One Earth Solar Farm

Written Summary of Applicant's Oral Submissions at the Issue Specific Hearing 1 (ISH1)

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Revision 01

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One Earth Solar Farm Ltd

Planning Act 2008

Infrastructure Planning (Examination Procedure) Rules 2010

Contents

1. Introduction

1.1.1 This note summarises the oral submissions made by One Earth Solar Farm Ltd (the Applicant) at Issue Specific Hearing 1 (ISH1) held on 9 and 10 July 2025 in relation to the application for development consent (Application) for the One Earth Solar Farm (the Proposed Development).

1.1.2 Where the Examining Authority (the ExA) requested further information from the Applicant on specified matters, or the Applicant undertook to provide further information during the course of ISH1, that further information is either set out in this document or provided as part of the Applicant's Deadline 1 submissions.

1.1.3 This note does not purport to summarise the oral submissions of other parties, and summaries of submissions made by other parties are only included where necessary to give context to the Applicant's submissions, or where the Applicant agreed with the submission(s) made and so made no further submissions (this is noted within the document where relevant).

1.1.4 The structure of this note follows the order of the items listed in the detailed agenda published by the ExA on 2 July 2025 (the Agenda). Numbered agenda items referred to are references to the numbered items in the Agenda. The Applicant's substantive oral submissions commenced at Item 4 of the Agenda. Therefore, this note does not address Items 1, 2 and 3 on the Agenda as these were procedural and administrative in nature.

2. Written summary of the Applicant's oral submissions

#	Agenda item	Written summary of Applicant's oral submissions
4	**The draft Development Consent Order (dDCO)**	**The applicant will be asked to provide a very brief overview of each part of the dDCO and explain the approach taken to include/explain the extent of the associated development and how this is defined and meets with the guidance for associated development.** The ExA asked the Applicant to provide an overview of each part of the dDCO and explain the approach taken to the associated development. Mr Jacob Burton, Senior Associate at Pinsent Masons LLP, for the Applicant, responded to provide a brief overview of the key provisions of the dDCO. The Order [**APP-007**] has been drafted having regard to PINS guidance in Advice Note 15, best practice and precedents established in other made DCOs, in particular energy DCOs and the made Gate Burton Energy Park, Cottam Solar Project and Mallard Pass orders. These provisions also align with the more recent solar DCOs, including the West Burton Energy Park Order 2025 and the East Yorkshire Solar Farm Order 2025. The Order includes 46 articles, divided into 6 Parts, and then 15 Schedules, which are given effect by, or tie into, the articles. A full explanation of the legal provisions in the Order are set out in the Explanatory Memorandum [**APP-008**]. The draft DCO is proposed to be called the *One Earth Solar Farm Order*, and is drafted to consent the construction, operation (including maintenance) and decommissioning of the authorised development, as described in Schedule 1. Article 2 of the Order sets out the definitions of terms used within the Order. **Part 2** of the Order sets out the Principal Powers – including granting the undertaker consent for the authorised development, as constrained by the Order limits and numbered areas shown on the Works Plan [**APP-014**]. This part of the Order also authorises the maintenance and operation of the authorised development. **Part 3** of the Order provides a suite of powers in relation to street works, including carrying out street works within streets, altering the layout of streets, construction and maintenance of altered streets, temporary or permanent closure of public rights of way, use of private roads, access to works, entering into agreements with street authorities, and traffic regulation measures. These provisions give effect to Schedules 4 to 8. **Part 4** contains four supplemental powers, relating to discharge of water, protective works to buildings, the authority to survey and investigate the Order land, and the management of human remains within the Order Land.

#	Agenda item	Written summary of Applicant's oral submissions

Part 5 of the Order sets out the powers of acquisition or temporary possession**.** These include powers to compulsorily acquire land or rights in land, to extinguish rights in land, or to take temporary possession of land. These articles relate only to the Order land, as shown on the Land Plan [**APP-013**]. There are also standard provisions relating to compensation payable to affected persons, incorporation of the mineral code and powers in relation to land and apparatus of statutory undertakers. These articles give effect to Schedules 9 to 11 of the dDCO.

Part 6 includes various miscellaneous or general provisions. These cover:

- **Articles 35 and 36** give the benefit of the Order to One Earth Solar Farm Ltd and set out provisions relating to the transfer of the benefit of the Order.
- **Articles 37 and 38** provide for how landlord and tenant law apply in relation to the Order and that the Order Land will be "operational land" for the purposes of the Town and Country Planning Act 1990 ("1990 Act").
- **Articles 39 and 40** set out the powers and restrictions that apply in respect of the lopping of trees, shrubs or hedgerows and the management of protected trees. This includes reference to Schedule 11 which lists the hedgerows that are proposed to be removed.
- **Article 43** provides protection for statutory undertakers through the protective provisions (set out in Schedule 14).
- **Articles 41-42 and 44-49** include provisions relating to certification of plans and documents relevant to the Order, arbitration, service of notices under the Order; procedure in relation to approvals required under the Order; guarantees in respect of the payment of compensation, protections against the acquisition of mineral rights, Crown Rights, and no double recovery.

The Order then has a series of Schedules, 1 through to 15 – each Schedule identifies its operative article in the Order, in the top right of the Schedule. **Schedule 1** sets out the details of the authorised development and the works numbers aligned with the numbered areas on the works plans **[APP-014]**. In addition to the works numbers, **Schedule 1** also provides for further associated development insofar as it is unlikely to give rise to any materially new or different environmental effects from those assessed in the ES. In terms of the broader approach taken to associated development, Mr Burton asserted that when developing the project design and drafting **Schedule 1**, careful regard was paid to what can be consented as associated development to under the insert under the Planning Act 2008 (2008 Act), and to the guidance in relation to associated development. The reasoning for this associated development and compliance with guidance is set out in the explanatory memorandum **[APP-008]**. Mr Burton noted that all associated development proposed is subordinate to the NSIP and are not an NSIP in their own right and are proportionate to the nature and scale of the NSIP proposed.

Schedule 2 are the requirements, relating to construction, operation and decommissioning of the Project.

#	Agenda item	Written summary of Applicant's oral submissions

Schedule 3 sets out Legislation to be disapplied.

Schedule 4 (Streets subject to street works) - sets out the streets that are to be subject to street works by reference to the Streets Rights of Way Access Plans **[APP-015]**. The Schedule relates to Article 8 (Street works).

Schedule 5 (Alteration of streets) - sets out the streets that are to be permanently altered (Part 1) and temporarily altered (Part 2) by reference to the Streets Rights of Way Access Plans **[APP-015]**. This Schedule relates to Articles 10 (Power to alter layout, etc., of streets) and 11 (Construction and maintenance of new and altered streets).

Schedule 6 (Streets and public rights of way) sets out the locations of the streets which will be temporarily closed, public rights of way that will be temporarily closed and diverted, temporary and permanent use of motor vehicles on public rights of way, temporary management of public rights of way, and public rights of way to be permanently closed and diverted. It references the Streets Rights of Way Access Plans **[APP-015]**. This Schedule relates to Article 12 (Temporary prohibition or restriction on use of streets and public rights of way).

Schedule 7 (Access to works) sets out the proposed accesses to works. It references the Streets Rights of Way Access Plans **[APP-015]**. The Schedule relates to Article 14 (Access to works).

Schedule 8 (Land in which only new rights etc. may be acquired) – sets out the areas of land in which only new rights may be acquired by the undertaker and the nature of the rights that may be acquired. The plot numbers in column 1 of that table correlate with the relevant plot reference numbers on the Land Plan **[APP-013]** and the nature of the rights in column 2 explains the purposes for which rights over land may be acquired and restrictive covenants imposed. The Schedule relates to Article 23 (Compulsory acquisition of rights).

Schedule 9 (Modification of compensation and compulsory purchase enactments for the creation of new rights and imposition of new restrictive covenants) - modifies existing compensation legislation including the Land Compensation Act 1973 and the Compulsory Purchase Act 1965. This is standard drafting.

Schedule 10 (Land of which temporary possession may be taken) - sets out the land of which only temporary possession may be taken, pursuant to Article 30 (Temporary use of land for constructing the authorised development). The plot numbers in column 1 of that table correlate with the relevant plot reference numbers on the Land Plans **[APP-013]** and Column 2 explains the purposes for which temporary possession may be taken.

#	Agenda item	Written summary of Applicant's oral submissions

Schedule 11 (Hedgerows to be removed) identifies the lengths and locations of hedgerow to be removed and the purpose of removal, with column (2) identifying the important hedgerows (under the Hedgerow Regulations) to be removed. It references the landscape and ecology management plan **[APP-179]**. The Schedule relates to Article 39.

Schedule 12 (Documents and plans to be certified) – lists the documents that the undertaker must have certified as true copies by the Secretary of State pursuant to Article 41 (Certification of plans and documents, etc.).

Schedule 13 (Arbitration rules) sets out the procedures for arbitration in accordance with Article 42 (Arbitration).

Schedule 14 (Protective provisions) – sets out protective provisions for the benefit of statutory undertakers whose equipment may be affected by the authorised development in accordance with Article 43 (Protective Provisions). Mr Burton noted that the set of draft protective provisions included in the dDCO were the sets that were available at the time of submission. However, negotiations with statutory undertakers are underway, and the Applicant anticipates that the drafting of those will evolve further as the examination progresses.

Schedule 15 (Procedure for discharge of requirements) – sets out the procedure for discharge of requirements.

The ExA asked for clarification around the position of protective provisions with the Canal and River Trust and Mr Burton confirmed that the Applicant had been in contact with the Canal and River Trust and is currently negotiating protective provisions with them.

The ExA asked for further clarification about the definition of the "date of decommissioning" at page 5 of the dDCO being: "*means in respect of each part of the authorised development, the date that that part of the authorized development has permanently ceased to generate electricity on a commercial basis*". The ExA queried what this means and how and when this would apply. Mr. Richard Griffiths, Partner at Pinsent Masons LLP, for the Applicant, responded that the date of decommissioning as drafted refers to the date that the Applicant stops sending electricity to the National Grid which could be done in whole or in parts across the Proposed Development.

The ExA asked about the securing mechanism for decommissioning and how interested parties would be aware that commercial power generation has ceased for that part of the Proposed Development.

#	Agenda item	Written summary of Applicant's oral submissions
		Mr Griffiths noted that this is managed by Requirement 20 whereby decommissioning is allowed to be done by phases. In addition, Requirement 3 includes the obligation to inform the relevant authorities when a phase has been decommissioned and in accordance with the phasing that had been established for the construction of the Proposed Development in accordance with Requirement 3. The longstop date is 60 years, and this can be worked out from the date of final commissioning as agreed with the local authorities for that phase under Requirement 3. It is therefore considered there are various mechanisms for managing decommissioning and informing interested parties. In response to a submission from Miss Stephanie Hall (on behalf of Lincolnshire County Council ("**LCC**")) about whether there should be a definition of "part" as they consider that there is tension between the use of "part" in the date of decommissioning definition and the use of "phase" in requirement 20, Mr. Griffiths confirmed that the Applicant will look at the references to "part" and the interrelationship between the definition and the requirement in the dDCO. The ExA referred to the recent decision on the Oaklands Solar Farm [EN010122] where they adjusted their wording of "decommissioning of part" at Article 64 to address this tension. Mr. Griffiths confirmed that the Applicant will consider Art 64 of the Oaklands Solar Farm DCO and their definition of date of "decommissioning of part", noting that the Oaklands Solar Farm DCO does not refer to "phase". In response to a submission from Mr. Simon Betts (on behalf of Newark & Sherwood District Council ("**NSDC**")), about the submission of a phasing plan during examination, Mr Griffiths confirmed that no phasing plan would be submitted during examination as this is not appropriate prior to pre-commencement phase of the development.. **Post hearing note:** The Applicant has reviewed the drafting in Oaklands and as included in its own draft DCO for One Earth. At Deadline 1 the Applicant has not amended Requirement 20 of the dDCO, however, it has included definitions in Schedule 2 and Schedule 15 for "part" and "phase" to make clear how those terms are used in the requirements. The effect of requirement 20 is that for each phase, as identified in the phasing plan approved pursuant to requirement 3, the date of decommissioning is not later than 60 years for each phase, running from its date of final commissioning (as notified under requirement 3(3)). The way the remainder of the requirement is discharged, including the decommissioning itself and the approval of the DEMP(s), can be done in parts (which may in practice be a phase, but, may also be part of a phase or multiple phases, or multiple parts), but that is subject to the over-arching time constraint on each phase. **(ExA Action 1)** <u>Principal Powers in the dDCO</u>

#	Agenda item	Written summary of Applicant's oral submissions
		The ExA noted that the Oaklands Solar Farm made Development Consent Order has included the reference to materially, new or materially different effects in the principal powers section of their made DCO and asked the Applicant whether this approach would be neater. Ms Alexis Coleman, Legal Director at Pinsent Masons LLP, for the Applicant, confirmed that this will be considered by the Applicant and the Applicant will look at updating the drafting of the dDCO in light of the recent decisions which were not available at the time of submission. **Post hearing note:** The Applicant has considered the drafting from Oaklands and has updated Article 3 at Deadline 1 in line with the drafting in Oaklands, however the drafting in Article 2(8) has been retained as this aids with the interpretation of provisions within the Order, including the newly included drafting in Article 3(3). The Applicant has updated the draft DCO at Deadline 1 to align with recently made Orders, as recorded in the Schedule of Changes submitted alongside the draft DCO. **(ExA Action 2)** <u>Article 31 - Temporary use of land for maintaining the authorised development</u> The ExA wished to understand how the maintenance of the authorised development will be managed and noted that there is a disparity between Article 5 – Power to maintain the authorised development and the Outline Landscape and Ecology Management Plan (oLEMP), in terms of the time period for maintenance. Ms Coleman explained that where long-term planting is required, that powers of temporary possession are secured to support the ongoing maintenance of this planting. Ms. Coleman referred to Section 7 of the oLEMP which refers to the ongoing maintenance of the plots Proposed Development which is extended for the whole of the operational period of the Proposed Development. Ms Coleman asked whether it would be helpful to set out what the actions might look like in terms of those plots and the ExA confirmed that, in addition, it would also be helpful to revisit the oLEMP in particular as there is currently inconsistency in the maintenance between the various hedgerows and trees as there are some elements that aren't maintained for the same duration or manner as the others. **Post hearing note:** The Applicant has reviewed the oLEMP and included a number of amendments (for this action and others noted below) to ensure consistency across maintenance periods. These include confirmation that all existing and proposed vegetation will be managed and maintained for the operational duration of the Proposed Development. For plots identified for temporary possession in the Land Plan [APP-013], powers for maintenance of planting in these areas over the operational

#	Agenda item	Written summary of Applicant's oral submissions
		period, where for example such planting has the potential to obstruct highway access, are secured through Article 31 of the draft DCO, for the period specified within the LEMP. **(ExA Action 3)** Article 38 - Operational land for purposes of the 1990 Act The ExA asked about operational land and wanted to understand whether all of the land within the Order Limits would, subject to consent being granted, become "operational land" for the purposes of the 1990 Act. They raised a concern that once defined as operational land that this land would therefore be subject to permitted development rights. In particular, the ExA raised concerns that the Environmental Statement (ES) does not currently assess the impacts of the use of the permitted development rights should such rights apply. Ms Coleman noted that the ExA is correct in its interpretation of Article 38 and stated that the extent of those permitted development rights is appropriate. Ms Coleman explained that permitted development rights had been included in Part 15 Class B of the Town and Country Planning (General Permitted Development) (England) Order 2015 (GPDO) in order that such rights are available to statutory undertakers for the generation of electricity, so these are rights that would be available to generation licence holders for sub-50MW solar farms. The Applicant holds a generation licence, granted by Ofgem, and would therefore be a statutory undertaker, and given the rights available for sub-50MW solar farms, it is entirely appropriate that such rights are also available for larger scale solar farms, in order to ensure the efficient, effective and safe operation of the solar farm over its 60 year life time. Ms Coleman also explained that it is important to note, firstly, that the permitted rights available themselves, as set out in Class B, are limited and then further restricted by Class B1, meaning the scope of the rights relates only to very minor works. Further, the permitted development rights would not enable the Applicant to do anything in breach of the DCO, which is a further restriction. Finally, Ms Coleman also noted that to the extent that any use of permitted development rights results in likely significant effects in environmental terms, then permitted development rights under the GPDO are no longer available (see article 3 of the GPDO). Ms Coleman gave examples of the types of works that might be undertaken as being a car port for a vehicle or an enclosure for plant. The types of development possible and the inability for the development to be EIA development, mean that they are not works that would result in likely significant effects and their impacts would therefore not be required to be assessed in the environmental statement. The ExA referred to the illustrative Masterplan and the large areas that do not contain any "above ground development" and queried whether these areas should benefit from permitted development rights by being considered operational land.

#	Agenda item	Written summary of Applicant's oral submissions
		Ms Coleman explained that the lifespan of the development requires a certain about of flexibility for the operational lifespan in order to ensure that the Applicant has the appropriate powers to ensure the effective and safe operation of the solar farm, however, there are controls within the DCO and the GPDO to restrict the kind of development that could take place using permitted development rights. Mr Griffiths explained that the landscaping activities, which would occur within the land without any above ground development, remain part of the development being considered and are part of the Applicant's undertaking. Therefore, any landscaping activities as a result of the Proposed Development can also be undertaken in a more flexible manner, for instance if a maintenance shed was required at a later date, provided for under permitted development rights. Mr Griffiths reiterated that conducting any works that would be in breach of the DCO and the approved LEMP (as secured by the dDCO) would be a criminal offence. **Post hearing note:** As requested by the ExA, the Applicant has further considered the points raised during this agenda item. Having done this, the Applicant maintains its position as set out above, that firstly, permitted development rights are required for the full extent of the Order Limits, and that to restrict or remove such rights would be inconsistent with the approach taken for sub-50MW solar farms and all other consented >50MW solar farms consented by DCOs to date. Given the controls and limitations set out above, combined with the potential need for permitted development rights to be able to undertake minor but unforeseen development to ensure the efficient and safe running of the solar farm over its 60 year lifetime, there is no justification for restricting such rights. In terms of the environmental statement point, the Applicant's environmental statement has assessed the authorised development and included a description of the likely significant effects over the construction, operational and decommissioning phases, in line with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017 ("EIA Regulations"). The scale and nature of development that the Applicant could undertake using permitted development rights, and the fact that it cannot undertake EIA development using permitted development rights, means that the type of development that may be undertaken is not development that would result in likely significant effects to be described in the ES. **(ExA Action 4)** <u>Article 39 - Felling or lopping of trees and removal of hedgerows</u> The ExA asked about the use of British Standards in the assessment and whether this is a reference that should be made on the face of the Order. Ms Coleman confirmed that the Applicant will review the standards that are referred to with the oLEMP and confirm whether these standards are more appropriately referenced in the oLEMP or on the face of the Order.

#	Agenda item	Written summary of Applicant's oral submissions

Ms. Coleman further noted that the Applicant will be making an amendment to Article 39 so that paragraph (1) of Article 39 only applies to "trees or shrubs within or overhanging the Order limits" and this will be submitted at Deadline 1.

Post hearing note: The outline LEMP has been updated at Deadline 1 to confirm that where tree removal is required, works shall be carried out in accordance with BS 3998:2010. The Applicant considers that the oLEMP is the most appropriate location for this commitment to be secured, rather than directly within a requirement in the draft DCO, on the basis that the LEMP can reflect best practice and relevant standards at the time without an amendment being required to the DCO (for example, where BS 3998:2010 is revised or updated). It is standard drafting practice for this approach to be taken where such details are secured through the relevant management plan and consistent with the Nationally Significant Infrastructure Projects - Advice Note Fifteen: drafting Development Consent Orders which records that "Mitigation may include adherence with control measures established through relevant management plans." **(ExA Action 5)**

The ExA asked about the difference between ancient trees and veteran trees and how veteran trees are dealt with in the Proposed Development and whether they are subject to different or additional protections. The ExA asked for this to be set out clearly in writing for their understanding.

Ms. Coleman confirmed that this will be taken away by the Applicant to consider.

Post hearing note: Ms. Hall on behalf of LCC, made submissions during ISH1 on the management of any removed trees and how this relates to BNG and submissions were also made from Mr Betts on behalf of NSDC, on the detailed surveys referred to in the Landscape and Visual Impact (LVIA) assessment in relation to the treatment of trees. In response, the Applicant confirms that the data on trees within Appendix 11.6 Arboriculture Report [APP-134] has been reviewed and where appropriate, have been included within Appendix 6.10 Biodiversity Net Gain Assessment [APP-093]. These trees have also been included within an update to Appendix 6.3 Extended Habitat Survey [APP-086]. The overall outcome is a marginal change in the level of BNG for hedgerows (net gain of 92.64% uplift in comparison to the previous figure of 92.49%).
In response to a submission from Mr. Clarkson (on behalf of West Lindsey District Council ("**WLDC**")), Ms. Coleman confirmed that there are no existing trees within the Order Limits that are subject to Tree Preservation Orders (TPO) and therefore the drafting in Article 40 intentionally only applies to TPOs that made after February 2025 (being the date of submission of the Application).

#	Agenda item	Written summary of Applicant's oral submissions
		The ExA noted that there is a table in the application which shows that veteran trees are within the Order Limits and queried if this is correct. Some discussion followed between the ExA and the Applicant and the Applicant agreed to take away the action to confirm the position. **Post hearing note:** The position on TPOs is as confirmed above. The data on veteran trees within Appendix 11.6 Arboriculture Report [APP-134] has been considered in further detail following the Issue Specific Hearing 1 and there are in fact thirteen trees identified as supporting veteran characteristics were identified within the Order Limits (two of the fifteen trees identified in Appendix 11.6 Arboriculture Report [APP-134] are outside the Order Limits following project design evolution). None of these trees are in locations where the Vegetation Removal Plan shown in Appendix C of the Outline Landscape and Ecology Management Plan [APP-179] shows any losses to occur. At Deadline 1 Chapter 6 Biodiversity [APP-035] will be updated to reflect these veteran trees. **(ExA Action 6)** In response to a submission from Mrs Walker (North Clifton Resident), regarding the felling of trees Ms Coleman reiterated that the power in Article 39 is restrictive and is to ensure that the Proposed Development can be constructed and operated safely and with clear access routes. <u>Article 45 - Procedure in relation to certain approvals etc</u> The ExA asked about Article 45 which proposes a deemed approval clause and queried whether the ten week time period within this clause is appropriate, given the longer period of 13 weeks in major infrastructure consented under the 1990 Act. In response to submissions by Mr Betts (NSDC) and Mr Clarkson (WLDC), about how the timescale proposed, Ms. Coleman clarified that the 10-week time period in Article 45(4) relates to other approvals not covered Schedule 15. Ms Coleman noted that Schedule 15 (Procedure for discharge of requirements) sets out the procedure for the discharge of requirements, including that when discharging a requirement the Applicant would need to confirm whether the content being approved would be likely to result in any materially new or different environmental to those reported in the ES. Where new or different effects are likely, the deemed approval provisions do not apply. Further, Ms Coleman noted that under these processes the local authorities can ask for an extended timescale in which to determine an application, which is likely to be granted where the alternative is a refusal of the application.

#	Agenda item	Written summary of Applicant's oral submissions
		Ms. Coleman stated that as this project is a Nationally Significant Infrastructure Project a 10-week period is appropriate given the urgent need to deliver the Proposed Development and referred to other made solar DCOs which have shorter timescales than 10-weeks, and similar numbers of local authorities. These included The Oaklands Farm Solar Park Order 2025 (eight weeks, one district council, one county council), The Heckington Fen Solar Park Order 2025 (ten weeks, two district councils and one county council), The West Burton Solar Project Order 2025 (ten weeks, on district and one county council), The Gate Burton Energy Park Order 2024 (ten weeks, two district councils and two county councils), The Mallard Pass Solar Farm Order 2024 (ten weeks, one district council and one county council), and The Sunnica Energy Farm Order 2024 (eight weeks, two district councils and two county councils). Ms Coleman confirmed that some of these other projects similarly have multiple host authorities and asked whether it would assist to discuss with the Councils how and what information they would wish to receive in relation to these approvals and how any such approval process might best be managed approvals. The ExA noted this and suggested that dialogue remain open and Statements of Common Ground (SoCG) are used to clarify the position between the parties on this point. Otherwise, an explanation as to why these timeframes are needed may be required. **Post hearing note:** The Applicant maintains its position as set out in ISH1, however, is engaging with the host authorities in relation to Schedule 15. **(ExA Action 7)** <u>Work No. 4 – works to lay high voltage electrical cables and to facilitate the connection of the authorised development to the National Grid High Marnham Substation and access for the electrical cables</u> The ExA requested clarification for how these works are going to function as part of the DCO given that the connection is to a substation that does not currently exist. Mr. Griffiths confirmed that Work No. 4 refers to High Marnham Substation and this is defined as the proposed substation in the DCO. National Grid are promoting the application for this substation and the intention is for this to be submitted later this year. <u>Work No 6 - temporary construction and decommissioning compounds</u> ExA wanted to understand whether there will be any hardstanding in Work No. 6B.

#	Agenda item	Written summary of Applicant's oral submissions

Ms Coleman confirmed that there will be no hardstanding as part of these works. Mr. Ewan Sneddon, Associate Director at Aecom, for the Applicant, confirmed that the central compounds (Work No. 6A) would act as the hubs and the secondary compounds (Work No. 6B) will be of shorter duration for material storage and small welfare facilities. Mr. Sneddon confirmed that there would be a total of 10 of the secondary compounds that would roll across the Proposed Development as needed, but generally only 2 or 3 are expected to be in existence at any one time and this is outlined in the Outline Design Parameters **[APP-172]**.

Requirements

The ExA noted that in the list of local authorities in paragraph 1 the County Councils are not included as a "relevant planning authority" in respect of Requirement 4 (written approval) and asked whether there is a particular reason why the County Councils would not have requirement for written approval for any elements that they are in control of or have previously approved.

Ms. Coleman confirmed that this will be taken away and considered by the Applicant.

Post hearing note: Requirement 4 has been updated at Deadline 1 to include the relevant county council as a consultee. **(part of ExA Action 8)**

In response to a submission by Mr. Clarkson (WLDC), around successors in title to these relevant authorities Mr. Griffiths confirmed that the interpretation section of the dDCO, Article 2(6), makes it clear that references to a statutory body includes that body's successor.

<u>Requirement 3 – phasing of the authorised development and date of final commissioning</u>

The ExA wanted to clarify how this phasing works in relation to construction and traffic management and what will be provided to the local authorities as part of the discharge of this requirement

Ms. Coleman asserted this requirement would be confirming the phases that the Proposed Development would be undertaken in, possibly in the form of a timetable or plan for the local authorities.

The ExA noted that, in respect of the traffic management, how would the flow of information be managed where the County Councils are the Highways Authorities, but the District Council will be getting the phasing details subject to Requirement 3. In

#	Agenda item	Written summary of Applicant's oral submissions
		particular the ExA noted that the phasing plan will be reliant on the traffic management to ensure resources and materials are in the correct places for these phases. Ms. Coleman noted that these requirements as a whole will not be able to discharged in silos and also that if any of the councils wish to consult other bodies in the discharge of any of these requirements it is open for them to do so. ExA asked if the DCO could do this directly and Ms Coleman confirmed this could be looked at. **Post hearing note:** At Deadline 1 the Applicant has amended Requirement 3 in the Draft DCO so that the phasing plan is approved by the district councils and the relevant county authorities are consulted with (other amends have been made reflecting the approach on Oaklands). Further, requirement 15 (construction traffic management plan) has been updated so that the relevant district authority is consulted on. **(ExA Action 9)** <u>"Must be substantially in accordance with"</u> The ExA asked about the use of the phrase "substantially in accordance with" and whether this should not be "in accordance with". Further, when combined with an outline plan whether this is providing more flexibility than is needed for the Proposed Development. Ms. Coleman noted that "in accordance with" means "exactly the same as" which is not the intention or the purpose of the outline plans and explained that the current drafting allows for the ability to adapt and refine the plan submitted for approval in response to relevant legislation and guidance at the time, as well as detailed design. Ms. Coleman noted that the benefit of the use of "substantially in accordance with" is that the detailed plan can then be made quite bespoke and tailored to the circumstances at the time and better reflect detailed design. Without the use of "substantially" this wording does not allow for these later plans to be as targeted as possible. Ms Coleman noted that the lock and control over the flexibility is that the relevant planning authorities need to approve the plans submitted for approval, and are able to refuse them if they do not agree they comply with the requirement. **Post hearing note:** Without the term "substantially", "in accordance with" can be construed as meaning exactly the same as. This is not appropriate for Requirements 7, 8, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19 or 20. It is an 'outline' management plan that sets the outline for the final plan to be developed based on the detailed design of the Proposed Development, any updated legislation or guidance, and reflecting any improvements or changes to industry practices or approach. It is therefore

#	Agenda item	Written summary of Applicant's oral submissions
		important that the term "substantially" remains as part of these Requirements in order to build in the flexibility needed for the plan to be developed in accordance with the greater level of detail that will be known at a later stage. The outline battery safety management plan is a good example of where a plan needs to be able to respond to the most up to date legislation and guidance, and it is in no one's best interests for such a plan to secure the specific legislation and guidance that must be adhered to, when that is likely to evolve before detailed design. It is advantageous in order that any adverse effects are managed and the Proposed Development's impacts properly mitigated, that the plans can be responsive, so for example, the proposed planting can reflect the condition of habitats on the ground at the time of detailed design. It is noted that the ExA has asked for specific reasoning against each of the requirements, however, the reason for the approach is an overarching one, which applies equally in each case to the requirements listed. The ExA pointed the Applicant to the drafting of the requirements in the Oaklands Farm Solar Park Order 2025, however, the Applicant notes that in that application, the applicant proposed that drafting in its submission version of the draft DCO put forward, and it was not the decision of the ExA or the Secretary of State to impose that drafting in order to ensure mitigation was adequately secured. The previously made solar DCOs before Oaklands largely adopt the "substantially in accordance" drafting (including for example, Sunnica, where in the first round of written questions, the applicant was asked to justify the use of the drafting in each requirement) which the Secretary of State can be taken to consider is an acceptable and robust approach to securing mitigation. **(ExA Action 10)** <u>Requirement 8 – Landscape and Ecology Management Plan</u> ExA noted that the wording in sub-paragraph (3) does not clarify whether it is the plan that is being maintained or the landscaping within it. Ms. Coleman understood the point and the Applicant will look at the drafting of this to see if this can be articulated more clearly. **Post hearing note:** The Applicant has considered the drafting in requirement 8(3) and does not think a change is necessary, as the requirement that the approved plan is maintained throughout the operation of the Proposed Development means that the approved plan (and its approved content, processes, commitments etc) are continued throughout operation. Further, in the case of the LEMP, it is not simply that the planting that has occurred pursuant to the plan is maintained, but that all the measures, monitoring procedures, replacement of failed planting etc, are continued (i.e. maintained). This is the wording adopted in most of the requirements in Schedule 2 and it reflects the approach in many made solar DCOs to date, including Oaklands Farm Solar Park Order 2025. **(ExA Action 11)**

#	Agenda item	Written summary of Applicant's oral submissions

Requirement 9 – Biodiversity Net Gain (BNG)

The ExA asked whether this achieved the BNG calculations as set out?

Ms. Coleman confirmed that it does on the basis of how Requirements 8 and 9 work together to secure the delivery of the oLEMP and the planting in the oLEMP upon which the BNG calculation is based. Ms. Coleman confirmed that at Deadline 1 an amendment will be made to have percentages on the face of the Order. Ms Coleman clarified that these will not be the exact percentages as are included in the BNG assessment, as that is an assessment based on a snapshot of the position at this stage and will be subject to detailed design and other factors such as the condition of habitats on the ground at detailed design. The Applicant has therefore taken a precautionary approach in the commitments given in the requirement, to ensure it can deliver on them.

Post hearing note: Changes have been made to the requirement at Deadline 1 as noted during the hearing. **(ExA Action 12)**

Requirement 10 – fencing and other means of enclosure

The ExA asked about the distinction for temporary fencing bearing in mind that the whole Proposed Development is notionally temporary.

Ms Coleman noted temporary in this context refers to the construction period and relates to fencing required for security or to enclose a construction site. These fences are controlled by the outline Construction Environmental Management Plan (oCEMP) and then for any operational purposes these are controlled by the Outline Design Parameters. Ms. Coleman confirmed that the Applicant would look at referring to "operational" rather than "permanent" to make this purpose clearer.

Post hearing note: The Applicant has made amendments to this requirement at Deadline 1 to reference construction and operation. **(ExA Action 13)**

The ExA referred to paragraph 6 of Requirement 10 and the requirement that this fencing will be removed on completion. In particular, the ExA wanted to understand how would anyone know what complete meant and therefore removal is necessary.

#	Agenda item	Written summary of Applicant's oral submissions
		Ms Coleman suggested that this needs to be read in the context of paragraph 7 which details operational fencing being completed before the date of final commissioning. This means that by the date of final commissioning the operational fencing will be erected and construction fencing removed. Mr. Sneddon further explained the general procedure for building out a solar development; starting with the site compound, which would be enclosed, then a perimeter fence to enclose the site from people wandering through during construction. Once construction is completed for the temporary enclosing fences are removed leaving the perimeter fences. <u>Requirement 16 – Operational noise</u> The ExA queried whether there should be any controls for noise in respect of Work Nos. 4-8. Ms. Coleman confirmed that, during operation, there is no restriction on operational noise applied to the Work Nos. 4-8 as there are no likely significant effects reported for operational noise in relation to these works and they are the type of works that would not be noise generating once operational (being underground cables; works such as tracks, fencing, security; construction compounds (which would no longer be there); highway works; and green infrastructure). There is a restriction in place for Work Nos. 1-3 as these works, although not reporting likely significant effects, do have the potential to create operational noise impacts. Construction noise is managed with through the Construction Environment Management Plan (CEMP) and Construction Traffic Management Plan (CTMP). <u>Schedule 4 — streets subject to street works</u> The ExA asked about the proposed timescales in Article 16 relating to traffic regulations measures and specifically whether the highways authorities had any comments. Miss Hall (LCC) and Mr. William Lawrence (Nottinghamshire County Council ("**NCC"**)) said that they had no comments at this stage and will pick up with the Applicant separately. Ms. Coleman noted that the Applicant has been in discussions with the highways authorities on both this scheme and other schemes relating to Article 16 (and the street works and highways articles and Schedules generally), which has resulted in

#	Agenda item	Written summary of Applicant's oral submissions
		the inclusion of the permit scheme for example. The Applicant understands the drafting to be generally acceptable, but will pick up any further discussions with the authorities. The ExA asked whether highways authorities were satisfied that Schedules 4, 5, 6 and 7 are complete and the local county authorities confirmed that there were no comments at this time but this may be reported on in the Local Impact Report (LIR). <u>Mitigation Plans</u> The ExA asked the Applicant to review these plans and, in particular, review instances where "will do something" or "may do something" is used. The concern is that this is potentially no form of commitment to do anything and should be avoided. The ExA referred to the Oakland Solar Farm made Order as an example to consider. Further the ExA noted an error in the oCTMP **[APP-181]** on page 19 where it refers to a digital recorder which does not appear to be correct. **Post hearing note:** The Applicant confirms that it has considered these points and has amended the oCTMP to strengthen the Applicant's commitments through the use of more definitive language **(ExA Action 14)**, and to correct the reference to "digital recorder" **(ExA Action 15)** The ExA then asked for clarification on how working hours outside of those established by the oCEMP **[APP-176]** would be agreed and whether having these working hours on the face of the Order would be considered. Ms. Coleman confirmed that the preference would for these working hours to be in the oCEMP and not the Order as this is fairly standard drafting practice in other made DCOs noting that there are some outliers including Oaklands. **Post hearing note:** The Applicant's position remains as reported in the ISH1, and that is consistent with the Nationally Significant Infrastructure Projects - Advice Note Fifteen: drafting Development Consent Orders which records that "Mitigation may include adherence with control measures established through relevant management plans." **(ExA Action 16)** In response to a submission from Mrs. Walker (North Clifton resident), about the distances between residential properties and noise emitting infrastructure, Ms. Coleman confirmed that substations and BESS would be 300m from the properties and there is 100m distance for other infrastructure types including inverters.

#	Agenda item	Written summary of Applicant's oral submissions
		Post hearing note: Noting the concerns raised by Mrs. Walker at Open Floor Hearing 1 and Issue Specific Hearing 1 regarding the information presenting distances from residential properties from noise emitting infrastructure, the Applicant has considered the references provided and has provided clarifications on these as a post hearing note in the Written Summary of Applicant's Oral Submissions at the Open Floor Hearing 1 **[APP/9.4]**.
5	**Alternatives**	**The applicant will be asked to provide an explanation of the ES consideration of alternatives and how that aligns with the requirements of NPS EN-1 and EN-3, in particular with regard to the following.** **(i) The EIA Regulations,** **(ii) Flood Risk and the application of the sequential and exception tests,** **and how each of these has informed the choice of site.** Mr Guido Pellizzaro, Technical Director at Logika, went through how the Applicant has considered reasonable alternatives, including alternative design, technology, size, scale where required, and that has been undertaken in accordance with the EIA Regulations. This is set out in Chapter 4: Alternatives and Design Evolution of the ES **[APP-033]**. The Applicant has complied with the EIA Regulations, and importantly has considered reasonable alternatives, which are those that are genuine alternatives that meet the need in the timescales available. Mr. Pellizzaro noted that applicants are obliged under paragraph 4.3.15 National Policy Statement - EN1 (NPS EN-1) to include in their ES, information about the reasonable alternatives they have studied. This should include an indication of the main reasons for the applicant's choice, taking into account the environmental, social and economic effects and including, where relevant, technical and commercial feasibility." (para 4.3.15 NPS EN-1). Furthermore, Chapter 4: Alternatives and Design Evolution of the ES **[APP-033]** sets out the assessment of alternatives to the Proposed Development under different headings including: the 'do nothing' Alternative; Alternative Renewable Technologies and Design Evolution; and Consideration of Alternative Locations or Uses (with reference to the Site Selection Report **[APP-168]**. Mrs. Sarah Price, Director at DWD, for the Applicant went through the approach to site selection, which also considers the Sequential Test, noting that the approach to site selection is set out in the Site Selection Report provided at Appendix 1 of the Planning Statement **[APP-168]**. The Site Selection Report sets out the approach taken by the Applicant in identifying the Site and developing the design consistent with a series of site selection principles, and following those principles set out in NPS

#	Agenda item	Written summary of Applicant's oral submissions
		EN-3 paragraphs, 2.10.18 to 2.10.48, which from a policy perspective, are considered to be appropriate principles for site selection. The Applicant has set out in the Planning Statement that it sought to initially develop a single new, nationally significant infrastructure project capable of generating a minimum of 250 to 500MW. There wasn't a minimum size identified to do that. The Applicant understood from conversations with National Grid that there was capacity available within this area principally as a result of the closure of former coal fired power stations in this region. Following that, the Applicant set out the principles that it would have regard to when identifying a site, which are set out in paragraph 3.1.3 of the Site Selection Report. Principally, the Applicant was looking to identify a site that was capable of meeting the UK's urgent need for low carbon energy generation, to have regard to and avoid impacts on sensitive landscapes and environments as far as possible, and also to reduce the level of land used as part of the Proposed Development that was best and most versatile agricultural land, as well as ensuring that the Applicant had applied the Sequential Test. The Applicant also considered accessibility from the strategic road network in terms of enabling ease of construction, and also to deliver a scheme which would be primarily on land which could be acquired voluntarily, thereby avoiding and minimising the need for large scale compulsory acquisition. In identifying a site, the point of connection was the starting point, and that's been acknowledged as an appropriate starting point for site selection in numerous solar DCOs examined and made to date. Initial conversations with National Grid, which started in Q4 2020, identified that there was capacity available at High Marnham, and that ultimately led to a grid connection agreement for 740MW, with an agreed connection date of 2029. Upon identifying this point of connection, the Applicant considered what would be a reasonable distance to set their search area from the point of connection and a 10 kilometre distance was set to minimise the risk of environmental impacts, disruption to multiple landowners and challenges with crossings and also losses, process losses due to energy, travelling long distances and also the cost and delays associated with a longer cable route. This is set out in the Site Selection Report (Appendix 1 to the Planning Statement **[APP-168]**) and is considered an appropriate distance in the context of other solar DCOs and this particular site. Mrs. Price went on to note that the 10 kilometre search area has very significant parts of it within Flood Zones 2 and 3. Therefore, the Applicant first considered lower risk areas within the ten kilometre search area and initially started their search to the southwest of that search area around the settlement of Ossington, where there were reasonable areas to accommodate a utility scale solar farm in Flood Zone 1. The discussions with landowners within this area didn't prove fruitful, and there weren't any landowners within this part of the Area of Search that wanted to promote a solar farm on their land. In

#	Agenda item	Written summary of Applicant's oral submissions
		addition, this area was not considered suitable for solar panels for a variety of reasons, including proximity to settlements and people's homes, Conservation Areas and listed buildings and landscape and visual impact (see Post hearing note and responses to relevant representations). Mrs. Price went on to note that there are areas of Flood Zone 1 towards the west of the 10 kilometre search area, which is land on higher ground, but that also gives much more expansive, open, distant views in the agricultural landscape. The Applicant considered in relation to that land that it wouldn't be appropriate for a large scale solar scheme in the same area, due to a range of other environmental constraints, including being in close proximity to a residential area, and clusters of listed buildings and conservation areas. Other locations to the north, west, south west, and south east were identified as having constraints in terms of conservation areas, ancient woodland, existence of BMV agricultural land, or more significant cumulative effects when combined with other developments. **Post hearing note:** The Applicant is preparing further evidence to demonstrate how the Sequential Test has been applied and satisfied as part of site selection, arising from discussions during the ISH1. In doing this, the Applicant will demonstrate how it has considered reasonably available, lower risk sites that are appropriate for the proposed development. The Applicant will also provide further evidence to justify the 10km search area. The Applicant is confident from the work it has carried out to date that it can demonstrate that there are no reasonably available, lower risk sites that are appropriate for the Proposed Development in the search area. This will be provided at Deadline 2, in order to ensure this is comprehensively set out and takes account of the level of detail which the ExA has requested and to provide a thorough back check on potential alternative sites. **(ExA Action 17)**
6	**Electricity Generation and Grid Connection**	**(i) The applicant and National Grid Electricity transmission will be asked to provide an explanation of the status of the grid connection agreement, with evidence of timing, capacity, future consents or licences and any detail of any potential impediments to connection, or the timing of delivery/completion.** The ExA asked about the status of the grid connection agreement, what future consents or licences are required ahead of connection, and whether there are any potential impediments to connection, or the timing of delivery of completion. In terms of the status of the grid connection agreement, Mr. Griffiths explained that a grid connection offer was secured with the National Energy System Operator and (following a revised offer) formally accepted in December 2024. The agreement provides for a connection date of 2029, allowing the Applicant to import and export up to 740MW of electricity to a proposed new National Grid substation. This is detailed in the Grid Connection Statement **[APP-174]**.

#	Agenda item	Written summary of Applicant's oral submissions
		With regard to connection infrastructure, Mr. Griffiths said that while the existing High Marnham 275kV substation has sufficient capacity to accommodate the Proposed Development, National Grid is pursuing reinforcement works and proposing a new 400kV substation at High Marnham. This is part of a wider programme to strengthen transmission capacity between the North of England and the Midlands. The Applicant's connection agreement reflects this updated infrastructure plan. Although the Applicant could technically connect to the existing substation, the current agreement is for connection to the proposed new substation. The Applicant has sought flexibility within the DCO to allow cable routing to adapt once National Grid's final design is confirmed. The new substation is not part of the DCO Application, as it is National Grid's responsibility and will be subject to a separate 1990 Act application, expected to be submitted in Q4 2025. Mr. Griffiths noted that paragraph 4.1.18 of NPS EN-1 makes it clear that it is acceptable for a network connection to be submitted in a separate application to the proposed NSIP. Mr. Griffiths referred to the Connections Action Plan (jointly published by Government and Ofgem in November 2023), cited in the Statement of Need **[APP-173]**, which encourages efficient use of existing infrastructure to accelerate delivery of low-carbon generation. Additionally, NPS EN-3 paragraph 2.10.25 supports site selection based on proximity to grid capacity, reinforcing the rationale for the proposed connection strategy. As to future consents and licences, Mr. Griffiths confirmed that no further consents or licences are required for the Applicant's own connection into the proposed substation, beyond the DCO. However, National Grid will require planning permission for the substation itself. Mr Griffiths emphasised that it is not within the Applicant's control how National Grid progresses its infrastructure applications. In terms of potential impediments to connection or timing, the ExA queried whether delays or refusal of National Grid's wider infrastructure scheme could impact the Applicant's connection. Mr. Griffiths responded that: • The proposed substation is a standalone 1990 Act application, separate from National Grid's DCO for overhead line reinforcement. • The substation can be delivered independently of the overhead line works. • Should National Grid alter its plans or withdraw the substation proposal, the Applicant's connection agreement could be modified to allow connection to the existing 275kV substation. • National Grid has a statutory duty to connect under paragraph 2.8.5 of NPS EN-5, and must honour the agreed connection date of 2029.

#	Agenda item	Written summary of Applicant's oral submissions
		Mr. Sneddon, speaking on behalf of the Applicant, clarified that a 400kV overhead line is required to connect the new substation. He confirmed that the connection has two ends: one at Beverley, essentially the Creek Back substation, and the other at Chesterfield. He explained that the upgrade at Chesterfield involves re-cabling an existing overhead line, which does not require a DCO or a planning application. This work could commence immediately. He emphasised that even if the northern route is not constructed, the High Marnham substation would still be capable of connecting to the wider National Grid infrastructure. Mrs Price, also representing the Applicant, addressed potential planning impediments to grid connection. She noted that National Grid intends to submit its 1990 Act application by the end of the year and has already undertaken an EIA screening request with Bassetlaw District Council. This screening confirmed that the proposed substation does not constitute EIA development, which supports the expectation that National Grid will be able to submit its application within the anticipated timescales. Mrs Price further explained that the substation site already benefits from planning permission for a solar farm, which establishes the principle of renewable energy development on the land. While the impacts of a substation differ from those of a solar farm, she suggested that these differences would be considered as part of the planning process. She also highlighted that the application would be determined in accordance with the local development plan and relevant material considerations, including the National Planning Policy Framework (NPPF) and NPS EN-1, EN-3 and EN-5. These national policies are supportive of new energy infrastructure and its transmission. In addition, Mrs Price referred to Bassetlaw Local Plan Policy ST49, which supports new energy generation and transmission infrastructure, subject to site-specific considerations such as location, landscape setting, air and water quality, and scale. Mrs Price noted that National Grid applies the Horlock Rules when designing and siting new substations, which include considerations of residential amenity and mitigation of impacts. On this basis, the Applicant's position is that there is no obvious reason why planning permission for the substation would be refused. Mrs Price also referred to several paragraphs within NPS EN-1 to reinforce the urgency and national importance of electricity network infrastructure. Paragraph 3.3.65 identifies an urgent need for new infrastructure, while paragraphs 3.2.5 and 3.2.7 state that the need has been demonstrated and that substantial weight should be given to such applications. Paragraph 4.2.5 classifies this type of infrastructure as a critical national priority. Although the substation application will be determined under the 1990 Act rather than the 2008 Act, these provisions remain material considerations.

#	Agenda item	Written summary of Applicant's oral submissions
		In response to comments made by Ms. Hall on behalf of the Lincolnshire County Council regarding grid connection timelines and the cumulative assessment, Mrs Price confirmed that the cumulative assessment in Chapter 18 of the ES [**EP-047**] assumes a substation construction period of approximately two and a half years. Although the application has been delayed, it is now expected to be submitted in Q4 2025, and the assumed connection date of 2029 remains valid. Mrs Price stated that the slippage to date does not affect the cumulative assessment. Further, under Schedule 15 of the DCO, the Applicant is required to submit a report identifying any new or materially different environmental effects arising from the substation application, which provides a safeguard in the event of future changes. The ExA raised the possibility of including a Grampian-style condition in the DCO. Mr Griffiths responded that such a condition is neither necessary nor legally reasonable. Mr Griffiths noted that the precedent cited by the ExA, Keadby 3, involved a gas-fired power station with carbon capture, where the concern was that the power station could be constructed without the carbon capture element. In contrast, the current proposal involves a solar farm and grid connection, and the Applicant stated that the same concerns do not apply. Mrs Price reiterated that the Proposed Development is supported by clear national policy, particularly through NPS EN-1, which identifies it as critical national priority infrastructure. This policy backdrop reinforces the need for the scheme and its alignment with the government's strategic energy objectives. In response to the ExA's earlier suggestion of a Grampian-style condition, Mr Griffiths expanded on this further. He emphasised that the Applicant would not commit to the substantial financial investment required to deliver the scheme unless there was confidence that the substation would be constructed. Mr Griffiths also referenced the existing High Marnham substation, suggesting that the infrastructure context further supports the scheme's viability. On the question of necessity and reasonableness, Mr Griffiths explained that imposing a requirement to secure consent for the grid connection before progressing the solar farm would risk delaying critical supply chain engagement and procurement. Such delays could jeopardise the ability to meet the targeted connection date of 2029. Mr Griffiths expressed concern that introducing such a requirement could set a precedent with wide-reaching implications for future solar farm developments, potentially undermining the delivery of the UK's legally binding net zero commitments by 2050. Mr Griffiths noted that it is not uncommon for generating stations to come forward without a fully consented grid connection. He stated that there are no known precedents where a generating station has been prevented from progressing until its grid connection has been consented.

#	Agenda item	Written summary of Applicant's oral submissions

In response to the ExA's comments regarding the Viking Carbon Capture project, Mr. Griffiths confirmed that the Applicant would review the Viking decision.

Post hearing note: The Applicant's firm view is that a Grampian requirement restricting the commencement of the Proposed Development would not meet the policy tests of necessity and reasonableness. Key direction from NPS EN-1 is set out below:

- The Government's objectives for the energy system are to ensure our supply of energy always remains secure, reliable, affordable and consistent with net zero (3.2.1).
- There is a need for a range of different types of energy and the need for those types covered by EN-1 should be assessed as being urgent (3.2.2).
- The Secretary of State has determined that substantial weight should be given to the need when considering an application for energy types under EN-1 (3.2.7).
- Solar and storage are both urgently needed and a Critical National Priority. This CNP status means that there is a presumption in favour of granting consent for such infrastructure (3.3.59, 4.2.4 and 4.2.5).
- Connection infrastructure is expressly contemplated as being able to be delivered separately to a generating station (4.11.8 and 4.11.9).

Under the Clean Power 2030 Action Plan and in order to achieve net zero by 2050, if every low carbon or renewable energy project was restricted until all its grid infrastructure was consented, there would also be a considerable delay in bringing forward low carbon and renewable energy.

The Applicant has provided sufficient information to comply with the EIA Regulations and demonstrated why, in its opinion, there is no reason High Marnham Substation should be refused given the policy position for grid infrastructure at the national and local level. Any requirement that prevents this type of renewable energy infrastructure being delivered is contrary to this policy direction, and the Applicant has taken on the commercial risk of building out the Proposed Development without consent for the High Marnham Substation being confirmed.

While a Grampian requirement was imposed under the Viking CCS Carbon Dioxide Pipeline Order 2025, the policy basis for its inclusion was to manage risk that the DCO could be implemented before the offshore component of the carbon capture

#	Agenda item	Written summary of Applicant's oral submissions
		supply chain was authorised. Without the Grampian requirement, the ExA considered (and the Secretary of State agreed) that the needed benefits of CO_2 captured and storage would not be secured because it would be authorising the capture but not subsequent storage of CO_2. Irrespective of the merits of whether a Grampian Requirement was appropriate to include within the Viking CCS Carbon Dioxide Pipeline Order 2025, an onshore Solar DCO is incomparable to a carbon capture project that has both offshore and onshore components that must be implemented in order for its benefits to be realised. In any event, there are also examples of carbon capture projects where no such Grampian requirement was imposed, such as Drax Bioenergy Carbon Capture, despite the carbon capture pipeline not having consent. There are no precedents the Applicant is aware of involving solar farms where a requirement has been imposed to delay development until grid connection consent is secured. (**ExA Action 18**) **(ii) The applicant will be asked to provide information with regard to the capacity of the local grid connection, the total capacity of the solar farm and battery storage, generating capacity over time, solar panel efficiency over time and details or panel replacement over the course of the operation up to and including final decommissioning.** **(iii) The applicant will be asked to provide evidence explaining if the development includes for any overplanting, what the quantum of this is, the proportion of the panel area that is attributable to overplanting, and what the energy generation benefits of that overplanting might be, both at commencement but over time through the operation of the development.** **(iv) The applicant will be asked to provide details of the type of panel available, the differences between them including in their capacity/energy generation and what has been used to inform the Environmental Statement in setting out the worst case scenario.** The ExA sought further clarification from the Applicant regarding the anticipated generation capacity of the site, over-planting and the choice of solar panel technology. Mr. Griffiths confirmed that over-planting is proposed as part of the scheme, with a ratio of 1.41. He acknowledged the relevance of the recent decision of *Ross v Secretary of State for Housing, Communities and Local Government and*

#	Agenda item	Written summary of Applicant's oral submissions

Renewable Energy Systems Ltd [2025] EWHC 1183 (Admin) where the High Court held there is no standalone legal test requiring over-planting to be "reasonable"; rather, it must be justified in planning terms.

Mr. Sneddon explained that the scheme is designed to deliver an AC output of 740MW. With the proposed over-planting ratio of 1.41, the DC capacity of the installed panels would be 1,048MW. He stated that this level of over-planting is typical for solar schemes brought forward under the DCO regime. The rationale for over-planting is twofold. Firstly, solar panels are rated under Standard Test Conditions, which assume an illumination level of 1,000W/m^2. In practice, such illumination levels are rarely achieved in the UK, and typically only for a few hours per year. Therefore, solar systems are designed to operate efficiently under lower illumination levels, with inverters running at optimal capacity more frequently. This design approach often results in a minimum 20% oversizing to account for reduced illumination.

Secondly, Mr Sneddon explained that solar panels degrade over time due to exposure to sunlight. In the first year, degradation typically ranges between 1-2%, after which it stabilises at around 0.4% per year, depending on the manufacturer and warranty terms. Over the expected life of the panels, this results in a total output loss of approximately 20%. While older panels were typically warranted for 20 years, modern panels now carry warranties of 30 to 35 years, reflecting improvements in durability and performance.

Post Hearing Note: Please refer to graph and explanation in Appendix A. **(ExA Action 19)**

Mr. Sneddon confirmed that the assessment has been based on crystalline silicon solar panels, which represent approximately 95% of the current market. This choice was made to ensure the scheme could be robustly assessed using proven technology. While future technological advancements may offer improved performance, Mr. Sneddon stated that the Applicant cannot assess unknown technologies and has therefore based its environmental and technical assessments on currently available equipment.

In relation to bifacial modules, Mr. Sneddon confirmed that these panels are capable of absorbing light from both the front and rear surfaces. The rear surface captures reflected light from the ground or surrounding surfaces, which can enhance overall energy generation. The extent of this gain depends on the nature of the surface beneath the panels. For example, green grass may yield a 5-10% gain, while grey concrete or other reflective surfaces may result in higher efficiency. Conversely, darker or brownfield surfaces may offer less benefit.

Mr. Sneddon provided an update on the evolving nature of solar panel technology, noting that while panel types continue to change, the market is beginning to settle on a standardised panel size for utility-scale solar farms. This trend is being driven

#	Agenda item	Written summary of Applicant's oral submissions
		by major module manufacturers, who are working to establish consistent dimensions that facilitate efficient design and installation. Mr. Sneddon explained that panels are unlikely to increase significantly in size due to practical handling limitations, particularly the need to avoid requiring suction equipment for lifting glass modules. While panel sizes may stabilise, improvements in efficiency are expected to continue. This could allow for fewer panels to achieve the same direct current (DC) capacity, offering opportunities to space rows further apart and potentially increase energy yield per installed megawatt. Mr. Sneddon indicated that such spacing adjustments would be preferable to removing fields entirely, as the scheme has been designed to be land-efficient in terms of capacity rather than maximising output per panel. The ExA queried the variation in panel heights indicated on the site layout plan. Mr. Sneddon responded that the maximum height for solar schemes is typically around 3.5 metres, which aligns with many schemes brought forward under the 1990 Act. However, due to flood risk concerns at the Site, certain areas may require panels to be elevated to 3.8 metres. To manage this variation, the Applicant has adopted a field-by-field approach. Where any part of a field requires elevated panels, the entire field has been assessed at the higher height for the purposes of the Environmental Statement. This ensures that the visual impact assessment reflects a worst-case scenario. Mr. Sneddon confirmed that the final determination of panel heights and transitions between levels would be addressed during detailed design, once specific module types have been selected. The ExA sought further clarification on whether the panel arrays would follow a consistent line or vary with topography. Mr. Sneddon confirmed that the intention is to maintain visual consistency across the Site, as significant variation would appear jarring. The Outline Design Parameters [**APP-172**] constrain the number, orientation, and height of panels within the scheme. Where stepping is required to meet flood clearance requirements, this will be applied at the field level, although a more localised approach could be considered where possible at detailed design stage to further reduce visual impact. However, Mr. Sneddon noted that such refinement would not materially benefit the current assessment, which is based on worst-case assumptions of height parameters as set out in the Work Plans [**APP-014**] and Outline Design Parameters [**APP-172**]. **Post Hearing Note:** The Outline Design Parameters [**APP-172**] have been updated to include that the angle of solar panels will be consistent across the extent of Work Area 1 as far as practicable. This update confirms that whilst the height may vary between 3.5m – 3.8m, in accordance with the Height Parameter Plan [**APP-016]** and Outline Design Parameters [**APP-172]** both provided at DCO submission, the angle of the panels would be consistent. **(ExA Action 20 and 21)**

#	Agenda item	Written summary of Applicant's oral submissions
		Mr. Sneddon confirmed that the Environmental Statement has been prepared using the Rochdale Envelope approach. This methodology involves assessing the scheme based on maximum and minimum design parameters to ensure robustness and flexibility. For the landscape and visual impact assessment, the maximum panel height identified in the Work Plans [**APP-014**] has been used as a reasonable worst-case assumption. With regards to the aesthetic of the solar PV panels, the landscape and visual impact assessment has assumed the Works Plans would be implemented in line with the Outline Design Parameters [**APP-172**]. The extent of flexibility in the Outline Design Parameters, for example a dark blue, grey or black panel colour, would not make a material difference to the level of landscape and visual effects provided at Chapter 11 of the ES [**AS-017**]. Similarly, the greenhouse gas assessment has been based on the maximum number of panels and the least efficient panel types, ensuring that the environmental impacts are not underestimated. This approach allows the Applicant to retain flexibility in the final design while ensuring that all relevant environmental effects have been appropriately assessed. Mr. Sneddon reiterated that any refinements made during detailed design would remain within the parameters assessed and would not require variation unless they resulted in materially different impacts. **(v) Para 2.10.17 of EN-3 gives a theoretical range of power generation per acre. The applicant will be invited to explain the approach it has taken to assess power generation, the quantity of land needed, and the potential for technological advancements over time.** The ExA then returned to the question of generation efficiency. Responding on behalf of the Applicant, Mr. Griffiths referred to paragraph 2.10.17 of NPS EN-3, which states that a solar farm typically requires between 2 to 4 acres per megawatt of output. He confirmed that, for the Proposed Scheme, the generating elements, identified as Work Numbers 1 to 3, including the solar arrays and substations—equate to approximately 3.2 acres per megawatt. This places the scheme comfortably within the theoretical range set out in national policy, demonstrating consistency with established planning benchmarks.
7	**Decommissioning, timing and funding**	**(i) The applicant will be invited to explain how Requirement 20 Decommissioning and restoration is intended to work, how in practice this would ensure decommissioning was completed within a reasonable time scale and restoration undertaken.** The ExA requested an explanation as to how Requirement 20 on decommissioning and restoration is intended to work, and how in practice this would ensure decommissioning was completed within a reasonable timescale and to what standard the restoration of land would be undertaken.

#	Agenda item	Written summary of Applicant's oral submissions

Mr. Griffiths directed the ExA's attention to the Explanatory Memorandum **[APP-008]**, which at paragraph 5.2.26 explains how Requirement 20 operates. As noted previously, decommissioning must commence no later than 60 years following the date of final commissioning, which is defined as the point that commercial electricity generation starts and testing has been completed.

The Requirement recognises that there may be different phases for the decommissioning of as per the phases approved via Requirement 3. The Requirement also distinguishes between the decommissioning dates for Work No.1 and the Associated Development in Work Nos 2 to 8, on the basis that some parts of the associated development may be required for more than one phase of the generating station (Work No.1).

No later than 12 months before the undertaker decides to decommission any part of the Authorised Development, the undertaker must notify the relevant planning authority of the intended decommissioning date. This means that the relevant planning authority will know the phase or phases and will know the date of final commissioning all pursuant to Requirement 3. They can then calculate 60 years from that date which is the date all electricity generation is to cease and work backwards to ensure 12 months before that date they receive the Applicant's notice of intended decommissioning.

Then, no later than ten weeks prior to the intended date of decommissioning the undertaker must submit to the relevant planning authority for its approval a detailed and final decommissioning environmental management plan (which must be substantially in accordance with the Outline Decommissioning Environmental Management Plan (oDEMP) **[APP-178]**).

Mr. Griffiths stated that no decommissioning works can be carried out until the relevant planning authority has approved the decommissioning environmental management plan, in consultation with the Environment Agency and Natural England. The decommissioning environmental management plan must be implemented as approved.

In terms of ensuring decommissioning is completed within a reasonable timescale and restoration is undertaken, paragraph 2.2.2 of the oDEMP **[APP-178]** summarises what would be decommissioned and how the restored land is handed back to the landowner. Paragraph 2.4.2 of the oDEMP **[APP-178]** sets out the time frame of the decommissioning works, and that is set to be between 24 and 48 months. Both of these elements will be included in the final Decommissioning Environmental Management Plan to be approved by the relevant planning authorities, meaning that the relevant planning authorities will be the final decision maker on ensuring the timeframe is both suitable in accordance with the oDEMP **[APP-178]** and the restoration is reasonable and in terms of ensuring the works are undertaken. The requirement requires the Applicant to carry

#	Agenda item	Written summary of Applicant's oral submissions
		out the decommissioning in accordance with the Decommissioning Environmental Management Plan, as approved, and any breach of this requirement would be a criminal offence pursuant to section 61 of the 2008 Act. In response to a submission from Mr. Barker (WLDC), about how decommissioning will be managed if the electricity generation were to cease prior to the long stop date, Mr. Griffiths noted that Requirement 20(2) of the DCO notes that should generation cease prior to the 60 year long stop date, no later than 12 months prior to the intended ceasing of generation the Applicant is required to issue notice to the relevant planning authority of the intended date of decommissioning. This notice would be followed by the submission of the relevant plans relating to decommissioning to the relevant planning authorities. Mr. Griffiths noted the references to the Oaklands DCO drafting and confirmed that the Applicant will consider this drafting and consider whether alternative wording can be placed in either the dDCO **[APP-007]** or the oDEMP **[APP-178].** **Post hearing note:** At Deadline 1 the Applicant has included drafting in the outline Operational Enviornmental Management Plan to deal with extended outage periods and early decommissioning, based on the approach taken at Heckington Fen. **(ExA Action 24)** Miss. Hall (LCC), made submissions about whether the Applicant has considered a longer timeframe than 10 weeks for relevant planning authorities to consider the decommissioning plans, Mr. Griffiths confirmed that the Applicant will consider this wording. **Post hearing note:** The Applicant has further considered this drafting, however, the ten weeks is included to align with the time period included in Schedule 15 for discharge of requirements, and those timeframes should remain aligned. This doesn't prevent the Applicant building in a longer timescale in practice to deal with any anticipated delays to approval of the plan. **(ExA Action 25)** In response to a submission from Mr. David White (Say No to One Earth Solar Farm), about the risks of leaving cables in situ as part of decommissioning, Mr. Griffiths noted that the oDEMP **[APP-178]** states that buried, on site, low voltage cables would be removed as part of decommissioning. Buried interconnecting cables of medium voltage would either be removed or left in situ provided the depth of installation is below 0.9m and would not interfere with normal agricultural operations. Mr. Griffiths noted that at paragraph 1.1.6 of the oDEMP **[APP-178]** the Applicant makes it clear that the mode of cable decommissioning for the grid connection and other underground cables will be dependent upon government policy and best practice at that time. Mr. Griffiths noted that a balance needs to be stuck between the environmental damage of removing cables and leaving them in situ and the oDEMP **[APP-178]** leaves the removal of higher voltage cables and cable corridors

#	Agenda item	Written summary of Applicant's oral submissions
		open to discussions with the relevant planning authority (in consultation with the Environment Agency and Natural England) at the point of decommissioning to discuss what is more environmentally appropriate. The ExA asked whether the Applicant has any evidence about the degradation of cables left in situ as raised by Mr. White noting that these concerns have been raised as part of Mr. White's Relevant Representations. Mr. Kirk Hill, Technical Director at ADAS, for the Applicant, responded in relation to soil health specifically (rather than in relation to risks to groundwater and degradation of plastics), that plastics are used as a matter of formality and these are designed to a certain standard to remain in situ for years. Mr. Hill further noted that the cables will be buried in the mineral soil and not the topsoil so they will not be contaminating the soil that gets cultivated for human consumption and therefore will not have an effect on human health. There is some research to suggest that microplastics might affect the plant's ability to uptake nutrients and absorb rainfall however the scale of the cables across the area would only be in very narrow trenches across the farmland and therefore the integrity of the whole unit of the field or farmland is unlikely to be affected from a land quality perspective. Mr. Hill noted that in many ways, for the preservation of soil health, it is better to keep cables in situ as any removal will require handling and disturbance to the soil which risks causing damage to these soils. The ExA asked about the depth of burial of the cables and whether this would affect agricultural activity. Mr. Hill responded that the depth of 0.9m would mean that there is no interaction with agricultural activity as the maximum depth for those activities is 600mm and the only interactions would be the other cables or pipelines or the creation of land drains. Mr. Griffiths further noted the submission of Mr. White's Relevant Representation and confirmed that that Applicant will respond to these in writing for Deadline 1. **Post hearing note:** The Applicant has responded to Mr White's Relevant Representation at Deadline 1. **(ExA Action 27 which also picks up ExA Action 26)** **(ii) The applicant will be invited to explain how the SoS can have confidence funding would be in place to undertake decommissioning at a time where any receipts for electricity generation could have ceased.**

#	Agenda item	Written summary of Applicant's oral submissions
		The ExA asked how the Secretary of State can have confidence funding would be in place to undertake decommissioning at a time where any receipts for electricity generation would have ceased. Mr. Griffiths noted the following policy tests: paragraph 2.10.146 of NPS EN-3, paragraph 2.10.147 of NPS EN-3, paragraphs 2.10.148 of NPS EN-3 which detail the submission of a decommissioning plan, time limit and securing the decommissioning of a generating station after the expiration of its permitted operation. The Applicant has complied with all of these policy tests. The Applicant is aware of its liabilities under these requirements and has therefore made financial provision for any decommissioning during the operation of the Proposed Development to ensure that these funds are in place at the point of decommissioning. Mr. Griffiths also noted that in addition to the Applicant's liabilities under the requirements of the DCO, and the possible criminal sanctions were these requirements to be breached that the Proceeds of Crime Act 2002 is a further deterrent on the Applicant. The elements of the installed solar farm represent a valuable asset for the Applicant, so it would be in its interests financially, to decommission the site in order to recycle or sell those components. If the undertaker of the Order went into liquidation, its assets would be sold off to fund the decommissioning under the legal requirement. The Applicant therefore does not consider that any form of other security is necessary in the DCO as the guarantee to the Secretary of State is the requirement and the decommissioning management plan as per the policy. Mr. Griffiths noted that other NSIPs that have taken this approach have been accepted including Mallard Pass, where paragraph 7.4.73 of the Examining Authority's Report for Mallard Pass noted "*consistent with the other made DCO's for solar projects we do not consider this to be necessary given the controls that would already be in place via Requirement 18 of the DCO".* In response to a submission from Mr. Betts (NSDC), regarding the common practice for smaller scale solar farms to have a bond in place and whether any further evidence could be provided for if this is necessary in this case, Mr. Griffiths responded that recent NSIPs including Oaklands have not secured a bond. This is not required by policy and is not considered to be reasonable or necessary. In the event of liquidation, then the administrators would sell the valuable solar assets to assist with decommissioning of the Proposed Development.
8	**Environmental Matters**	**8.1 Flood Risk, Drainage and the Water Environment**

#	Agenda item	Written summary of Applicant's oral submissions

(i) The applicant will be invited to explain the methodology used to ensure drinking water supplies will remain safe, including private water supplies, and how the proposed mitigation to ensure drinking water supplies remain safe.

The ExA asked for an explanation of the methodology used to ensure that drinking water supplies will remain safe, taking into account the water protected area within the Order Limits.

Mr. Craig Thwaites, Associate Director at Logika, for the Applicant noted that in Chapter 8 - Land and Soils **[APP-037]** and Chapter 7 – Hydrology and Hydrogeology **[APP-036]** that there are a number of receptors with regards to water supplies being: secondary aquifer across majority of study area; Source Protection Zones to the north, outside of the Order limits; Hall Water Reservoir/Water Treatment Works to the east of the River Trent, outside of the Order limits; and private groundwater abstractions in a number of locations within the Order Limits. These receptors are all identified on Figures 8.2 to 8.7 **[APP-053]**.

Without mitigation in place, in theory, these receptors could be impacted by pollutants, from surface water runoff or pollutants that are mobilised in a flood event. Mr. Thwaites noted that there are inherent mitigation measures in place such as utilising the topography of the land, placing infrastructure outside of the flood zone extents and there are mitigation measures that have actively been included to minimise the potential for contaminants to those receptors.

Mr Thwaites explained that Hall Water Reservoir/Water Treatment Works is located in Flood Zone 1 and therefore won't be impacted by any potentially mobilised contaminants in a flood event. Although a number of Source Protection Zones and groundwater abstraction points are located within Flood Zones 2 and 3, there are mitigation measures contained within the oCEMP **[APP-176]**, outline Operational Environmental Management Plan (oOEMP) **[APP-177]** and oDEMP **[APP-178]**, that are protective of groundwater as a whole and will have the effect of protecting any groundwater that is abstracted. These measures include: the safe storage of materials; use of containment measures for fuels and oils; emergency spillage plans; designated areas for mixing and handling materials; management of site runoff; and a protocol for suspected contaminated material encountered during construction.

With regards to potentially polluted surface water runoff from the operational site, a drainage strategy to manage runoff from the battery storage and sub-station areas has been set out within Section 4 of the Flood Risk Assessment (FRA) **[AS-051]** and includes the following measures: detention basins have been sized to accommodate the 100 year plus 40% climate change storm event and have been located outside of the design flood risk extent (as illustrated in Appendix A7 of **[AS-051]**), minimising the potential for mobilisation of contaminants; there will be no infiltration of surface water runoff from the BESS/sub-station areas as an impermeable lining is included to prevent infiltration and potential contamination to

#	Agenda item	Written summary of Applicant's oral submissions
		groundwater; suitable SuDS features, including permeable surfacing and detention basins are included for treatment of runoff from BESS and substation areas prior to discharge to any watercourses, the pollution hazard of runoff and treatment is quantified in Table 4-8 and 4-9 of the FRA **[AS-051]**; fire suppression has been considered and should this occur, a penstock valve downstream of the basin will be automatically triggered to isolate potentially contaminated discharges, should this occur, contaminated water would be tankered away and treated accordingly off-site meaning there would not be discharge to any watercourse and the detention basins will be lined to prevent infiltration to ground. Mr. Thwaites stated that these measures also prevent any potential discharges to ordinary watercourses, which is where the detention basins ultimately discharge to. In addition to those measures, Mr. Thwaites also noted that the Applicant had assessed the potential for a fire to occur at the same time as a rainfall event. This has been considered in Table 4-7 of the FRA **[AS-051]**. The basins have therefore been sized to provide sufficient storage to attenuate the 1 in 10 year event plus 228m3 of firewater (based on firefighting at 1,900 l/minute for 2 hours, from National Fire Chiefs Council, 'Grid Scale Battery Energy Storage System planning – Guidance for FRS'), with no discharge. In response to a submission by Mr. White, that the reservoir is within the Order Limits, how a BESS fire will be managed and whether there will be any impact on the reservoir as a result, how concrete runoff and associated risks of environmental damage will be managed and actions in the event of an inverter fire, Mr. Thwaites responded to each submission in turn. Mr. Thwaites confirmed that the reservoir is outside of the Order Limits but is within the study area and has been included in the assessments and there are mitigation measures in place for the event of a BESS fire as has been described previously. Mr. Thwaites also noted that topographically the reservoir is higher than the location of the substation and BESS areas and compounds so any run off would not affect the reservoir. Mr. Thwaites then noted the measures in the oCEMP, which will be put in place to manage any spillage (such as from concrete runoff) and surface water runoff. These measures will be included in the CEMP, to be agreed by the relevant planning authorities and implemented for the Proposed Development. Mr. Thwaites noted that airborne particles is not his area of expertise but highlighted Appendix C – Unplanned Emissions Assessment of the Outline Battery Safety Management Plan **[APP-183]**, which addresses this point and shows the plumes and contours from fire that would be outside of the reservoir due to prevailing wind direction. As regards, the risks associated with an inverter fire this will be responded to in writing by the Applicant.

#	Agenda item	Written summary of Applicant's oral submissions

Post hearing note: The power conversion stations (PCS) where inverters are contained are tested to ensure that any arc flash (electrical fault) is contained by the enclosure and does not cause the unit to combust. The main risk to pollution within a PCS would be the oil filled transformer; this transformer is sited within a bund/capture tray that is sized to contain all of the oil within the transformer, with additional capacity as a buffer. These bunds contain a sump pump that can split and extract water to ensure that any water ingress will not cause the volume within the bund to be compromised. **(ExA Action 28)**

The ExA asked for clarification as to the impacts on the drinking water protection areas.

Mr. Thwaites confirmed that this will be responded to in writing by the Applicant.

Post hearing note: A drinking water protected area for surface water is present across the east and a portion of the western areas of the order limits. To mitigate the risks of pollution to this drinking water protected area during construction, measures are outlined within the oCEMP [**APP-176**], oOEMP [**APP-177**] and oDEMP [**APP-178**], that are protective of water as a whole. These measures include the safe storage of materials, use of containment measures for fuels and oils, emergency spillage plans, designated areas for mixing and handling materials, management of site runoff and protocols for if suspected contamination is encountered.

During operation, a drainage strategy to manage runoff from the battery storage and sub-station areas has been set out within Section 4 of the FRA [**AS-051**]. This includes the appropriate sizing of attenuation (to accommodate the 100 year plus 40% climate change storm event), locating attenuation outside of the design flood risk extent (minimising the potential for mobilisation of contaminants), inclusion of impermeable lining to prevent infiltration, provision of suitable SuDS for treatment, inclusion of automatic penstock valves to contain fire water runoff if necessary and consideration of a fire occurring at the same time as a rainfall event. These provisions are considered to provide suitable mitigation of risks to the drinking water protection areas.

This is also covered in the Applicant's Deadline 1 responses to Relevant Representations, references "RR-033 NSDC" and "RR-062". **(ExA Action 29)**

(ii) The applicant will be invited explain their methodology for their FRA, including the use of the most up to date datasets and the impact of construction activities on flood risk.

#	Agenda item	Written summary of Applicant's oral submissions
		The ExA asked for an explanation regarding the methodology of the flood risk assessment, including the most up to date data sets and the impact of construction activities on flood risk. Mr. Thwaites confirmed that the FRA **[AS-051]** has been prepared in line with the requirements of paragraphs 5.8.15 of NPS EN-1, EN-3, NPPF, Planning Practice Guidance (PPG) and local planning policy and guidance. The FRA was prepared using the following datasets: EA Flood Mapping, including the Flood Map for Planning, Long Term Flood Risk Mapping (surface water, reservoirs) and historic flood mapping; EA hydraulic modelling for the Tidal River Trent (2023); EA asset information with regard to flood defences; British Geological Survey Mapping with regard to ground geology; and mapping from Strategic Flood Risk Assessments from Lincolnshire and Nottinghamshire. These datasets have informed the baseline flood risk at the site as well as the future flood risk, which incorporates climate change. These have in turn informed the masterplan layout and any environmental measures and mitigation that have been incorporated into the design of the Proposed Development. Mr. Thwaites clarified that the FRA **[AS-051]** has been informed by a number of meetings with the Environment Agency and the lead local flood authority and meeting minutes from these meetings are included at Appendix A3 of the FRA **[AS-051]**. Mr. Thwaites also noted that an additional submission was made to include an updated FRA **[AS-051]** to include the latest Environment Agency flood mapping, which was released in March 2025 and was therefore subsequent to the original submission of the Proposed Development application. Mr. Thwaites addressed the mitigation proposed within the FRA, which includes taking a sequential approach to the development layout by locating sensitive equipment (sub-station and BESS) in low risk flood areas. This means that the solar panels and some inverters are located within the design flood extent, which is set out within the PPG as 1 in 100 years plus 39% climate change flood event for fluvial areas. The climate change allowance is in line with the higher central allowance, which is what is required for essential infrastructure and is in line with the latest climate change guidance. Another measure proposed in the FRA is to raise the panels and inverters within the design flood extent to be 300mm above design flood levels wherever possible. This means that the panels are raised on frames, and the Applicant has ensured that there is a 300mm gap between the design flood level and the base of the panel itself. In localised positions, where this is not possible, lesser freeboard depths are provided and some localised panels will be submerged but it is just 3% of the total solar panel area that could experience flooding to the panel itself.

#	Agenda item	Written summary of Applicant's oral submissions

All of these mitigations and principles have been agreed with the EA though discussions are ongoing on minor points on the mitigation strategy.

The ExA queried the reference to 3% of the panel area being affected by the potential flood event and whether 97% of the site is above the freeboard level of 300mm.

Mr. Thwaites clarified that the 3% refers to panels that could specifically experience flooding at their base. With regards to the freeboard, Mr. Thwaites clarified that 97% of the panels would not experience flooding at the base but that the freeboard achieved is broken down into areas that would still have a freeboard but at less than 300mm.

The ExA referred to a figure shared with the EA but indicated it wasn't clear where that figure is, the ExA therefore requested that this figure is clarified and that a plan showing where the freeboard is not achieved is provided.

Mr. Thwaites clarified that there is a Figure (Figure 3-10 **[AS-051]**) titled Summary of Freeboard Allowance and Panel Flood Depths for Design Fluvial Events, which summarises the freeboard allowance at the Proposed Development. Mr. Thwaites noted the pink through to purple areas of this figure represent localised areas where there would be some flooding to the panels and this is what represents the 3% of the total panel area.

Mr. Thwaites confirmed that the figure provided to the EA will be submitted to the ExA.

Post hearing note: Figure 3-10 is included within the Flood Risk Assessment [AS-051] on page 23. **(ExA Action 30)**

The ExA referred to the number of panels that could suffer flooding up to 600mm and queried whether the impact of their location has been assessed on flow of flood water if they are submerged.

Mr. Thwaites confirmed that this scenario has been addressed and discussed with the EA. The FRA **[AS-051]** refers to the raising of panels being achieved through the use of slender frames meaning that any potential for debris blockage is kept to a minimum. If there were to be some minor obstruction, flood water would still continue to flow around because of the slender frames. Furthermore, the frames will be designed to withstand debris impact thereby minimising their potential for failure and causing a greater obstruction to flood flows.

#	Agenda item	Written summary of Applicant's oral submissions
		Mr. Thwaites confirmed that maintenance activities will be set out and undertaken at regular intervals. The FRA **[AS-051]** sets out what maintenance activities would be required, for example clearance of debris, inspection of panel supports and fences to ensure structural integrity. Further, if there are any issues observed or failures that have occurred then remediation and replacement will be implemented as soon as possible following the flood event. Mr. Thwaites noted that there have been recent discussions with the EA (Thursday 3rd July) where the Applicant agreed to undertake a comparison of flood flow velocities where the submerged panels may be located to understand the potential impact on the conveyance of flood water. In response to a submission from Mr. White, about the location of the inverters, Mr. Thwaites confirmed that where the inverters are located with the design flood event that these will be raised to be 300mm above the design flood level. The method for this raising is currently using voided structures and this was a topic of discussion with the EA on 3 July to discuss how this will be provided for at the detailed design stage. Mr Thwaites reported that part of the discussion with the EA was whether, as part of the detailed design, analysis would be undertaken to determine whether any features can be raised up on raised ground rather than voided structures to minimise the potential of constraints to flows, with Mr Thwaites noting that at this outline stage the fallback position is voided structures. The ExA asked about the inverters and how many of these would be located in an area of flood risk and therefore whether this is no loss of floodplain storage as a result of these inverters. Mr. Thwaites confirmed that a volume assessment has been undertaken for the solar panel frames and one is currently being undertaken for the solar panels that would be submerged but there has not been an assessment of the inverters at this level of detail. This is on the basis that discussions are ongoing with the EA about the treatment of inverters and any potential implications of their impact of flood water flow is location specific, for example is there raised land that could be used or will these need to be raised artificially, and this may be quantified at detailed design. The ExA noted that one of the tests they need to consider is that there is no loss of floodplain storage that does not adversely affect land elsewhere and whether this test will be something that they can be satisfied with on the level of detail provided. The Applicant confirmed its understanding of this and agreed to take an action to come back in more detail on its position. **Post hearing note:** Supplemental work in terms of impact on floodplain storage is currently being undertaken and will be provided at Deadline 2 along with updated versions of Flood Risk Assessment [AS-051] and ES Chapter 7 [AS-053] and the Applicant's note on flood risk and compliance with relevant policy tests in this regard. **(ExA Action 31)**

#	Agenda item	Written summary of Applicant's oral submissions

Ms. Coleman further noted that the location of the inverters will be confirmed at detailed design and that when discharging requirements, including detailed design, that Schedule 15 of the dDCO requires confirmation that the subject matter or details being approved will not result in any new or materially different effects to those reported in the ES.

(iii) The applicant will be invited to explain the rationale for the scheme including solar panels and other related items in areas identified as Flood Zone 3.

(iv) The consequential effect that may cause panels to be submerged during a flood event, including the impact on energy generation, the need for solar panels in these locations, and the flow of floodwater.

The ExA asked about whether the panels will remain functional if they are submerged and if they won't what is the maximum generation capacity of the areas affected by flooding.

Ms. Coleman referred to paragraph 5.8.7 NPS EN-1 and confirmed that in compliance with that requirement, the Proposed Development is designed and constructed to remain operational in times of flooding. Therefore the 3% of panels that may be submerged in the 1 in 100 year plus 39% allowance for climate change are designed to be operational during that flood event. It may be that these panels are not utilised during a flood event to take a precautionary approach but they are designed and constructed to remain operational.

Ms. Coleman noted in the hearing that the generation capacity of these panels is probably in the region of 20MW although given the likely irradiation conditions in a flood event this is likely to be less.

In response to a submission from Mrs. Heather Fox (North Clifton Resident), regarding whether the design of the panels are resistant to a flood event or a breach event, Ms. Coleman confirmed that the panels have been designed to 1 in 100 year flood event plus the 39% climate change allowance, which the 2024 flood event did not reach, so they are designed to be able to remain operating in those circumstances and meet the exception test in terms of not having any impact from the panels on flood risk.

Post hearing note: In terms of Mrs Fox's question, structural design calculations are currently being undertaken for the panel frames and will be provided at Deadline 2 as part of a wider note addressing flood risk. **(ExA Action 32)** The response will also address **ExA Action 34.**

#	Agenda item	Written summary of Applicant's oral submissions

In response to a submission from Mr. White, regarding whether the flood risk assessment has included the operation of the Environment Agency's gates during flood events and how that has a broader effect during those flood events, Mr. Thwaites confirmed that this is not currently set out in the flood risk assessment and the Applicant will revert in full to the details set out in Mr. White's Relevant Representation.

Post hearing note: Although the proposed solar panels are impervious, research undertaken by Cook L.M. and McCuen R.H (2013, Hydrologic response of Solar Farms. Journal of Hydrologic Engineering 18: pp 536-541) indicates that solar farms are not considered to result in significant increases in runoff when compared to the existing greenfield situation. This is on the basis that runoff from the panels themselves will simply discharge directly to the vegetated ground beneath where the natural regime will be maintained. However, measures including inspection and maintenance of vegetation cover are proposed to ensure that the impact remains negligible. In addition, it is proposed that strategic Sustainable Drainage Systems (SuDS) such as filter drains, swales and basins/scrapes are incorporated within the solar array areas to encourage infiltration to the ground and also provide ecological and biodiversity benefits. The exact location of these SuDS features will be determined at detailed design depending on the constraints and opportunities within each area.
The EA have been contacted to request further information on the EA flood gate referred to by Mr White and a response is awaited. However, given the impact on surface water runoff from the solar array areas is considered negligible and a surface water drainage strategy is to be implemented for the sub-station/BESS areas (which restricts runoff rates to match natural conditions), it is considered that there will be no negative impact on the existing drainage infrastructure as a result of the development proposals. The impact in the event that the EA flood gate is closed is therefore not considered to change. **(ExA Action 33)**

(v) The applicant will be invited to explain how drainage features and watercourses will be maintained for the life of the scheme, including ditches that may be outside the Order Limits.

The ExA asked for an explanation on the approach to maintenance of watercourses, ditches and SuDS and how this approach will ensure that all drainage features will remain in working order throughout the lifetime of the Proposed Development.

Ms. Coleman noted that in the oOEMP **[APP-179]** there are general provisions in terms of the responsibility of the environmental manager to ensure compliance with the provisions of the OEMP including site inspections and walkovers and a compliance log.

#	Agenda item	Written summary of Applicant's oral submissions
		Mr. Thwaites confirmed that table 4-10 of the FRA **[AS-051]** sets out an indicative SuDS maintenance schedule and sets out the typical tasks expected for permeable surfacing, swales, filter drains and detention basins and the frequency these tasks need to be undertaken. These maintenance tasks are the responsibility of the Applicant, will be maintained for the lifetime of the development and are in line with CIRIA C753 guidance (i.e. the SuDS Manual). In terms of the existing ditches and watercourses, the Applicant as the riparian owner will be responsible for the maintenance of those ditches and watercourses. This includes ensuring that normal flow is not impeded, removing obstructions, maintaining the beds and banks of the watercourse and maintaining any structures like culverts, bridges or outfalls. It is fundamental that these watercourses continue to be able to accept upstream flows and transfer that flow without obstruction, pollution or diversion. The Applicant has provided for 10m offsets from ordinary watercourses and 16m minimum offsets from the River Trent which are measured from top of bank and any built development. One purpose of these is to allow access for any sort of emergency procedures from the IDB or EA. This is set out in the FRA **[AS-051]** and commitment C38 of commitments register **[APP-187]**. Mr. Thwaites also noted that Table 6.6 of Chapter 6 - Biodiversity [**APP-035**] sets out the following: *"Ongoing management of drainage ditches will involve the clearance of any silt build-up as required (outside of the main bird breeding season), with the aim of clearing no more than one third of each ditch in each year, and from one bank/side only. Bankside vegetation will be cut every other year (in autumn), alternating from one bank, to the opposite bank, maintaining vegetation cover all year round."* **(vi) The applicant** **(vii) ill be invited to explain the Sustainable urban Drainage Systems (SuDS) maintenance schedule, including rationale for the frequency for maintenance activities to take place.** The ExA asked about Table 4.1 of the FRA and noted that a number of maintenance tasks are shown to be undertaken "as required" and queried whether the frequency of maintenance should be set out more clearly given the size of the Proposed Development.

#	Agenda item	Written summary of Applicant's oral submissions

Mr. Thwaites clarified that these maintenance activities are referred to "as required" and therefore they might not be needed every time monitoring or inspection is carried out. For example, the removal of weeds is only necessary when weeds have grown.

(viii) The applicant will be invited to explain the management of firefighting water, including storage design, firewater run-off, and the impact of a flood event on these topics.

The ExA acknowledged the earlier discussions about the drainage systems proposed at the BESS locations, in particular whether there would be any permeable materials used, and asked about the capacity of the firewater provisions and whether this is sufficient firewater or will it be for rainwater as well.

Mr. Thwaites clarified that there will be permeable surfacing at the BESS, for example gravel surfaces but there will be an impermeable lining beneath that surface to prevent infiltration through to the ground. Regarding the capacity, the basins have been sized for a 1 in 100 years plus 40% climate change rainfall event which is the design event for the drainage system.

However, for the capacity of firewater storage, the Applicant considered the potential for a fire to occur at the same time as a rainfall event to assess the worst case scenario where there is an influx of polluted water to the basin at the same time as a rainfall event. This scenario considers a rate of firewater based on firefighting at 1,900 l/minute for 2 hours (from National Fire Chiefs Council, 'Grid Scale Battery Energy Storage System planning – Guidance for FRS') with a rainfall event with a 1 in 10 year return period (in line with the guidance set out in CIRIA C736 "Containment Systems for the Prevention of Pollution").

The ExA raised a query about the Western BESS site, which is detailed within the FRA and outline drainage strategy **[AS-051]**, and in particular the reference to using cut and fill to change the level to ensure that a minimum of 300mm freeboard is achieved above the predicted flood level.

Mr. Thwaites, noted that the ExA is correct that there is reference to a cut and fill assessment being required on the basis that the Western BESS could, in theory, be within the residual breach flood event and the raising of the BESS areas to be 300mm above that event is a conservative approach to the flood risk. The FRA notes that this would only be undertaken outside of the 1 in 1,000 year pluvial flood extent to ensure that there's no impact on floodplain storage as a result.

The ExA asked whether it is the intention that the entirety of the Western BESS structure will be elevated to provide this 300mm freeboard and how this will affect the maximum height parameters assessed in the Proposed Development.

#	Agenda item	Written summary of Applicant's oral submissions
		Mr. Sneddon confirmed that an illustrative plan showing the elevation and a section of the existing ground, the made ground and relative heights can be provided and link back to what has been assessed by the ES in terms of heights and visual impacts. **Post hearing note:** These two illustrative drawings have been provided in Appendix B and C to this written summary. The first drawing shows where the two sections through the BESS and Substation area and in the inset to the bottom left you can see the exaggerated vertical interpretation of the cut and fill required to form a level BESS and substation area, this shows the existing ground level in green and the proposed ground level in red. The maximum cut required is 1.58m. The maximum fill is 2m. The second drawing shows an unexaggerated section through the BESS units showing again in green the current level and in red the proposed ground levels of the platform for the BESS scheme. The landscape and visual impact of the BESS and Substation was assessed at the maximum height of the substation (13.5m from existing ground levels) across the whole field so the cut and fill requirements will not change the impact assessment of the landscape and visual effects of the scheme. **(ExA Action 35)** **(i) The applicant will be invited to explain the position with respect to compliance with the Water Framework Directive (WFD)** The ExA asked the Applicant to explain its compliance with the WFD, noting Mr. White's Relevant Representations on this topic. Ms. Coleman confirmed that a WFD Screening Assessment has been completed and submitted to the EA for comment. The Applicant will revert on Mr. White's Relevant Representation in full. Mr. Thwaites confirmed that discussions were held with the EA prior to submission regarding the WFD Screening Assessment and it was agreed that the Applicant would submit the assessment to the EA for their review and that further discussions would be undertaken if the EA deemed further assessment was required. There have not been any concerns raised by the EA on the approach or conclusions of the screening assessment. Mr. Thwaites noted that there are ongoing discussions with the EA on the sensitivity of existing or new watercourses and based on conditions of one groundwater body. **Post hearing note:** The WFD Screening Assessment was included with the submission of the Application in February 2025 however, since the hearing the Applicant has provided the screening directly to the EA (as it appeared they had not seen it on the PINS website) and their responses are awaited. **(ExA Action 36)**]

#	Agenda item	Written summary of Applicant's oral submissions

8.2 Traffic and Transport

(i) The applicant will be invited to explain the methodology and evidence used in the assessment of traffic and transport relating to the construction, operation and decommission of the proposed development, including, but not limited to the following:

- **Management of construction traffic on the road network;**
- **Construction phase staff travel plan;**
- **Access point strategy**
- **Condition of the road network**
- **AIL routes**

The ExA asked for an explanation of the methodology and evidence used in the assessment of traffic and transport relating to the construction, operation and decommissioning of the Proposed Development.

Mr. Gordon Buchan, Sector Director at Pell Frischmann, for the Applicant, responded that for the management of construction traffic on the road network, construction traffic will be managed via a CTMP. The outline CTMP is provided as **APP-181**. The CTMP sets out the access routes to be used by car, Light Goods Vehicles (LGV) and Heavy Goods Vehicles (HGV) during the construction phase and would be a contractual requirement for the contractor(s) to adhere to. The CTMP is a requirement of the DCO and is secured by this requirement.

The CTMP sets out the agreed access routes, noting that there may be other routes that can be included to the list of barred routes noted in Section 4.2 of the oCTMP [**APP-181**], following ongoing discussions with Nottinghamshire County Council. The Applicant noted that there are ongoing discussions with Nottinghamshire County Council on this point.

The oCTMP sets out general traffic management measures, the creation of a Traffic Management Group to help with transport liaison, contractor requirements, signage, a Wear & Tear agreement, turning facilities, onsite parking arrangements, a Staff Travel Plan, onsite access management measures, the management of the CTMP, including a review and complaint process and a commitment to try to work with other neighbouring developers.

The oCTMP has been based upon recent experience from other renewable projects to ensure that best practice from other schemes can be captured and adapted for use on the proposed development.

#	Agenda item	Written summary of Applicant's oral submissions
		In response to a submission from Ms. Hancock (NCC), relating to the contractual obligation to use certain routes and how these will be enforced, Mr. Buchan noted that in terms of the enforcement measures that are available, the supply of materials and goods for use on the site is subject to a contractual arrangement between the Applicant and the contractors via either a principal contractor or individually. Within those contractual agreements, the set routes for accessing the site along with other measures can be specified within the CTMP. There will be measures on how access routes will be monitored for example via vehicle identification numbers on lorries or spot checks on routes, and the ability for public to report any errant traffic using incorrect routes. Mr. Buchan noted that these are measures that have been used extensively on other renewable projects around the UK and have been proven to be very effective in ensuring that required routes are adhered to. Furthermore, if there are drivers deviating from those routes, then that becomes a disciplinary matter and may result in their exclusion from the Proposed Development. The ExA asked about how realistic the target of 80% of staff arriving by minibus is in the context of the Proposed Development and how will it be enforced. Mr. Buchan responded that the share targets for construction staff are set out in the oCTMP and these are based on experience from other projects regarding bringing construction workers onto the site. These targets have been adopted on other energy projects and would be another contractual obligation between the Applicant and the contractor(s). Contractor(s) bidding for the Proposed Development will be aware at the outset that a staff travel plan is a requirement of the contract including bringing staff in by minibus, coaches and in terms of car sharing and other sustainable measures. Mr. Buchan assured the ExA that the Applicant does not want to build vast car parks on the site for construction workers as this does not align with the ethos of the Proposed Development. The ExA asked whether there would be any mechanism for an external body such as the relevant highway authority to be involved in the enforcement of the staff travel plan. Mr. Buchan responded that generally enforcement is managed by the Applicant or the contractor as part of the contractual arrangement. In terms of the access point strategy, the ExA noted that there were some roads that are very narrow and do not allow two way traffic to pass. The ExA asked whether there is any specific mitigation for those routes. Mr. Buchan confirmed that updates to the oCTMP can be made in regard to the minor network to set out in more detail how this network will be managed.

#	Agenda item	Written summary of Applicant's oral submissions
		Post hearing note: An update to the oCTMP has been made providing further detail on the Staff Travel Plan and its monitoring. In addition, passing place details for Crabtree Lane and Moor Lane have also been prepared and are included in an updated Transport Assessment. **(ExA Action 38)** The ExA noted that the illustrative masterplan has access points on it and, noting that it is illustrative, these seem to be higher in number than the access points provided in the transport assessment. **Post hearing note:** The ExA requested that these plans be reviewed to ensure they are consistent, and Mr. Buchan confirmed that this would be done. The public road access points are correct. The difference noted by the ExA relate to crossing points of access tracks / roads, where these points do not act as an access from a public road. The only other junction is an emergency access junction on the A1133 that would not be used for construction access. These have been clarified in the revised oCTMP and revised Transport Assessment. **(ExA Action 39)** The ExA asked whether a Road Safety Audit Stage One is being undertaken for each of the proposed access points and Mr. Buchan confirmed that this had not been undertaken. The ExA asked about timescales for when this audit might be undertaken or whether this is not something that will be undertaken at this stage. Mr. Buchan noted that the Applicant has a meeting scheduled with Nottinghamshire County Council in July and is willing to engage with them on this point. The Applicant will respond with a timetable for any further actions. **Post hearing note:** A Stage 1 RSA has been requested for the A57 junction and one other access junction. These will be prepared and submitted when complete along with a copy of a Designer Response. **(ExA Action 40)** Mr. Buchan clarified that Lincolnshire County Council have indicated they are content with the access elements to inform the ExA as to one half of the development area. In response to a submission from Miss. Hancock (NCC), relating to the introduction of access on the A57 which has been barred without justification, Mr. Buchan noted that the philosophy that has been adopted for the access strategy is to try and avoid bringing construction traffic through communities and villages as far as possible within the route. The access strategy that has been proposed would be the construction traffic away from the village and would reduce the disruption and

#	Agenda item	Written summary of Applicant's oral submissions
		significant effects on the community. It would also allow the construction traffic to leave the road network as soon as possible, to avoid wear and tear on the road network, instead moving along the purpose built access tracks. This is also of benefit on the west side of the Proposed Development, in particular, as it would remove AILs from the road network quickly rather than routing through Ragnal. The Applicant can provide a geometric design to accommodate an access junction at that location and welcomes the opportunity to discuss this further with Nottinghamshire County Council. **Post hearing note:** A discussion with NCC has been held and it was agreed that a briefing note on the A57 junction will be provided, with a Stage 1 Road Safety Audit to allow the Council to consider the matter in more detail. **(ExA Action 40)** In response to a submission from Mrs. Walker, about the use of Moor Lane and Mill Lane when there are several of these within the Order Limits in the list of barred routes for HGV and LGV traffic, Mr. Buchan responded that updates can be made to the oCTMP to provide a map showing the suggested barred routes to provide clarity along with the revised plan showing the access routes. **Post hearing note:** An updated plan has been provided in the updated oCTMP report at Deadline 1. **(ExA Action 38)** The ExA asked about the movement of Abnormal Indivisible Loads (AILs) and the latest progress on routes being agreed with the relevant highways. Mr. Buchan explained the strategy behind AILs noting that there are two substation sites on either side of the River Trent. A review of abnormal access has been undertaken and is contained within the Transport Assessment **[APP-136]** and two routes are required as the proposed AIL traffic will not be able to traverse the Dunham Toll Bridge. A review of suitable Ports of Entry has been undertaken. The facilities at Torksey Ferry Road and Cottam were examined but were discounted due to ownership constraints and / or the level of physical mitigation that would be required to depart from either facility. Other quay facilities on the River Trent were also reviewed but found unsuitable. The use of Goole and Immingham are physically suitable for the proposed loads and a detailed review of access from both ports has been undertaken. This has considered all horizontal, vertical and weights constraints on each route.

#	Agenda item	Written summary of Applicant's oral submissions

At various points, mitigation works in the form of street furniture modifications or minor load bearing surfacing has been proposed. Specific traffic management measures to accommodate the AIL movements are proposed in Section 5 of the oCTMP **[APP-138]**.

The Applicant has undertaken a consultation with the various authorities on these movements and the result of those are contained with the route survey report contained in the Transport Assessment. The Applicant has received no further commentary on the AILs routing on either route from either highways authority or National Highways.

8.3 Landscape

(i) The applicant will be invited to explain the approach to landscape assessment, including with regard to cumulative effects with other projects, the proposed mitigation strategy and proposed maintenance regime.

The ExA asked for an explanation as to the approach undertaken towards the landscape assessment, including with regard to cumulative effects with other projects, and also the proposed mitigation strategy and subsequent maintenance regime.

Mr. Ben Gurney, Associate at Iceni Projects, for the Applicant, began with an overview of the technical approach to landscape and the cumulative assessment noting that the methodology for the assessment of likely significant landscape effects is set out at Appendix 11.2 **[APP-130]** with a summary in Chapter 11 - Landscape and Visual **[AS-017]**. The assessment of visual effects is also set out in Appendix 11.2.

The LVIA is based on best practice and industry guidance as set out in paragraph A.11.1.4 of Appendix 11.2 **[APP-130]**, in particular the Guidelines for Landscape Visual Impact Assessment (Third Edition) (GLVIA3). An overview of the stages involved in the assessment is also provided at paragraph A.11.1.2 Appendix 11.2 **[APP-130]**, which comprises five principal steps. The first involving a review of published landscape assessments, studies, relevant supporting evidence base documents, aerial photography, mapping and field work to identify and define the landscape and visual baseline and receptors. The second is iterative design development to embed mitigation measures into the proposed development. Third is the consideration of the sensitivity of landscape and visual receptors based on an assessment of their respective value and susceptibility to change. Fourth is the consideration of the magnitude of effect resulting from the proposed development based on an assessment of the scale, geographic extent, duration, and reversibility. Finally, fifth is combination of the receptor's sensitivity and the magnitude of the effect experienced to determine the resultant level of effect.

#	Agenda item	Written summary of Applicant's oral submissions
		The Study Area is determined to be a 2km radius from the Order Limits and this was arrived at following an initial analysis of a wider search area of up to 5km radius and this is explained further in paragraphs 11.3.2-11.3.10 of Chapter 11 – Landscape and Visual **[AS-017]**. Paragraph 11.3.9 of Chapter 11 confirms that the 2km study area has been agreed in consultation with the host authorities. The landscape receptors and visual receptors have been agreed in consultation with the host authorities as confirmed in paragraph 11.3.20 of Chapter 11 – Landscape and Visual **[AS-017]**. Mr. Gurney noted that in terms of the assessment scenarios, the assessment has been undertaken for peak construction activity in winter year 1 of operation, summer year 15 of operation, winter year 15 of operation and decommissioning in winter. Paragraph 11.5.7 of Chapter 11 – Landscape and Visual **[AS-017]** notes that all features and commitments relied upon in the assessment of landscape and visual effects are embedded in the proposed development, and the method for securing the motions is listed. Mr. Gurney further noted that the consultants, AAH Consultants, who are advising Lincolnshire County Council, Nottinghamshire County Council, Bassetlaw District Council and Newark & Sherwood District Council have noted that the LVIA methodology was in conformity with the approach adopted at PEIR, which was accepted as best-practice. The Applicant has since had further discussions with the host authorities to formally agree the landscape and visual impact assessment (LVIA) approach is in accordance with GLVIA3 and LITGN-2024-01 for the Statement of Common Ground and these discussions are ongoing. As regards the cumulative assessment, Mr. Gurney stated that the approach to assessing cumulative landscape visual effects is consistent with the Planning Inspectorate's guidance on cumulative effects. It follows a proportionate methodology as outlined in GLVIA3. The applicant has considered both intra-project effects and inter-project effects, with intra-project effects outline in section 18.4 of Chapter 18 – Cumulative Effects **[APP-047]**. Significant landscape and visual effects from the proposed development in isolation were considered for the potential interactions with other individual aspect assessments that had also identified significant effects, in this case Cultural Heritage, in paragraphs 18.4.3 and 18.4.8 of Chapter 18. In conclusion, there would be no significant intra-project cumulative effects. The inter-project effects assessment is presented at section 18.5 of Chapter 18 – Cumulative Effects **[APP-047]**. This focusses on the combined landscape and visual effects of each individual, short-listed cumulative scheme within the 2km LVIA Study Area with the Proposed Development. Together with the proposed development receptors assessed as negligible

#	Agenda item	Written summary of Applicant's oral submissions
		from the process alone, were excluded from the quantitative assessment, and this is on the basis that negligible effects are typically imperceptible and therefore unlikely to contribute meaningfully to cumulative impacts alongside the proposed development. On the topic of other developments, there was a long list which was agreed with the host authorities and is presented in Appendix 18.1 **[APP-145]**, alongside stages one and two of the Cumulative Assessment. Table 18.3 of Chapter 18 sets out the final stage of the cumulative assessment being those developments that are likely to give rise to significant cumulative landscape and visual effects. Mr. Gurney noted the concerns raised above the potential for cumulative landscape impacts with solar schemes in the Gainsborough area, namely Cottam, West Burton and Gate Burton on national and regional landscape character areas. The Applicant would like to highlight that the potential effect or cumulative effects of One Earth and these other solar NSIPs were considered previously in each of those projects' respective examinations. A joint report on interrelationships between the NSIPs was published and found there to be no significant potential for cumulative effects with One Earth Solar Farm. The primary reason given was no intervisibility with the One Earth Solar Farm, due to the distance between the scheme's intervening topography, built structures, and vegetation. Mr. Gurney also highlighted the examining authority's comments in the Secretary of State decision letter for Cottam Solar Farm, which concurred with the conclusion of no likely significant cumulative effects on regional landscape character areas and visual receptors. Mr. Gurney noted that potential visual and landscape cumulative effects were discussed between Iceni Projects (on behalf of the Applicant) and AAH Consultants (on behalf of LCC, NCC, BDC and NSDC) during a site visit on 25 June 2025. WLDC was also invited but was unable to attend due to other work commitments. The overall purpose of this site meeting was to discuss landscape and visual matters raised in the Relevant Reps and to assist in the preparation of the Statements of Common Ground. It was agreed between Iceni Projects and AAH Consultants to await further clarity from the relevant planning authority Local Impact Reports before discussing the Statements of Common Ground further. The ExA asked whether the joint report on interrelationships referred above could be submitted to the examination for their reference. **Post hearing note:** The Joint Interrelationships Report from the Tillbridge examination has been provided at Appendix D. This the most recent report from the projects mentioned above and is consistent with the earlier versions of the report produced in the other examinations and referenced for example in the Decision Letter for Cottam. The related Technical Note on Cumulative Effects of Additional Schemes that was submitted to the Cottam Solar Project Examination has also been

#	Agenda item	Written summary of Applicant's oral submissions
		provided at Appendix E as it contains additional consideration of the potential cumulative effects of One Earth Solar Farm. **(ExA Action 41)** The ExA sought confirmation whether the visual receptors agreed with the local authorities included residential receptors and Mr. Gurney confirmed that these receptors did include residential receptors. Mr. Sam Griffiths, Director at Iceni Projects, for the Applicant, noted the overarching strategy to embed good design from the outset of the Proposed Development, this included appointing a design lead at the beginning. Project specific design principles were established early in the project's development and have informed the overall design process, spanning issues highlighted in National Infrastructure Commission Guidance, namely climate, people, place and value. The project specific design principles are listed on page 34 of the Design Approach Document [**AS-013**]. These design principles were established with input from the wider project team, including environmental specialists. This same team also fed into the site selection process, embedding mitigation for each ES topic by removing land parcels from the emerging Order limits that were considered to have the greatest potential for significant adverse impacts on environmental features. With reference to landscape and visual mitigation specifically, in line with NPS EN1 paragraph 5.10.19, landscape and visual matters were considered at the earliest stages of siting and design. Section 11.5 of Chapter 11 - Landscape and Visual [**AS-017**] provides an overview of the measures embedded in the Proposed Development to mitigate potential adverse effects on landscape character and visual amenity, and to maximise associated benefits. The approach to landscape and visual mitigation is based on the list of considerations identified in NPS EN-1 at paragraph 4.7.6 and paragraph 5.10.27 which includes: the siting of elements relative to existing landscape character, land form and vegetation, as well as the sensitive use of materials. For instance, the sighting of the project substations and BESS has taken account of sensitive landscape and visual receptors. Similarly, the landscape and visual mitigation has been a key contributor when defining the heights of different elements, such as the solar panels. More details of this are provided within the commitments register **[APP-187]**, which sets out the method for securing each of these measures. Mr. S Griffiths, noted that as the Applicant went through the iterative design process, further refinements have been made to landscape and visual mitigation, particularly in response to residential dwellings and also public rights of way.

#	Agenda item	Written summary of Applicant's oral submissions

In terms of the maintenance regime, Mr. S Griffiths noted that the establishment and maintenance of the proposed landscape planting is detailed with the oLEMP **[APP-179]** and a detailed LEMP will be provided during the detailed design stage as required under Requirement 8. This LEMP will cover the operational lifespan of the Proposed Development.

The overarching aim of the management plan is to integrate the Proposed Development into the existing landscape pattern, replace habitats lost during construction and to filter and screen elements of the Proposed Development from sensitive receptors. The oLEMP details the new habitats that will be provided, including over 9km of species-rich native hedgerows with trees, 6km of species rich native hedgerow, 4.2ha of woodland and tree belts, and approximately 1,240 ha. of species rich grassland. A five year establishment regime is detailed for each proposed habitat, followed by long term management prescriptions to be undertaken to the end of operation.

The approach to establishing new planting will be overseen by a Landscape Clerk of Works. Any plant failures in the first 5 years are to be replaced in the next planting season with stock of the same size and an Ecological Clerk of Works will undertake quarterly checks of plants to record their growth and condition. A broad range of species is proposed to be planted to enhance biosecurity, such that if one were to fail on the site, there are other species that will succeed to provided that greater level of resilience.

(ii) The applicant will be invited to explain how it has undertaken an assessment of effects on residential property and determined separation distances to mitigate any identified harm.

The ExA asked to be shown where within the documentation the residential receptors have been identified.

Mr. Gurney responded that there is not a plan that identifies residential receptors on the basis that the Applicant has assessed the impacts on residential receptors as part of the impacts on particular views. Those views are the representative viewpoints which are shown on Figure 11.10 [**AS-029**].

Mr. Gurney noted that this figure needs to be understood in parallel with Table 11.9 of Chapter 11 – Landscape and Visual [AS-017]. This table acknowledges the different types of residential receptors, and the viewpoints identified to represent their particular views. Receptors have been grouped where they are likely to experience similar views to understand the impact of the Proposed Development upon them.

#	Agenda item	Written summary of Applicant's oral submissions
		The ExA clarified that they wish to understand how the Applicant has assessed the effect on individual residential properties within or adjacent to the Order Limits as a list or plan of such properties has not been supplied. Mr. S. Griffiths confirmed that the Applicant has engaged with residential properties via several visits to those individual dwellings, which is a process that started at non-statutory consultation. During this stage 14 of the closest properties were visited, either within or adjacent to the Order Limits were, and these properties were revisited during statutory consultation with an additional 6 visited at that stage. At these visits the Applicant acknowledged that visual mitigation would be different for each receptor to suit the needs of those residential properties. For example, the nuances of the topography, the orientation of the dwelling, and the character of the view, including also how people use their homes. The Applicant was grateful that certain residents allowed them to view the Order Limits from upstairs rooms and gardens and these visits informed the emerging design. These visits also assisted in the assessment of the residential visual impacts, recorded in the wider viewpoints on Figure 11.10 **[AS-029]**. For example, a 200m offset has been included at Ragnall and a 150m offset from Robert's Close in order to place solar panels over the crest of a hill. Mr. S. Griffiths noted that a plan highlighting spatially the location of the residential receptors could be provided. The ExA requested that this is submitted though it was noted that a plan was provided as part of the Consultation Report **[APP-151]** which highlights the location of the 20 visited properties. **Post hearing note:** The Applicant has prepared further detail explaining the properties within the Order Limits and how they have been assessed at Appendix F to this written summary. **(ExA Action 42)** The ExA reiterated that it would be helpful to understand whether there are any residential receptors that were not visited within or adjacent to the Order Limits and a complete list of these properties would assist with that. The ExA further queried whether the Applicant has provided a detailed explanation of the approach that has been taken to assessing individual residential receptors. Mr. S. Griffiths noted with respect to how the residential properties have been assessed, it is common practice within LVIA for these receptors to be grouped where they are likely to experience similar views such that the Applicant has used a representative viewpoint approach as opposed to assessing a viewpoint for every single residential property. The approach to identifying visual receptors and representative viewpoints is detailed at paragraphs A.11.3.1 to A.11.3.10 of Appendix 11.2 [**APP-130**]. A summary of the visual receptors, the associated representative viewpoint and their visual sensitivity is set out in

#	Agenda item	Written summary of Applicant's oral submissions
		Table 11.9 of Chapter 11 – Landscape and Visual [**AS-017**], whilst the baseline and assessment of the visual receptors in those particular views is set out in Appendix 11.4 Visual Baseline and Assessment [**AS-046**]. Mr. S. Griffiths noted that visits to residential properties only occurred where the Applicant was invited to do so, which covered the majority of the Order Limits and this was supplemented by the wider landscape and visual fieldwork that was undertaken as part of the LVIA assessment preparation. In response to a submission from Mrs. Walker, noting that the Applicant did not actively seek out visitation for those residents impacted, Mr. S. Griffiths noted visits were conducted as requested through consultation and other properties were considered as part of the wider LVIA surveys. Mr. Griffiths confirmed that Table 11.10 of Chapter 11 – Landscape and Visual [**AS-017**] identifies the residential mitigation that has been applied as part of the Proposed Development, this includes properties that were visited and those that were not. **(iii) The applicant will be invited to explain how it has undertaken an assessment of effects on PROW and determined separation dist** **(iv) nces to mitigate any identified harm** The ExA asked about the approach taken to assessing Public Rights of Way (PROW) and how separation distances have been determined for mitigation purposes. Mr. Gurney set out the process of identifying the visual receptors, meaning the people who would experience the change in views along the PROW, summarised in paragraphs 11.4.80 to 11.4.90 of Chapter 11 – Landscape and Visual [**AS-017**]. This involved a series of computer-generated Zone of Theoretical Visibility maps followed by fieldwork across 17 days between November 2023 and September 2024. Table 11.9 of Chapter 11 – Landscape and Visual [**AS-017**] provides a summary of the visual receptors, the associated representative viewpoints, and their visual sensitivity. In line with GLVIA3, this provides judgements on the susceptibility to change in views and visual amenity of each visual receptor, and also the value attached to the particular views. For people using promoted walking and cycling routes, these are considered to have a high visual susceptibility whereas people using

#	Agenda item	Written summary of Applicant's oral submissions
		local public rights of way or local roads, these are judged to have a medium visual susceptibility, and this difference is attributed to the level of attention or interest that these people are assumed to have on the surrounding landscape. The value of each recreational receptor or use of PROW way is specific to its context and determined in line with the criteria set out in Table 6 of Appendix 11.2 **[APP-130]** and the assessment of magnitude change then considers the effects on the Proposed Development on those receptors in line with the criteria set out in Table 9 of Appendix 11.2 **[APP-130]**. Finally, photomontages were used to represent the likely changes to those views. Mr. S. Griffiths noted that in relation to the separation distances that the project vision, as set out in the Design Approach Document [**AS-013**], states "the project will engage in meaningful conversation with communities and will be sighted to take account of the local environment and people's visual amenity". This has been actioned proactively from the beginning of the Proposed Development and is echoed in the Design Principles also set out in the Design Approach Document [**AS-013**], for example to protect and enhance places of value and to protect features that are important to the local community. The initial starting point for the Applicant was to keep all PROW open and where this was not possible a minimum distance offset of 15m was applied to the closet solar panel and 10 metres to the closest fence. Mr. S. Griffiths emphasised that this is a minimum and in many cases is exceeded across the Order Limits, for example where there are wider views the Applicant has sought to extend these offsets to 100m in some cases. Once the offset had been determined then mitigation planting is proposed, typically on the near side of the fence to screen the Proposed Development beyond. Mr. S. Griffiths noted that bridleways and riders were also considered in the design of the Proposed Development referring to guidance from the British Horse Society (BHS) titled 'Advice on Solar farms near routes used by equestrians (April 2024). The guidance recommends "*a minimum usable width of 4m between fences… which usually means fencing at no less than a 5m corridor…This mitigates the enclosed effect of the corridor of the right of way.*" In response, the Proposed Development proposes a fence no closer than 10m to Bridleways meaning that a 20m corridor is provided. The BHS guidance continues to state that "*Use of open mesh fencing is preferable to close boarding or metal palisade-type fencing with sharp points on top…*" With reference to the Outline Design Parameters [**APP-172**], fencing around the solar panels would comprise "*a deer fence of wooden posts and metal wire mesh*".

#	Agenda item	Written summary of Applicant's oral submissions

The BHS guidance also states that "*Large developments are opportunities for increasing access… There may be chance to upgrade a footpath to bridleway or to gain an additional route*." The Proposed Development includes 6.1km of proposed permissive paths, 2.5km of which are located east of the River Trent and connects to existing routes open to equestrians.

Mr. S. Griffiths confirmed that all of these offsets are secured via the Works Plans [**APP-014]**.

The ExA clarified that the offsets referred to above are in either direction from the PROW and therefore this is a minimum of a 20m corridor and a 30m corridor. Mr. S. Griffiths confirmed this is correct and highlighted the Design Approach Document **[AS-013]** which at pages 65 and 66 provides an elevated view to demonstrate the relationship between the offsets and the infrastructure.

The ExA also queried how the minimum of 10m was determined and whether this was in reference to a standard or guidance and if this is consistent with other NSIPs.

Mr. S. Griffiths confirmed that this was determined using professional judgement based on the potential impacts as viewed during site surveys and walking the PROW routes. Mr. S. Griffiths confirmed that in his experience this approach is largely consistent with other solar farm DCOs. Having reviewed several consented DCOs for solar farms the Applicant found that not all projects state a minimum offset from PROWs. Of those that do, such as East Yorkshire Solar Farm, Mallard Pass and Gate Burton, offsets range from 5m - 20m. In comparison, One Earth Solar Farm proposes a minimum offset of 10m to the fence line and 15m to the nearest solar panel. **(ExA Action 43)**

Mr. Oliver Brown at AHH Consultants, for Lincolnshire County Council, Nottinghamshire County Council, Bassetlaw District Council and Newark & Sherwood District Council made submissions relating to cumulative landscape and visual effects. In particular, Mr. Brown referred to the potential change of land use as a result of extent of solar development in the area and the visual impact of moving through this landscape and the sequential effect of seeing solar development.

In response, Mr. Griffiths noted that cumulative effects have been considered as part of the examinations of those other NSIPs in the area and concluded that there were no significant cumulative effects and that the Applicant will respond to any submission on behalf of the local authorities in due course.

8.4 Heritage

#	Agenda item	Written summary of Applicant's oral submissions

(i) The applicant will be invited to explain the methodology and evidence used in the assessment of effects on heritage assets, and their setting.

The ExA asked for an explanation of the methodology and evidence used in the assessment of effects on heritage assets and their setting.

Ms. Georgia Foy, Associate Director at Iceni Projects, for the Applicant, set out that the methodology used in the assessment is summarised in Section 10.3 of Chapter 10 – Cultural Heritage **[APP-039]**. It was agreed with relevant stakeholders (Historic England and conservation officers at Nottinghamshire County Council, Lincolnshire County Council, Bassetlaw District Council, Newark and Sherwood District Council, West Lindsey District Council) as confirmed in Table 10.5 in the aforementioned document. As set out in Sections 10.2 and 10.3, this assessment follows legislative and policy requirements and best practice guidance including Infrastructure Planning (Decisions) Regulations 2010, National Policy Statements on Energy and Renewable Energy EN1, EN3 and EN5 and Historic Environment Good Practice Advice in Planning Note 3. The Setting of Heritage Assets, Third Edition among others.

Ms. Foy noted that heritage assets in the surroundings were identified using National Heritage List for England, GIS, Historic Environment Record (Nottinghamshire and Lincolnshire), local listing where available (Bassetlaw) and local conservation area mapping (as confirmed at 10.3.4, 10.3.6 and 10.4.1 Chapter 10 – Cultural Heritage **[APP-039])**. Heritage Asset Mapping is provided at Figures 10.1 and 10.2 [**APP-055**]. A 2km study area and scope of heritage assets within this study area for assessment was identified at 10.3.1 Chapter 10 – Cultural Heritage **[APP-039]** with Table 10.6 demonstrating the assets scoped into assessment. The scope of assessment was agreed with relevant stakeholders and this is summarised at Table 10.5 [**APP-039**].

Ms. Foy stated that this scoping exercise concluded that that there were 76 designated heritage assets and 63 non-designated heritage assets, which were agreed within the 2km search radius. The Applicant did consider assets outside of this radius and it was agreed with Natural England that there were no assets outside of 2km that required assessment.

An assessment of significance was then undertaken, including the contribution of setting, of assets in scoped into the assessment. This was based on sources already mentioned, plus historic research including historic mapping, historic landscape character and topography. A description of the elements that contribute to the significance of each asset within the scope is provided at Appendix 10.2 [**APP127 / APP-128**] and for the purposes of the ES assessment, an overall level of value is identified at Table 10.6 in Chapter 10 – Cultural Heritage [**APP-039**].

#	Agenda item	Written summary of Applicant's oral submissions
		Following this an assessment of impact was undertaken in Section 10.6 of Chapter 10 – Cultural Heritage [**APP-039]** that considered the potential impact on the significance (including contribution of setting to significance) of heritage assets. The assessment of impact included consideration of both visual effects to setting of heritage assets, and non-visual effects to perception and understanding of the significance of the assets, in line with Historic England guidance (GPA3). The understanding of visual effects was supported by Zone of Theoretical Visibility analysis (Figures 10.3 and 10.4 [**APP-055**]) and cross-referencing with relevant LVIA views at Figures 11.1–14, [**APP-056–APP-074]**. This assessment also took into account mitigation embedded into the design, set out in Section 10.5 of Chapter 10 – Cultural Heritage [**APP-039**], which was developed with extensive consultation with the relevant stakeholders. The ExA noted that Relevant Representations had been made in relation to the views of Lincoln Cathedral and that it had been identified in the landscape assessment that the cathedral is visible from certain vantage points. The ExA requested where in the assessment the setting of that heritage asset had been considered. Ms. Foy stated that the significance of the setting of Lincoln Cathedral had been considered at an early stage and discussed with the relevant stakeholders and it was decided that the setting of Lincoln Cathedral would not be affected due to the sheer distance between the setting and the Proposed Development. This was noted in the PEIR Chapter 11 at Table 11-2 and stakeholders confirmed agreement to this (or no further comments) in Statutory Consultation Responses (summarised Table 10.5 of Chapter 10 - Cultural Heritage [**APP-039**]). However, Lincoln Cathedral has been considered in relation to the setting of the Roman Vexillation Fortress Scheduled Monument, where views of Lincolnshire Ridge are considered to be potentially of strategic importance. This is captured in the LVIA viewpoints: View 2, Figure 11.13 Winter Photomontages, Part 1 **[AS-037].** The ExA sought clarification that there was no adverse effect on the cathedral due to the separation distance even though it is accepted that there would be panels in the view. Ms. Foy confirmed that the Applicant concluded no adverse effects at an early stage during the scoping of the assessment and this is due to the distance between the Proposed Development and the cathedral (over 12km from the Order Limits and c.15km from LVIA view 2, **AS-037**) meaning that the setting of the cathedral is very varied with pockets of development throughout being characteristic of this wider setting. Whilst the Lincolnshire Ridge would be visible with the cathedral atop it in View 2 (Figure 11.13 Winter Photomontages, Part 1 **[AS-037])**, it is difficult to appreciate the form of the cathedral with the naked eye. Further, whilst this view would feature panels this does not mean that the contribution of setting to the significance of the cathedral would be affected as the panel would sit much lower than the Lincolnshire Ridge and so the cathedral would still be able to be appreciated at that prominent, raised vantage point which is the only element of its wider setting that could contribute to significance when viewed at this distance. **(ExA Action 45)**

#	Agenda item	Written summary of Applicant's oral submissions

(ii) The applicant will be invited to explain the rationale behind the approach to archaeological investigations, and to advise the ExA of the latest position with investigations, timing of any further surveys, and therefore justify the position that there is sufficient information to have confidence that the (value) significance of the asset(s) is/are sufficiently understood.

The ExA asked for an understanding of the approach that has been taken to below ground heritage, whether that approach is sufficiently robust and whether any further work is required and the timescales for that work.

Ms. Coleman clarified at the outset that the Applicant has carefully and diligently considered our approach to archaeological investigations in the context of complying with the EIA Regulations, such that the ExA and the Secretary of State have sufficient environmental information in order to make an informed approach on the likely significant effects of the Proposed Development. The Applicant has also had regard to the requirements of the NPS policies to ensure that adequate information has been provided to ensure compliance with these policies.

Ms. Coleman further noted that a proportionate approach focussed, as advocated by NPS EN-3 2.10.115, on likely areas of ground disturbance and areas of archaeological potential. On the one hand, the Applicant needs to ensure that likely significant effects have been identified but the assessment recognises that the archaeological investigations in the form of trial trenching are intrusive surveys, which themselves have impacts on archaeology.

Ms. Coleman also noted that the EIA Regulations requirement is that the ES must include information reasonably required for reaching a reasoned conclusion on the significant effects of the development on the environment, taking into account current knowledge and methods of assessment. Further, there is direction in NPS EN-1, but more specifically in NPS EN-3 which relates directly to solar farm NSIPs, and this includes paragraphs at 2.10.113 – 2.10.116: that "*where a site on which development is proposed includes, or has the potential to include, heritage assets with archaeological interest, the applicant should submit an appropriate desk-based assessment, and where necessary, a field evaluation…in some instances, field studies may include investigative work to assess the impacts of any ground disturbance…the extent of investigative work should be proportionate to the sensitivity of, and extent of, proposed ground disturbance in the associated study area*".

Mr. Stefano Ricchi, Senior Project Manager at Iceni Projects, for the Applicant expanded on Ms. Coleman's submissions above that the assessment was conducted in full compliance with the EIA Regulations, the NPS and professional standards and guidance including the Chartered Institute for Archaeologist's (CIfA) Code of Conduct and the CIfA's Standard for Archaeological Evaluation.

#	Agenda item	Written summary of Applicant's oral submissions

Mr. Ricchi noted that the assessment had been conducted upholding the underlying concepts in archaeological research of avoiding disproportionate and unjustifiable harm to the historic environment whilst providing sufficient data to reach a robust conclusion on the effects to the historic environment. As per NPS EN-1 paragraph 5.9.11 and paragraph 207 of the NPPF, this was achieved by carrying out an appropriate desk-based assessment followed by proportionate evaluation work, which as per CIfAs Standard for Evaluation (2023), encompasses both non-intrusive and intrusive fieldwork.

Mr. Ricchi emphasised that all of the non-intrusive survey work has been carried out and development in agreement with the keys stakeholders and accounted for the scoping opinion and the methodology for the non-intrusive assessment is presented at section 9.3 of Chapter 9 – Buried Heritage **[APP-038].**

The assessment work that has informed the assessment has identified 29 discrete locations where important buried archaeological remains may survive within the Order Limits, 9 of which have already been subjected to archaeological trial trenching. A tiered system was adopted to define both the scope of the evaluation, the areas to be evaluated and to ensure these interventions were as proportionate as possible to understand the assets significance. This approach is set out at paragraphs 9.3.5 to 9.3.6 of Chapter 9 – Buried Heritage **[APP-038]** and included 3 key areas: areas with the highest potential impact from the Proposed Development (substation and BESS options parameters) were evaluated with 3% trial trenching; an area of special archaeological interested has been identified by the Archaeological Advisory Teams to the local authorities and Historic England for their significant archaeological potential (Ragnall) in their scoping response also evaluated with 3% trial trenching; and some of the areas outside of those detailed above but identified in the Desk-Based Assessment and/or geophysical survey as being of archaeological potential at 2% trial trenching.

The evaluation included targeted trenching, both of the potential archaeology detected during the geophysical survey, but also in blank areas where no archaeology was expected. This enabled a very robust cross-referencing between the intrusive and non-intrusive evaluation techniques.

Mr. Ricchi noted that the outcome of this work produced a very strong, robust and proportionate data set, and what the Applicant noticed was a very strong correlation between intrusive and intrusive assessment, which provided a very high confidence in the geophysical results and non-intrusive results compared to where the trail trenching and intrusive trail trenching was carried out.

#	Agenda item	Written summary of Applicant's oral submissions
		This integrated approach between intrusive and non-intrusive survey assessments has also been successfully applied to other NSIPS in the area where this proportionate approach has reduced the impact on archaeological resources whilst providing sufficient data to inform the development consent order applications. Mr. Ricchi confirmed that further additional trenching is proposed pre-commencement and the design for which is currently subject to consultation with the local planning authorities and Historic England. This additional phase of trenching will be formalised in the Applicant's outline Written Scheme of Investigation and will serve two purposes. The first is to investigate the remaining 20 areas of archaeological potential that have not yet been investigations and the second to investigate areas where impacts arising from the construction activities of the Proposed Development are expected. These additional trenching activities will be undertaken in advance of the construction works to ensure that any impacts on previously unidentified archaeological assets are appropriately understood and offset accordingly. Mr. Ricchi confirmed that the outline Written Scheme of Investigation is in progress and being discussed with the local planning authorities and Historic England and prioritises a proportionate and robust approach ensuring that the impact of any intrusive assessment do not exceed the impact of the Proposed Development itself. It also provides a flexible and adaptive framework for these further archaeological works acknowledging that detailed design will not be available until later in the process. In response to submissions from Miss Hall (LCC), Ms Jan Allen (Archaeologist, LCC) and Mr. Matthew Adams (Senior Planning Archaeologist, NCC), about the progress of discussions and the level of survey work completed and assessments available, Ms. Coleman reiterated that there are proactive discussions ongoing on these topics. Mr. Ricchi noted that the majority of trenches that targeted areas of blank spaces were in Ragnall, which had been identified as an area of archaeological significance. This further supports the assertion that non-intrusive and intrusive surveys can be taken together to inform a robust assessment of the area. In addition, Mr. Ricchi noted that the Rochdale envelope has been used in the Proposed Development to ensure that trial trenching can be delayed to the detailed design stage where it will be better understood where there are areas of activity and investigative works are most needed to further avoid harm to archaeological assets.

#	Agenda item	Written summary of Applicant's oral submissions

In response to a submission from Miss. Hayley James (Historic England), on an area of proposed panels near to Whimpton Moor scheduled ancient monument and the direct impact on any potential archaeology in that area, which would need to be characterised, and on the archaeological potential along Lincolnshire ridge which could be associated with the Roman Vexillation Scheduled Monument, Ms. Foy responded that the Applicant has been in discussions on the impact on Whimpton Moor and the setting in relation to the panels to the South. Ms. Foy noted that this has been assessed in Chapter 10 – Cultural Heritage **[APP-039]** where there are a number of considerations in terms of views that are relevant to these discussions. In terms of the Roman Vexillation Fort, Ms. Foy noted that discussions have been ongoing with Historic England and directed the ExA to Table 10.5 and paragraphs 10.6.15, 10.6.81 - 10.6.85 of Chapter 10 – Cultural Heritage **[APP-039]** where the setting of this observation post has been assessed (see Figure 10.7 [**APP-055]**) and concluded that this not a design viewpoint. Mr. Ricchi confirmed that the area along Lincolnshire Ridge has been subject to trial trenching to understand whether there is any associated archaeology to the Roman Vexillation Fortress and the area south of Wimpton Moor has also been subject to trenching activity and may be subject to further archaeological surveys subject to detail design. The preliminary results of the evaluation carried out to date are included in Preliminary Trial Trenching Evaluation Report [APP-124], and the final reports will be circulated as soon as available.

Post hearing note: Both the Whimpton Moor and Roman Fort are included in the proposed Accompanied Site Visit itinerary. **(ExA Action 46)**

8.5 Agriculture, Soils and Best and Most Versatile (BMV) Agricultural Land

(i) The applicant will be invited to explain the effect on soils, BMV, and provide evidence on the management of soils through the lifetime of the project.

The ExA asked for an explanation on the effects on soils and BMV and an understanding of the evidence to support the management of the soil for 60 years such that this soil will still be in a suitable condition.

Miss. Jay Ryan, Soils Consultant at ADAS, for the Applicant, went through the survey background and assessment process provided as part of the Proposed Development. Soil is recognised in UK policy as a fragile finite resource which needs to be protected. Some soils are more vulnerable than others, which outlines the requirement for an Agricultural Land Classification survey. A range of soil types of various quality and resilience have been identified at the site, with lighter soils being more resilient than heavier soils. In this particular case, the lighter soils are recognised as being BMV and higher quality land, but they are also the more resilient soils as they are lighter in texture, and the heavier soils, the counterpart being more susceptible to damage, is in this case the lower quality land.

#	Agenda item	Written summary of Applicant's oral submissions

The Outline Soil Management Plan **[APP-182]** outlines good practice, guide and mitigation efforts on the soil for the duration of the project and the Appendix 8.3 Agricultural Land Classification Survey Report **[APP-105]** was stipulated by Natural England, and the Soil Management Plan was done in accordance with DEFRA's (2009) Construction Code of Practice for the Sustainable Use of Soils on Construction Sites, which have both been approved by Natural England.

Mr. Hill, on behalf of the Applicant, noted that the biggest threat to soil is through compaction, by trafficking of the land, and stripping down of soil. As regards to whether the soil will still be manageable in 60 years, we know from years of experience and research that putting soil down to a long term grass lay improves soil health because there is less physical working of the soil. In agricultural terms, every time we cultivate the soils, there's a risk of doing damage to it which is why as little cultivation as possible is recommended depending on the need of the type of farming used on the land. This means that are risks inherent in agriculture, in managing soils, which are similar to the risks on a construction site. However, these risks do differ depending on the construction type. For example, cable laying is more intrusive than a solar farm as these require more intrusive actions, more intensive machinery and heavy machinery, and digging far greater trenches and far greater risk of mixing soils than would occur in a solar farm. The greatest risks for solar farms are from soil movements and compaction as well as some risks of soil mixing. This occurs mainly on the solar farm, when stripping soils to put the access tracks down or compounds down. It is also noted that excavation activities, for example removing cable, also carry risks to the soils as this is additional handling. The Outline Soil Management Plan **[APP-182]** manages these risks by ensuring that works are done in certain conditions and that there is no soil mixing as these soils are stored linearly and return to the same order. This has been agreed to by Natural England.

Natural England have provided comments on the Outline Soil Management Plan **[APP-182]** requesting that any topsoil storage that occurs over winter or for longer than six months that this is put down to grass. The Outline Soil Management Plan **[APP-182]** currently states in paragraphs 5.3.16 and 8.3.11 that any topsoil that is stored for longer than six months is put to grass but the Applicant will also include the same measures for any storage over winter. Natural England also requested that concrete shoes are designed for areas of archaeological significance as they are less intrusive. Mr. Hill confirmed that this will also be updated in the Outline Soil Management Plan **[APP-182].**

Post hearing note: Paragraphs 5.3.16 and 8.3.11 of the Outline Soil Management Plan have been updated to now include commitment to seeding topsoil over winter in response to Natural England's comment.

#	Agenda item	Written summary of Applicant's oral submissions
		The ExA asked for clarification around the storage of soil that has been stripped for the various components of the site, in particular what depth of soil will be stripped, the quantum of soil that will then be stored, the height of these storage mounds and whether this will have a material effect on the quality of the soil over time as a consequence. Mr. Hill responded that typically around 200mm is the common topsoil depth across the site, though there will be some variation as stripping occurs up to the colour change. When stripping, there will be small heaps alongside the track and ideally next to hedgerows in a small mound. These mounds will be no more than 2 metres high and in reality will be smaller than this. The ExA asked for clarification about the length of these mounds and Mr. Hill clarified that these mounds will be the same length as the temporary access tracks along the route and these will be of a very short duration. For the long term access tracks, the soil will remain by the track for the duration the track is in place unless there are reasons such as floodplain zones for this soil to be moved elsewhere for storage. **Post hearing note:** The ExA requested that these permanent access or tracks are shown on a plan so that they can understand the length and size of soil storage along these. Topsoil will be stored to a maximum 2m and subsoil between 3m. Outside of the Flood Zone soil from the permanent access and tracks will be stored adjacent the track in a way that will not impact landscape enhancement and management. Within the Flood Zone soil will be transported to a location within Works Areas 2 and 3, outside of the Flood Zone that will not impact landscaping. The approximate total volume of soil from within the Flood Zone is 9,600m3. Soil stored for longer than six months will be seeded to prevent development of anaerobic conditions. **(ExA Action 49)** In response to a submission by Mr. Sam Franklin (NSDC), regarding any damage to field drainage pipes, Mr. Hill responded that the Applicant is unable to guarantee that there won't be damage to these pipes as the location of these are unknown. The Applicant will repair any damage that may occur and there will be a remedial drainage plan to manage these remedial works where necessary during construction, operation and decommissioning and this is set out in 5.3.26 of the Outline Soil Management Plan **[APP-182]**. The ExA asked about the proportion of BMV at the site and whether the national policy in terms of protecting BMV and avoiding BMV has been compiled with for the Proposed Development.

#	Agenda item	Written summary of Applicant's oral submissions
		Mrs. Price, on behalf of the Applicant, responded that the Site Selection Report at Appendix 1 of the Planning Statement **[APP-168]** sets out how the Applicant has taken account of BMV when considered the site it was going to take forward for development. This is set out in paragraphs 3.3.4 to 3.3.11 of that Site Selection Report. When the Applicant was initially identifying the site, they took account of publicly accessible data published by DEFRA and Natural England, which is an approach that has been established as a reasonable starting point for the other solar NSIPs determined to date. In accordance with that data, the area was identified as almost entirely grade three and with some small elements of grade four and with much larger areas of grade two agricultural land located towards the western and southern extents of the 10km search area. The Applicant sought to avoid this area of grade two agricultural land but as there are pockets of grade 4 land throughout the 10km search area total avoidance of BMV was not possible. Mrs. Price noted that the Design Approach Document **[APP-171]** addresses how BMV was considered throughout the Order Limits and the land available and how the sighting of the solar panels within the Order Limits has sought to reduce the use of BMV. For example, during the early stages of the Proposed Development and following initial consultation 34 hectares of BMV was removed from the area proposed for solar panels and a further 65 hectares was removed following statutory consultation. In total, 99 hectares of BMV land has been removed from the Proposed Development as the design has progressed. In response to submissions by Mr. Betts (NSDC) and Miss. Hall (LCC), about the concerns of the level of BMV and also the length of the scheme and possible cumulative effects with other nearby NSIPs, Ms. Coleman noted that the other projects are 60 years and impacts are treated as permanent (see for example the Secretary of State's decision in Cottam, another 60 year consent "*4.74 The Secretary of State agrees that the Proposed Development would revert back to agricultural use once the operational time-period has expired and agrees with the ExA that any effects would be temporary and reversible.*"). Ms. Coleman noted that in the assessment the Applicant has confirmed that established habitats will remain in place and there will be no permanent harm though the use of concrete. **Post hearing note:** **a) Approach to cumulative effects in relation to BMV land**

#	Agenda item	Written summary of Applicant's oral submissions
		The Applicant has presented the cumulative effects of the use of best and most versatile (BMV) agricultural land in Chapter 18 of the Environmental Statement - Cumulative effects [APP-047]. Appendix 18.3 [APP-147] provides a "Summary of Other Developments included within the Cumulative BMV Assessment". This includes all current and proposed solar NSIPs in Lincolnshire and Nottinghamshire, including Steeple Renewables, Fosse Green Energy and Great North Road Solar Park (all of which are behind One Earth in the planning process) as well as smaller applications on agricultural land. A very conservative approach has therefore been taken in terms of potential cumulative effects. Chapter 19 confirms that a change in land use in the range 0.05% to 5.0% is considered to be 'normal'. Based on the areas of BMV land within the Order Limits, the temporary change in land use as a result of the Proposed Development will affect 0.03% of BMV land within Lincolnshire and 0.5% of BMV land within Nottinghamshire. If all reasonably foreseeable schemes within Lincolnshire proceed, the change in land use would be 0.26% (including temporary and permanent schemes). The change in land use in Nottinghamshire (for temporary and permanent schemes) would be 0.14%. When the Proposed Development is added to the reasonably foreseeable schemes, this results in a 0.29% and 0.64% change respectively. Cumulative impacts on BMV, including from One Earth, have been considered by the Secretary of State in other solar decisions taken to date, for example: West Burton, Secretary of State's decision letter: *4.272. The Secretary of State recognises the geographical clustering of solar developments in Lincolnshire and has considered the Applicant's assessment of cumulative effects. The Secretary of State is content that the Applicant has, as far as practicable, assessed the cumulative impact on BMV from other NSIP schemes and Stow Park Solar Farm under the TCPA 1990 route in the locality. The Secretary of State welcomes the sharing of the CRC with West Burton, Cottam and Tillbridge solar schemes and considers this land will be returned to agricultural use as soon as construction is completed and that the oSMP will ensure the land is returned in the same condition. The Secretary of State agrees with the Applicant that there would not be any significant cumulative impacts on agricultural land resource or soil resource. The Secretary of State notes the Applicant's cumulative assessment does not provide a predicted total number of hectares of agricultural land or BMV land lost across all nearby solar developments. However, the Secretary of State concludes the cumulative effects would be small compared to all the agricultural land available in Lincolnshire and the East Midlands (See paragraph 4.239 and 4.267 above).*

#	Agenda item	Written summary of Applicant's oral submissions

b) Written ministerial statements

The weight to be attached to the written ministerial statements has been considered in numerous solar NSIP decisions, one of the most recent ones being West Burton Solar Farm[1] which was made in January 2025, in which the WMS 2024 is referred to as having "*emphasised certain aspects of the policy in the 2024 NPSs*" (West Burton para 4.227) and the decisions are clear that the WMS 2024 does not introduce new policy over and above that contained in the NPSs. In summary, it is clear that the 2024 written ministerial statement[2] reflects policy in NPS EN1 and NPS EN3 which is that:

- applicants should not site their scheme on BMV agricultural land without justification;
- applicants should demonstrate that they have prioritised the use of previously developed, contaminated and industrial land and lower grade land first; and
- where schemes are located on BMV agricultural land, the Secretary of State should take into account the economic and other benefits of the land.

The written ministerial statement of 2015[3] was also referred to by LCC. Clearly this is now a decade old, however it is still broadly reflective of current policy in the NPSs, which requires decision makers to consider making effective use of previously developed land and, where a proposal involves agricultural land, being quite clear this is necessary and that poorer quality land is to be used in preference to land of a higher quality. Whilst the Applicant is compliant with this statement, the age of the statement and the government policy introduced since that statement, point to it being given little, if any, weight.

The Proposed Development has done this as set out in the Site Selection Report (Appendix 1 of Planning Statement [APP-168] paragraphs 3.3.4 to 3.3.11 and the Design Approach Document [APP-171] at page 64 which explains how the siting within the Order Limits has sought to reduce use of BMV land. This explains that 84 acres (34 ha) of BMV agricultural land was removed before the Statutory Consultation and a further 161 acres (65 ha) before submission – 99ha in total.

[1] West Burton Solar Farm, decision letter published on 24th January 2025

[2] Written Ministerial Statement 15th May 2024 (Statement UIN HCWS466)

[3] Written Ministerial Statement 25th March 2015 (Statement UIN HCWS488)

#	Agenda item	Written summary of Applicant's oral submissions

The Secretary of State's decision on West Burton Solar Farm confirmed the following:

"*4.265 - The Secretary of State has considered all relevant policy within the 2011 and 2024 NPSs relating to solar and land use as important and relevant considerations within the decision-making process, including paragraph 5.11.34 of 2024 EN-1 which states that the Secretary of State must ensure that applicants do not site their scheme on BMV land without justification, and, where schemes are to be sited on BMV land, the Secretary of State should take into account the economic and other benefits of the land. The Secretary of State recognises that the 15 May 2024 WMS4 is an important and relevant consideration and it emphasises elements of the 2024 NPSs.*"

"*4.267. The Secretary of State agrees with the ExA that the Applicant has demonstrated they have sought to minimise the impact as far as possible with the amount of BMV land required for the totality of the Proposed Development at 26.24%, and the Stow Park Alteration reduces the BMV further to 23.51%. The Secretary of State notes the land could be returned to arable farming after 60 years and that the oSMP provides a commitment to restoration of the land. The Secretary of State acknowledges, for the Stow Park Alteration, the fixed term, reversible loss of approximately 627ha of agricultural land, and 147.58ha of BMV land, for 60 years but considers that the use of agricultural land is necessary. The Secretary of State notes the Applicants calculations (without the Stow Park Alteration) that the 769ha of agricultural land required for the Proposed Development would be 0.16% of the 494,085ha of agricultural land in Lincolnshire and that the Stow Park Alteration would reduce the impact further."*

24.268. The Secretary of State agrees with the ExA that the NPPF recognises the value of agricultural land for food production and considers that the Applicant does not fully mitigate this. The Secretary of State considers the fixed-term, reversible loss of land for food production is a negative impact of the Proposed Development, but the impact is small when considered against the total agricultural land available for food production in Lincolnshire." (our emphasis)

c) Overall conclusions

The Proposed development would result in the use of 0.03% of BMV land within Lincolnshire and 0.5% of BMV land within Nottinghamshire. When all reasonably foreseeable projects are added, these figures increase to 0.29% and 0.64% respectively. In the context of the Secretary of State's decision on West Burton Solar Farm, these figures are still very small (less than 1%). It would therefore be reasonable for the ExA to draw the same conclusion as the Secretary of State that the impact is small when considered against the total agricultural land available for food production in Lincolnshire and Nottinghamshire.

(ExA Action 50)

#	Agenda item	Written summary of Applicant's oral submissions

8.6 Socio-economic effects

(i) The applicant will be invited to explain their methodology for determining the socio-economic impacts caused by the proposed development.

(ii) The applicant will be invited to explain their methodology for assessing the impact on employment.

The ExA request an explanation about the methodology for determining the socio-economic impacts.

Mr. Griffiths confirmed at the outset that the approach the Applicant has taken is in accordance with Paragraphs 5.13.2 to 5.13.7 of NPS EN-1, with the overall approach set out in Chapter 2 - EIA Methodology **[APP-031]**.

In terms of specifics Mr. David Tyrer, Technical Director at Logika, for the Applicant, noted that the baseline socio-economic conditions were assessed at different spatial scales. These started at the local area, for which 4 Lower Level Super Output Areas (LSOA) were used as this is the smallest area for which public data are available. Mr. Tyrer noted that the LSOA is larger than the Order Limits, which is important to note in the interpretation of the data but is the closest available dataset to the Order Limits. The Applicant then considered the labour catchment area, which is where existing employees in the local areas live. Finally, the Applicant considered data from the districts, being Newark & Sherwood District Council, West Lindsay District Council and Bassetlaw District Council and compared this to regional and national data.

In particular, the Applicant looked at data on population characteristics, age profiles, reported health, employment market indicators, and existing amenity and recreation attractions and facilities in the local area.

The Applicant assessed effects on employment (during construction, operation and during decommissioning), both potential effects on existing employment within order limits (via a survey of landowners within the Order limits) and new jobs (construction and operation) from the Proposed Development.

The Applicant also assessed effects on tourism/the visitor economy in the local area (during construction, operation and during decommissioning) by looking at existing provision/facilities (i.e. campsites, holiday home park etc), local data on employment in relevant sectors, the proximity and nature of works, effects identified (Noise, LVIA etc) and taking into account of potential demand/spend from construction workers to offset any harm to the local economy. The wider cumulative assessment set out in Chapter 18 – Cumulative Effects **[APP-047]** also considers employment and potential impacts for the visitor economy.

#	Agenda item	Written summary of Applicant's oral submissions

In response to a submission from Mr. Betts (NSDC), on the methodology for assessing the impacts on the supply chain associated with agricultural activity and whether this had been considered, Mr. Tyrer confirmed that this has been included in the assessment at Table 17.18 in Chapter 17 – Socio-Economics **[APP-046]** where the Applicant considered direct employment from the Proposed Development and assumes - taking a precautionary approach - that existing agricultural employment within the order limits is lost. In reality, it is likely that some of the displaced jobs will be reabsorbed into other plots owned by the affected landowners – and/or the labour market more generally. Therefore, for assessment purposes, existing employment is considered lost as a worst case scenario. Moreover, Mr Tyrer noted the approach set out in Table 17.18 does take into account potential indirect employment losses in agriculture because an economic multiplier was only applied to the net increase in jobs, rather than the total new jobs. This is explained further in the post hearing note below.

Post hearing note: Mr Tyrer confirmed that a written response would be submitted, per the below, to assist the ExA in understanding the potential indirect effects from potential direct job losses in agriculture whether that would or could result in job losses.

(ExA Action 51)

Impacts on supply chain / supporting industries associated with loss of agricultural land / agricultural businesses

During an open floor hearing on the 7th July 2025, another party raised a concern about the potential adverse *indirect* effects arising in supply chains / supporting industries which may arise as a consequence of any *direct* employment losses in agriculture during the operational stage of the proposed development. The ExA requested further consideration and explanation of how this has been dealt with in the socio-economic chapter of the ES (APP-046) and an explanation of key uncertainties.

This issue is considered in the existing calculations and approach set out in Table 17.18 on page 39 of APP-046[4]. This table notes the following:

[4] See examination library: https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN010159-000205-6.17%20Chapter%2017%20-%20Socio-Economics.pdf

#	Agenda item	Written summary of Applicant's oral submissions
		• The Proposed Development is expected to support 15 Full time Equivalent (FTE) roles at the site, once operational. • A landowner survey established that there were some 7.75 existing FTE roles on the various plots which comprise the Order limits. The majority of these roles are part time/seasonal roles in agriculture related occupations (further detail of this survey and the results is in APP 144[5]). • We assume – conservatively – that *all* such jobs will be lost as a result of the Proposed Development. This appears unlikely, in practice, for three reasons. First, via the interaction with landowners as part of the undertaking of the survey, we are aware some landowners also have other plots elsewhere. Employment may be consolidated/retained in these. Second, landowners will receive ongoing income via rent as part of the proposed arrangements with One Earth. As such, this regular income may support farm diversification and hence with retaining existing employees and recruiting new ones. Third, it is likely that even if roles were lost, then employees would be able to return to paid employment, if they wish, in the wider labour market in due course. We make no allowance for these factors. • Assuming all are lost, leaves a net increase of 7.25 (i.e. 15 minus 7.75). • We then apply an economic multiplier to this difference (i.e. the 7.25 FTE jobs – the net increase only) of 1.33. This is the same multiplier as used elsewhere in the socio-economic chapter, taken form an economic study on the effects of large-scale solar investment. This results in 9.6 FTEs (we round this to 9.75) in the chapter. This leaves 16.9 direct and indirect FTEs (we round this to 17 FTE in the chapter). • Given that the multiplier is only applied to the net increase (i.e. only those jobs which represent an increase over those potentially lost) this already accounts for approximate supply chain effects from any lost jobs. This is broken down further in Tabel 1-1. This demonstrates that the original calculation already takes potential supply chain losses from agriculture into account.

[5] See examination library: https://nsip-documents.planninginspectorate.gov.uk/published-documents/EN010159-000188-6.21%20Chapter%2017%20Appendices%2017.1%20-%2017.2.pdf

Table 2-1 Breakdown of potential employment losses and gains

Direct and indirect effects of employment ***losses***		Direct and indirect effects of employment ***gains***	
Direct employment (existing site)	7.75 FTE	Direct new employment (proposed development)	15 FTE
Assumed employment losses in agriculture (existing site)	100% (7.75 FTE)		
Indirect effects from potential losses (assuming multiplier of 1.33 (i.e. 7.75 *1.33)	10.3 FTE	Indirect effects from new employment (assuming multiplier of 1.33 i.e. 15*1.33)	20 FTE
Direct and indirect losses (worst case)	**18 FTE**	**Direct and indirect gains**	**35 FTE**
Net additional employment (i.e. 35 minus 18):			***17 FTE***

There are uncertainties inherent in such assessments which are typically assumptions based, rather than using primary survey data, as in this case. The approach taken by individual authors also often differ somewhat. For transparency, two important assumptions are:

- First, a further allowance is sometimes made to account for additional "displacement" effects. Such displacement arises where the intervention (i.e. the proposed solar farm) takes market share (called product market displacement) or labour, land or capital (called factor market displacement) from other existing local firms or organisations. The first effect does not appear to be relevant given the government's objectives for increasing the supply of renewable energy in the UK. The second, appears unlikely to occur in practice for the reasons set out in section 1.1.1. above. The additionality guide suggests a "ready reckoner" factor of 25% where such effects are considered to be low. This factor was not originally included given the assumed losses in the landowner survey already reflect this and takes a worst-case approach in terms of possible losses. However, if- for illustration - a further 25% was subtracted from the

#	Agenda item	Written summary of Applicant's oral submissions

15 additional jobs, then the net direct jobs would reduce to 11.25 FTE, the indirect jobs would then reduce to 15 FTE (or 26 direct and indirect FTEs in total). The net additional jobs would then reduce to around 8 FTE (i.e. 26-18).

- Second, the approach above assumes that the multiplier effects associated with any employment losses (agriculture) and employment gains (via an operational solar farm) are of the same magnitude. This assumption is usually incorporated into assessments as the differences are typically small and/or within the range of uncertainty in these assessments more generally. However, given that the issue raised by the consultee related specifically to these indirect effects, some further research has been undertaken, for illustration. The Office of National statistics publish various UK employment multipliers for different industries; the higher the multiplier the larger the effect. The latest data relate to 2022[6]. The data indicate that the employment multiplier for "crop and animal production, hunting and related activities" – considered to be the closest available industry to agriculture - was 2.522. The corresponding multiplier for "Electric power generation, transmission and distribution" – considered to be the closest available industry to solar power generation - was considerably higher at 8.762. This suggests the indirect employment gains may be of a larger magnitude than any indirect losses. That the multiplier is so much higher likely reflects that energy is an important input to many subsequent economic activities in various supply chains across the economy. Note that these multipliers are not used in the socio-economic chapter and cannot be directly compared to the multiplier used in the assessment because they are derived from a different methodology. However, it provides further confidence that the approach uses reasonable, conservative assumptions to arrive at the conclusion that effects from the proposed development on employment once operational is likely to be positive (but insignificant in EIA terms).

(iii) The applicant will be invited to explain their methodology for assessing the likely effects on tourism caused by the construction and operation of the scheme.

The ExA asked about the 2013 study referred to at 17.6.25 of Chapter 17 – Socio-Economics **[APP-046]** on the impact of renewable energy farms on businesses in Cornwall and how relatable this is to the impacts of the Proposed Development.

[6] ONS Dataset, Employment multipliers and effects in the UK
https://www.ons.gov.uk/economy/nationalaccounts/supplyandusetables/datasets/employmentmultipliersandeffectsintheuk2020

#	Agenda item	Written summary of Applicant's oral submissions

Mr. Tyrer set out the approach to tourism to provide context for the 2013 Cornwall Study. Mr. Tyrer noted that in respect of the visitor economy that this is to a degree subjective because it relates to individual's decisions and purchasing and nature of their visits. However, the Applicant considered the existing accommodation and visitor attractions near the Order Limits (noting there are none within the Order Limits). The Applicant also considered the level of employment in the accommodation and food services sector, which is approximately 150 people in the local area (see Table 17.11 in APP-046). The Applicant also considered the works that are proposed in the vicinity of these attractions and a diagram at [APP-078] highlights in blue where these attractions or facilities are located, which can be referenced against the Illustrative Masterplan [APP-018]. The Applicant also considered the natural and proposed barriers and mitigation vegetation and green space that is going to be part of the proposed development near those attractions.

The Applicant cross referred to assessments of amenity that could be related to the enjoyment of visit and inclination to visit/return. Those were noise, air quality/dust, traffic, cultural heritage and Landscape and Visual impact and noted the mitigation measures in those assessments (and associated management plans). The Applicant took into account size of the site, that works would move across the site etc over the 2 year construction period and their temporary nature.

The Applicant recognises that there will be a sizeable increase in construction employment (554-750) on site, though there is some uncertainty on the level of increase, which on balance would offset any adverse effects given that there would be expenditure from these employees, a proportion of which may be on accommodation, depending on where the employees live and the ability of the labour market to accommodate the number.

Mr. Tyrer then noted that as part of the evidentiary background to the assessment, the Applicant had considered a2013 Cornwall Study, noting that whilst this is not a directly comparable study, it provided some empirical data on the relationship between tourism and solar farms. In this study the data showed the majority of visitors were unaware of the presence of solar farms and their decision to visit would not have been influenced by the presence of these solar farms.

Post hearing note: Mr Tyrer confirmed that a written response to assist the ExA in understanding further detail of the 2013 Cornwall study would be provided. This is below. **(ExA Action 52)**

Evidence on the relationship between operational solar farms and tourism

During the ISH on the 10th July 2025, the ExA requested further detail on a study undertaken in Cornwall on the relationship between solar (and wind) farms and effects on tourism/the visitor economy. This study is referred to in paragraph 17.6.25 on page 40 of the socio-economic chapter (APP-046) and was discussed in the ISH1 hearing[7].

The study was undertaken by an independent research organisation on behalf of "Good Energy"[8]. It sought to explore attitudes of visitors to Cornwall toward renewable energy, levels of awareness of wind and solar farms in Cornwall and the extent to which these developments affected visitors' enjoyment of their holidays and their willingness to visit again in the future. The study utilised a face-to-face survey of 1,007 people aged 16+ at six "holiday locations"[9] across Cornwall. Questions were asked on both wind and solar farms, but the results are presented separately. Page 11 and 12 of the study addresses statistical reliability of the overall results, noting on page 11 " an overall random sample of this size provides robust results and good margins of error within which one can be 95% certain that the true figures will fall".

Specific results to questions (and the sample sizes for each response) are below:

- How do you feel about solar farms specially as means for generating power (977 responses): generally, in favour 75%; no particular opinion on it 16%; generally not in favour of it 9%.
- Are you aware of any solar farms in Cornwall (1,007 responses): Yes 35%; No 64%; don't know 1%.
- Has the presence of solar farms had a positive or negative impact on your visit or no impact at all? (351 responses)[10]: Positive 22%; negative 7%; no impact 71%.
- Has the presence of solar farms had a positive or negative impact on your visit to Cornwall or no impact at all (995 responses): positive 8%; negative 2%; no impact 25%; unaware of solar farms 65%.
- How does the presence of wind farms and solar farms in Cornwall affect the likelihood of you visiting the county again in the future (1,003 responses): 2% they make me less likely to visit; 4% they make me more likely to visit; 94% they make no difference in my decision to visit again in the future.
- Are any of the following factors likely to deter you from taking another holiday in Cornwall in the future (1,007 responses). The risk of poor weather (17%); cost compared to other holiday destinations (14%); the range and quality of local attractions (3%); the presence of wind and solar farms (2%); none of these (69%).

The ExA asked what assessment has taken place for the cumulative impact of the other NSIPs in the locality and on the tourism industry.

#	Agenda item	Written summary of Applicant's oral submissions
		Mr. Tyrer noted that the cumulative impact assessment looked at the local area i.e. the same geographical area as the alone assessment and did not consider the effect on tourism of other NSIPs. Mr. Tyrer noted that there had been Relevant Representations that queried the potential effect on sufficient supply of visitor accommodation and this was not something that was considered on the basis that this is a third order effect, which depends on the cumulative demand for construction workforce and this being sourced from outside the local area requiring accommodation. Mr. Tyrer noted that this could be explored if requested by the ExA though information on existing labour supply provides some assurance that this is unlikely to be the case. Mr. Tyrer noted that the applicants of other NSIPs in the area have looked at the scope for construction works to take up temporary private rented accommodation. The ExA confirmed that it would like to see additional detail on the cumulative effect on accommodation during the construction period and, in particular, asked that reference is made to the Construction Staff Travel Plan which has a modal shift target of 80%. Further information has been provided with information on construction timescales for other NSIP projects, on potential sources of labour supply - and hence the likelihood of workers commuting from further afield and driving demand for accommodation – on hotel occupancy data and private rental accommodation - in the responses to the relevant representations (see response to RR-022). **(ExA Action 53)** **(iv) The applicant will be invited to explain what benefits the scheme will bring in or near the Order Limits.** The ExA asked for what benefits are available to residents affected by the Proposed Development. Mr. Tyrer responded that it is difficult to difficult to disaggregate the benefits in general against those for people in or near the Order limits.

[7] The South West Research Company (2013). The impact of renewable energy farms on visitors to Cornwall. Available at: https://www.deg.wales/wp-content/uploads/2015/09/TheimpactofrenewableenergyfarmsonvisitorstoCornwall-FINALREPORT-November13.pdf

[8] No further details are provided in the study, but they are assumed to be a renewable energy supplier.

[9] These were Padstow, Perranporth, Tintagel/Trebarwith, Widemouth Bay, Newquay and Penzance.

[10] Note this data reflects only those that were aware of solar farms in Cornwall. The next question provides data for the whole sample.

#	Agenda item	Written summary of Applicant's oral submissions
		However, the following benefits were identified during the assessment. Employment during construction was an identified benefit with approximately 554 full time jobs (peaking at 750) over a course of 2 years. The outline Skills Supply Chain and Employment Plan **[APP-180]** contains measures to support the uptake of jobs and other skills development actions to those in the local area. For scale, an addition of 554 employment opportunities via the Proposed Development will constitute an increase of 140% in 2022 construction employment in the Local Area and an increase of 21% of total employment in the Local Area. Across the 3 districts, it will comprise an increase of 6% of employment in the construction sector. Mr. Tyrer noted that there is an opportunity or that quantum of construction work to have wider spin off benefits from their expenditure on accommodation, fuel and subsistence for example. These wider effects are driven by the expenditure patterns of the employees and the supply chain of purchases for the for the project itself. Once operational, the assessment has suggested that there will be a net increase in employment in terms of Full Time Equivalents (FTEs), from a majority of part time and seasonal agricultural roles to full time roles within the Order limits. Mr. Tyrer also noted the various ecological enhancements such as over 9km of species-rich native hedgerow with trees (including existing hedgerow enhancement), approximately 6km of species-rich native hedgerow, approximately 1,240ha of species-rich grassland across the Order Limits in hedgerow and field margins, 4.2ha of woodland and native tree belts and a permissive path network, totalling 2.5km, from south of the A57 to the Sustrans route and further 3.6km on the west of the River Trent. Mr. Griffiths, noted the central benefit of the scheme is the contribution that is made to the greenhouse gas emission reduction as set out in Chapter 14 – Carbon and Climate Change **[APP-043]**. Mr. Griffiths also noted the outline Skills Supply Chain and Employment Plan **[APP-180]** that has a clear purpose to promote the delivery of economic benefits to people and businesses in the local area and the wider region, particularly focussed on access to employment, upskilling and reskilling opportunities for people and enhancing business growth. In response to a submission from Mr. Betts (NSDC), on when the benefits in the outline Skills Supply Chain and Employment Plan **[APP-180]** will be crystalised, Mr. Griffiths responded that the outline Skills Supply Chain and Employment Plan **[APP-180]** sets out some key milestones and actions at Table 4.1 and describes continued engagement with local authorities. The Applicant welcomes continued engagement on this topic throughout the examination period. In summary, the ExA requested a table listing the current jobs that are operating from the site and then the Applicant's assessment of the supporting jobs that are supporting those businesses and then a direct comparison with the Proposed

#	Agenda item	Written summary of Applicant's oral submissions

Development so that it is clear to see the existing jobs and supporting jobs and what is proposed for the Proposed Development. This is provided in the post hearing note above in Table 1.1 in Agenda item 8.6.

Mr. Griffiths also noted the provision of a community benefit fund by the Applicant, noting that this is not a matter for the planning balance, but wishing to make the ExA and others aware.

8.7 Human health

(i) The applicant will be invited to explain their methodology for assessing the likely effects on mental health caused by the construction and operation of the scheme, and the evidence that supports the conclusions made.

The ExA asked the Applicant to explain its methodology of assessing the likely effects on mental health in particular.

Ms. Katy Field, Associate Director at Iceni Projects, for the Applicant, noted that all development have the potential for adverse effects for some particular individuals. In accordance with IEMA guidance, the assessment took a population health approach for each determinant of health meaning that it reaches conclusions on the population health outcomes, rather than the clinical health outcomes of individuals. The likely significant effects, those that are both adverse and beneficial, were considered on the populations that occur within the study areas and where effects may be only relevant to a few individuals a population level health effect would not occur.

The role of EIA significance conclusions is not to set a threshold of 'no harm' from development, but to show where, at a population level, the harm should weigh strongly in the balance alongside the development's benefits for health and other outcomes.

The significance of an effect is an evidence based professional judgment, informed by the sensitivity of a human health receptor at magnitude of impact specific magnitude. This again reflects IEMA guidance. Sensitivity of human health receptors includes general populations and potentially vulnerable subpopulations. The assessment covered both groups. The assessment took into account the qualitative rather than quantitative, sensitivity of relevant populations and subpopulations, and their ability to respond to change.

The magnitude of impact considered the scale of the exposure of the population to an impact; whether the impact was a one off or continuous, the likely nature of the human health impact, the permanence of the change, and the proportion of the

#	Agenda item	Written summary of Applicant's oral submissions
		relevant study area population that would be affected. The wider determinants of health considered by the assessment were: physical health, community, identity, culture, resilience and influence, employment and income for vulnerable groups, climate change mitigation and adaptation, wider societal infrastructure and resources and health and social care services during the construction phase. The ExA asked the Applicant whether there has been any assessment undertaken on the impacts on residents of individual properties or small business clusters that are affected by the Proposed Development. Ms. Field responded that the Applicant was aware that during and pre construction, there may be worry and anxiety associated with a loss of sense of control over their living environment particularly relevant to individual, and this can often be exacerbated by the consultation exercises and the public engagement process itself. There may also be worry about how the introduction of the Proposed Development in the area would change how the physical landscape of communities is experienced. Therefore, the Applicant explored the impacts on mental health through the assessment of impacts and community identity, culture, resilience and influence. The ExA asked about the Study Area for this assessment. Ms. Field responded that the study area uses the same study area as set out in Chapter 17 - Socio-Economics **[APP-046]** so there is continuity between the two in terms of the population that has been considered. This means that there are local impact areas and then a wider geographical area. The ExA asked whether there was any study area selected for the very local community that are living in or nearby the proposed development and Ms. Field responded that the Applicant had considered data that is available for mental health but there is not a substantial amount of data on local health at a local population level so this was considered at a LSOA level, which is approximately 1,200 households. This was done in accordance with IEMA guidance, which takes a population approach. In response to a submission by Mr. Betts (NSDC), around the collection of mental health data via a survey or other method, Mr. Griffiths responded that this type of data is not appropriate for the Applicant to collect. Ms. Field confirmed that the data that has been used in the assessment was the Office of Health, Inequalities and Disparities Public Mental Health Dashboard data. This was the best and most robust dataset that could be found at the submission

#	Agenda item	Written summary of Applicant's oral submissions

stage. Ms. Field noted that there had been earlier discussions with the local authorities about obtaining mental health data but that these discussions did not result in any data.

The ExA noted that Table 16-11 of Chapter 16 – Human Health **[APP-045]** does not refer to mental health. Ms. Field noted that this is because mental health is not one of the prescribed wider determinants of health as per the IEMA guidance and was therefore not considered as a receptor. Instead impacts on mental health were considered through the community, identity, culture, resilience and influence receptor.

The ExA noted the number of Relevant Representations that have been received on this topic and requested that when the Applicant responds to these that this is done in a sensitive manner that does not underplay the importance of these representations but still adheres to best practice.

Mr. Griffiths confirmed that this is a topic that the Applicant takes seriously and that the consultant team has been following best guidance. Further, the IEMA guidance refers to meaningful engagement as a primary mitigation measure and this has been secured in the application and has been ongoing throughout the application. Mr. Griffiths noted that there is a community liaison officer for the Applicant, and they have been signposted as a point of contact for the community to raise concerns throughout the application. In addition, the management plans such as the oCTMP, and oCEMP, secure measures aimed at ensuring the community is considered for example through the timing of construction traffic, provision of a community liaison officer, and the opening of new permissive paths.

In response to a submission by Mrs. Heather Fox, that the Applicant has been made aware of this topic through community engagement as well as Relevant Representations, Mr. Griffiths noted that the Applicant will be responding to Relevant Representations in due course for Deadline 1.

8.8 Cumulative effects

(i) The applicant will be invited to explain their Methodology for assessment of cumulative effects in particular in relation to:

- **traffic and transport during construction, operation and subsequent decommissioning;**
- **selection of sites, schemes and projects assessed;**
- **landscape parameters;**
- **working with or planning with other developers in the locality.**

#	Agenda item	Written summary of Applicant's oral submissions
		The ExA wanted to understand the approach taken to the Cumulative Effects Assessment (CEA) in relation to transport effects during construction and decommissioning of the Proposed Development. Mr. Buchan assured the ExA that the full detail of the CEA will be in Transport Report, which is to be submitted prior to Deadline 1 as it was erroneously omitted in the submission of the Development Consent Order application. He assured the ExA that the Transport CEA has been undertaken and is based on the long list of projects established as part of the wider Proposed Development CEA at Chapter 18 – Cumulative Effects **[APP-047]** and the sifting review of this long list was undertaken and is part of the Transport Report is in Appendix E The Transport Assessment **[APP-136]**. This sifting review only considered developments that may be concurrent with the construction phase of the Proposed Development and considered: the status of the application; if an application was a significant trip generator; it a development will lead to vehicle movements travelling on the Proposed Development study areas and road network; and if the developments traffic generation information is publicly available. There were 8 projects that met all the criteria including Gate Burton and West Burton. Mr. Buchan noted that the Proposed Development CEA is in many ways a worst-case scenario as it takes all the peak activity periods of these projects and treats these as happening at the same time, which is a highly robust approach. A road capacity review was also undertaken to review any link capacity issues, which did not find any capacity issues. The Applicant has expressed a willingness to engage with other projects to understand what issues may arise and what mitigation can be put in place for this. During the operational period, there is expected to be very little traffic generated during normal operation and therefore there are no significant cumulative impacts expected. In terms of the decommissioning period a revised traffic management plan will be created to reflect the needs at that time, but Mr. Buchan noted that fewer traffic movements are expected at decommissioning than as at construction because some elements may be retained by the users at that time thereby requiring fewer movements to manage. ExA asked whether this CEA can be submitted earlier than Deadline 1 and whether, as the Applicant has raised a willingness to work with other projects, a document will be produced managing this work.

#	Agenda item	Written summary of Applicant's oral submissions

Ms. Coleman confirmed that a Joint Report on Interrelationships will be prepared for Deadline 1 and Mr. Buchan further noted that a commitment to working with other projects is also included in the outline CTMP **[APP-181]** and that a copy of the CEA Transport Report will be issued ahead of Deadline 1.

In response to a submission from Miss. Hall (LCC), about the Transport Assessment and the CEA as well as other topics, Ms. Coleman confirmed that if Lincolnshire County Council will be detailing these in their written submissions then the Applicant will respond on that basis.

Post hearing note: The cumulative traffic information was circulated to the County Council Transport Officers on 25 July 2025 **(ExA Action 47 and 48).** The Joint Interrelationship report is submitted at Deadline 1. The updated Transport Assessment contains the cumulative assessment information.

The ExA asked for a broad understanding of the approach that has been taken on cumulative effects and in particular, noted the submission from Bassetlaw District Council in their Relevant Representation that a number of the application references referred to were incorrect. The ExA suggested that this should be reviewed as part of the Applicant's submissions at Deadline 1.

Mr. Pellizzaro acknowledged the comments about inconsistencies raised previously and as part of the Relevant Representations and stated that this will be looked at for Deadline 1.

Post hearing note: [Chapter 18 – Cumulative Effects [APP-047] is being updated and will be submitted as part of Deadline 2. **(ExA Action 54)**

Mr. Pellizzaro noted that the Inter-project assessment was described in Chapter 18 – Cumulative Effects **[APP-047].** Mr. Pellizzaro noted that advice from the Planning Inspectorate (PINS) has been followed and this involved a four stage process as follows:

1. Establishing the long list of other existing and, or approved development
2. Establishing a shortlist of other existing and, or approved development
3. Information Gathering
4. Assessment

The Long List of Other Developments was established using the following criteria:

#	Agenda item	Written summary of Applicant's oral submissions

- Have planning permission (or development consent) but are not yet built.
- Have a planning application (or DCO application) submitted but a decision not yet made.
- Are major projects likely to occur due to existing policy.

A 10km zone from the Order Limits of the Proposed Development was considered a broad enough area to capture potential significant cumulative effects from other projects, and this approach has been adopted by other made solar developments. This long list of developments was agreed with all the relevant local authorities on the 14 January 2025, which allowed for sufficient time to undertake the assessment. The long list of developments is detailed in the Appendix 18.1 Other Development Long List Stages 1 and 2 **[APP-146]** and the locations of these schemes are visualised in the figures at **[APP-079]**.

Mr. Pellizzaro confirmed that a conservative approach was taken towards the long list, which is detailed at 18.3.21 of Chapter 18 – Cumulative Effects **[APP-047]**, as during the consultations held with the local authorities a concern was raised about the number of projects coming forward in Lincolnshire and Nottinghamshire and therefore the Cumulative Effects Assessment (CEA) took into account any BESS or solar schemes within Lincolnshire and Nottinghamshire beyond that initial 10km spatial zone. This was primarily to assess the impact on BMV and LVIA.

The certainty of other developments was considered using the tiers as defined within PINS' advice and the potential Zone of Influence of the Proposed Development's construction, operation (including maintenance), and decommissioning was considered by each environmental aspect. This identified the zones of influence where there could be a likely impact and these projects were included in the shortlist, at **[APP-146]**.

The next stage was to undertake a detailed assessment based on the overlap in temporal and scale and nature of developments likely to have a significant effect, and those cumulative schemes are detailed in Chapter 18 – Cumulative Effects **[APP-047]**.

Mr. Pellizzaro noted the discussions held in the OFH1 and stated that the High Marnham Substation Expansion has been considered at 18.5.18 of Chapter 18 – Cumulative Effects **[APP-047]** taking into account the details in the public domain and with prior understanding that an application under the 1990 Act will be sought.

The ExA asked whether the solar schemes that have been selected as part of the CEA were solely NSIPs or whether this included planning applications under the 1990 Act.

Mr Pellizzaro confirmed that both NSIPs and 1990 Act applications were considered as this was at the request of the local authorities.

#	Agenda item	Written summary of Applicant's oral submissions
		The ExA noted that discussions are ongoing with other projects as to how any cumulative impacts will be managed and mitigated and asked whether the Applicant can provide any update on the progress of these discussions. **Post hearing note:** Mr. Pellizzaro confirmed that an update on this will be provided as part of written submissions and as part of the Joint Report on Interrelationships that will be submitted at Deadline 1. An updated ES Chapter taking account of the latest details for the long-list of cumulative schemes will be provided at Deadline 2. In response to submissions from Miss Hall (LCC), on the methodology that has been applied to the CEA and in particular the triaging of projects through Tiers 1, 2 and 3 raising the example of the waste approach and the cumulative effects therein with similar constructions phases across the projects, which does not appear to have been assessed, Ms. Coleman noted these submissions and that these will be submitted to the Applicant in writing as part of Lincolnshire County Council's Local Impact Report (LIR) and these will be responded to in writing on these points once the LIR is received. Mr. Pellizzaro noted that the Zones of Influence for the Proposed Development have been established at Table 8.2 of the Chapter 18 – Cumulative Effects **[APP-047]** and that further detail can be provided on how the Applicant reached the shortlist of developments for this assessment. In response to submissions from Mr. Clarkson (WLDC), requesting a plan representing the Order Limits of the projects that have been selected as part of the CEA in relation to the Order Limits of the Proposed Development to understand the scale of the assessment and impacts in relation to BMV and flood zones, Ms. Coleman noted that this plan will be provided as part of the Joint Report on Interrelationships. **Post hearing note:** The Joint Interrelationship report will be submitted as part of Deadline 1, which refers to the Zones of Influence and includes a plan showing the Order Limits of projects within the CEA in relation to the Proposed Development's Order Limits (this addresses **ExA Action 55 & 56**).

Appendix A Degradation

Appendix A Degradation

In the response to the ExA question “could the applicant provide a graph showing typical solar degradation, and an explanation of the overplanting proposed and generation range and overplanting ratio over operational life.” The following technical note has been prepared, firstly to provide a typical degradation graph of a solar module and to provide some more context around the overplanting of the solar PV array areas for the scheme.

A.1 Module Degradation

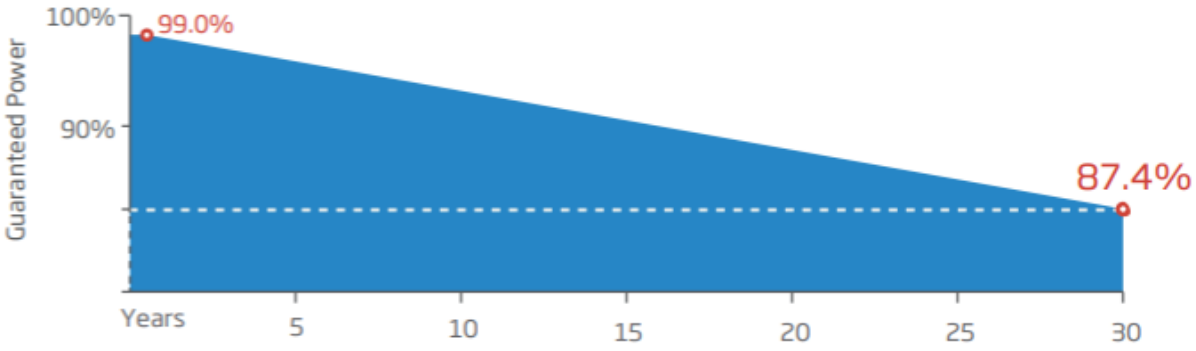


Figure 1. Typical solar panel degradation curve

Solar panel degradation is higher in the first year (~1%) due to Light-Inducted Degradation (LID), which is caused by its first exposure to sunlight after being manufactured. Each year after this, the panels can be expected to degrade at a rate of approximately 0.4% per year. This results in a final power output after 30 years of approximately 87.4% of the original rated power output, depending on manufacturer and assuming a suitable maintenance regime over the lifespan.

A.2 Overplanting

Modules have two ratings depicted on their datasheets, Standard Test Conditions (STC) and Nominal Operating Cell Temperature (NOCT). These ratings are used to indicate the performance of the panel under certain lighting conditions. NOCT is closer to the conditions a panel will be subject to throughout its lifespan. The table below illustrates the difference between these rating conditions. For a panel that measures 700Wp at STC, the output at NOCT will be ~534Wp. The NOCT ratings better account for the fact that peak generating conditions are rarely available (clear skies and sunny). It should be noted that real life conditions vary day to day and exact site conditions vary; the NOCT operating conditions are an indication of typical performance but can be exceeded on sunny days in the UK. Given the location in question and using available weather data for the simulation, the number of hours where the designed solar farm will experience irradiance exceeding the NOCT rating (800W/m^2) is 150 hours per year. This is based on the average irradiation over the hour being higher than 800W/m^2.

Table 1 - Module Testing Parameters

	STC	NOCT
Irradiance	1000 W/m^2	800 W/m^2
Cell Temperature	25°C	43°C
Air Mass	1.5	N/A
Windspeed	N/A	1 m/s

The table below shows the DC capacity and overplanting ratio from year 1 to 30 at both STC and NOCT conditions assuming a 1% LID and 0.4%/year degradation after year 1. The overplanting ratio is for a 740MW grid connection.

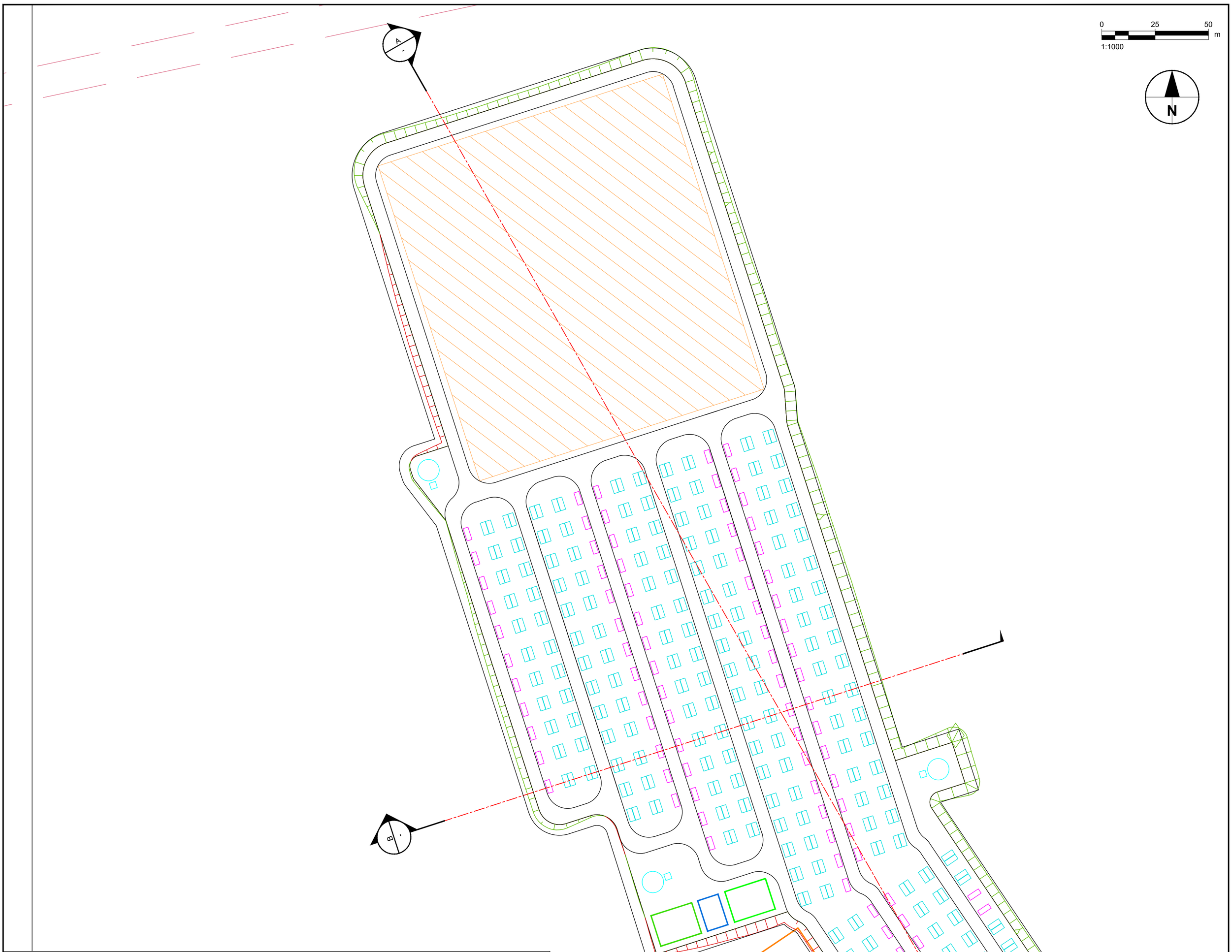
Table 2 - Overplanting ratio by year

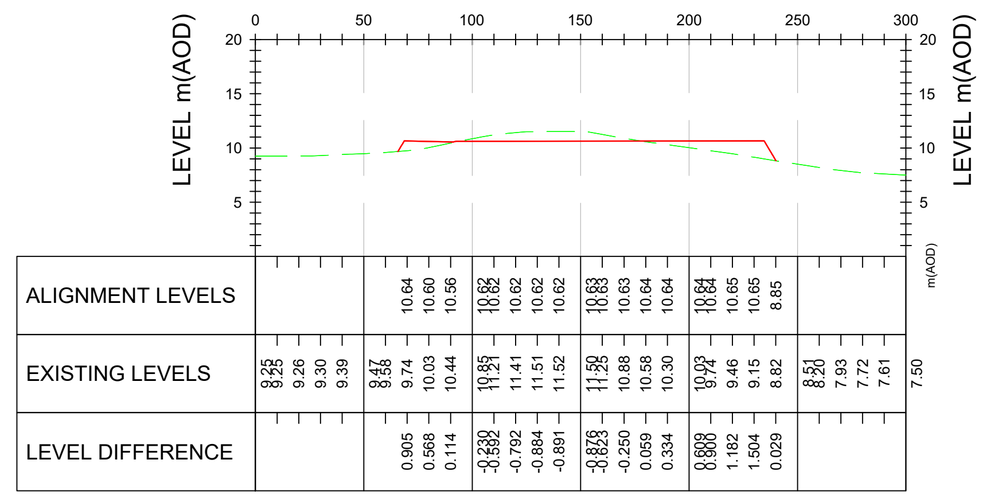
	DC Capacity at STC (MWp)	DC Capacity at NOTC (MWp)	Overplanting at STC	Overplanting at NOCT
Y1	1036.9	791.0	1.40	1.07
Y2	1032.8	787.9	1.40	1.06
Y3	1028.6	784.7	1.39	1.06
Y4	1024.5	781.6	1.38	1.06
Y5	1020.4	778.4	1.38	1.05
Y6	1016.4	775.3	1.37	1.05
Y7	1012.3	772.2	1.37	1.04
Y8	1008.2	769.1	1.36	1.04
Y9	1004.2	766.1	1.36	1.04
Y10	1000.2	763.0	1.35	1.03
Y11	996.2	759.9	1.35	1.03
Y12	992.2	756.9	1.34	1.02
Y13	988.2	753.9	1.34	1.02

	DC Capacity at STC (MWp)	DC Capacity at NOTC (MWp)	Overplanting at STC	Overplanting at NOCT
Y14	984.3	750.9	1.33	1.01
Y15	980.3	747.9	1.32	1.01
Y16	976.4	744.9	1.32	1.01
Y17	972.5	741.9	1.31	1.00
Y18	968.6	738.9	1.31	1.00
Y19	964.8	736.0	1.30	0.99
Y20	960.9	733.0	1.30	0.99
Y21	957.0	730.1	1.29	0.99
Y22	953.2	727.2	1.29	0.98
Y23	949.4	724.3	1.28	0.98
Y24	945.6	721.4	1.28	0.97
Y25	941.8	718.5	1.27	0.97
Y26	938.1	715.6	1.27	0.97
Y27	934.3	712.7	1.26	0.96
Y28	930.6	709.9	1.26	0.96
Y29	926.8	707.1	1.25	0.96
Y30	923.1	704.2	1.25	0.95

The values of overplanting on Table 2 above does not include any allowance for bifacial gain, if the bifacial gain in typical of other solar schemes in the UK then the NOCT overplanting ration would be 1.00 in year 30 based on a 5% Bifacial gain. The values above show why the application for One Earth Solar Farm includes the provision for renewal of the modules during the lifetime of the scheme. This summary shows that the overplanting ratio of 1.41 is appropriate for the scheme given the location and duration of the scheme that has been applied for.

Appendix B Cut and Fill (BESS & Substation)





Section B-B 5x Vertical exaggeration

ALIGNMENT LEVELS	EXISTING LEVELS	LEVEL DIFFERENCE
	9.25	
	9.25	
	9.26	
	9.30	
	9.39	
	9.47	
	9.58	
10.64	9.74	0.905
10.60	10.03	0.568
10.56	10.44	0.114
10.62	10.85	-0.230
10.62	11.21	-0.592
10.62	11.41	-0.792
10.62	11.51	-0.884
10.62	11.52	-0.891
10.63	11.50	-0.876
10.63	11.25	-0.623
10.63	10.88	-0.250
10.64	10.58	0.059
10.64	10.30	0.334
10.64	10.03	0.609
10.64	9.74	0.900
10.65	9.46	1.182
10.65	9.15	1.504
8.85	8.82	0.029
	8.51	
	8.20	
	7.93	
	7.72	
	7.61	
	7.50	

Section A-A 5x Vertical exaggeration

ALIGNMENT LEVELS	EXISTING LEVELS	LEVEL DIFFERENCE
	8.50	
	8.62	
	8.75	
	9.11	
9.73	9.60	0.129
10.65	10.13	0.524
10.65	10.59	0.060
10.65	10.94	-0.287
10.65	11.16	-0.510
10.65	11.26	-0.608
10.65	11.28	-0.626
10.65	11.23	-0.582
10.65	11.19	-0.535
10.65	11.14	-0.494
10.65	11.07	-0.424
10.65	11.03	-0.384
10.65	10.97	-0.325
10.65	10.98	-0.328
10.65	11.04	-0.389
10.65	10.95	-0.299
10.65	10.81	-0.162
10.65	10.72	-0.068
10.65	10.61	0.039
10.65	10.55	0.099
10.65	10.47	0.176
10.64	10.43	0.215
10.64	10.39	0.255
10.64	10.38	0.265
10.64	10.37	0.272
10.64	10.34	0.293
10.63	10.28	0.354
10.64	10.23	0.404
10.64	10.20	0.434
10.64	10.23	0.408
10.64	10.24	0.396
10.64	10.23	0.408
10.64	10.29	0.346
10.64	10.31	0.333
10.64	10.34	0.301
10.64	10.39	0.248
10.65	10.43	0.221
10.65	10.48	0.172
10.65	10.48	0.167
10.65	10.46	0.185
10.65	10.50	0.149
10.65	10.59	0.059
10.65	10.67	-0.019
10.65	10.72	-0.070
10.65	10.76	-0.114
10.65	10.80	-0.147
10.65	10.82	-0.166
10.65	10.86	-0.210
10.65	10.96	-0.314
10.65	10.98	-0.326
10.65	10.96	-0.313
10.65	11.03	-0.381
10.65	11.08	-0.435
10.65	11.11	-0.464
10.65	11.10	-0.449
10.65	11.08	-0.432
10.65	11.13	-0.479
10.65	11.22	-0.568
10.65	11.20	-0.552
10.65	11.15	-0.503
10.65	11.19	-0.536
10.65	11.16	-0.514
10.65	11.07	-0.420
10.65	11.03	-0.379
10.65	10.96	-0.305
10.65	10.83	-0.178
10.65	10.66	-0.010
10.65	10.50	0.153
	10.44	
	10.39	
	10.33	
	10.39	

one earth
solar farm

Client:
One Earth Solar Farm Ltd

Drawing Title:
Appendix B - Cut and Fill (BESS & Substation)
Sheet 1

Project:
One Earth Solar Farm

Project:
One Earth Solar Farm

Rev.
01

Drawn: JR
Designed: ES
Approved: JP

Planning Inspectorate Scheme Ref:EN010159

Environmental Statement Volume 2

Drawing Date:
2025-07-29

Scale:
Plan 1:1000
Sections 1:2000

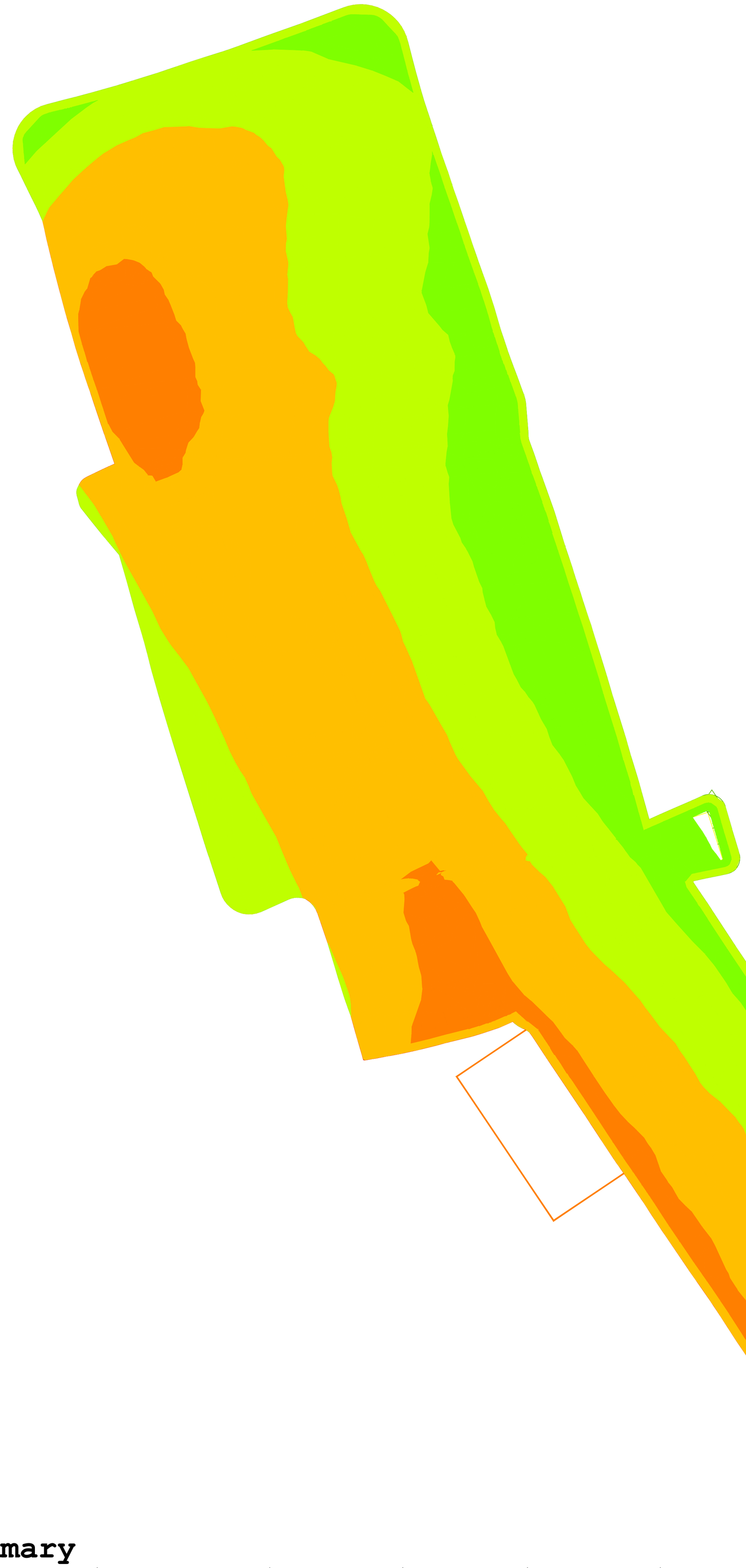
Plan Legend:
- ▭ BESS units
- ▭ PCS units
- ○ Water tanks
- ▭ Control building area
- ▭ Storage area
- ▭ Parking area
- ▭ Laydown area
- ▨ Substation

Sections Legend:
- - - - Existing ground level
- —— Proposed ground level (10.65m AOD)

0 25 50 m

1:1000

N



Cut/Fill Summary

	Cut Factor	Fill Factor	2d Area	Cut	Fill	Net
Volume	**1.000**	**1.000**	86493m^2	29245m^3	27877m^3	1368m^3 <Cut>

one earth solar farm

Client:
One Earth Solar Farm Ltd

Drawing Title:
Appendix B - Cut and Fill (BESS & Substation)
Sheet 2

Project:
One Earth Solar Farm

Project:
On Earth Solar Farm

Rev.
01

Drawn: JR | Designed: ES | Approved: JP

Planning Inspectorate Scheme Ref:EN010159

Environmental Statement Volume 2

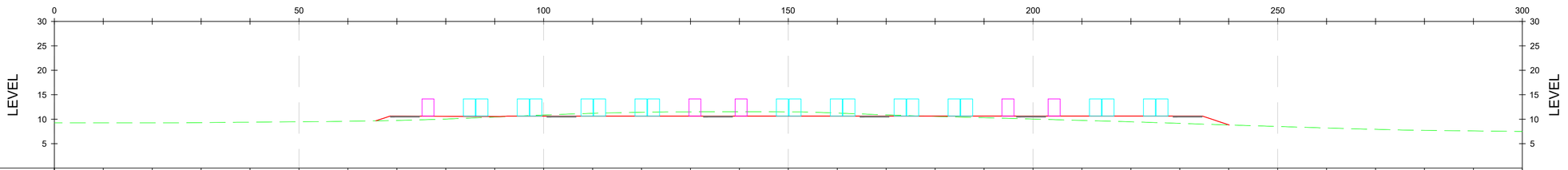
Drawing Date:
2025-07-29

Scale:
1:1000

Legend

CUT/FILL LEGEND		
COLOUR	MINIMUM LEVEL	MAXIMUM LEVEL
	-1.58	-1.00
	-1.00	0.00
	0.00	1.00
	1.00	2.00

Appendix C Section Through BESS Units



Section B-B - LONG SECTION
SCALE: H 1:1000, V 1:1000 - DATUM: 0.000

ALIGNMENT LEVELS								10.64	10.60	10.56	10.62	10.62	10.62	10.62	10.62	10.63
EXISTING LEVELS	9.25	9.25	9.26	9.30	9.39	9.47	9.58	9.74	10.03	10.44	10.85	11.21	11.41	11.51	11.52	11.50
LEVEL DIFFERENCE								0.905	0.568	0.114	-0.230	-0.592	-0.792	-0.884	-0.891	-0.876

ALIGNMENT LEVELS	10.63	10.63	10.64	10.64	10.64	10.64	10.65	10.65	8.85						
EXISTING LEVELS	11.25	10.88	10.58	10.30	10.03	9.74	9.46	9.15	8.82	8.51	8.20	7.93	7.72	7.61	7.50
LEVEL DIFFERENCE	-0.623	-0.250	0.059	0.334	0.609	0.900	1.182	1.504	0.029						

Client:
One Earth Solar Farm Ltd

Drawing Title:
Appendix C - Section Through BESS units
No exaggeration

Legend:
- - - Existing Ground Level
— Proposed Ground Level
▬ Road

☐ Battery Units
☐ PCS Units

Project:
One Earth Solar Farm

Project:
One Earth Solar Farm

Rev.
01

Drawn: JR | Designed: ES | Approved: JP

Planning Inspectorate Scheme Ref:EN010159

Environmental Statement Volume 2

Drawing Date:
2025-07-29

Scale:
1:250

Appendix D Tillbridge Solar Joint Report on Interrelationships

Gate Burton ENERGY PARK

West Burton SOLAR PROJECT

Tillbridge Solar

Cottam SOLAR PROJECT

EN010142

Volume 7

Joint Report on Interrelationships between Nationally Significant Infrastructure Projects Part 1 of 3

Document reference: EN010142/APP/7.6

Regulation 5(2)(q)
Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

April 2025
Revision Number: 02 (V9)

Gate Burton Energy Park Limited, West Burton Solar Project Limited, Tillbridge Solar Limited, Cottam Solar Project Limited

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Prepared for:

Gate Burton Energy Park Limited, West Burton Solar Project Limited, Tillbridge Solar Limited and Cottam Solar Project Limited.

Prepared by:

AECOM Limited

Table of Contents

Figures

Tables

1. Introduction

1.1 Purpose of this report

1.1.1 This Report provides information on the interrelationships between the Gate Burton Energy Park, Cottam Solar Project, West Burton Solar Project and Tillbridge Solar Project. The report has been prepared to support the Development Consent Order (DCO) applications for the four projects.

1.1.2 An initial version of this Report was prepared to address a request from the Examining Authority (ExA) in the Examination of the application to develop the Gate Burton Energy Park (the "Gate Burton scheme"). Annex G of the Rule 6 letter (issued on 31 May 2023) on the Gate Burton scheme set out a list of additional information that the ExA required to assess the interrelationship between Gate Burton scheme and other Nationally Significant Infrastructure Projects (NSIPs). Annex C of the Rule 6 letter identified five proposed NSIP schemes which are located close to the Gate Burton scheme, being Cottam Solar Project, Tillbridge Solar Project, West Burton Solar Project, Heckington Fen Solar Park and Mallard Pass Solar Project. The Rule 8 letter (issued on 12 July 2023) did not list the NSIP schemes for consideration.

1.1.3 A request for the same report was made by the ExA in the Rule 6 letter for the Examination of the Cottam Solar Project (issued on 10 July 2023), with the first iteration of the joint report submitted into the Cottam Solar Project Examination on 17 October 2023. The document was also requested in the Rule 6 letter for the West Burton Solar Project issued on 10 August 2023, with the first iteration originally due on 26 October 2023 and later changed to 24 November 2023.

1.1.4 To aid the ExAs, the developers of the Gate Burton, Cottam, West Burton and Tillbridge schemes have agreed to produce one joint version of this report, to be revised and submitted at the various deadlines for each project.

1.1.5 For clarity, the versions of the report and the deadlines the report has been submitted at are provided in **Table 1.1** below. This table will be updated as the programmes progress.

Table 1.1 Versions of the Interrelationships Report and Submission Deadlines

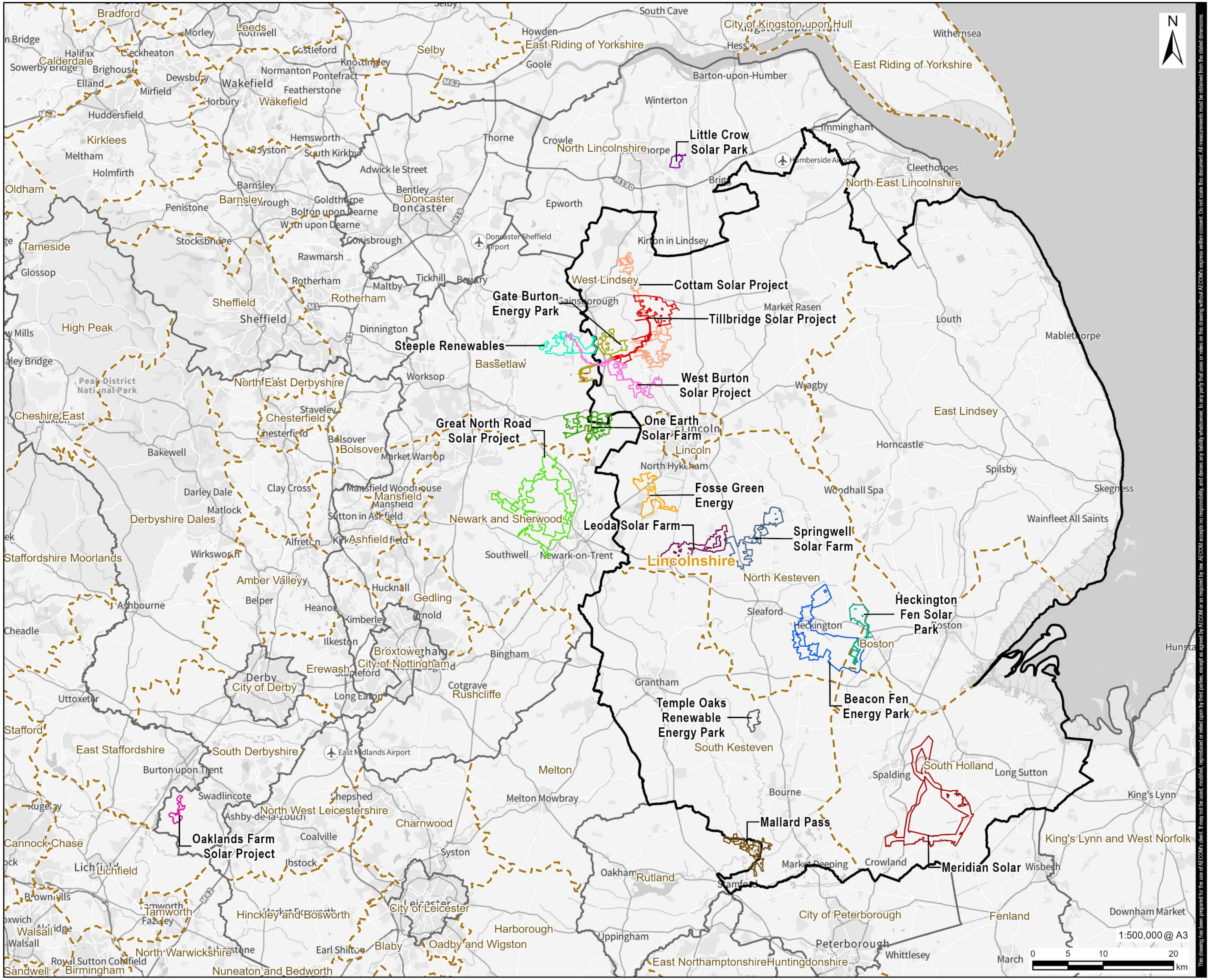
Version	Notes	Gate Burton	Cottam	West Burton	Tillbridge
0	Not joint report[1]	D1 (18 July 23)	N/A	N/A	N/A
1	1st joint report	D4 (3 Oct 23)	D1 (17 Oct 23)	N/A	N/A
2	2nd joint report	D5 (20 Nov 23)	D2 (21 Nov 23)	D1 (24 Nov 23)	N/A
3	3rd joint report	D6 (21 Dec 23)	D3 (delayed submission to 21 Dec 23)	D2 (5 Jan 24)	N/A
4	4th joint report	Not submitted as examination finished	D4 (30 January 2024)	N/A	N/A
5	5th joint report	N/A	D5 (27 February 2024)	D4 (4 March 2024)	N/A
6	6th joint report	N/A	Not submitted as examination finished	N/A	Submitted as part of the DCO Application
7	7th Joint Report	N/A	N/A	D6 (30 April 2024)	N/A
8	8th Joint Report	N/A	N/A	Not submitted as examination finished	D3 (10 December 2024)
9	9th Joint Report	N/A	N/A	N/A	D6 (1 April 2025)

1.1.6 For the reasons identified below, this Report focuses on the interrelationships between the Gate Burton, Cottam, West Burton and Tillbridge schemes. This Report references documents from the applications for all four schemes. For ease, references are provided with the scheme number first (see **Table 2.1**), followed by the application reference in the relevant Examination library if applicable. Where applicable, the document number is also provided for ease of reference.

[1] It should be noted that whilst the first report was prepared for the Gate Burton project and was not a 'joint report', it was developed in collaboration with all other parties, with their assistance and input.

1.2 Schemes considered in this report

1.2.1 **Figure 1.1** shows the location and Order limits of various proposed NSIP schemes in or near Lincolnshire. **Table 1.2** sets out further details of each of these schemes as of April 2025. The distance provided measures the approximate distance from the project listed under “Scheme Name” to the closest edge of the order limits of either the Cottam, West Burton, Tillbridge or Gate Burton scheme, whichever is the nearest. It should be noted that the Order limits for all projects not yet submitted are evolving and may change over time. The column ‘potential for cumulative effects’ has been populated by the environmental specialists assessing the cumulative impacts of the projects on behalf of Gate Burton scheme and has been agreed by the undertakers of the Cottam, West Burton and Tillbridge schemes.



AECOM

PROJECT
Tillbridge Solar Project

CLIENT
Tillbridge Solar Limited

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Aldgate Tower
2, Leman Street
London, E1 8FA
United Kingdom
aecom.com

LEGEND
- Lincolnshire County Boundary
- Other County Boundaries
- District Boundary

Solar Scheme
- Beacon Fen Energy Park
- Cottam Solar Project
- Fosse Green Energy
- Gate Burton Energy Park
- Great North Road Solar Project
- Heckington Fen Solar Park
- Leoda Solar Farm
- Little Crow Solar Park
- Mallard Pass
- Meridian Solar
- Oaklands Farm Solar Project
- One Earth Solar Farm
- Springwell Solar Farm
- Steeple Renewables
- Temple Oaks Renewable Energy Park
- Tillbridge Solar Project
- West Burton Solar Project

NOTES

ISSUE PURPOSE
DCO Submission

PROJECT NUMBER
60677969

FIGURE TITLE
DCO Solar Schemes in/near Lincolnshire

FIGURE NUMBER
Figure 1-1

Revision: 02 Drawn: LL Checked: CW Approved: AT Date: 2025-03-24

Filename: \\na.aecomnet.com\lfs\EMEA\London-UKLON1\Legacy\UKLON6PFPSW001\UKLON6PFPSW001-V1\DCS\Library\GIS_DATA\Projects\Greta III\Layout\Tillbridge Solar\ES\Interrelationships Report\250320_TillbridgeSolar_IR_Figure1-1_DCOSolarSchemes.aprx

Table 1.2 List of NSIP Solar Schemes in and around Lincolnshire

Scheme Name	LPA	Stage of Application	PEIR[2] available	ES available	Date Application Submitted/ Due[3]	Distance to the nearest edge of Cottam, West Burton, Tillbridge or Gate Burton scheme (whichever is closer) (km)	Potential for cumulative effects
Little Crow Solar Park	North Lincolnshire	Development Consent Granted	Yes	Yes	Dec 2020	8km (to Cottam Scheme)	No
Mallard Pass Solar Farm	Rutland/ South Kesteven	Development Consent Granted	Yes	Yes	Nov 2022	51km (to West Burton Scheme)	No
Heckington Fen Solar Park	North Kesteven/ Boston	Development Consent Granted	Yes	Yes	Feb 2023	31km (to West Burton Scheme)	No
Springwell Solar Farm	North Kesteven	Examination	Yes	No	Q3 2024	20km (to West Burton Scheme)	No
Beacon Fen Energy Park	North Kesteven/ Boston	Pre-application	Yes	No	Q2 2025	31km (to West Burton Scheme)	No
Temple Oaks Renewable Energy Park	South Kesteven	Withdrawn by the developer	No	No	No timescale available	38km (to West Burton Scheme)	No
Oaklands Farm Solar Project	South Derbyshire (Derbyshire)	Decision stage	Yes	Yes	Autumn 2023	67km (to Gate Burton Scheme)	No

[2] Preliminary Environmental Information Report, an environmental report on potential effects produced for statutory consultation on a NSIP.
[3] Due dates are as stated on the National Infrastructure Planning website.

Scheme Name	LPA	Stage of Application	PEIR[2] available	ES available	Date Application Submitted/ Due[3]	Distance to the nearest edge of Cottam, West Burton, Tillbridge or Gate Burton scheme (whichever is closer) (km)	Potential for cumulative effects
Fosse Green	North Kesteven	Pre-application	No	No	Q3 2025	7km (to West Burton Scheme)	No
One Earth Solar Farm	West Lindsey/ Bassetlaw	Application submitted	No	No	Q1 2025	3.5km (to West Burton Scheme)	Yes (except Tillbridge)
Steeple Renewables Project	Bassetlaw	Pre-application	No	No	Q2 2025	0km (to West Burton, assuming the Order limits for West Burton and Steeple will overlap at the Substation). 1.2 km to the nearest solar panel area, being the panels in the north east of the Solar and Energy Storage area of the Gate Burton scheme. 7km to Tillbridge Principal Site.	Cannot be confirmed
Great North Road Solar Park	Newark and Sherwood District Council	Pre-application	No	No	Q2 2025	10km (to West Burton scheme)	Yes (except Tillbridge)
Leoda Solar Farm	North Kesteven	Pre-application	No	No	Q1-Q2 2026	21km (to West Burton scheme)	No
Meridian Solar Farm	South Holland	Pre-application	No	No	Q3 2025	67km (to West Burton scheme)	No

1.2.2 **Table 1.3** below provides details of the distances (and direction) between the solar arrays for the Cottam, West Burton, Tillbridge and Gate Burton schemes. The distance between solar arrays is measured at the nearest point to the other relevant scheme and the direction means the direction from the scheme named horizontally at the top of the table (e.g. the solar arrays for Cottam scheme are 1.7km north from the solar arrays for the West Burton scheme at their nearest point). Each of the four schemes is considered to have the potential for cumulative impacts on the others, based on an assessment by the Gate Burton scheme's environmental specialists which has been agreed by the undertakers of the Cottam, West Burton and Tillbridge schemes.

Table 1.3 Distance between the solar arrays of the Cottam, West Burton, Tillbridge and Gate Burton schemes

Scheme Name	Cottam	West Burton	Gate Burton	Tillbridge
Cottam	0km	1.70km (north)	1.42km (east)	0.70km (south)
West Burton	1.70km (south)	0km	0.87km (south)	6.5km (south-west)
Gate Burton	1.42km (west)	0.87km (north)	0km	4.28km (south-west)
Tillbridge	0.70km (north)	6.5km (north-east)	4.28km (north-east)	0km

1.2.3 This Report discusses the interrelationships between the Gate Burton, Cottam, West Burton and Tillbridge schemes, because these are the projects with the potential for cumulative effects, as well as being those geographically closest to each other (although please note comments below on Steeple Renewables Project). These schemes also share common features, including a shared cable route corridor. The projects are being developed by different developers who have been working together to improve the schemes and reduce environmental effects.

1.2.4 The Report does not focus on the other schemes listed above because they are located some distance from the Gate Burton, Cottam, West Burton and Tillbridge schemes and/or do not share the same common features. In particular, Heckington Fen and Mallard Pass solar projects listed in the Gate Burton Rule 6 letter are over 30km from the Gate Burton, Cottam, Tillbridge and West Burton schemes so there is no potential for cumulative effects.

1.2.5 **Table 1.2** is being continually updated and so includes projects that have only been announced very recently. As shown above, many projects are at such an early stage that no statutory consultation has yet been undertaken and no Preliminary Environmental Information Report produced.

1.2.6 For all projects listed in **Table 1.2**, except Steeple Renewables, One Earth Solar Farm and Great North Road Solar Park, cumulative effects can

nevertheless be ruled out due to large separation distances. For Tillbridge, Steeple Renewables, One Earth Solar Farm and Great North Road Solar Park can also be scoped out, as they are too far to have the potential to result in cumulative effects.

1.2.7 Steeple Renewables Project is located in close proximity to the four projects in this report and therefore cumulative effects cannot be ruled out at this stage. The Steeple Renewables Project proposes up to 400MW of solar energy generation and 200MW of battery storage. It is proposed to connect at the former West Burton Power Station site, as does the West Burton Solar project.

1.2.8 Steeple Renewables Project was announced on 23 October 2023 and only very high level information is available. A Scoping Report was submitted to the Planning Inspectorate in April 2024. It is therefore not possible to carry out a meaningful environmental assessment of the cumulative effects between the projects due to a lack of design and environmental information to feed into the assessment.

1.2.9 Given the early stage of design, there is also uncertainty on the design and significant potential for the project to evolve over time. For example, the distances provided in **Table 1.2** are based on the distance between the Gate Burton project (as the closest solar array of the four projects) and the 'land under consideration' for the Steeple Renewable Project. However, at present it is not known whether the 'land under consideration' would be used for solar panels, battery storage, access tracks or environmental mitigation planting, which would make any assessment of cumulative effects very uncertain. Given that full details are available for Gate Burton, Cottam, West Burton and Tillbridge, it is also considered highly likely that the developer of the Steeple Renewables project will evolve the scheme design to minimise cumulative impacts.

1.2.10 Scoping Reports for One Earth Solar Farm and Great North Road Solar Park were both submitted to the Planning Inspectorate in November 2023. The potential cumulative effects of these two schemes are considered in a Technical Note on Cumulative Effects of Additional Schemes **[EN010133/REP4-059]** that was submitted to the Cottam Solar Project Examination and in an equivalent document **[EN010132/REP5-030]** that was submitted to the West Burton Solar Project Examination.

1.2.11 The potential for cumulative effects with the above schemes is also assessed within **Chapter 18: Cumulative Effects and Interactions** of the Environmental Statement for the Tillbridge Solar Project **[EN010142/APP/6.1(Rev04)]**.

1.3 Structure of this report

1.3.1 In line with the requirements in Annex G of the Gate Burton scheme Rule 6 letter, Annex G of the Cottam Rule 6 letter and Annex G of the West Burton Rule 6 letter, this Report comprises the following sections:

a. **Section 2** provides an overview of the Gate Burton, Cottam, Tillbridge and West Burton schemes, including details on timings, construction phasing, grid connection and start of operation. This is accompanied by figures showing the Order limits for the projects. The plans show the locations of the main features of each project, including solar arrays,

energy storage facilities, substations, electrical cable routes, grid connections, environmental mitigation areas, temporary construction and decommissioning areas, and construction haulage routes.

b. **Section 3** outlines the approach taken by the project promotors to work collaboratively with one another.

c. **Section 4** outlines the DCO provisions required to be implemented satisfactorily in relation to other projects.

d. **Section 5** outlines the mitigation measures that are shared between the projects.

e. **Section 6** sets out information on the other projects relied upon for the cumulative impact assessments, the level of detail, and any other changes since the submission of applications.

f. **Section 7** provides a summary of the matters coordinated with other projects, setting out the matters that have been agreed and further work being undertaken jointly between the projects.

2. Overview of the Schemes

2.1 Introduction

2.1.1 This section provides an overview of the Gate Burton, Cottam, West Burton and Tillbridge schemes including details on timings, construction phasing, grid connection and start of operation. It is accompanied by **Figures 2.1 and 2.2** which show the locations of the main features of each project, including solar arrays, energy storage facilities, substations, electrical cable routes, grid connections, environmental mitigation areas, temporary construction areas, and construction haulage routes.

2.2 Overview of the schemes

2.2.1 All four schemes are proposals for solar energy parks that would deliver electricity to the national electricity transmission network. They involve the construction, operation, maintenance and decommissioning of solar photovoltaic (PV) electricity generating facilities and energy storage facilities with total capacities exceeding 50 megawatts and electrical connections to the National Grid via existing substations. Each scheme is distinct and is being promoted by a different undertaker.

2.2.2 The Gate Burton scheme is a proposal for a solar PV park with a capacity of approximately 531MW together with a battery energy storage system, promoted by Gate Burton Energy Park Limited (the “Gate Burton undertaker”), which is part of Low Carbon Limited. It is located to the east of the River Trent between the villages of Knaith, Gate Burton and Willingham by Stow. The electricity generated will be transferred by an underground 400kW cable to the grid connection substation at Cottam Power Station to the south-west. The DCO application was submitted by the Gate Burton undertaker to the Planning Inspectorate (PINS) on 27 January 2023 and accepted for Examination on 22 February 2023. Examination commenced on 4 July 2023 and closed on 4 January 2024. The Gate Burton scheme was consented on 12 July 2024.

2.2.3 Cottam Solar Project (the “Cottam scheme”) is being promoted by Cottam Solar Project Limited (the “Cottam undertaker”), which is part of Island Green Power UK Limited. The Cottam scheme is a proposed solar farm across four areas of land connected by underground cable with a capacity of approximately 600MW together with a battery energy storage system. Two of the areas of the Cottam scheme containing solar panels are located between the villages of Willingham by Stow, Thorpe le Fallows and Fillingham. The other two areas are located further north around Blyton, Pilham and Corringham. The electricity generated will be transferred to the grid via a substation at Cottam Power Station. The DCO application was submitted to PINS on 12 January 2023 and accepted for Examination on 10 February 2023. Examination commenced on 5 September 2023 and closed on 5 March 2024. The Cottam scheme was consented on 5 September 2024.

2.2.4 West Burton Solar Project (the “West Burton scheme”) is being promoted by West Burton Solar Project Limited (the “West Burton undertaker”), which is also part of Island Green Power. It is a proposal for a solar PV park across three areas of land connected by underground cable, with a capacity of

approximately 480MW together with a battery energy storage system. The areas of the West Burton scheme siting solar panels are located south of the A1500 around the villages of Marton, Ingleby and Bransby. The electricity generated will be transferred to the grid via a substation at West Burton Power Station. The DCO application was submitted to PINS on 21 March 2023 and accepted for Examination on 18 April 2023. The Examination commenced on 8 November 2023 and closed on 8 May 2024. The West Burton scheme was consented on 24 January 2025.

2.2.5 Tillbridge Solar Project (the "Tillbridge scheme") is being promoted by Tillbridge Solar Limited (the "Tillbridge undertaker") and is a joint venture between Tribus Clean Energy Limited and Recurrent Energy. Tillbridge Solar Limited. The Tillbridge scheme has secured a Bilateral Connection Agreement (BCA) with National Grid to allow 500MW of renewable energy to be transferred into and out of its substation. The proposed solar farm is located between Springthorpe and Glentworth. The electricity generated will be transferred to the grid via a substation at Cottam Power Station (National Grid Cottam Substation). The DCO application was submitted to PINS on 10 April 2024 and accepted for Examination on 8 May 2024. The Examination commenced on 15 October 2024. This report forms part of Deadline 6 submission for the Tillbridge scheme.

2.2.6 The main scheme components for all four schemes comprise: PV tables (mounting structures) and panels; inverters; transformers; an on-site Substation (two in the case of the Tillbridge scheme); onsite cabling; a Battery Storage and Energy Storage System (BESS) (or multiple in the case of the Tillbridge scheme); a 400kV electrical connection to the National Grid Substation at Cottam Power Station (for the Gate Burton, Cottam and Tillbridge schemes) and the National Grid Substation at West Burton Power Station (for the West Burton scheme); fencing and security measures; access tracks; and landscaping and biodiversity enhancement.

2.2.7 Designing the schemes has been an iterative process, guided by environmental assessments and consultation with statutory and non-statutory consultees. A number of the design aspects of the schemes cannot be confirmed until the tendering process for design and construction has been completed. Therefore, whilst this Report (and the applications for development consent) gives as much detail as possible on proposed design and construction for the schemes, the final design and construction processes are to be determined. For the purposes of applying for development consent, the designs are considered in line with the principles of the "Rochdale Envelope" to present a likely worst-case assessment of potential environmental effects of the schemes where the design details cannot yet be fixed.

2.2.8 **Table 2.1** sets out the key details for each of the schemes including details on the estimated timetable of works such as obtaining consent, construction phasing, grid connection and operational commencement.

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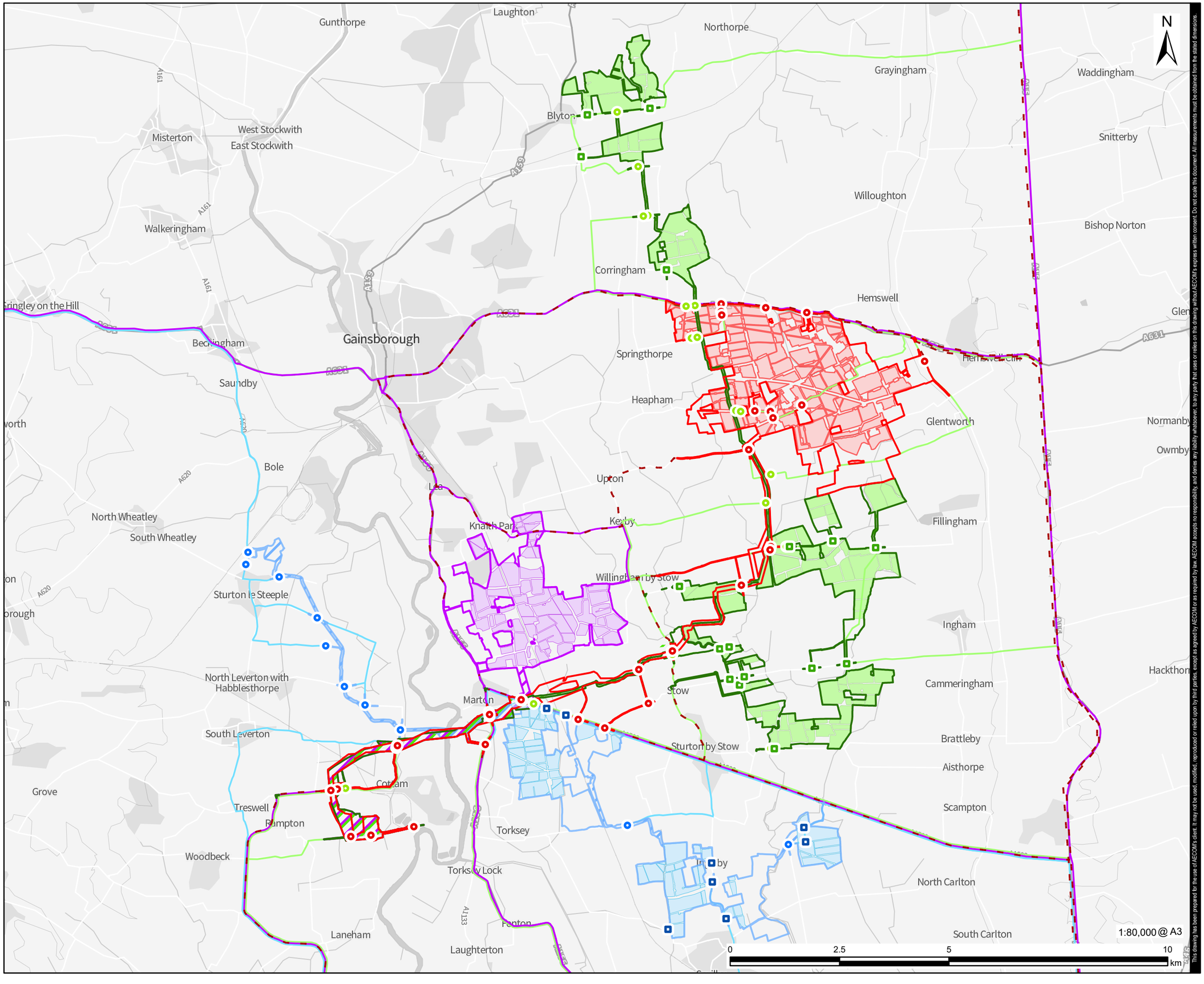
Revision: 02 Drawn: LL Checked: CW Approved: AT Date: 2025-03-20



AECOM

PROJECT

Tillbridge Solar Project

CLIENT

Tillbridge Solar Limited

CONSULTANT

Aldgate Tower
2, Leman Street
London, E1 8FA
United Kingdom
aecom.com

LEGEND

Tillbridge Solar Project
- Order limits
- Solar Arrays
- Access Location
- Construction Route

Cottam Solar Project Boundary
- Order limits
- Solar Arrays
- Grid Connection Corridor
- Construction Access
- Cable Route Access
- Construction Route

Gate Burton Energy Park
- Order limits
- Solar Arrays
- Grid Connection Corridor
- Construction Route

West Burton Solar Project
- Order limits
- Solar Arrays
- Grid Connection Corridor
- Construction Access
- Cable Route Access
- Construction Route

NOTES

ISSUE PURPOSE

DCO Submission

PROJECT NUMBER

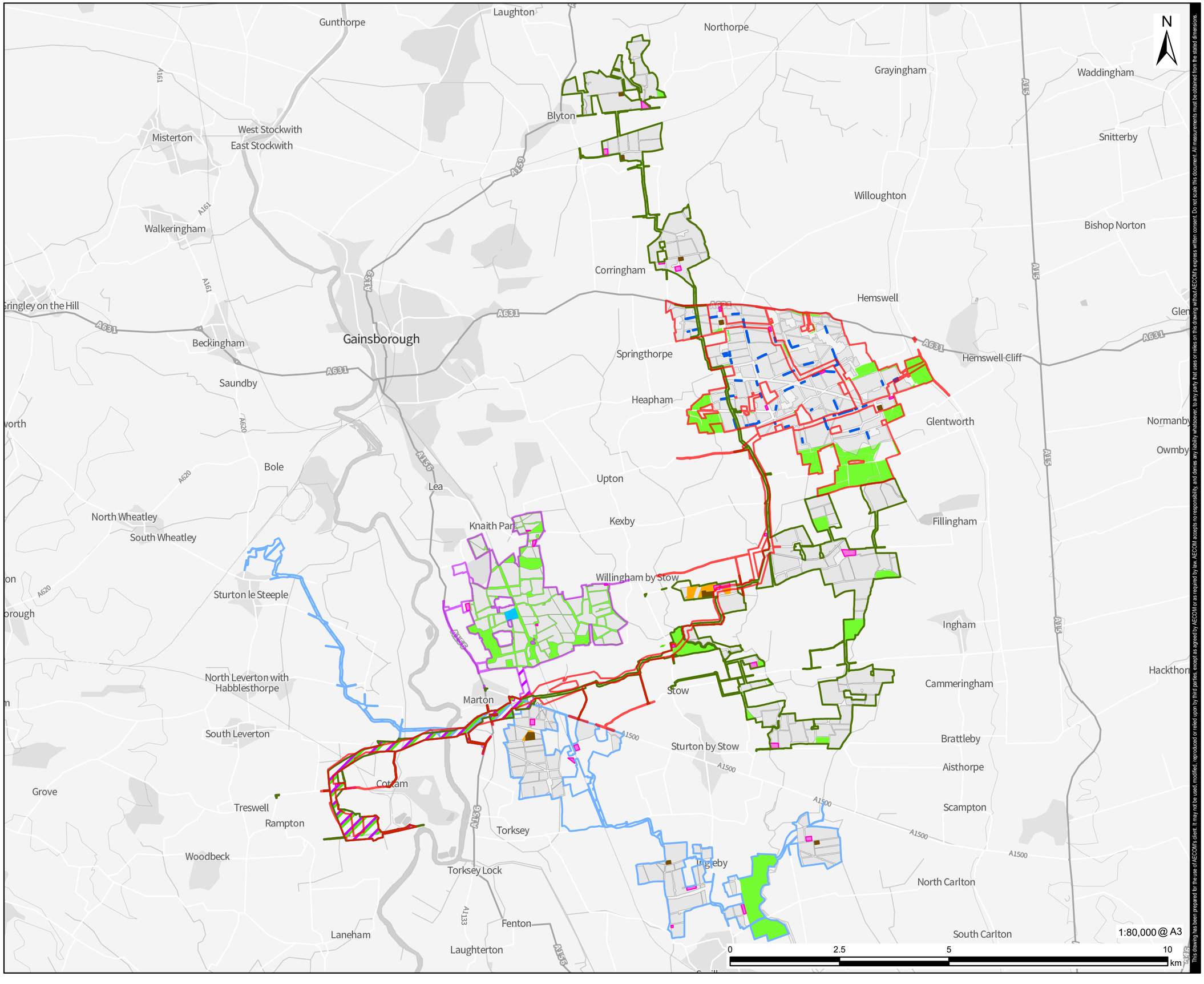
60677969

FIGURE TITLE

Tillbridge, Gate Burton, Cottam and West Burton Solar Projects: Overview

FIGURE NUMBER

Figure 2-1



AECOM

PROJECT

Tillbridge Solar Project

CLIENT

Tillbridge Solar Limited

CONSULTANT

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LEGEND

Tillbridge Solar Project
- Order limits

Cottam Solar Project
- Order limits
- Grid Connection Corridor

Gate Burton Energy Park
- Order limits
- Grid Connection Corridor

West Burton Solar Park
- Order limits
- Grid Connection Corridor

Indicative Infrastucture
- Solar Arrays
- Substation
- Battery Energy Storage Systems (BESS)
- Battery Energy Storage Systems (BESS) and Solar Station
- Battery Storage
- Environmental Mitigation Area
- Construction compound

NOTES

ISSUE PURPOSE

DCO Submission

PROJECT NUMBER

60677969

FIGURE TITLE

Tillbridge, Gate Burton, Cottam and West Burton Solar Projects: Indicative Layout Plan

FIGURE NUMBER

Figure 2-2

Table 2.1 Overview of schemes including details of consenting, construction and operation timetables

Project detail/date	Gate Burton Energy Park	Cottam Solar Project	West Burton Solar Project	Tillbridge Solar Project
Planning Inspectorate Project Number	EN010131	EN010133	EN010132	EN010142
Approximate solar MW capacity	531 MW	600 MW	480 MW	500 MW connection agreement.
Approximate battery storage capacity	500 MWh	Two options have been assessed for the Environmental Statement: Option A: 1357MWh Option B: 2773MWh	159MWh	Subject to detailed design.
Order Limits (ha)	824 ha, including 652 ha for Solar and Energy Storage Park and 172 ha for Grid Connection Corridor.	1,451.23 ha. The four combined sites minus the Cable Corridors, means of access and Cottam 1 permissive path total 1188.5 2ha.	886.42 ha. The three combined sites minus the Cable Corridors, but including means of access total 769.1ha.	Approximately 1,345 ha for solar and BESS (Principal Site), of which approximately 795ha is developable and 550ha is for ecological, landscape and heritage offsets. Additional area for cable corridor.
Local Authority Areas covered by scheme	Lincolnshire County Council, Nottinghamshire County Council, West Lindsey District Council and Bassetlaw District Council.	Lincolnshire County Council, Nottinghamshire County Council, West Lindsey District Council and Bassetlaw District Council.	Lincolnshire County Council, Nottinghamshire County Council, West Lindsey District Council and Bassetlaw District Council.	Lincolnshire County Council, Nottinghamshire County Council, West Lindsey District Council and Bassetlaw District Council.

Project detail/date	Gate Burton Energy Park	Cottam Solar Project	West Burton Solar Project	Tillbridge Solar Project
Submission of application	27 January 2023	12 January 2023	21 March 2023	April 2024
Start of Examination (actual/predicted)	4 July 2023	5 September 2023	8 November 2023	15 October 2024
Due date for decision	4 July 2024	5 September 2024	24 January 2025	Q3 2025
Predicted start of construction	Q1 2025	Q4 2024 (earliest possible date)	Q1 2025 (earliest possible date)	Q4 2025
Details of construction phases and any shared construction timetable/ shared works with other schemes.	The main construction phase is predicted to be 24-36 months between 2025 and 2027, with construction peak in 2026. A list of key construction activities is included in Chapter 2: the Project of the Environmental Statement **[EN010131/APP-011/3.1].**	The main construction phase is predicted to be 24 months between, at the earliest, 2024 and 2026. A list of key construction activities is included in Chapter 4: Scheme Description of the Environmental Statement **[EN010133/REP-012].**	The main construction phase is predicted to be 24 months between, at the earliest, 2025 and 2027. A list of key construction activities is included in Chapter 4: Scheme Description of the Environmental Statement **[EN010132/APP-042].**	The main construction phase is predicted to be 24-36 months, starting at the earliest in late 2025, with construction peak in 2026. A list of key construction activities is included in Chapter 3: Scheme Description of the Environmental Statement **[REP4-016]**.
Predicted end of construction	Q4 2027/Q1 2028	Q4 2026 (earliest possible date)	Q1 2027 (earliest possible date)	Q4 2027

Project detail/date	Gate Burton Energy Park	Cottam Solar Project	West Burton Solar Project	Tillbridge Solar Project
Predicted Operation Date	Q4 2028	Q3 2029 (with potential for an earlier date to be achieved)	Q4 2028 (with potential for an earlier date to be achieved)	Q1 2028

2.3 Main features of the schemes

2.3.1 **Figure 2.1** provides an overview of the four schemes, including the main solar areas, cable route corridors and main routes for heavy goods vehicles. Information on this plan has been limited so the main areas can be seen clearly. **Figure 2.2** provides more detail on the proposed indicative layouts for each scheme including solar arrays, energy storage facilities, substations, electrical cable routes, grid connections, environmental mitigation areas, temporary construction areas, and construction haulage routes.

2.3.2 The Gate Burton, West Burton and Cottam schemes each have main battery storage areas as shown in **Figure 2.2**. Tillbridge has taken a different approach, with the scheme being DC-coupled with batteries located in individual containers or housed within a larger building or buildings, typically coming in containerised solutions dispersed across the scheme's principal site. The precise number of individual battery storage containers will depend upon the level of power capacity and duration of energy storage that each project will require and work is ongoing to determine this. The areas shown as 'BESS and solar stations' in **Figure 2.2** for Tillbridge are distributed across the scheme's principal site and located alongside the solar stations. Solar stations comprise a DC/AC inverter and a LV/MV transformer, including switchgear with these areas not used solely for battery storage.

2.3.3 As can be seen from **Figure 2.1**, the construction haulage routes for the Gate Burton scheme follow a range of routes including the A156 north-south corridor, A1500 east-west corridor and routes further afield including the A57 (accessed via the A156 to the south), the A631 to the east and west, and the A15 to the north and south. This similarly applies to the other three solar projects, although these tend to be more focussed on the A15, A1500 and A631. In terms of construction vehicle routing overlaps between the four projects, these mainly include the A15 (with traffic predominantly serving the Cottam scheme), the A1500 (predominantly serving the West Burton scheme), the A631 (predominantly serving the Tillbridge scheme) and the A156 (predominantly serving the Gate Burton scheme). The construction haulage route for the Cottam scheme is slightly more complex because of the geographical split between the different areas that make up the project. All projects have additional accesses off smaller roads for both the solar array areas and the cable route corridor. For all projects traffic is concentrated in the construction periods, with limited operational traffic.

2.3.4 Section 3.6 of this Report provides more detail on collaboration on access points and design for the four projects.

2.4 Examination timetables

2.4.1 **Table 2.2** sets out the key dates in the examinations for the Cottam, West Burton, Gate Burton and Tillbridge schemes, as per the Rule 6 letters for each scheme. The table includes the details from the Rule 8 letter for West Burton as published on 16 November 2023.

Table 2.2 Overview of Examination Timetables for the schemes

Project	03/07/2023	10/07/2023	17/07/2023	07/08/2023	21/08/2023	28/08/2023	04/09/2023	11/09/2023	02/10/2023	16/10/2023	23/10/2023	06/11/2023	20/11/2023	04/12/2023	11/12/2023	18/12/2023	01/01/2024	08/01/2024	15/01/2024	22/01/2024	29/01/2024	05/02/2024	26/02/2024	04/03/2024	11/03/2024	01/04/2024	29/04/2024	06/05/2024	14/10/2024	28/10/2024	04/11/2024	11/11/2024	18/11/2024	09/12/2024	13/01/2025	27/01/2025	03/02/2025	24/02/2025	03/03/2025	10/03/2025	31/03/2025	07/04/2025
Gate Burton		1	1	2		3		2	4		3		5		6		7																									
Cottam										1			2			3			2		4		5	6																		
West Burton													1	1A			2	3					4		2	5	6	7														
Tillbridge																													1	1A	2	1	3		4	2	5		3	6	7

KEY

Deadlines

Hearings

Publication of written questions

3. Approach taken to coordinate between the projects

3.1 Introduction

3.1.1 This section describes the ways in which the undertakers of the Gate Burton, Cottam, West Burton and Tillbridge schemes collaborated when designing the schemes, making applications and through the Examination periods.

3.1.2 The Gate Burton, West Burton and Cottam schemes are all on similar timelines and significant work has been undertaken to minimise cumulative impacts associated with the projects. This includes devising a shared cable route corridor, adopting similar methodologies for the environmental assessment and managing consultation periods in a way that reduces confusion for communities and stakeholders. Due to the differences in projects, locations and teams, environmental assessment methodologies are similar but not always identical. The aim of this collaboration is to reduce overall environmental and social effects of the schemes, particularly on communities close to the cable route corridor and sensitive heritage and ecological receptors close to the River Trent. Further details of the meetings that have taken place to co-ordinate scheme development are detailed below.

3.1.3 The Tillbridge scheme is at an earlier stage in the DCO process than the Gate Burton, Cottam and West Burton schemes. The Gate Burton, West Burton and Cottam schemes had Preliminary Environmental Information Reports (PEIR) available for those three projects when preparing their respective Environmental Statements. In contrast, no PEIR was available at the time for the Tillbridge scheme as the project did not commence Statutory Consultation until the end of May 2023. This was after the other three applications had been submitted. Cumulative impacts for Tillbridge were therefore considered using the Tillbridge Scoping Report. As set out in Chapter 6 of this report, the cumulative impact assessments for the Cottam, West Burton and Gate Burton schemes have been revisited as further information has become available. Chapter 18: Cumulative Effects and Interactions of the Environmental Statement **[EN010142/APP/6.1(Rev04)]** for the Tillbridge scheme provides an updated cumulative effects assessment, considering latest published information across all four projects.

3.1.4 Since the applications for the first three projects have been submitted, the undertakers of the Gate Burton, West Burton and Cottam schemes have agreed to enter into reciprocal protective provisions, as detailed further in Section 4. The three projects also included draft protected provisions for Tillbridge in their draft DCOs so they could be included when the DCO application for Tillbridge was submitted.

3.1.5 Reciprocal protective provisions have been included within the draft DCO for the Tillbridge Solar Project **[EN010142/APP/3.1(Rev07)]** for the other three projects**.**

3.2 Collaboration on this report

3.2.1 The undertakers of all four schemes have worked collectively to produce this Report. Information and GIS data from the undertakers of all four schemes has been combined in order to compile:

a. **Table 2.1** outlining the key features of each scheme including timings, construction phasing, grid connection and operation commencement; and

b. **Figures 2.1 and 2.2** showing the interrelationship between the schemes on the ground.

3.2.2 The first version of this report (version 0) was submitted at Deadline 1 in the Gate Burton scheme Examination (18 July 2023). All undertakers were provided with a draft report prior to that deadline in order to review and check the accuracy of information provided on their specific schemes, and all provided comments that were incorporated prior to submission. Subsequent versions have similarly been reviewed and approved by all undertakers prior to submission.

3.2.3 Chapter 6 of the first version of the Report (version 0) describes the process the Gate Burton scheme team has undertaken to confirm whether any changes to cumulative effects occur due to further information being available on all schemes.

3.2.4 All four undertakers have worked together to produce the joint version of the Report (i.e. version 1 and all subsequent versions), including an updated cumulative assessment at Chapter 6 and the associated Cumulative Effects Table at **Appendix E**.

3.3 Meetings held and discussion points

3.3.1 The undertakers of the Gate Burton, Cottam, West Burton and Tillbridge schemes have met regularly to discuss areas of collaboration and co-ordination between the schemes. These meetings initially took place between the Gate Burton, Cottam and West Burton Schemes and have widened to include the Tillbridge project as it developed.

3.3.2 The undertakers of the Gate Burton, Cottam and West Burton schemes have collaborated from an early stage when approaching landowners regarding their proposals. This included joint landowner engagement for early non-intrusive surveys. Depending on the activities being undertaken, meetings were held on a fortnightly or monthly basis between communications teams, heritage teams and environmental leads. A list of meetings held between parties is provided in **Appendix A**, although informal engagement has also been held outside these scheduled meetings and site visits. Joint working with landowners has also been progressing with Tillbridge since the scheme has been announced publicly. Data is also being shared between teams to avoid the need to repeat surveys for areas affected by more than one project, particularly the shared cable route corridor.

3.3.3 At all stages of the projects, the land referencing teams engaged landowners on behalf of each project but, through collaboration, opportunities were found to engage with landowners about all projects, particularly in the shared cable route corridor. For example, the Gate Burton, Cottam and West Burton

schemes took a joint approach to archaeological geophysical surveys and the four projects have shared trial trenching results in the shared cable route corridor. This reduced the number of times surveyors were accessing the same land parcels and disruption to landowners, as well as enabling sharing of survey costs.

3.3.4 There has also been extensive collaboration between the Gate Burton, Cottam and West Burton schemes in the preparation of Environmental Statements, including discussions on survey methodologies, viewpoints and assessment of individual and cumulative effects.

3.3.5 The Gate Burton, West Burton and Cottam schemes have also worked together to identify and agree the shared cable corridor and submitted cable corridors that are almost identical in the shared area. Collaboration and joint working with Tillbridge with respect to the design iteration of its cable route corridor has also been undertaken, with all four developers working together to achieve a shared corridor as much as possible and to minimise environmental effects. The undertakers continue to collaborate as four projects to identify further ways to reduce impacts where possible, for example, through examining access routes, the use of shared haul roads and on planned consultation. Further detail on these areas of collaboration is provided below.

3.4 Approach to consultation

3.4.1 In application preparation and during consultation, the Gate Burton, Cottam and West Burton undertakers cooperated with each other to ensure clear communication and to distinguish between the projects. The consultations opened and closed on different dates and events were held over different periods, with regular collaboration ensuring this was the case. This coordination allowed the local community the opportunity to attend events for each of the projects and to have sufficient time to provide feedback. Similar conversations were undertaken with Tillbridge Solar in the timing of both their non-statutory and statutory consultation periods to avoid clashes.

3.4.2 Maps and plans were created to show the shared aspect of the schemes to ensure those attending consultation events understood the scheme under discussion and how it related to the other two schemes. For the Gate Burton scheme, this included the map at **Figure 3.1** below showing the shared cable route corridor. A map was also created showing the layouts of the Gate Burton, Cottam and West Burton schemes (see **Figure 3.2**) to assist understanding of how the projects related to one another and enable understanding of potential cumulative effects. The same plan was used in the West Burton and Cottam schemes' statutory consultation events to ensure this information was shared with all attendees. Tillbridge Solar was not included on the maps as they were created before the Tillbridge scheme launched publicly, however, Tillbridge used a similar plan which provided details of all four schemes in its consultation documents (see **Figure 3.3**).

Figure 3.1 Gate Burton scheme stage two consultation plan showing shared cable route corridor. Please note that the content is superseded by application plans.

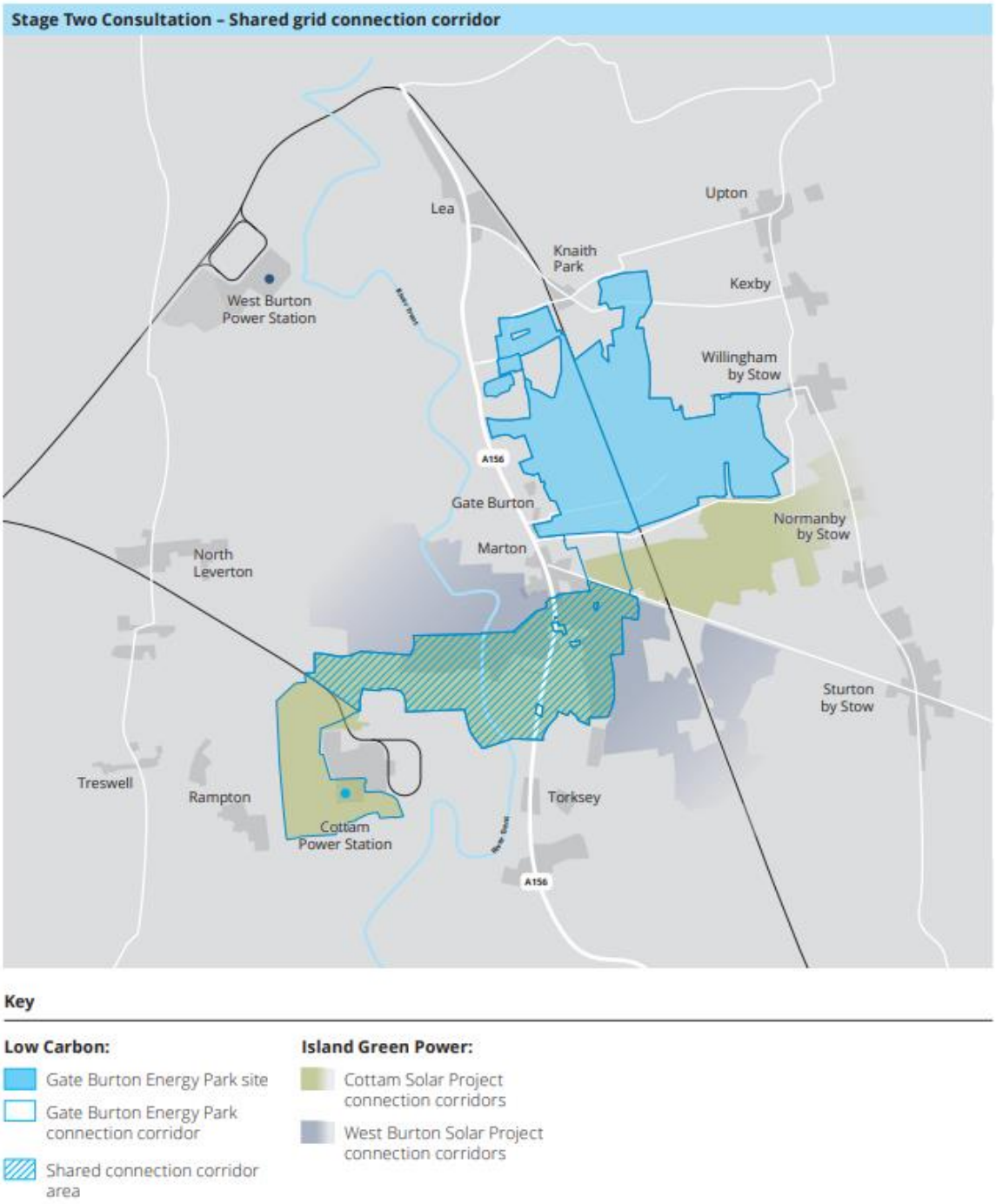


Figure 3.2 Consultation plan showing initial layouts of the Gate Burton, Cottam and West Burton schemes. This plan has now been superseded as the schemes have evolved.

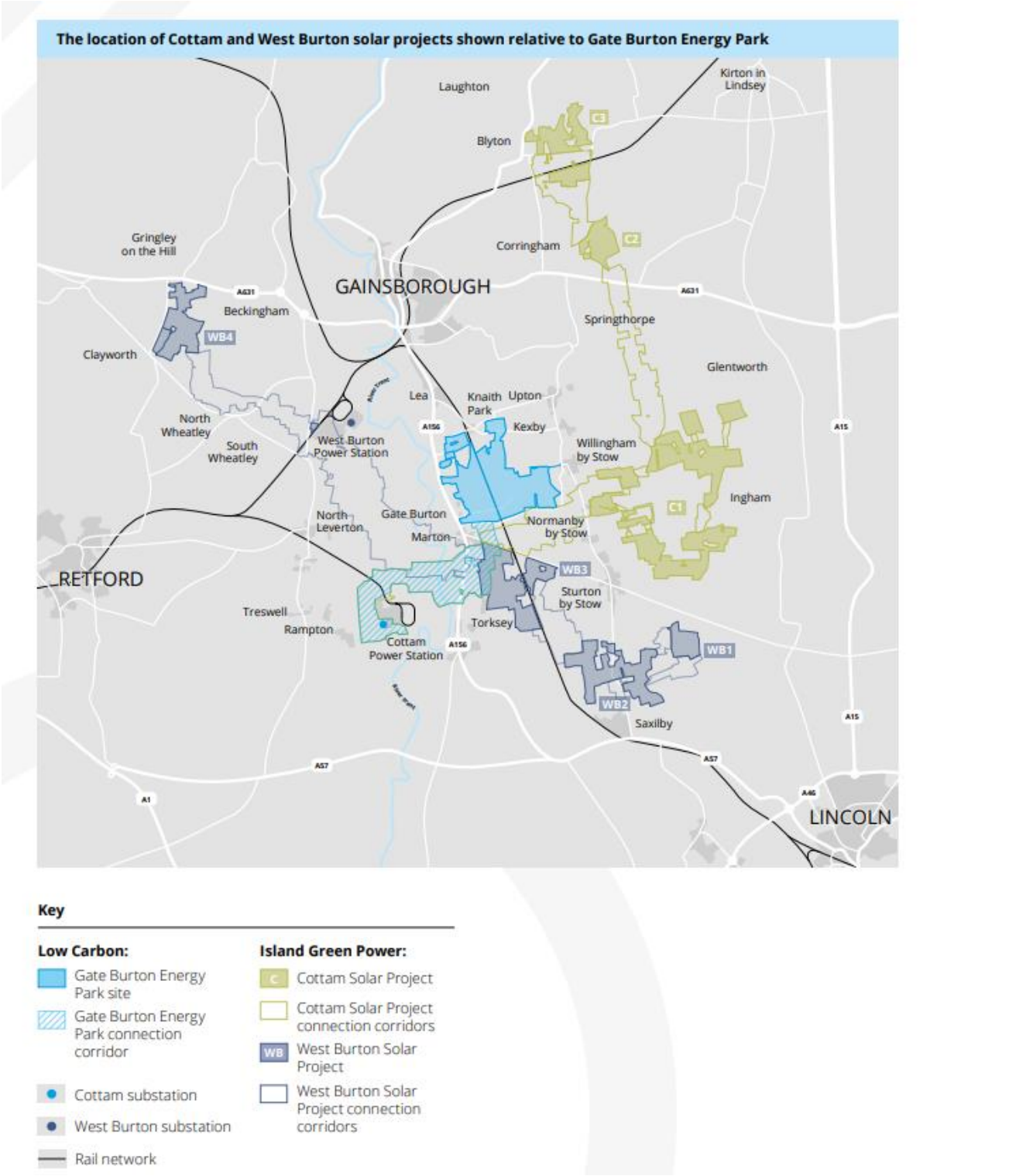
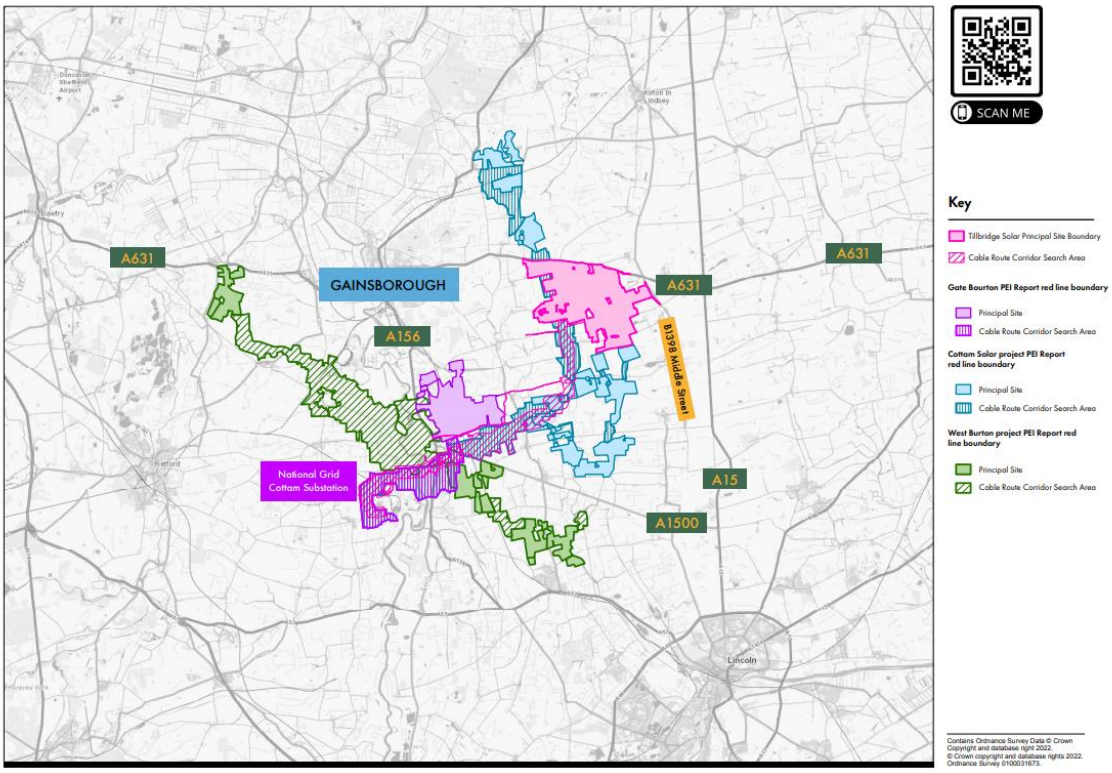


Figure 3.3 Consultation plan used in Tillbridge Consultation showing all four schemes. This plan has now been superseded as the schemes have evolved.



3.4.3 Regular meetings were held between the consultation teams for each project to ensure messaging was consistent and that communications were being delivered in a way that defined the individual projects, while acknowledging the cumulative impacts. All teams were aware of the events being held by the other projects and were ready to provide information about events on other projects when asked. Whilst inevitably there were individuals who requested clarification on the project being considered at events, in the experience of all four developers, attendees were generally aware of the project under consideration and the others in the area.

3.5 Collaboration in design: shared cable route corridor and mitigation measures

3.5.1 The undertakers for the Gate Burton, West Burton, Cottam and Tillbridge schemes also worked collaboratively on design development and environmental avoidance/mitigation to reduce overall environmental and social effects. In particular, the scheme developers have worked together to reduce the impact on communities living in close proximity to the shared cable route corridor and on known ecological and archaeologically sensitive areas adjacent to the River Trent, including the Viking Great Army Winter Camp (MLI125067) on the eastern side of the River Trent (refer to Chapter 7: Cultural Heritage of the Gate Burton ES **[EN010131/APP-016/3.1]**), Chapter 13 Cultural Heritage of the Cottam ES **[EN010133/APP-048]**, Chapter 13 Cultural Heritage of the West Burton ES **[EN010132/APP-051]**) and Chapter 8 Cultural Heritage of the Tillbridge ES **[EN010142/APP-039]**.

3.5.2 The shared cable route corridor (see area 4b in the Gate Burton **Works Plans [EN010131/CR1-009/5.2],** Work package 6B on the Cottam Works Plan **[EN010133/REP4-005]**, Works package 5B on the West Burton Works Plan **[EN010132/REP1-004]**) and Work No. 4C, 4D and 4E on Tillbridge Works Plan **[EN010142/ REP2-004]** comprises an area within which the Gate Burton undertaker, the Cottam undertaker and the Tillbridge undertaker will all locate their connections to Cottam substation; and, in part, the West Burton undertaker will locate its connection to West Burton substation. The shared cable route corridor is further defined within Chapter 5: EIA Methodology of the Gate Burton ES **[EN010131/REP4-007/3.1]**, Chapter 2 EIA Process and Methodology of the Cottam ES **[EN010133/APP-037]**, Chapter 2 EIA Process and Methodology of the West Burton ES **[EN010132/APP-040]**) and Figure 4-6: Shared Cable Route Corridor of the Tillbridge ES **[EN010142/APP-149]**, with the cumulative effects and respective environmental mitigation reported within each of the topic chapters and Chapter 18: Cumulative Effects and Interactions of the Tillbridge ES **[EN010142/APP/6.1(Rev04)]**.

3.5.3 Shared mitigation measures include excavation and recording (strip, map and record) of archaeological remains in advance of construction activities for cultural heritage within the shared cable route corridor. Shared mitigation measures for ecology include joint mitigation to be undertaken with the Cottam and West Burton schemes within the shared cable route corridor and this will be outlined in the detailed Construction Environmental Management Plans (CEMP(s)), secured in the respective DCOs. Further details will be set out within the Detailed Construction Traffic Management Plans for mitigation opportunities for transport and traffic. Section 5 provides further detail on shared mitigation measures secured in the Gate Burton draft DCO **[EN010131/REP6-023],** the Cottam draft DCO **[EN010133/REP5-005]**, the West Burton draft DCO **[EN010132/EX6/WB3.1_G]** and the Tillbridge draft DCO **[EN010142/APP/3.1(Rev07)]**.

3.5.4 In addition to the above collaboration on the initial design of the shared cable route corridor and associated mitigation, the undertakers of the Gate Burton, Cottam and Tillbridge schemes have continued to work together to consider revisions to the shared cable route corridor around the former Cottam power station site and access to the Cottam Substation.

3.5.5 The Gate Burton, Cottam and Tillbridge schemes all propose to connect into the Cottam Substation, which is situated in the south of the former Cottam power station site. The former power station site is owned by EDF (Thermal Generation) Limited ("EDF") and is recognised in the draft Bassetlaw Local Plan as a 'Priority Regeneration Area'. EDF has plans for redevelopment of the area, with detailed proposals yet to be determined. The Cottam Substation would be retained in any redevelopment, but EDF has expressed a preference for the connections and accesses into it to be designed to minimise the impact on its future plans for the wider site. In particular, during discussions with the scheme undertakers in August- September 2023, EDF indicated a preference for the cable routes to enter the Cottam Substation from the south and for the routes for the Gate Burton, Cottam and Tillbridge schemes to be co-ordinated. EDF also indicated a preference for the access into Cottam Substation to be along Torksey Ferry Road in the south to minimise the potential conflict with proposed demolition works and future redevelopment to the extent currently known. Uniper (UK) Limited (which owns assets to the north of Cottam

Substation and is proposing expansion of those assets) also expressed a preference for the relevant schemes to connect into the Cottam Substation from the south and that the construction access be located along Torksey Ferry Road.

3.5.6 The undertakers for the Gate Burton, Cottam and Tillbridge schemes worked collaboratively to address the preferences raised by EDF and Uniper, including attendance at joint meetings between the undertakers, EDF and Uniper to discuss the proposals. The details of the meetings held are outlined in **Appendix A** to this Report and included a joint meeting on 23 August 2023 with EDF, Uniper and the technical teams of the relevant schemes to walk the potential cable routes and discuss the technicalities of the proposed route into the Cottam Substation, taking into account the current infrastructure and other constraints. A further meeting was held with EDF on 12 September 2023 with all three developers present to discuss access options. At this meeting it was agreed in principle that EDF was supportive of the schemes expanding their Order limits to accommodate a construction access from Torksey Ferry Road and the additional land to the south of Torksey Ferry Road for flexibility to route the schemes' cables into the Cottam Substation, should all three schemes come forward. Further joint meetings took place in September 2023 as the undertakers' plans to accommodate the scheme changes developed.

3.5.7 In response to the preferences raised and discussions held, the undertakers for the Gate Burton scheme submitted a Change Request on 3 October 2023 **[EN010131/CR1-043/8.24]** to request the extension of its proposed Order limits to include further land on and around Torksey Ferry Road which would allow the scheme's cables to enter the Cottam Substation from the south and allow access to be routed along Torksey Ferry Road. The Change Request was accepted by the Examining Authority on 6 October 2023 **[EN010131/PD012],** with a timetable set for the change request to be considered during the Examination for the scheme.

3.5.8 Cottam Solar Project submitted a Change Application on 8 December 2023 to allow a similar extension of its Order limits **[EN010133/AS-063]**. The Change Request was accepted by the Examining Authority on 18 December 2023. Tillbridge Solar Project Order limits also account for this additional area.

3.6 Collaboration on access points

3.6.1 The undertakers of all four schemes have continued to work collaboratively (in the case of the Gate Burton, Cottam and West Burton schemes, post-application) to minimise cumulative impacts associated with the construction of access points from the local highway network within the shared cable route corridor. This collaboration has happened in response to comments raised after the submission of the Gate Burton, Cottam and West Burton applications.

3.6.2 During examination of the Gate Burton scheme, Lincolnshire County Council queried whether environmental impacts could be reduced through re-considering the design of accesses for the Gate Burton scheme. A similar query was raised on accesses by Nottinghamshire County Council for the same project. When considering these accesses individually, the opportunity was identified to proactively explore whether impacts could be reduced still further by combining accesses within the shared cable route corridor.

3.6.3 From an access design perspective, any cumulative impacts are focused principally upon the cable route corridor, with no shared access points related to the sites of the solar arrays or BESSs.

3.6.4 On the 20 June 2023, representatives from all four schemes met to explore the potential to share and harmonise access points within the shared cable route corridor. The outcome of this meeting was to agree actions to consider whether any accesses could be combined, particularly any areas where combination would reduce cumulative environmental effects or increase safety.

3.6.5 The Gate Burton undertaker produced plans 60664324-HGN-DR-CH-0037 through to 60664324-HGN-DR-CH-0041 (see **Appendix B** of this report) to visually identify accesses proposed for each of the four projects. This information was based upon the latest publicly available information at the start of June 2023. A new plan 60664324-HGN-DR-CH-0045 was included at **Appendix B** of version 2 of the joint report, in order to show interrelationships of accesses on Torksey Ferry Road to account for the proposed changes to the Order limits for the Gate Burton scheme.

3.6.6 From this exercise, several areas were identified for further investigation:

a. A1500 Stow Park Road (north and south)

b. A156 High Street near Marton (east and west)

c. Headstead Bank (east and west)

d. Cottam Road (north and south)

e. Torksey Ferry Road (north and south)

3.6.7 All the accesses at the above locations have been discussed between undertakers, although any changes would be complex due to the fact that they are part of four separate applications, three of which have been submitted. The outcomes of the engagement thus far are as follows:

a. The Gate Burton undertaker agreed in conjunction with the Cottam and Tillbridge undertakers to relocate the proposed access on Cottam Road, identified as point 15/12 on Sheet 15 of the Streets, Rights of Way and Access Plan for the Gate Burton Scheme **[EN010131/APP-210/5.3]** to the existing field access denoted by point 15/01. This change was agreed with Nottinghamshire County Council on the 06/07/2023. The documents for the Gate Burton Scheme were amended at Deadline 2 of the Gate Burton Examination on 8 August 2023. By undertaking this change, a common access point to the land south of Cottam Road is achieved for the Gate Burton, Cottam and Tillbridge projects and this would reduce the overall quantum of hedgerow removal to facilitate access at this location.

b. For the access proposed on the A156 High Street at point 12/09 on Sheet 12 of the Streets, Rights of Way and Access Plans for the Gate Burton Scheme **[EN010131/APP-210/5.3]**, it has been confirmed that all parties are already utilising the same existing field gate to access land to the west of the A156 High Street and therefore access at this location is already co-ordinated.

c. For the access proposed on Headstead Bank at point 14/02 on Sheet 14 of the Streets, Rights of Way and Access Plans for the Gate Burton Scheme **[EN010131/APP-210/5.3**, it has been confirmed that the Gate Burton, Cottam and Tillbridge schemes are already utilising the same existing field gate to access land to the east of Headstead Bank and therefore access at this location is already co-ordinated.

3.6.8 The Gate Burton undertaker submitted a Technical Note on Access Updates and Cumulative Impact Assessment **[EN010131/REP2-045/8.10]** as part of its Deadline 2 submissions (8 August 2023). This set out the access changes to further minimise the environmental impacts associated with access for the Gate Burton scheme and includes those access identified in collaboration with the undertakers of the other three schemes. It also provided an updated cumulative impact assessment which considers the effect of each access in light of the other schemes. These changes have been made to the Gate Burton Scheme and require no changes from any other project.

3.6.9 The Cottam and West Burton Solar undertakers have made the following updates to their access proposals, with Cottam Change Application being submitted on 8 December 2023 and accepted on 18 December 2023 and West Burton Change Application being submitted on 19 January 2024 and accepted on 24 January 2024:

a. For access points off the A1500 Stow Park Road, the Cottam scheme Accesses AC110 and AC109 and West Burton scheme Accesses AC112 will be updated to align with the proposed locations presented by the Gate Burton scheme. Therefore, this will co-ordinate the north/south accesses off the A1500 Stow Park Road between the respective projects.

b. For access points off the A156 High Street Westbound, representatives of West Burton scheme confirmed that access AC109 Westbound off the A156 High Street will be removed, with access to land parcels to the west off the A156 High Street being accessed via West Burton Access AC111. This change aligns to the access strategy presented by both the Gate Burton and Cottam Solar schemes and therefore access proposals to land to the west off the A156 High Street are now co-ordinated between the respective projects.

c. For access points off the A156 High Street Eastbound, representatives of the Cottam and West Burton schemes confirmed that accesses eastbound off the A156 High Street, Cottam Access AC108 and West Burton Access AC110 will be updated to align with the proposed locations presented by the Gate Burton scheme. Therefore, this will co-ordinate the accesses Eastbound off the A156 High Street between the respective projects.

d. For access points off Headstead Bank Westbound, representatives of the Cottam Solar Park Scheme confirmed that Access AC105 will be updated to align with the proposed location presented by the Gate Burton scheme. Therefore, this will co-ordinate the accesses Westbound off Headstead Bank between the respective projects

e. For access points off Cow Pasture Lane, representatives of the Cottam scheme confirmed that access AC104 will be removed, with access to the land to the north of Cottam Road being serviced via access AC103.

This will therefore minimise the overall number of accesses in this location between the respective projects.

3.6.10 On 6 November 2023, the Tillbridge scheme undertakers confirmed the following updates to their access proposals:

a. For access point off the A1500 Stow Park Road North, the Tillbridge undertaker has confirmed that their prospective access, Access 10, has been updated to align with the proposed location presented by Gate Burton.

b. For access point off the A1500 Stow Park Road South, the Tillbridge undertaker has confirmed that their prospective access, Access 9, has been updated to align with the proposed location presented by Gate Burton.

c. For the works introduced as part of the Gate Burton change request **[EN010131/AS-025],** the Tillbridge team will access land to the South of Torksey Ferry Road via Shortleys Lane, with aligns to the Gate Burton Access 17/05 presented on Sheet 17 of the Gate Burton Streets, Rights of Way and Access Plans **[EN010131/CR1-011/5.3]**

3.6.11 On the 16 November 2023, the Tillbridge scheme undertakers confirmed the following updates to their access proposals:

a. For access point off the Cottam Road North, the Tillbridge undertaker confirmed that their prospective access, Access 4, has been updated to align with the proposed location presented by Gate Burton.

3.6.12 The Streets, Rights of Way and Access Plans prepared for the Tillbridge scheme **[EN010142/REP1-005]** incorporate the coordinated access locations listed above.

3.6.13 The undertakers of all four schemes will continue to engage with each other throughout the DCO process and will update the relevant ExAs where changes to any access locations are agreed between respective projects and subsequently confirmed with the relevant local authority.

4. Shared Development Consent Order Provisions

4.1 Introduction

4.1.1 This section sets out the DCO provisions that are shared with other schemes to ensure that the schemes can be implemented satisfactorily in relation to other projects.

4.1.2 The Gate Burton and Cottam scheme solar arrays are located on distinct and separate sites. The cable corridor for each project is initially distinct, however they meet close to Gate Burton and then are entirely overlapping from the initial point of overlap to the grid connection location for both projects at the Cottam National Grid Substation. The Tillbridge scheme is also located on a distinct and separate site, although cabling which links Cottam 2 and Cottam 1 crosses under the western part of the Tillbridge Principal Site. The cable corridor for Tillbridge joins Cottam's cabling at the edge of the Tillbridge Principal Site and overlaps along the same route used by Cottam and Gate Burton to the Cottam National Grid Substation. The grid connection for the West Burton scheme partially overlaps/crosses the cable corridors for Cottam and the Gate Burton scheme to connect to West Burton National Grid substation.

4.1.3 In the areas of overlap:

a. Each undertaker has sought development consent powers over the area of overlap;

b. Each undertaker has sought compulsory acquisition and temporary use powers over the area of overlap;

c. No undertaker has identified specifically where in the area of overlap its infrastructure will be placed to allow flexibility for detailed design post-consent.

4.1.4 The overlap is being managed via protective provisions, a private commercial agreement and by bespoke transfer of benefit provisions within each DCO.

4.1.5 The approach to ensuring reciprocal protections is confirmed in the Cooperation Agreement (see **Appendix C**) entered into between the parties, at Clause 5.5.

4.1.6 Protective provisions for the benefit of the Cottam undertaker are included in Part 4 of Schedule 15 of the Gate Burton draft DCO. The protective provisions for the benefit of the West Burton undertaker are included in Part 5 of Schedule 15 of the Gate Burton draft DCO [**EN010131/APP-215/6.1**] (and as amended since this version). Protective provisions for the benefit of the Tillbridge undertaker are included in Part 14 of Schedule 15 of the Gate Burton draft DCO.

4.1.7 The Cottam draft DCO includes the same protective provisions (with necessary amendments to company names etc.) for the Gate Burton undertaker (Part 11 of Schedule 16), the West Burton undertaker (Part 12 of

Schedule 16) and the Tillbridge undertaker (Part 17 of Schedule 16) **[EN010133/APP-016]** (and as amended since this version).

4.1.8 The West Burton draft DCO includes the same protective provisions (with necessary amendments to company names etc.) for the Gate Burton undertaker (Part 12 of Schedule 16), the Cottam undertaker (Part 11 of Schedule 16) and the Tillbridge undertaker (Part 17 of Schedule 16) **[EN010132/APP-017]** (and as amended since this version).

4.1.9 The Tillbridge draft DCO **[EN010142/APP/3.1(Rev07)]** includes the same protective provisions (with necessary amendments to company names etc.) for the Gate Burton undertaker (Part 5 of Schedule 15), the Cottam undertaker (Part 4 of Schedule 15) and the West Burton undertaker (Part 6 of Schedule 15).

4.1.10 Now that the Tillbridge application has been submitted, the agreed approach between the developers is that Gate Burton, Cottam and West Burton will advise the Examining Authority and/or Secretary of State for their respective schemes (dependant on the stage of the scheme) of any necessary changes to the Tillbridge protective provisions contained in their respective DCOs to reflect the confirmed plan references and works numbers.

4.1.11 The following can be noted from the protective provisions:

a. The protective provisions relate to a specified Works No. in another party's DCO – this is the area of overlap. For the Gate Burton draft DCO this is Work No. 4B, for Cottam it is Work No. 6B, for West Burton it is Work No. 5B and for Tillbridge it is Work No 4C, 4D and 4E;

b. The provisions apply unless otherwise agreed between the parties, a standard approach which allows refinement of technical and commercial solutions open post-DCO award, subject to the parameters of each consent;

c. The provisions prevent one party from compulsorily acquiring rights etc. in respect of another party's apparatus or the area of overlap without consent, not to be unreasonably withheld or delayed;

d. Works within the area of overlap, within a set distance of 25m from the area of overlap or any apparatus or which may adversely affect apparatus (specified works), including proposed apparatus, must be carried out with prior consent, not to be unreasonably withheld or delayed, and subject to a deemed approval mechanism;

e. There is provision for advance sharing of plans for specified works and approvals of works being subject to conditions;

f. Access must be maintained for another party to access its works; or alternatives provided;

g. There are provisions for payment of damages (including an obligation to mitigate loss); and

h. The standard arbitration provisions apply.

4.1.12 These provisions provide each undertaker sufficient protection from overlapping development consent and compulsory acquisition powers, providing sufficient assurance to each Examining Authority and the Secretary of State that each DCO can be granted as sought. Clause 5.4 of the

Cooperation Agreement between the parties confirms that the protective provisions included in the draft DCOs are appropriate.

4.1.13 In addition, the undertakers have worked closely together to negotiate a standard set of protective provisions where these relate to third party interests in the cable route corridor area of overlap, to seek to minimise the burden on stakeholders and ensure consistency in protections offered. For example, the undertakers have collaborated in respect of the Canal and River Trust (CRT) protective provisions to agree consistent provisions across all three projects. These protective provisions have now been agreed between the CRT, Gate Burton Energy Park, Cottam Solar Project and West Burton Solar Project. The agreement with Gate Burton is explained in the Statement of Common Ground (SoCG) for that party, with the signed version submitted at Deadline 4 [**EN010131/REP4-016**].

4.2 Transfer of benefit provisions

4.2.1 In addition to including reciprocal protective provisions, each undertaker has included bespoke transfer of benefit provisions within the draft DCO, to facilitate ease of transfer of relevant rights to the other named undertakers where they relate to the shared cable corridor (e.g. for Gate Burton this is Work No. 4B).

4.2.2 The purpose of this provision is to enable the appointment of a joint contractor, or to allow one or more undertakers to undertake works on behalf of the other, if appropriate, post-detailed design. This would reduce the impact of the scheme construction.

4.3 Cooperation agreement

4.3.1 On 5 July 2023, a formal Cooperation Agreement was signed between the undertakers of the four projects; the Gate Burton undertaker, the Cottam undertaker, the West Burton undertaker and the Tillbridge undertaker. A copy of this agreement is provided in **Appendix C**.

4.3.2 The Agreement sets out the fundamental principles of cooperation between the parties, and how they will interact with third parties. Specifically, the agreement requires:

a. The parties must cooperate with each other and act reasonably and in good faith (Clause 4.1) including specifically to mitigate adverse impacts on persons with an interest in the land affected by the Projects (Clause 4.1.1);

b. Each party must act as a Reasonable and Prudent Developer (Clause 4.2) i.e. acting in good faith as a skilled and experienced developer would;

c. There is agreement that the protective provisions included in the draft DCOs in favour of the other parties (as relevant) are appropriate (Clause 5.4);

d. There is agreement that protective provisions for Tillbridge on substantially the same terms will be included at the appropriate time (Clause 5.5) and vice versa in the Tillbridge draft DCO;

e. There is an agreement to enter into a Further Agreement in due course, to cover the matters in **Appendix C**, which includes coordinating stakeholder and community engagement post-consent, and seeking to minimise interference to landowners and impacts on the environment. The agreement will also establish how the parties will work together to discharge relevant DCO requirements in a consistent manner.

4.3.3 Therefore, the Cooperation Agreement not only secures cooperation and working in good faith between the parties, it ensures they work together to reduce environmental and land impacts. This level of cooperation between developers is unusual and has been achieved through dedicated positive collaboration between parties. The SoCG between the parties (submitted to the Examinations of Gate Burton [**EN010131/APP-REP-017/4.3K**], Cottam [**EN010133/REP2-066**], West Burton [**EN010132/REP1-071**] and Tillbridge [**EN010142/REP1-037**]) confirms discussions will continue throughout the Examination phase and into construction but there are no matters of disagreement between the parties.

4.3.4 In terms of the Further Agreement referred to in paragraph 4.3.2(e) above, the parties have agreed to the principle of a further cooperation agreement that will relate to the discharge of requirements and detailed design stages. Discussions are ongoing between the Parties regarding this further cooperation agreement

5. Shared Mitigation Measures in Draft DCOs

5.1 Introduction

5.1.1 This section identifies shared mitigation measures that have been identified and developed between the projects. As requested within the Rule 6 letter for Gate Burton, the section below also sets out how these mitigation measures are secured in the Gate Burton draft DCO, with references to the Cottam and West Burton draft DCOs where appropriate.

5.2 Shared cable route

5.2.1 The Gate Burton Outline Design Principles Statement **[EN010131/REP4-005/2.3]**, the Cottam Concept Design Parameters and Principles document **[EN010133/REP3-020],** the West Burton Concept Design Parameters and Principles **[EN010132/REP3-020]** and the Tillbridge Outline Design Principles Statement **[EN010142/REP4-020]** set out a number of design measures that were embedded during the development of the schemes. The cable route corridor for the Gate Burton scheme is Work No. 4 in the draft DCO **[EN010131/CR1-017/6.1]**, Work No. 6 for Cottam **[EN010133/REP5-005],** Work No. 5 for West Burton **[EN010132/REP3-006]** and Work No. 4 for Tillbridge **[EN010142/REP2-004]**. Area 4B in the Gate Burton Works Plans **[EN010131/CR1-009/5.2]**, Area 6B in the Cottam Works Plans **[EN010133/REP4-005]** and Area 5B in the West Burton Works Plans **[EN010132/REP1-004]** show the area of the cable route corridor shared by the Gate Burton, West Burton, Cottam and Tillbridge schemes, with this area covering a significant proportion of the cable route. Area 4C in the Tillbridge **Works Plans [EN010142/REP2-004]** shows the area of the Cable Route Corridor shared with Cottam, area 4D in the Tillbridge **Works Plans [EN010142/REP2-004]** shows the area of the Cable Route Corridor shared with West Burton and area 4D and 4E in the Tillbridge **Works Plans [EN010142/REP2-004]** shows the area of the Cable Route Corridor shared with Gate Burton. These overlaps have been intentional to reduce environmental and social impacts of the cable routes.

5.2.2 Avoidance areas and construction methods (such as Horizontal Directional Drilling (HDD)) (as shown on Gate Burton ES Volume 3: Appendix 2-B (Figure 1) **[EN010131/REP2-019/3.3]**) to reduce effects are shared across all projects within the shared area of the cable route corridor. There has been particular joint working on the section of the cable route corridor near the River Trent, including working collaboratively with the Canal and River Trust to agree Protective Provisions in this area (e.g. see relevant Gate Burton SoCG with progress on these discussions [**EN010131/REP4-016/4.3l**]). The agreed position has also been incorporated within the **draft DCO** for Tillbridge **[EN010142/APP/3.1(Rev07)]**.

5.3 Cultural heritage

5.3.1 Chapter 7: Cultural Heritage of the Gate Burton ES **[EN010131/APP-016/3.1]** details additional mitigation measures comprising of excavation and recording (strip, map and record) of archaeological remains in advance of construction activities. The sites to which excavation and recording relate are identified

within the Archaeological Mitigation Strategy **[EN010131/CR1-030/7.6]** and secured by Requirement 11 of the Gate Burton draft DCO.

5.3.2 The shared cable route corridor incudes mitigation specific to the corridor proposed with the Cottam and West Burton schemes, on Sites 8 – 16 as labelled in the Archaeological Mitigation Strategy. This mitigation is also included in the West Burton and Cottam Written Schemes of Investigation (WSI) **[EN010133/REP5-012 and EN010132/APP-122]** which are secured by Requirement 12 of the Cottam draft DCO **[EN010133/REP5-005]** and by Requirement 12 of the West Burton draft DCO **[EN010132/REP3-006]**.

5.3.3 Avoidance areas and construction methods (such as HDD) to reduce effects are shared across all projects within the shared cable route corridor and this includes the Tillbridge Solar project. The Tillbridge Archaeological Mitigation Strategy that will be prepared post-DCO Application submission will take into account these avoidance areas. For the purposes of the assessment of interrelationships and cumulative effects, it is assumed that the Tillbridge Solar Archaeological Mitigation Strategy will secure the same archaeological mitigation measures as the Gate Burton, Cottam and West Burton schemes within the shared cable route corridor.

5.4 Traffic and transport

5.4.1 Chapter 13: Transport and Access of the Gate Burton ES **[EN010131/REP4-013/3.1]** and Chapter 16: Transport and Access of the Tillbridge ES **[EN010142/APP-047]** state that the opportunity to combine mitigation across all four of the solar DCO schemes will be explored in order to reduce cumulative impacts during the construction phase.

5.4.2 In the event the construction schedules are overlapping, a joint Construction Traffic Management Plan (Joint CTMP) would be produced that will set out construction traffic management and control measures relevant to those areas where vehicle routes overlap.

5.4.3 At present there is no certainty that the other schemes will be consented and therefore that a Joint CTMP would be required. If they are all consented, they may be subject to different requirements on construction traffic or timescales, which may make production of one document across all projects challenging. No single party has authority over another and each DCO only controls the activities for that project. For all these reasons, a firm commitment cannot be made to prepare or agree a Joint CTMP. Notwithstanding the above, it is the developers' intention to together develop a Joint CTMP and this approach has been agreed between the parties as evidenced in this report and the cooperation agreement.

5.4.4 The Framework CTMP for the Gate Burton scheme sets out the possibility of a Joint CTMP in paragraph 3.2.6 and 7.6.1 [**EN010131/APP 167 and 168/3.3** and as amended]. The Outline CTMPs for Cottam [**EN010133/REP3-008**], West Burton [**EN010131/REP3-012],** and Tillbridge **[REP5-019]** also provide for a Joint CTMP. A Joint CTMP could support implementation of shared mitigation measures such as joint traffic management, joint consultation with Lincolnshire County Council traffic officers, combined vehicle access and routeing plans, shared use of construction compounds, taking a holistic approach to construction traffic planning and management. In the meantime,

the four developers are working closely together to identify further ways to collaborate and reduce impacts on communities and the environment. Progress on this is reported here and will be updated throughout the Examinations.

5.5 Ecology

5.5.1 Chapter 8: Ecology and Nature Conservation of the Gate Burton ES **[EN010131/REP4-009/3.1]** and Chapter 9: Ecology and Nature Conservation of the Tillbridge ES **[EN010142/APP-040]** state that where practicable, joint mitigation will be undertaken across all four of the solar DCO schemes within the shared cable route corridor. The detailed CEMP(s) will outline all ecological mitigation, which will likely include combined pre-construction surveys, protected species mitigation, translocation (if required), monitoring and post construction reinstatement plans. Joint ecological mitigation is secured in the CEMP by Requirement 14 of the Gate Burton draft DCO **[EN010131/CR1-017/6.1]** and Requirement 12 of the Tillbridge draft DCO **[EN010142/APP/3.1(Rev07)]**.

6. Cumulative Impact Assessment

6.1 Updated information

6.1.1 The Gate Burton, Cottam and West Burton undertakers relied upon the PEIRs for the other projects when preparing the cumulative impact assessment, presented in the Environmental Statements (ESs) for the applications. Now that the ESs are available for all three projects, the three developers have considered whether there have been any changes affecting the assumptions and conclusions made in its cumulative impact assessments.

6.1.2 No PEIR was available for the Tillbridge scheme when the Gate Burton, Cottam and West Burton cumulative impact assessments were carried out and instead the three undertakers relied on the Tillbridge Scoping Report. After the applications were submitted, a PEIR for Tillbridge was published. The three developers have therefore also considered whether there have been any changes between Tillbridge's Scoping Report and PEIR which affect the assumptions and conclusions made in the cumulative impact assessments.

6.1.3 Prior to Deadline 1 on the Gate Burton Examination (18 July) the Gate Burton undertaker reviewed the recently published Cottam Solar Project ES, West Burton Solar Project ES and Tillbridge Solar PEIR to identify whether the information contained would alter the cumulative assessment contained within the Gate Burton Scheme's ES. No changes to the conclusions in relation to likely significant cumulative effects were identified and no updates are required to the Gate Burton Scheme ES as a result.

6.1.4 Prior to the publication of the version of the Joint Interrelationships Report dated 3 October 2023, the Cottam and West Burton undertakers also reviewed all new information. The two undertakers confirmed that there is no change to likely significant cumulative effects and no updates are required to the Cottam or West Burton Scheme ESs.

6.1.5 The Tillbridge ES has considered all published information on the Gate Burton, Cottam and West Burton schemes and provides a cumulative effects assessment reflecting this information within Chapter 18: Cumulative Effects and Interactions of the ES **[EN010142/APP/6.1(Rev04)]**.

6.1.6 The published documents reviewed, and the review of the cumulative assessments contained within them as submitted Environmental Statements for each of the environmental disciplines is set out within a Technical Note provided as **Appendix E** to this Inter-Relationships Report.

6.1.7 The Technical Note provides a summary of the review of information made available subsequent to submission of the applications for the Gate Burton, West Burton and Cottam schemes DCOs. This Technical Note has been updated to take into account information published as part of the Tillbridge ES.

6.1.8 The joint review of the published ESs confirm that the cumulative effects reported within the Gate Burton, West Burton, and Cottam Environmental Statements as submitted remain unchanged.

6.1.9 Given that construction traffic has proved a particular area of interest for local communities and local authorities, **Appendix D** provides a detailed

assessment of the cumulative traffic impacts. Further detail on the cumulative traffic assessment for Tillbridge is presented within Chapter 18: Cumulative Effects and Interactions of the ES **[EN010142/APP/6.1(Rev04)].**

6.1.10 Following the close of Examination for Gate Burton Energy Park, the West Burton and Cottam Solar Projects updated **Appendix E** of the Joint Report on Interrelationships to include Soils and Agriculture as a standalone topic in line with ESs for these two schemes (West Burton ES Chapter 19 Soils and Agriculture **[EN010132/APP-057]** and Cottam ES Chapter 19 Soils and Agriculture Revision A **[EN010133/REP-010]**) and in response to the Cottam ExA's Written Question 2.8.7 **[EN010133/PD-015]**. This was not done previously, as this assessment topic was included in the Gate Burton ES Chapter on Socio Economics and Land Use **[EN010131/REP4-010]** and in the Socio-economics chapter of the PEIR for Tillbridge.. It is noted that the examination of the Cottam Solar Project has now also finished. A stand-alone Soils and Agriculture chapter has been published as part of the Tillbridge ES (refer to Chapter 15 of the Tillbridge ES **[EN010142/APP-046]**). Gate Burton Energy Park, Cottam Solar Project and West Burton Solar Project all submitted Technical Notes on the Cumulative Effects of Additional Schemes to the respective Examinations **[EN010131/REP4-049, EN010133/REP4-059 and EN010132/REP5-030]**. The purpose of these Technical Notes was to review and assess Schemes that have emerged since the start of the Joint Interrelationships Report, namely, Luminous Energy, One Earth Solar Farm and Great North Road Solar Park. These schemes have also been considered as part of Chapter 18: Cumulative Effects and Interactions of the Tillbridge ES **[EN010142/APP/6.1(Rev04)]** and Appendix 18-1: List of Cumulative Developments of the Tillbridge ES **[EN010142/APP-124].**

7. Summary of matters coordinated between NSIPs

7.1.1 This Report sets out the ways in which the undertakers of the Gate Burton, Cottam, West Burton and Tillbridge schemes have worked collaboratively to minimise the cumulative impacts associated with the projects, maximise the benefits of the scheme and introduce consistency into applications and assessments. The undertakers are of the view that the joint working between the four parties is an example of best practice within the energy industry, showing what can be achieved when separate developers work together towards common goals.

7.1.2 As a result of the collaborative working, the undertakers of the Gate Burton, Cottam, West Burton and Tillbridge schemes have developed a shared cable route corridor and a variety of shared mitigation measures. Mechanisms have been introduced to all submitted DCOs to enable each developer to develop the shared cable route corridor on behalf of all parties. This will help reduce the impacts that would otherwise be associated with developers either affecting several different routes, or the same routes at different times.

7.1.3 A collaboration agreement has been reached between all four parties to govern joint working going forward and introduce further efficiencies to the process.

7.1.4 The teams have also worked together extensively to align survey methodologies for ESs, share survey work to minimise disturbance to landowners and sites and identify ways to reduce impacts. Work carried out by all parties to minimise individual and cumulative impacts has meant few cumulative impacts are reported over the four projects. This collaborative working is continuing after submission of applications, with the most recent focus being on minimising the impact of the accesses within the shared cable route corridor. This work is likely to further reduce impacts.

7.1.5 The Gate Burton, West Burton, Cottam and Tillbridge undertakers have considered the now published ES information and do not consider there to be any changes to the conclusions of the cumulative assessments of the respective schemes.

7.1.6 A SoCG has been prepared between the four parties that does not identify any areas of disagreement. This was provided at Deadline 1 in the Gate Burton scheme Examination, with a signed version provided at Deadline 5 **[EN010131/APP/4.3K]**. Signed versions of the SoCG have been submitted to the Cottam Examination **[EN010133/REP2-066]** and to the West Burton Examination **[EN010132/REP1-071]**. The final version of the SoCG for Tillbridge Examination was submitted at Deadline 6 **[EN010142/APP/9.21(Rev01)]**.

Appendix A Summary of Discussions between Undertakers

Note attendees from each project include the client and contractors working on their behalf. All meetings below were on Microsoft Teams unless stated otherwise.

Date	Attendees	Record of Engagement
15/02/22	Gate Burton, Cottam and West Burton undertakers and their land reps.	Discussion on project status and landowner engagement for early non-intrusive surveys
Recurring meetings 15/02/22 – 04/07/22	Gate Burton, Cottam and West Burton undertakers and their comms teams	Regular fortnightly/monthly meetings to align on non statutory and statutory communications
Recurring meetings 17/02/22 – 07/11/22	Gate Burton, Cottam and West Burton undertakers and their environment teams	Heritage team discussions on approach to evaluation for all Schemes. Regular meeting scheduled during preparation of DCO submissions. Regular fortnightly/monthly discussions to align on heritage approach
In person meeting 22/02/22	Gate Burton, Cottam and West Burton undertakers	High level meeting to discuss Gate Burton, West Burton and Cottam projects
Recurring meeting 10/03/22 – 14/07/22	Gate Burton, Cottam and West Burton undertakers planning and environment leads	Monthly meetings with the planning and environment leads for Gate Burton, West Burton and Cottam.
17/03/22	Gate Burton, Cottam and West Burton undertakers and their land reps.	Discussion on survey access agreements with landowners and access logistics
23/03/22	Gate Burton, Cottam and West Burton undertakers	Discussion on cable corridor width and next steps for survey work
29/03/22	Gate Burton, Cottam and West Burton undertakers and their ecologists	Shared cable corridor: discussion on Phase 1 Habitat Surveys, potential of Terrestrial invertebrate/reptile surveys habitats and flora surveys and breeding bird surveys. Also discussed Great Crested Newt Pond buffers.

Date	Attendees	Record of Engagement
05/04/22	Gate Burton, Cottam and West Burton planning and environment teams	Review of proposed layout of West Burton and Cottam Solar Farms and the likelihood of cumulative effects and how cumulative effects could be assessed effectively.
12/04/22	Tillbridge, Cottam and West Burton	Introduction to the Tillbridge Solar scheme following internal kick-off meeting
28/04/22	Gate Burton, Cottam and West Burton ecology teams	Discussion on the buffer zones for ecology surveys on shared cable route corridor
In person meeting 05/05/22	Gate Burton, Cottam and West Burton undertakers and their comms teams	Discussion on approach to statutory consultation.
24/05/22	Gate Burton, Cottam and West Burton undertakers and their ecologists	Discussion on minimising effects of the shared connection corridor regarding ecology.
21/06/22	Gate Burton, Cottam and West Burton undertakers and planning teams	Discussion on cable route corridor Heads of Terms
05/08/22	Tillbridge, Cottam, West Burton and Gate Burton client teams	Introduction to the Tillbridge Solar scheme following internal kick-off meeting
01/09/22	Low Carbon (Gate Burton), Island Green Power and Lanpro (Cottam and West Burton)	Discussion on joined up approach to intrusive cable route surveys

Date	Attendees	Record of Engagement
Hybrid Meeting 13/09/22	Low Carbon and Pinsent Masons (Gate Burton), Island Green Power (Cottam and West Burton)	Workshop to discuss shared cable route corridor, protective provisions, various powers in overlapping area and continued cooperation ahead of finalising respective DCO applications. Hybrid meeting but held at Pinsent Masons London office
30/09/22	Gate Burton, Cottam, West Burton, Tillbridge planning teams and client; PINS, LCC, WLDC	Quadrapartite meeting with the four project developers and the PINS. Discussing interplay between the four projects.
10/10/22	Gate Burton, Cottam and West Burton Heritage Teams	Discussion on shared route within cable route corridor including results of evaluation and mitigation strategies
21/10/22	Gate Burton, Cottam and West Burton Heritage Teams	Discussion on shared route within cable route corridor including approach to mitigation strategies
07/11/22	Gate Burton, Cottam and West Burton Heritage Teams	Discussion on aligning mitigation strategies for all three schemes
17/11/22	Tillbridge, Cottam and West Burton Solar	Status update on the Tillbridge Solar and Cottam schemes interaction
16/12/22	Gate Burton, Cottam and West Burton Heritage Teams	Finalising aligned mitigation strategies for all three schemes

Date	Attendees	Record of Engagement
In person meeting 03/01/23	Gate Burton, Cottam and West Burton undertakers and their lands teams	Joint in person meeting with cable route landowner
05/01/23	Gate Burton, Cottam and West Burton Heritage Teams	Reviewing finalised aligned mitigation strategies for all three schemes
30/01/2023	Tillbridge and Gate Burton Heritage Teams	Discussion on approach to evaluation
Recurring meeting 22/02/23 - present	Gate Burton, Cottam and West Burton undertakers and their lands teams	Fortnightly meetings to discuss approach to the cable route, heads of terms negotiations with landowners and knowledge sharing
27/03/23	Tillbridge, Cottam and West Burton	Discussion about the potential for collaboration including survey data sharing
In person meeting 13/04/23	Gate Burton, Cottam and West Burton undertakers and their lands teams	Joint in person meeting with cable route landowner
Joint Site Walkover 26/04/23	Gate Burton and Tillbridge landscape teams	Walkover of cable route corridors and overall review of landscape and visual interrelations between Gate Burton and Tillbridge projects.

Date	Attendees	Record of Engagement
26/05/23	Tillbridge, Cottam, West Burton and Gate Burton technical teams	Technical discussion about cable corridor interaction with other projects
31/05/23	Tillbridge, Cottam, West Burton and Gate Burton	Meeting concerning co-ordination of solar DCO cable route corridors
02/06/23, 08/06/23 09/06/23, 14/06/23, 20/06/23, 30/06/23	Gate Burton, Cottam, West Burton and Tillbridge teams	Discussion on sharing information around cable route options to the south of Marton. Discussion on joint meeting with the Canal and Rivers Trust
13/06/23	Cottam, West Burton and Tillbridge teams	Discussion of ecology and heritage data
15/06/23, 21/06/23, 28/06/23, 05/07/23, 10/07/23, 15/08/23, 16/08/23, 27/09/23	Cottam, West Burton and Tillbridge teams	Discussion of Cottam, West Burton and Tillbridge site and cable route interactions

Date	Attendees	Record of Engagement
13/06/23	Gate Burton, Cottam, West Burton and Tillbridge land referencing teams	Joint approach on cable route landowners
14/06/23	Gate Burton, Cottam and West Burton	Cable route landowner update
30/06/23	Gate Burton, West Burton, Cottam and Tillbridge Highways Engineering Teams	Discussion about access differences and commonality for accesses in the shared cable route corridor.
30/06/2023	Gate Burton, Cottam, West Burton and Tillbridge	Joint approach on extra cable route surveys
14/07/23	Gate Burton, Cottam, West Burton and Tillbridge and Canal and Rivers Trust	Joint approach on protective provisions
18/07/23	Gate Burton, Cottam and West Burton	Discussion on access into Cottam substation
20/07/23	Gate Burton, Cottam, West Burton and Tillbridge	Discussion around the cables near Cottam substation
25/07/23	Gate Burton, Cottam, West Burton and Tillbridge design teams	Technical discussion around Cottam substation

Date	Attendees	Record of Engagement
26/07/23	Gate Burton, Cottam and West Burton	Cable route landowner update
10/08/23	Gate Burton, Cottam, West Burton and Tillbridge and EDF	Discussion on Cottam substation
14/08/23	Gate Burton, Cottam, West Burton and Tillbridge	Discussion around Cottam substation
15/08/23	Gate Burton, Cottam, West Burton and Tillbridge	Cable route discussion
17/08/23	Gate Burton, Cottam, West Burton, Tillbridge and Uniper	Discussion on Cottam substation
18/08/23	Gate Burton, Tillbridge	Discussion on cable route landowners
23/08/23	Gate Burton, Cottam, West Burton, Tillbridge, EDF and Uniper	Site walkover to look at constraints around Cottam substation
31/08/23	Gate Burton, Cottam, West Burton and Tillbridge and Uniper	Discussion on Cottam substation

Date	Attendees	Record of Engagement
01/09/23	Gate Burton, Cottam and West Burton	Cable route discussion
01/09/23	Gate Burton, Cottam, West Burton and Tillbridge	Cable route discussion
04/09/23	Gate Burton, Cottam, West Burton and Tillbridge technical teams	Technical discussion around Cottam substation
11/09/23	Gate Burton, Cottam, West Burton and Tillbridge	Cable route and substation discussion
12/09/23	Gate Burton, Cottam, West Burton, Tillbridge and EDF	Discussion on Cottam Substation
12/09/23	Gate Burton, Cottam and West Burton	Cumulative Effects Comparison table
13/09/23	Gate Burton, Cottam and West Burton	Cable route landowner update
14/09/23	Gate Burton, Cottam, West Burton and Tillbridge and Uniper	Discussion on Cottam substation

Date	Attendees	Record of Engagement
20/09/23	Gate Burton, Cottam and West Burton heritage teams	Discussion on cable route surveys
25/09/23	Gate Burton, Cottam, West Burton and Tillbridge and EDF	Discussion on Cottam substation
26/09/23	Gate Burton, Cottam, West Burton and Tillbridge and Uniper	Discussion on Cottam substation
27/09/2023	Gate Burton, Cottam and West Burton	Cable route landowner update
02/10/2023	Gate Burton, Cottam, West Burton, Tillbridge and Uniper	Update meeting between the developers and Uniper
03/10/23	Gate Burton, Cottam, West Burton, Tillbridge and EDF	Update meeting between the developers and EDF
05/10/23	Gate Burton, Cottam, West Burton, Tillbridge	Update between the developers
11/10/23	Gate Burton, Cottam, West Burton	Cable route update

Date	Attendees	Record of Engagement
11/10/23	Gate Burton, Cottam, West Burton, Omnia	Technical cable route discussions
13/10/23	Gate Burton, Cottam, West Burton, Tillbridge	Cable route discussions
20/10/23	Gate Burton, Cottam, West Burton, Tillbridge, Aecom	Technical cable route discussions
24/10/23	Gate Burton, Cottam, West Burton, Tillbridge, EDF, Uniper	Joint developer, EDF and Uniper catch up
25/10/23	Gate Burton, Cottam, West Burton	Cable route update
08/11/23	Gate Burton, Cottam, West Burton	Cable route update
14/11/23	Gate Burton, Cottam, West Burton, Tillbridge, EDF, Uniper	Joint developer, EDF and Uniper catch up
16/11/23	Gate Burton, Cottam, West Burton, Tillbridge, Network Rail	Joint developer meeting with Network Rail to discuss cable crossings

Date	Attendees	Record of Engagement
28/11/23	Gate Burton, Cottam, West Burton, Tillbridge, EDF, Uniper	Joint developer, EDF and Uniper catch up
30/11/23	Gate Burton, Cottam, West Burton	Cable route update
06/12/23	Gate Burton, Cottam, West Burton	Cable route update
15/12/23	Gate Burton, Cottam, West Burton, Tillbridge, Network Rail	Joint developer meeting with Network Rail to discuss cable crossings
18/12/23	Gate Burton, Cottam, West Burton, Tillbridge	Meeting to discuss cable formations
19/12/23	Gate Burton, West Burton, Cottam, Tillbridge, EDF, Uniper	Joint developer, EDF and Uniper catch up
09/01/24	Gate Burton, West Burton, Cottam, Tillbridge, EDF, Uniper	Joint developer, EDF and Uniper catch up
23/01/24	Gate Burton, West Burton, Cottam, Tillbridge, EDF, Uniper	Joint developer, EDF and Uniper catch up

Date	Attendees	Record of Engagement
20/02/24	Gate Burton, West Burton, Cottam, Tillbridge, EDF, Uniper	Joint developer, EDF and Uniper catch up
05/03/24	Gate Burton, West Burton, Cottam, Tillbridge, EDF, Uniper	Joint developer, EDF and Uniper catch up
04/04/2024	Gate Burton, West Burton, Cottam, Tillbridge, EDF, Uniper	Joint developer, EDF and Uniper catch up
14/05/2024	Gate Burton, West Burton, Cottam, Tillbridge, EDF, Uniper	Joint developer, EDF and Uniper catch up
11/06/2024	Gate Burton, West Burton, Cottam, Tillbridge, EDF, Uniper	Joint developer, EDF and Uniper catch up
27/06/2024	Gate Burton, West Burton, Cottam, Tillbridge	Sharing the current versions of the Order limits for each project.
16/07/2024	Gate Burton, West Burton, Cottam, Tillbridge, EDF, Uniper	Joint developer, EDF and Uniper catch up
31/07/2024	Gate Burton, West Burton, Cottam, Tillbridge	Meeting to discuss dis-used railway crossing

Date	Attendees	Record of Engagement
20/08/2024	Gate Burton, West Burton, Cottam, Tillbridge, EDF, Uniper	Joint developer, EDF and Uniper catch up
02/09/2024	Gate Burton, West Burton, Cottam, Tillbridge	Sharing details of Tillbridge change request application.
26/11/2024	Gate Burton, West Burton, Cottam, Tillbridge	Updated cooperation agreement shared with all parties for comment.
25/03/2025	Gate Burton, West Burton, Cottam, Tillbridge	Email exchange with Tillbridge sharing the updated Report on Interrelationship with other NSIPs and the final SoCG with Low Carbon and Island Green Power for comment.

Appendix E Cottam Solar Technical Note on Cumulative Effects

Cottam Solar Project

Technical Note on Cumulative Effects of Additional Schemes

Prepared by: Lanpro Services

January 2024

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Infrastructure Planning (Examination Procedure) Rules 2010

Cottam
SOLAR PROJECT

Contents

Issue Sheet

Report Prepared for: Cottam Solar Project Ltd.

Technical Note on Cumulative Effects of Additional Schemes

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original	30 Jan 2024	AV	TS

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 Cottam Solar Project (the 'Scheme') by Cottam 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-036 to APP-057, REP-010, REP-012, REP-014, REP2-008, REP2-010]**, 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 Question 1.2.21 of the Examining Authority's (ExA) First Written Questions **[PD-011]** 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) **[REP2-076]** requested that One Earth Solar Farm and Stow Park Solar Farm be included. Nottinghamshire County Council **[REP2-075]** provided a list of five schemes, including One Earth Solar Farm and Great North Road Solar Park. In addition, in Question 1.4.1, the Examining Authority asked the Applicant to keep the One Earth Solar Farm project under review.

1.1.4 In **C8.1.15 Applicant Response to ExA First Written Questions [REP2-034]**. n response to these questions, the Applicant undertook to review the cumulative effects of these three schemes .

1.1.5 Question 2.4.1 of the ExA's Second Written Questions **[PD-015]** asks the Applicant for an update in relation to the cumulative effects of Stow Park Solar Farm.

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

1.1.7 This report should be read alongside C8.1.8 Joint Report on Interrelationships between Nationally Significant Infrastructure Projects **[EN010133/EX4/C8.1.8_C]** which addresses the cumulative impacts of four Nationally Significant Infrastructure Projects: the Scheme (Cottam Solar Project), West Burton Solar Project, Gate Burton Energy Project and Tillbridge Solar Project.

[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/]

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-037]** 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-065]**.

2.1.3 Following the methodology set out in ES Chapter 2: EIA Process and Methodology [APP-037], three additional schemes meet the criteria for assessment as part of the Long List: One Earth Solar Farm, Great North Road Solar Park and Stow Park Solar Farm. Three further schemes have been excluded from consideration: The Steeples Renewables Solar Project and West Burton Power Station Finding STEP a Home have not yet submitted scoping reports 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-148]**.

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.

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	2.5km to southwest of Cottam 1	Scoping Report submitted to LPA	2
NSIP EN010159	One Earth Solar Farm Solar farm and battery energy storage system with a generating capacity exceeding 50MW	8km to southwest of Cottam 1	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	18.5km to southwest of Cottam 1	Scoping Report submitted to PINS. Submission of application expected Q2 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. There will be no intervisibility between the schemes listed in Table 2.1 and the Scheme due to the distance of the schemes, intervening topography, built structures and vegetation. 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 effects.** No significant cumulative effects are anticipated during construction, operation, or decommissioning.
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 and Great North Road Solar Park (GNRSP), 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. However, as the GNRSP lies between 19.25km and 31.1km from the Scheme's generating stations and the One Earth Solar Farm lies between 8.2km and 22.8km from the Scheme's generating stations, it is considered that	**Significant adverse cumulative effect likely at District Scale.** This is also the same assessment significance and scale predicted to occur when considering the 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-044]**.

Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
	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.	
Chapter 10 Hydrology, Flood Risk and Drainage		
Effects on Hydrology, Flood Risk and Drainage (Water Environment) receptors across all Schemes listed in Table 2.1 and Scheme	The Schemes in Table 2.1 have been reviewed to consider whether any cumulative effects will occur to the water environment. Given the distance between the schemes, no cumulative effects have been identified.	**No significant cumulative effects.** No significant cumulative effects are anticipated during construction, operation, or decommissioning.
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 distance between the schemes, no cumulative effects have been identified.	**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.	**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
	The Great North Road Solar Park and One Earth Solar Farm proposals both affect large areas of safeguarded fluvial sand and gravel deposits associated with the River Trent. The One Earth Solar Farm proposal within Lincolnshire also lies with an Area of Search for future sand and gravel supplies. 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 those listed in Table 2.1, the additional area of safeguarded mineral affected is relatively small and the impact is for a limited time. The Stow Park Farm proposal does not affect any safeguarded mineral deposits and so there are no cumulative mineral impacts arising from that 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. Due to the distance and lack of historical association between the Scheme and those listed in Table 2.1 no cumulative effects have been identified.	**No significant cumulative effects.** No significant cumulative effects are anticipated during construction, operation, or decommissioning.
Chapter 14 Transport and Access		

Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
	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 Farm EIA Scoping Report does not identify a construction vehicle route, an assumption has been made that it will use the A1500. If this is the case, there is the potential for overlap with construction vehicles accessing Cottam 1 South, 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	**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
	movements, no significant cumulative effects have been identified. Given the distance from the Scheme to Great North Road Scheme, no cumulative effects have been identified.	
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. Due to the distance and lack of shared receptors between the schemes and those listed in Table 2.1, no significant cumulative effects have been identified.	**No significant cumulative effects.** No significant cumulative effects are anticipated during construction, operation, or decommissioning.
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 between the Scheme and those listed in Table 2.1 no significant cumulative effects have been identified.	**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.	**No significant cumulative effects.** No significant cumulative effects are anticipated during construction, operation, or decommissioning.
Chapter 18 Socio-Economics, Tourism and Recreation		

Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
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 Cottam are likely to be localised in nature. District-level socio-economic, tourism and recreation effects may potentially be increased by One Earth Solar. Great North Solar is located outside the Local Impact Area (Bassetlaw District and West Lindsey District) and so is not likely to result in additional cumulative effects, except at a regional level. However, these are not anticipated to be significant.	Due to the smaller size of Stow Park solar (<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 operational lifetime, One Earth Solar Farm is likely to increase the amount of energy employment, and decrease the amount of agricultural employment in the Local Impact Area. No specific data has been provided in the One Earth Solar Scoping Report for the number of jobs generated by, or impacted by the Scheme. 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. 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 **[APP-053]** . No 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-053]**.

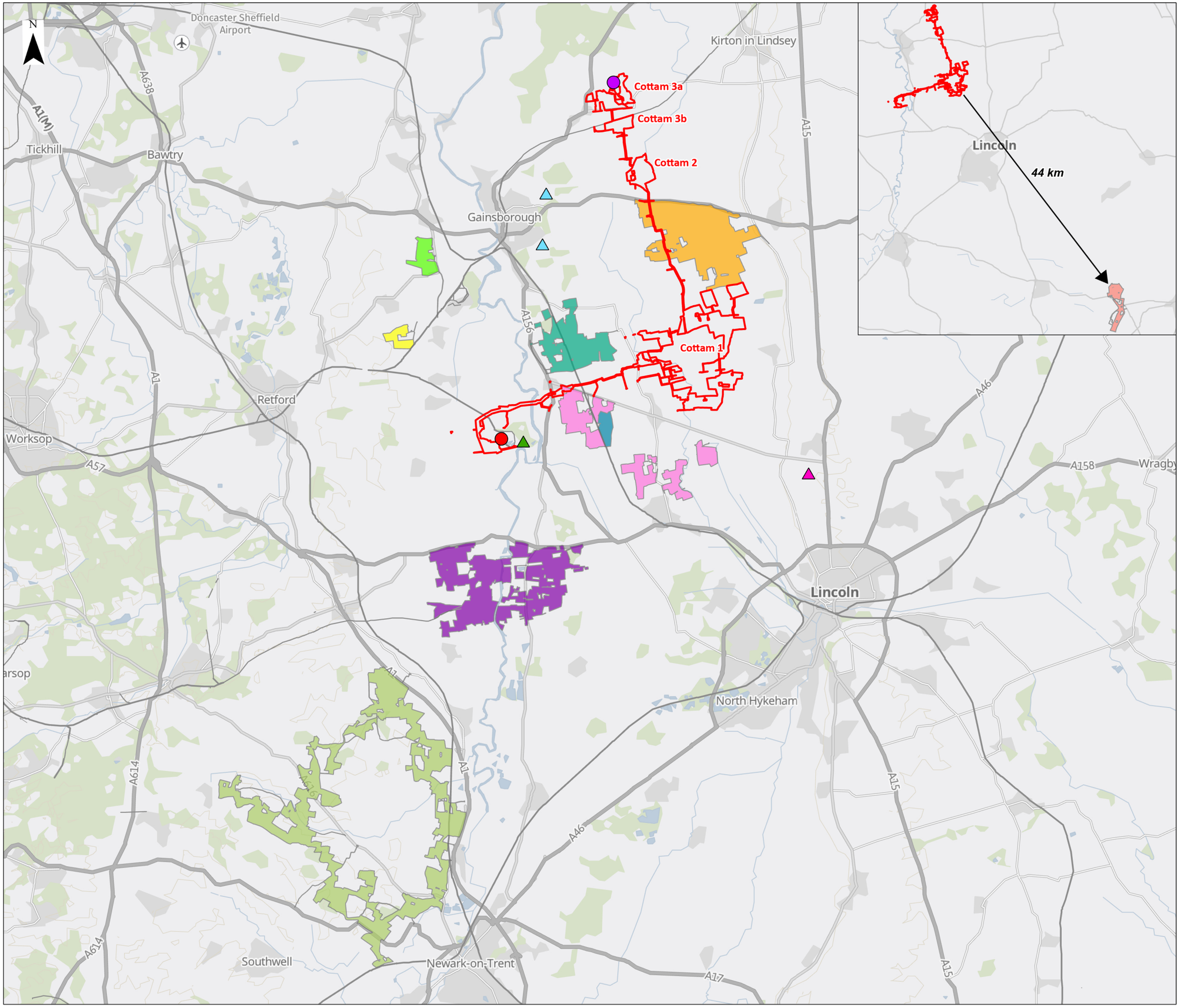
Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
		One Earth Solar has a projected construction timescale of 2027-2029, and projected decommissioning timescale of no earlier than 2074. This therefore may create an increased amount of cumulative construction and decommissioning works. However, no changes to significant cumulative decommissioning effects are identified as likely due to the staggered timescales for this project comparison to other NSIPs assessed in C6.2.18 ES Chapter 18 Socio-Economics, Tourism and Recreation **[APP-053]**.
Chapter 19 Soils and Agriculture		
Effects on Agricultural Land Resource, Soil Resource and Farming Circumstances	The Stow Park 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. No information on agricultural occupancy is provided for any of these sites.	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 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 occupancy between Sites would strongly suggest large and

Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
		diverse farm businesses already, minimising the potential for there to be any adverse cumulative effects.
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 (<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 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. However, no changes to the level of significance, nor number of significant cumulative effects are identified at any stage of the Scheme's lifetime taking into an account an assessment of these additional schemes. Therefore, there are **no new signficant adverse effects** compared to those identified in C6.2.20 ES Chapter 20: Waste **[APP-055]**.
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, no cumulative effects have been identified.	**No significant cumulative effects.**

Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative 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, no cumulative effects have been identified.	**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, no cumulative effects have been identified.	**No significant cumulative 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 cumulatively with Cottam. District-level health and wellbeing matters may potentially be affected by One Earth Solar. Due to the separation of Great North Solar, 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 (<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 due to its distance from the other cumulatively assessed projects. One Earth Solar 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 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 C6.2.21 ES Chapter 21 Other Environmental Matters **[APP-056]** and

Nature of Effects	Description of Potential Cumulative Effects	Assessment of Significance of Cumulative Effects
		C8.4.21.1 ES Addendum 21.1: Human Health **[EN010133/EX4/C8.4.21.1]**, 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 cumulatively with West Burton. Due to the separation of Great North Solar and One Earth Solar, 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.	Due to the comparatively smaller size of Stow Park solar (<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.. No additional likely significant effects are anticipated from One Earth Solar and Great North Road Solar Park due to its distance from the other cumulatively assessed projects. 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

Current and Emerging Policy

- Emerging Policy ST6: Cottam Priority Regeneration Area
- Policy 48 Gainsborough Northern Neighbourhood SUE Allocation
- Policy LP8 Employment Site Land at Lincolnshire Showground

Cumulative Developments

- Decommissioning of Cottam Power Station
- Automotive Research and Development Centre
- Bumble Bee Farm
- Field Farm
- Gate Burton Energy Park
- Heckington Fen Solar
- Tillbridge Solar
- West Burton Solar
- Stow Park Solar
- One Earth Solar
- Great North Road Solar

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: 1:175,000@ A3

APFP Regulation: 5(2)(a)	Application Doc No. C6.4.2.1
Ref: ?2981_LPR_ZZ_ON_DR_Z_0159	Date: 30/01/2024
Drawn by: AZ	Checked by: AVW

Figure 2.1
Cottam
Cumulative Developments

COTTAM SOLAR PROJECT
EIA Process and Methodology
Environmental Statement (ES)

Appendix F Residential Assessment and Design

1. Consideration of residential visual effects and mitigation requirements

1.1 Context

1.1.1 This note has been prepared by Iceni Projects to address ExA Action 42 from Issue Specific Hearing 1. Action 42 was:

"Provide list of 20 (14+6) properties visited and full list of properties within Order Limits

Provide spatially on a plan.

Explain how assessed."

1.1.2 It provides supplementary information regarding the approach taken to consider the potential impacts that One Earth Solar Farm (the Proposed Development) may have on residential visual amenity and the steps taken to provide mitigation. This follows discussion concerning this matter during Issue Specific Hearing 1 held on 9 and 10 July 2025.

1.1.3 The document references have not been updated from the original submission. Please refer to the Guide to the Application [EN010159/APP/1.3] for the list of current versions of documents

1.2 List of properties visited and figures identifying locations of properties

1.2.1 The location of the properties visited and a summary of the discussions was provided in the Consultation Report (APP-151) on page 63 - 68.

1.2.2 The figures appended to this note show the locations of properties adjacent to the Order Limits, and identify which of those properties have been visited by a representative of the Applicant in blue, and properties not visited in orange. For each property, the figures also include supporting notes demonstrating how the potential impact on residential visual amenity has been considered and how the design has responded to embed appropriate mitigation measures for all properties.

1.3 Explanation of how residential properties adjacent to the Order Limits have been assessed

1.3.1 A summary of the visual receptors, the associated representative viewpoints, as well as their visual sensitivity is provided at Table 11.9 from pages 50 to 65 of Chapter 11, (AS-017) and should be read in combination with Figure 11.10 Representative Viewpoint Location (AS-029). As is common practice, visual

receptors who are likely to experience similar views have been grouped as a single receptor group, for example, residents along the High Street in the southern part of Newton on Trent, or residents between North Clifton and Wigsley.

1.3.2 In line with Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA3), Table 11.9 provides judgements on the susceptibility to change in views / visual amenity of each visual receptor, and also the value attached to the particular views. With regard to residential receptors, these are judged to have a high visual susceptibility. The value of each residential receptor is specific to its context and is determined in line with the criteria set out in Table 6 on page 15 of Appendix 11.2 (APP-130).

1.3.3 The assessment of magnitude of change then considers the effects of the Proposed Development on the visual receptors in line with the criteria set out in Table 9 on page 17 of Appendix 11.2 (APP-130). These judgements have also been informed by fieldwork across 17 days between November 2023 and September 2024 including to a total of 20 residential properties adjacent to the Order Limits.

1.3.4 Paragraph 6.17 of the Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA3) states:

"*Effects of development on private property are frequently dealt with mainly through 'residential amenity assessments'. These are separate from LVIA although visual effects assessment may sometimes be carried out as part of a residential amenity assessment, in which case this will supplement and form part of the normal LVIA for a project. Some of the principles set out here for dealing with visual effects may help in such assessments but there are specific requirements in residential amenity assessment*."

1.3.5 As paragraph 6.17 of GLVIA3 alludes to, Residential Visual Amenity Assessment (RVAA) is subject to separate guidance namely, the Landscape Institute's Technical Guidance Note 2/19 (TGN 2/19) published on 15 March 2019, and the key difference between RVAA and LVIA is that RVAA focuses on private visual amenity at individual properties whilst LVIA focuses on public amenity and views.

1.3.6 As noted in TGN 2/19 at paragraph 3.4, "*a Residential Visual Amenity Assessment is generally only justified when the effect of Residential Visual Amenity could reach the Residential Visual Amenity Threshold*". The Residential Visual Amenity Threshold is not specified anywhere in the guidance but "*requires experience in addition to thorough and logical evaluation and reasoning*" (paragraph 3.1, LI TGN 2/19). Elsewhere at paragraph 2.5 of LI TGN 2/19, it is noted that a RVAA may be appropriate where a development could result in a high magnitude of visual change, and that the scope is normally agreed with the determining / competent authority.

1.3.7 The Applicant has agreed with the host authorities that the LVIA methodology accords with best practice and that the receptors are appropriate. It was also agreed, via Technical Memorandum 1 (AAH TM01), that a RVAA would be provided if major effects were identified for residential receptors on the year 15 assessment within the LVIA. No such effects have been identified and therefore a RVAA has not been conducted.

1.3.8 Finally, an overview of the environmental measures that have been embedded in the design is provided at paragraphs 11.5.1 to 11.5.21 of Chapter 11 [AS-017], and the Applicant would draw particular attention to Table 11.10 which sets out the design response to specific properties beyond the villages.

1.4 Approach to mitigation

1.4.1 The design of the Proposed Development has been developed in line with the project vision, part of which states "…*The project will engage in meaningful conversation with communities and will be sited to take account of the local environment and people's visual amenity*..." The full vision can be found in the Design Approach Document (AS-013). Several project specific design principles also relate to the protection of residential visual amenity, including the principle to "*Protect features that are important to the local community*".

1.4.2 The project team, including the project design lead, undertook extensive field work to realise this vision. This included the LVIA fieldwork previously mentioned. This field work was undertaken from publicly accessible locations across the Order limits and the wider study area to inform both the landscape and visual assessment and design of mitigation.

1.4.3 In addition to LVIA fieldwork, the project team also visited residential properties as part of the non-statutory and statutory consultation process. This is detailed in full in the Consultation Report (APP-151). These site visits were offered to anyone who requested one via the consultation process, for instance at public information events or through the project communication lines via telephone or email, stating that they lived particularly close to the Proposed Development. The project team also sought to make contact with residents of properties close to the original project boundary by knocking on the door of 35 properties prior to the project launch.

1.4.4 A total of 14 site visits took place through non-statutory consultation. During statutory consultation these 14 properties were revisited, with an additional six properties visited for the first time, taking the total number of properties visited to 20. The residential visits typically comprised a walk around the property curtilage boundary and, where invited to do so, experiencing views from inside the dwelling, including the upper storey.

1.4.5 These visits included discussion with residents regarding the way in which homes are used, including the position of furniture such as desks or chairs within upper

storey rooms. The design approach detailed within the plans provided in this document takes account of these discussions.

1.4.6 The information gathered through residential visits and wider field work was used to consider the desgin of the Proposed Development around residential properties. Each property was considered in turn, informed by site work and desk based assessment such that all properties were given the same level of consideration and mitigation, regardless of whether it was possible to visit the property. A summary of the considerations and mitigation is provided on the following figures.

1.5 Figures

WHIMPTON HOUSE
VISITED: NO

VIEWS MOSTLY ENCLOSED BY CURTILAGE VEGETATION. POTENTIAL FOR UPPER-STOREY VIEWS SOUTH.

FIELD SOUTH OF PROPERTY MAINTAINED FREE FROM SOLAR PANELS UP TO CREST IN LANDFORM.

GREY OAK AND THE GROVE
VISITED: GREY OAK: NO. THE GROVE: YES

VIEWS HEAVILY FILTERED BY CURTILAGE VEGETATION BUT INTERVISIBILITY WITH SURROUNDING LANDSCAPE IN WINTER - PARTICULARLY TO THE SOUTH (OUTBUILDINGS SCREEN VIEWS EAST).

FIELD TO SOUTH MAINTAINED FREE FROM SOLAR PANELS UP TO CREST IN LANDFORM, SCREENING WIDER VIEWS.

314m

259m

290m

413

FARHILL FARM
VISITED: YES

PRINCIPAL VIEWS TO NORTH OF THE PROPERTY. EXISTING VEGETATION SCREENS MAJORITY OF VIEWS TO THE SOUTH.

FIELD TO THE NORTH KEPT FREE FROM DEVELOPMENT

N

0 250m

one earth solar farm

Client:
One Earth Solar Farm Ltd

Project:
One Earth Solar Farm

Planning Inspectorate Scheme Ref:EN010159

Drawing Title:
Residential assessment and design response

Document Reference Number:
EN010159/APP/9.5 Appendix F

Rev.
01

Drawn: JG | Designed: SG | Approved: SG

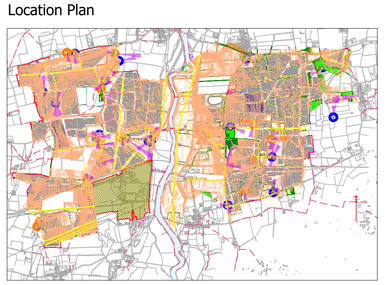
Drawing Date:
2025-07-29

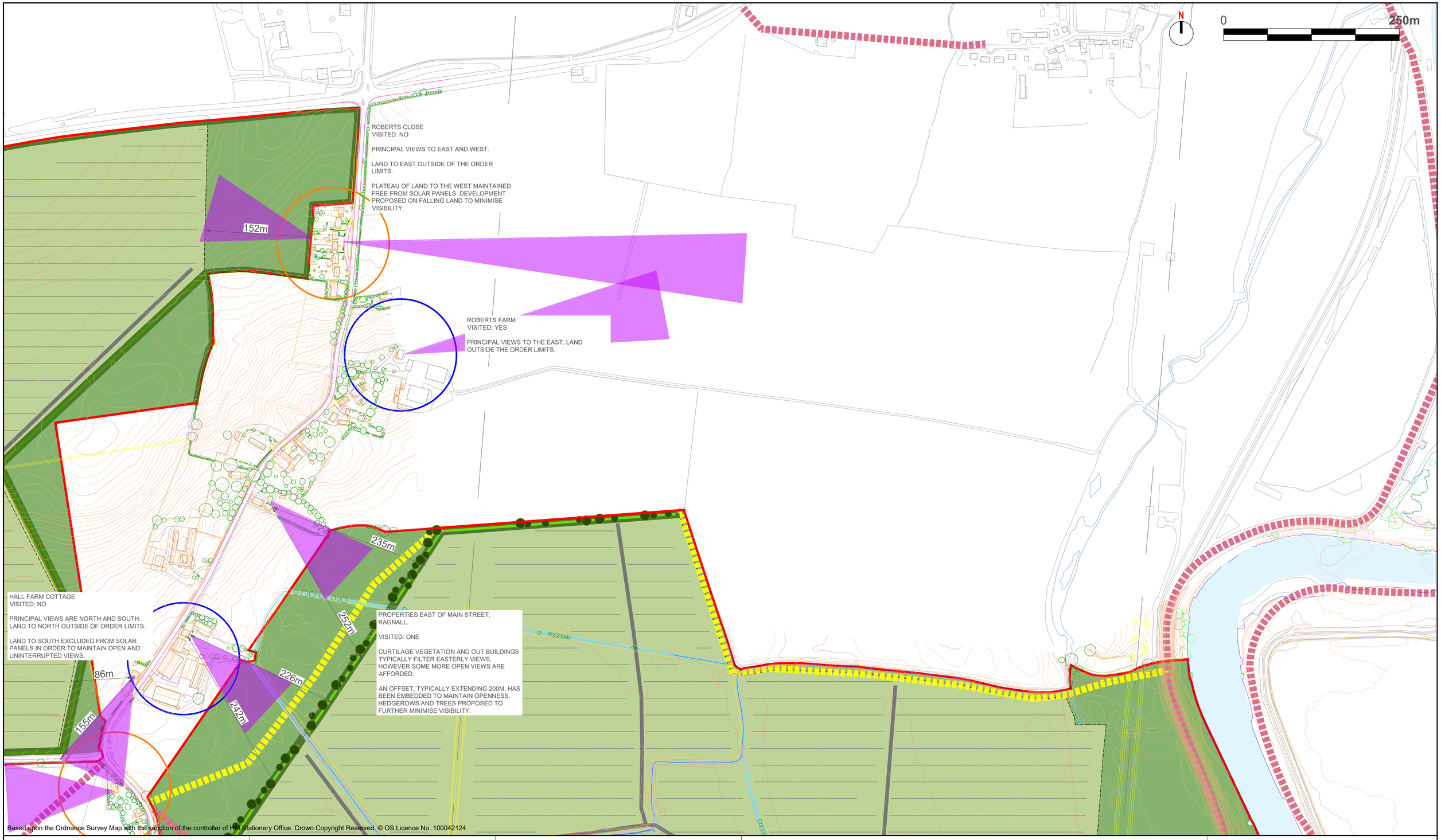
Scale:
1:2500 @ A1

Legend

- Order Limits
- Proposed solar PV Panels, power conversion stations and supporting infrastructure.
- Principal view from residential property.
- Residential property visited as part of consultation.
- Residential property not visited as part of consultation.

Location Plan





one earth solar farm

Client:
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Planning Inspectorate Scheme Ref:EN010159

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Drawn: JG | Designed: SG | Approved: SG

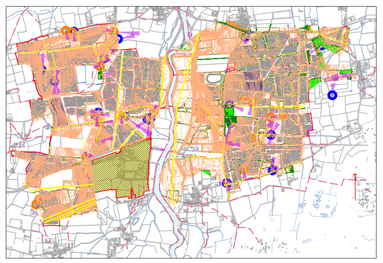
Drawing Date:
2025-07-29

Scale:
1:2500 @ A1

Legend

- Order Limits
- Proposed solar PV Panels, power conversion stations and supporting infrastructure.
- Principal view from residential property.
- Residential property visited as part of consultation.
- Residential property not visited as part of consultation.

Location Plan



FARHILL FARM
VISITED: YES

PRINCIPAL VIEWS TO NORTH OF THE PROPERTY. EXISTING VEGETATION SCREENS MAJORITY OF VIEWS TO THE SOUTH.

FIELD TO THE NORTH KEPT FREE FROM DEVELOPMENT

155m

319m

VICARAGE FARM
VISITED: YES

PRINCIPAL VIEWS TO NORTH AND SOUTH OF THE PROPERTY. EXISTING OUTBUILDINGS SCREEN SOME VIEWS TO THE WEST.

FIELD TO THE NORTH AND SOUTH MAINTAINED FREE FROM SOLAR PANELS. NEW TREES PROPOSED SOUTH OF THE PROPERTY TO FILTER LONGER DISTANCE VIEWS.

129m

180m

363m

217m

576m

FARM WEST OF MAIN STREET
VISITED: YES

PRINCIPAL VIEWS FROM THE PROPERTY ARE TO THE EAST BUT VIEWS NORTH AND WEST ARE IMPORTANT FROM AREA USED FOR HORSE RIDING.

FIELD ADJACENT TO THE AREA USED FOR HORSE RIDING HAS BEEN MAINTAINED AS OPEN AND FREE FROM SOLAR PANELS.

AN OFFSET HAS BEEN INCLUDED ACROSS LAND EAST OF THE DWELLING TO MINIMISE VISIBILITY.

273m

N

0 250m

one earth solar farm

Client:
One Earth Solar Farm Ltd

Project:
One Earth Solar Farm

Planning Inspectorate Scheme Ref:EN010159

Drawing Title:
Residential assessment and design response. Sheet 3.

Document Reference Number:
EN010159/APP/9.5 Appendix F

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01

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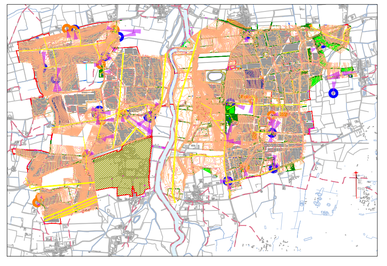
2025-07-27

Scale:
1:2500 @ A1

Legend

- Order Limits
- Proposed solar PV Panels, power conversion stations and supporting infrastructure.
- Principal view from residential property.
- Residential property visited as part of consultation.
- Residential property not visited as part of consultation.

Location Plan



one earth solar farm

Client:
One Earth Solar Farm Ltd

Project:
One Earth Solar Farm

Planning Inspectorate Scheme Ref:EN010159

Drawing Title:
Residential assessment and design response. Sheet 4.

Document Reference Number:
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2025-07-27

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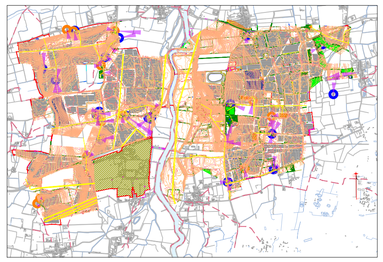
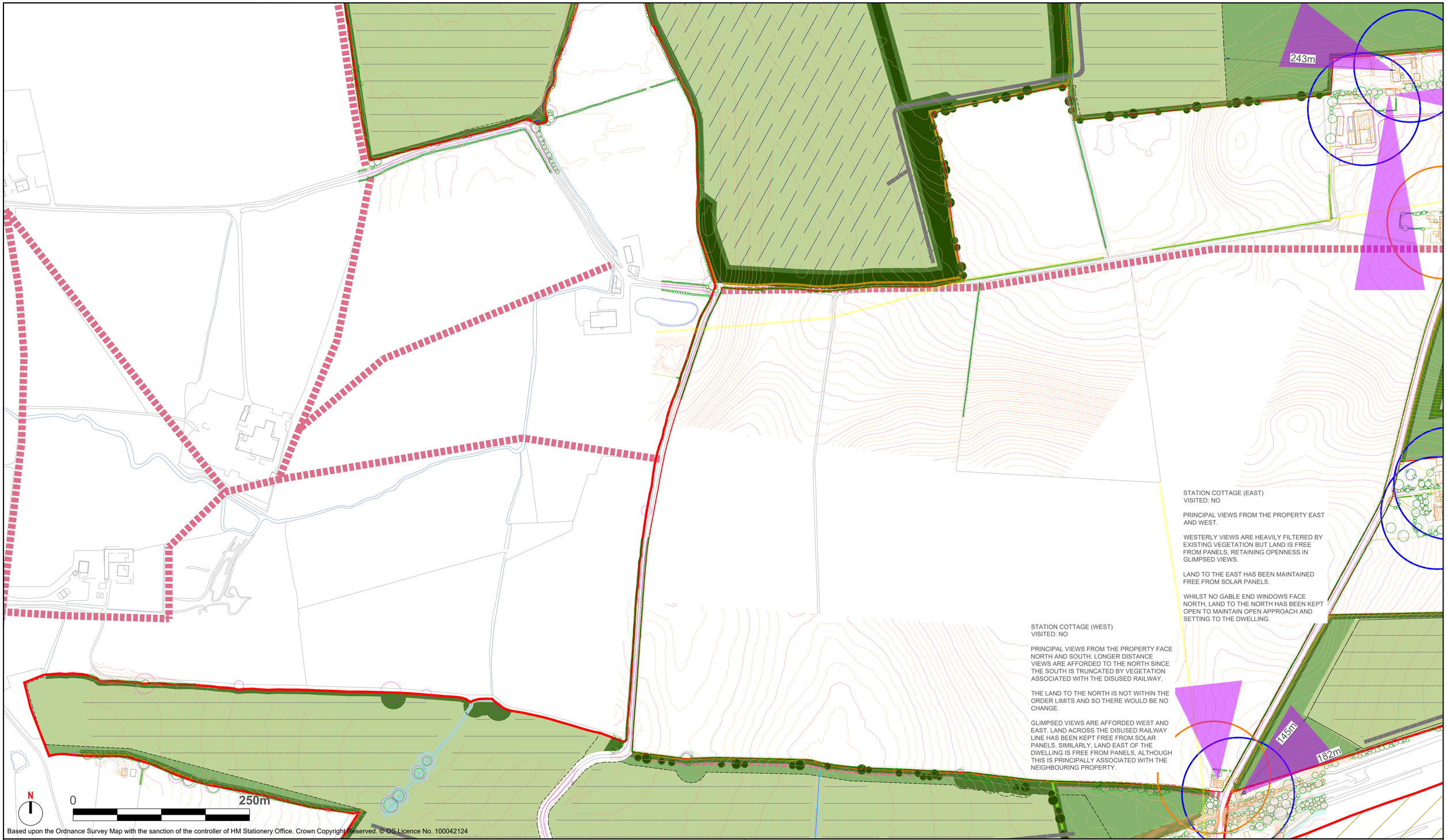
Legend

- Order Limits
- Proposed solar PV Panels, power conversion stations and supporting infrastructure.
- Principal view from residential property.
- Residential property visited as part of consultation.
- Residential property not visited as part of consultation.

Location Plan





STATION COTTAGE (EAST)
VISITED: NO

PRINCIPAL VIEWS FROM THE PROPERTY EAST AND WEST.

WESTERLY VIEWS ARE HEAVILY FILTERED BY EXISTING VEGETATION BUT LAND IS FREE FROM PANELS, RETAINING OPENNESS IN GLIMPSED VIEWS.

LAND TO THE EAST HAS BEEN MAINTAINED FREE FROM SOLAR PANELS.

WHILST NO GABLE END WINDOWS FACE NORTH, LAND TO THE NORTH HAS BEEN KEPT OPEN TO MAINTAIN OPEN APPROACH AND SETTING TO THE DWELLING.

STATION COTTAGE (WEST)
VISITED: NO

PRINCIPAL VIEWS FROM THE PROPERTY FACE NORTH AND SOUTH. LONGER DISTANCE VIEWS ARE AFFORDED TO THE NORTH SINCE THE SOUTH IS TRUNCATED BY VEGETATION ASSOCIATED WITH THE DISUSED RAILWAY.

THE LAND TO THE NORTH IS NOT WITHIN THE ORDER LIMITS AND SO THERE WOULD BE NO CHANGE.

GLIMPSED VIEWS ARE AFFORDED WEST AND EAST. LAND ACROSS THE DISUSED RAILWAY LINE HAS BEEN KEPT FREE FROM SOLAR PANELS. SIMILARLY, LAND EAST OF THE DWELLING IS FREE FROM PANELS, ALTHOUGH THIS IS PRINCIPALLY ASSOCIATED WITH THE NEIGHBOURING PROPERTY.

one earth solar farm

Client:
One Earth Solar Farm Ltd

Project:
One Earth Solar Farm

Planning Inspectorate Scheme Ref:EN010159

Drawing Title:
Residential assessment and design response. Sheet 5.

Document Reference Number:
EN010159/APP/9.5 Appendix F

Rev.
01

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Drawing Date:
2025-07-27

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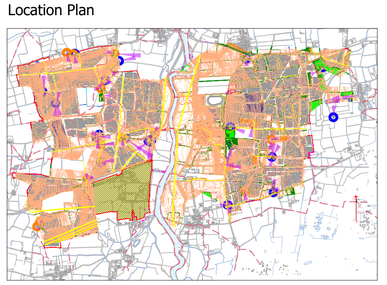
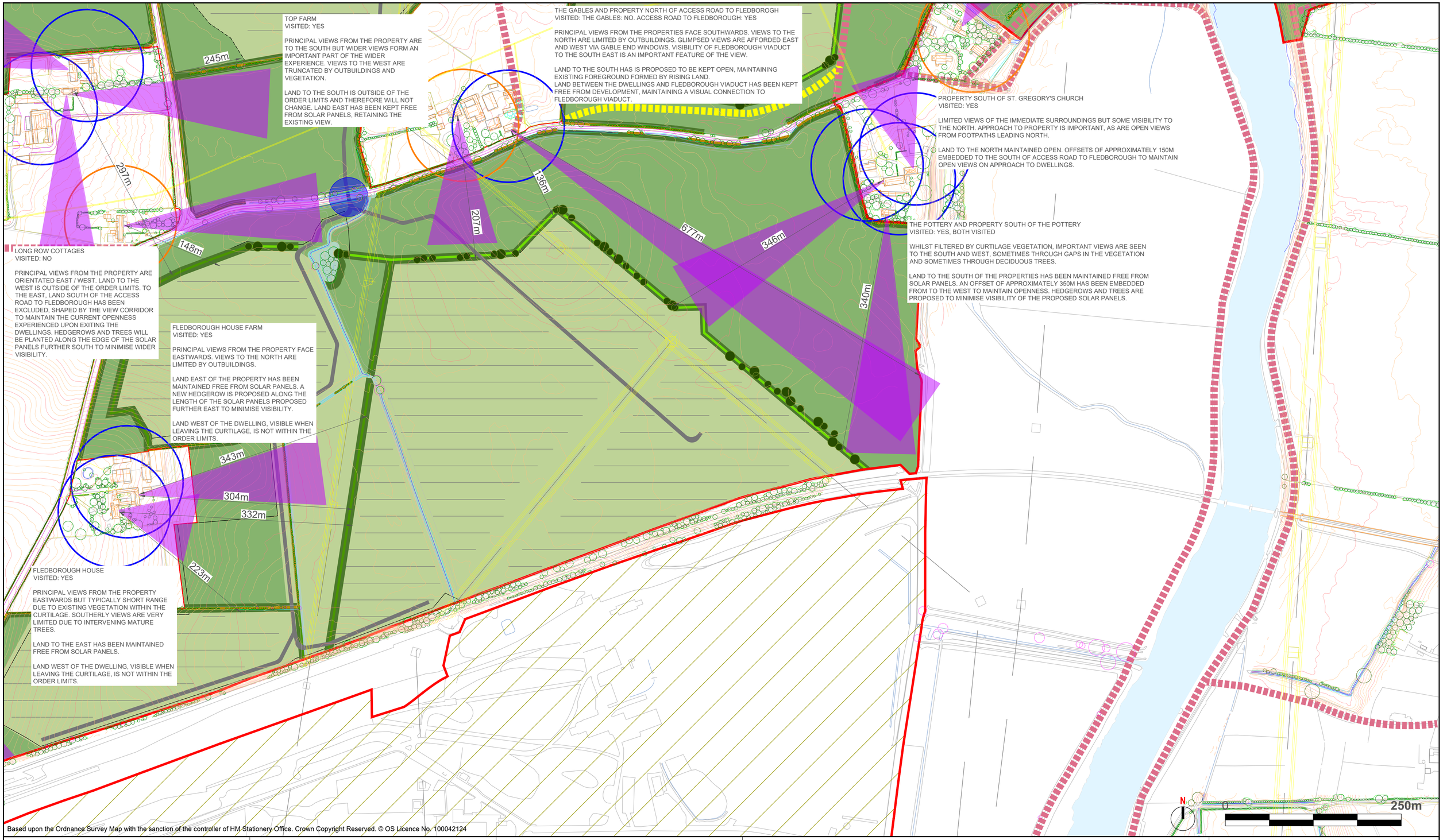
1:2500 @ A1

Legend

- Order Limits
- Proposed solar PV Panels, power conversion stations and supporting infrastructure.
- Principal view from residential property.
- Residential property visited as part of consultation.
- Residential property not visited as part of consultation.

Location Plan





TOP FARM
VISITED: YES

PRINCIPAL VIEWS FROM THE PROPERTY ARE TO THE SOUTH BUT WIDER VIEWS FORM AN IMPORTANT PART OF THE WIDER EXPERIENCE. VIEWS TO THE WEST ARE TRUNCATED BY OUTBUILDINGS AND VEGETATION.

LAND TO THE SOUTH IS OUTSIDE OF THE ORDER LIMITS AND THEREFORE WILL NOT CHANGE. LAND EAST HAS BEEN KEPT FREE FROM SOLAR PANELS, RETAINING THE EXISTING VIEW.

THE GABLES AND PROPERTY NORTH OF ACCESS ROAD TO FLEDBOROGH
VISITED: THE GABLES: NO. ACCESS ROAD TO FLEDBOROUGH: YES

PRINCIPAL VIEWS FROM THE PROPERTIES FACE SOUTHWARDS. VIEWS TO THE NORTH ARE LIMITED BY OUTBUILDINGS. GLIMPSED VIEWS ARE AFFORDED EAST AND WEST VIA GABLE END WINDOWS. VISIBILITY OF FLEDBOROUGH VIADUCT TO THE SOUTH EAST IS AN IMPORTANT FEATURE OF THE VIEW.

LAND TO THE SOUTH HAS IS PROPOSED TO BE KEPT OPEN, MAINTAINING EXISTING FOREGROUND FORMED BY RISING LAND.
LAND BETWEEN THE DWELLINGS AND FLEDBOROUGH VIADUCT HAS BEEN KEPT FREE FROM DEVELOPMENT, MAINTAINING A VISUAL CONNECTION TO FLEDBOROUGH VIADUCT.

PROPERTY SOUTH OF ST. GREGORY'S CHURCH
VISITED: YES

LIMITED VIEWS OF THE IMMEDIATE SURROUNDINGS BUT SOME VISIBILITY TO THE NORTH. APPROACH TO PROPERTY IS IMPORTANT, AS ARE OPEN VIEWS FROM FOOTPATHS LEADING NORTH.

LAND TO THE NORTH MAINTAINED OPEN. OFFSETS OF APPROXIMATELY 150M EMBEDDED TO THE SOUTH OF ACCESS ROAD TO FLEDBOROUGH TO MAINTAIN OPEN VIEWS ON APPROACH TO DWELLINGS.

THE POTTERY AND PROPERTY SOUTH OF THE POTTERY
VISITED: YES, BOTH VISITED

WHILST FILTERED BY CURTILAGE VEGETATION, IMPORTANT VIEWS ARE SEEN TO THE SOUTH AND WEST, SOMETIMES THROUGH GAPS IN THE VEGETATION AND SOMETIMES THROUGH DECIDUOUS TREES.

LAND TO THE SOUTH OF THE PROPERTIES HAS BEEN MAINTAINED FREE FROM SOLAR PANELS. AN OFFSET OF APPROXIMATELY 350M HAS BEEN EMBEDDED FROM TO THE WEST TO MAINTAIN OPENNESS. HEDGEROWS AND TREES ARE PROPOSED TO MINIMISE VISIBILITY OF THE PROPOSED SOLAR PANELS.

LONG ROW COTTAGES
VISITED: NO

PRINCIPAL VIEWS FROM THE PROPERTY ARE ORIENTATED EAST / WEST. LAND TO THE WEST IS OUTSIDE OF THE ORDER LIMITS. TO THE EAST, LAND SOUTH OF THE ACCESS ROAD TO FLEDBOROUGH HAS BEEN EXCLUDED, SHAPED BY THE VIEW CORRIDOR TO MAINTAIN THE CURRENT OPENNESS EXPERIENCED UPON EXITING THE DWELLINGS. HEDGEROWS AND TREES WILL BE PLANTED ALONG THE EDGE OF THE SOLAR PANELS FURTHER SOUTH TO MINIMISE WIDER VISIBILITY.

FLEDBOROUGH HOUSE FARM
VISITED: YES

PRINCIPAL VIEWS FROM THE PROPERTY FACE EASTWARDS. VIEWS TO THE NORTH ARE LIMITED BY OUTBUILDINGS.

LAND EAST OF THE PROPERTY HAS BEEN MAINTAINED FREE FROM SOLAR PANELS. A NEW HEDGEROW IS PROPOSED ALONG THE LENGTH OF THE SOLAR PANELS PROPOSED FURTHER EAST TO MINIMISE VISIBILITY.

LAND WEST OF THE DWELLING, VISIBLE WHEN LEAVING THE CURTILAGE, IS NOT WITHIN THE ORDER LIMITS.

FLEDBOROUGH HOUSE
VISITED: YES

PRINCIPAL VIEWS FROM THE PROPERTY EASTWARDS BUT TYPICALLY SHORT RANGE DUE TO EXISTING VEGETATION WITHIN THE CURTILAGE. SOUTHERLY VIEWS ARE VERY LIMITED DUE TO INTERVENING MATURE TREES.

LAND TO THE EAST HAS BEEN MAINTAINED FREE FROM SOLAR PANELS.

LAND WEST OF THE DWELLING, VISIBLE WHEN LEAVING THE CURTILAGE, IS NOT WITHIN THE ORDER LIMITS.

one earth solar farm

Client:
One Earth Solar Farm Ltd

Project:
One Earth Solar Farm

Planning Inspectorate Scheme Ref:EN010159

Drawing Title:
Residential assessment and design response. Sheet 6.

Document Reference Number:
EN010159/APP/9.5 Appendix F

Rev.
01

Drawn: JG | Designed: SG | Approved: SG

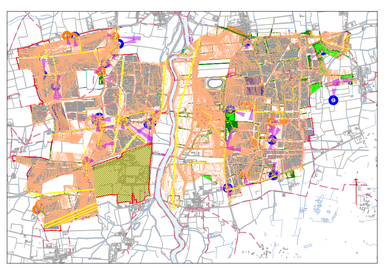
Drawing Date:
2025-07-29

Scale:
1:2500 @ A1

Legend

- Order Limits
- Proposed solar PV Panels, power conversion stations and supporting infrastructure.
- Principal view from residential property.
- Residential property visited as part of consultation.
- Residential property not visited as part of consultation.

Location Plan



2 SKEGBY HOUSE
VISITED: NO

PRINCIPAL VIEWS TO THE EAST AND WEST. LAND TO THE WEST IS OUTSIDE THE ORDER LIMITS. VIEWS TO THE EAST ARE FORESHORTENED BY EXISTING VEGETATION.

EXISTING HEDGEROWS AND TREES TO BE GAPPED UP TO LIMIT VISIBILITY.

SKEGBY HOUSE FARM
VISITED: NO

LIMITED INTERVISIBILITY WITH SURROUNDING LAND GIVEN MATURE VEGETATION ENCLOSING HOUSE. LAND OPPOSITE PROPERTY IS OUTSIDE OF THE ORDER LIMITS.

NEW AND IMPROVED PLANTING TO THE NORTH PROPOSED TO MINIMISE PERIPHERAL VISIBILITY.

38m
58m
76m

N
0
250m

one earth solar farm

Client:
One Earth Solar Farm Ltd

Project:
One Earth Solar Farm

Planning Inspectorate Scheme Ref:EN010159

Drawing Title:
Residential assessment and design response. Sheet 7

Document Reference Number:
EN010159/APP/9.5 Appendix F

Rev.
01

Drawn: JG | Designed: SG | Approved: SG

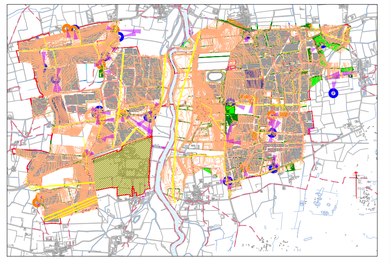
Drawing Date:
2025-07-29

Scale:
1:2500 @ A1

Legend

- Order Limits
- Proposed solar PV Panels, power conversion stations and supporting infrastructure.
- Principal view from residential property.
- Residential property visited as part of consultation.
- Residential property not visited as part of consultation.

Location Plan



N

0 250m

one earth solar farm

Client:
One Earth Solar Farm Ltd

Project:
One Earth Solar Farm

Planning Inspectorate Scheme Ref:EN010159

Drawing Title:
Residential assessment and design response.
Sheet 8

Document Reference Number:
EN010159/APP/9.5 Appendix F

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Drawn: JG | Designed: SG | Approved: SG

Drawing Date:
2025-07-29

Scale:
1:2500 @ A1

Legend

- Order Limits
- Proposed solar PV Panels, power conversion stations and supporting infrastructure.
- Principal view from residential property.
- Residential property visited as part of consultation.
- Residential property not visited as part of consultation.

Location Plan