



One Earth Solar Farm

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Minerals Safeguarding Assessment

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1. Introduction

1.1 Background to the Proposed Development

- 1.1.1 This Minerals Safeguarding Assessment (the 'Assessment') has been prepared on behalf of One Earth Solar Farm Limited (the 'Applicant') in relation to an application for a Development Consent Order (the 'Application') to be made to the Secretary of State (SoS) for Energy Security and Net Zero of the United Kingdom, pursuant to the Planning Act 2008 (PA 2008).
- 1.1.2 The Order Limits for the Proposed Development are shown on drawing **Location Plan [EN010159/APP/2.1]**, which is approximately 1,409 hectares (ha) of land on the border of Nottinghamshire County Council (NCC) and Lincolnshire County Council (LCC). The Order Limits are also located within Newark and Sherwood District Council (NSDC), West Lindsey District Council (WLDC) and Bassetlaw District Council (BDC).
- 1.1.3 The DCO application is a Nationally Significant Infrastructure Project (NSIP) for the construction, operation and maintenance, and decommissioning of a solar photovoltaic (PV) array electricity generating facility with a total capacity exceeding 50 megawatts (MW) and export connection to the National Grid (the 'Proposed Development').
- 1.1.4 The design of the Proposed Development has evolved throughout the environmental assessment process to avoid or minimise environmental effects and in response to consultation and engagement feedback, where appropriate. The location of the Proposed Development is on drawing **Location Plan [EN010159/APP/2.1]** and described in **ES Volume 1, Chapter 5: Description of the Proposed Development [EN010159/APP/6.5]** with the consideration of alternatives and the evolution of the design of the Proposed Development presented in **ES Volume 1, Chapter 4: Alternatives and Design Evolution [EN010159/APP/6.4]**.
- 1.1.5 The Project will be determined pursuant to section 104 of the PA 2008. On 17 January 2024, the Overarching National Policy Statement for Energy (NPS EN-1), the NPS for Renewable Energy Infrastructure (NPS EN-3) and the NPS for Electricity Networks Infrastructure (NPS EN-5) came into force. These are the relevant National Policy Statements that affect the DCO application for the Project.
- 1.1.6 While the relevant NPSs are the primary basis for decisions on applications for development consent, the SoS may consider other matters important and relevant to decision-making, such as the national planning policy framework and the development plan policies of the host local authorities.
- 1.1.7 The Assessment has, therefore, been prepared with regard to NPS EN-1, NPS EN-3, NPS EN-5, and important and relevant considerations such as the National

Planning Policy Framework (2024) (NPPF), Lincolnshire Minerals and Waste Local Plan Core Strategy, Nottinghamshire Minerals Local Plan and the relevant District Local Plans.

1.2 Minerals Context

1.2.1 The Order Limits are within the administrative area of two Minerals Planning Authorities:

- > NCC is the Minerals Authority relevant to the area of the Order Limits within NSDC and BDC; and
- > LCC is the Minerals Authority relevant to the area of the Order Limits within WLDC.

1.2.2 The Order Limits is partially within areas that have been allocated by LCC and NCC as Mineral Safeguarding Areas (MSAs). Development within the MSAs is subject to the requirements of relevant minerals policies, discussed further in Section 2. This includes a requirement to prepare a Minerals Assessment.

1.2.3 There is also an existing mineral site adjacent to the Order Limits in LCC which is addressed within the Assessment.

1.2.4 Consultation has been held with LCC and NCC with regard to the provision of a Minerals Assessment with the DCO submission.

1.3 Purpose of the Report

1.3.1 The purpose of the Assessment is to address the requirement of national and local policies relating to minerals and provide an assessment of the impact of the Proposed Development on the safeguarded minerals resource. The report is structured as follows:

- > Section 2 provides a review of relevant national and local minerals policies;
- > Section 3 provides an assessment of impact of the Proposed Development on minerals resource; and
- > Section 4 presents the conclusions of the assessment.

2. Minerals Policy Review

- 2.1.1 The Proposed Development constitutes a NSIP development in accordance with the Planning Act 2008 (PA 2008), as it comprises the construction or extension of a generating station (Part 3, Section 14(1)(a) of the PA 2008) with a generating capacity of more than 50MW (Part 3, Section 15(2)(c)).
- 2.1.2 The Proposed Development will be determined pursuant to section 104 of PA 2008. On 17 January 2024, NPS EN-1, NPS EN-3, and NPS EN-5 came into force. These NPSs are the relevant National Policy Statements that affect the DCO application for the Project.
- 2.1.3 The relevant mineral safeguarding policies are contained within the Lincolnshire Minerals and Waste Local Plan Core Strategy and Development Management Policies DPD, adopted in June 2016 and the Nottinghamshire Minerals Local Plan, adopted in March 2021.

2.2 National Policy Statements

- 2.2.1 Overarching National Policy Statement for Energy (EN-1) (November 2023) sets out the current national policy for delivering NSIP energy infrastructure in England and Wales.
- 2.2.2 NPS EN-1 Paragraph 5.11.19 states: *“Applicants should safeguard any mineral resources on the proposed site as far as possible, taking into account the long-term potential of the land use after any future decommissioning has taken place.”*
- 2.2.3 Paragraph 5.11.28 states: *“Where a proposed development has an impact upon a Mineral Safeguarding Area (MSA), appropriate mitigation measures to safeguard mineral resources should be put in place to safeguard mineral resources.”*
- 2.2.4 National Policy Statement for Renewable Energy Infrastructure (EN-3) (November 2023) includes a section (Section 2.10) which specifically covers policy for solar photovoltaic generation. This section recognises that solar farms are one of the most established renewable electricity technologies in the UK and the cheapest form of electricity generation worldwide. There are no specific references to mineral safeguarding in NPS EN-3.
- 2.2.5 National Policy Statement for Electricity Networks Infrastructure (EN-5) (November 2023) relates specifically to electricity networks, and whilst relevant to the project as a whole there are no specific reference to minerals safeguarding in NPS EN-5.

National Planning Policy Framework (NPPF) (December 2024)

- 2.2.6 Paragraph 222 of the NPPF 2024 highlights that *“it is essential that there is a sufficient supply of minerals to provide the infrastructure, buildings, energy and goods that the country needs. Since minerals are a finite natural resource, and can only be worked where they are found, best use needs to be made of them to secure their long-term conservation.”*
- 2.2.7 To meet this objective, Paragraph 223 of the NPPF 2024 sets out that Minerals planning authorities (MPAs) should safeguard mineral resources by defining MSAs. MPAs should also adopt appropriate policies so that known locations of specific minerals resources of local and national importance are not sterilised by non-mineral development, where this should be avoided, whilst not creating a presumption that the resources defined will be worked. In addition, MPAs should set out policies to encourage the prior extraction of minerals, where practical and environmentally feasible, if it is necessary for non-mineral development to take place.
- 2.2.8 Paragraph 225 of the NPPF 2024 states that local planning authorities should not normally permit other development proposals in MSAs if it might constrain potential future use for mineral working. In this context, it is appropriate to recognise that solar development is an inherently temporary use and does not permanently sterilise the land beneath it.

National Planning Practice Guidance (PPG)

- 2.2.9 The Minerals PPG (2014) confirms that minerals 'make an essential contribution to the country's prosperity and quality of life'. Paragraph 007 of the Minerals PPG states that: *"Mineral planning authorities are encouraged to plan for minerals extraction using Ordnance Survey-based proposals maps and relevant evidence provided by the minerals industry and other appropriate bodies... This approach will allow mineral planning authorities to highlight areas where mineral extraction is expected to take place, as well as managing potentially conflicting objectives for use of land."*

2.3 Local Policy

Nottinghamshire Minerals Local Plan (March 2021)

- 2.3.1 Nottinghamshire Minerals Local Plan forms the land use planning strategy for mineral development within the County up to 2036, but also seeks to ensure the protection of mineral resources from the risk of sterilisation by development which potentially prevents future extraction.
- 2.3.2 The Local Plan has 7 Strategic Policies, with Policy SP7 'Minerals Safeguarding, Consultation Areas and Associated Minerals Infrastructure' stating:

Minerals Safeguarding Areas

1. *Locally and nationally important mineral resources, permitted reserves, allocated sites and associated minerals infrastructure will be safeguarded from needless sterilisation by non-minerals development through the designation of minerals safeguarding areas as identified on the Policies Map.*
2. *Non-minerals development within minerals safeguarding areas will have to demonstrate that mineral resources will not be needlessly sterilised as a result of the development and that the development would not pose a serious hindrance to future extraction in the vicinity.*
3. *Where this cannot be demonstrated, and where there is a clear and demonstrable need for the non-minerals development, prior extraction will be sought where practicable.*

Minerals Consultation Areas

4. *District and Borough Councils within Nottinghamshire will consult the County Council as Minerals Planning Authority on proposals for nonminerals development within the designated Mineral Consultation Area, as shown on the Policies Map.*
5. *The Minerals Planning Authority will resist inappropriate non-minerals development within the Minerals Consultation Areas.*
6. *Where non-minerals development would cause an unacceptable impact on the development, operation or restoration of a permitted minerals site, mineral allocation, or associated minerals infrastructure, suitable mitigation should be provided by the applicant prior to the completion of the development.*

- 2.3.3 Paragraph 3.84 states that, “not every non-mineral development proposal within or close to a Minerals Safeguarding and Consultation Areas represents a risk to future minerals extraction. The main risks will arise from proposals to extend built up areas and new development in the open countryside, as such; the following categories of development are exempt from both consultation and safeguarding:

Development which is in accordance with adopted District/Borough Local Plan allocations which took account of minerals sterilisation and where prior extraction is not feasible or appropriate;

- > Temporary development;
- > Householder planning applications (except for new dwellings);
- > All applications for advertisements;
- > Infill development;
- > Reserved matters; and
- > Prior notifications (telecoms, forestry, agriculture, demolition).

Lincolnshire Minerals and Waste Local Plan Core Strategy and Development Management Policies DPD (June 2016)

2.3.4 Lincolnshire Minerals and Waste Local Plan Core Strategy and Development Management Policies DPD (June 2016) consists of two parts:

- > Core Strategy and Development Management Policies (June 2016): This outlines the principles for the future winning and working of minerals and the form of waste management. It also provides the criteria under which we consider minerals and waste development applications.
- > Site Locations (adopted December 2017): This includes specific proposals and policies for the provision of land for mineral and waste.

2.3.5 Figure 1 of the Lincolnshire Minerals and Waste Core Strategy and Development Management Policies identifies the MSAs for sand and gravel, limestone and blown sand. This is reproduced in Appendix 2 – Proposed Development location within Mineral Safeguarding Area.

2.3.6 Policy M11 'Safeguarding of Mineral Resources' seeks to protect MSAs from permanent sterilisation by other development. Applications for non-minerals development in an MSA must be accompanied by a Minerals Assessment. Where proposed development in MSAs will not sterilise mineral resources or prevent future minerals extraction on neighbouring land, planning permission will be granted when:

“The applicant can demonstrate to the MPA that prior extraction of the mineral would be impracticable and that the development could not be reasonably sited elsewhere; or

- > The incompatible development is of a temporary nature and can be completed and the site restored to a condition that does not inhibit extraction within the timescale that the mineral is likely to be needed; or
There is an overriding need for the development to meet local economic needs, and the development could not reasonably be sited elsewhere; or
- > The development is of a minor nature which would have a negligible impact with respect to sterilising the mineral resource; or
- > The development is, or forms part of, an allocation in the Development Plan.”

2.3.7 Policy M12 'Safeguarding of Existing Mineral Sites and Associated Minerals Infrastructure' seeks to ensure that existing Mineral Sites (excluding dormant sites) and associated minerals infrastructure that supports the supply of minerals in the County will be safeguarded against development that would unnecessarily sterilise the sites and infrastructure or prejudice or jeopardise their use by creating incompatible land uses nearby.

- 2.3.8 With regards to sand and gravel specifically, Policy M3 Landbank of Sand and Gravel states that:

“In order to ensure a steady and adequate supply of sand and gravel for aggregate purposes, the County Council will seek to maintain a landbank of permitted reserves of sand and gravel of at least 7 years within each of the Production Areas based on the County Council's latest local Aggregate Assessment which includes provision for the preservation of production capacity”.

- 2.3.9 Policy SL2 of the Lincolnshire Minerals and Waste Local Plan Site Locations (December 2017) *Safeguarding Mineral Allocations confirms that:*

“Allocated sites, as set out in Policy SL1, including an area of 250 metres surrounding each site, will be safeguarded against development that would unnecessarily sterilise the sites or prejudice or jeopardise their use by creating incompatible land uses nearby”.

Review of the Lincolnshire Minerals and Waste Local Plan (Feb 2021 and July 2024)

- 2.3.10 LCC recently undertook an in-depth review of the Lincolnshire Minerals and Waste Plan to assess whether its policies remain relevant and effective, and it was concluded that the plan should be updated as a whole. LCC are currently at an early stage of preparation for the new Minerals and Waste Local Plan. A consultation on the issues and options for updating the plan, along with a call for sites exercise, was undertaken from 28 June 2022 - 12 August 2022. Following this consultation, the mineral and waste local plan was updated based on the feedback from the previous issues and options consultation (June to August 2022) and the latest evidence. The Lincolnshire Minerals and Waste Local Plan, the preferred approach for updating the plan (July 2024), was consulted from 30 July 2024 to 24 September 2024.
- 2.3.11 It should be noted that the plan review has demonstrated that Policy M11, in its current form, does not provide a practical or efficient approach to safeguarding mineral resources. Policy M11 states:
- “Sand and gravel, blown sand and limestone resources that are considered to be of current or future economic importance within the Minerals Safeguarding Areas [...] together with potential sources of dimension stone for use in building and restoration projects connected to Lincoln Cathedral/Lincoln Castle [...] and chalk resources [...] will be protected from permanent sterilisation by other development.*
- 2.3.12 *Applications for non-minerals development in a minerals safeguarding area must be accompanied by a Minerals Assessment. Planning permission will be granted for development within a Minerals Safeguarding Area provided that it would not sterilise mineral resources within the Mineral Safeguarding Areas or prevent future minerals extraction on neighbouring land.*

2.3.13 *Where this is not the case, planning permission will be granted when:*

- > *the applicant can demonstrate to the Mineral Planning Authority that prior extraction of the mineral would be impracticable, and that the development could not reasonably be sited elsewhere; or*
- > *the incompatible development is of a temporary nature and can be completed and the site restored to a condition that does not inhibit extraction within the timescale that the mineral is likely to be needed; or*
- > *there is an overriding need for the development to meet local economic needs, and the development could not reasonably be sited elsewhere; or*
- > *the development is of a minor nature which would have a negligible impact with respect to sterilising the mineral resource; or*
- > *the development is, or forms part of, an allocation in the Development Plan.”*

2.3.14 The review states that since the adoption of the Lincolnshire Minerals and Waste Plan a number of decisions have been made by the district councils that have not reflected LCC advice that the proposals would be contrary to Policy M11. Other issues identified with the policy reported in the review included; applications being submitted without a Mineral Assessment as required by the policy, Mineral Assessments being produced for sites that were not suitable for mineral extraction due to other constraints, and the requirement for a Mineral Assessment being disproportionate and unreasonable in a large number of cases.

2.3.15 The review concluded that the policy would, therefore, benefit from being updated. The updated policy, as set out in policy SM15: Safeguarding of Mineral Resource, is taken from the approach adopted in the local plans of the District, Borough, and City to ensure consistency. Policy SM15 states:

“Sand and gravel, blown sand and limestone resources that are considered to be of current or future economic importance within the Minerals Safeguarding Areas shown on the Policies Map, will be protected from permanent sterilisation by other development. Planning permission will be granted for development within a Minerals Safeguarding Area provided that it would not sterilise mineral resources within the Minerals Safeguarding Areas or prevent future minerals extraction on neighbouring land. Where this cannot be demonstrated, the applicant must demonstrate to the Mineral Planning Authority that prior extraction of the mineral would be impracticable; and in any case:

(i) the development is of a temporary nature and will be completed and the site restored to a condition that does not inhibit extraction within the timescale that the mineral is likely to be needed; or

(ii) there is an overriding need for the development and the development could not reasonably be sited elsewhere; or

(iii) the development would have a negligible impact with respect to sterilising the mineral resource. Applications for non-minerals development in a Minerals Safeguarding Area must be accompanied by a Minerals Resources Assessment, unless demonstrated by the applicant, to the satisfaction of the Mineral Planning Authority, that it is disproportionate to do so”.*

- 2.3.16 Policy SM15 has been drafted with the intention and purpose of replacing the current policy M11. The changes mainly relate to the requirement of a Mineral Assessment, as per the comments raised during the review process. The key criteria for non-minerals developments remain largely the same, as such the Proposed Development has had regard to the draft Policy SM15.

2.4 Industry Guidance and Advice

Mineral Safeguarding in England: Good Practice Advice, British Geological Survey Open Report OR/11/046 (2011)

- 2.4.1 The Planning Practice Guidance (Paragraph: 003 Reference ID: 27-003-20140306) makes reference to the Mineral Safeguarding in England: Good Practice Advice for detailed advice on mineral safeguarding.
- 2.4.2 The Good Practice Advice guidance states that an “*MSA neither precludes other forms of development permitted nor conveys any presumption that the mineral will be worked. MSAs simply provide a policy tool which will be alert to the fact that minerals may be sterilised by the proposed non-mineral development and that this should be taken into account in the planning process*”.

3. Assessment of Impact of the Proposed Development on Mineral Resource

3.1.1 This section identifies the mineral-related policy allocations relevant to the Order Limits. It considers the potential for the Proposed Development to impact on the supply of mineral reserves following a review of the local policy on landbanks. It then considers the potential impact of the Proposed Development on existing minerals sites and safeguarded minerals in line with policy requirements protecting MSAs.

3.2 Minerals allocations relevant to the Order Limits

Nottinghamshire

3.2.1 The relevant allocations are retained within the Nottinghamshire Minerals Local Plan, March 2021 (Figure 1: Nottingham Mineral Safeguarding Areas Map) which is reproduced at Appendix 1. It should be noted that the mapping in the Minerals Planning Authorities plans is provided at a relatively low resolution, however we have engaged with NCC who have provided specific high resolution mapping from which to assess the extent of the MSAs.

3.2.2 Parts of the Order Limits are located within an MSA, and the Proposed Development is located on this land within the Newark and Sherwood, and Bassetlaw Districts, across the majority of the Site to the east of the Trent and a small area to the west (as allocated by the Nottinghamshire Minerals and Waste Local Plan; see Appendix 1). This MSA is designated for Sand and Gravel, and it extends in a south-east direction across a large area of Nottinghamshire.

3.2.3 The existing Girton Quarry is located outside of the Order Limits approximately 1.5km to the south, and is a currently 'mothballed' but has permission until 2036. Sand and gravel is being worked from existing stockpiles at around 50,000-100,000 tonnes per annum. Given the distance from the Order Limits there will be no impacts on the operations of this existing Site as a result of the Proposed Development.

Lincolnshire

3.2.4 The relevant allocations are retained within the Lincolnshire Minerals and Waste Local Plan Core Strategy and Development Management Policies DPD, June 2016 (Figure 2: Lincolnshire Mineral Safeguarding Areas Map), reproduced at Appendix 2. It should be noted that the mapping in the Minerals Planning Authorities plans is provided at a relatively low resolution, however we have engaged with LCC who have provided specific high resolution mapping from which to assess the extent of the MSAs.

3.2.5 Within the LCC part of the Order Limits, there are three types of allocations within the Order Limits: These areas are defined within the Lincolnshire Minerals and Waste Local Plan Core Strategy and Development Management Policies DPD, June 2016 and reproduced below:

Sand and Gravel Area of Search – “An extensive area of land believed to contain significant, but generally unproven mineral resource”;

Sand and Gravel Mineral Safeguarding Area (MSA) – “An area where a mineral resource has been identified. A Mineral Safeguarding Area is not a proposed area of extraction and does not mean that proposals will be permitted within the area. The main purpose of the MSA is to protect a mineral resource for the long term for future generations. These areas will be safeguarded against development that would unnecessarily sterilise the sites or prejudice or jeopardise their use by creating incompatible land uses nearby”; and

- > Site-Specific Mineral Safeguarding Area – “these are existing or dormant minerals sites including an area of 250 metres around the specific sites and will be safeguarded against development that would unnecessarily sterilise the sites or prejudice or jeopardise their use by creating incompatible land uses nearby”.

3.2.6 The Order Limits located within Lincolnshire are wholly located within the ‘Area of Search’, and partially located within the Minerals Safeguarding Area, and the Proposed Development is located on this land within the West Lindsey District (as allocated by the Lincolnshire Minerals and Waste Local Plan Core Strategy; see Appendix 2). This MSA is designated for Sand and Gravel, and also covers large areas of Lincolnshire to the east, south and north.

3.2.7 As set out below, one existing minerals site adjoins the Proposed Development which is safeguarded by Policy M12: ‘Safeguarding of Existing Mineral Sites and Associated Minerals Infrastructure’. This existing mineral site (Newton on Trent Oil Well Ref: 32) is located within the study area, which sits outside of the Order Limits, and is assessed in Section 3.3.

3.2.8 A large area of the Order Limits located in Lincolnshire is within a Petroleum Exploration and Development License (PEDL) area (as is a large area of Lincolnshire north of Lincoln) and one petroleum license has been granted adjacent to the Order Limits (reference EXL141) at the Newton on Trent Oil Well referenced above. These resources are located underground, and therefore are not affected by the surface works associated with the Proposed Development. This is addressed further in section 3.4 below.

3.3 Site-specific Minerals Safeguarding Areas

3.3.1 One existing minerals site adjoins the proposed development which is safeguarded by Policy M12: ‘Safeguarding of Existing Mineral Sites and Associated Minerals Infrastructure’. This is an existing oil well called Newton on Trent Oil Well (Ref: 32).

It is not included within the Order Limits, and access has been retained should this be required for any future operations or maintenance. It is however considered that the well is no longer functioning and the surrounding land has been put forward by the current landowner. Discussions with the landowner and status of the oil well are ongoing, however the discussions to date confirm that the oil well is not currently active and has not been for 10 years. Site visits from the team confirm this and a review of the current lease has been undertaken. The leasehold document refers to an exploration licence for petroleum which has a term of 20 years from 14/01/1998 so this has now expired and does not appear to have been renewed on the title. There remains an open dialogue between the Applicant and the landowner should there be any further comments raised.

- 3.3.2 A safeguarded buffer zone of 250m around the existing site is located within the Order Limits and is proposed for Solar Arrays. This form of development would not sterilise the oil resources or impact its operations, if still functioning. The Proposed Development is of a temporary nature, and after 60 years, the land will be returned to its existing use. The location of the existing minerals site in relation to the Order Limits can be seen at Appendix 2.

3.4 Petroleum Licence Areas

- 3.4.1 Lincolnshire has a long history associated with the production of conventional oil and gas going back to the 1940s, and large parts of the county are licensed for production. Welton oilfield is the second largest on-shore field in the UK after Wytch Farm in Dorset. It started oil production in 1984 and has a predicted total production of 16.7 million bbl (barrels) of oil. In addition, the county has extensive oil fields around Gainsborough, Corringham and Scampton. Gas has previously been produced from the Saltfleetby field to the east of the county on a significant scale. At the beginning of 2021 there were 37 permitted oil and gas sites across the county.
- 3.4.2 Paragraph 106 of the minerals section of the PPG requires all mineral planning authorities which are in a Petroleum Licence Area, when they update their local plans, to include the Petroleum Licence Areas on their policies maps and include criteria-based policies for each of the exploration, appraisal and production phases of hydrocarbon extraction. Additionally, paragraph 221(a) of the NPPF sets out that mineral planning authorities should, when planning for on-shore oil and gas development, clearly distinguish between, and plan positively for, the three phases of development (exploration, appraisal and production), whilst ensuring appropriate provision is made for monitoring and site restoration. Lincolnshire contains a number of Petroleum Licence Areas (as set out below) and as such, it is a requirement that the Minerals Local Plan includes a policy relating to hydrocarbon exploration and extraction.
- 3.4.3 As stated in this Assessment, there is a mineral site adjacent to the Order Limits, south of Newton on Trent, called the Newton on Trent Oil Well site (Reference: 32

in the Lincolnshire Minerals and Waste Local Plan Core Strategy) with the location shown in Appendix 1.

- 3.4.4 The Newton on Trent Oil Well site (adjacent to the Order Limits) and the surrounding area (within the Order Limits) within Lincolnshire is located within a Petroleum Exploration and Development License (PEDL) area which are set by the Department for Energy Security and Net Zero (DESNZ). DESNZ grant the license holder the opportunity to apply for drilling permission. The license alone does not grant consent for petroleum drilling and planning permission must still be obtained from the Minerals Planning Authority to commence operations. The part of the Order Limits allocated as a PEDL area is not exclusively bound for petroleum operations, rather it indicates an area where there may be the opportunity for exploration and proving economically recoverable reserves and then an application for planning permission. It is noted that much of the land within Lincolnshire north of Lincoln is located within the PEDL area.
- 3.4.5 From a review of applications on the Council's planning portal, Newton on Trent Oil well has previously produced crude oil. The site was granted planning permission for five exploratory boreholes for oil in 1998 (ref. 98/P/0370). That permission was then extended in 2001 through application M01/P/0515 and in 2011 through application 127165. Planning permission to continue use of the five exploratory boreholes was granted until the 30th of June 2036.
- 3.4.6 There is one licence granted adjacent to the Order Limits, Reference EXL141, which was granted in 1988 to Trans World Oil and Gas Ltd to search and bore for and get petroleum in the course of exploration. Current North Sea Transition Authority Records¹ show that the license is extant, with an anticipated licence end date of 31 March 2025. The PEDL license is on the same site as the Newton on Trent Oil Well site (Reference: 32 in the Lincolnshire Minerals and Waste Local Plan Core Strategy) with the location shown in Appendix 1.
- 3.4.7 In terms of policy support for petroleum exploration, Lincolnshire Minerals and Waste Plan (2016) confirms:
- 3.4.8 *"Policy M9: Energy Minerals Planning permission will be granted for exploration, appraisal and/or production of conventional and unconventional hydrocarbons provided that proposals accord with all relevant Development Management Policies set out in the Plan."*
- 3.4.9 LCC recently undertook an in-depth review of the Lincolnshire Minerals and Waste Plan to assess whether its policies remain relevant and effective, and it was concluded that the plan should be updated as a whole. LCC are currently at an early stage of preparation of the new Minerals and Waste Local Plan. A consultation on the issues and options for updating the plan along with a call for

¹ https://itportal.nstauthority.co.uk/eng/fox/oga-report/PED300X/onshore-licence/?LICENCE_TYPE=EXL&LICENCE_NO=141

sites exercise was undertaken from 28 June 2022 – 12 August 2022. Following this consultation, the Mineral and Waste Local Plan was updated based on the feedback from the previous issues and options consultation (June to August 2022) and the latest evidence. The Lincolnshire Minerals and Waste Local Plan, the preferred approach for updating the plan (July 2024), was consulted from 30 July 2024 to 24 September 2024 (the 'Preferred Approach Plan').

3.4.10 The Preferred Approach Plan confirms the following:

"On 4 November 2019, following seismic events linked to shale gas exploration in Lancashire, the Secretary of State for Business, Energy and Industrial Strategy issued a ministerial statement announcing a moratorium on fracking. However, this does not override the requirements of the NPPF or the PPG for mineral planning authorities to plan for both types of hydrocarbon development (conventional and unconventional) in their local plans".

3.4.11 As such, a slightly amended policy has been proposed in the Emerging Mineral Local Plan under the new reference SM10 Energy Minerals:

"Planning permission will be granted for each of the exploration, appraisal and / or production phases of conventional and unconventional hydrocarbon extraction provided that the proposals accord with all relevant Development Management Policies and Restoration Policies set out in the Plan."

3.4.12 It is noted that the Central Lincolnshire Local Plan (2023) confirms the following at paragraph 3.5.7 and 3.5.8:

"The current Lincolnshire Minerals and Waste Local Plan, adopted in 2016, includes a policy which supports the "exploration, appraisal and/or production of conventional and unconventional hydrocarbons" (Policy M9). However, the Central Lincolnshire Joint Strategic Planning Committee has taken the view that both the legislative and policy context has evolved considerably since then. Indeed, the Committee's view is that the remaining carbon budget, at both a local and a global level, cannot be met if fossil fuels continue to be extracted and consumed. Whilst undoubtedly there will be a period of time where we transition away from fossil fuels, it is imperative that the economy needs to move to low carbon energy, and Policy M9 is not, in the view of the Committee, compatible with this transition. Extraction and burning of fossil fuels is not commensurate with delivering a net zero carbon Central Lincolnshire.

Lincolnshire County Council is the Minerals Authority for Lincolnshire and as such it is responsible for making decisions on applications for mineral exploration and working, and for allocating land for such uses, as well as maintaining planning policies for minerals exploration and extraction. The Joint Committee recognises that this Local Plan cannot introduce a minerals policy relating to developments that fall under the jurisdiction of the County Council, nor does it have the legal ability to introduce a development plan policy which is inconsistent

with an existing development plan policy in an adopted Minerals and Waste Plan (namely, Policy M9 of the Lincolnshire Minerals and Waste Plan, 2016. Nevertheless, resisting fossil fuel extraction is vital in delivering the climate change aims of this Local Plan, and therefore the Joint Committee hereby confirms it's in principle view against any form of fossil fuel exploration, extraction, production or energy generation in its area."

- 3.4.13 The Central Lincolnshire Local Plan (CLLP) 2018-2040 was adopted by the Central Lincolnshire Joint Strategic Planning Committee (CLJSPC) on 13 April 2023 and it now replaces the 2017 version of the CLLP as the development plan for the City of Lincoln, West Lindsey, and North Kesteven District Councils.
- 3.4.14 It is therefore clear that the direction of travel for LCC as the relevant Minerals Authority is to resist fossil fuel extraction where possible. It is also noted that the oil well itself is not included within the Order Limits, and access has been retained should this be required for any future operations or maintenance. It is however considered that the well is no longer functioning, and the surrounding land has been put forward by the current landowner. Discussions with the landowner and status of the oil well are ongoing, however the discussions to date confirm that the oil well is not currently active and has not been for 10 years. Site visits from the team confirm this and a review of the current lease has been undertaken. The leasehold document refers to an exploration licence for petroleum which has a term of 20 years from 14/01/1998 so this has now expired and does not appear to have been renewed on the title. There remains an open dialogue between the Applicant and the landowner should there be any further comments raised.
- 3.4.15 As such, is not considered that the Proposed Development would have any implications for existing or proposed exploration and eventual exploitation of oil and gas resources. Solar arrays and associated development are not considered to be sensitive adjoining land uses to an oil well. Whilst together the solar PV development occupies a large area, they are not a single block of land and are dispersed across a large area thus there is still scope for exploratory drilling, if necessary and considered consistent with planning policy at the time. The Proposed Development has been demonstrated not to sterilise mineral resources and is therefore considered to be in accordance with paragraph 5.10.9 of NPS EN-1 (2011) and paragraph 5.11.19 of NPS EN-1 (November 2023) and Lincolnshire Minerals and Waste Local Plan Core Strategy Policy M2 and M11 and Nottinghamshire Minerals Local Plan (March 2021) Policy SP7.

4. Impact on Supply of Minerals

- 4.1.1 Consideration is given to the availability of permitted reserves of minerals in both Nottinghamshire and Lincolnshire in order to assess whether the Proposed Development may prevent a sufficient supply of minerals from coming forward.
- 4.1.2 A landbank is a stock of planning permissions for mineral extraction. The government requires MPAs to have landbanks for aggregates and raw industrial minerals such as limestone and clay for cement manufacture.
- 4.1.3 Landbanks are principally a monitoring tool to provide an early indication of possible disruption to the provision of an adequate and steady supply of minerals in the county and indicate when new permissions are likely to be needed. Government policy requires provision to be made for the maintenance of landbanks of at least 7 years for sand and gravel, 10 years for crushed rock and provision of a stock of permitted reserves to support the maintenance of cement production of at least 15 years for cement primary and secondary materials to maintain an existing plant.

4.2 Nottinghamshire Landbank

- 4.2.1 In respect of sand and gravel, important alluvial (river) sand and gravel deposits are found in the Trent and the Idle Valleys which have made Nottinghamshire an important producer of sand and gravel in the East Midlands. Limited extraction also occurs in glaciofluvial sand and gravel deposits near East Leake, south of Nottingham. Sand and gravel is mainly used in ready mixed concrete production, although Nottinghamshire's reserves are particularly valuable because they meet high strength concrete specifications as the gravel is made up of quartzite.
- 4.2.2 The Nottingham Local Aggregate Assessment (December 2024) reported that the sand and gravel landbank has gradually increased and stands at 16.02 years, which is well above the NPPF minimum 7-year requirement (paragraph 226.f).
- 4.2.3 The landbank is calculated by dividing existing permitted reserves by the level of production based on the average sales over the last 10 years. This is in line with guidance set out in the National Planning Practice Guidance.
- 4.2.4 Permitted reserves currently total 20.66 million tonnes, with average sales over the last 10 years standing at 1.29 million tonnes per annum. Therefore, as of December 2023 the landbank stood at 16.02 years of production. This is above the minimum 7-year landbank requirement set out in the NPPF at paragraph 226.f.
- 4.2.5 The sand and gravel landbank has been steadily increasing, this is caused by permitted reserves increasing due to a significant extension being granted at Langford Lowfield quarry and the 10-year average (which is used to calculate the

landbank) falling since 2014 as higher pre-recession sales data was removed from the 10-year average.

- 4.2.6 There are eight permitted sand and gravel quarries in Nottinghamshire, although at present only six are in full production. The status of these quarries reflects ongoing site operations and market demand for aggregates.
- 4.2.7 The quarry at Sturton Le Steeple is listed as inactive, as work had not commenced during the reporting period, which covers up until December 2023. However, it is important to note that operations at Sturton Le Steeple are understood to have commenced, and future reports will reflect this activity (with the next report expected to be published in October 2025). Additionally, Cromwell quarry received new planning permission for continued extraction in 2024, further supporting Nottinghamshire's capacity to meet future aggregate demand.
- 4.2.8 It is noted that additional reserves will be needed over the plan period to 2036 to replace existing quarries as they are worked out. The adopted Minerals Local Plan allocates a mix of extensions to existing permitted quarries and one new quarry to provide these reserves. None of these fall within or adjoining the Order Limits.

4.3 Lincolnshire Land Bank

- 4.3.1 The Lincolnshire Local Aggregates Assessment (July 2023) (LMWLP) confirms that Lincolnshire has sand and gravel resources in fluvial (river), glacial, coastal and windblown deposits.
- 4.3.2 In 2022 Lincolnshire had 9 active sand and gravel quarries and extraction sites producing aggregates from reserves within the county. In addition, there was one site currently working reserves located in an adjacent county, one that was inactive, two pending commencement of operations and a further five sites that were dormant.
- 4.3.3 Lincolnshire is subdivided into three sand and gravel production areas in the LMWLP known as the Lincoln Trent Valley Production Area, the Central Lincolnshire Production Area, and the South Lincolnshire Production Area. In previous years, the sales and landbank data has been reported separately for each of these production areas. However, since 2021 there has been a reduction in the number of operators in the Central Lincolnshire Production Area. As a result, dividing the data between the production areas would no longer comply with the confidentiality undertaking agreed with industry.
- 4.3.4 The 2022 data is therefore only reported for the county as a whole. In 2022 aggregate sales for the county amounted to 2.453 million tonnes (mt). This represents a fall in sales but the 10-year average for the period 2013 to 2022 has increased slightly to 2.326mt per annum. After considering local factors, national growth projections and recent production levels, it has been concluded that the calculation of landbanks should continue to be based on the rolling 10-year

average sales. On this basis, the permitted reserves for the county of 22.364mt at the end of 2022 provided a landbank of 9.621 years. At the end of 2022 two planning applications at Baston No, 2 Quarry were pending determination (subsequently determined for approval). The first was for an extension to the quarry onto allocated land at Baston No 2 Quarry, Langtoft and the second proposed to extract mineral from under the existing plant site. These will provide for an additional 1.25million tonnes of sand and gravel bringing the landbank to above 10-years.

- 4.3.5 The LMWLP reports that, together with the remainder of sites allocated in the SLD, there should be sufficient sand and gravel resources to last beyond the LMWLP period which extends to the end of 2031.

4.3.6 East Midlands Aggregates Working Party (EMAWP)

- 4.3.7 Lincolnshire and Nottinghamshire are part of the EMAWP which provides technical advice about the supply and demand for aggregates (including sand and gravel) to the mineral planning authorities in the East Midlands working with the Department of Levelling Up, Housing and Communities (DLUHC) to do so.

- 4.3.8 The role of the Aggregate Working Party is:

- > to consider, scrutinise and provide advice on the Local Aggregate Assessment of each mineral planning authority in its area.
- > to provide an assessment on the position of overall demand and supply for the Aggregate Working Party area, including whether, in its view, the area is making a full contribution towards meeting both national and local aggregate needs.
- > to obtain, collect and report on data on minerals activity in their area. This includes annual data on sales, permissions and mineral reserves in their area, and data on recycled and secondary sources.

- 4.3.9 The most recent EMAWP Annual Report (2023) has been reviewed which confirms that for Lincolnshire, based on the average of the last 10-years of sales data (2013-2022), the county council considers that it is making more than sufficient provision for the supply of sand and gravel for the current period of the Lincolnshire Mineral and Waste Local Plan (LMWLP), which ends in 2031. Even if sales were to rise significantly in the near future, the LMWLP is likely to provide sufficient flexibility to accommodate increases in production.

- 4.3.10 For Nottinghamshire, the report confirms that the provision of sand and gravel is the biggest issue for Nottinghamshire and Nottingham over the plan period. The 10-year sales average has fallen from 1.7 million tonnes in 2013 to 1.35 million in 2022. This is largely due to the fall in sales due to the recession in 2007 and the continued subdued sales since, even though significant sand and gravel resources remain in the Trent Valley.

- 4.3.11 Additional reserves will need to be needed over the plan period to 2036 to replace existing quarries as they are worked out. The adopted Minerals Local Plan allocates a mix of extensions to existing permitted quarries and one new quarry.
- 4.3.12 Resource depletion in the Idle Valley is likely to be the biggest factor potentially influencing exports to South Yorkshire. The extent of the impact will depend on the level of demand, due to economic conditions, the status of Sturton Le Steeple quarry and the increasing trend of replacing sharp sand with crushed rock in concreting products. However, it is likely that sand and gravel will either be sourced from quarries around Newark or from other areas outside of Nottinghamshire that maybe closer.

4.4 Summary of availability of mineral reserves

- 4.4.1 In summary, both Nottinghamshire and Lincolnshire both have sufficient permitted reserves of sand and gravel to provide excess of a 10-year landbank. Even if further reserves are required, the MSAs extend well beyond the Order Limits and therefore there would be significant opportunities for enviromentally suitable minerals extraction sites to be identified in other areas.

4.5 Impact on Safeguarding Resource

- 4.5.1 As outlined above, the Order Limits are located in part within MSAs. Paragraph 223 of the NPPF as well as LCC's Policies M11 and M12, and NCC Policy SP7 require that development must not permanently sterilise mineral resource in MSAs, as well as ensuring that existing mineral sites and associated infrastructure are safeguarded to allow continued operation on site without constraints or impacts.
- 4.5.2 In addition to requiring developers to demonstrate that development will not sterilise minerals resources, Policy M11 also outlines further criteria where development impacting an MSA would be considered acceptable. The criteria include:
- demonstrating that prior extraction of the mineral would be impracticable and that the development could not be reasonably sited elsewhere;
 - or demonstrating that the development is temporary in nature and that the site can be restored to a condition that does not inhibit extraction within the timescale that the mineral is likely to be needed;
 - or demonstrating an overriding need for the development to meet local economic needs, and the development could not reasonably be sited elsewhere.
- 4.5.3 The Proposed Development is expected to be operational for 60 years. When the operational phase ends, the solar farm will require decommissioning. All PV modules, BESS containers, mounting poles, inverters transformers and switchgear would be removed and recycled or disposed of in accordance with good practice

and market conditions at the time. Therefore, the site will be restored to its current condition, allowing the ability to extract the minerals if needed after the operation of the Proposed Development. The Proposed Development works are not directly interfering with or sterilising the identified potential of the mineral reserves, given the works proposed are predominately above ground, and the location of these resources underground.

- 4.5.4 The section below outlines how the Proposed Development can demonstrate that it will not sterilise mineral resources and demonstrate that it meets the additional criteria of LCC Policies M11 and M12 and NCC Policy SP7.

4.6 Sterilisation of Minerals Resource

- 4.6.1 This section outlines in detail how the Proposed Development will not result in the sterilisation of mineral resources designated under an MSA.
- 4.6.2 The Proposed Development is temporary and will not permanently sterilise resources or hinder future extraction, as the Solar PV Development can be removed and the land restored to its former use following its operational life.
- 4.6.3 The Proposed Development is expected to be operational for 60 years. When the operational phase ends, the solar farm will require decommissioning. Decommissioning will include the removal of all above ground infrastructure, including the BESS and Substations foundations. Permissive paths will also be removed. Underground cables may remain in situ. Trees and hedgerows planted as part of the Proposed Development are assumed to remain in situ when the land is returned to the landowners. It is also expected any clear span bridges used throughout the operational period will also remain in place.
- 4.6.4 Following decommissioning, the landowner has the right to use their land as they would now and any minerals would not be permanently sterilised and would be available to exploit if required at a future date. The minerals within the Order limits will not be permanently sterilised, and post-decommissioning, the land could be worked for minerals.
- 4.6.5 Therefore any impacts caused by the Proposed Development related to land use are considered temporary and will be managed through a Decommissioning Environmental Management Plan, which will be submitted as part of the application and used as a commitment once operation ceases. See the **Outline Decommissioning Environmental Management Plan [EN10159/APP/7.6]** for more information.
- 4.6.6 It is therefore considered that the Proposed Development is demonstrated to be in accordance with all relevant criteria with policies M11 and M12 of the Lincolnshire Minerals and Waste Local Plan Core Strategy and Development Management Policies DPD and Policy SP7 of the Nottingham Minerals Local Plan 2021.

4.7 Need for Development and Site Selection

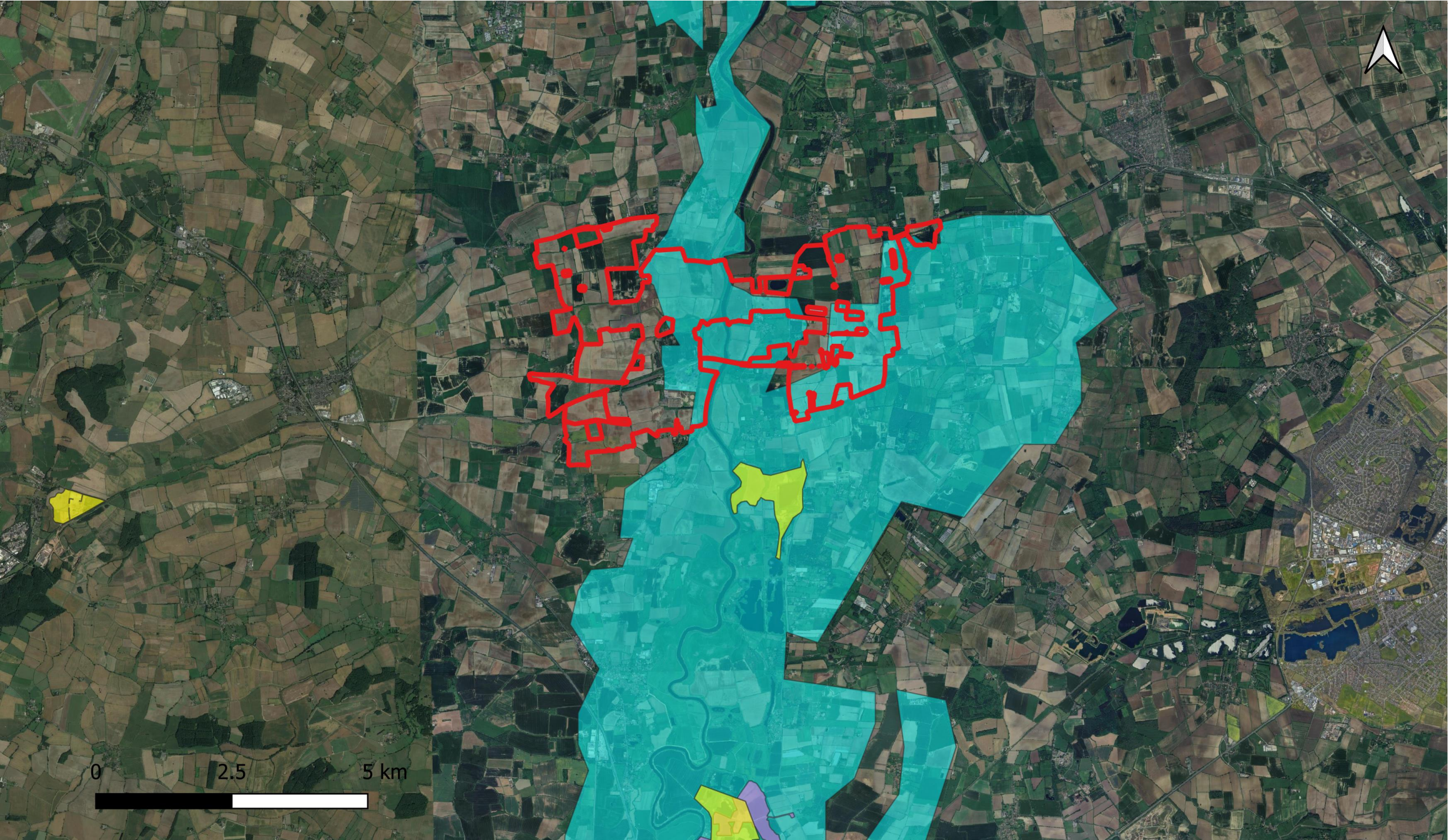
- 4.7.1 The **Statement of Need [EN010159/APP/7.1]** accompanying the DCO Application sets out a detailed case for why the Proposed Development is urgently required, concluding that it will be a critical part of the UK's portfolio of renewable energy generation, and required to decarbonise its energy supply quickly and provide secure and affordable energy supplies.
- 4.7.2 The **Site Selection Report Appendix 1** to the **Planning Statement [EN010159/APP/5.5]** provides an overview of the site selection process undertaken to identify the development site and presents the reason why the Proposed Development and Order Limits are located in this particular location. Section 3 of the **Planning Statement [EN010159/APP/5.5]** gives an overview of the principles and the technical and environmental requirements of a large-scale solar farm development project that have guided the site selection. Both demonstrate that there are limitations and external factors influencing the siting of the Proposed Development including the availability of a suitable grid connection with sufficient capacity, suitable topography of the land and a generally sparse settlement patterns once those criteria are met, meaning that there is opportunity to develop this site to a sufficient scale to deliver meaningful contributions towards meeting net-zero.

4.8 Summary of the Impact on Safeguarded Resource

- 4.8.1 The Order Limits (approximately 1,409 ha) are located within MSAs designated by both Nottinghamshire and Lincolnshire County Councils. There are no allocated minerals sites within the Order Limits, but there is an existing minerals site adjoining the Order Limits (Newton on Trent Oil Well Ref: 32).
- 4.8.2 Nottinghamshire and Lincolnshire County Council both have sufficient permitted reserves of sand and gravel to provide in excess of a 10-year landbank. There is no need for any additional permitted provision to be made for the foreseeable future.
- 4.8.3 The Proposed Development is expected to be operational for at least 60 years. Following this period, it will require decommissioning. This will involve removing all of the Solar PV infrastructure, including the Ground-Mounted Solar PV Generating Stations, Collector Compounds, One Earth Substation, BESS, and ancillary infrastructure, including any on-site compounds. As such, any impacts that are caused by the Proposed Development are considered temporary. As such, the minerals within the Order Limits will not be permanently sterilised and post decommissioning the land could be worked for minerals. Furthermore, it is demonstrated through the DCO Application that there is an overriding need for the Proposed Development and that the development could not reasonably be sited elsewhere, in line with the requirements of Policy M11 and M12 of the Lincolnshire Minerals and Waste Core Strategy and Development Management Policies, and Policy SP7 of the Nottinghamshire Minerals Local Plan.

- 4.8.4 The existing minerals site, Newton on Trent Oil Well is not included within the Order Limits, and access has been retained should this be required for any future operations. It is however considered that the well is no longer functioning and the surrounding land has been put forward by the current landowner. The safeguarded buffer zone around the existing site is located within the Order Limits and is proposed for Solar Array development. This form of development would not sterilise the oil resources or impact its operations, if still functioning. The Proposed Development is expected to be operational for 60 years. When the operational phase ends, the solar farm will require decommissioning. All PV modules, BESS containers, mounting poles, inverters transformers and switchgear would be removed and recycled or disposed of in accordance with good practice and market conditions at the time. As such, any impacts that are caused by the Proposed Development are considered temporary.
- 4.8.5 In light of the above it is considered that the Proposed Development is in accordance with NPS, NPPF and Local minerals planning policy.

A.1 Appendix 1 – Nottinghamshire Minerals Allocations



Client:
One Earth Solar Farm Ltd

Project:
One Earth Solar Farm





Planning Inspectorate Scheme Ref:EN010159
Environmental Statement Volume 2

Drawing Title:
Mineral Safeguarding Areas -
Nottinghamshire

Drawing Number:
14529A-xxxxx

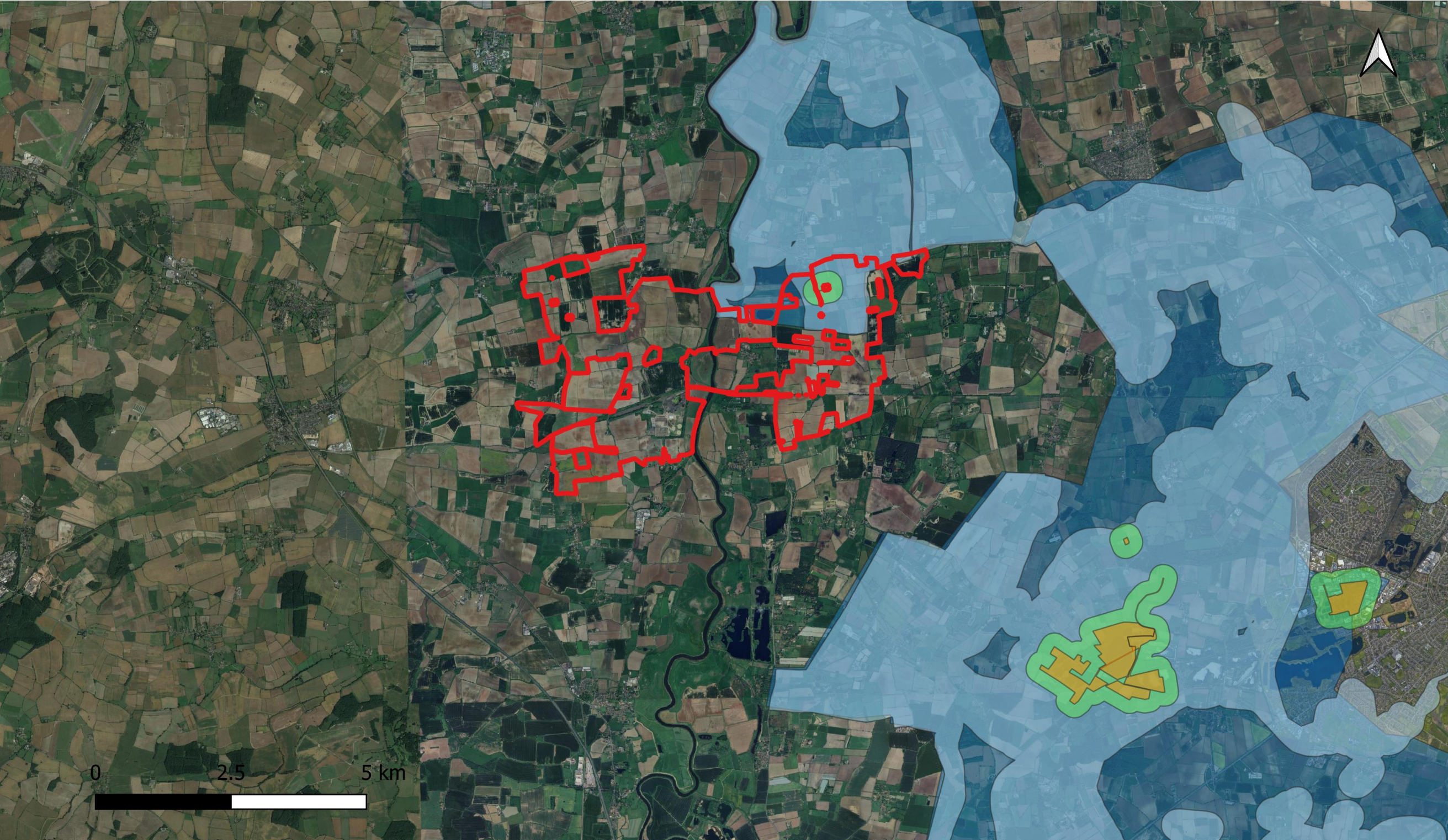
Drawn Date:
2024-12-19

Rev:
01

- Legend:
-  Red Line Boundary
 -  Minerals Safeguarding Region — All Permitted Sites
 -  Minerals Safeguarding Region — Adopted Mineral Allocation
 -  Minerals Safeguarding Region — Sand and Gravel



A.2 Appendix 2 – Lincolnshire Minerals Allocations



Client:
One Earth Solar Farm Ltd

Project:
One Earth Solar Farm






Planning Inspectorate Scheme Ref:EN010159
Environmental Statement Volume 2

Drawing Title:
Mineral Safeguarding Areas -
Lincolnshire

Drawing Number:
14529A-xxxxx

Drawn Date:
2024-12-19

Rev:
01

- Legend:
-  Red Line Boundary
 -  Existing Minerals Sites
 -  Site Specific Mineral Safeguarding Area
 -  Sand and Gravel Mineral Safeguarding Area
 -  Sand and Gravel Areas of Search





one earth
solar farm