of Cumulative Schemes (Doc Ref. 5.4)</b> .	<b>No cumulative effects identified.</b>
<i>Other Topics</i>			
No cumulative effects identified.			

Table 17.7: Summary of Cumulative Effects – Decommissioning

Potential Impact	Potential for Cumulative Effect	Relevant Cumulative Schemes	Cumulative Effect
<i>Cultural Heritage</i>			
Direct Effects	<b>ES Volume 4, Appendix 1.2: EIA Scoping Opinion (Doc Ref. 5.4)</b> confirmed that an assessment of the direct physical effects on below ground assets (i.e., archaeological remains) during operational and decommissioning phases could be scoped out of the ES as direct physical effects will only occur during construction phase of the Project. .	As listed for Cultural Heritage in <b>Table 17.5</b> .	<b>No cumulative effects identified.</b>
Indirect Effects	The effect on off-site heritage assets from the Project, though changes to their setting will be reversible following the decommissioning phase.	As listed for Cultural Heritage in Table 17.5.	<b>No cumulative effects identified.</b>
<i>Landscape and Views</i>			
Landscape Effects (LCA)	LCA Postling Scarp and Value will experience Minor Adverse cumulative effect as a result of the decommissioning phase.  LCA Upper Stour Valley will experience a Negligible Adverse cumulative effect compared with a Negligible neutral effect on its own.	As listed for Landscape and Views in <b>Table 17.5</b> .	<b>No significant cumulative effects:</b> Minor Adverse and Negligible Adverse

Potential Impact	Potential for Cumulative Effect	Relevant Cumulative Schemes	Cumulative Effect
Users of PRow (within/adjacent to the Site)	Users of PRow within or adjacent to the Site will experience temporary Minor to Moderate Adverse visual effects as a result of sequential views of the Project and ID No.9 in quick succession due to their proximity.	ID No. 7 Land north of 1 Church View, Aldington  ID No. 9 East Stour Solar Farm	<b>Significant cumulative effects:</b> Minor to Moderate Adverse
People Travelling on Goldwell Lane  Users of PRow AE474  Users of PRow HE307  People Travelling on the North Downs Way in the Kent Downs NL	These receptors will experience Negligible Adverse effects as a result of the decommissioning phase.	As listed for Landscape and Views in <b>Table 17.5.</b>	<b>No significant cumulative effects:</b> Negligible Adverse
<i>Biodiversity</i>			
Potential for impacts on designated sites, habitats and species.	During decommissioning, the most important habitats, species and associated receptor areas and BIAs will be retained. Mitigation measures will also be in place through the DEMP. No cumulative effects have been identified.	All cumulative schemes.	<b>No cumulative effects identified.</b>

*Water Environment*

Potential Impact	Potential for Cumulative Effect	Relevant Cumulative Schemes	Cumulative Effect
<p>Pollution to the East Stour River</p>	<p>The Project will result in Minor Adverse (not significant) effects in the decommissioning phase in relation to pollution to the East Stour River. If other major works were to occur during the period of decommissioning this could contribute to a significant Adverse effect.</p> <p>Subject to the implementation of mitigation measures, including monitoring, investigation of adverse changes in water quality and implementation of remedial measures, where appropriate, the cumulative impact on pollution to the East Stour River would be Minor Adverse (not significant).</p>	<p>As listed for Water Environment in <b>Table 17.5</b> of this Chapter.</p>	<p><b>No significant cumulative effects:</b> Minor Adverse.</p>
<p><i>Land Contamination</i></p>			
<p>Potential for increase in the mobilisation of contaminants in the air, ground and groundwater through the disturbance of a larger area of potentially contaminated</p>	<p>The mitigation measures detailed in the <b>Outline DEMP (Doc Ref. 7.12)</b> for the Project have been designed to ensure a similar level of protection to identified sensitive receptors and prevent the potential for off-site migration of contamination. It is therefore considered that it is unlikely for significant cumulative effects with this scheme and the Project.</p>	<p>As listed for Land Contamination in <b>Table 17.5</b>.</p>	<p><b>No identified cumulative effects</b></p>



Potential Impact	Potential for Cumulative Effect	Relevant Cumulative Schemes	Cumulative Effect
ground mobilising contaminants.			

*Socio-Economics*

Potential for cumulative effects on socio-economic receptors.	Given the lack of certainty regarding the interaction between the Project's decommissioning phase and the activity generated by the cumulative schemes, it is not possible to identify the significance of effects over and above those assessed for the Project in isolation.	All known cumulative schemes.	<b>No identified cumulative effects.</b>
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*Traffic and Access*

Decommissioning effects are scoped out of the assessment.

*Noise*

Potential noise effects on NSRs from decommissioning activities with other schemes which may be undergoing construction, operational phase or decommissioning type noise in the	It is unlikely that the decommissioning of the Project would be undertaken in such a way that would result in significant effects at NSRs. Predicted decommissioning noise effects from the Project are below the SOAEL, and BPM measures included in the <b>Outline DEMP (Doc Ref. 7. 12)</b> would serve to minimise decommissioning effects.	All cumulative schemes within the relevant Zol of the Project which may be undergoing construction, operational phase or decommissioning type noise in the local area at the same time as the Project.	<b>No significant cumulative effects:</b> Negligible to Minor Adverse.
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Potential Impact	Potential for Cumulative Effect	Relevant Cumulative Schemes	Cumulative Effect
local area at the same time as the Project.			

*Climate Change – Greenhouse Gases*

Scoped out of the assessment.

*Climate Change – Climate Resilience*

Hotter Summer Temperatures and more Extreme Temperature Events	Effects associated with higher summer temperatures and more extreme temperature events could be exacerbated by cumulative developments if they result in a large increase in hard surfaces in the vicinity of the Project. However, the Project is not in an urbanised region and embedded mitigation has been included to minimise potential effects created by the Project.	All cumulative schemes listed in <b>ES Volume 4, Appendix 6.1: List of Cumulative Schemes (Doc Ref. 5.4)</b> .	<b>No cumulative effects identified.</b>
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*Other Topics*

No cumulative effects identified.

## References

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- <sup>1</sup> European Commission. (1999). Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions.
- <sup>2</sup> Planning Inspectorate. (2019). Nationally Significant Infrastructure Projects - Advice Note Seventeen: cumulative effects assessment relevant to nationally significant infrastructure projects. Available at: <https://www.gov.uk/government/publications/nationally-significant-infrastructure-projects-advice-note-seventeen-cumulative-effects-assessment-relevant-to-nationally-significant-infrastructure/nationally-significant-infrastructure-projects-advice-note-seventeen-cumulative-effects-assessment-relevant-to-nationally-significant-infrastructure> (Accessed April 2024).