North Kesteven
DISTRICT COUNCIL

Application by Springwell Energy Farm Limited for an order granting development consent for the Springwell Solar Farm

Local Impact Report

A report prepared by North Kesteven District Council

(ID 20054501)

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1 Terms of Reference and Introduction

1.1 This report comprises the Local Impact Report (LIR) of North Kesteven District Council (NKDC). The Council has had regard to the purpose of LIRs as set out in s60(3) of the Planning Act 2008 (as amended), MHCLG's Guidance for the examination of applications for development consent and the Planning Inspectorate's Advice for Local Authorities.

2 Scope, Purpose and Structure of the LIR

2.1 This LIR describes the impact of 'Works' (as described in the Development Consent Order (DCO)) as described below. This LIR does not consider the direct impacts of development insofar as they relate to the proposals to construct a new electricity substation at Navenby Heath by the National Grid which falls within the red line of the DCO but will be subject to a separate planning application under the Town and Country Planning Act 1990 (TCPA).

2.2 North Kesteven District Council and Lincolnshire County Council (LCC) will prepare and submit separate LIRs.

2.3 This LIR has been prepared to highlight the ways in which the proposed development of a solar farm and associated battery storage facility at Springwell Solar Farm will affect the locality and local community. It is not intended as a technical document – the application itself is accompanied by a great deal of technical information – but as a broad overview of the likely issues (positive, negative and neutral) that might arise from the proposed development. These are summarised in Table 26.1.

2.4 This LIR seeks to identify where there is compliance (or conversely where there is a tension or conflict) with national and, in particular, local plan policy and to distinguish between matters that are of most potential impact and those that are either temporary or less significant in the longer term.

3 Application Description

3.1 Springwell Solar Farm is a proposed solar photovoltaic (PV) electricity generating and battery storage facility with associated infrastructure which would allow for the generation and export of electricity exceeding 50 megawatts (MV).

3.2 The key components of the proposed development, as set out in paragraph 3.1.4 of the Environmental Statement are:

- Solar PV development including:
    - Ground-mounted Solar PV generating station. The generating station will include Solar PV modules and mounting structures;
    - Balance of Solar System (BoSS), which comprises inverters, transformers, and switchgear;

- 400kV Grid Connection Corridor to connect the Springwell Substation and proposed National Grid Navenby Substation;
- Satellite Collector Compounds comprising switchgear, transformers, ancillary equipment and operation, maintenance, security and welfare units;
- A project substation (the 'Springwell Substation') compound, which will include substation, Main Collector Compound, switching and control equipment, office/control/welfare/security buildings, storage areas, and provisions for vehicular parking and material laydown;
- Battery Energy Storage System (BESS) compound, including batteries and associated inverters, transformers, switchgear and ancillary equipment and their containers, enclosures, monitoring systems, air conditioning, electrical cables, fire safety infrastructure and operation, maintenance, security and welfare facilities;
- Underground cabling will connect the Solar PV modules and BESS compound to the BoSS, Collector Compounds, and the Springwell Substation.
- Ancillary infrastructure works, including boundary treatments, security equipment, earthing devices, fencing, lighting, earthworks, surface water management, internal tracks and any other works identified as necessary to enable the development;
- Landscaping, habitat management, biodiversity enhancement and amenity improvements; and
- Works to facilitate vehicular access to the Site

3.3 The design of the proposals has followed an iterative process informed by ongoing environmental assessment, consultation and engagement with statutory and non-statutory consultees. Design based Project Principles have informed the planning and design process. These design outcomes will be secured through project parameters, design commitments and other control documents such as works plans or outline management plans. The DCO Requirements will also have a role in securing the design outcomes.

3.4 The DCO identifies the key design outcomes that will be provided alongside the solar farm as:

- Community growing area
- New Public Rights of Way (PRoWs)
- New Permissive paths
- Upgrading existing PRoWs
- New areas of woodland, hedgerow and grassland

3.5 The solar farm will be connected to a proposed substation at Navenby Heath that is being promoted by the National Grid. The substation is not currently the subject of a planning application, however, the National Grid have commenced public consultation and completed the EIA screening process. From the timescale set out on the National Grid website, it is anticipated that the substation planning application will be submitted to North Kesteven District Council in autumn 2025 under the Town and Country Planning Act 1990. National Grid intend to submit an application for a Scoping Opinion in summer 2025.

4 Site Description, Surroundings and Characteristics

4.1 The proposed solar farm is located on approximately 1,280 ha of land in close proximity to the settlements of Blankney, Scopwick, Kirkby Green and Ashby de la Launde. The RAF Digby Station is also located adjacent to the site. The settlements of Metheringham, Ruskington, Navenby and Digby are also within 3km of the site. The site extends across three distinct land parcels referred to as Springwell West, Springwell Central and Springwell East.

4.2 The land within the Order Limits predominantly consists of agricultural fields, interspersed with hedgerows, small woodland blocks and farm access tracks.

- Springwell West: forms the westernmost part of the site and is bisected by the A15. This parcel is characterised by a relatively large scale, open agricultural landscape. It is located adjacent to Bloxham Wood Nature reserve in the south-east and Gorse Covert in the northwest.
- Springwell Central: is located in the centre of the site, providing connectivity between Springwell West and Springwell East. The parcel lies adjacent to RAF Digby and the B1191 (Heath Road) to the north-west, Ashby de la Launde to the south and relatively open agricultural fields to the south-east.
- Springwell East: is bounded by Scopwick to the south, Kirkby Green to the south-east, Blankney to the north, the B1188 (Lincoln Road) to the west and a railway line to the east. The parcel is interspersed with small woodland plantations and hedgerows and has a smaller and more intimate character compared to other parcels.

4.3 The plateau area has a history of use for airfields and RAF airbases and a number of operational and remnant airfields exist along it. Modern large scale arable farming now sites alongside an older, sparse settlement pattern of small-scale hamlets and isolated farmsteads.

4.4 The majority of the site lies within Flood Zone 1 with several fields at the north-eastern extent of Springwell East located in Flood Zones 2 and 3.

4.5 The site is intersected by the A15 Sleaford Road, which heads north to south within Springwell West. The adjoining B1191 lies west of Springwell Central and south of Springwell East, providing direct access to RAF Digby, Scopwick and the surrounding villages.

4.6 The key topographical landform in the wider landscape is the 'Lincolnshire Cliff', a dramatic, north-south escarpment running from Grantham in the south to the Humber Estuary in the north. The site is located on a broad 'plateau' to the east of the Lincoln Cliff on a dip slope that undulates gently towards the edge of the fens in the east. The three land parcels extend across the plateau in a broadly east-west orientation. The topography of the site ranges between 60-80 metres AOD with the highest elevation at the north-western boundary of the site and the lowest elevation at the eastern boundary. Landform across the plateau is gently undulating. Ridges and dips run across the plateau in an east-west direction following shallow 'dry' valleys. This is particularly apparent when travelling along the A15, which falls and rises with the topography, and to the south of the B1191 (Heath Road) between RAF Digby and Scopwick where there is a gentle ridge to the south of the road.

4.7 No part of the site or its immediate surrounding context falls within a statutory designated landscape. There are no Registered Parks and Gardens within 5km of any part of the site. There are also no local landscape designations covering any part of the site. The nearest local designation is the Lincoln Cliff Area of Great Landscape Value (AGLV). There is no intervisibility between the site and the AGLV.

4.8 Land use across the solar farm site is in arable, agricultural use. Agricultural land is graded, with Grade 1 being excellent quality and Grade 5 being very poor quality. Grade 3 is further divided into subgrades 3a "good" and 3b "moderate" quality land. Grades 1, 2 and 3a are defined as the "best and most versatile" in the National Planning Policy Framework (NPPF). The site is covered by 42.3% BMV agricultural land which equates to 541.2ha. There are notable differences in the classification of soils across the three land parcels. Springwell East is the only parcel to contain areas of Grade 1 land and also has the greatest area of Grade 2 land. Springwell West contains the greatest area of Grade 3b (non-BMV land).

4.9 It is noted that the DCO documents do not specifically identify the land that will be permanently sealed as a result of development taking place over a long period of time. Such land uses would comprise access tracks, satellite collector compounds, on-site substations, main collector compounds and the BESS.

4.10 There is an extensive network of Public Rights of Way (ProW) within the site which link with the surrounding settlements. The distribution of PRoW varies across the land parcels with a notably higher concentration of PRoW in Springwell East. The Spires and Steeples trail runs north to south through Springwell East. In addition, a series of locally promoted 'Stepping Out Walks' pass through Springwell East. Bloxham Woods layby and Nature Reserve Walk are located adjacent to the Order Limits near Springwell West.

4.11 The site is not covered by any statutory ecological designations. There are no nationally designated nature conservation sites within 2km nor any sites within 10km which are designated for bats and/or birds. The predominant habitat is arable farmland, cropped on rotation, with some improved grassland and

grassleys, bordered by hedgerows and arable field margins with small blocks of woodland and connecting wet and dry ditches.

4.12 There are four non-statutory designated Local Wildlife Sites (LWS) located within the Order Limits. No ancient woodland has been identified within the Order Limits and woodlands have been excluded except for one small broadleaved woodland (Brickyard Plantation), just north of Scopwick. There is one ancient woodland and several broadleaved woodlands adjacent to the site. Hedgerows within the site vary in structure and species-richness which has been confirmed through field survey.

4.13 The site is considered of at least County importance for the farmland bird assemblage as it supports a range of species including skylark, corn bunting and grey partridge, all of which have undergone significant declines in recent decades. Barn owls have also been identified nesting adjacent to the site and use the site for foraging. The site is also considered to be up to District importance for wintering birds. The assemblage of bat species within this geographic region of the UK is considered of up to national importance. Desk study and field surveys have been conducted in addition to analysis of existing records and information.

4.14 There is one Grade II listed building (Mile Post, 20m south of Ashby Farm Lodge on A15) located within the Order Limits. There are a number of designated heritage assets within 5km of the Order Limits comprising 11 Grade I listed buildings, 11 Grade II* listed buildings, 207 Grade II listed buildings and 17 scheduled monuments including Brauncewell Medieval village located south of Springwell West. In addition, there are two military crash sites which are non-designated heritage assets. The Scopwick Conservation Area and Blankney Conservation Areas are located directly adjacent to (but outside) the Order Limits. There are three other Conservation Areas located within 3km of the Order limits: Bloxham, Metheringham and Martin.

4.15 In total, there are 3 designated heritage assets, 71 previously recorded non-designated heritage assets and 8 non-designated heritage assets identified during assessment within the site. The designated heritage assets within the site comprise Brauncewell Medieval village (partial), Blankney Conservation Area (partial) and the listed milepost on the A15. Part of the site is located within a Mineral Safeguarding Area.

5 Planning History

5.1 As an agricultural site, the relevant planning history of the land is very limited with the principal exclusion to this being the approval for the development of a solar PV farm and associated infrastructure for land in Springwell East (ref: 14/0937/FUL). The development also benefits from a Certificate of Lawful Development confirming that the original planning permission has been technically commenced and, as such, is extant.

5.2 An EIA Screening Opinion has been provided for the site proposed for the National Grid substation which concluded that those proposals are EIA development (ref: 24/1080/EIASCR). A Scoping Report has yet to be submitted.

6 Legislative and Policy Context – National Policy Statements

6.1 NKDC recognises the application as one made under the Planning Act 2008 (PA2008) for a Development Consent Order (DCO) for development that falls within the definition of energy generating stations set out in section 15 of the PA2008.

6.2 The PA2008 provides for two different decision-making procedures for NSIP applications.

i) Section 104 - where a relevant National Policy Statement (NPS) has been designated and has effect; and
ii) Section 105 – where there is no designated NPS or there is a designated NPS but which does not have effect.

6.3 The application falls to be determined under section 104 of PA2008 due to electricity generation by solar generating stations being included within the scope of NPS EN-1 'Overarching National Policy Statement for Energy' and EN-3 'National Policy Statement for Renewable Energy Infrastructure' (both November 2023 which came into force on 17 January 2024). In addition, energy storage infrastructure also falls within the scope of EN-1 and EN-3.

6.4 EN-5 'National Policy Statement for Electricity Networks Infrastructure' (November 2023 which came into force on 17 January 2024) is relevant to the proposed development as the policy recognises electricity networks as 'transmission systems (the long distance transfer of electricity through 400kV and 275kV lines), and distribution systems (lower voltage lines from 132kV to 230V from transmission substations to the end-user) which can either be carried on towers/poles or undergrounded; and associated infrastructure, e.g. substations (the essential link between generation, transmission, and the distribution systems that also allows circuits to be switched or voltage transformed to a useable level for the consumer) and converter stations to convert DC power to AC power and vice versa'.

6.5 NPS EN-1 on Energy together with the technology specific energy NPS's (EN-3 and EN-5) provides the primary policy for the decision by the Secretary of State on this type of application. Under the Planning Act 2008, where an NPS has effect, the Secretary of State must also have regard to any local impact report submitted by a relevant local authority, any relevant matters prescribed in regulations and any other matters which the Secretary of State thinks are both important and relevant to the planning decision.

EN-1 'Overarching National Policy Statement for Energy' (2023)

6.6 NPS EN-1 is an overarching document supported by the suite of five technology-specific NPSs. It sets out government's aims for decarbonisation of the power sector and to support sustainable development. It concludes that 'there is a critical national priority (CNP) for the provision of nationally significant low carbon infrastructure'. It also emphasises that the need for these types of infrastructure is urgent, that substantial weight should be given to this need when considering NSIP applications and that there is no requirement to consider separately the specific contribution of any individual project to satisfying the need established in EN-1.

6.7 In respect of this solar farm application, it falls within the meaning of low carbon infrastructure for the purposes of EN-1, since the policy includes:

- For electricity generation, all onshore and offshore generation that does not involve fossil fuel combustion
- For electricity grid infrastructure, all power lines in scope of EN-5 including network reinforcement and upgrade works, and associated infrastructure such as substations.

6.8 EN-1 states that in all but the most exceptional circumstances, it is unlikely that consent will be refused on the basis of non-Habitat Regulations Assessment (HRA) residual impacts identified after the mitigation hierarchy has been applied in the EIA process. Any HRA residual impacts will continue to be considered under the framework set out in the Habitats Regulations.

6.9 The NPS does not contain any general requirement to consider alternatives or to establish whether the proposed project represents the best option from a policy perspective. The applicant should, however, include information about the reasonable alternatives that they have studied including an indication of the main reasons for their choice. This is also a requirement of The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. The SOS, given the level and urgency of need for new energy infrastructure will be guided by principles of proportionality and ability to meet the objectives of the development when deciding what weight be given to alternatives.

6.10 Achieving biodiversity net gain is not currently an obligation on applicants (this will be introduced from November 2025), however, energy NSIP proposals are encouraged to seek opportunities to contribute to and enhance the natural environment by providing net gains for biodiversity, and these should be set out in a biodiversity gain statement.

6.11 The NPS envisages that, wherever reasonably possible, applications for new generating stations and related infrastructure should be contained in a single application or in separate applications submitted in tandem which have been prepared in an integrated way. The SOS will need to be satisfied that appropriate grid network connections are/will be in place for a given project.

6.12 An assessment of any likely significant heritage impacts of the proposed development as part of the EIA, together with mitigation, is expected by the NPS. This should include consideration of heritage assets above, at, and below the surface of the ground. The NPS advises that considerable importance should be given to the desirability of preserving all heritage assets. Substantial harm to or loss of significance of asset of the highest significance should be wholly exceptional. Where there would be less than substantial harm of a designated heritage asset, it must be demonstrated that substantial public benefits outweigh that harm or loss.

6.13 In terms of landscape issues the overarching commentary in EN-1 is that the landscape and visual effects of energy projects will vary on a case-by-case basis according to the type of development, its location and the landscape setting of the proposed development.

6.14 EN-1 requires the applicant's Landscape and Visual Impact Assessment to include reference to any landscape character assessment and associated studies as a means of assessing landscape impacts relevant to the proposed project, as well as any relevant policies based on these assessments in local development documents in England.

6.15 In terms of decision making, EN-1 requires the SOS to have regard to the degree to which projects have been carefully designed to take account of the potential impact on the landscape. The general aim is that with reference to siting, operational and other relevant constraints harm to the landscape should be minimised, providing reasonable mitigation where possible and appropriate.

6.16 EN-1 also notes that the SOS will have to judge whether the visual effects on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area, outweigh the benefits of the project. When considering whether reductions to the scale of a project could help to mitigate adverse visual and landscape effects, EN-1 cautions that reducing the scale or otherwise amending the design of a proposed energy infrastructure project may result in a significant operational constraint and reduction in function – for example, the electricity generation output – which needs to be factored into decision making.

6.17 In relation to impacts on Best and Most Versatile (BMV) land, EN-1 requires applicants to seek to minimise impacts on BMV (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification) and preferably use land in areas of poorer quality (grades 3b, 4 and 5) except where this would be inconsistent with other sustainability considerations. Applicants should also identify any effects and seek to minimise impacts on soil quality taking into account any mitigation measures proposed.

6.18 Where new energy infrastructure is, exceptionally, necessary in flood risk areas, EN-1 aims to make it safe for its lifetime without increasing flood risk elsewhere and, where possible, by reducing flood risk overall. It should also be designed to remain operational during times of flood. The Sequential Test for flood risk should be applied, and if necessary, the Exception Test.

6.19 At Section 4.11, EN-1 advises that the connection of a proposed electricity generation plant to the electricity network is an important consideration for applicants wanting to construct a generation plant such as a solar farm. It envisages that '*wherever reasonably possible, applications for new generating stations and related infrastructure should be contained in a single application to the Secretary of State or in separate applications submitted in tandem which have been prepared in an integrated way, as outlined in EN-5. This is particularly encouraged to ensure development of more co-ordinated transmission overall.*' However, it also recognises that this is not always possible and each element may be subject to a separate application.

6.20 In this respect EN-1 (paragraph 4.11.18) states '*Where this is the case, the applicant should include information on the other elements*[160] *and explain the reasons for the separate application confirming that there are no obvious reasons for why other elements are likely to be refused*.' It goes onto warn that '*the applicant accepts the implicit risks involved in doing so and must ensure they provide sufficient information to comply with the EIA Regulations including the indirect, secondary, and cumulative effects, which will encompass information on grid connections.*' (paragraph 4.11.9).

EN-3 'National Policy Statement for Renewable Energy Infrastructure' (2023)

6.21 NPS EN-3, taken together with EN-1 above, provides the primary policy for NSIP applications for renewable energy infrastructure. This includes solar photovoltaic (PV) electricity generating stations of a size >50MW in England. While EN-1 contained the general principles and the policy on generic impacts arising from energy technologies, the policies in EN-3 are concerned with specific considerations arising from solar PV (and other technologies covered by the NPS). It reiterates the urgent need for new major renewable electricity infrastructure.

6.22 Section 2.10 of EN-3 sets out the detailed policies on solar PV covering:

- site selection and design (such as topography, network connection, proximity to dwellings, agricultural land classification, public rights of way, security and lighting),
- technical considerations (such as capacity, site layout, project lifetime, decommissioning), and
- site specific impacts (such as landscape and visual impact, traffic, ecology etc) and mitigations

6.23 EN-3 reiterates the advice that poorer quality land should be preferred to higher quality land avoiding the use of Best and Most Versatile agricultural land where possible together with consideration of whether continued agricultural use can be accommodated to maximise the efficiency of land use. The NPS confirms that the Agricultural Land Classification (ALC) system should be applied in the overall assessment of the construction, operation and decommissioning phases. Whilst the statement recognises that solar farms of the scale governed

by the Planning Act may use some agricultural land, applicants are expected explain their choice of site, noting the preference for development to be on brownfield and non-agricultural land.

6.24 EN-3 recognises that below ground impacts may include direct impacts on archaeological deposits through ground disturbance associated with trenching, cabling, foundations, fencing, temporary haul routes etc. It anticipates that the results of pre-determination archaeological evaluation will inform the design of the scheme and related archaeological planning conditions. Where a site includes, or has potential to include, heritage assets with archaeological interest, the applicant should submit an appropriate desk-based assessment and, where necessary, a field evaluation (including investigative work).

EN-5 'National Policy Statement for Electricity Networks Infrastructure' (2023)

6.25 As identified in EN-1, government has concluded that there is a CNP for the provision of nationally significant low carbon infrastructure. This includes for electricity grid infrastructure, all power lines in scope of EN-5 including network reinforcement and upgrade works, and associated infrastructure such as substations. NPS EN-5, taken together with EN-1 above, provides the primary policy for NSIP applications for electricity networks infrastructure. This includes two main elements:

- transmission systems (long distance transfer of electricity through high voltage power lines) and distribution systems (lower voltage lines from transmission substations to the end-user) which can either be carried on towers/monopoles, or undergrounded; and
- associated infrastructure e.g. substations and convertor stations to convert DC power to AC power and vice versa.

6.26 EN-1 covers all above ground electricity lines subject to certain criteria such as above 132kV and greater than 2km in length.

6.27 Again, this NPS should be read in conjunction with EN-1. The advice on generic impacts detailed in EN-1 are relevant alongside the additional policies in EN-5 on factors influencing site selection and design, biodiversity and geological conservation, landscape and visual, noise and vibration, electric and magnetic fields; and sulphur hexafluoride.

6.28 EN-5 recognises that the initiating and terminating points – or development zone – of new electricity networks is not substantially within the control of the applicant. It may be determined by the location or new generating stations or other infrastructure requiring connection to the network, and/or system capacity and resilience requirements determined by the Electricity System Operator. These locational constraints do not exempt applicants from their duty to consider and balance the site-selection considerations set out in the NPS, much less the policies on good design and impact mitigation.

6.29 EN-5 includes a new section on ‘Environmental and Biodiversity Net Gain’ which states that when planning and evaluating a projects contribution to environmental and biodiversity net gain, it will be important, for both the Applicant and examining Authority, to recognise that ‘the linear nature of electricity networks infrastructure allows excellent opportunities to: i) reconnect important habitats via green corridors, biodiversity stepping zones, and re-establishment of appropriate hedgerows; and/or ii) connect people to the environment, for instance via footpaths and cycleways constructed in tandem with biodiversity enhancements.’

6.30 The NPS aspires to co-ordination between applications for new generating stations and their related infrastructure but also recognises that this is not always possible.

6.31 Where applicable, the Council further references the NPSs under the technical chapter sub-headings below insofar as they relate to matters which the Examining Authority should have regard to.

7 National Planning Policy Framework (NPPF), National Planning Practice Guidance (NPPG) and Written Ministerial Statements (WMS)

7.1 The latest version of the National Planning Policy Framework (NPPF) was published in December 2024 and updated in February 2025.

7.2 Paragraph 5 of the NPPF states that the document does not contain specific policies for NSIPs. These are to be determined in accordance with the decision-making framework set out in the Planning Act and relevant NPSs for nationally significant infrastructure, as well as any other matters that are considered both important and relevant (which may include the NPPF).

7.3 The NPPF does, however, state that the planning system should support the transition to a low carbon future and support renewable energy and associated infrastructure (paragraph 161) and that local planning authorities should, when determining planning applications for such development, approve the application if its impacts are (or can be made) acceptable. Applicants are not required to demonstrate the overall need for renewable or low carbon energy (paragraph 168(a)).

7.4 The National Planning Policy Guidance (NPPG) outlines guidance on the specific planning considerations that relate to large scale ground-mounted solar PV farms. It states that one consideration amongst others should be whether land is being used effectively; recommending that large scale solar farms are focused on previously developed and non-agricultural land.

7.5 The NPPG advises that where a proposal involves greenfield land, decision making should consider whether (i) the proposed use of any agricultural land has been shown to be necessary and poorer quality land has been used in preference to higher quality land; and (ii) the proposal allows for continued agricultural use where applicable and/or encourages biodiversity improvements around arrays.

7.6 The potential impacts of large-scale solar farms were also addressed through a speech by the then Minister for Energy and Climate Change to the solar PV industry on 25 April 2013 and subsequent Written Ministerial Statements (WMS). The speech highlighted the importance of considering the use of low-grade agricultural land which works with farmers to allow grazing in parallel with energy generation, and the WMS (dated 25/3/15 and referenced UIN HCWS488) affirmed that meeting energy goals should not be used to justify the unnecessary use of high quality agricultural land. The WMS noted that 'any proposal for a solar farm involving the best and most versatile agricultural land would need to be justified by the most compelling evidence'.

7.7 The then Secretary of State for Energy Security and Net Zero, in May 2024, released a written ministerial statement regarding the impact of solar farms on food production. In particular, it referenced the impact of geographical clustering of solar developments in some rural areas, such as in Lincolnshire, and drew attention to the importance of considering cumulative impacts. Meanwhile, Development Consent Orders for the Heckington Fen Solar Farm in North Kesteven together with the Mallard Pass Solar Farm, Gate Burton Energy Farm, West Burton elsewhere in Lincolnshire, approved by the new government, came into force on 3 August 2024 and 24 January 2025. The cumulative impact of the loss of BMV agricultural land was considered by the Examiners in each application, concluding that the impact was not so significant when considered across Lincolnshire on a spatial scale.

7.8 The NPSs provide the predominant policy context; and whilst the applicant's DCO application has cross referred to the NPPF and the NPPG where applicable, where there are any inconsistencies between the NPPF and the relevant NPSs, it is policies within the latter that prevails.

8 Central Lincolnshire Local Plan (April 2023)

8.1 The Central Lincolnshire Local Plan forms part of the development plan for North Kesteven (replacing the previous Central Lincolnshire Local Plan, adopted in 2017). The Local Plan was adopted in April 2023 and therefore represents an 'up to date' statutory development plan, which is 'important and relevant' for the purposes of section 105 of the PA 2008 and to which significant weight should be afforded in decision making. The relevant policies and a brief summary of each are set out are set out below.

Table 8.1

Policy	Summary
Policy S1: The Spatial Strategy and Settlement Hierarchy	The spatial strategy will focus on delivering sustainable growth for Central Lincolnshire that meets the needs for homes and jobs, regenerates places and communities, and supports necessary improvements to facilities, services and infrastructure.

	Development should create strong, sustainable, cohesive and inclusive communities, making the most effective use of previously developed land and enabling a larger number of people to access jobs, services and facilities locally.
Policy S2: Level and Distribution of Growth	The economic vision and strategy of this plan is to seek to facilitate the creation of 24,000 new jobs over the plan period, 2018-2040. To help facilitate that target and ensure the provision of new homes is in balance with job creation, this plan aims to facilitate the delivery of 1,325 dwellings per year, or 29,150 dwellings over the Plan period.
Policy S5: Development in the Countryside	Part E 'Non-residential development in the countryside' states that such proposals will be supported provided that: a) The rural location of the enterprise is justifiable to maintain or enhance the rural economy or the location is justified by means of proximity to existing established businesses or natural features; b) The location of the enterprise is suitable in terms of accessibility; c) The location of the enterprise would not result in conflict with neighbouring uses; and d) The development is of a size and scale commensurate with the proposed use and with the rural character of the location.
Policy S10: Supporting a Circular Economy	The Joint Committee is aware of the high energy and material use consumed on a daily basis, and, consequently, is fully supportive of the principles of a circular economy. Accordingly, and to complement any policies set out in the Minerals and Waste Development Plan, proposals will be supported, in principle, which demonstrate their compatibility with, or the furthering of, a strong circular economy in the local area (which could include cross-border activity elsewhere in Lincolnshire).
Policy S11: Embodied Carbon	All development should, where practical and viable, take opportunities to reduce the development's embodied carbon content, through the careful choice, use and sourcing of materials.
Policy S14: Renewable energy (matters for solar based	*(specific matters for solar based energy proposals)* Proposals for ground based photovoltaics and associated infrastructure, including commercial large scale proposals, will be under a presumption in favour unless there is clear and demonstrable significant harm arising; or the proposal will take place on Best and Most Versatile (BMV)

energy proposals)	agricultural land and does not meet the requirements of Policy S67, or the land is allocated for another purpose. Proposals should be accompanied by evidence demonstrating how opportunities for delivering biodiversity net gain will be maximised in the scheme taking account of site-specific factors.
Policy S16: Wider Energy Infrastructure	The Joint Committee is committed to supporting the transition to net zero carbon future and, in doing so, recognises and supports, in principle, the need for significant investment in new and upgraded energy infrastructure. Where planning permission is needed from a Central Lincolnshire authority, support will be given to proposals which are necessary for, or form part of, the transition to a net zero carbon sub-region, which could include: energy storage facilities (such as battery storage or thermal storage); and upgraded or new electricity facilities (such as transmission facilities, substations or other electricity infrastructure).
Policy S21: Flood Risk and Water Resources	All development proposals will be considered against the NPPF, including application of the sequential and, if necessary, the exception test. Development proposals that are likely to impact on surface or ground water should consider the requirements of the Water Framework Directive.
Policy S28: Spatial Strategy for Employment	In principle, employment related development proposals should be consistent with meeting the following overall spatial strategy for employment. The strategy is to strengthen the Central Lincolnshire economy offering a wide range of employment opportunities focused mainly in and around the Lincoln urban area and the towns of Gainsborough and Sleaford, with proportionate employment provision further down the Settlement Hierarchy
Policy S47: Accessibility and Transport	Development proposals which contribute towards an efficient and safe transport network that offers a range of transport choices for the movement of people and goods will be supported. All developments should demonstrate, where appropriate, that they have had regard to the following criteria: a) Located where travel can be minimised and the use of sustainable transport modes maximised; b) Minimise

	additional travel demand through the use of measures such as travel planning, safe and convenient public transport, car clubs, walking and cycling links and integration with existing infrastructure; c) Making allowance for low and ultra-low emission vehicle refuelling infrastructure.
Policy S53: Design and Amenity	All development, including extensions and alterations to existing buildings, must achieve high quality sustainable design that contributes positively to local character, landscape and townscape, and supports diversity, equality and access for all.
Policy S54: Health and Wellbeing	The potential for achieving positive mental and physical health outcomes will be taken into account when considering all development proposals. Where any potential adverse health impacts are identified, the applicant will be expected to demonstrate how these will be addressed and mitigated. Part (c) of the policy promotes schemes that will safeguard, create or enhance the role of allotments and orchards.
Policy S57: The Historic Environment	Development proposals should protect, conserve and seek opportunities to enhance the historic environment of Central Lincolnshire. Development should protect the significance of heritage assets (including where relevant their setting) including through protecting and enhancing architectural and historic character, and take into account the desirability of sustaining and enhancing non-designated heritage assets and their setting. Where a development proposal would result in less than substantial harm to a designated heritage asset, permission will only be granted where the public benefits, including, where appropriate, securing its optimum viable use, outweigh the harm. Development affecting archaeological remains, whether known or potential, designated or undesignated, should take every practical and reasonable step to protect and, where possible, enhance their significance.
Policy S59: Green and Blue Infrastructure Network	The Central Lincolnshire Authorities will safeguard green and blue infrastructure in Central Lincolnshire from inappropriate development and work actively with partners to maintain and improve the quantity, quality, accessibility and management of the green infrastructure network.

Policy S60: Protecting Biodiversity and Geodiversity	All development should a) protect, manage, enhance and extend the ecological network of habitats, species and sites of international, national and local importance (statutory and non-statutory), including sites that meet the criteria for selection as a Local Site; b) minimise impacts on biodiversity and features of geodiversity value; c) deliver measurable and proportionate net gains in biodiversity in accordance with Policy S61; and d) protect and enhance the aquatic environment within or adjoining the site, including water quality and habitat. Development should avoid adverse impact on existing biodiversity and geodiversity features as a first principle, in line with the mitigation hierarchy. Where adverse impacts are unavoidable they must be adequately and proportionately mitigated. If full mitigation cannot be provided, compensation will be required as a last resort where there is no alternative. If significant harm to biodiversity resulting from development cannot be avoided, adequately mitigated, or, as a last resort, compensated for, then planning permission will be refused
Policy S61: Biodiversity Opportunity and Delivering Measurable Net Gains	Following application of the mitigation hierarchy, all development proposals should ensure opportunities are taken to retain, protect and enhance biodiversity and geodiversity features proportionate to their scale, through site layout, design of new buildings and proposals for existing buildings with consideration to the construction phase and ongoing site management. All qualifying development proposals must deliver at least a 10% measurable biodiversity net gain attributable to the development. The net gain for biodiversity should be calculated using Natural England's Biodiversity Metric. Biodiversity net gain should be provided on-site wherever possible.
Policy S66: Trees, Woodland and Hedgerows	Development proposals should be prepared based on the overriding principle that the existing tree and woodland cover is maintained, improved and expanded; and opportunities for expanding woodland are actively considered and implemented where practical and appropriate to do so. Proposals for new development will be expected to retain existing hedgerows where appropriate and integrate them fully into the design having regard to their management requirements.

	Loss of hedges of high landscape, heritage, amenity or biodiversity value unless the need for, and benefits of, the development clearly outweigh the loss and this loss can be clearly demonstrated to be unavoidable.
Policy S67: Best and Most Versatile Agricultural Land	Proposals should protect the best and most versatile agricultural land so as to protect opportunities for food production and the continuance of the agricultural economy. Significant development resulting in the loss of the best and most versatile agricultural land will only be supported if: a) The need for the proposed development has been clearly established and there is insufficient lower grade land available at that settlement; and b) The benefits and/or sustainability considerations outweigh the need to protect such land, when taking into account the economic and other benefits of the best and most versatile agricultural land; and c) The impacts of the proposal upon ongoing agricultural operations have been minimised through the use of appropriate design solutions; and d) Where feasible, once any development which is supported has ceased its useful life the land will be restored to its former use (this condition will be secured by planning condition where appropriate).
Policy S84: Ministry of Defence Establishments	Part Two 'Development affecting MOD establishments' of policy S84 states that development 'will not be supported where it would adversely affect military operations or capability unless those impacts can be appropriately mitigated in agreement with the MOD'.

9 Neighbourhood Plans and Other Local Policy, Guidance and Strategy

9.1 The relevant Neighbourhood Plans relevant to the application site is the Scopwick and Kirkby Green Neighbourhood Plan (SKGNP) (made 2022). The majority of Springwell East and Springwell Central would fall within the Parish Council boundary.

9.2 SKGNP Policy 1 (Sustainable Development, Limited Infill and the Development Boundary) provides that development outside the Development Boundaries will be considered against the wider policies in the CLLP, including as appropriate, the policies of the SKGNP. All new development should be of a design which is adaptable and resilient to current and future flood risk having regard to the Sequential Test where appropriate.

9.3 The SKGNP identifies a number of key views from the village and a number of significant green gaps which are protected by SKGNP Policy 2 (Protecting the Landscape Character). Development proposals should not obstruct or detract from the key view or any key feature or heritage asset within the view. They should also show how they have regard to the relevant design principles in the Scopwick and Kirkby Green Design Code. Native species are recommended in mitigation planting and boundary treatment.

9.4 SKGNP Policy 3 (Protecting and Enhancing Biodiversity) requires development to provide at least 10% biodiversity gain. Existing trees and hedgerows should be retained and replacement tree planting provided as necessary. Proposals that result in a net increase in tree coverage will be supported.

9.5 The Parish has a notably dense network of public rights of way which provide walking and horse-riding routes around the local countryside and the local country lanes are popular with cyclists. Under SKGNP Policy 5 (Conservation and Enhancement of Non-Vehicular Routes), improving or extending the non-vehicular routes across the Parish will be supported. Development proposals will be expected to demonstrate how they protect and where possible enhance existing public rights of way and permissive routes. Opportunities to improve non-vehicular linkages between existing routes from the edge of Scopwick village to the countryside are supported.

9.6 SKGNP Policy 6 (Achieving High Quality Design) requires new development to demonstrate a high design quality that accords with National Design Guide standards, Building for a Healthy Life and contributes to the character of the village. Development proposals are expected to include landscaping schemes and boundary treatment appropriate to their context.

9.7 Proposals to improve community facilities will be supported under SKGNP Policy 8 (Enhancing the Provision of Community Facilities).

9.8 SKGNP Policy 10 (Protecting Heritage Assets) requires the effect of a proposal on the significance of a non-designated heritage asset, including their setting, to be taken into consideration when determination planning applications.

9.9 At Appendix A, the list of village projects includes options to improve existing footpaths from Scopwick to Blankney in order to secure a cycle route to Metheringham railway station.

9.10 The Lincolnshire Minerals and Waste Plan (Core Strategy and Development Management Policies) is also applicable. LMWLP Policy M11 (Safeguarding of Mineral Resources) requires proposals for development within a mineral safeguarding area (MSA) to be accompanied by a Minerals Assessment and will only be granted where it can be demonstrated that it would not sterilise a mineral resource. Where this is not the case then proposals will need to demonstrate compliance with a range of criteria.

9.11 LMWLP Policy 12 (Safeguarding of Existing Mineral Sites and Associated Mineral Infrastructure) safeguards existing mineral sites that supply minerals in the County from development that would unnecessarily sterilise the sites and infrastructure or prejudice or jeopardise their use by creating incompatible and uses nearby.

9.12 Parts of the Springwell Solar farm order limits are situated within a Limestone MSA within the Council's administrative boundary and two existing mineral (limestone) extraction sites adjoin the Order Limits boundary. Brauncewell Quarry directly adjoins Springwell West and Longwood Quarry adjoins Springwell East separated by the B1188.

9.13 The LMWLP is being updated, and additional reserves will be required to cover the proposed new plan period up to 2041. Consultation on the 'preferred approach' draft local plan was undertaken in 2024. No up-to-date public information is available on the timeline for the preparation of the 'proposed submission' draft version and examination by the Secretary of State. The Council defers to Lincolnshire County Council regarding the likely impact of the Springwell solar farm on minerals reserves and safeguarding areas.

9.14 The Council considers that the following key plans, studies, strategies and guidance (some of which comprise part of the evidence base to the preparation of the CLLP) are also material to the assessment of the proposed development.

- NKDC Climate Emergency Strategy to 2030
- NKDC Climate Emergency Action Plan 2024/25
- NKDC Environment Policy 2024/25 – 2026/27
- The NK Plan 24-27
- NK Community Strategy 2030
- NK Economic Strategy 2024
- NK Tourism Strategy 2024
- North Kesteven District Council Landscape Character Assessment (2007)
- North Kesteven District Council Strategic Flood Risk Assessment (2009)
- Central Lincolnshire Level 1 Strategic Flood Risk Assessment (SFRA) (2015 and 2022)
- Biodiversity Opportunity Mapping for Central Lincolnshire
- Central Lincolnshire Green infrastructure mapping for Central Lincolnshire
- Historic Landscape Characterisation Project for Lincolnshire
- 4th Lincolnshire Local Transport Plan (LTP4) and consultation draft LTP5
- Central Lincolnshire Economic Needs Assessment (ENA) March 2020
- NKDC criteria for the assessment of non-designated heritage assets

A number of these are summarised below.

NKDC Climate Emergency Strategy (CES) to 2030 and Climate Emergency Action Plan (CEAP) 24/25

9.15 The NKDC CES is the Council's vision for a sustainable transition to net zero by 2030 for both North Kesteven District Council (NKDC) and the District of

North Kesteven, supported by mitigation measures to reduce emissions and adaptation measures to improve resilience to the effects of climate change. The CES establishes three strategic aims:

1. *For North Kesteven District Council to achieve net zero 2030 through a 95% reduction in Council Greenhouse Gas emissions compared to 2008/09 levels, with offsetting and/or negative emissions technologies to be used only for the final 5% of emissions from hard to eliminate sources;*

2. *To support the District of North Kesteven to achieve the aspirational net zero 2030 target through a 95% reduction in carbon emissions from energy compared to 2005 levels, with offsetting and/or negative emissions technologies to be used only for the final 5% of emissions from hard to eliminate sources; and*

3. *To support a just transition to net zero to create a sustainable future for North Kesteven in alignment with our Community Strategy 2030 vision to create a District of Flourishing Communities.*

9.16 The NKDC CEAP establishes the actions being taken across the Council and the District to reach net zero and address the climate emergency and complement the CES. The Strategy and Action Plan are fundamentally integral to one another and shape the Council's activities, building upon its Climate Emergency Declaration in July 2019. The CEAP contains nine themes used to categorise our climate actions, including 'decision making' and 'energy'.

9.17 The 'decision making' theme includes embedding climate actions and activities within Council Service Delivery Plans and accounting for climate implications as part of its corporate decision-making processes.

9.18 The 'energy' theme focuses on reducing fossil fuel dependence and associated emissions by promoting renewable energy generation opportunities for both NKDC and the District. It sets out to do this by supporting renewable energy generation opportunities across the District of North Kesteven.

NKDC Environment Policy 2024/25– 2026/27

9.19 This document sets out NKDC's corporate environment policy and provides guidance through 8 key principles to ensure that all necessary steps are taken to help protect and enhance the natural environment, address the climate emergency, and work towards net zero carbon. The key principles include;

- supporting and work towards a sustainable net zero future for North Kesteven District Council.
- empowering everyone within NKDC to act to protect and enhance the natural environment, take action to address the climate emergency, and work towards our net zero 2030 target
- ensuring that the decisions we make at all levels consider the climate emergency, reaching net zero, and protecting and enhancing the natural environment.

- protecting and enhancing the natural environment, supporting ecosystems, habitats, and biodiversity.

The NK Plan 24-27 and Community Strategy

9.20 The NK Plan and the overarching Community Strategy drive forward the Council's priorities for 'Our Economy', 'Our Homes', 'Our Environment', 'Our Communities', 'Our Green Thread' and 'Our Council' through to 2030. The 'Our Environment' Key Ambition is to 'Champion greenhouse gas reduction, both within the Council and across the District'. Given the extent of the target for net-zero by 2030, the 2021 NKDC Corporate Peer Challenge identified the Council's 'excellent ambitions for tackling climate change'.

9.21 The 'Environment' action within the 'Our Green Thread' priority is to 'champion and deliver a just transition for our climate and environmental commitments and aspirations'. The associated 'Sustainable Development Goals' confirm that as the Council targets its actions on achieving both carbon net-zero and the aspirations of our Community Strategy in 2030, it has aligned all that it does with the United Nations Sustainable Development Goals; making this a shared vision where global aims influence local ambition.

9.22 The Council has also recently adopted an Economic Strategy and Tourism Strategy. The Tourism Strategy is a central component of the 'Our Economy' priority of the 2024-27 NK Plan which aims to 'Support sustainable and regenerative local economic growth and resilience, transitioning to a green economy working within environmental thresholds'. The Economic Strategy recognises that the District has a significant number of operational and proposed solar farms and increasingly associated battery storage facilities. It supports the growth of the green economy and to maximise the benefits arising from solar farms including the creation of a dedicated Community Energy Fund. It also seeks to support skills development for the green economy including sustainable construction and specialised trades.

10 EIA Methodology

10.1 The ES is required to contain the information specified in regulation 14(2) and must meet the requirements of Regulation 14(3) and 14(4) of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017. It must also include any additional information specified in Schedule 4- Information for Inclusion in Environmental Statements of the EIA Regulations at (Regulation 14(2)) which is relevant to the specific characteristics of the particular development or type of development and to the environmental features likely to be significantly affected. The Council and its consultees do not identify any overarching areas where the submission documents do not accord with these regulations, although we do highlight some matters in relation to assessment methodology in relation to the temporary / permanent loss of BMV agricultural land.

10.2 The Council also notes that where the applicant has identified that flexibility is required in relation to design and layout considerations (in particular the general arrangement within the BESS/substation), guidance produced by the Planning Inspectorate with regard to the use of the 'Rochdale Envelope' has been applied within the relevant ES chapters to ensure a robust assessment of the likely significant (and worse case) environmental effects of the proposed development. We note that this involves assessing the maximum (and where relevant, minimum) parameters, size (footprint, width, and height) technology, and locations of the different elements of the proposed development for the elements where flexibility needs to be retained.

10.3 The Council also agrees that the applicant has applied relevant 'Zones of Influence' for each environmental topic area based on the extent of likely effects as identified as the study area in each of the individual topic chapters of this ES. In most cases these have been agreed with the Council and its consultees at pre-application stage and in feedback in relation to the Preliminary Environmental Impact Report (PEIR).

10.4 Finally, the Council has also discussed and agreed the 'Cumulative Sites Long List and Shortlist' (Chapter 16, Appendix 16.1 and Table 16.3 respectively) which presents the identified long list of existing and/or approved developments within the search area and sets out the threshold criteria applied to identify the shortlist of existing and/or approved developments for each environmental topic.

11 Grid Connection to Proposed Navenby Substation

11.1 The Springwell Solar Farm is reliant upon the National Grid constructing a new substation at Navenby (NGNS) to enable a point of connection to be made to the National Electricity Transmission System. Currently, this project is at an early stage with public consultation only having been carried out in September - October 2024. An EIA screening opinion has been obtained from the Council which concluded that an ES would be required for the project (15 October 2024). No scoping request has been made to the Council as yet.

11.2 The National Grid website (Navenby Substation | National Grid ET) currently indicates that a planning application to the Council (under the Town and Country Planning Act 1990) will be submitted by Autumn 2025 and determined by Spring 2026. In addition, National Grid have confirmed the need to carry out overhead line works under s37 of the Electricity Act 1989 which will be determined by the Secretary of State for Energy Security and Net Zero. It envisages that, subject to approval, construction would start by mid-late 2026. The construction of the four new pylons would take place by spring / summer 2028 and the substation construction would be completed by late 2029. This information is reiterated in the Grid Connection Statement at paragraph 4.4.3.

11.3 The description of the solar farm project is clear that a connection will be made to connect the Springwell substation to the proposed NGNS. It is included in the principal components of the proposed development. It is also stated that the solar farm operator has secured a grid connection agreement with the National Energy System Operator (NESO) to provide connection dates in April 2028 and April 2030.

11.4 At Section 4.11, EN-1 advises that the connection of a proposed electricity generation plant to the electricity network is an important consideration for applicants wanting to construct a generation plant such as a solar farm. It envisages that '*wherever reasonably possible, applications for new generating stations and related infrastructure should be contained in a single application to the Secretary of State or in separate applications submitted in tandem which have been prepared in an integrated way, as outlined in EN-5. This is particularly encouraged to ensure development of more co-ordinated transmission overall.*' However, it also recognises that this is not always possible and each element may be subject to a separate application.

11.5 In this respect EN-1 states '*Where this is the case, the applicant should include information on the other elements[160] and explain the reasons for the separate application confirming that there are no obvious reasons for why other elements are likely to be refused*.' It goes onto warn that '*the applicant accepts the implicit risks involved in doing so and must ensure they provide sufficient information to comply with the EIA Regulations including the indirect, secondary, and cumulative effects, which will encompass information on grid connections.*'

11.6 The documents accompanying the DCO application, however, are less clear on whether the NGNS will be completed in time to meet the phased connection dates and in line with the construction timetable for the solar farm. Chapter 3 of the ES indicates that the construction of the solar farm would take place in phases from Q1 2027 to Q4 2030. By the end of 2028, Springwell West and the Springwell Substation Phase 1 would be complete, with Phase 2 and Springwell East and Central completed by Q4 2030. The Grid Connection Statement at paragraph 4.1.5, provides that the completion of the Springwell Substation would take place in Q3 2029 which requires reconciliation with the information in Chapter 3 of the ES.

11.7 It thus appears that Springwell West and the Springwell Substation Phase 1 could be completed at the end of 2028, in advance of the NGNS which would not be completed until the end of 2029. If these timescales are correct, this has significant implications for the deliverability and potential benefits of the solar farm and the validity of the ES. It is not unreasonable to assume that the benefits of energy generation under these proposals cannot be realised without the provision of a point of connection to the electricity transmission network. Further clarification is required on the dates provided within the ES documents and on how the timing of two projects would align.

11.8 The Council has further concerns regards the potential impact of delays to the National Grid timetable with regard to the planning process. The Council has concerns that the NGNS is locally controversial, that a planning permission cannot be guaranteed and therefore (on a without prejudice basis) there is a need to account for timescales associated with the appeal process and any potential risk of legal challenge/JR.

11.9 Whilst the developer may have secured a grid connection, the NGNS cannot be delivered until a planning permission first has been secured and any and all pre-commencement conditions have been discharged. As such the applicant should evidence that there are no obvious reasons why the NGNS application will not be refused (as per Section 4.11 EN-1). In the Council's view, this remains uncertain at this stage but we appreciate that the NGNS planning application process is at an early stage and will develop over the course of 2025.

11.10 However, any delays in grid connection would reduce the potential benefits of the solar farm providing renewable energy before the government's target date of 2030 (the Clean Power 2030 Action Plan was published on 13 December 2024 and sets out a pathway to a clean power system) and thus may impact on the planning balance. In addition, the reliability of supporting evidence that is time limited, such as ecological surveys, will reduce and undermine the impacts assessed in the ES.

11.11 The Council suggests that the delivery of the NGNS and alignment with the construction of the solar farm is a crucial matter upon which the Examining Authority should satisfy itself given that this is an unprecedented situation and that the Springwell solar farm is reliant on somewhat scarce public information available from the National Grid at the point of preparing their DCO application.

11.12 If the solar farm proposals were to commence without the benefit of a grid connection, there is the potential risk that negative environmental impacts would occur. As a result, during the Examination (and on a 'without prejudice' basis) the Council will seek to ensure that an additional Requirement is provided to restrict the commencement of the Springwell solar farm until the NGNS has reached a meaningful point of construction, beyond simply the commencement of development, that ensures more certainty that the provision of the substation will be achieved prior to commencement of the solar farm and to ensure alignment between the projects.

11.13 The Planning and Infrastructure Bill (PIB) was introduced to Parliament on 11 March 2025. In relation to Electricity Network Connections Reforms, the Guide to the PIB states that the current 'first come, first served' grid connection process is not fit for purpose. The process will be reformed with a focus on a 'first ready, first connected' approach.

11.14 While this approach is welcomed, the Council suggests that a cautious approach is taken on the perceived 'readiness' of the solar farm in respect of the DCO process. The development may be the first NSIP customer of the

proposed new substation to have reached Examination stage, however, for the reasons given above in the preceding paragraphs, it is not certain that the NGNS will receive planning consent or within timescales that align with the delivery of the solar farm. There is a risk that an unfettered consent may result in the solar farm being constructed but not capable of generating electricity due to the lack of a grid connection. This would lead to an unnecessary change to the landscape of the area and other adverse impacts, without the benefit of renewable energy generation.

12 North Kesteven District Council Assessment of Impacts

12.1 The following sections identify the relevant policies within the development plan and other local policy, the key issues raised by the proposed development, the extent to which the applicant addresses them and thus the degree to which the Council considers the proposal to comply with local policy and the NPSs.

13 Air Quality

13.1 Paragraph 5.2.9 of EN-1 states that the decision maker 'should generally give air quality considerations substantial weight where a project would lead to a deterioration in air quality in an area or leads to a new area where air quality breaches any national air quality limits'. In all cases the IPC must take account of any relevant statutory air quality limits.

13.2 The UK Air Quality Strategy (AQS) identifies nine ambient air pollutants that have the potential to cause harm to human health and two for the protection of vegetation and ecosystems. The AQS defines objectives for these pollutants that aim to reduce the impacts of these pollutants to negligible levels. The objectives are not mandatory but rather targets that local authorities should try to achieve.

13.3 CLLP Policy S14 'Renewable Energy' states that whilst renewable energy scheme will be supported, this is subject to an assessment as to whether the impacts are acceptable on the amenity of sensitive neighbouring uses (including local residents) by virtue of matters including dust and air quality.

13.4 CLLP Policy S53 'Design and Amenity' requires that all development will not result in adverse noise and vibration taking into account surrounding uses nor result in adverse impacts upon air quality from odour, fumes, smoke, dust and other sources.

13.5 The ES states that Springwell Solar Farm has incorporated a range of mitigation measures based on industry recognised guidance for dust and particulate matter control in demolition and construction and incorporated into the design of Springwell Solar Farm to minimise these impacts. The mitigation measures relevant to air quality that are embedded in the design of Springwell Solar Farm are:

- A minimum 20 metres offset from Solar Photovoltaic development to locally designated wildlife sites;

- A minimum 15 metres offset from Solar Photovoltaic development to existing woodlands; and
- A minimum 250 metres offset from the inverter and transformer stations, Battery Energy Storage System, Springwell Substation and Collector Compounds to residential properties.

13.6 During construction, there is potential for dust and emissions to affect local settlements including, Blankney, Scopwick, Kirkby Green and Ashby de la Launde, as well as ecological receptors (the Local Wildlife Sites) during the 48 months of construction. Therefore, site-specific mitigation measures have been proposed. The adequate implementation of dust control measures and construction equipment emission controls can greatly reduce any adverse effects during the construction phase. Dust effects during the construction phase are therefore expected to be not significant.

13.7 The impacts of road traffic emissions associated with the construction of Springwell Solar Farm have the potential to affect existing human and ecological receptors. Impacts on local air quality as a result of road traffic emissions are expected to be confined to this timeframe and therefore be temporary. The quality of the air at the site is generally good, based on the review of North Kesteven District Council air quality monitoring data, and there is not a designated Air Quality Management Area declared within the District.

13.8 The NKDC Air Quality Strategy 2024 to 2029 confirms that historically, air quality within North Kesteven has complied with the AQS objectives, with no exceedances of the NO_2 annual mean reported in the last five years. Therefore, due to this consistent compliance, no AQMA's have been declared and no AQAP has been published. The Strategy does however confirm the Council's commitment to taking actions that improve air quality to further reduce, and mitigate, pollution concentrations to ensure that no exceedances arise within the District in the future. Therefore, impacts of road traffic emissions associated with the construction phase following the implementation of mitigation measures are expected to be not significant.

13.9 Decommissioning is expected to generate lower effects to those anticipated during construction and therefore the mitigation measures proposed for implementation during the construction phase will be appropriate for application to decommissioning. The effect on existing human and ecological receptors during decommissioning phase following the implementation of mitigation measures is considered to be not significant.

13.10 During operation (including maintenance) road traffic emissions resulting from Springwell Solar Farm are anticipated to increase slightly. Effects on existing human and ecological receptors during operation (including maintenance) following the implementation of mitigation measures is considered to be not significant.

13.11 Any effects on air quality experienced during construction, operation and decommissioning will be controlled through the implementation of mitigation measures, which are detailed in and secured by the Outline Construction Traffic

Management Plan, Outline Decommissioning Environmental Management Plan and Outline Operational Environmental Management Plan.

13.12 The Council's position is that there are no positive construction, operation and decommissioning impacts in relation to air quality and that overall, the construction and operational impacts are **neutral**.

14 Biodiversity

14.1 Paragraph 5.4.42 of EN-1 states that 'development should, in line with the mitigation hierarchy, aim to avoid significant harm to biodiversity and geological conservation interests, including through mitigation and consideration of reasonable alternatives (…); where significant harm cannot be avoided, then appropriate compensation measures should be sought'.

14.2 It also notes that due consideration should also be given to regional and local biodiversity and geological designations this is because these sites have a fundamental role to play in meeting overall national biodiversity targets; contributing to the quality of life and the well-being of the community; and in supporting research and education.

14.3 EN-3 also highlights that solar farms have the potential to increase the biodiversity value of a site, especially if the land was previously intensively managed. Paragraph 2.10.89 notes that "in some instances, this can result in significant benefits and enhancements beyond Biodiversity Net Gain, which result in wider environmental gains and which is encouraged'.

14.4 CLLP policy S14 'Renewable Energy' states that proposals for renewable energy schemes, including ancillary development, will be supported where the direct, indirect, individual and cumulative impacts are, or will be made, acceptable, including in relation to biodiversity and geodiversity considerations.

14.5 CLLP policy S59 'Green and Blue Infrastructure Network' states that the Central Lincolnshire Authorities 'will safeguard green and blue infrastructure in Central Lincolnshire from inappropriate development and work actively with partners to maintain and improve the quantity, quality, accessibility and management of the green infrastructure network'. Continuing, the policy notes that 'Proposals that cause loss or harm to the green and blue infrastructure network will not be supported unless the need for and benefits of the development demonstrably outweigh any adverse impacts. Where adverse impacts on green infrastructure are unavoidable, development will only be supported if suitable mitigation measures for the network are provided'.

14.6 CLLP policy S60 'Protecting Biodiversity and Geodiversity' states that development proposals will be considered in the context of the relevant Local Authority's duty to promote the protection and recovery of priority species and habitats. If the proposals do cause adverse impacts, then the benefit of the scheme will need to provide benefits the clearly outweigh the harms.

14.7 Development will only be supported where the proposed measures for mitigation and/or compensation along with details of net gains are acceptable. All developments are required to meet the tests of:

- Protecting, managing, enhancing and extending the ecological network of habitats, species and sites of international, national and local importance.
- Minimising impacts on biodiversity and geodiversity value.
- Delivering measurable and proportionate net gains in biodiversity.
- Protecting and enhancing the aquatic environment within or adjoining the site, including water quality and habitat.

14.8 Part 2 of CLLP policy S60 requires developments to seek to preserve, restore and re-create priority habitats, ecological networks and the protection and recovery of priority species set out in the Natural Environment and Rural Communities Act 2006, Lincolnshire Biodiversity Action Plan, Lincolnshire Geodiversity Strategy and Local Nature Recovery Strategy. It further requires that where adverse impacts are likely, 'development will only be supported where the need for and benefits of the development clearly outweigh these impacts' and in such cases, 'appropriate mitigation or compensatory measures will be required'.

14.9 CLLP policy S61 'Biodiversity Opportunity and Delivering Measurable Net Gains' requires development to deliver at least a 10% measurable biodiversity net gain (BNG) attributable to the development. The net gain for biodiversity should be calculated using Natural England's Biodiversity Metric, and should be provided on-site wherever possible. Unless specifically exempted, a biodiversity gain plan should be submitted providing clear and robust evidence for biodiversity net gains and losses, and which includes details of the pre-development biodiversity value of the onsite habitat, the post-development biodiversity value of the onsite habitat following implementation of the proposed ecological enhancements/interventions and on ongoing management strategy for any BNG proposals.

14.10 Finally, CLLP policy S66 'Trees, Woodland and Hedgerows' requires proposals to provide evidence that they have been subject to adequate consideration of the impact of the development on any existing trees and woodland. New developments will also be to retain existing hedgerows where appropriate and integrate them fully into the design having regard to their management requirements. There is an interface here with CLLP policy S60 given the impacts on hedgerows, a habitat of principal importance.

14.11 SKGNP policy 3 seeks to ensure that +10% BNG is provided on new developments and the protection and retention of trees and hedgerows as they are significant to the character of the village. The policy supports proposals that result in a net increase in tree coverage.

14.12 The Council's ecological consultant, AECOM, has reviewed the ES and supporting information and assessments. In conclusion, the approach taken,

the results obtained, the impact assessment conclusions and the mitigation proposed is considered largely satisfactory. The impact assessment approach aligns with typical good practice requirements. In general terms, the existing baseline of intensively managed farmland is of relatively low ecological risk.

14.13 The Council's consultants, however, recommend that further detail is provided in some cases for purposes of transparency at decision-making, and to ensure clarity on what is proposed and that it is robust and securable. In some cases, comparable queries were raised at PEI stage and have not been addressed. More information is required on certain methods to allow verification of the baseline habitat and to permit that the BNG assessment is correct. This is set out in AECOM's full comments (attached at Appendix A) and additional BNG comments (attached at Appendix B) attached and should be read in full as they have implications for the conclusions reached by the Council in this LIR.

14.14 The impact conclusions on biodiversity can be split into designated sites, habitats and protected species. The ES states that the proposed development will deliver +10%Biodiversity Net Gain (BNG). These matters are discussed below.

14.15 **Designated Sites:** During all phases, no statutory designated sites for nature conservation are anticipated to be affected.

14.16 The ES states that non-statutory designated Local Wildlife Sites within or adjacent to the Site would be protected by a 20 metres buffer from Springwell Solar Farm, as detailed in and secured by the Design Commitments, except for four Local Wildlife Sites which would require sections to be removed to enable highways access into the Site. These are:

- A15, Green Man Road to Cuckoo Lane Local Wildlife Site.
- A15, Slate House Farm to Dunsby Pit Plantation Local Wildlife Site;
- Temple Road Verges, Welbourn to Brauncewell Local Wildlife Site; and
- Navenby Heath Road Verges Local Wildlife Site.

These are all roadside grassland verges designated for calcareous grassland.

14.17 The sections to be removed from each Local Wildlife Site are relatively small and total less than 5% of the total length of the Local Wildlife Sites. New calcareous grassland would be created to compensate for the sections of Local Wildlife Sites lost and to enhance the overall amount of calcareous grassland within the Site once established during the operational (including maintenance) phase.

14.18 AECOM have queried whether the mitigation hierarchy has been applied for this important habitat and why habitat losses cannot be avoided (irrespective of the ability to compensate for losses). For example, AECOM query what has been done at the design stage to avoid or proactively minimise impacts on

LWSs and hedgerows. The provision of habitat compensation and BNG should not be relied on to make the case for hedgerow loss being acceptable.

14.19 **Habitats:** The solar PV development area is mostly arable land. The ES states that important habitats, such as ponds, species-rich grassland and woodlands, have either been excluded from the site or would be retained and protected by offset buffers, including a minimum 15 metres buffer from woodlands, 10 metres buffer from field margins and 6 metres buffer from watercourses. The implementation of buffer zones is secured by the Design Commitments**.** Mitigation to protect habitats from pollution are detailed in and secured by the Outline Construction Environmental Management Plan and Outline Decommissioning Environmental Management Plan. Habitat creation and enhancement proposals are detailed in and secured by the Outline Landscape and Ecology Management Plan.

14.20 Habitat creation and enhancement proposals include:

- Creation of approximately 100 hectares of grassland consisting of calcareous and neutral grassland - managed as hay meadow to enhance biodiversity.
- Creation of new calcareous grassland adjacent to existing Local Wildlife Site verges.
- Enhancement of field margins and management for wildlife, including treatments for wild bird seed and for arable wildflowers, creation of tussocky grassland and species-rich grassland.
- Creation of legume-rich herbal leys under and between Solar Photovoltaic modules.
- Strategic hedgerow and tree planting (15,563m of new hedgerow and 16 new tree belts) to enhance wildlife connectivity and bolstering of existing hedgerows.

14.21 Habitat creation and enhancement proposals have been calculated to provide a minimum of 10% biodiversity net gain**.** Habitats would be managed and maintained as appropriate throughout the operational (including maintenance) phase, as detailed in and secured by the Outline Landscape and Ecology Management Plan.

14.22 As per paragraph 14.16 above, AECOM have raised questions about the application of the mitigation strategy in seeking avoidance of impacting hedgerows to achieve electrical connections. The ES indicates that 1,249m of hedgerow would be removed during construction for internal access and cables. They have also requested clarification of the method used for surveying existing hedgerows as this has implications for the identification of species-rich hedgerows, the accounting of hedgerows within the BNG Metric, and the practical achievement of like-for-like compensation of hedgerows. See

AECOM's full comments in relation to Appendix 7.11 Important Hedgerow Survey.

14.23 AECOM point out that in Table 7.6 of the ES, it is stated that embedded mitigation is provided to protect the important scarce arable plant assemblages identified. This is not supported by the BNG figures which show that fields (BC105 and 115 and Target Notes 9 and 10) where the most diverse assemblage of notable plants was found will be converted to grassland. Pending this point, it is not agreed that there would be no significant effect. There is a potential conflict with CLLP Policy S60. As noted in Appendix 7.8, the development coincides with a landscape and soil types of known value for scarce arable flora and therefore is located where action is best targeted to conserve scarce arable flora need to be focussed to achieve the aims of the Lincolnshire Biodiversity Action Plan.

14.24 Paragraph 4.2.28 of the PEA report, however, identifies a very notable scarce arable plant species that is endemic to (globally restricted to) England, Nationally Rare, has not been seen recently, and has only been found in Cornwall previously. A full impact assessment of this important feature is required and identification of whether the data is adequate to understand its full distribution across the site.

14.25 **Protected and/or Notable Species:** The ES states that adverse effects on species are considered potentially significant during construction and decommissioning, rather than during the operational (including maintenance) phase. The adverse effects are mainly in relation to construction; however, the effects from decommissioning are also considered likely to be similar to construction, although for a shorter duration. Mitigation to protect species and their habitats is detailed in and secured by the Outline Construction Environmental Management Plan and Outline Decommissioning Environmental Management Plan. Habitat creation and enhancement proposals are detailed in and secured by the Outline Landscape and Ecology Management Plan.

14.26 *Ground nesting and wintering birds* – including skylark grey partridge and corn bunting. Both ground nesting and wintering birds could be adversely affected by habitat loss and disturbance during construction. However, large open areas are to be retained and enhanced for ground nesting and wintering birds. The habitat creation and enhancement proposals are anticipated to improve ground nesting bird habitat (based on the number of skylark territories found on Site) and increase the amount of foraging habitat. It is anticipated that birds would rapidly be able to use the newly created and enhanced habitat and therefore adverse effects during construction would be temporary and are considered not significant. Once habitats are fully established during the operational (including maintenance) phase, there is anticipated to be a significant beneficial effect for ground nesting and wintering birds.

14.27 In respect of ES paragraph 7.7.14, AECOM request that more clarity is provided on the impacts of ground nesting birds and how the calculation has been made to determine that the post-development habitats are adequate to maintain the

conservation status of these species (and ideally to enhance their status). A similar exercise was carried out for the Heckington Fen DCO. It is not clear how much reliance is placed on land within the solar array contributing to this, and whether this is realistic and certain. It should be confirmed whether all ground nesting birds are suitably addressed (e.g. quail).

14.28 *Non-ground nesting birds* - Non-ground nesting birds are not anticipated to be adversely affected as field margins, hedgerows and hedgerow trees would be protected by minimum 10 metres buffers. Habitat creation and improvement measures would enhance foraging and nesting habitat once established during the operational (including maintenance) phase. The provision of nest boxes for a range of farmland bird species would also enhance nesting opportunities.

14.29 *Barn owl* - Barn owls use the Site for foraging and a pair of barn owls were found to be nesting just outside of the Site. Barn owls are not anticipated to be adversely affected as they mostly hunt along field margins which would be protected by a minimum 10 metres buffer. Nesting barn owls could be disturbed by construction works; however, surveys would be carried out of potential nest sites prior to works and mitigation would be undertaken as appropriate to avoid disturbance. Habitat creation and improvement of field margins would enhance foraging habitat, and the provision of barn owl nest boxes would also enhance nesting opportunities. These proposals are anticipated to have a beneficial effect on barn owls, although not significant.

14.30 *Bats* - The site is considered to be of up to National importance for bats due to the diversity of bat species found to be using the Site.

14.31 Lighting would conform to best practice guidelines with respect to minimising light spill into adjacent habitats to prevent disturbance to bats and other nocturnal animals. Throughout construction and operation (including maintenance), the use of motion detection or manually operated lighting would be used to avoid constant lighting.

14.32 Noise and vibration from construction activity and noise from the Battery Energy Storage System and inverters during operation is not considered likely to disturb bats due to a minimum of 10 metres buffer zones from any woodlands, hedgerows or trees; and because higher frequency noise quickly decreases over distance.

14.33 Trees with potential bat roost features have been avoided. The buffer zones from hedgerows, field margins, watercourses and woodland edges to any built development would protect bat foraging and commuting corridors.

14.34 Several sections of hedgerow would need to be removed for cables or accesses. Creating gaps of 10 metres or more would cause fragmentation of habitat which could disrupt the flight paths of some bat species. However, mitigation proposals to temporarily ‘in-fill’ gaps in key hedgerows (for example, with brash or shrubs in planters) is anticipated to enable bats to continue to use the key hedgerows for commuting and foraging during construction. After construction, hedgerows would be reinstated, and any remaining gaps (for

internal access roads) would be less than 10 metres wide. The provision of bat boxes would also provide roosting opportunities.

14.35 There is limited research and no common consensus on the long-term impacts of solar farms on bats. However, some studies suggests that there are potential impacts following the installation of the Solar Photovoltaic modules that had an adverse effect on the abundance of some bat species. This potential adverse effect is considered not significant as the habitat creation and enhancement proposals for Springwell Solar Farm are anticipated to provide an overall enhancement of bat foraging and commuting habitat in the long-term once established. Monitoring of bat activity is proposed to inform mitigation and habitat management throughout the operational (including maintenance) phase. Monitoring is detailed in and secured by the Outline Landscape and Ecology Management Plan.

14.36 *Reptiles and amphibians* - Great crested newts are considered likely absent from the Site. All nearby ponds that are within 500 metres were surveyed, and no evidence of great crested newt was found. Two ponds had unclear results, however they are close to other ponds that tested negative. Grassland which is considered suitable for reptiles and other amphibians has been excluded from Springwell Solar Farm and field margins would be protected by 10 metres buffers. Any field margin improvement works, where reptiles or other amphibians may be present, would be subject to precautionary method of works to avoid harm.

14.37 *Water voles, otter and aquatic species* - There are a few watercourses within the Site; however, they are not anticipated to be affected by works. A minimum 6 metres buffer and standard pollution control measures are anticipated to protect watercourses and their associated species. Six ditches would potentially be affected by Springwell Solar Farm; however, these ditches were all dry and deemed unsuitable for water vole, otter and aquatic species.

14.38 *Badgers and notable mammals* - There were a few badger setts found within the Site; however, these would be avoided by works, with a 30 metres minimum buffer imposed from any main badger setts. Measures to avoid harm to badgers and their setts are detailed in and secured by the Outline Construction Environmental Management Plan and Outline Decommissioning Environmental Management Plan.

14.39 Fencing around the fields of the Solar Photovoltaic development would have ‘two-way mammal gates’ installed to allow badgers to forage and disperse into fields with Solar Photovoltaic modules throughout the Site. Gaps underneath the fencing where there are low lying undulations in ground level would also allow other mammals, such as brown hare and hedgehogs, access to forage and disperse. This is detailed in and secured by the Design Commitments.

14.40 *Deer* - The 10 metres wide buffers from field margins would allow deer to disperse across the Site via the field margins.

14.41 In respect of cumulative impacts, AECOM have confirmed agreement provided that it is demonstrated that the development adequately compensates for its specific impact on ground nesting birds and scarce arable flora as detailed above.

14.42 The monitoring approach set out in the oLEMP is not agreed. All habitats should be monitored and reported on in accordance with the Central Lincolnshire guidance. Mitigation for scarce arable flora should be provided for at least 30 years (consistent with the wider habitat requirements) and monitoring should be undertaken to verify that this management is being applied as approved. The detailed comments by AECOM include reference to the provisions within the oCEMP and oLEMP to which additional information would be welcomed.

14.43 The Council and Lincolnshire County Council have agreed in principle that the establishment of an Ecological Steering Group (ESG) would be beneficial for the proposed development. The group is envisaged to consist of key ecological stakeholders (both statutory and non-statutory). The remit of the group would be to receive updates on project progress and to advise on issues encountered during construction as well as to refine the delivery of required mitigation and enhancement measures. A key role would also be to carry out validation checks of the applicant's Biodiversity Net Gain monitoring over the required minimum 30-year period. It is anticipated that meetings would be held at an appropriate frequency to ensure good communication between both the developer and stakeholders and that funding would be required (anticipated via a s106 Agreement) to reflect Officer time in participating in the ESG and associated monitoring obligations.

14.44 The Council is in the process of estimating monitoring commitments on the basis of the published Central Lincolnshire BNG monitoring formula. At present there is no draft s106 Agreement or Heads of Terms and as such the Council will raise this matter through its Written Representation.

14.45 A further beneficial purpose of the group would be to yield benefits by assisting with the identification of opportunities for strategic working with other solar NSIP developers in the vicinity. This would assist in relation to the delivery of BNG where strategic delivery could result in significant benefits for species groups such as ground nesting birds.

14.46 **Biodiversity Net Gain:** the ES indicated that +10% BNG would be provided on the site. AECOM have reviewed the BNG Metric provided by the applicant and confirm that it is the current version of the Statutory Metric. There do not appear to be any plans provided that allow the relevant habitat parcels to be identified. This is a limitation on the ability of stakeholders to verify the details entered into the Metric. In the attached notes, AECOM have raised a number of additional matters that require clarification and/or provision of additional information. Consequently, the Council is not currently in a position to agree the BNG calculation.

14.47 The applicant proposes a number of significant on-site gains that would need to be appropriately secured, as explained in the Central Lincolnshire BNG guidance. These gains include the following higher distinctiveness habitats:

- Lowland calcareous grassland priority habitat
- Other neutral grassland of good condition
- Species-rich native hedgerow with trees

14.48 This also influences the frequency of habitat monitoring, as set out in the Central Lincolnshire BNG guidance. The LEMP does not fully align with this requirement. There is also a monitoring fee that would need to be provided to cover the Council's costs of monitoring BNG. As above this would need to be secured via a s106 agreement or as part of the Ecological Steering Group arrangement and where a monitoring fee estimate is currently being undertaken by the Council on the basis of the applicant's proposals.

14.49 Whilst the delivery of +10% BNG is not currently mandatory for NSIPs, other solar developments have achieved significant levels of BNG. In the District, the Heckington Fen NSIP was consented with 65% gain secured by requirement, with the final BNG of habitat units expected to reach 113%. Given the scale and nature of the proposals, the Council would expect a significant level of BNG to be achieved on site commensurate with other solar farms. This would appear to be supported by EN-1, paragraph 5.4.33 which states that "Applicants should consider any reasonable opportunities to maximise the restoration, creation, and enhancement of wider biodiversity".

14.50 **Trees:** The Council's Tree Officer raises no concerns with the submitted Arboricultural Impact Assessment (AIA). It is noted that no veteran trees have been identified though several trees are over 40 years old. Veteran trees do not have to be large to be categorised as such but would normally have other features such as cavities, broken branches, decay crown loss etc which under BS5837 categorisation 2012 would result in a U category (lowest condition). No veteran trees have been identified within the AIA.

14.51 The following mature trees require further clarification as to their veteran status as some have not been fully inspected due to understorey, others are smaller/multi-stemmed that may still have veteran qualities. Examples include T008, T009, T021, T028, T040, T045, T052, T055, T078, T089, T091, T092, T109, T111, T113, T114, T118 (noted as having veteran potential), T121,T124 (noted as having veteran potential), T127, T144, T154, T156, T158, T162, T163, T170, T173, T175, T180, T188, T196, T199, T200, T202, T203, T211, T215, T227, T239, T240, T244, T245, T246, T247, T267, T275, T284, T286, T287, T310, T326. Root Protection Areas (RPAs) for veteran trees should be 15m radius regardless of stem diameter so assessments should provide for no loss of veteran trees and no incursion into RPAs.

14.52 There are some additional noteworthy trees that merit further attention given their sizes. Losses of large trees cannot be fully compensated, and these trees

seem notable within the affected landscape. A specific tree of interest is T78, an historic ash coppice with regrowth of 1000mm diameter. Other trees of notable size (relative to others recorded) include T22 (1300mm), T136 (950mm) and T287 (1200mm). It is not clear if these trees are to be retained.

14.53 On the basis of the feedback from AECOM the Council highlights **negative** construction/operation effects in relation to ground nesting birds and scarce arable flora. Set in that context we do not yet agree that temporary minor beneficial/positive effects accrue for those species. Impacts on highway verges and hedgerows within the solar farm are **neutral** subject to further clarification. Whilst we agree that BNG of over 10% is likely to be secured, and would be **positive**, further details are needed to ensure that it would be in accordance with Central Lincolnshire's BNG guidance.

15 Climate

15.1 Section 4.10 of EN-1 addresses climate change adaptation in energy infrastructure development. It notes that the SOS should take the effects of climate change into account when developing and consenting infrastructure, referring also to the potential long-term impact of climate change.

15.2 New energy infrastructure will typically be a long-term investment and will need to remain operational over many decades, in the face of a changing climate. Consequently, applicants must consider the impacts of climate change when planning the location, design, build, operation and, where appropriate, decommissioning of new energy infrastructure (paragraph 4.10.8).

15.3 The SOS should be satisfied that applicants for new energy infrastructure have considered the potential impacts of climate change using the latest UK Climate Projections available at the time the ES was prepared to ensure they have identified appropriate mitigation or adaptation measures. This should cover the estimated lifetime of the new infrastructure (paragraph 4.10.3).

15.4 EN-1 notes the energy NPSs should speed up the transition to a low carbon economy and thus help to realise UK climate change commitments sooner than continuation under the current planning system.

15.5 Paragraph 2.3.5 notes the UK economy is reliant on fossil fuels, and they are likely to play a significant role for some time to come. Most of our power stations are fuelled by coal and gas. The majority of homes have gas central heating, and on our roads, in the air and on the sea, our transport is almost wholly dependent on oil.

15.6 Paragraph 2.3.6 identifies that the UK needs to wean itself off such a high carbon energy mix: to reduce greenhouse gas emissions, and to improve the security, availability, and affordability of energy through diversification. EN-1 also notes that storage has a key role to play in achieving net zero and providing flexibility to the energy system.

15.7 Section 4.10 of EN-1 focuses on climate change adaptation and reiterates the need to minimise the most dangerous impacts of climate change.

15.8 EN-3 (paragraphs 2.10.65 and 3.10.149), requires the applicant to consider the design life of solar panel efficiency over time when determining the period for which consent is required. An upper limit of 40 years is typical, although applicants may seek consent without a time-period or for differing time-periods of operation.

15.9 CLLP Policy S11 'Embodied Carbon' requires schemes to reduce the development's embodied carbon content, through the careful choice, use and sourcing of materials. Policy S11 also requires applicants to demonstrate that they have considered options and opportunities for the use of lower embodied carbon materials; and which gains weight from 1 January 2025, with a further requirement to take opportunities to minimise embodied carbon.

15.10 CLLP policy S14 'Renewable Energy' sets out the position that renewable energy schemes will be supported where the direct, indirect, individual and cumulative impacts on the following considerations are, or will be made, acceptable. The criteria-based sections of the policy, including under the sub-heading of 'Additional matters for solar based energy proposals' are considered elsewhere in this LIR.

15.11 The supporting text to policy S14, at paragraph 3.3.4 sets out that in Central Lincolnshire, 'the aim of the Joint Committee that prepared this Plan is to maximise appropriately located renewable energy generated in Central Lincolnshire, as confirmed in Policy S14 below. The Policy sets no floor or cap on the scale of renewable energy targeted to be generated, preferring, instead, an approach which supports all appropriate proposals that meet the policy requirements set out.'

15.12 In addition, and with particular relevance to the BESS, paragraph 3.3.19 sets out that 'in order to support a move to a zero carbon Central Lincolnshire there is a need to move away from fossil fuels (gas, petrol, diesel, oil) towards low carbon alternatives and this transition needs to take place with increasing momentum in order to stay within identified carbon saving targets'. Continuing, it sets out that 'Energy storage including battery storage, consideration of existing and new electricity substations and energy strategies for large developments are required to help support the future energy infrastructure needs for Central Lincolnshire'.

15.13 CLLP policy S16 'Wider Energy Infrastructure' notes that the Joint Committee is 'committed to supporting the transition to net zero carbon future and, in doing so, recognises and supports, in principle, the need for significant investment in new and upgraded energy infrastructure'. The policy offers support for proposals which are necessary for, or form part of, the transition to a net zero carbon sub-region, including energy storage facilities and upgraded or new electricity facilities (such as transmission facilities, sub-stations or other electricity infrastructure).

15.14 However, the policy caveats that any such proposals should take all reasonable opportunities to mitigate any harm arising, not only in terms of the appropriate

locations for such facilities, but also design solutions (cross referring to CLLP Policy S53) which minimises harm arising.

15.15 As set out above, the 'golden thread' running through the NKDC Climate Emergency Strategy (CES), the Climate Emergency Action Plan (CEAP) , its Environment Policy, the NK Plan 24-27 and its Community Strategy is the Council's vision for a sustainable transition to net zero by 2030 for both North Kesteven District Council (NKDC) and the District of North Kesteven, supported by mitigation measures to reduce emissions and adaptation measures to improve resilience to the effects of climate change.

15.16 This includes a commitment to seek to deliver a 95% reduction in carbon emissions from energy compared to 2005 levels, and supporting a 'just transition' to net zero to create a sustainable future for North Kesteven in alignment with the Council's Community Strategy 2030 vision to create a District of Flourishing Communities.

15.17 The ES states that while Springwell Solar Farm will produce some greenhouse gas emissions throughout its lifecycle (from construction, operational maintenance and repair, and decommissioning), a whole lifecycle greenhouse gas assessment has been carried out in order to assess the net greenhouse gas impact. This assessment considers the potential emissions caused by the development against the potential emissions savings by the renewable energy generated. The design of Springwell Solar Farm includes embedded mitigation measures to minimise the use of concrete, steel, aggregates, and other construction materials. Furthermore, any and all vegetation cleared for Springwell Solar Farm will be compensated by a planting scheme that equals or exceeds the current levels of vegetation. Additional mitigation measures include the responsible sourcing of materials, segregating waste to be re-used and recycled where possible, and measures to decrease fuel use by maximising efficiency.

15.18 Since the nature of Springwell Solar Farm is to have a beneficial positive impact in terms of greenhouse gas emissions, the mitigation measures implemented are intended to maximise this beneficial impact. Over its lifetime, Springwell Solar Farm is expected to save over 9.6 million tonnes of carbon dioxide equivalent. It is expected that it will take 10 years to offset the greenhouse gases produced during construction, operation (including maintenance) and decommissioning, with all greenhouse gas savings beyond that point providing a net benefit.

15.19 The Council's Climate Emergency Strategy (CES) is the corporate strategy for the Council's net zero ambitions within North Kesteven. The ES has referenced the Climate Emergency Action Plan as a 'local planning policy' whereas it is the delivery framework for the CES.

15.20 The ES has used conservative calculations in most cases, however, there was a reference to the panels being maintained by persons travelling from outside the country in some instances (paragraph 8.4.22). It is recommended that the

applicant should consider apprentices and local employment opportunities for this solar farm.

15.21 The proposal indicates that the proposed development will be compensated by a planting scheme that equals or exceeds the current levels of vegetation. It is recommended that the development should consider exceeding current levels of vegetation and increasing soil sequestration / soil enrichment above the beyond to ensure that the development returns the land in a better state and therefore maintaining sustainable future considerations for valuable arable farmland (Table 8.9).

15.22 Within the ES, it is stated that monitoring requirements are not compulsory (paragraph 8.11) in relation to climate change matters. However, the Council strongly recommends ongoing monitoring as best practice to ensure transparency in regard to how this proposal helps the national net zero agenda and how this would be contributing over the 40 year period. Specifically the Council's view is that monitoring and reporting requirements should be imposed in relation to emissions data and renewable energy generation figures. This is especially relevant where it is recognised that the GHG assessments within the ES are dependent on the quality of data and in some cases have been estimated (paragraph 8.12.1).

15.23 Overall, the proposed methodology is reasonable and it is agreed that the proposal would have a **positive** impact in regard to the national net zero targets and green energy agenda.

16 Cultural Heritage

16.1 Section 5.9 of EN-1 states that the SOS should consider the impact of a proposed development on any heritage assets and that they should take into account the particular nature of the significance of the heritage assets and the value that they hold for this and future generations. This understanding should be used to avoid or minimise conflict between conservation of that significance and proposals for development.

16.2 In terms of archaeological assets, paragraph 5.9.21 states that where there is a high probability that a development site may include as yet undiscovered heritage assets with archaeological interest, then Requirements should be considered to ensure that appropriate procedures are in place for the identification and treatment of such assets discovered during construction.

16.3 EN-1 seeks consistency with the current National Planning Policy Framework (adopted July 2021) and expands the definition of heritage significance to acknowledge the contribution that can be made by setting, and alters the wording of paragraphs 5.9.5 and 5.9.6 regarding non-designated archaeological heritage assets of demonstrably equivalent significance to Scheduled Monuments.

16.4 EN-1 also recommends that the applicant prepares proposals that enhance heritage significance and mitigate heritage harm, and considers whether the

development effects will be direct, indirect, temporary or permanent. It further identifies a need to weigh any identified less than substantial harm to the significance of a designated heritage asset against the public benefits of the proposal.

16.5 CLLP policy S47 'the Historic Environment' requires development proposals to protect, conserve and seek opportunities to enhance the historic environment of Central Lincolnshire including through protecting the significance of heritage assets (including where relevant their setting), and taking into account the desirability of sustaining and enhancing non-designated heritage assets and their setting.

16.6 Continuing, the policy states that where a development proposal would result in less than substantial harm to a designated heritage asset, permission will only be granted where the public benefits, including, where appropriate, securing its optimum viable use, outweigh the harm. Finally, development affecting archaeological remains (whether known or potential, designated or undesignated) should take every practical and reasonable step to protect and, where possible, enhance their significance.

16.7 SKGNP policy 10 (Protecting Heritage Assets) states that the effect of a proposal on a non-designated heritage asset, including their setting, will be taken into consideration when determining planning applications.

16.8 **Above Ground Heritage Assets:** Table 9.3 only proposes to retain the listed milepost on the A15 as an above ground sensitive receptor.

16.9 The Council has expressed ongoing concerns about the assessment of built heritage assets during Scoping and PEIR stages. Despite this, these concerns remain unaddressed and there has been no follow-up engagement from the developer.

16.10 There is a lack of detailed analysis of individual assets, rather a broad-brush approach and de-scoping en-masse within groups. There is very limited information within the groups as to why individual heritage assets have been scoped out the analysis and why a 'grouped assessment' of the significance of effects has instead been applied. In addition, the proposals also have cumulative impacts, particularly the connectivity of the open rural landscape and broader visual and experiential effects on heritage assets. This is notable given the proximity to the Leoda Solar Farm and other proposed developments, alongside potential sequential visual impacts on historic landmarks. A detailed evaluation of these cumulative effects should be undertaken to ensure a robust understanding of the scheme's wider historic environment implications.

16.11 A number of receptors located within close proximity to the development have been scoped out and no evidence base has been provided. These are Thompsons Bottom Farmhouse and outbuildings (LBEN 1254329/1254407), Temple Farmhouse (LBEN 1254328 and 1261359), Home Farmhouse (LBEN 1061825) and Farmyard to the north of The Firs (LBEN 1280661). All are

farmhouses which have been grouped together and descoped despite having clear impacts on both setting and special interest.

16.12 This generalised approach fails to consider the impact on individual assets and appears to rely heavily on embedded mitigation. In the case of Scopwick Mill (Grade II Listed), it is only 200m from the nearest solar array, yet despite the proximity and scale there is no detail on the specific mitigation.

16.13 Table 9.2 in Chapter 9 appears to solely list receptors and descope them without any detailed analysis of the individual impacts on setting. There are probably a number of instances where this group approach is acceptable in the context of a 5km study area (particularly with regards village centres where there are enclosed views) but an understanding of individual significance is required of those buildings with greatest impact and the heritage assets need to be considered in greater detail.

16.14 The assessment considers the Council's Local List of non-designated heritage assets but whilst this is analysed in Appendix 9.1, it does not feature in Chapter 9. This required to demonstrate a full understanding of the built environment of the area around the site.

16.15 In summary, there continues to be a lack of consideration of individual assets and analysis of impacts on designated heritage assets within close appreciation of the site. The descoping is broad brush and provides no rationale or evidence base for the decisions. Stating that the assets will not be impacted is insufficient as it fails to consider the individual circumstances of the individual assets and how any mitigation can be best applied. There remains limited and insufficient information on mitigation and inconsistent application of what is being considered for additional mitigation.

16.16 There are clear demonstrable impacts on the heritage and built environment, and these have either been largely dismissed, or are reliant on a standard approach for mitigation, with no information provided regarding bespoke analysis and understanding of the heritage assets which may be impacted. Much of the proposal will lead to 'less than substantial harm' to the designated heritage asset and those impacts should be tested and understood to ensure the correct approach and mitigation has been applied.

16.17 **Archaeology:** the Council has an arrangement with Lincolnshire County Council for the provision of archaeological advice on behalf of NKDC. The Council supports the views of the LCC's Historic Environment (Infrastructure) Officer which are attached at Appendix C and summarised below.

16.18 The LCC Historic Environment (Infrastructure) Officer has serious concerns over the adequacy of works undertaken for Springwell. The assessment undertaken falls considerably short of acceptable standards and fails to meet the requirements set out by the NPPF, EIA Regulations and National Policy Statement EN-1. EN-1 outlines requirements for understanding the significance of heritage assets that will be affected, including Section 5.9.12: *'The applicant should ensure that the extent of the impact of the proposed development on the*

significance of any heritage assets affected can be adequately understood from the application and supporting documents.'(Section 5.9.9 – 5.9.15) and that *'The results of pre-determination archaeological evaluation inform the design of the scheme and related archaeological planning conditions.'* (footnote 94).

16.19 The significance of any heritage assets cannot be assessed until there has been sufficient evaluation to identify the currently unknown archaeology across the proposed development area. Trial trenching is essential in finding and characterising the archaeology. The Applicant has not undertaken sufficient trenching evaluation to identify the presence of archaeology across the impact zone and therefore '*the significance of any heritage assets*' cannot be adequately understood.

16.20 Significant concerns are raised over the amount of trial trenching undertaken within the 1280-hectare site. The Applicant has completed 196 trenches, each 50m by 1.8m. The trenching thus represents slightly over 0.1% of the full red line boundary. Approximately 99.9% of the site has not been evaluated.

16.21 The direct and indirect significant effects of the development on cultural heritage cannot be understood until sufficient trial trenching has been undertaken across the full impact zone and the scheme as presented currently lacks a proportionate level of detail on the significance of any heritage assets affected on 99.9% of the site and there is insufficient information to understand the impact.

16.22 The Applicant has indicated that further archaeological works will be undertaken post-consent. Whilst the Council welcome's this approach in principle, best practice, as stated above within Historic England Advice Note 17 'Planning and Archaeology', is that this should have been undertaken prior to submission of the DCO and should have been representative of the full DCO Order Limit red line boundary, in accordance with NPPF, EIA Regulations and National Policy Statement EN-1.

16.23 There are also considerable amounts of the site where no archaeological trenching is proposed at all. The outline Written Scheme of Investigation (oWSI) states that areas of ecological enhancement will not be subject to archaeological trenching eg tree planting, wildflower planting and other forms of enhancement. These areas will need to be included within the programme of trenching to establish if archaeological remains are present and whether mitigation is required depending on the type of enhancement proposed. Concern remains whether all areas of landscaping and drainage will also be included within the trenching programme or have been proposed for omission.

16.24 It is essential that sufficient trenching is undertaken to identify the presence, extent, depth and significance of previously unknown archaeology across the redline boundary, including areas of ecological mitigation. The current 0.1% sample is not standard practice and has proven to be ineffective at establishing the presence of archaeological remains. LCC's Historic Environment (Infrastructure) Officer advises that between 3% and 5% of the site should be

sampled by trenching to get an understanding of the archaeological potential, with a contingency of 2% should it be needed to aid understanding the extent, depth and significance of any remains found, as required.

16.25 The Council's position is that the proposed Requirement 11 covering archaeological works post-consent is not appropriate or fit for purpose. The wording currently suggested is vague and unenforceable. We would advise that the wording accepted at the Mallard Pass, Cottam and West Burton Solar Farms, all recently consented NSIPs within Lincolnshire, is included for Springwell, should the scheme be consented. The wording utilised within the Mallard Pass Requirement has been deemed to be appropriate and allows for an enforceable and robust level of archaeological works to be undertaken and appropriate mitigation, informed by sufficient evaluation, to be deployed.

16.26 The work undertaken to date is in the Council's view substandard, not fit for purpose and does not provide the baseline evidence necessary for assessing impact or producing an effective and appropriate mitigation cannot be determined outside of the trenched areas.

16.27 The Council considers that there is a **negative** impact on above-ground heritage assets in view of the lack of approach taken within the ES which has taken a broad-brush approach and largely descoped multiple heritage assets. The Council also considers that there is a **negative** impact on below-ground heritage assets in view of the insufficient amount of trial-trenching that has taken place.

17 Landscape and Visual Impacts, and Residential Visual Amenity

17.1 EN-1 states that the ExA needs to consider the design of a scheme carefully. They should have regard to siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate.

17.2 Paragraph 5.10.35 of EN-1 states that the ExA should 'judge whether any adverse impact on the landscape would be so damaging that it is not offset by the benefits (including need) of the project'. Paragraph 5.10.36 then sets out that the ExA should 'consider whether any adverse impact is temporary, such as during construction, and/or whether any adverse impact on the landscape will be capable of being reversed in a timescale that the Secretary of State considers reasonable'.

17.3 Paragraph 5.10.5 of EN-1 sates that 'Virtually all nationally significant energy infrastructure projects will have adverse effects on the landscape, but there may also be beneficial landscape character impacts arising from mitigation'. Paragraph 5.10.6 then states that projects need to be designed carefully, taking account of the potential impact on the landscape, and that they should have regard to 'siting, operational and other relevant constraints the aim should be to minimise harm to the landscape, providing reasonable mitigation where possible and appropriate'.

17.4 The specific guidance relating to Solar Photovoltaic Generation in section 3.10 of EN-3 notes at paragraph 2.10.94 that 'Solar farms are likely to be in low lying areas of good exposure and as such may have a wider zone of visual influence than other types of onshore energy infrastructure'. Paragraph 3.10.95 states that 'whilst it may be the case that the development covers a significant surface area, in the case of ground-mounted solar panels it should be noted that with effective screening and appropriate land topography, the area of a zone of visual influence could be appropriately minimised'.

17.5 CLLP policy S14 'Renewable Energy' supports proposals for renewable energy schemes subject to the direct, indirect, individual and cumulative impacts of development on, amongst other things, landscape character and visual amenity being acceptable or capable of being made acceptable.

17.6 CLLP policy S53 'Design and Amenity' states all development must achieve high quality sustainable design which contributes positively to the local character and landscape. Development should, amongst other things, be based on a sound understanding of the context, integrating into the surrounding, relate well to the site, protect any important local views into, out of or through the site, reflect the identity of area and contribute to the sense of place and maintain landscape quality and minimise adverse visual impacts through high quality building and landscape design.

17.7 SKGNP policy 2 (Protecting the Landscape Character), amongst other things, requires development proposals to show how they have had regard to the relevant design principles in the Scopwick and Kirkby Green Design Code 2020. As appropriate to their scale, nature and location, mitigation planting and boundary treatment should include native species. Development proposals should not obstruct or detract from key views.

17.8 SKGNP policy 6 (Achieving High Quality Design) requires proposals to reinforce the character of the area as defined in the Scopwick and Kirkby Green Design Code 2020. It also requires development proposals to include landscaping schemes and boundary treatments appropriate to their context such as through the use of native trees and hedgerows or the inclusion of limestone walls.

17.9 **Landscape Impact:** no part of Springwell Solar Farm or the land surrounding it falls within a designated landscape. There are also no registered parks and gardens close to Springwell Solar Farm.

17.10 Springwell Solar Farm would be located across arable farmland on a gentle dip slope between the limestone cliff known as the Lincoln Cliff to the west and the Lincolnshire Fens to the east. Impacts on the Lincoln Cliff have been scoped out due to the distance from the application site.

17.11 There are notable variations in the character of the landscape from west to east across the site area which are reflected in the local landscape character areas. Springwell West and Springwell Central lie within Landscape Character Area 7:

Limestone Heath (LCA7) whilst Springwell East lies within Landscape Character Area 11: Central Clays and Gravels (LCA11).

17.12 The landscape within Springwell West and Springwell Central is flat or gently undulating and mostly open with relatively few mature trees or hedgerows. There are a number of small copses and woodlands, mostly broad-leaved, throughout the landscape, which because of the general openness of the landscape are prominent and make important features. Linear infrastructure such as the A15 and high voltage overhead electricity lines are a feature of Springwell West.

17.13 The landscape within Springwell East is more enclosed with more dense and established vegetation. Settlement is concentrated in the main villages of Scopwick, Kirkby Green, Blankney, Ashby de la Launde and at Royal Air Force Digby. Elsewhere throughout the landscape there are scattered farmsteads and a few isolated properties. Royal Air Force Digby is locally prominent between Springwell West and Springwell East.

17.14 **Visual Impact:** people in the landscape surrounding Springwell Solar Farm who are likely to experience views of Springwell Solar Farm are:

- Residents (at isolated farmsteads and dwellings);
- Users of public rights of way (footpaths and bridleways); and
- Users of main roads and minor country lanes.

17.15 The villages of Scopwick, Kirkby Green and Blankney lie just beyond the Site near Springwell East. Vegetation which surrounds these settlements would screen any view of Springwell Solar Farm from within them. It has been assessed that there would be no view of any element of Springwell Solar Farm during construction, operation (including maintenance) or decommissioning from any location within these villages. No key views identified in the SKGNP would be impacted.

17.16 The village of Ashby de la Launde lies approximately 1 kilometre from Springwell Solar Farm in Springwell West but there would be no view of Springwell Solar Farm from within the residential and communal parts of the village.

17.17 The ES states that effects during operation (including maintenance) on landscape character and visual amenity would typically arise from:

- New energy infrastructure including ancillary structures;
- Earth bunds (up to 5 metres in height) in the vicinity of Springwell Substation (within Springwell West);
- Newly established mitigation planting (hedgerows and woodland);
- New wildflower rich grassland in open fields and field margins; and
- Regular maintenance operations including habitat management.

17.18 Additional effects during the construction phase on landscape character would arise from short-term change of farmland to a construction site including the formation of temporary construction compounds (with associated temporary night time lighting) and access tracks; increased vehicular movement and personnel in the landscape delivering and erecting the component parts of Springwell Solar Farm; highways works and management; underground cable installation; and changes to landscape from vegetation removal.

17.19 New structure planting has been proposed to mitigate landscape and visual effects. This includes extensive new hedgerow and native woodland planting. Specific attention has been focussed on mitigating views from individual residential properties, the A15, the B1191 (Heath Road) and public rights of way where they pass close to Springwell Solar Farm. In total, it is proposed to plant over 15 kilometres of new hedgerow and over 16 hectares of new structural woodland planting within the Site. The new planting proposals respond directly to specific guidelines in the North Kesteven Landscape Character Assessment. It is intended that existing and new hedgerows (once established) would be maintained at a minimum height of 3.5 metres for the duration of the operational (including maintenance) phase of Springwell Solar Farm.

17.20 Lincolnshire County Council has commissioned specialist advice from AAH consultants on the impacts of the solar farm on landscape and visual impacts in a shared arrangement with the District Council. A copy of AAH's review of the applicant's LVIA is attached at Appendix E. AAH have carried out pre-application landscape and visual consultation with the applicant over a 12 month period. AAH conclude that the LVIA provides a thorough analysis of the landscape and visual effects of the development, the level of information and detail is appropriate for the scale and type of development and the assessment has been carried out to best practice. By reason of its mass and scale, AAH conclude that the solar farm would lead to significant adverse effects upon the existing landscape and visual baseline which is reflected in the LVIA submitted with the application.

17.21 By reason of its mass and scale, AAH consider that the solar farm would lead to significant adverse effects on landscape character and visual amenity at all main phases of the scheme (Construction, Operation Year 1 and Operation Year 10). The development has the potential to transform the local landscape by altering its character on a large scale. This landscape change also has the potential to affect a wider landscape character, at a regional scale, by replacing large areas of agricultural or rural land with solar development, affecting the current openness, tranquillity and agricultural character that are identified as defining characteristics of the area. The scale and extent of the development would also lead to significant adverse effects on views from receptors, by altering from views within an agricultural or rural landscape to that of a landscape with large scale solar development.

17.22 **AAH comments on Landscape Impact:** the ES concludes that there will be the significant major/moderate adverse landscape effects across the whole site during construction and Operation Year 1. This will reduce to moderate adverse (not significant) at Springwell East at Operation Year 10 when mitigation will have been established but will remain significant major/moderate adverse at Springwell West and Central.

17.23 AAH note that professional judgement has been applied in reaching this assessment and a rationale provided (paragraph 10.9.193), however, they recommend that the conclusion that the impact on Springwell East is not significant (at operational year 10) is considered during the Examination.

17.24 In addition, AAH recommend that vegetation removal is limited along site boundaries or sight lines, or along construction access routes, due to its potential to change the character of the local landscape beyond the limits of the development. Tree and vegetation removal must be clarified through the examination process, and subsequently any works or removal of trees and hedgerows must be agreed prior to any works commencing.

17.25 **AAH comments on Visual Impact:** the ES baseline follows the LVIA methodology and considers the consultation undertaken at pre-application stage. A viewpoint analysis has been carried out on 40 assessment viewpoints. None have been identified as being of high sensitivity. Moderate Adverse (significant) visual effects at Operation Year 10 when mitigation has been established have been identified for PRoW between Blankney, Scopwick and Kirkby Green extending up to Blankney Walks Lane and the railway on the eastern site boundary (including several 'Stepping Out' walks) and the A15 . These residual visual effects have been identified as it is not possible to sufficiently screen views of the development, or in the case of the A15 where the mitigation itself may cause an adverse effect through screening open views.

17.26 Access, and the wider highways elements of the scheme, do not appear to be fully considered in the LVIA despite the potential for adverse effects on the views of the rural landscape including potential vegetation loss, urbanisation and reduction of visual amenity. Consequently, the visual effects during construction may be underestimated within the LVIA due to unconsidered impact of loss of vegetation. Clarification on this matter by the applicant should be provided.

17.27 In terms of cumulative impacts, National Grid Navenby Substation is identified as the primary project to potentially generate cumulative landscape or visual effects with Springwell Solar Farm. Subsequently significant cumulative effects are identified through extending the area of development, increasing the land use area changed from agricultural to energy infrastructure, and also visually through increasing the extent the two schemes may likely be visible by receptors.

17.28 There are potential opportunities for the applicants of each scheme to coordinate mitigation planting in the area around the National Grid Substation,

which we would recommend are investigated further if possible. For example, this may include the extending of carriageway hedgerow planting further north along the western edge of the A15 (such as along field parcels Bcd024, Bcd027, Bcd031), which are in the Springwell Order Limits and would bring mitigation planting closer to potential visual receptors, likely further screening the proposed National Grid Substation.

17.29 **Residential Visual Amenity:** a Residential Visual Amenity Assessment (RVAA) has been provided with the ES focusing on private views and private visual amenity during the operation of the solar farm. The methodology relies on the Residential Visual Amenity Threshold (RVAT) being reached when further change to the visual amenity of individual properties is identified as 'having the greatest magnitude of change'. This is a higher bar than used within the 'visual impact' assessment of the ES. The RVAA was carried out in stages commencing with an initial review of larger number of properties, then focusing in detail on 18 properties.

17.30 Of these 18 properties, four properties are within 100m of any solar array. These are 1 & 2 Peacock Lodge Cottages, Scopwick Lowfield Farm and Sheffield House. The RVAA concludes that while there will be significant adverse visual effects from several properties, none would experience such an overbearing or dominating visual effect that it would render any property an unpleasant or unattractive place to live. As such, the RVAA concludes that none of these will reach the RVAT. The proposals were designed to move development further away from affected residential properties as part of the design evolution (the nearest property is 70m from any solar arrays) and mitigation through landscape planting has been developed to reduce the visual effects on remaining residential properties.

17.31 Paragraph 10.9.58 of the ES states that 31 dwellings would experience significant visual effects during construction. Paragraph 10.9.363 of the ES states that at decommissioning, due to the establishment and growth of mitigation planting, only four properties would experience significant visual effects during decommissioning, namely Scopwick Low Field Farm, The Windmill and Scopwick Mill on Heath Road and Gorse Hill Farm.

17.32 Paragraph 10.9.198 of the ES concludes that residents of 25 dwellings would experience significant visual effects during Year 1 but in most cases these effects would reduce in magnitude due to the establishment of mitigation and by Year 10 would not be significant. It is considered that significant visual effects would remain at the Windmill on Heath Road reflecting the fact that views are available from elevated rooms within the converted windmill. Table 10.12 summarises the operational phase visual effects on residential properties.

17.33 There are some residential properties which lie close to the NGNS on the east of the A15 which may benefit from the additional hedgerow planting suggested at paragraph 17.28 of this report for visual screening purposes. These are Temple High Grange Cottages, Temple High Grange Farm and Corner Cottage.

17.34 The proposals include embedded mitigation measures which are reliant on additional planting to integrate and screen proposals, promote conservation and protection of the environment and encourage ecological and habitat diversity. The success of the landscape mitigation is highly dependent on the successful management and maintenance of the new planting, as well as the protection of existing trees and hedgerows (to BS:5837 Trees in Relation to Construction standard and any subsequent arboricultural method statements, as approved by the appropriate authority). This would include areas within the Order Limits but away from construction activity, such as storage areas for materials which may suffer from tracking by plant that would damage tree root protection areas. The Council would expect the management plan to be developed further beyond the initial 5-year period, particularly if landscape and visual effects are being assessed at 10 years. Any early planting should be included in the maintenance plan as the reduction in effects described in the LVIA are also based on the assumption that this too will have established as planned.

17.35 The landscape proposals are at a high level and it would be expected that if the project proceeds, much more detailed plans would need to be submitted and subsequently agreed by the appropriate authority prior to the commencement of any works. This should include detail of the areas of landscape mitigation, location and types of planting as well as number, density and specification. Detailed landscape proposals should be based on the mitigation illustrated in the oLEMP.

17.36 Monitoring of the proposals also requires further development to ensure that there is sufficient robustness to deal with the challenging climatic conditions when it comes to establishing new planting. The updating of the management plan every 5 years after the initial establishment will assist.

17.37 The Council considers that there is a **negative** impact on the landscape character of the whole site during construction and the initial years of operation. This will remain negative at the Springwell West and Central areas (LCA7 Limestone Heath) but reduce to a potentially lesser impact on the Springwell East area (LCA11 Central Clays and Gravel) due to the establishment of vegetation by Operation Year 10. The impact on visual amenity is **negative** in respect of PRoWs in the Blankney, Scopwick and Kirkby Green area and along the A15.

17.38 In addition, the Council concludes that there would be significant impacts on 25 residential properties by way of visual impact between Operational Year 1 to 10 which is a **negative** effect but this would not result in a negative effect on their residential amenity as explained in the RVAA.

18 Land, Soil and Groundwater

18.1 Paragraph 5.11.12 of EN-1 outlines that applicants should ‘seek to minimise impacts on the best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification (ALC)) and preferably

use land in areas of poorer quality (grades 3b, 4 and 5) except where this would be inconsistent with other sustainability considerations'.

18.2 Paragraph 5.11.34 of EN-1 states that the decision maker should ensure that 'applicants do not site their scheme on the best and most versatile agricultural land without justification. Where schemes are to be sited on best and most versatile agricultural land, the Secretary of State should take into account the economic and other benefits of that land. Where development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality'.

18.3 Under the heading of 'Solar Photovoltaic Generation', paragraph 2.10.29 of EN-3 states that 'While land type should not be a predominating factor in determining the suitability of the site location applicants should, where possible, utilise previously developed land, brownfield land, contaminated land and industrial land. Where the proposed use of any agricultural land has been shown to be necessary, poorer quality land should be preferred to higher quality land avoiding the use of "Best and Most Versatile" (BMV) agricultural land where possible'.

18.4 Paragraph 2.10.30 notes that 'Whilst the development of ground mounted solar arrays is not prohibited on BMV agricultural land, or sites designated for their natural beauty, or recognised for ecological or archaeological importance, the impacts of such are expected to be considered and are discussed under paragraphs 2.10.73 - 92 and 2.10.107 – 2.10.126'.

18.5 Paragraph 2.10.31 acknowledges that it is likely that applicants' developments may use some agricultural land, however that 'Applicants should explain their choice of site, noting the preference for development to be on brownfield and non-agricultural land'.

18.6 Paragraph 3.10.32 states that where sited on agricultural land, consideration may be given as to whether the proposal allows for continued agricultural use and/or can be co-located with other functions (for example, onshore wind generation, storage, hydrogen electrolysers) to maximise the efficiency of land use.

18.7 Paragraph 3.10.145 of EN-3 reiterates that the SoS should take into account 'the economic and other benefits of the best and most versatile agricultural land' and that 'The Secretary of State should ensure that the applicant has put forward appropriate mitigation measures to minimise impacts on soils or soil resources'.

18.8 Under the sub-heading of 'Additional matters for solar based energy proposals', CLLP policy S14 'Renewable Energy' states that proposals for ground based photovoltaics and associated infrastructure, including commercial large scale proposals, will be under a presumption in favour (of approval) unless, amongst other things, 'the proposal is (following a site specific soil assessment) to take place on BMV agricultural land and does not meet the requirements of Policy S67'.

18.9 CLLP policy S67 ‘Best and Most Versatile Agricultural Land’ states that significant development resulting in the loss of the best and most versatile agricultural land will only be supported if:

- The need is clearly established;
- The benefits outweigh the need to protect such land, when taking into account the economic and other benefits of the best and most versatile agricultural land;
- The impacts of the proposal upon ongoing agricultural operations have been minimised through the use of appropriate design solutions; and
- Once the development has ceased its useful life then the land should be returned to its former use’.

18.10 The Written Ministerial Statement on solar infrastructure (15 May 2024), in recognition of geographical clustering of proposed solar developments in some rural areas such as Lincolnshire, highlights the importance of considering ‘*not just the impacts of individual proposals, but also whether there are cumulative impacts where several proposals come forward in the same locality’*.

18.11 The ES states that the soil across the site is mainly used for agriculture. In terms of the availability of non-BMV agricultural land, effects are considered to be not significant. There would be a significant beneficial effect on soil quality during the operational (including maintenance) phase, as the land will not experience the usual effects from intensive farming practices during this time. During decommissioning, effects on the use of BMV and non-BMV agricultural land are expected to be minimal and therefore considered to be not significant, as much of the land will be returned to the landowner for agricultural use.

18.12 Table 11.11 within the ES sets out the agricultural land classification (ALC) results across the Order Limits.

Table 18.1

Agricultural Land Classification grade	**Area (hectares)**	**Percentage (%)**
Grade 1	6.0	0.5
Grade 2	80.1	6.3
Grade 3a	455.1	35.6
Grade 3b	582.6	45.5
Grade 4	4.2	0.3
Unsurveyed land (field verges, internal tracks etc)	152.0	11.8
Total Best and Most Versatile	541.2	42.3

Total non-Best and Most Versatile	586.8	45.9
Total	**1280.0**	**100.00**

18.13 The ES concludes that in terms of the availability of Non-Best and Most Versatile agricultural land, effects are considered to be not significant. The scheme has been designed to remove all fields comprising solely Grade 1 land (noting that some pockets of Grade 1 land within larger field parcels remain) and most of the Grade 2 land. The overall ALC findings show that 42.3% (541.2ha) of the whole site is assessed as BMV land. Ther ES states that there would be a significant beneficial effect on soil quality during the operational (including maintenance) phase, as the land will not experience the usual effects from intensive farming practices during this time. During decommissioning, effects on the use of BMV and non-BMV agricultural land are expected to be minimal and therefore considered to be not significant, as much of the land will be returned to the landowner for agricultural use.

18.14 Table 11.12 of the ES (summarised below) breaks down the ALC survey results further by key components of the areas surveyed within the Order Limits.

Table 18.2

Temporary Land Use			
Land Use	**Agricultural Land Classification grade**	**Area (hectares)**	**Percentage (%)**
Satellite Collector Compounds	Total BMV	1.5	50
	Total non-BMV	1.5	50
Springwell Substation and Main Collector Compound	Total BMV	6.9	44.2
	Total non-BMV	8.6	55.8
BESS	Total BMV	12.6	93.3
	Total non-BMV	0.9	6.7
Solar PV Development	Total BMV	210.7	35.6
	Total non-BMV	380.6	64.4
Green Infrastructure (Field Tb2 and community growing area)	Total BMV	31.7	60.9
	Total non-BMV	20.4	39.1
Permanent Land Use			
Green Infrastructure	Total BMV	77.1	46.4
	Total non-BMV	89.1	53.6

18.15 The Council has commissioned specialist advice from Landscope consultants on the impacts of the solar farm on soils and agricultural land in a shared arrangement with LCC. A copy of their report is attached as Appendix D and should be read in conjunction with this LIR. Landscope have confirmed that the ALC surveys have been undertaken by a professional team in agreement with Natural England and the results are considered reliable.

18.16 The scale of the project and the amount of BMV land, makes the impact significant at both District and County level. Whilst the ES states that the area amounts to only 1% of the farmed area of Lincolnshire, the cumulative effect is significant for both the District and the County particularly as there are several other large solar and infrastructure schemes either proposed or approved across the wider area that contribute to this impact. For a project of this scale, there will be an impact as the project will tie up the land for 40 years. The loss of such a large area of land is considered as significant at District level, even though the use is considered to be 'temporary'. In addition to this temporary loss, there would be a considerable permanent loss of BMV land due to green infrastructure. Across Lincolnshire, the estimated proportion of BMV land is 71.2%. Whilst across North Kesteven, the proportion of BMV land is 67%, this still covers two-thirds of agricultural land and is well above the national average.

18.17 It is noted that Table 11.12 differentiates between uses that are temporary and permanent. The elements of the solar farm are categorised as temporary since they would be, if approved, subject to a temporary permission with a lifespan of 40 years. The permanent uses are those which would remain in place beyond the lifespan of the solar farm. This is acknowledged as typical for solar farm applications where a temporary permission is applied for. The amount of BMV land under solar PV panels would be 210.7ha (35.6% of the total area under solar PV panels).

18.18 In assessing the environmental impact on agricultural land, Table 11.7 of the ES describes 'permanent, irreversible loss of one or more soil functions or soil volumes (including permanent sealing or land quality downgrading), over an area of more than 20ha of soil related features (including effects from 'temporary developments') as a major impact. Temporary developments can result in a permanent impact if resulting disturbance or land use change causes permanent damage to the soil. The Council notes that Examining Authorities on other solar projects have taken the view that such a loss of land is a permanent impact as it is virtually impossible to mitigate.

18.19 It is anticipated that BMV land used for satellite collector compounds, Springwell substation and main collector compound and BESS would be hard surfaced. This would result in up to 21ha of BMV land being permanently sealed. In addition, the land uses listed in Table 11.12 do not include construction compounds or access tracks which may be hard surfaced and thus may result in the further loss of BMV and non-BMV agricultural land.

18.20 The BMV land to be used for temporary green infrastructure in field T2b (through the formation of a bund to screen the substation and BESS) and

community growing area appears to be a further permanent loss of BMV agricultural land. While the land to be used as temporary green infrastructure will not be permanently sealed, it would be covered by a 3-5m bund for the duration of the solar farm. The community growing area may or may not result in a loss of BMV agricultural land. Together they would account for the further loss of up to 31ha of BMV land.

18.21 The Council considers that permanent sealing or potential land quality downgrading of BMV land from 'temporary' uses should be assessed as a major adverse impact in the ES and weighed in the planning balance. In this context the Council highlights the Institute of Environmental Management & Assessment (IEMA) Guide 'A New Perspective on Land and Soil in Environmental Impact Assessment' (February 2022) which notes that that soils in grades 1, 2 and Subgrade 3a are considered to be a receptor of 'Very High Sensitivity' and where the permanent loss, or reduction in quality, of more than 20ha of agricultural land due to development is of very high magnitude of impact.

18.22 There is some conflict between maintaining the land in agricultural production and improving biodiversity. Table 11.12 indicates that 77.1ha of BMV land will be permanently lost to green infrastructure which is considered to be a significant adverse impact. Whilst not incompatible, site-based issues, such as soil type(s) and local agricultural practices may create future problems. The green infrastructure areas particularly target the highest grades on agricultural land and any future restriction that might prevent its return to cultivation should be a consideration in the planning process. At least some of these areas are likely to be bound by BNG monitoring and habitat management obligations for the duration of operation and therefore will likely be incompatible with ongoing agricultural use.

18.23 Soil structure can be significantly damaged during the construction phase of the process. Much of this damage can be remedied post construction but not all and it is possible that long term drainage issues may occur on the site due to the construction.

18.24 Suitable soil management and restoration clauses would be needed in order to secure the land's quality at the end of the term. Whilst many of the damaging operations can be remedied using agricultural equipment, the layout of the panels and buried cables will often prohibit this during the life of the solar farm and as such remedies can only be completed at the end of the term when all infrastructure has been removed. If the soil is in substandard condition during the operation of the solar farm, carbon sequestration is reduced and infiltration of water can also be reduced, leading to localised standing water and the reduction in soil quality.

18.25 The ES states that upon decommissioning, the land beneath hard surfaced areas will be removed to a depth of 1m and restored using soils retained onsite or replaced with imported topsoil. This needs to be reconciled with the approach in the outline Soils Management Plan.

18.26 The amount of BMV land lost on a permanent basis to green infrastructure is significant while the loss of BMV land on a temporary basis through 'sealing' the land under hardstanding is also considered to be significant in terms of its environmental impact especially given the 40-year lifespan of the solar farm. The site is currently productive farmland which will be removed from mainly arable farming for 40+ years at best and a lower intensity grass-based system will replace it. The loss of arable production is locally significant and in view of other projects in the wider District and County, potentially cumulative significant. The loss of BMV agricultural land is considered to be a **negative** impact.

19 Noise and Vibration

19.1 Paragraph 5.12.15 of EN-1 states that developments should demonstrate good design through selection of the quietest cost-effective plant available; optimisation of plant layout to minimise noise emissions; and, where possible, the use of landscaping, bunds or noise barriers to reduce noise transmission.

19.2 The NPS also states that the decision maker should not grant development consent unless it is satisfied that the proposals will avoid significant adverse impacts on health and quality of life from noise, mitigate and minimise other adverse impacts on health and quality of life from noise and where possible, contribute to improvements to health and quality of life through the effective management and control of noise.

19.3 Moreover the decision maker should consider if mitigation methods needed for construction and operational noise over and above any which may form part of the project application. The mitigation methods may include consideration of layout to ensure adequate distance between source and noise-sensitive receptors; incorporating good design to minimise noise transmission through screening by natural barriers, or other buildings and administrative controls such as restricting activities allowed on the site including specifying acceptable noise limits.

19.4 EN-3 includes construction (including traffic and transport noise and vibration) as a specific factor to consider. The accompanying text does not however identify specific effects related to noise (aside from the volume of traffic potentially associated with construction activities).

19.5 CLLP policy S14 'Renewable Energy' supports the principle of new renewable energy schemes, including ancillary development, subject to the direct, indirect, individual and cumulative impacts on (inter alia) the amenities of sensitive neighbouring uses (including local residents) by virtue of matters such as noise, dust, odour, shadow flicker, air quality and traffic being satisfactorily addressed.

19.6 CLLP policy S53 'Design and Amenity' requires all development, including extensions and alterations to existing buildings, to achieve high quality sustainable design that contributes positively to local character, landscape and townscape, and supports diversity, equality and access for all. Under the 'Uses' sub-heading of the policy, this includes a requirement for development to 'not result in adverse noise and vibration taking into account surrounding uses nor

result in adverse impacts upon air quality from odour, fumes, smoke, dust and other sources'.

19.7 In addition, the value of retaining trees and hedgerows in terms of reduced noise impacts from development is recognised in paragraph 11.7.2; the preface to CLLP policy S66 'Trees and Hedgerows'.

19.8 Construction noise is temporary and variable, and due to the nature of the construction works, highest levels of noise may only exist for a matter of hours or days as the works move across the Site. The majority of heavy machinery works would be within Field Tb2 to the north of Springwell West along the A15 where the BESS and substation are to be located. Mitigation measures, including temporary barriers to screen the works, the use of screw piling when installing solar panels near residential properties, and equipment being switched off when not in use will help minimise construction noise. These measures will be implemented along with controlled working hours between 8am and 6pm on weekdays, and 8am and 12 noon on Saturdays near residential properties. Further assessment of the horizontal directional drilling works around the B1188, which is part of the electrical cabling works, is expected to be agreed with North Kesteven District Council, as this would likely require 24 hour works over a period of days depending on the ground conditions.

19.9 Operational (including maintenance) noise is generated by the BESS, Springwell Substation transformers, satellite collector compound transformers, and solar field inverters and transformers. Iterative design of the layout and capacity of Springwell Solar Farm has been modelled to achieve suitable noise levels at surrounding residential properties. Noise levels at residential properties has been agreed with the Council.

19.10 Given the distances between residential properties and construction works, such as in Field Tb2, as well as the duration of works and the use of construction mitigation methods like Best Practical Means, the ES concludes that construction noise levels are predicted to be not significant. Noise generated by construction traffic on the local road network is also predicted to be not significant.

19.11 The ES states that operational impacts are considered to be at or lower than "noise can be heard, but does not cause any change in behaviour, attitude or other physiological response. Can slightly affect the acoustic character of the area but not such that there is a change in the quality of life." Possible noise from the maintenance of Springwell Solar Farm during operation, including traffic, is expected to be minimal, as these aspects are considered to occur in isolated instances.

19.12 The Council is satisfied that the assessment methodology is correct and concur with the outcomes. Following noise monitoring at 24 locations, the ES indicates that mainly residential sensitive receptors have been identified for noise, however, noise to users of PRoW has been scoped out due to the transient use

of the footpaths. Vibration has been scoped out of the ES as receptors are far enough away for this not to cause adverse impacts during any stage of the development.

19.13 There is a high risk of adverse impacts during the construction and decommissioning stages. Embedded mitigation would include features such as a 4m high barrier around the BESS compound, with a 6m high absorbent barrier positioned around the west, north and east faces of the Springwell substation transformer, set off distances from solar PV development and independent outdoor equipment form specific receptors. The highest levels of construction noise calculated from the construction phase is from the cable trenching phase with the highest predicted level (66dB$L_{Aeq,T}$) being at Scopwick Mill. This will be for a short period of time, estimated at 10 weeks. All other construction activities are predicted to generate noise levels less than 65dB$L_{Aeq,T}$ at all sensitive receptors. Construction traffic noise will be at a lower level. Additional mitigation is also proposed via the outline management plans.

19.14 Some noise sensitive receptors have been identified as high risk for the operational stage (from plant equipment), however, mitigation will be provided to ensure that noise levels would comply with the day-time and night-time criteria agreed with the Council.

19.15 The Council considers that the impact of noise and vibration is **neutral**.

20 Population

20.1 Paragraph 5.13.9 of EN-1 states that the decision maker 'should have regard to the potential socio-economic impacts of new energy infrastructure identified by the applicant and from any other sources that the IPC considers to be both relevant and important to its decision'. EN-1 goes on to say the decision maker 'should consider whether mitigation measures are necessary to mitigate any adverse socio-economic impacts of the development'.

20.2 EN-1 makes reference to an extended list of potential impacts to consider as relevant, including (at paragraph 5.13.4) creation of jobs and training opportunities, contribution to low-carbon industries, provision of additional local services and improvements to local infrastructure, any indirect beneficial impacts for the region, effects on tourism, impact of a changing influx of workers, and cumulative effects.

20.3 Furthermore, EN-1 also makes reference to the need to consider development of accommodation strategies, if appropriate, to address any potential impacts during the construction and decommissioning phases. In addition, it also refers to the potential for the SoS to require the approval of an employment and skills plan detailing arrangements to promote local employment and skills development opportunities, and additionally consideration of solar and potential for associated socio-economic effects is referenced in respect of the potential for socio-economic benefits of the site infrastructure being retained after the operational life of solar photovoltaic generation.

20.4 CLLP policy S10 ‘Supporting a Circular Economy’ recognises the high energy and material use consumed on a daily basis, and, consequently, is fully supportive of the principles of a circular economy. As such, proposals will be supported, in principle, which demonstrate their compatibility with, or the furthering of, a strong circular economy in the local area.

20.5 CLLP policy S20 ‘Resilient and Adaptable Design’ requires design proposals to be adaptable to future social, economic, technological and environmental requirements in order to make buildings both fit for purpose in the long term and to minimise future resource consumption.

20.6 CLLP policy S28 ‘Spatial Strategy for Employment’ requires employment related proposals to be consistent with meeting the overall spatial strategy for employment. The strategy is to strengthen the Central Lincolnshire economy offering a wide range of employment opportunities focused mainly in and around the Lincoln urban area and the towns of Gainsborough and Sleaford, with proportionate employment provision further down the Settlement Hierarchy.

20.7 The preface to the CLLP ‘employment’ policies notes at paragraph 5.1.2 that Central Lincolnshire is located within the Greater Lincolnshire Local Enterprise Partnership (GLLEP) area and represents roughly 30% of the GLLEP area’s population, employment and business base. Greater Lincolnshire has an economy of £20.7bn with an ambition to grow the Gross Value Added (GVA) by £3.2bn by 2030, and boasts a mix of traditional manufacturing, a comprehensive agri-food sector, energy and services, and is strong in health and care and the visitor economy.

20.8 The ES states that the net number of additional construction jobs associated with Springwell Solar Farm is estimated to be around 300 to 360 full time equivalent jobs per year within a 50-mile radius of Springwell Solar Farm and 140 full time equivalent jobs within approximately 10 miles of Springwell Solar Farm. The operation (including maintenance) of Springwell Solar Farm is estimated to create 20 full time equivalent jobs in Lincolnshire.

20.9 The solar farm is also expected to add to the economy of the area during construction and operation phases. To help maximise the positive gain for the local economy from the beneficial effect arising from employment generation during the construction, operational (including maintenance) and decommissioning phase, an Outline Employment, Skills and Supply Chain Plan has been submitted.

20.10 There are a large number of people employed in the agricultural sector in Lincolnshire. The ES states that the number of potential jobs lost in the sector as a result of Springwell Solar Farm is anticipated to be low when compared to the levels of employment in the sector generally. It is not expected that there will be an adverse impact on the tourism sector as the visual impact on leisure related footpaths will be offset by improvements and greater connectivity. Tourist accommodation will not be negatively impacted by construction workers.

20.11 In seeking to create a balanced growth economy it is important that as complete a picture as possible of the economic impacts of NSIP developments are considered. However, given the minimal and temporary nature of the direct economic benefits of individual applications (largely limited to the construction phases) it is the Council's view that the indirect impacts, and particularly the cumulative economic and socio-economic impacts of a potentially significant number developments of a similar scale, both in the District and neighbouring parts of Greater Lincolnshire, must be taken into account.

20.12 Given the number and scale of NSIP developments currently 'live' or in the pre-planning phases there is a significant risk created by considering proposals either individually or on a piecemeal basis that an underestimation of the cumulative impacts may cause unforeseen and unmitigated harms to the agricultural economy or, that real opportunities will be missed.

20.13 The Council is committed to achieving Net Zero by 2030 and because North Kesteven is predominantly rural in character, the development of green infrastructure is a key strategic aim of the Council's Economic Strategy. While NSIP developments are fundamentally of national importance, the potential of these developments to contribute singly and collectively to the growth of local green infrastructure must be grasped.

20.14 'Green infrastructure' in its broadest, inclusive sense can be defined as 'networks that provide sustainable and resilient infrastructure enabling adaption to climate change and enhancing the social, economic and environmental health of the district and its communities'. In terms of the local economic growth, this includes developing a low carbon, greener economy, digital connectivity, better transport and the development of green capital, skills in order to enhance economic wellbeing.

20.15 This definition is in complete alignment with more traditional economic measures such as 3BL and LM3 (which test local economic multiplier, social equity, economic, and environmental factors) which are generally considered when assessing economic impacts. We therefore expect LIAs to take a similarly broad view of the economic and socio-economic impacts of developments.

20.16 The direct Employment benefits set out in full in ES Volume 1, Chapter 13: Population highlights the main issue in respect of the local labour market - '*the Proposed Development is one of 10 solar farms proposed across Greater Lincolnshire together with a wider pipeline of green industry and other major infrastructure projects. These projects will, collectively, impose a significant demand upon available construction labour; a challenge which would need to be addressed at the regional level.*

20.17 The Council agrees with this assessment and would further argue that this approach to managing the challenges and opportunities created by the cumulative impacts of major NSIP and other projects should be extended to include key areas of concern for the local economy, specifically:

- **The cumulative impact of land take on the Agri food sector locally both in terms of Food Security and land use:** It is possible that a significant proportion of land in the District (up to 10% of the total area of NK - roughly 100,000ha) will be given over to NSIP solar energy production. Agriculture accounts for 90% of land use in the District and so the impact will be proportionately greater. What impacts will this land take have on the agri-food sector and its supply chains? If solar farms produce a de facto 'energy crop' the economic value of this output may have far-reaching impacts on the local economy, GVA, skills, future land values as well as more generally countywide in the construction and agri-food sectors. The move towards the monetisation of the environment and biodiversity suggested by new subsidy regimes and Biodiversity Net Gain legislation will allow the value of land and its potential outputs to be measured in different ways. Solar energy will be only one of several 'green' options open to landowners considering investments to drive profitability, productivity, or resilience both alongside and instead of primary production.
- **Aggregating direct economic benefits:** North Kesteven has a nationally significant role in feeding and defending the nation. In the future it may have a similarly significant role in powering the nation. The value of the electricity produced will be of considerable direct economic benefit over time to impacted businesses and communities, the wider District and Greater Lincolnshire. Given that we are concerned with measuring the cumulative impacts of NSIP developments, it is logical to explore the case for aggregating the cumulative financial benefits of a large number of such schemes in order to maximise value and assess the potential to contribute to strategic economic and socio economic goals, particularly in respect of green infrastructure growth, Net Zero and the building of green capital in the rural economy.
- **Importance of modelling:** The individual and cumulative impacts of NSIP developments may be far-reaching. They may also be largely positive. There are established economic models available to measure the wider impacts of major investments on local economies and communities. We would urge applicants to use 3BL or LM3 modelling to set help achieve a balanced view across the lifetime of developments.
- **Future Energy needs**. Solar Farms have a lifespan of 25-40 years. This raises questions about how decommissioning be staggered across the Grid and how will the energy they produce be replaced, how soon will new solar farms need to be planned if output is to be maintained and what will the land take be in 40-100 years' time given that energy demands are likely to increase.

20.18 The production of the outline Employment, Skills and Supply Chain Plan (ESSCP) is seen to be critical to minimise some of the adverse impacts of the solar farm, particularly given that numerous solar farms are consented or planning within the District (Heckington Fen, Beacon Fen, Fosse Green and Leoda with others to follow) and more within the wider Lincolnshire county. The

Council will raise further points regarding the outline ESSCP in its Written Representations.

20.19 The Council considers that the outline ESSCP requires a financial contribution to enable its delivery. The relatively recently consented Longfield and Heckington Fen DCOs were subject to s106 Agreements which provide for a £50,000 index-linked per annum to (in the case of the latter) the Council for increasing employment, education and skills opportunities in the local areas for individuals in the renewable energy, sustainable farming/agricultural diversification, ecology and sustainable development sector and which may include the provision of training and apprenticeships and education bursary payments.

20.20 Given the commitment to improving skills, employment and the local supply chain, the Council considers the impacts on population to be **neutral**.

21 Traffic and Transport

21.1 Paragraph 5.14.18 and 5.14.19 of EN-1 sets out the that the SoS should consider the substantial impacts of traffic and therefore should ensure 'that the applicant has sought to mitigate these impacts, including during the construction phase of the development. Where the proposed mitigation measures are insufficient to reduce the impact on the transport infrastructure to acceptable levels, the SOS should consider requirements to mitigate adverse impacts on transport networks arising from the development'. Moreover, applicants may be willing to enter planning obligations to for funding infrastructure and otherwise mitigating adverse impacts.

21.2 With regards to mitigation, EN-1 states that the SoS may attach requirements to a consent where there is likely to be substantial HGV traffic that control numbers of HGV movements to and from the site in a specified period during its construction and possibly on the routing of such movements, make sufficient provision for HGV parking including to avoid prolonged queuing on approach roads and ensuring satisfactory arrangements for reasonably foreseeable abnormal disruption (paragraph 5.14.14).

21.3 Section 2.10 of EN-3 makes a number of recommendations in relation to accessibility and public rights of way, noting that the suitability of the access routes to the proposed site for both the construction and operation of the solar farm must be considered, with the former likely to raise more issues. With reference to public rights of way, the draft advises that applicants should keep, as far as is practicable and safe, all public rights of way that cross the proposed development site open during construction and protect users accordingly. They are also encouraged to design the layout and appearance of the site to ensure continued recreational use of public rights of way, where possible during construction, and in particular during operation, and to provide enhancements to public rights of way and the adoption of new public rights of way through the site.

21.4 CLLP Policy S47 'Accessibility and Transport' requires development to contribute towards an efficient and safe transport network and that proposals

should demonstrate, where appropriate, that they have had regard to the need to minimise additional travel demand through the use of measures such as travel planning, safe and convenient public transport, walking and cycling links and integration with existing infrastructure. The Policy also sets out that any development that has severe transport implications will not be granted planning permission unless deliverable mitigation measures have been identified, and arrangements secured for their implementation, which will make the development acceptable in transport terms.

21.5 SKGNP policy 5 (Conservation and Enhancement of Non-Vehicular Routes) states that improving or extending the non-vehicular routes across the Parish will be supported where the proposals:

a) do not detract from the landscape character as defined in the most recent Landscape Character Assessment Study and the Scopwick and Kirkby Green Design Code; and

b) will not harm locally protected habitats.

21.6 It also goes onto state that, where applicable, development proposals will be expected to demonstrate how they protect and where possible enhance existing public rights of way and permissive routes. Opportunities to improve non-vehicular linkages between existing routes from the edge of Scopwick village to the centre and/or out into the countryside are supported.

21.7 For Springwell Solar Farm, construction vehicles will access the Site via the B1191, B1188, Gorse Hill Lane and Temple Road, with the A15 also an important link for construction traffic. To mitigate the effects of construction and decommissioning traffic, specific measures and infrastructure have been embedded into the design of the solar farm. Such embedded mitigation includes:

- Upgrade of A15/B1191/Temple Road junction to improve existing conditions for all users, including a non-motorised user crossing point;
- Improved junction and surfacing for all users of the A15/Gorse Hill Lane.
- B1191 Royal Air Force Digby and Ashby-de-la-Launde widening. Improved passing opportunities for all heavy goods vehicles.
- Vehicle passing bays along Temple Road to ensure safe passage of vehicles and AILs during construction

21.8 Further mitigations would be set out in the detailed Construction Traffic Management Plan (CTMP).

21.9 Since the Council is not the Local Highway Authority, it defers comment on traffic and transport matters to LCC. From their draft Local Impact Report (paragraph 11.12), LCC are likely to require that a contribution of £500,000 is secured through a s106 Agreement to fund the improvement of the A15/B1202 junction which is currently over-capacity and would be adversely affected by the solar farm development.

21.10 The development also seeks to protect and enhance the existing public right of way network and ensure the provision of new and improved multi-user routes across the site. The Council would also defer comment on Public Rights of Way to LCC although the Council recognises that the provision of new or enhanced Permissive Footpath routes in particular in the area between Scopwick and Blankney (Springwell East) would respond positively to broader policy objectives in the SKGNP albeit balanced against the significant adverse effects predicted by the applicant (as summarised in the LVIA section above).

22 Water

22.1 Sections 5.9 and 5.16 of EN-1 focuses on flood risk as well as water quality and resources. In the decision-making process, the SoS should note that all activities that discharge to the water environment are subject to pollution control. Moreover, the SoS will 'generally need to give impacts on the water environment more weight where a project would have an adverse effect on the achievement of the environmental objectives established under the Water Framework Directive'.

22.2 EN-1 also states that the SoS 'should consider whether appropriate requirements should be attached to any development consent and/or planning obligations entered into to mitigate adverse effects on the water environment' (paragraph 5.16.16).

22.3 Paragraph 5.8.7 of EN-1 notes that new energy infrastructure should only be permitted by exception in flood risk areas (for example where there are no reasonably available sites in areas at lower risk), and that it should be safe for its lifetime without increasing flood risk elsewhere and, where possible, should reduce flood risk overall. It should also be designed and constructed to remain operational in times of flood. Paragraphs 5.8.9 and 5.8.10 confirm the requirement for the flood risk sequential and exception tests to be applied.

22.4 The guidance confirms that the Exception Test should only be engaged where "the Sequential Test has identified reasonably available, lower risk sites appropriate for the proposed development where, accounting for wider sustainable development objectives, application of relevant policies would provide a clear reason for refusing development in any alternative locations identified". The examples of such 'relevant policies' which would provide a clear reason for refusing potential alternative sites are those relating to landscape, heritage and nature conservation designations, for example Areas of Outstanding Natural Beauty (AONBs), SSSIs and World Heritage Sites.

22.5 Paragraph 2.10.60 of EN-3 also set out that applicants for solar generating stations will need to consider several factors when considering the design and layout of sites, including "proximity to available grid capacity to accommodate the scale of generation, orientation, topography, previous land – use and ability to mitigate environmental impacts and flood risk".

22.6 Paragraph 2.10.84 then notes that where a Flood Risk Assessment has been carried out this must be submitted alongside the applicant's ES and will need

to consider the impact of drainage. It notes that as solar PV panels will drain to the existing ground, “the impact will not, in general, be significant”.

22.7 Paragraph 54.10.145 also notes that where previous management of the site has involved intensive agricultural practice, “solar sites can deliver significant ecosystem services value in the form of drainage, flood attenuation, natural wetland habitat, and water quality management”.

22.8 CLLP policy S21 ‘Water Efficiency and Sustainable Water Management’ sets out that in addition to the wider flood and water related policy requirements contained in policy S21, all residential development or other development comprising new buildings with outside hard surfacing, must ensure such surfacing is permeable unless technical considerations dictate otherwise.

22.9 CLLP policy S14 ‘Renewable Energy’ supports proposals for renewable energy schemes, including ancillary development, where the direct, indirect, individual and cumulative impacts are or can be made acceptable, which with reference to point (i) includes flood risk, albeit there are no further references to flood risk under the ‘Additional matters for solar based energy proposals’ subheading.

22.10 CLLP policy S20 ‘Resilient and Adaptable Design’ requires design proposals to be adaptable to future social, economic, technological and environmental requirements in order to make buildings both fit for purpose in the long term and to minimise future resource consumption, including that they are resilient to flood risk, from all forms of flooding.

22.11 CLLP policy S21 ‘Flood Risk and Water Resources’ requires all proposals that are likely to impact on surface or ground water to consider the requirements of the Water Framework Directive and that with specific relevance to flood risk that they will be considered against the NPPF, including application of the sequential and, if necessary, the exception test.

22.12 Amongst other things proposals are required to demonstrate that they are informed by and take account of the best available information from all sources of flood risk and by site specific flood risk assessments where appropriate; that the development will be ‘safe’ during its lifetime taking into account the impacts of climate change, that flood defence integrity is not impacted, that wider scope for flood risk reduction has been considered and that where appropriate they have incorporated Sustainable Drainage Systems (SuDS).

22.13 Finally CLLP policy S59 ‘Green and Blue Infrastructure Network’ states that proposals that cause loss or harm to the green and blue infrastructure network will not be supported unless the need for and benefits of the development demonstrably outweigh any adverse impacts.

22.14 Metheringham Beck is the closest Water Framework Directive waterbody and the only one within the Site. A Water Framework Directive (WFD) Waterbodies Stage 1 Screening Technical Note has been produced and concluded that with appropriate mitigation measures in place, the solar development’s impact on watercourses classified under the WFD is considered negligible and not significant.

22.15 A Flood Risk Assessment has evaluated multiple sources of flooding and has determined an overall low flood risk to the development, given the limited extents of Flood Zone 3 and surface water flooding identified within the site. The risk to development is not considered to be significant since the BESS and Springwell substation would be located outside the higher flood risk areas. Further surface and foul water drainage details would be agreed as part of the draft DCO requirements.

22.16 The Council considers the risk associated with flooding to be **neutral**.

23 Cumulative Effects

23.1 The EIA Regulations at Schedule 4 require that an ES should include '*a description of the likely significant effects on the environment resulting from, inter alia, (e) the cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affect or the use of natural resources.'*

23.2 EN-1 states at paragraph 4.1.5 '*In considering any proposed development, in particular when weighing its adverse impacts against its benefits, the Secretary of State should take into account; its potential adverse impacts, including on the environment, and including any long-term and cumulative adverse impacts, as well as any measures to avoid, reduce, mitigate or compensate for any adverse impacts, following the mitigation hierarchy.'*

23.3 CLLP policy S14 supports proposals for renewable energy schemes where the direct, indirect and cumulative impacts on the following consideration are met or will be made acceptable. The following tests will have to be met:

(i) The impacts are acceptable having considered the scale, siting and design, and the consequent impacts on landscape character; visual amenity; biodiversity; geodiversity; flood risk; townscape; heritage assets, their settings and the historic landscape; and highway safety and rail safety; and

(ii) The impacts are acceptable on aviation and defence navigation system / communications; and

(iii) The impacts are acceptable on the amenity of sensitive neighbouring uses (including local residents) by virtue of matters such as noise, dust, odour, shadow flicker, air quality and traffic.

23.4 The ES has considered intra-project combined effects and inter-project cumulative effects. In considering inter-project cumulative effects, the ES considered both a long-list and a short-list of projects after consultation with the Council.

23.5 The likely cumulative effects with the proposed NGNS were considered specifically within the ES given the functional inter-relationship and proximity between the two developments. It concluded that there were likely to be potential adverse cumulative effects in relation to air quality, removal of sections of the LWS verges on Navenby Heath Road, archaeology and construction

traffic – all of which could be mitigated through the implementation of management plans. If the two construction phases overlapped, there would be the potential for significant adverse inter-project cumulative effects on the LCA7 Limestone Heath and on views from the A15. During operation, there would be a visual effect (when moving through the landscape) when travelling along the A15, with effects on views extending up to the B1202 (further north than effects to views from Springwell solar farm alone).

23.6 The short list of cumulative sites included 17 other existing or proposed developments such as residential developments, solar parks, quarry extensions, industrial and employment parks and infrastructure. The ES considered the cumulative effects on air quality, biodiversity, cultural heritage, traffic and landscape. Minor effects are anticipated in respect of construction traffic and landscape and visual impacts. While the short list includes other NSIP solar farms in the District (Heckington Fen, Beacon Fen and Fosse Green), it does not include the Leoda Solar Farm at Leadenham which was subject to public consultation and EIA Scoping from January to March 2025 but it is noted that the applicant intends to keep the short list under review. The Council considers that the cumulative effects of the development alongside the Leoda solar farm should be considered.

23.7 The ES considers the cumulative effects of solar PV development within the county of Lincolnshire and within 1km of the western boundary with Nottinghamshire on BMV land. There are 18 solar farms proposed within this area. If all were granted permission, this would lead to a temporary loss of approximately 2.06% of BMV agricultural land in Lincolnshire (noting the loss of BMV land at some solar farms has been estimated).

23.8 In considering the impact on population, the ES notes that the combined solar farms could lead to a slight increase in construction and energy sector jobs; and in Gross Value Added. However, a reduction in the indicative employment capacity of agricultural land is likely to be experienced. The cumulative solar farm developments account for 3.1% of the indicative agricultural employment capacity in agriculture in Lincolnshire.

23.9 The Council considers that negative cumulative impacts will be experienced as a result of the Springwell solar farm in conjunction with the NGNS and Fosse Green and Leoda NSIP solar farms; and with Beacon Fen solar farm in relation to cumulative agricultural land impacts. These impacts could be significant in terms of landscape and visual impact, construction related traffic and transport movements and loss of BMV agricultural land over a long period. This is likely to have a negative impact on the amenity of the local community.

23.10 Looking to the future, the Council considers that the construction of a new National Grid substation at Navenby will lead to a cluster of solar farms and BESSs developing around the substation since it will offer a means by which new energy related developments can connect to the electricity transmission network in the context where other Lincolnshire substations are already at capacity.

23.11 The Transmission Entry Capacity (TEC) Register confirms multiple expressions of interest for connections into the proposed NGNS and the National Grid has indicated that the substation can accommodate 7 new customers, not all of which have entered the public domain by way of public consultation or EIA screening/scoping. This clustering scenario has been experienced nearby by West Lindsey District Council where numerous applications for solar farms and BESSs (both NSIP and TCPA applications) have been submitted in recent years and their cumulative impacts have been the subject of consideration at examination.

23.12 The Council considers that there is potential for significant inter-project effects to arise and that this would lead to a **negative** impact.

24 Glint and Glare

24.1 EN-1 does not contain specific guidance on glint and glare in respect of solar farms. Paragraph 5.5.55 of EN-1 refers to the design of lighting in such a way that it avoids glare or dazzle to pilots and/or ATC and prevention of confusion with aeronautical lighting. Paragraph 2.10.158 of EN-3 states that 'while there is some evidence that glint and glare from solar farms can be experienced by pilots and air traffic controllers in certain conditions, there is no significant evidence that glint and glare from solar farms results in significant impairment on aircraft safety'.

24.2 At 2.10.102 EN-1 states that 'solar panels are specifically designed to absorb, not reflect, irradiation. However, solar panels may reflect the sun's rays at certain angles, causing glint and glare. Glint is defined as a momentary flash of light that may be produced as a direct reflection of the sun in the solar panel. Glare is a continuous source of excessive brightness experienced by a stationary observer located in the path of reflected sunlight from the face of the panel. The effect occurs when the solar panel is stationed between or at an angle of the sun and the receptor'. The main likely impacts of glint and glare would be on nearby homes, motorist, public rights of way and aviation infrastructure.

24.3 Policy S53: Design and Amenity, sub-section 8 (d) sets out that development proposals 'should not result in harm to people's amenity either within the proposed development or neighbouring it through overlooking, overshadowing, loss of light or increase in artificial light or glare'.

24.4 Solar PV modules are specifically designed to absorb light rather than reflect it. Light reflecting from Solar PV modules results in the loss of energy output. Solar PV modules are dark in colour due to their antireflective coatings and are manufactured with low-iron, ultra-clear glass with specialised coatings and textures to enable maximum absorption. The combination of these factors significantly increases electrical energy production of the panels and at the same time significantly reduces reflected rays.

24.5 Whilst the Planning Inspectorate has agreed that glint and glare can be scoped out of the assessment as part of the EIA of likely significant effects, a glint and

glare assessment has been undertaken, as presented in ES Volume 3, Appendix 5.4: Glint and Glare Study. The assessment pertains to the possible impact upon road safety, residential amenity, railway infrastructure and operations, and aviation activity. Mitigation to reduce the glint and glare impacts, in the form of planting is embedded within the design and is presented within ES Volume 2, Figure 3.3: Green Infrastructure Parameters

24.6 **Aviation activity:** the Applicant has assessed the impact on a number of RAF and private airfields. Overall, the assessment demonstrated that there would be no significant impacts that warrant mitigation. The applicant continues to seek engagement with RAF Cranwell where there would be a low impact of 'yellow glare' (a temporary after image), however, the assessment shows that it would occur after the aerodrome's published hours of flying.

24.7 **Railway Operations and Infrastructure:** the assessment found that a solar reflections are geometrically possible towards a 1.5km-section of railway track (located to the eastern boundary of the solar farm) and occur outside a train driver's main field of view (30 degrees either side of the direction of travel). Solar reflections are geometrically possible towards one trackside signal. However, screening in the form of existing vegetation is predicted to significantly obstruct the views of reflecting panels, such that a solar reflection will not be experienced. No impact is predicted, and mitigation is not required.

24.8 **Road Safety:** Solar reflections are geometrically possible towards:

- A 4.0km section of the A15
- Separate 3.0km and 1.4km sections of the B1911;
- Separate 2.4km and 1.1km sections of the B1188;
- Separate 300m, 400m and 400m sections of Main Street/Scopwick / Kirby Green) and Timberland Road.

24.9 Screening in the form of existing and proposed vegetation, buildings and/or intervening terrain is predicted to significantly obstruct views of reflecting panels, such that solar reflections will not be experienced. Temporary mitigation will be implemented during the interim for proposed vegetation to reach a sufficient height and density to mitigate impacts (see Section 2.2).Table

24.10 A 700m section of the A15 at the south of Springwell West requires mitigation to reduce glint and glare impacts upon roads users. This includes hedgerows to be infilled and maintained to a height of at least 3m. Until the advance planting (implemented Feb/March 2025) in this area has grown to sufficient density and height of 3m to mitigate impacts of glint and glare, temporary mitigation will be implemented to mitigate impacts. This temporary mitigation may include temporary screening or suitable alternative mitigation to be confirmed in the detailed LEMP. This would be removed once the hedgerows are of sufficient height. It is anticipated that a temporary hoarding or suitable alternative would be required for approximately 3 years following the construction phase. The landscape planting proposals are secured within the Outline Landscape and Ecology Management Plan.

24.11 **Residential Properties:** the ES confirms that solar reflections are geometrically possible towards 103 dwellings. Screening in the form of existing and proposed vegetation, buildings and/or intervening terrain is predicted to significantly obstruct views of reflecting panels for 99 dwellings, such that solar reflections will not be experienced. Any impacts during the interim for proposed vegetation to reach a sufficient height and density to mitigate impacts are considered to be low due to the duration of the effects considering the existing screening present. No significant impact is predicted, and mitigation is not required.

24.12 For the remaining 4 dwellings, marginal views from above ground floor levels are considered possible. The duration of effects are predicted to be experienced for less than three months per year and less than 60 minutes on any given day which is the general threshold applied by industry guidance. Therefore, a low impact is predicted for these four dwellings and not considered significant. No mitigation is required.

25 Other Matters

25.1 **Battery Energy Storage System (BESS) and Fire Safety:** paragraph 1(8) of Schedule 4 to the EIA Regulations requires consideration to be given to the risks of major accidents and disasters but does not include a definition of these terms. The regulations, however, specifically refer to effect on human health.

25.2 EN-1, EN-3 and EN-5 are silent regarding consideration of major accidents and disasters and other safety issues which may arise specifically from solar PV development and associated energy storage systems as well as electricity networks infrastructure.

25.3 The Planning Practice Guidance section on ‘Renewable and low carbon energy’ provides specific guidance regarding potential risks arising from BESSs, including engagement with the relevant local fire and rescue service so that its views can be taken into account regarding potential mitigations which could be put into place in the event of an incident.

25.4 Part (7) of CLLP policy S53 ‘Design and Amenity’ requires development to avoid adverse impacts associated with noise, dust and air quality, and part (9) requires schemes to minimise the need for resources both in construction and operation of buildings and be easily adaptable to avoid unnecessary waste production.

25.5 CLLP policy S54 seeks to ensure that where any potential adverse health impacts are identified the developer will be expected to demonstrate how these will be addressed and mitigated.

25.6 It was agreed at Scoping stage by PINS, that a standalone chapter for major accidents and disasters is not required on the basis that the nature, scale and location of the proposed development is not considered to be vulnerable to or to give rise to significant impacts in relation to the risk of major accidents and disasters. The applicant had identified at Scoping stage that these might include

flooding, fire risk, aircraft disasters, rail accidents and plant disease. The applicant stated their intention to include these matters in the design of the proposed development and cover them in the flood risk assessment, battery safety commitments, glint and glare assessment and planting design and oLEMP. PINS required that the ES should clearly signpost where these impacts are assessed in other relevant chapters and where any relevant mitigation measures are secured, if required.

25.7 In light of the rapidly growing volume of BESS facilities across the country, it has been recognised that appropriate health and safety standards are required and in recent years, new guidance has been emerging. In April 2024, the Department for Energy Security and Net Zero produced Health and Safety in Grid Scale Electrical Energy Storage Systems guidance which is applicable to this application. In addition, the National Fire Chiefs Council has produced Grid Scale Batter Energy Storage System planning – Guidance for Fire and Rescue Services in 2023, with an update that was due in 2024.

25.8 The proposed BESS will be located adjacent to the Springwell substation on land off the A15 within Springwell West. It is located 440m from the nearest residential dwelling. The BESS would utilise a variant of Lithium-ion batteries. The Plume Assessment document explains that current technology market trends include a move from Lithium-Nickel-Manganese-Cobalt-Oxide (NMC) to Lithium Iron Phosphate (LFP) chemistries. The ES uses LFP cells by way of assessment. Research suggests that LFP cells have an advantage over other lithium-ion chemistries in relation to thermal and chemical stability, which improves battery safety, as well as having a higher charge/discharge cycle life.

25.9 Paragraph 3.7.4 of Chapter 3 of the ES states that it will be constructed in accordance with the National Fire Chief Council (NFCC) Grid Scale Battery Energy Storage System Planning Guidance. These guidance documents and standards, alongside the provisions designed into the BESS compound for safety purposes, are outlined in the outline Battery Safety Management Plan (oBSMP) e.g. adequate space between battery units. The ES states that where appropriate, water storage tanks will be included in the BESS compound to provide water supply for firefighting. Additional tanks will be used to store any used firefighting water which may be contaminated.

25.10 The ES is accompanied by a Plume Assessment. This document assesses the evaluation of three scenarios (which reflect the DESNZ guidance):

- The release of toxic gases without a fire event;
- A fire event, and
- An explosion from the ignition of gases.

25.11 The Plume Assessment concludes that under day-to-day operation there is a low risk of an incident, and in the event of an incident the credible hazards are understood and have been evaluated to demonstrate that the risk to the local population remains very low. An Emergency Response Plan (ERP) will be prepared.

25.12 The applicant has engaged with the Lincolnshire Fire and Rescue Service (LFRS) during the pre-application stage. It is noted that a draft Statement of Common Ground with LFRS has been submitted with the application.

25.13 As set out in their draft LIR, LCC have consulted with LFRS. LFRS have developed their own standing advice for BESS based on national guidance and require a programme of monitoring and risk assessment once the BESS has been established to ensure that it complies with the oBMSP and ERP. During the first year of operation, this will involve 21 days of work for LFRS and then two days in each subsequent year for the lifetime of the development.

25.14 LFRS have identified that the need for monitoring and assessment will enable:

- early engagement to ensure that the required standards are being complied with;
- to ensure the BESS is constructed to the correct standards with support from LFRS;
- early development of the ERP;
- familiarisation of the BESS for local fire crews and overview by LFRS;
- development of on-going maintenance and updating risk information; and
- assurance for local residents and communities that the BESS is being independently inspected and monitored to reduce the risk of a fire.

25.15 To enable LFRS to undertake the necessary monitoring to ensure that BESS is in accordance with the draft Requirement 7, they have requested a financial contribution to be provided via a Protective Provision within the DCO so the LFRS has sufficient resources in place to undertake monitoring of the BESS. The sum total requested over the operational period of the solar farm is £76,335. This approach has been agreed as part of the recently approved Gate Burton, West Burton, Cottam and Heckington Fen solar farm DCOs. Therefore, there is a precedent for this approach to be followed at the Springwell solar farm.

25.16 Notwithstanding the isolated location of the BESS relative to centres of population and noting a separation distance of over 400m to the closest residential property, the Council has strong concerns about the potential risk to human health arising from fire related accidents at BESS developments. For this reason, it supports the measures sought by LFRS (as summarised in the LCC Local Impact Report) including the payment of a financial contribution towards the independent monitoring of the BESS by LFRS.

25.17 However, at present, without any provision in the draft DCO of a payment mechanism to address LFR's site monitoring requirement there is a gap in the overall mitigation package; notwithstanding that LFR do not object to the proposals. Battery safety guidance published by the National Fire Chiefs Council sets out that applicants should specify their choice of NMC or LFP battery chemistry in developing emergency response/Battery Safety Management Plans.

25.18 The degree to which the Planning Act (2008) can compel what is essentially and ultimately a matter of customer choice is unclear. However, as above, with the suggestion that LFP cells have an advantage over other lithium-ion chemistries in relation to thermal and chemical stability, which improves battery safety, the Council's view is that the ExA should consider this matter through the examination.

25.19 Section 105 of the Planning Act (2008) requires SoS decisions to have regard both to 'any local impact report' and 'any other matters which the Secretary of State thinks are both important and relevant to the Secretary of State's decision'. The scope of material planning considerations is wide and must have a planning purpose that relates to the character and use of the land, and it must fairly and reasonably relate to the proposed development under consideration.

25.20 In that regard the Council's view is that the 'perception of harm' to public amenity, safety and wellbeing associated with an incident at the BESS is capable of being a material planning consideration and we note that Defra plans to open a consultation on integrating grid-scale battery energy storage systems into the Environmental Permitting Regulations by June this year, in order to determine whether more robust regulatory and operational oversight is required. As such the Council consider that there is a need to agree the battery type proposed within the BESS as part of the requirement to agree the BSMP in view of the changing market trends and the need to minimise the impact on human health following any major accident or disaster, and the 'perception of harm' to public amenity, safety and wellbeing as a material planning consideration.

25.21 The Council considers that there would be a **negative** impact as a result of fire safety risk on human health until the LFR's requirements are agreed; including securing the monitoring contribution through the DCO.

25.22 **Force Majeure Event:** the Council has concerns that the application does not make provision for the eventuality of a force majeure event which may lead to the cessation of the production of electricity for a lengthy period. It might include a major incident/disaster at the National Grid substation, a major accident at the Springwell solar farm or commercial collapse of the solar farm owner or operator. Such an unforeseen eventuality could take place during any of the phases of the construction, operation or decommissioning of the solar farm.

25.23 The Council notes that an outline Decommissioning Environmental Management Plan (oDEMP) has been produced. Requirement 19 would require a full DEMP to be produced within 10 weeks prior to the intended date of decommissioning together with a timetable for its implementation. The Council considers that a provision should be made within the oDEMP for the provision of a *force majeure* event. There is precedent for such a provision within the DCO for the Heckington Fen solar farm in North Kesteven. The purpose of the provision would be to ensure that extensive redundant solar PV arrays and equipment are not left in situ within the countryside and to ensure that early decommissioning of the development is triggered in the event of the early cessation of energy generation from the site.

25.24 The Council considers that there would be a **negative** impact on the landscape until the provisions are made for unexpected cessation of energy generation are included in the outline DEMP.

26 Summary and Conclusion

26.1 The Springwell solar farm will have several impacts on the North Kesteven District Council area. This report has highlighted the positive, neutral and negative impacts of the scheme that have been identified in the Environmental Statement (ES), within the context of its knowledge and understanding of the area.

26.2 It provides a summary of those impacts, an identification of relevant policies, plans and guidance applicable to this project and where relevant the degree to which the project aligns with those documents. The LIR also considers the cumulative effects of other proposed schemes (primarily NSIP-scale solar projects) in the North Kesteven but also those in the surrounding parts of Lincolnshire.

26.3 It is noted that the delivery of renewable energy of this nature and of this scale is in accordance with the strategic policies of the Central Lincolnshire Local Plan (2023); most notably CLLP policies S14 ‘renewable energy’ and S16 ‘wider energy infrastructure’. Underpinning the Plan is the overarching vision and strategy, and a series of policies, to address the challenges relating to climate change to ensure that the District and Central Lincolnshire is fit for a zero-carbon future, contributes to the transition to a net-zero carbon society, and is responsive to a changing climate.

26.4 These golden and green threads also run through the NKDC Climate Emergency Strategy (CES), the Climate Emergency Action Plan (CEAP), its Environment Policy, the NK Plan 24-27 and its Community Strategy. Together these also comprise the Council’s vision and strategy for a sustainable transition to net zero by 2030, supported by mitigation measures to reduce emissions and adaptation measures to improve resilience to the effects of climate change.

26.5 The Council therefore supports the principle of the development, however, notes that (not unexpectedly for a project of this scale and nature) there are negative impacts identified for the majority of the ES topics. This creates a degree of tension, of varying degrees, with elements of EN-1 and EN-3 along with the associated policies contained in the CLLP and in some instances the SKGNP. The Council does not ‘weight’ those negative impacts on a sliding scale and we reserve the right to make further Written Representations submissions in relation to all matters set out in this LIR. The five topic areas and associated impacts of greatest concern are in relation to;

- Grid Connection Phasing and Deliverability
- Impacts on Best and Most Versatile (BMV) agricultural land

- Landscape and Visual Impact
- Cultural Heritage impacts (above ground and archaeology)
- Battery Energy Storage System (BESS) and Fire Safety

26.6 The table below provides a tabulated form of all the impacts by topic, also taking account of any cumulative impacts related with that topic.

26.7 The Council requests that the Secretary of State for Energy Security and Net Zero has regard to this Local Impact Report when making his decision.

Table 26.1

High Level Summary of Positive, Negative and Neutral Impacts

ES Chapter	Positive	Neutral	Negative	CLLP Policy
6 Air Quality		x		S14, S53
7 Biodiversity including Biodiversity Net Gain	x	x	x	S14, S59, S60, S61, S66
8 Climate	x			S11, S14, S16
9 Cultural Heritage			x	S14, S53, S57
10 Landscape			x	S14, S53, S66
11 Land, Soil and Groundwater			x	S14, S67
12 Noise and Vibration		x		S14, S53
13 Population		x	x	S10, S20, S28
14 Traffic and Transport		x	x	S14, S47, S53
15 Water		x		S12, S14, S20, S21
16 Cumulative Effects		x	x	Various
Glint and Glare		x		S14, S53

BESS/Fire Safety			x	S14, S53, S54
Force Majeure Events			x	S14, S53, S66

Submission ID: 36632

NKDC Local Impact Report is attached but Appendices A-E have been emailed to PINS.

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23 January 2025

Our Reference 60468641 Springwell Solar DCO

Dear [redacted]

Springwell Solar Farm DCO – Ecology Review

The ecological information and assessments accompanying the DCO application are generally appropriate. I am generally satisfied with the approach taken, the results obtained, the impact assessment conclusions, and the mitigation proposed. The impact assessment approach aligns with typical good practice requirements. I agree that, in general terms, the existing baseline of intensively managed farmland is of relatively low ecological risk and that the proposed development is capable of delivering BNG.

The above said, further detail is required in some cases for purposes of transparency at decision-making, and to ensure clarity on what is proposed and that it is robust and securable. In some cases, comparable queries were raised at PEI stage and have not been addressed. More information is required on certain methods to allow verification of the baseline habitat information and to permit agreement that the BNG assessment is correct.

I have reviewed all of the documents that I consider relevant to agreement of the ecological impact assessment and provide comments for each within the table appended below.

The BNG assessment cannot be agreed until the Applicant forwards the original version of the BNG Metric in accordance with good practice requirements. The Metric is one of the primary documents necessary for agreement of the BNG strategy.

Yours sincerely

[redacted] BSc MSc MPhil CEnv
MCIEEM
Associate Ecologist
AECOM Limited

Report	Section/paragraph	Comment
Chapter 7 Biodiversity	General – mitigation hierarchy	Please provide further detail on how the mitigation hierarchy has been applied for important habitats, and why habitat losses cannot be avoided (irrespective of the ability to compensate for losses). Specifically - what has been done at the design stage to avoid or proactively minimise (e.g. consideration of micro-siting) impacts on LWSs and hedgerows (priority habitats)? The provision of habitat compensation and BNG should not be relied on to make the case for hedgerow loss being acceptable. The first consideration is whether it is necessary and avoidable e.g. HDD versus open cut methods. HDD has not been discounted as an option to avoid other sensitive receptors (Chapter 3, 3.9.7). There would seem to be viable (“reasonably practicable”) technical options for avoidance of hedgerow loss for electrical connections and exploration of such measures (e.g. in relation to the 12 important hedgerows) is advised as necessary within the relevant NPS (EN-5 paragraph 2.9.19). Paragraph 7.9.7 commits to like for like compensation of all hedgerows. Where is the relevant data reported that can be used to agree the specifications for this pre-commencement? If this data is not currently available, when will it be collected?
Chapter 7 Biodiversity	Table 7.3	This places a caveat (“reinstate where possible”) on, and therefore uncertainty over, whether full hedgerow reinstatement can be provided over electrical connections. Please advise on any restrictions on the replanting of hedgerows over electrical connections. Is planting permissible, and are there specific design considerations relating to this and have these been allowed for?
Chapter 7	Table 7.6	The embedded mitigation seems comprehensive. I query the stated need

Report	Section/paragraph	Comment
Biodiversity		(given it conflicts with the wider aim to avoid lighting) for permanent security lighting at emergency exits given these will rarely be used. Why do these areas need to be permanently lit?
Chapter 7 Biodiversity	7.7.14 ground nesting birds	More clarity is needed on the impacts on ground nesting birds and how the calculation has been made to determine that the post-development habitats are adequate to maintain the conservation status of these species (and ideally enhance their status). A similar exercise was completed for the Heckington DCO and should be accessible online. It is not clear how much reliance is placed on land within the array contributing to this, and whether this is realistic and certain (given operational regimes etc). Are all notable ground nesting birds suitably addressed (e.g. quail)?
Chapter 7 Biodiversity	Table 7.6	It is stated that embedded mitigation is provided to protect the important scarce arable plant assemblages identified. This is not supported by the BNG figures which show that the fields (BCD105, 115 and Target Notes 9 and 10) where the most diverse assemblage of notable plants was found will be converted to grassland. Please provide further explanation for the mitigation approach for scarce arable flora to demonstrate that this is certain to preserve and improve the conservation status of these species. See also the comment below on Fumaria muralis subsp. neglecta. Pending the above, it is not agreed that there would be no significant effect. There is a potential conflict with Policy S60 of the Local Plan. As noted in Appendix 7.8, the development coincides with a landscape and soil types of known value for scarce arable flora, and therefore where action to conserve scarce arable flora needs to be focussed to achieve the aims of the Lincolnshire Biodiversity Action Plan.
Chapter 11 Cumulative	General	No disagreement provided that it is demonstrated that the development adequately compensates for its specific impact on ground nesting birds and

Report	Section/paragraph	Comment
		scarce arable flora. Related comment on this is provided above in relation to Chapter 7.
Appendix 7.1 PEA Report	General	In general the approach, level of detail and conclusions are appropriate, albeit with some exceptions in relation to specific habitats or species groups.
Appendix 7.1 PEA Report	1.4 Validity of data	Based on the survey dates, the PEA does not obviously meet the requirements defined in this section (or only partially meets). What work has been undertaken to review and update the habitat information prior to submission, particularly in relation to provision of a current baseline for BNG purposes?
Appendix 7.1 PEA Report	Table 1	What local references have been consulted to determine habitats of strategic significance? Related to this, the BNG report makes no reference to the relevant local guidance that needs to be addressed. The national references cited do not appear to align with the local requirements.
Appendix 7.1 PEA Report	3.3 UK Hab survey	Noting the survey timings and related limitations in 3.5.7, please provide further detail on how hedgerows have been reliably and correctly surveyed to determine their specific hedgerow types. What methods and species lists were used? Where is the supporting evidence presented? In relation to this it should be noted that the Hedgerow Regulations survey does not provide this as this is not the method used for UKHab survey. This matter was identified previously within the response to the PEIR.
Appendix 7.1 PEA Report	4.2.28	This identifies a very notable plant species that is relevant to the EcIA, if correctly identified. This is Fumaria muralis subsp. neglecta, a species that is endemic, Nationally Rare (based on available data), has not been seen recently, and has only been found in Cornwall previously. Please provide a full impact assessment for this important feature (i.e. International value). Please identify if the data is adequate to understand its full distribution across the site.

Report	Section/paragraph	Comment
		This matter was identified previously within the response to the PEIR.
Appendix 7.1 PEA Report	4.2.38 and habitat maps	Noting the presence of streams and the relevance of this for BNG assessment, please clarify the location of the MoRPh survey results and the competency of the relevant survey team.
Appendix 7.2 Breeding birds	General	No action required. The report adequately defines the relevant baseline and defines the parameters for the impact assessment in Chapter 7.
Appendix 7.3 Wintering birds	General	No action required. The report aligns with prior discussions and adequately defines the relevant baseline.
Appendix 7.4 Barn owl	General	No action required. The report adequately defines the relevant baseline and no impacts are predicted in Chapter 7.
Appendices 7.5, 7.6 and 7.13 Bats	General	No action required. The report adequately defines the relevant baseline. The site design precludes potential for likely significant effects on bats. The BNG strategy is likely to markedly improve habitat quality for bats.
Appendix 7.7 Riparian mammals and aquatic habitat	General	No action required. The report aligns with prior discussions and adequately defines the relevant baseline.
Appendix 7.8 Notable arable flora	General	In general this provides a good account of the arable flora.
Appendix 7.8 Notable arable flora	3.3.1	The survey was not appropriately timed (early June) to reliably survey maize fields. Maize is a sub-tropical plant that is not sown until mid to late April when soil temperatures are suitable. This timing and the preceding cultivation makes it unrealistic to expect full germination of associated notable flora until later in the year. Please provide further comment on why the assessment is adequately precautionary in this context. Was the soil type the same as or different from locations where county value assemblages were recorded?

Report	Section/paragraph	Comment
		This matter was identified previously within the response to the PEIR.
Appendix 7.8 Notable arable flora	3.2.2	This paragraph seems to suggest Anthemis cotula could have arisen from sowings. This does not seem likely (in some cases the more ornamental Anthemis arvensis might be sown). What is the evidence for this and has it affected the interpretation/valuation?
Appendix 7.8 Notable arable flora	Target Note 8	As noted in the report, Cynoglossum officinale is a Near Threatened species. What is the impact of the development on this species? Can it be protected and its status improved (if still present at construction)?
Appendix 7.8 Notable arable flora	4.1.3-4	Given the narrative in these paragraphs (which seems precautionary and responsive to the results obtained), please provide further explanation for the approach to 'bundling' fields. My reading is the bundles only cover the fields where scarce flora were detected, rather than being responsive (as per 4.1.3) to possible inter-annual variations in occurrence. Confidence is needed that an appropriate area of land has been identified for the maintenance of the conservation status of notable arable flora.
Appendix 7.8 Notable arable flora	4.1.4	In bundling the fields, the assessor has deferred to the criteria for assessing sites/ monads (1x1km squares) (Table 3) rather than based on fields (Table 2). This reduces the value placed on the assemblage, discounting some locations as being of county value (I agree that national value might be overstating things). Currently the approach seems insufficiently precautionary given the limited number of fields "bundled" and the relatively small area of land encompassed. There is no guarantee that these species occur more widely in the landscape, so the farmland within the solar farm could be of specific importance for maintaining the status of these species within the county. Please review this given the limitations (which are well covered in the report) on the ability to reliably detect annual plant species.
Appendix 7.9 LWS verges survey	General	There will be a permanent loss of land from the affected designations, irrespective of the conclusions of the impact assessment. So, there are planning policy (Local Plan S60 and S61) implications that will need to be

Report	Section/paragraph	Comment
		assessed at Examination. Please clarify how the data has been used to apply the mitigation hierarchy and to inform the micro-siting of any necessary passing places to minimise impacts on the biodiversity value of the LWSs concerned. A bespoke mitigation strategy will need to be agreed with relevant stakeholders.
Appendix 7.9 LWS verges survey	General	Related to the preceding point, rock-rose (Helianthemum nummularium) was recorded. The report does not identify that this is a Near Threatened plant species that is a relevant ecological feature. Please clarify (using standard Red Data Lists and other readily available information) if any other notable plant species were recorded and if they would be affected.
Appendix 7.10 Badger	General	No action required. The report adequately defines the relevant baseline and no impacts are predicted in Chapter 7.
Appendix 7.11 Important Hedgerow survey	2.2.1.7-8	Please confirm that the methods applied accorded with the requirements set by the Hedgerow Regulations. This is not clear from the method statement. Specifically: - Please confirm how many 30m survey sections were completed per hedgerow (the report states only that “an average 30m stretch of hedge” was surveyed). - Please explain why ground flora was only recorded with 30m sections, and not the full length of the hedgerow. - Please confirm that the full length of each hedgerow was walked to search for the relevant tree species named in the Regulations.
Appendix 7.11 Important Hedgerow survey	2.2.1.9	This report does not clarify how hedgerows were assigned to a UKHab type, and cross-references to the PEA report only in relation to the BNG condition assessment. Therefore this report only provides a Hedgerow Regulations survey and assessment, and the data cannot be relied on for other purposes e.g. for assigning hedgerows to species-rich and poor types in accordance with the UKHab method.

Report	Section/paragraph	Comment
		Please refer to the preceding comment for Appendix 7.1. Confidence is needed that the BNG baseline is correct.
Appendix 7.11 Important Hedgerow survey	General	Seventeen ecologically important hedgerows and 20 historically important hedgerows are identified (all of which are also priority habitats). Some of these would be impacted. As noted elsewhere, it is not clear how the mitigation hierarchy and other policy has been applied. It is also not clear why certain (if not all) impacts cannot be reasonably avoided. The applicant should provide further information in relation to this.
Appendix 7.12 Arboriculture	General	The report identifies veteran trees and provides clarity that they can be adequately protected. There are some additional noteworthy trees that merit further attention given their sizes. Losses of large trees cannot be fully compensated, and these trees seem notable within the affected landscape. Are they all retained? I defer to the Tree Officers at the Council to agree that (if impacts are likely) these trees are not veteran. A specific tree of interest is T78 an historic ash coppice with regrowth of 1000mm diameter. Other trees of notable size (relative to others recorded) include T22 (1300mm), T23 (1130mm), T136 (950mm) and T287 (1200mm).
Appendix 7.14 BNG Report	General	The general approach and attention to detail in developing the habitat design is acknowledged. However, there are some matters requiring review and comment before the report can be agreed.
Appendix 7.14 BNG Report	General	The BNG assessment will not be agreed until such time that the District Planning Authority has been provided with the original assessment (i.e. the BNG Metric (macro-enabled format)) for examination.
Appendix 7.14 BNG Report	General	Good practice expects use of habitat reference codes to allow plans to be related to the data entered into the metric and the underpinning habitat data/evidence. Currently, there is insufficient clarity on the locations of the assessed polygon and line features identified in the report (including the

Report	Section/paragraph	Comment
		screenshots of the metric), so there is no way for third parties to check and verify the assessment. Minimum requirements/expectations for transparency have therefore not been met.
Appendix 7.14 BNG Report	General	The report does not reference the detailed requirements set out within the Central Lincolnshire Biodiversity Net Gain Guidance for Planners, Ecologists & Applicants (May 2024). Please confirm that the BNG assessment is compliant with this guidance and explain how it has been addressed.
Appendix 7.14 BNG Report	General	The outline LEMP states that the development is likely to be phased. Please confirm that this has been considered, and how it will be addressed. The Central Lincolnshire guidance identifies requirements in relation to phased development.
Appendix 7.14 BNG Report	General	Please provide further explanation for how the habitats within the array have been calculated. What ratio has been used to determine the relative balance between infrastructure and vegetation?
Appendix 7.14 BNG Report	General	The accompanying Figures suggest that 'hedgerow with ditch' types may be over-accounted for within the metric. These categories do not apply if the relevant ditch is a watercourse (page 38 of the statutory guidance document).
Appendix 7.14 BNG Report	General	Please confirm that all relevant trees, including hedgerow trees that will be removed, have been accounted for within the metric. Appendix 7.12, Table 2 indicates that there would be losses of c. 29 trees.
Appendix 7.14 BNG Report	Table 2, Principle 2	It is stated that the ES details how the mitigation hierarchy has been addressed. I identify no clear account of this in Chapter 7, particularly in relation to impacts on LWSs and hedgerow loss. Please provide further detail on how the mitigation hierarchy has been applied for important habitats, and why habitat losses cannot be avoided (irrespective of the ability to compensate for losses). As an example, there would seem to be viable ("reasonably practicable") technical options for avoidance of hedgerow loss for electrical connections

Report	Section/paragraph	Comment
		and exploration of such measures (e.g. in relation to important hedgerows) is advised as necessary within the relevant NPS (EN-5 paragraph 2.9.19).
Appendix 7.14 BNG Report	2.2.2	Please provide the methods for how hedgerows have been surveyed to correctly assign their UKHab types. The important hedgerows survey does not meet this need as it is not the prescribed method. This matter was identified previously within the response to the PEIR.
Appendix 7.14 BNG Report	2.2.4 onwards	The approach to assigning strategic significance does not accord with the local requirements.
Appendix 7.14 BNG Report	2.5.3	States no irreplaceable habitats are present within the Order Limits. This does not seem correct. I understand that there is at least one veteran tree (retained) in the Order Limits.
Appendix 7.14 BNG Report	Table 3	Please provide further explanation for classifying all ponds as “non-priority” habitat. What is the evidence for this assessment?
Appendix 7.14 BNG Report	Table 8	Please explain use of “fairly poor” condition for the legume-rich modified grassland. Please also explain (if this is material to the target condition) how it is reasonable to assume that a varied sward height can be achieved.
Appendix 7.14 BNG Report	Table 8 and Table 9	I am not satisfied that it is realistic or precautionary to assume that good quality neutral grassland can be created. In the absence of further clarity on this, I do not think that all necessary criteria can be met. Specific criteria of concern are those relating to sward height and bare ground.
Appendix 7.14 BNG Report	Table 10	I agree that it is feasible to achieve hedgerows of good condition. Please provide greater clarity on the balance between new plantings and gapping up of existing hedgerows i.e. the balance between habitat creation and enhancement. This should be distinguished on the relevant Figures. Confidence is needed that any gapping up of existing hedgerows is addressing baseline failures of the relevant criterion (B2), so the assessment needs to be traceable back to the baseline evidence for the relevant hedgerows.

Report	Section/paragraph	Comment
Appendix 7.14 BNG Report	Table 11	This does not mention creation of culverts. Please confirm this is correct, or otherwise amend the metric. Please clarify the location within the statutory guidance that states that watercourses do not need to be enhanced if there is no baseline habitat loss.
Appendix 7.14 BNG Report	Appendix B	Please review the woodland assessment to confirm that criterion F has been assessed correctly. Clearings only need to be considered for woodlands above 10ha size, if the woodland is smaller the maximum 3 points would apply. This would alter the baseline condition score for some of the “other woodlands.”
Appendix 7.14 BNG Report	Appendix B	Line of trees feature 33 would appear to be an ecologically valuable line of trees as the scoring indicates the presence of >1 veteran trees. Please review and confirm (so that the baseline is not under-valued) for all line of tree features with reference to the relevant UKHab guidance (which includes a relevant definition for mature trees as a secondary code).
7.7 Outline CEMP	2.1.2	The list of responsible parties omits reference to an ecological specialist. Please review to ensure alignment with expectations set in Table 4. The identified environmental manager cannot be assumed to meet this need.
7.7 Outline CEMP	Table 4	The biodiversity provisions seem reasonable. However, I identify no specific provisions in relation to Schedule 1 birds other than barn owl. Quail is a specific risk in relation to works affecting arable farmland. Other Schedule 1 birds are identified in the relevant reports. Please amend to provide clear instruction on these species. Further update may be needed once the clarifications have been provided on the matters raised above.
7.9 Outline LEMP	General	The approach seems well considered and my comments relate primarily to the finer detail. The potential to provide early planting is welcome and, in some cases, will be important to achieve effective screening as early as

Report	Section/paragraph	Comment
		possible.
7.9 Outline LEMP	General	Please note that the Central Lincolnshire guidance requires a HMMP that accords with the statutory templates. Any divergence from the templates (which may be appropriate for a site of this size and potential complexity) should be agreed in advance with the Council.
7.9 Outline LEMP	General	Pending the requested clarifications on the ground nesting bird impact assessment, I am not certain that a specific strategy/specification for ground nesting birds is not a reasonable requirement. At present reliance is placed on the habitat creation and management strategy being sufficient.
7.9 Outline LEMP	5.3.1	I welcome the commitment to provide bat, bird and owl boxes. Please advise on the numbers proposed and the broad specifications for these. This is needed to set the parameters for agreement post-consent, and to permit confidence in the permanence of the habitat provision.
7.9 Outline LEMP	5.3.5-7	It is welcome that the relevance of soil testing to the agreement of final specifications has been recorded. If action is needed to reduce fertility this will affect the timeline for habitat creation and the related delay entered into the BNG metric. Therefore, there is an important risk needing to be acknowledged, and this may not be fully understood until the time of discharge of Requirements. What (if anything) can be done to address/plan for this risk and provide greater confidence that the committed level of BNG can be achieved later within the Order Limits?
7.9 Outline LEMP	5.3.13	The worst-case assumptions/scenario for plantings over utilities are not clearly defined and instead the relevant parameters appear to be left for resolution later. What are the worst-case parameters and how do these affect the BNG assessment?
7.9 Outline LEMP	7.2.4	Please review and confirm that the proposed monitoring events accord with the Central Lincolnshire BNG guidance (which advises that the frequency of monitoring should be informed by the difficulty of habitat creation).
7.9 Outline LEMP	7.2.5-6	The monitoring approach is not agreed. All habitats should be monitored and

Report	Section/paragraph	Comment
		reported on in accordance with the Central Lincolnshire guidance. Mitigation for scarce arable flora should be provided for at least 30 years (consistent with the wider habitat requirements) and monitoring should be undertaken to verify that this management is being applied as approved.
7.9 Outline LEMP	Table A3.2	As currently configured, I find this table hard to understand (particularly the timings/ frequency of management events) and therefore I do not wish to comment on or agree the content at this time. No action is required at this time, but greater clarity will be needed when discharging Requirements post-consent.
7.10 Outline OEMP	General	No comment needed. The appropriate locations for biodiversity specifications are the LEMP/HMMP, so the oEMP has minimal relevance.

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6 February 2025

Our Reference 60468641 Springwell Solar DCO

Dear [redacted]

Springwell Solar Farm DCO – Supplementary Ecology Review (BNG Metric)

Thank you for forwarding the BNG metric for review. The version that I have reviewed is labelled: *Springwell_Solar_Farm_Statutory_Biodiversity_Metric_Calculation_Tool_-_Macro_enabled_tool_V.2* and is dated November 2024.

I confirm that the current version of the Statutory Metric has been used. The metric provides information on how the various rows have been populated, including reference to specific habitat parcels. As noted in my previous response, there do not appear to be any plans that allow the relevant habitat parcels to be identified. This is a limitation on the ability of stakeholders to verify the details entered into the metric.

In addition to the points raised in my previous response, I wish to raise the following additional matters that require clarification and/or provision of additional information. I am not currently in a position to agree the BNG calculation.

1. The metric does not include any data relating to trees. In my previous response I noted that there appear to be tree losses and I queried the relevance of these to the BNG calculation.
2. No irreplaceable habitats are recorded in the metric. I understand that there is at least one veteran tree in the Order Limits.
3. The additional information does not demonstrate that Strategic Significance has been applied in accordance with the Central Lincolnshire BNG guidance. This should be reviewed and the metric amended, as necessary.
4. I have not been able to verify that all of the woodland entered as ‘other woodland’ is of this type and not a priority habitat type e.g. the stand northeast of TN10, part of which is shown on the 1st Edition Ordnance Survey map.
5. Explanation is needed for each incidence of use of the fairly poor condition category.
6. It is not clear to me why the proposed uplifts in condition or distinctiveness of grassland types is enhancement rather than habitat creation. I am not satisfied

that the target grassland types are realistically achievable without interventions such as re-sowing.

7. The trading rules do not appear to have been met for hedgerows – refer to the 'Trading Summary Hedgerows' tab.

8. The metric does not record the creation of culverts, are there any affecting wet ditches? Similarly, and as noted in my previous response, clarity is needed on why 10% BNG is not required in relation to watercourses.

9. I have not been able to identify the location of the section of Dorrington Dike coinciding with the Order Limits so I have not been able to verify that this is not a priority habitat. The assessor does not appear to have consulted the two public access datasets on priority rivers, and these mark parts of this Dorrington Dike/Digby Beck as a priority habitat. Please refer to:

   https://naturalengland-defra.opendata.arcgis.com/datasets/priority-river-habitat-rivers-england/explore?location=53.069253%2C-0.412690%2C13.65

   https://naturalengland-defra.opendata.arcgis.com/datasets/priority-river-habitat-headwater-areas-england/explore?location=53.071285%2C-0.307401%2C13.63

10. The information entered into the metric does not state that the mandatory method has been applied to determine the baseline condition of Digby Dike/Beck i.e. the MoRPh method which must be completed by an accredited surveyor. The metric information refers to an RCA survey (which is a different survey method), but also states that the watercourse was not surveyed. Further explanation is required on the work completed and any limitations associated with this.

The Applicant proposes a number of significant on-site gains that would need to be appropriately secured, as explained in the Central Lincolnshire BNG guidance. These significant gains include the following higher distinctiveness habitats:

- Lowland calcareous grassland priority habitat;
- Other neutral grassland of good condition;
- Species-rich native hedgerow with trees.

This also influences the frequency of habitat monitoring, as set out in the Central Lincolnshire BNG guidance. The LEMP does not fully align with this requirement.

Yours sincerely

[redacted] BSc MSc MPhil CEnv
MCIEEM
Associate Ecologist
AECOM Limited

Springwell Local Impact Report – Archaeology/Cultural Heritage

Key Policies

The Central Lincolnshire Local Plan 2018-2040 - historic environment (Policy S57).

Development affecting archaeological remains, whether known or potential, designated or undesignated, should take every practical and reasonable step to protect and, where possible, enhance their significance.

Planning applications for such development should be accompanied by an appropriate and proportionate assessment to understand the potential for and significance of remains, and the impact of development upon them.

If initial assessment does not provide sufficient information, developers will be required to undertake field evaluation in advance of determination of the application. This may include a range of techniques for both intrusive and non-intrusive evaluation, as appropriate to the site.

Wherever possible and appropriate, mitigation strategies should ensure the preservation of archaeological remains in-situ. Where this is either not possible or not desirable, provision must be made for preservation by record according to an agreed written scheme of investigation submitted by the developer and approved by the planning authority.

Any work undertaken as part of the planning process must be appropriately archived in a way agreed with the local planning authority.

Policy S57 of the Lincolnshire Local Plan, which has passed examination by government appointed inspectors, sets out a proportionate and reasonable approach from Lincolnshire County Council by which the archaeological resource within the county is to be managed within the development process. Alternative approaches which vary from this standard and accepted approach should be demonstrably fit for purpose and provide adequate and sufficient information to allow appropriate management of the archaeological resource.

LCC Archaeology Officer Comments

LCC has serious concerns over the adequacy of works undertaken for Springwell. The assessment undertaken falls considerably short of acceptable standards and fails to meet the requirements set out by the NPPF, EIA Regulations and National Policy Statement EN-1. EN-1 outlines requirements for understanding the significance of heritage assets that will be affected, including Section 5.9.12: *'The applicant should ensure that the extent of the impact of the proposed development on the significance of any heritage assets affected can be adequately understood from the application and supporting documents.'*(Section 5.9.9 –

5.9.15) and that *'The results of pre-determination archaeological evaluation inform the design of the scheme and related archaeological planning conditions.'* (footnote 94).

The significance of any heritage assets cannot be assessed until there has been sufficient evaluation to identify the currently unknown archaeology across the proposed development area. Trial trenching is essential in finding and characterising the archaeology. The Applicant has not undertaken sufficient trenching evaluation to identify the presence of archaeology across the impact zone and therefore '*the significance of any heritage assets*' cannot be adequately understood.

An appropriate and effective baseline is crucial to understanding the potential significance of previously unknown archaeology within the redline boundary and will form the basis for reasonable mitigation to deal with the impacts of the development. Where an effective baseline has not been established, or only partially understood, there is an exponential risk of significant delays and increased costs to the project and harm to the historic environment, all of which could be reduced or avoided through an appropriate level of assessment pre-consent.

Archaeological activity may be located across the whole of the redline boundary and it is essential that all areas where works are proposed, including solar arrays, ecological enhancement, drainage, access tracks and works compounds, are investigated for archaeological remains. The landscape here is essentially an agricultural one, where little previous archaeological research has been completed. Therefore, baseline information held by the Lincolnshire Historic Environment Record is only partial and this lack of prior investigation reinforces the need for a programme of archaeological evaluation that covers the full redline boundary. Geophysical survey and aerial photographic analysis will not identify all archaeological activity, such as burials, even if done well.

Engagement by the archaeological consultants has been limited and on the whole unsatisfactory. The Applicant has not been willing to work fully with us to establish an effective methodology to determine archaeological impact and significance. We have communicated to them regarding our substantial concerns and ways in which to resolve the wholly ineffective methodology currently employed but this has resulted in little to no change in direction by the Applicant. The lack of consultation with the local archaeological advisors, who have decades of experience working in archaeological development management within Lincolnshire, is a serious and avoidable flaw within the Applicants methodological approach.

The language used is intentionally dismissive and paints the picture of a landscape of low archaeological potential and value yet the almost complete lack of archaeological evaluation means these sweeping statements are not evidence-based and are misleading and unreliable. This conflicts directly with NPPF, EIA Regulations and National Policy Statement EN-1, which requires that the baseline evidence is accurate and that '*The EIA must identify,*

describe and assess in an appropriate manner, in light of each individual case, the direct and indirect significant effects of the proposed development on the following factors…(d)material assets, cultural heritage and the landscape.' (Regulation 5 (2d)). Where the significance of heritage assets has been misunderstood or downplayed, there is a likelihood that any mitigation measures will be ineffective, leading to longer than anticipated archaeological excavation times and increased costs and delays before or during the construction phase.

The limitations are particularly evident within the aerial assessment, which has utilised a mere 13 aerial photographs for a site covering 1280 hectares. For comparison, a nearby solar farm NSIP, covering 1100 hectares, reviewed 166 Historic England vertical aerial photos and 575 Historic England specialist aerial photographs, which provided a comprehensive assessment and discovered a number of potential archaeological sites that had not shown on the geophysical survey.

Within our Scoping Report response, we stated that "*It's vital that a competent full desk-based assessment (DBA) be completed at the earliest opportunity as desk based work provides the basis for initial understanding. This is informed by and built upon by a full air photo/LiDAR assessment and geophysical survey which in turn assists in the development of the trial trenching programme*". It is standard archaeological practice to undertake full assessment of all available air photos, this is a fundamental part of archaeological desk-based work as thousands of new sites, and new information about existing sites, are found in this way.

We have significant concerns over the amount of trial trenching undertaken within the 1280-hectare site. The Applicant has completed 196 trenches, each 50m by 1.8m. The trenching thus represents slightly over 0.1% of the full redline boundary. Approximately 99.9% of the site has not been evaluated.

The direct and indirect significant effects of the development on cultural heritage cannot be understood until sufficient trial trenching has been undertaken across the full impact zone and we currently lack a proportionate level of detail on the significance of any heritage assets affected on 99.9% of the site and there is insufficient information to understand the impact.

Where trenching has been done, these have been restricted to five specific small areas only, albeit to an acceptable standard. The Applicant has omitted large portions of the site despite proposed widespread ground disturbance in those areas, through solar arrays, which will puncture the ground to a depth of 1,5m, destroying any archaeology present, cabling, drainage, topsoil strip, access tracks and BNG/soil inversion. Archaeological remains will be present within these unevaluated areas and will be impacted by construction activities. At a recent NSIP site in Lincolnshire (Cottam), Saxon burials were found 20cm under the topsoil during the first day of trenching, these burials had not been identified through desk-based or geophysical surveys. Any groundworks or even heavy plant movements would have

destroyed these previously unknown Saxon burials if they had not been located by the trenching. This harm to previously unrecorded archaeological remains will also occur at Springwell if comprehensive trenching is not undertaken.

As previously covered within our PIER, Historic England Advice Note 17: Planning and Archaeology states that *'Appropriate evaluation can support the smooth and speedy progression of the development and help to manage the developer's risk early in the planning process'* (section 131). It also states that '*Data gathered can also help to inform a costed mitigation strategy, the benefits of which include a reduction in the chances of unexpected risks and associated costs, and potentially the scope to allocate the cost of archaeology appropriately into financial forecasts*' (section 132).

The Chartered Institute for Archaeologists Standard and guidance for archaeological advice by historic environment services stipulates that '*Advisors should only make a recommendation in response to a development proposal where the significance of assets affected by the development proposal and the scale of any loss of significance is adequately understood. Where there is insufficient evidence, advisors should recommend that further information be gathered prior to determination of the proposal. Requirements for the gathering of further information should always be focused on informing decision making*.' We, as local archaeological advisors, have considerable experience of the archaeological resource within Lincolnshire and are ideally placed to help Applicants to best understand the archaeological implications of development and where they have insufficient information to do this. We do not arbitrarily require Applicants to undertake work for no reason. Requirements for archaeological investigation have been set out within the Lincolnshire Archaeology Handbook. These have been designed by the local authority archaeological advisors over decades in consultation with archaeological fieldwork companies and are based on what has proven to be effective and works. There is insufficient evidence, both currently and as proposed in the Applicant's oWSI's for us to meet the requirements of this standard and we have informed the Applicant of this to no avail. We need to see adequate trenching results across the full impact zone to inform fit for purpose appropriate levels of mitigation and to manage the level of post-consent risk for the Applicant.

The Applicant has indicated further archaeological works will be undertaken post-consent. Whilst we welcome the proposed additional trenching, best practice, as stated above within Historic England Advice Note 17, is that this would have been undertaken prior to submission of the DCO and needed to be of the full redline boundary, in accordance with NPPF, EIA Regulations and National Policy Statement EN-1.

Pushing back trenching to the post-consent stage is a highly risky approach, placing all the risk at the end of the process, with a high potential for previously unknown to be discovered during the construction phase, which will cause costly programme delays and unnecessary harm to archaeological remains. There will need to be sufficient flexibility built into the

budget and timetable to allow for unexpected archaeology to be appropriately dealt with during the work programme.

There are also considerable amounts of the site where no archaeological trenching is proposed at all. The outline Written Scheme of Investigation (oWSI) states that areas of ecological enhancement will not be subject to archaeological trenching. These areas will need to be included within the programme of trenching to establish if archaeological remains are present and whether mitigation is required depending on the type of enhancement proposed. Tree planting, wildflower planting and other types of enhancement will cause subsurface disturbance and therefore will need to be included in the programme of evaluation and where archaeological remains are present, appropriate and effective mitigation measures will need to be deployed.

Concern remains whether all areas of landscaping and drainage will also be included within the trenching programme or have been proposed for omission. The depth of archaeological activity in this part of Lincolnshire can be quite shallow, merely 30cm beneath the ground level. Even temporary drainage systems, where used, would have permanent impacts on buried archaeology and without adequate trenching, it is highly likely that harm to archaeological remains will occur.

Section 7.1.2 of the oWSI states that the WSIs will conform to the requirements of the Lincolnshire Archaeology Handbook. We would like to point out that all phase of works already undertaken should have been completed in accordance with the Handbook.

It is essential that sufficient trenching is undertaken to identify the presence, extent, depth and significance of previously unknown archaeology across the redline boundary, including areas of ecological mitigation. The current 0.1% sample is not standard practice and has proven to be ineffective at establishing the presence of archaeological remains.

Emerging regional guidance and recent academic research has concluded that effective trial trenching should be at a minimum 5% and most effective at 10% of the site. We would advise between 3% and 5% to get an understanding of the archaeological potential, with a contingency of 2% should it be needed to aid understanding the extent, depth and significance of any remains found, as required.

The oWSI indicates a programme will be agreed for the proposed additional archaeological works. This will only be possible for the next phase of archaeological trenching. The scope of subsequent works and mitigation will depend on the results of the next phase. If this will be the case, the Applicant needs to ensure all measures outlined in the oWSI confirm to those requirements set out within the Lincolnshire Archaeology Handbook, as suggested in their oWSI. This includes excavation, recording, photography, sampling, post-excavation and archiving.

Furthermore, the embedded mitigation measures within the oWSI are generic and their implementation or viability dependent on further archaeological evaluation. Proposed use of non-intrusive concrete feet for solar arrays would still result in harm to fragile and shallow archaeological remains such as human burials.

Excavation is suggested at 13 locations within the cable corridor and a further 11 locations where avoidance is not possible. Directional drilling should be considered as a mitigation option to avoid or minimise the impact depending on the significance of the archaeological resource as well as any other areas identified through archaeological trenching. Presently, the extent of these archaeological areas is not known so a conservative approach will be needed, as areas of archaeological activity may extend much further than is apparent.

Areas indicated as descoped within the oWSI are shown to be part of the development on scheme drawings. These will need to be included in any trenching programme unless they have been taken out of the redline boundary. Areas of ecological enhancement/green, areas of solar arrays and cabling, and primary and secondary construction compounds need to be included in the trenching programme.

The scale of mitigation will need to be based on the evidence available once the trenching phase has been completed. Where the extent of any archaeological remains is unclear, mitigation areas will need to extend and cover any areas of unknown, unevaluated land.

Areas of unknown and previously unevaluated archaeological potential will need to be subject to appropriate investigation prior to commencement of any preliminary works, ecological enhancement, construction-related activities or groundworks associated with access, storage, works compounds and drainage. Sufficient flexibility will need to be built into the works programme to account for archaeological remains of high significance which require additional resources and capacity to preserve in a manner appropriate to their significance.

Policy S57 The Historic Environment of the Central Lincolnshire Local Plan states that "*Development proposals should protect, conserve and seek opportunities to enhance the historic environment of Central Lincolnshire*". There is little to no consideration of enhancement of the historic environment within the Springwell proposals. There is no mention of public engagement or evidence that any thought has gone into involving the local community when undertaking archaeological works. This is poor practice and represents a major barrier to achieving a successful outcome to any archaeological project. Interest in archaeology, particularly any remains which have been found locally, can be massive and, if done well, can have the potential to foster high amounts of positive publicity. It can increase both physical and mental well-being and offset elements of a development which may be poorly perceived or have a visibly negative impact on surrounding communities.

The work undertaken to date is substandard, not fit for purpose and do not provide the baseline evidence necessary for assessing impact or producing an effective and appropriate mitigation cannot be determined outside of the trenched areas.

The proposed Requirement 11 covering archaeological works post-consent is not appropriate or fit for purpose. The wording suggested is vague and unenforceable. We would advise that the wording accepted at the Mallard Pass, Cottam and West Burton Solar Farms, all recently consented NSIPs within Lincolnshire, is included for Springwell, should the scheme be consented. The wording utilised within the Mallard Pass Requirement has been deemed to be appropriate and allows for an enforceable and robust level of archaeological works to be undertaken and appropriate mitigation, informed by sufficient evaluation, to be deployed.

We remain positive and keen to work with the Applicant going forwards in establishing an effective approach to understanding, managing and mitigating the archaeological risk that will occur and maximising the public benefit that will be gained from the archaeological work.

Appendix D

January 2025

Review of Soil and ALC for Springwell Solar Project (LIR)

On behalf of North Kesteven Council

LANDSCOPE
LAND & PROPERTY

Summary of Situation

I have considered the three agricultural land classification reports for each of the three main areas of the site, together with the outline soil management plan and various other documents

The ALC land surveyed represents a total area of 1,620.9 hectares across 3 locations Eastern, Central and Western and Cable Corridors. It is mostly in the ownership of one landowner, a major estate in the locality with significant farming interests. The overall ALC results will feed into the baseline data on soils and agriculture, as set out in Chapter 11 of the Environmental Statement.

The ALC reports have been undertaken by a professional team in agreement with Natural England and the results are considered reliable. The oSMP should deal with construction, operation and decommissioning concerns. Land drainage is always an issue to consider on the heavier soils, but a plan is in place.

Agricultural Land Classification Summary of The Three Sites

Eastern Area
A total area of 431 hectares, Grade 1 23.8 (5.5%) Grade 2 75.3 (17.5%) Subgrade 3a 168.6 (39.1%) Subgrade 3b 163.3 (37.9%)

Western Area
A total of 932.6 hectares, with 60.4 ha (6.5%) of Grade 2, 377.5 (40.5%) of Grade 3a and the remainder 494.7 ha (53%) Grade 3b. A total of 47% BMV.

Central Area
257.3 hectares Grade 2, 44.2ha (17.2%) Subgrade 3a 138.1 (53.7%) Subgrade 3b 70.8 (27.5%) Grade 4 4.2 (1.6%)

All the ALC surveys were conducted in line with guidance and at 1 auger per hectare.

BMV Summary
Split of BMV vs non-BMV, is 733 hectares non-BMV (45.22%) and 887.9 (54.77%) BMV.

The total area proposed under panels is 591 hectares (as per Table 11.13). The proportion of BMV is reduced to 35.6% (210.7Ha) under panels and other infrastructure.

An outline Soil Management Plan (oSMP) has been prepared following consultation with Natural England and Stakeholders including local authorities.

At the end of the scheme some BMV land will be retained permanently in Green Infrastructure.

1. The Site and Proposal

The Proposed Development comprises the installation of solar photovoltaic (PV) generating modules, battery storage facilities, and grid connection infrastructure with a capacity in the region of 800MW.

The Site is located within the administrative boundary of North Kesteven District Council, in the county of Lincolnshire. The ALC survey area measures approximately 1,620 hectares (ha) and extends across three distinct parcels (referred to as Springwell West, Springwell Central and Springwell East). The Order Limits area is 1,280 hectares and the site boundary and three land parcels are presented in **Appendix 1**.

2 Background to Soils and Agriculture

A meeting was held with Natural England in September 2023 to discuss the initial agricultural land classification survey and the consideration of Best and Most Versatile (BMV) land in the development of the design. Natural England requested an agricultural land classification survey to be undertaken of the proposed cable route locations connecting each parcel to help inform the management requirements of the soil and for additional survey work on the three main sites. A detailed agricultural land classification survey has been undertaken in order to assess agricultural classification within the Site, including all of the cable routes. This survey has informed the design-development and the outline Soil Management Plan (oSMP).

3 Agricultural Land Classification

In the review of Scoping we stated:-

The ALC should identify where BMV land is and the scheme should seek to protect and minimise damage to higher grade land wherever possible in line with national planning policy. There is undoubtedly a lot of BMV land in this vicinity and only a full ALC will identify where it is and what the Grade and quality is. Laboratory analysis of representative samples should be used to determine textures.

Table 11.11 below shows the stated breakdown and make-up of the different Grades of land, within the Order Limits. The total area extends to 1,280 hectares which is less than the 3 ALC reports of 1,620 hectares. Around 360 hectares have been surveyed outside (but adjoining) the scheme. These areas are shown on the Plan (**Appendix 1**) outside of the red line of the Order Limits. Some of those areas represented alternative Cable Route corridors and are now 'excluded' though the ALC results are shown on the ALC plan **Appendix 2**.

Table 11.11 Agricultural land classification results of the Order Limits

Agricultural land classification grade	Area (ha)	Percentage (%)
Grade 1	6.0	0.5
Grade 2	80.1	6.3
Grade 3a	455.1	35.6
Grade 3b	582.6	45.5
Grade 4	4.2	0.3
Unsurveyed land (field verges, internal tracks, etc)	152.0	11.8
Total BMV	541.2	42.3
Total non-BMV	586.8	45.9
Total	**1280.0**	**100.00**

The actual area proposed for panel and related development is set out in Table 11.13 below. All of the Grade 1 land has been excluded from development and most of the Grade 2 area within the Order. The total BMV 'take' for the solar development is now 210.7 hectares (35.6%).

Table 11.13 Agricultural land classification results of the area of Solar PV development

Agricultural land classification grade	Area (ha)	Percentage (%)
Grade 1	0	0
Grade 2	14.3	2.4
Grade 3a	196.4	33.2
Grade 3b	376.4	63.7
Grade 4	4.2	0.7
Total BMV	210.7	35.6
Total non-BMV	380.6	64.4
Total	**591.3**	**100.00**

NB: The percentage column indicates the percentage of agricultural land classification grade within the Solar PV development area, not the percentage of agricultural land classification grade within the Order Limits.

The ES states:-
*11.5.29 The potential use of BMV land has been a key consideration in the development of the design, as discussed in **ES Volume 1, Chapter 4: Reasonable Alternatives Considered [EN010149/APP/6.1]** and several fields have been removed due to them being classified as high grade BMV agricultural land.*

4 Soil Management Plan

Soil structure can be significantly damaged during the construction phase of the process. There is a lot of trafficking of vehicles on the land to erect the panels and if this work is undertaken when soils are wet, there can be significant damage. Much of this damage can be remedied post construction but not all and it is possible that long term drainage issues occur on the site due to the construction.

Soil Damage During Construction

Soil structure can be significantly damaged during the construction phase of the process. There is a lot of trafficking of vehicles on the land to erect the panels and if this work is undertaken when soils are wet, there can be significant damage. Much of this damage can be remedied post construction but not all and it is possible that long term drainage issues occur on the site due to the construction.

The oSMP now includes the cable route in order to minimise the impact on soil structure, land drainage and ultimately soil quality. Further guidance is available in published documents.

11.8.4. The oSMP [EN010149/APP/7.11] sets out the measures to manage any potential impacts to the soil and agricultural land during the construction phase, and is secured by a requirement in the Draft DCO [EN010149/APP/3.1]. The oSMP [EN010149/APP/7.11] identifies those areas within the Site which may be more susceptible to damage, and it advises on when soils are suitable for being handled or trafficked. The oSMP [EN010149/APP/7.11] also details measures for soil management and follows the principles of best practice to maintain the physical properties of the soil, with the aim of restoring the land to its preconstruction condition following the temporary construction use and at the end of the lifetime of the Proposed Development.

Cumulative Impact at District and County Level

The scale of the project and the amount of BMV land, I consider makes the impact significant at both District and County level. The information argues that the area of amounts to only 1% of the farmed area of Lincolnshire. However, the cumulative effect is significant for Lincolnshire and the District. There are a several other large solar schemes proposed or approved across the wider area that contribute to this impact.

For a project of this scale there is an impact the project will tie up the land for up to 40 years, there will be some impact. The loss of such a large area of land would normally be considered as significant at District level, even though the use is 'temporary'. Any permanent loss of land due either to construction or through biodiversity designation may affect this assessment.

The ES states:-
11.5.28. Agricultural land quality is referred to in the National Policy Statement for Renewable Energy Infrastructure (EN-3) [Ref. 11-8] and it notes that lower quality agricultural land, should be preferred, avoiding BMV land "where possible". The Proposed Development would not be deliverable without the temporary use of some BMV land.

11.6.3. In addition, the Applicant sought to work with the landowners to understand relative productivity (including accessibility) of the land to focus on areas of land with poorer yield and to determine if fields that were discounted for development would be suitable would be accessible for continued agricultural use.

Across Lincolnshire the estimated proportion of BMV is 71.2%; across North Kesteven the proportion of BMV at 67% is slightly lower than the Lincolnshire average, but this still covers two thirds of agricultural land, and is well above the national average.

Table 16.4: Area and Proportion of Lincolnshire and North Kesteven

ALC Grade (pre 1988)	Lincolnshire		NKDC	
	Area (ha)	%	Area (ha)	%
1[1]	82,600	14.6	1,260	1.4
2[2]	203,600	36.0	39,830	44.9
3a[3]	116,700	20.6	18,340	20.7
3b	155,900	27.5	28,220	31.8
4	7,400	1.3	1,130	1.2
5	0	0	0	0
Total	566,200	100.0	88,780	100

[1] 75,757 x 1.09
[2] 186,752 x 1.09
[3] 296,243 x 0.394

Table 11.14 of the ES states:-
Fields comprising solely of Grade 1 or 2 land within the Site will remain available for arable production. The design and layout seeks to minimise disturbance to agricultural land of BMV quality. Where possible, existing access tracks within the Order Limits will be used, and new access tracks will avoid BMV land as far as is practical.

Solar PV mounting structure foundations will be driven or helical piles or concrete footings.

The foundations for the Solar PV modules will be at a maximum depth of 3m, depending on the ground conditions.

Construction Methodology Decommissioning and Land Use

Construction

The ES states:-
11.7.4. Construction activities, including trafficking of agricultural land by construction vehicles, formation of construction compounds, installation of the cable route and earthworks may lead to compaction and deterioration of soil and agricultural land during the construction phase.

11.7.5. Access tracks and steep slopes within the Site are likely to be most susceptible to deterioration through erosion.

11.7.6. Some soil types are more susceptible to damage when handled during construction, and due to the use of machinery and vehicular activity, depending upon soil type, climate and wetness class.

Operation

The ES states:-
11.7.10. With respect to soil and agricultural land, there is anticipated to be limited ground disturbance or trafficking over the soil, apart from periodic maintenance requirements, including replacement of damaged parts or cleaning and maintenance of the Solar PV modules, as described in ES Volume 1, Chapter 3: Proposed Development Description [EN010149/APP/6.1].

11.9.11. Soil and agricultural land on the Site are classified as very high (grade 1 and 2 land), high sensitivity (grade 3a) and medium sensitivity (grade 3b land). It is considered that any impact as a consequence of construction activities will at worst lead to a temporary reduction in availability of agricultural land, with no discernible change in soil quality or agricultural land classification grade. The potential for damage to field drains (with possible subsequent effects on drainage of agricultural land) will be managed by the oCTMP [EN010149/APP/7.8]. The area within the Order Limits that is classified as BMV land is 541.2 ha (42.3%). Therefore, given a temporary and reversible reduction in availability of agricultural land and the additional mitigation proposed, the magnitude of impact is minor. The significance of effect is therefore determined to be moderate or large adverse for very high sensitivity soils, slight or moderate adverse for high sensitivity soils and slight adverse for medium sensitivity soils. As the higher of these effects has a split significance range, professional judgement has been applied, based on the information provided in the preceding sections. Given that the quality of the soil, and the agricultural land classification grade, will not be changed by the Proposed Development (with works all being completed in accordance with the oSMP [EN010149/APP/7.11] and oCEMP [EN010149/APP/7.10]), it is considered appropriate to adjust the significance of effect to moderate adverse for very high sensitivity soil.

Decommissioning

The ES states:-
11.7.19. With respect to soil, there is potential for erosion associated with works conducted on steep slopes located within the Order Limits. The number of vehicle movements is anticipated to be less than during the construction phase, limiting the potential for compaction of soil to occur.

Decommissioning works are also less likely than construction works to adversely impact on agricultural field drains as there would be no requirement for piling, so this phase is less likely to result in deterioration of soil quality.

11.7.23. Following decommissioning, it is intended that the land would be returned to the landowner(s) for agricultural use. However, for the purposes of this assessment, it has been assumed that Green Infrastructure (excluding Field Tb2 and the community growing area) will be permanent. The permanent land take for Green Infrastructure affects a total area of 166.2ha, of which 77ha are classified as BMV land.

11.7.24. Further detail on the decommissioning phase is detailed in ES Volume 1, Chapter 3: Proposed Development Description [EN010149/APP/6.1].

The reality often is that contractors are under immense pressure to complete works in accordance with a work programme and will inevitably undertake works in substandard conditions in order to complete their contractual obligations.

Suitable soil management and restoration clauses would be needed in order to secure the land's quality at the end of the term. Whilst many of the damaging operations can be remedied using agricultural equipment, the layout of the panels and buried cables will often prohibit this during the life of the solar farm and as such remedies can only be completed at the end of the term when all infrastructure has been removed. If the soil is in substandard condition during the operation of the solar farm, carbon sequestration is reduced and infiltration of water can also be reduced, leading to localised standing water and the reduction in soil quality.

There is a programme for decommissioning and re-instatement of the land. Whilst this is detailed and can be conditioned as part of a consent, even possibly with S106, it remains to be seen whether it will be effective in leading to the land being returned to productive agriculture.

11.9.20. As in the earlier phases, where vehicle movements are required over soils for decommissioning activities, these will be managed by the oSMP [EN010149/APP/7.11] to prevent damage to soil structure, as well as potential damage to field drains (and subsequent effects on drainage of agricultural land). This will control the timing of work and take into account soil saturation. Although the decommissioning phase will not adversely affect soils if the oSMP [EN010149/APP/7.11] is followed, as above, it is worth noting that a reduction in soil quality can be reversed, preventing medium or long-term effects.

Cable route

It has been agreed that the cable route involves temporary disturbance of the soils to enable a trench to be dug and the cabling to be inserted. This will not involve the sealing or downgrading of the land quality. An ALC survey of the cable route has been carried out, and the Outline Soil Management Plan (oSMP) includes the details.

The route of the offsite Grid Connection Route Corridor has been ALC surveyed. The cable route will be underground and laid either through open trenching or through directional drilling where open trenching is not possible.

As each section of cable is laid it will be back filled, and farming would be able to re-commence on this land.

As ever the trenching works may damage land drainage locally and a suitable record of condition and re-instatement plan is required.

Ecological Effect

There is some conflict between maintaining the land in agricultural production and improving biodiversity. Whilst not incompatible, site based issues, such as soil type(s) and local agricultural practices may create future problems. The biodiversity areas particularly target the highest grades on agricultural land and any future restriction that might prevent its return to cultivation should be a consideration in the planning process and in the conditioning of any consent.

Additional Information for Local Impact Report

Changes That Have Occurred to Scheme

The DCO red line

This has been amended to remove high grade BMV around site perimeters. This is a positive amendment.

ALC Detail Main 3 sites

The sampling across the Solar Park site has been carried out in two stages, in consultation with Natural England and NKDC. Initially a semi-detailed ALC was carried out, involving sampling on a regular 200 metre by 200 metre grid. Since that time the whole site has been fully surveyed including the cable route – to the satisfaction of NE.

BMV Land 'Take'

The overall ALC findings are found in tables in the ES chapter (**Table 11.13 Appendix 3**). Approximately 42% of the site is assessed as BMV.

BMV land is considered as temporarily used under the panels, although 40 years is a long period. The amount of BMV land to be lost 'permanently' (mainly due to green infrastructure) is significant, amounting to around 77 hectares of BMV.

The total area of BMV land – mostly Grade 3a, with the remaining non BMV being Grade 3b -moderate quality. The area of BMV has been reduced since the original DCO red line. The difference between

Grade 3a and 3b however is quite small in this instance and there is a degree of subjectivity about the difference, though I do not dispute the findings.

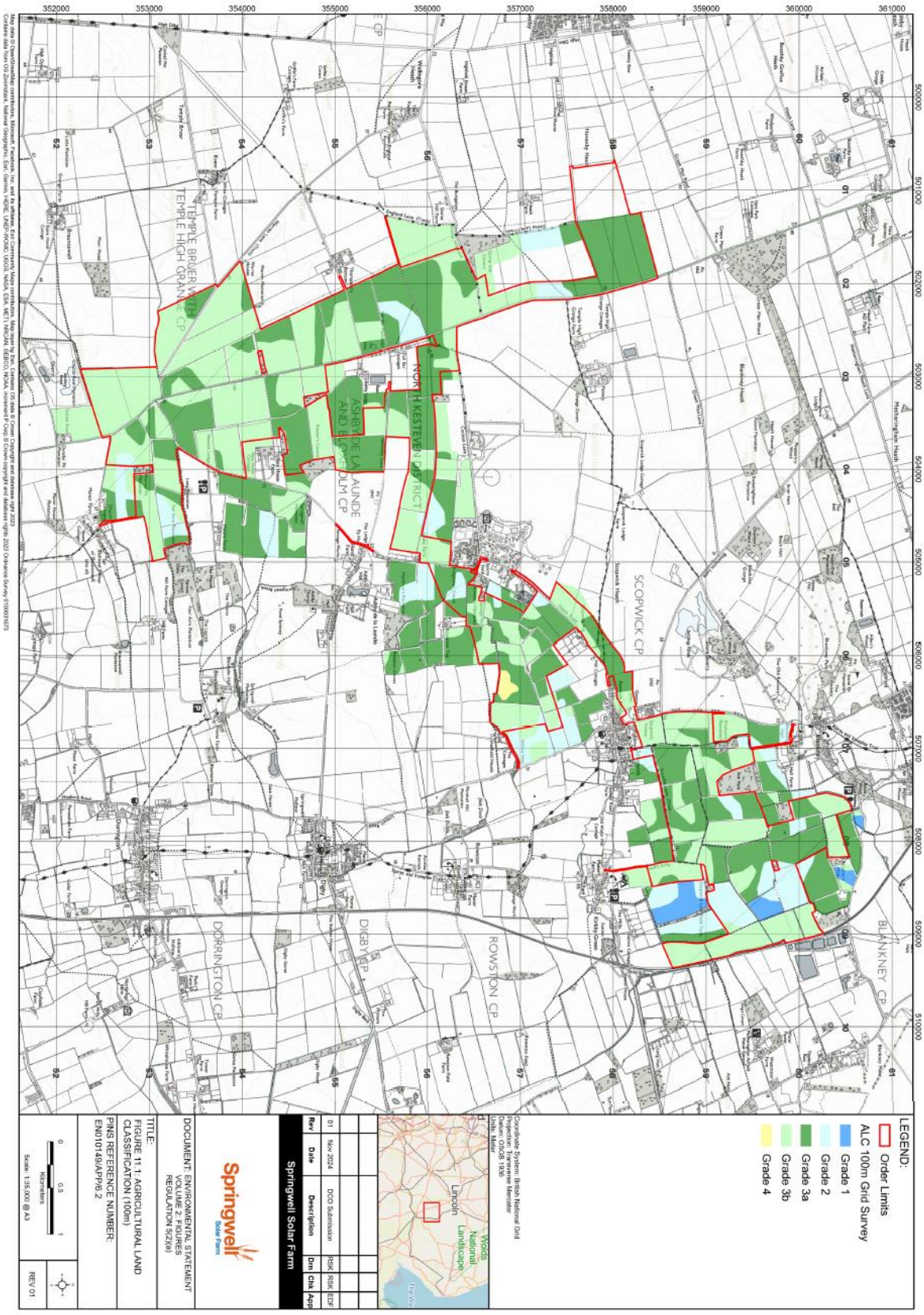
Nevertheless, the whole area is productive farmland, which will be removed from mainly arable farming for 40+ years and at best, a lower intensity grass based system will replace it. The loss of arable production is I consider locally significant and in view of other projects in the wider District and County potentially cumulatively significant.

Whilst the scheme includes measures to remove the panels at the end of the project, this will remain and uncertainty as very few largescale solar farms have been decommissioned in the UK to compare.

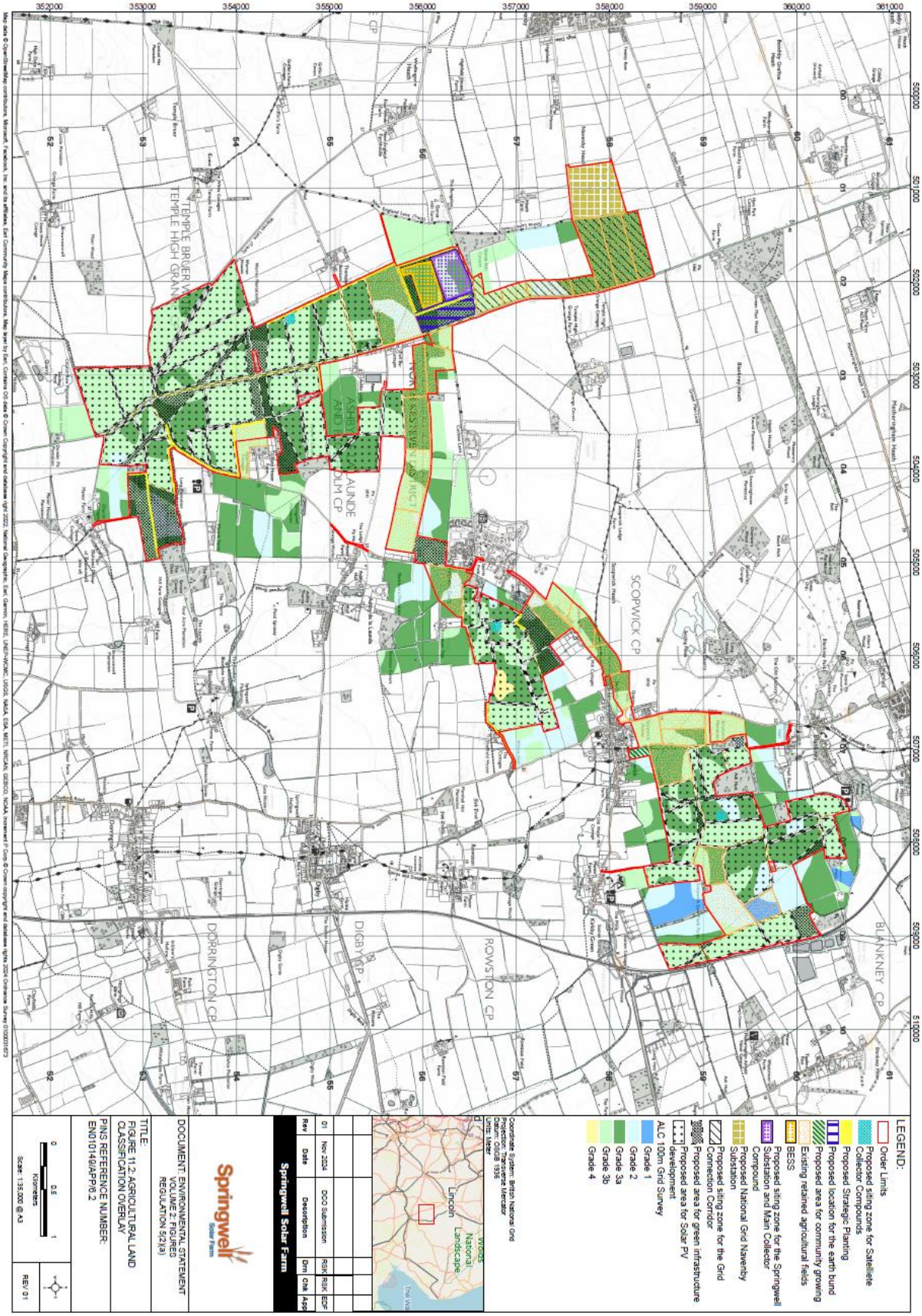
Spatial Approach and Methodology for Assessment of Significance

The report follows the recent guidelines found in the IEMA Soils and EIA document. It argues that the impact on actual loss of BMV land is therefore small. This is only correct if it is accepted that the temporary loss of around 540 hectares of BMV is not included in this assessment. I recognise that Natural England consider the main use as temporary, however local policies may take a different view.

Appendix 1


LEGEND:
Order Limits
ALC 100m Grid Survey
Grade 1
Grade 2
Grade 3a
Grade 3b
Grade 4
Springwell Solar Farm
DOCUMENT: ENVIRONMENTAL STATEMENT VOLUME 2: FIGURES REGULATION 5(2)(e)
TITLE: FIGURE 11.1: AGRICULTURAL LAND CLASSIFICATION (100m)
PINS REFERENCE NUMBER: EN010149/APP/6.2
REV 01
Scale: 1:35,000 @ A3
Kilometers
SCOPWICK CP
DIGBY CP
ROWSTON CP
BLANKNEY CP
DORRINGTON CP
TEMPLE BRUER WITH TEMPLE HIGH GRANGE CP
NORTH KESTEVEN DISTRICT
ASHBY DE LA LAUNDE AND BILSBY CP

Appendix 2


LEGEND:
Order Limits
Proposed siting zone for Satellite Collector Compounds
Proposed Strategic Planting
Proposed location for the earth bund
Proposed area for community growing
Existing retained agricultural fields
BESS
Proposed siting zone for the Springwell Substation and Main Collector Compound
Proposed National Grid Navenby Substation
Proposed siting zone for the Grid Connection Corridor
Proposed area for green infrastructure development
Proposed area for Solar PV
ALC 100m Grid Survey
Grade 1
Grade 2
Grade 3a
Grade 3b
Grade 4
Springwell Solar Farm
DOCUMENT: ENVIRONMENTAL STATEMENT VOLUME 2: FIGURES REGULATION 5(2)(a)
TITLE: FIGURE 11.2: AGRICULTURAL LAND CLASSIFICATION OVERLAY
PINS REFERENCE NUMBER: EN010149/APP/6.2
REV: 01
Scale: 1:35,000 @ A3
Kilometers
SCOPWICK CP
DIGBY CP
ROWSTON CP
BLANKNEY CP
DORRINGTON CP
TEMPLE BRUER WITH TEMPLE HIGH GRANGE CP
ASHBY DE LA LAUNDE AND BOULTHAM CP

Appendix 3

Table 11.12 Agricultural Land Classification survey results of the key components of the areas surveyed within the Order Limits

Grade/ subgrade category	Temporary land use										Permenant land use	
	Satellite Collector Compounds		Springwell Substation and Main Collector Compound		BESS		Solar PV development		Green Infrastructure (Field Tb2 and community growing area)		Green Infrastructure	
	Area (ha)	Area (%)	Area (ha)	Area (%)	Area (%)	Area (%)	Area (ha)	Area (%)	Area (ha)	Area (%)	Area (ha)	Area (%)
Grade 1	-	-	-	-	-	-	-	-	-	-	-	-
Grade 2	-	-	-	-	-	-	14.3	2.4	1.9	3.6	11.8	7.1
Subgrade 3a	1.5	50.0	6.9	44.2	12.6	93.3	196.4	33.2	29.8	57.3	65.3	39.3
Subgrade 3b	1.5	50.0	8.6	55.8	0.9	6.7	376.4	63.7	20.4	39.1	89.1	53.6
Grade 4	-	-	-	-	-	-	4.2	0.7	-	-	-	-
Grade 5	-	-	-	-	-	-	-	-	-	-	-	-
Non-agricultural	-	-	-	-	-	-	-	-	-	-	-	-
Urban	-	-	-	-	-	-	-	-	-	-	-	-
Total BMV	1.5	50.0	6.9	44.2	12.6	93.3	210.7	35.6	31.7	60.9	77.1	46.4
Total non-BMV	1.5	50.0	8.6	55.8	0.9	6.7	380.6	64.4	20.4	39.1	89.1	53.6
Total	3.0		15.5		13.5		591.3		52.1		166.2	

INITIAL LANDSCAPE AND VISUAL REVIEW

OF THE DEVELOPMENT CONSENT ORDER (DCO) APPLICATION

FOR THE SPRINGWELL SOLAR PROJECT

FOR

LINCOLNSHIRE COUNTY COUNCIL

&

NORTH KESTEVEN DISTRICT COUNCIL

January 2025

AAH Planning Consultants
1 Bar Lane, York

Landscape and Visual Review

Quality Assurance – Approval Status

Version	Date	Prepared by	Checked by	Approved by	Version Details
1	31/01/25	[redacted]	[redacted]	[redacted]	Draft Issued for comment

Landscape and Visual Review

Contents

Appendices:

Appendix A: Previous AAH Consultation documents:

- AAH TM01 Landscape and Visual Scoping Opinion 14th April 2023
- AAH TM02 Initial Viewpoint Comments 29th June 2023
- AAH TM03 Viewpoint Comments 15th August 2023
- AAH TM04 PIER Comments 19th February 2024
- AAH TM05 Viewpoint Comments 10th July 2024

Appendix B: Landscape Institute Technical Guidance Note 1/20 (10 Jan 2020): *Reviewing Landscape and Visual Impact Assessments (LVIAs) and Landscape and Visual Appraisals (LVAs).*

1.0 Introduction

Purpose of the Landscape and Visual Review

1.1 AAH Consultants (**AAH**) has been commissioned to prepare a review of the Landscape and Visual elements of the Development Consent Order (**DCO**) Application for the Springwell Solar Project (the '**Development'**), submitted to the Planning Inspectorate in November 2024 and accepted for Examination in December 2024, on behalf of Lincolnshire County Council (**LCC**) and North Kesteven District Council (**NKDC**). This follows on from AAH providing landscape and visual consultation with the applicant on behalf of LCC and NKDC at the Pre-Application stage of the project. AAH pre-application correspondence (in the format of Technical Memos) is provided within **Appendix A**.

1.2 The purpose of this report is to carry out an independent review of the landscape and visual elements of the DCO submission, with a focus on a review of the Landscape and Visual Impact Assessment (**LVIA**) chapter of the Environmental Statement (**ES**), which is based on the guidance provided within the Landscape Institute *Technical Guidance Note 1/20 (10 Jan 2020): Reviewing Landscape and Visual Impact Assessments (LVIAs) and Landscape and Visual Appraisals (LVAs)*, which is included within **Appendix B** for reference.

1.3 This report will be utilised to inform and guide LCC and NKDC input into further stages of work through the Examination of the application, which is for a Nationally Significant Infrastructure Project (**NSIP**). This will include input into Local Impact Reports (**LIR**) and Statements of Common Ground (**SoCG**), as well as formal requests for information or responses to examiners questions that may be required through the Examination or at any associated hearings.

About AAH Planning Consultants and The Author

1.4 AAH Consultants comprises professional and accredited individuals. Our consultants are Chartered Members of the Landscape Institute (**CMLI**) and the Royal Town Planning Institute (**RTPI**).

1.5 This review has been prepared by [redacted], who is a Chartered Landscape Architect within AAH with over 20 years' experience in landscape design and assessment, and

considerable experience in landscape and visual matters associated with solar NSIP and associated DCO Applications.

Relevant Documents

1.6 The Landscape and Visual review is based on the following documents (including sub-appendices) submitted to the Planning Inspectorate, which are available at: https://national-infrastructure-consenting.planninginspectorate.gov.uk/projects/EN010149/documents

Information downloaded and initially reviewed is as follows (which include any associated sub-appendices):

- **3.1 Draft Development Consent Order**

- **Plans / Drawings / Sections**
  - 2.1 Location, Order Limits Grid Coordinate Plans
  - 2.3 Work Plans
  - 2.5 Illustrative Layout Plans and Sections

- **Environmental Statement Volume 1**
  - 6.1 Environmental Statement Volume 1 Chapter 00: Glossary
  - 6.1 Environmental Statement Volume 1 Chapter 1: Background and Context
  - 6.1 Environmental Statement Volume 1 Chapter 2: Location of the Proposed Development
  - 6.1 Environmental Statement Volume 1 Chapter 3: Proposed Development Description
  - 6.1 Environmental Statement Volume 1 Chapter 4: Reasonable Alternative Considered
  - 6.1 Environmental Statement Volume 1 Chapter 5: Approach to the EIA
  - 6.1 Environmental Statement Volume 1 Chapter 10: Landscape and Visual
  - 6.1 Environmental Statement Volume 1 Chapter 16: Cumulative Effects
  - 6.1 Environmental Statement Volume 1 Chapter 17: Mitigation Schedule

- **Environmental Statement Volume 2**
  - 6.2 Environmental Statement Volume 2: Figures Chapter 1: Background and Context 1.1-1.2
  - 6.2 Environmental Statement Volume 2: Figures Chapter 2: Location of the Proposed Development
  - 6.2 Environmental Statement Volume 2: Figures Chapter 3: Proposed Development Description
  - 6.2 Environmental Statement Volume 2: Figures Chapter 5.1: Approach to the EIA
  - 6.2 Environmental Statement Volume 2: Figures Chapter 10: Landscape and Visual
  - 6.2 Environmental Statement Volume 2: Figures Chapter 16: Cumulative Effects

- **Environmental Statement Volume 3**
  - 6.3 Environmental Statement Volume 3 Appendix 1.1: Statement of Competence
  - 6.3 Environmental Statement Volume 3 Appendix 3.1 – Project Parameters
  - 6.3 Environmental Statement Volume 3 Appendix 5.4 Glint and Glare Study
  - 6.3 Environmental Statement Volume 3 Appendix 7.11: Important Hedgerow Survey

- 6.3 Environmental Statement Volume 3 Appendix 7.12: Arboricultural Impact Assessment
- 6.3 Environmental Statement Volume 3 Appendix 10.1: Landscape and Visual Methodology and Assessment Criteria
- 6.3 Environmental Statement Volume 3 Appendix 10.2: Baseline Landscape Character Appraisal
- 6.3 Environmental Statement Volume 3 Appendix 10.3: Landscape Sensitivity Appraisal
- 6.3 Environmental Statement Volume 3 Appendix 10.4: Viewpoint Analysis
- 6.3 Environmental Statement Volume 3 Appendix 10.5: Residential Visual Amenity Assessment

- **Environmental Statement Volume 4**
  - 6.4 Environmental Statement Volume 4 Landscape Visualisations Part 1
  - 6.4 Environmental Statement Volume 4 Landscape Visualisations Part 2
  - 6.4 Environmental Statement Volume 4 Landscape Visualisations Part 3
  - 6.4 Environmental Statement Volume 4 Landscape Visualisations Part 4
  - 6.4 Environmental Statement Volume 4 Landscape Visualisations Part 5
  - 6.4 Environmental Statement Volume 4 Landscape Visualisations Part 6
  - 6.4 Environmental Statement Volume 4 Landscape Visualisations Part 7
  - 6.5 Environmental Statement Volume 5 Non-Technical Summary

- **Other Documents**
  - 7.2 Planning Statement
  - 7.3 Design Approach Document
  - 7.4 Design Commitments
  - 7.7 Outline Construction Environmental Management Plan
  - 7.9 Outline Landscape and Ecology Management Plan
  - 7.10 Outline Operational Environmental Management Plan
  - 7.11 Outline Soil Management Plan

Please note: this review is of the information available at the time of writing. Throughout the pre-examination and examination process additional information will be submitted, including updates and amendments to some of the documents listed above.

Previous Consultation

1.7 As part of the DCO process, as stipulated by *The Planning Act 2008* (**PA2008***)*, AAH have carried out pre-application landscape and visual consultation with the applicant and relevant members of their design team, on behalf of LCC, and NKDC over approximately a 12-month period. This has included discussion and consultation on:

- Expectations of the LVIA, including content and reflection of current best practice and guidance
- LVIA Methodology;
- ZTV parameters;

- Study Area extents (distance);
- Viewpoint quantity and locations;
- Accurate Visual Representations (**AVR**s), including the quantity and location, as well as type and Level.
- Mitigation Measures/Landscape Scheme/Site Layout;
- Cumulative landscape and visual effects, including identification of sites/projects; and
- Residential Visual Amenity Assessment (**RVAA**) if there are residential properties with receptors likely to experience significant effects to their visual amenity.

1.8 Section 10.3 and Table 10.1 of the LVIA summarises relevant consultation carried out, and for landscape and visual matters, AAH have subsequently issued five Technical Memos (**AAH TMs**) summarising comments and consultation through the Pre-application period, including a focus on proposed viewpoints, and review of the Preliminary Environmental Information Report (**PEIR**). For reference, the AAH Technical Memos from the Pre-Application stage are included within **Appendix A**.

2.0 Presentation of the LVIA

The following section provides a review of the presentation of the LVIA, based on the following criteria (where applicable):

- *Is the LVIA appropriate and in proportion to the scale and nature of the proposed development;*
- *Are findings of the assessment clearly set out and readily understood;*
- *Is there clear and comprehensive communication of the assessment, in text, tables and illustrations;*
- *Are the graphics fit for purpose and compliant with other relevant guidance and standards; and*
- *Are landscape and visual effects considered separately;*
- *Are receptors and all likely effects comprehensively identified;*
- *Does the LVIA display clarity and transparency in its reasoning, the basis for its findings and conclusions; and*
- *Is there a clear and concise summation of the effects of the proposals.*

LVIA Chapter

2.1 The LVIA and associated figures, appendices and documents provide a thorough analysis of landscape and visual effects of the Development, and the level of information and detail is appropriate for the scale and type of development. The assessment is detailed and laid out in a logical manner, and the process of assessment is thorough and well explained. It has been carried out to best practice and guidance, primarily the *Guidelines for Landscape and Visual Impact Assessment (GLVIA3)* by the *Landscape Institute*, by a team of competent Chartered Landscape Architects.

2.2 The LVIA clearly draws a distinction between **landscape effects** and **visual effects**, with the main chapter focussing on likely **'significant'** effects. Paragraph 1.7.2 of Appendix 10.1

clarifies *major* or major/*moderate* effects generally being considered **'significant'**. Paragraph 1.7.3 of Appendix 10.1 clarifies *moderate/minor, minor, minor/negligible* or *negligible* significance are considered to be not significant. Paragraph 1.7.4 clarifies professional judgement is applied in regards to *moderate* effects being significant, or not. This is aligned with standard practice and is typical for LVIAs, however we would generally assume *moderate* effects would be considered significant, and the author would justify as to the reasoning as to why any moderate effects would be considered not significant.

2.3 The LVIA presents an assessment of a 'worst case' scenario of the Development, based on design parameters presented in ES *Chapter 3: Proposed Development Description*. Section 3.2 goes on to describe the project parameters that the LVIA have assessed, and clarifies in para. 3.2.6. that *"the Applicant intends to use the 'Rochdale Envelope' approach to assessing the impacts of the Proposed Development within the maximum parameters set out in this ES".* Paragraph 10.4.7 of the LVIA clarifies that the assessment of landscape and visual effects has assumed the worst-case scenario in regards to assessing the maximum parameters, with Table 10.4 laying out the reasonable 'worst case' scenarios for each project element. This includes an assumption that all vegetation proposed to be removed on the *Vegetation Removal Parameters* drawings would be removed. However, if proposed mitigation areas and existing retained vegetation proposals are changed in later, detailed design stages, the findings of the LVIA are likely to also change. Landscape mitigation, and vegetation retention and protection, needs to be clarified and guaranteed as the assessment relies heavily upon it to mitigate the effects of the Development.

2.4 The LVIA assesses landscape and visual effects at the main phases: **construction; operation** and **decommissioning**, with operation phase considered with and without mitigation (year 1 effects and year 10 effects) The main phases are detailed within the section of *Chapter 5* on Assessment Scenarios (Paragraph 5.7.18). The LVIA considers the scheme in isolation, and *Chapter 16* of the ES (from paragraph 16.6.11 to 16.6.45) considers the scheme **cumulatively** with similar type and scale schemes in the local area (notably the National Grid Navenby Substation scheme, proposed within the northern part of the DCO order limits for Springwell).

LVIA Appendices

2.5 The Appendices produced as part of the LVIA provide very detailed supporting information relating to the assessment. The appendices are clearly laid out and easy to follow and locate pertinent detailed information relating to the main chapter. The appendices are listed within section 10.1.3 of the LVIA, and are referenced throughout the report to support the findings and provide additional information.

LVIA Figures

2.6 The Figures produced as part of the LVIA are appropriate in the level of detail provided and clarity of information presented. The figures are clearly listed within section 10.1.2 of the LVIA, and are referenced throughout the report to support and illustrate the findings.

3.0 Methodology and Scope

The following section provides a review of the LVIA Methodology based on the following criteria (where applicable):

- *Has the LVIA been prepared by 'competent experts';*
- *Is the methodology in accordance with relevant guidance and meets the requirements of the relevant Regulations;*
- *Does the methodology and scope of the LVIA meet the requirements agreed in discussions at the pre-application stage during scoping and consultation;*
- *Has the methodology been followed in the assessment consistently;*
- *Are the levels of effect clearly defined, and have thresholds and approach to judging significance been clearly defined;*
- *Is detail about various development stages provided and appropriately assessed;*
- *Have cumulative landscape and visual effects been addressed.*

LVIA Methodology

3.1 The LVIA Methodology is presented in paragraphs 10.4.38 to 10.4.52 of the LVIA and *Appendix 10.1: Landscape and Visual Methodology and Assessment Criteria*. Reference is made in section 12.4.21 to industry best practice, including GVLIA3. It clarifies in Section 12.4.22 compliance with GVLIA3 guidance by assessing both **landscape effects** and **visual effects** as interrelated but separate components.

3.2 The process and stages of assessment are clearly presented, including a baseline assessment, the detailing and review of the design, assessment of sensitivity (by assessing value and susceptibility), an assessment of magnitude of impact (in relation to size, scale, geographical extent, duration and reversibility) of the development on the baseline conditions, and a determination of the significance of effects at all phases of the scheme (construction, year 1, year 10 and decommissioning).

3.3 The study area selection and establishment are explained in detail within paragraphs 10.4.1 to 10.4.15 of the LVIA. The Study area is illustrated in Figure 10.1. The radius of the study area of 3km for elements up to 6m in height and 5km for elements up to 12m in height are justified and appropriate.

3.4 The baseline conditions have been determined following a mix of desk and field studies alongside consultation with appropriate consultees. Desk research has included the prevailing policy framework and fieldwork carried out by qualified (Chartered) and experienced landscape architects.

3.5 The methodology is clear, with section 1.4 covering landscape effects and section 1.5 covering visual effects. Paragraphs 1.4.2 (landscape) and 1.5.1 (visual) of *Appendix 10.1* clarify how the significance of landscape and visual effects are determined by combining judgements regarding the sensitivity of the receptor and the magnitude of the effect arising from the Development.

3.6 Tables within the methodology provide criteria for assessment of value, and susceptibility, and subsequently how these have been combined to provide a judgement on sensitivity. These tables provide clear indicative criteria of the assessment of landscape and visual value, susceptibility, sensitivity and magnitude of effects. The utilisation of professional judgement is promoted within the methodology, should an effect be different to that presented within the tables.

3.7 The assessment methodology has been carried through into the main assessment and used consistently.

ZTV Methodology

3.8 The process of modelling Zones of Theoretical Visibility (ZTVs) is described within section 1.9 of *Appendix 10.1* (paragraphs 1.9.1 to 1.9.8).

Visualisation Methodology

3.9 The process of delivering visualisations is presented within section 1.9 of *Appendix 10.1* (paragraphs 1.9.9 and 1.9.13). which states that they were prepared in accordance with the Landscape Institute *TGN 06/19 Visual Representation of Development Proposals*. However,

it is not explicit regarding what parameters the proposals have been modelled to. Therefore, it has been assumed that the photomontages have been presented to the maximum allowed parameter heights, and the proposals modelled and presented using visualisations generated with the maximum parameters provided within *Chapter 3: Proposed Development Description,* as this would provide a 'worst case' visualisation. However, this needs to be clarified.

4.0 Appraisal of Landscape Baseline and Effects

The following section provides a review of the Landscape Baseline and Effects, based on the following criteria (where applicable):

- *Has the methodology been followed in the landscape assessment?*
- *Are all landscape receptors and all likely effects comprehensively identified and assessed?*
- *Has the value and susceptibility of landscape resources been appropriately addressed and at appropriate scales (e.g., site, local, regional, and national)?*
- *Is there a clear and concise summation of the landscape effects of the proposals? and*
- *Are potential cross-over topics, such as heritage or ecology, addressed?*

Landscape Baseline

4.1 The Landscape Baseline is considered in section 10.5 of the LVIA, with Figure 10.1 illustrating the Scheme Location and Order limits. The Site covers 1,280 hectares of predominantly agricultural land.

4.2 The baseline follows the LVIA methodology and begins by identifying landscape designations and then describing the underlying landscape conditions identifying the characteristics and elements of the Site and study area. This is summarised in the LVIA chapter and further detail is provided in *Appendix 10.2*. Paragraphs 10.5.2 to 10.5.15 provide a narrative on the existing landscape baseline of the Site. The Lincoln Cliff Area of Great Landscape Value (**AGLV**) was identified at the pre-application stage as a potentially sensitive landscape to be considered, however this area is located approximately 3km to the west of Springwell West and, as clarified in Table 10.3, this was subsequently scoped out of the LVIA due to being *"no visibility of the Proposed Development from this AGLV".*

4.3 The LVIA acknowledges the gently undulating, rural and expansive character of the Site and Study area, however, it also notes that *"there are notable differences in the landscape character across the three identified parcels of land".* The LVIA also identifies that the *"landscape within Springwell West and Springwell Central is more open with limited mature*

vegetation structure whereas the landscape within Springwell East is more enclosed with more dense and established vegetation".

4.4 Published landscape character assessments are considered from paragraphs 10.5.7 to 10.5.15 and illustrated in Figure 10.2, and the author acknowledges that the Site and Study Area reflect the boundaries of the LCAs of the *North Kesteven Landscape Character Assessment* relatively accurately; a brief overall summary is provided in the LVIA of the existing landscape baseline at paragraphs 10.5.2 and 10.5.3, with a detailed narratives contained within section 1.5 of Appendix 10.2. The brief summary in the main LVIA chapter, while limited in detail, aids readers basic understanding of the baseline landscape character.

4.5 No further detailed, or finer grained landscape character assessments have been carried out in the LVIA, which we have assumed is due to the author acknowledging that through the field work carried out, the published landscape character assessments accurately reflect the site and study area.

4.6 This process, undertaken by the applicant, resulted in two district landscape character areas (LCA) being considered as landscape receptors for the assessment of effects on them by the Development. These are LCA 7: Limestone Heath; and LCA 11: Central Clays and Gravels, two LCA defined and described in *the North Kesteven Landscape Character Assessment*. The Site falls directly within these two LCA, which the LVIA identifies as *"host landscape character areas".* We agree that beyond the two LCA of LCA 7: Limestone Heath; and LCA 11: Central Clays and Gravels, there are unlikely to be any significant landscape effects on any of the other identified LCAs.

4.7 Further detail of the landscape baseline is provided within *Appendix 10.2: Baseline Landscape Character Appraisal*, and *Appendix 10.3 Landscape Sensitivity Appraisal*.

Landscape Assessment

4.8 The Landscape Assessment is detailed within section 10.7 of the LVIA, which refers to *Appendix 10.3: Landscape Sensitivity Appraisal*, which includes a clear assessment of Value and Susceptibility, and subsequently the Sensitivity of the landscape receptors, which is aligned with the criteria provided within the methodology. The landscape assessment commences at paragraph 10.9.2 and 10.9.3, which summarises the sensitivity of the two identified landscape receptors within *Table 10.9*.

4.9 As agreed at the pre-application stage, the National Character Areas have not been assessed and are referred to for context only.

4.10 In line with the methodology, the assessment of the landscape effects considers the change to the identified landscape receptors. Both of the identified landscape receptors have been assessed as being of medium/low sensitivity,

4.11 The LVIA identifies significant landscape effects at the phases of **construction, operation (year 1),** and **operation (year 10),** however no significant landscape effects were identified at the **decommissioning** stage. The following effects upon identified landscape receptors are identified in the LVIA:

- At **Construction** the following receptors were assessed as having the following landscape effects:
    - LCA7: Limestone Heath: **Major/Moderate Adverse: Significant** (temporary);
    - LCA 11: Central Clays and Gravels: **Major/Moderate Adverse: Significant** (temporary);
- At **Operation (Year 1)** the following receptors were assessed as having the following landscape effects:
    - LCA7: Limestone Heath: **Major/Moderate Adverse: Significant**;
    - LCA 11: Central Clays and Gravels: **Major/Moderate Adverse: Significant**;
- At **Operation (Year 10)** the following receptors were assessed as having the following landscape effects:
    - LCA7: Limestone Heath: **Major/Moderate Adverse: Significant**;
    - LCA 11: Central Clays and Gravels: **Moderate Adverse: Not Significant.**

4.12 These 'significant' effects represent direct effects on the landscape of the entirety of the Site. At year 10, LCA7: Limestone Heath, which accounts for the majority of the land within the DCO boundary, has been assessed as having a **Major/Moderate Adverse residual** effect even when mitigation planting has established. LCA 11: Central Clays and Gravels has been judged by the author as having a **Moderate Adverse residual** effect even when mitigation planting has established, however has judged this to not be significant. This accounts for a direct effect on this landscape receptor, and while we agree that professional judgement has been applied and a rational provided within paragraph 10.9.193 in regards to not being

judged a significant effect, we would query this judgement and would welcome the opportunity to clarify this further during the examination stage.

4.13 Localised removal of vegetation is identified in the assessment of landscape effects; however, it is unclear whether this includes vegetation works on the wider highways network, and what this would entail. We strongly recommend limiting vegetation loss along Site boundaries for access or sight lines, or along construction access routes, because this has the potential to change the character of the local landscape beyond the limits of the Development.

5.0 Appraisal of Visual Baseline and Effects

The following section provides a review of the Visual Baseline and Effects, based on the following criteria:

- *Has the methodology been followed in the visual assessment?*
- *Are all visual receptors and all likely effects comprehensively identified and assessed?*
- *Has the value and susceptibility of visual resources been appropriately addressed?*
- *Is there a clear and concise summation of the visual effects of the proposals?*
- *Are the viewpoints that have been used appropriate and meet the number, location and requirements agreed in discussions at the pre-application stage during scoping and consultation?*
- *Are the Visualisations/Photomontages that have been used appropriate and meet the number, location and requirements agreed in discussions at the pre-application stage during scoping and consultation?*

Visual Baseline

5.1 The Visual Baseline is considered in section 10.5 of the LVIA, and describes in paragraph 10.5.16 that the primary visual receptors identified in the Study Area likely to be affected by the development are Residents; Users of PROW; and Users of local road network. The process of identifying visual receptors started with the development of a Zone of Theoretical Visibility (**ZTV**) analysis, used to assist and identify potentially sensitive receptors. This is described in paragraph 10.5.20 to 10.5.11, with Visual Receptors identified on Figure 10.3 and the ZTVs shown on Figure 10.5.

5.2 Following fieldwork, utilising the information presented within the ZTVs, visual receptors likely to experience views of the construction, operation or decommissioning of the Development were identified. Viewpoints were subsequently selected to represent views from these receptors. The selection of viewpoints formed part of the pre-application consultation and includes locations recommended as part of this process. Viewpoints are located on Figure 10.4.

5.3 Paragraph 10.5.11 summarises the identified receptor groups (residential locations, PROW, and from roads) with likely views of the scheme.

5.4 Paragraph 10.9.10 notes that *"In order to inform the assessment of magnitude and significance of residual effects on landscape character and visual amenity, viewpoint analysis has been undertaken for a total of 40 assessment viewpoints".* These forty viewpoints are presented as photographs within *ES Volume 4: Landscape Visualisations*.

5.5 The baseline follows the LVIA methodology and considers the consultation undertaken at the pre-application stage. Further detail of the visual baseline is provided within *Appendix 10.4: Viewpoint Analysis.*

Visualisations/Photomontages

5.6 Viewpoints representative of the visual receptors were identified through consultation and agreed upon (refer **Appendix A**). This baseline process resulted in the identification of forty viewpoints, to represent the views of the visual receptors.

5.7 Photographs have been prepared as Type 1 (annotated photographs) and presented within *ES Volume 4: Landscape Visualisations*. Of these viewpoints, thirteen have been developed as Type 3 (photomontages) visualisations and presented in *ES Volume 4: Landscape Visualisations* for year 1 and year 10. A methodology for photography and visualisations is provided in *Appendix 10.1: Landscape and Visual Methodology and Assessment Criteria*.

Visual Assessment

5.8 The Visual Assessment is detailed within section 10.7 of the LVIA which includes an assessment of value and susceptibility, and subsequently the sensitivity of visual receptors and viewpoints, which is aligned with the criteria provided within the methodology. A viewpoint analysis has been carried out on the 40 assessment viewpoints to inform the assessment of magnitude and significance of residual effects on visual amenity. This is detailed within Appendix *10.4: Viewpoint Analysis.* This is subsequently summarised in *Table 10.11 Viewpoint Analysis Summary* within the LVIA, which clearly lays out the Scale of Change for both visual and landscape aspects.

5.9 The visual assessment commences at paragraph 10.9.4 and Table 10.10 summarises the sensitivity of the identified visual receptors through combining value and susceptibility. Twelve receptors have been assessed as being of High/Medium sensitivity, with none identified as being of a high sensitivity.

5.10 The visual baseline is structured around receptors with viewpoints utilised to represent views and inform judgements on magnitude and significance of residual visual effects of those identified receptors. This approach is aligned with recent LI guidance which confirms that the "*focus of the visual assessment should be the visual receptors"*, and that viewpoints are for the *"illustration of the visual effects*".

5.11 The LVIA identifies significant visual effects at the **construction, operation (year 1),** and **operation (year 10)** phases, however no significant visual effects were identified at the **decommissioning** stage.

5.12 The following significant effects are identified in the LVIA, summarised in paragraphs 10.9.55 to 10.9.136 (for construction effects) and 10.9.194 to 10.9.333 (for operation effects – both year 1 and residual at year 10) within the LVIA:

- At **Construction**:
    - **Major Adverse** (significant) visual effects for:
        - PRoWs between Blankney, Scopwick and Kirkby Green extending up to Blankney Walks Lane and the railway on the eastern site boundary (including several 'Stepping Out' walks);
    - **Major/Moderate Adverse** (significant) visual effects for:
        - Minor Roads to Temple Bruer and Thompsons Bottom Farm
        - PRoWs and lanes north-west between A15 and Wellingore Heath including New England Lane and Gorse Hill Lane
    - **Moderate Adverse** (significant) visual effects for:
        - PRoW between RAF Digby and B1188 (Footpath R5/1);
        - Bloxholm Woods Local Nature Reserve Footpath;
        - Spires and Steeples Trail;
        - A15 trunk road;
        - B1191 (Heath Road)
    - **Moderate Adverse** (Not significant) visual effects for:
        - Navenby Lane
        - Church Lane, church and properties at Brauncewell
        - PRoWs and lanes south-west between A15 and Brauncewel

These are typically identified for receptors that are in close proximity to the development with limited or absent screening. These **Moderate** and **Major Adverse** effects are considered to be significant and would result from the proposed construction activity seen at close range across a wide extent of a view.

- At **Operation (Year 1)**:

  - **Major Adverse** (significant) visual effects for:
    - PRoWs between Blankney, Scopwick and Kirkby Green extending up to Blankney Walks Lane and the railway on the eastern site boundary (including several 'Stepping Out' walks);

  - **Major/Moderate Adverse** (significant) visual effects for:
    - PRoW between RAF Digby and B1188 (Footpath R5/1);
    - Minor Roads to Temple Bruer and Thompsons Bottom Farm;
    - PRoWs and lanes north-west between A15 and Wellingore Heath including New England Lane and Gorse Hill Lane;
    - A15 trunk road;

  - **Moderate Adverse** (significant) visual effects for:
    - Bloxholm Woods Local Nature Reserve Footpath;
    - Spires and Steeples Trail;

  - **Moderate Adverse** (Not significant) visual effects for:
    - Navenby Lane;
    - Church Lane, church and properties at Brauncewell;
    - PRoWs and lanes south-west between A15 and Brauncewel;
    - B1191 (Heath Road)

    These are typically identified for receptors that are in close proximity to the development with limited or absent screening. These **Moderate, Major/Moderate Adverse** and **Major Adverse** effects are considered to be significant and where any mitigation planting is yet to establish and is subsequently providing limited screening or integration of the development.

- At **Operation (Year 10)**:

  - **Moderate Adverse** (significant) visual effects for:
    - PRoWs between Blankney, Scopwick and Kirkby Green extending up to Blankney Walks Lane and the railway on the eastern site boundary (including several 'Stepping Out' walks);
    - A15 trunk road;

    Moderate Adverse (Not significant) visual effects for:
    - PRoWs and lanes south-west between A15 and Brauncewel
    - PRoWs and lanes north-west between A15 and Wellingore Heath including New England Lane and Gorse Hill Lane

5.13 The development has been identified in the LVIA as resulting in a Significant change to a variety of visual receptors during construction and in the early years of operation and maintenance, with Significant residual visual effects much reduced in number. Seven of these sensitive receptors were assessed as having significant effects prior to any mitigation planting maturing (at Operation year 1). This reduces to two receptors experiencing significant residual effects at year 10 which suggests a potential over reliance upon mitigation planting to screen the proposals without full attention to the potential impact of this screening on the landscape. These residual Significant effects have been identified as arising from sensitive users along PROW and users of the A15 where it is not possible to sufficiently screen views of the development, or in the case of the A15 where the mitigation itself may cause an adverse effect (through screening open views). The reduction in Significant visual effects relies upon the successful establishment of the mitigation planting scheme.

5.14 Access, and the wider highways elements of the scheme, do not appear to be fully considered in the LVIA beyond increased traffic during construction and decommissioning phases. This is despite the potential for adverse effects on the views of the rural landscape including potential vegetation loss, urbanisation and reduction of visual amenity. Consequently, the visual effects during construction may be underestimated within the LVIA due to the unconsidered impact of loss of vegetation. We recommend limiting vegetation loss along site boundaries, for access or sight lines, or along construction access routes, as this has the potential to change the character of the local landscape beyond the limits of the development. Clarification on this matter by the applicant should be provided.

6.0 Appraisal of Cumulative Landscape and Visual Effects and Residential Visual Amenity Assessment

The following section provides a review of the cumulative effects and Residential Visual Amenity Assessment (RVAA), based on the following criteria:

- *Have cumulative landscape and visual effects been addressed?*
- *Are the RVAA and cumulative effects methodologies in accordance with relevant guidance and meet the requirements of the relevant Regulations?*
- *Does the methodology and scope of the assessment of cumulative effects and RVAA meet the requirements agreed in discussions at the pre-application stage during scoping and consultation?*
- *Has the methodology been followed consistently?*
- *Are residential and cumulative receptors and all likely effects comprehensively identified?*
- *Are any residential properties (receptors) likely to experience significant effects to their visual amenity?*

Cumulative Methodology

6.1 Cumulative landscape effects are considered in *Chapter 16: Cumulative Effects*, and not summarised in the LVIA chapter. It would have been useful to bring all the landscape and visual assessment matters together in one document even if just as providing a summary, however the cumulative landscape and visual effects section within ES Chapter 16 is dealt with separately in paragraphs 16.6.11 to 16.6.45 and provides a clear assessment of the cumulative landscape and visual effects.

6.2 Schemes that are considered for the cumulative assessment are identified within *Table 16.3 Short list of other existing development and/or approved development* and illustrated on *Figure 16.2: Cumulative Short List Radius*. *Table 16.2 Zone of Influence for each environmental factor* clarifies that a 10km zone of influence from the order limits has been considered for cumulative Landscape and Visual matters.

Cumulative Landscape and Visual Effects

6.3 Cumulative landscape and visual effects are those that: "*result from additional changes to the landscape or visual amenity caused by the proposed development in conjunction with other developments"*.

6.4 National Grid Navenby Substation is identified as the primary project to potentially generate cumulative landscape or visual effects with Springwell Solar Farm. Subsequently Significant cumulative effects are identified through extending the overall area of development, increasing the land use area changed from agricultural to energy infrastructure, and also visually through increasing the extent the two schemes may likely be visible by receptors.

6.5 We note that para. 16.6.41 states that "*No further additional mitigation has been proposed to mitigate inter-project cumulative effects between the two developments.*" However, there are potential opportunities for the applicants of each scheme to coordinate mitigation planting in the area around the National Grid Substation, which we would recommend are investigated further if possible. For example, this may include the extending of carriageway hedgerow planting further north along the western edge of the A15 (such as along field parcels Bcd024, Bcd027, Bcd031), which are in the Springwell Order Limits and would bring mitigation planting closer to potential visual receptors, likely further screening the proposed National Grid Substation.

6.6 We would also expect that landscape and visual cumulative effects would be likely from:

- 23/0390/EIA SCO Town and Country Planning Act 1990 Navenby Heath 400 Megawatt (MW) Battery Storage Development 2km north west
- 24/0959/FUL Town and Country Planning Act 1990 RAF Digby Proposed office and training building Adjacent to Order Limits/within Order Limits.

Table 16.11 identifies cumulative effects from these two schemes, with further detail provided from paragraph 16.7.48. However the LVIA identifies in paragraph 16.7.55 that *"No significant inter-project cumulative effects have been identified and therefore it is considered that there is no additional mitigation is required above what is described".*

Residential Visual Amenity

6.7 Residential Visual Amenity has been assessed and presented within *Appendix 10.5 Residential Visual Amenity Assessment*. As clarified within paragraph 10.4.53 of the LVIA *"Residential Visual Amenity Assessment is a stage beyond Landscape and Visual Impact Assessment and focuses exclusively on private views and private visual amenity",* whereas the LVIA process is typically associated with public views from public areas.

6.8 The methodology for assessing Residential Visual Amenity is outlined within Section 1.4 of Appendix 10.5. This correctly references the Landscape Institute's Technical Guidance Note *2/19: 'Residential Visual Amenity Assessment',* which identifies in paragraph 1.3.2 of Appendix 10.5 that the Residential Visual Amenity Threshold (**RVAT**) is reached when further the change to visual amenity of individual properties identified as *"having the greatest magnitude of change"*

6.9 *Table A10.5.1 Preliminary residential property visits* within *Appendix 10.5* and *Figure 10.10* identify those properties identified and those visited sited as part of the assessment of Residential Visual Amenity.

6.10 Paragraph 10.7.1 of Appendix 10.5 concludes that while there will be significant adverse visual effects from several properties, none of these will reach the RVAT.

6.11 Paragraph 10.7.2 goes on to identify mitigation commitments that have been developed to reduce visual effects on residential properties.

7.0 Mitigation and Design

The following section provides a review of the Mitigation and Design, based on the following criteria:

- *Is there evidence of an iterative assessment-design process and it is clear that this has informed the site redline, layout and primary and secondary mitigation?*
- *How appropriate is the proposed mitigation?*
- *Are potential cross-over topics, such as heritage or ecology, addressed and incorporated within the mitigation?*
- *Is the long-term management of existing and proposed vegetation properly addressed in any management plans to promote establishment?*

Evidence of Iterative Process

7.1 The scheme has been presented as evolving through an iterative process, with the landscape and visual findings feeding back into the design. This has been evident at several consultation workshops and meetings held between the applicant and LCC, NKDC and community engagement sessions. This is clarified in paragraph 3.1.3 which states that the scheme has: "*evolved throughout the environmental assessment process to avoid or minimise environmental effects and in response to consultation and engagement feedback".* It is noted that the layout appears to respond to issues and points raised through these sessions and the AAH TMs that were subsequently issued.

7.2 The design appears to have a clear evolution through different stages of the masterplan. The mitigation has responded to the recommendations of the local landscape character area reports and feedback from community events and statutory consultees.

Mitigation Measures

7.3 Section 3.2 of the ES describes Green Infrastructure proposed as part of the Scheme (covered by Work Order 9). The location of the proposed Green Infrastructure is subsequently located according to the Works Plans.

7.4 Section 10.6 of the LVIA describes the embedded mitigation measures of the scheme which avoid, where practicable, adverse effects on the landscape and views. This process is described in more detail within ES Chapter 3 and Chapter 4. These mitigation proposals reference a series of documents within the DCO package, in particular the Design Approach document which lays out how landscape and visual matters have been addressed within the design.

7.5 The *Outline Landscape and Ecology Management Plan* provides information regarding the establishment and maintenance of the planting associated with the Development, as shown on *Figure 3.1: Zonal Masterplan* and *Masterplan* and in more detail within *Figures 3.3A* to *3.3F: Green Infrastructure Parameters*.

7.6 The success of the landscape mitigation to meet the objectives laid out in the management plan - to integrate and screen proposals, promote conservation and protection of the environment, and encourage ecological and habitat diversity - is highly dependent upon the successful management and maintenance of the new planting, as well as the protection of exiting trees and hedgerows. The maintenance operations provide an initial overview of operations; however, we would expect the management plan to be developed further beyond the initial 5-year period, particularly if landscape and visual effects are being assessed at 10 years. The long-term reduction in landscape and visual effects, presented in the LVIA, are based on the long-term success of the landscape mitigation. Similarly, any early planting (pre-construction) should be included in the maintenance plan as the reduction in effects described in the LVIA are also based on the assumption that this too will have established as planned.

7.7 Monitoring of the proposals is a key aspect of the mitigation plan and is something which needs further development to ensure there is sufficient robustness to deal with the challenging climatic conditions when it comes to establishing new planting. The updating of the management plan every 5 years after the initial establishment period will go some way to ensuring that it is kept valid and can respond to issues and trends effectively.

7.8 There is a potential over reliance within the LVIA upon planting to mitigate the visual effect of the development; the character of the area is relatively open, and too much planting to screen the development without due care for the location, could have detrimental impacts. The PROW and local roads in the study area enjoy an open aspect across some areas of the

study area, in particular along the A15, where users currently experience open views across this agricultural landscape. Therefore, care needs to be taken to prevent the loss of this character through an overbearing set of mitigation proposals.

7.9 We would re-emphasise the point made in the cumulative effects section regarding potential opportunities for the applicants of Springwell and the Navenby Substation schemes to coordinate mitigation planting in the area around the proposed National Grid Substation.

8.0 Conclusions and Recommendations

The following section provides an overall summary and conclusion on the suitability of the Landscape and Visual elements of the DCO Application and whether they are sufficient to support an informed decision. This includes the adequacy of the LVIA, reviewed in accordance with the Landscape Institute *Technical Guidance Note 1/20 (10 Jan 2020): Reviewing Landscape and Visual Impact Assessments (LVIAs) and Landscape and Visual Appraisals (LVAs)*.

Finally, there are recommendations for further information that should be provided to assist in the examination of the DCO Application.

Summary and Conclusions on the LVIA

8.1 The LVIA and the associated figures, appendices and documents provide a thorough analysis of the Development and is appropriate to the scale and context of the Site. The process of assessment is thorough and well explained in the volumes, which include a clear summary of findings and identification of significant effects on the landscape and visual baseline.

8.2 By reason of its mass and scale, the Development would lead to significant adverse effects on landscape character and visual amenity at all main phases of the scheme (construction, operation year 1, operation year 10). The Development has the potential to transform the local landscape by altering its character on a large scale. This landscape change also has the potential to affect a wider landscape character, at a regional scale, by replacing large areas of agricultural or rural land with solar development, affecting the current openness, tranquillity and agricultural character that are identified as defining characteristics of the area.

8.3 The scale and extent of development would also lead to significant adverse effects on views from receptors, by altering from views within an agricultural or rural landscape to that of a landscape with large scale solar development.

8.4 The cumulative landscape and visual effects of the Development have the potential to bring about significant landscape and visual effects, however adjacent schemes are relatively small in comparison with the wider Springwell order limits schemes.

8.5 Tree and vegetation removal associated with the Development, including wider highways improvements and access for construction, must be clarified through the examination process, and subsequently any works (such as lopping or pruning), or removal of trees and hedgerows must be agreed prior to any works commencing. Prior to any construction activities, all tree and hedgerow protection methods associated with that phase of construction should also be clarified and subsequently agreed with the appropriate authority (in this case the local planning authority). This would be to BS:5837 Trees in Relation to Construction and any subsequent arboriculture method statements, again this should be approved by the appropriate authority. In particular this should ensure existing trees, and associated root protection areas, are suitably protected throughout the entire construction period. This would also likely include areas within the order limits, but away from construction activity, such as storage areas for materials which may suffer from tracking by plant that would damage tree root protection zones.

8.6 While the submission includes landscape proposals, these are of a high level and it would be expected that if the project proceeds much more detailed plans would to be submitted and subsequently agreed with the appropriate authority (in this case the local planning authority) prior to the commencement of any works. This would include clear detail of the areas of landscape mitigation, location and types of planting (species), as well as number, density and specification. The mitigation illustrated on the *Outline Landscape and Ecology Management Plan* has been utilised to assess the landscape and visual effects of the scheme, therefore we would expect any detailed landscape proposals to consist of the area and extent shown on these plans as a minimum.

APPENDIX A

Previous AAH Consultation documents:

AAH TM01 Landscape and Visual Scoping Opinion 14th April 2023

AAH TM02 Initial Viewpoint Comments 29th June 2023

AAH TM03 Viewpoint Comments 15th August 2023

AAH TM04 PIER Comments 19th February 2024

AAH TM05 Viewpoint Comments 10th July 2024

AAH consultants

Technical Memorandum 1: AAH TM01

Lincolnshire County Council, Springwell Solar Farm

Landscape and Visual Scoping Opinion

This Review has been carried out by AAH Consultants on behalf of Lincolnshire County Council (LCC) and relates to landscape and visual issues and elements only. It is based upon a review of the relevant sections of the following document:

- *Springwell Solar Farm; Scoping Report; 21st March 2023.* Prepared by *RSK Environment Limited* for *Springwell Energy Farm Ltd.*

Overall, we would expect that the assessment of potential Landscape and Visual matters and evolving proposals relating to the Springwell Solar Farm, as a Nationally Significant Infrastructure Project (NSIP), follow an iterative process of engagement and consultation to ensure the following are not fixed at this stage and are discussed, developed and agreed at subsequent technical meetings:

- Landscape and Visual Impact Assessment (LVIA) Methodology;
- Development, and subsequent ZTV, parameters;
- Study Area extents (distance);
- Viewpoint quantity and locations;
- Photomontage/Accurate Visual Representations (AVRs):
    - Quantity and location;
    - Phase depiction;
    - AVR Type and Level.
- Mitigation Measures/Landscape Scheme/Site Layout;
- Cumulative effects, including surrounding developments to be considered; and
- The extent as to which a Residential Visual Amenity Assessment (RVAA) should be considered (based on the Landscape Institute TGN 2/19) if there are residential properties with receptors likely to experience significant effects to their visual amenity.

We would also expect the production of the Landscape and Visual chapter of the Environmental Statement (ES), which would be in the form of a Landscape and Visual Impact Assessment (LVIA), and any supporting information (such as plans or figures) reflect current best practice and guidance from, as a minimum, the following sources:

- *'Guidelines for Landscape and Visual Impact Assessment'*, (GLVIA3), April 2013 by the Landscape Institute (LI) and Institute of Environmental Management and Assessment (IEMA);
- *'An Approach to Landscape Character Assessment'*, Natural England (2014);
- '*Technical Guidance Note (TGN) 06/19 Visual Representation of Development Proposals'*, 17th September 2019 by the Landscape Institute (LI);
- *'Technical Guidance Note (TGN) 1/20 Reviewing Landscape and Visual Impact Assessments (LVIAs) and Landscape and Visual Appraisals (LVAs)'*, 10th January 2020 by the Landscape Institute (LI) ;
- *'Technical Guidance Note (TGN) 04/20 Infrastructure',* April 2020 by the Landscape Institute (LI); and

- *'Technical Guidance Note (TGN) 2/21 Assessing landscape value outside national designations'*, May 2021 by the Landscape Institute (LI).

While the focus of this review is on Landscape and Visual matters, other information provided within the report, and associated Appendices, has also been considered, providing background and context to the site. At this initial stage of the NSIP process, the content and level of information provided by the developer within *Section 6.5 Landscape and visual* are generally considered satisfactory, however, as stated previously, we would expect to discuss this content and approach as part of the iterative process. Due to the scale and extent of the site and proposed development, we would be able to discuss and agree the *Scoping questions* within *Section 6.5.14* as part of this ongoing process, as at this stage it is not possible to provide full answers to these questions. The following should be considered in the evolving assessment and layout:

Viewpoints

The final locations of viewpoints are to be reviewed and agreed with LCC and other relevant stakeholders. The final viewpoint selection should also consider views of taller and more conspicuous elements, such as battery storage or sub-stations once the layout is more developed, as well as consider potential key, or sensitive, viewpoints. We would welcome an initial discussion and subsequent workshop (on site if appropriate) with the developer's team in regards to proposed viewpoints.

Photomontages

To gain an understanding of the visibility of the development and how the panels and infrastructure would appear in the surrounding landscape, Photomontages/Accurate Visual Representations (AVRs) should be produced. The number and location of the agreed viewpoints to be developed as Photomontages/AVRs should be agreed with LCC and other relevant stakeholders and produced in accordance with *TGN 06/19 Visual Representation of Development Proposals*. At this stage, it is deemed appropriate that these should be produced to illustrate the proposals at different phases: Existing Situation (baseline), Operational (year 1) and Residual with planting established (10 to 15 years). The Photomontage/AVR Level and Type is to be discussed and agreed.

Methodology

As stated previously, the LVIA should be carried out in accordance with the GLVIA3 and undertaken by suitably qualified personnel. The methodology provided at *Section 6.5.11 and Appendix D* is typical of those used for ES Chapters and standalone LVIA where potential significant effects can be considered and reflects the guidance in GLVIA3. We would request that the most up to date technical guidance be used and the methodology is further interrogated at the next phases of the project.

The *Landscape and Visual* methodology within *Appendix D* identifies that **Significant** effects are identified as those that are "*Major or Major/Moderate*", and that in the case of predicting *Moderate effects* professional judgement will be applied. This is fine and follows GLVIA3, however for full transparency, we would expect that a full explanation be provided in the assessment as to whether a Moderate effect on a receptor is assessed as being **Significant** or not, and not simply relying on stating that an effect is not significant "based on professional judgement".

The methodology should also clearly lay out the process of assessing temporary and permanent elements of the scheme, and the LVIA should clearly identify those elements that would not be

decommissioned at the end of the life of the development, such as the National Grid substation, and assessed accordingly.

Scope of the Study Area:

It is acknowledged in *Section 6.5.2* that, based on desktop (ZTV mapping) and field study, an initial Study Area covering 3km has been allowed for the proposed development, and an extended Study Area covering 5km for the National Grid substation and National Grid connecting tower. At this early stage, we recommend these extents are discussed and further reviewed as the full extent of potential visibility of the development is not yet fully known, and the ZTV mapping within *Appendix F* does identify potential visibility beyond these extents. The ZTV mapping would be updated once the proposals have developed (as stated within paragraph 13.5) and the study area should not be fixed until the full extents of visibility are known from both desktop and site work.

Once the study area has been defined, the LVIA should also provide a justification for the full extent/distance, which would be further refined as part of the iterative process.

Landscape

Published landscape character areas have been identified, however to align with GLVIA3 the LVIA should include an assessment of landscape effects at a range of scales and likely need to include a finer grain landscape assessment that includes the Site and immediate area that also considers individual landscape elements or features that make up the character area. *Sections 6.5.8*. and *6.5.9*. identify a range of potential landscape receptors to be scoped in or out of the LVIA, however at this early stage of the project we request these be reviewed and consulted upon further once proposals have been developed and we are not in a position to confirm their inclusion or omission.

Visual

Several visual receptors are identified within *Sections 6.5.5*. and *6.5.8*. We would expect that the visual assessment would include for identification of visual receptors, and not just an assessment of any agreed viewpoints, which should clearly cross reference viewpoints to associated receptors. *Sections 6.5.8*. and *6.5.9*. identify a range of potential visual receptors to be scoped in or out of the LVIA, however at this early stage of the project we request these be reviewed and consulted upon further once proposals have been developed and we are not in a position to confirm their inclusion or omission.

The visual assessment should take account of the 'worst case scenario' in terms of winter views, and effects associated with landscape mitigation at the Operational Phase (year 1), Residual Phase with planting having established (10 to 15 years), and at the Decommissioning Phase.

The LVIA should ensure all elements associated with the development are considered and assessed, such as battery storage, sub-stations, CCTV poles and boundary fencing, which may be more visible than panels due to height, mass and extent.

Cumulative impacts

Cumulative Landscape and Visual effects should be assessed in regards to other major developments, and in particular commercial scale solar developments, as appropriate in regards to proximity and scale.

Mitigation and Layout

As this is an iterative process, at this stage it is not relevant to comment on any potential mitigation or layout of the development. However, best practice guidance, relevant published landscape character assessment's and Local and County Council Policy and Guidance shall be referred to and implemented as appropriate.

We would also expect the landscape and planting scheme is coordinated with other relevant disciplines, such as ecology, heritage or civils (e.g. SuDS features), to improve the value of the landscape and reflect appropriate local and regional aims and objectives. Any Landscape Scheme and associated Outline Landscape and Ecological Management Plan should accompany the ES which should cover the establishment period, which is assumed would be up to 15 years to cover the period up to the residual assessment. The management plan should provide for both new planting and existing retained vegetation and how it will be managed and protected through all phases of the development.

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14th April 2023

AAH consultants

Technical Memorandum 2: AAH TM02

Lincolnshire County Council, Springwell Solar Project

Visual Amenity: Initial Viewpoint Comments

An initial Site visit was carried out by representatives from AAH, Lincolnshire County Council (LCC) and North Kesteven District Council (NKDC) on 1st June 2023, which was followed by a meeting with Stephenson Halliday and LDA Design at LCC offices to discuss the proposed scheme, progress to date and strategy for the landscape elements over the coming weeks and months. Following the initial site visit and discussions on the 1st June, a plan and schedule identifying a shortlist of potential viewpoints for the LVIA were issued to AAH, LCC and NKDC via email. AAH subsequently visited site with Stephenson Halliday on the 13th June 2023 to view the site and surrounding area and visit key locations and discuss the potential viewpoints currently proposed for the LVIA.

Therefore, we have the following general comments and requests:

1. Comments provided are based on the information provided to AAH and subsequent AAH fieldwork carried out to date. Therefore any comments are based on the layouts currently provided, which are confirmed as undergoing development. This is to be expected as part of an iterative process. While we understand that the information provided to date is not intended to undergo wholesale changes, the layout is undergoing design development and subject to the final layouts presented, additional viewpoints or information may be requested. This is particularly pertinent for taller/larger and permanent elements such as sub stations or battery storage which due to their mass will likely be more conspicuous in the landscape;

2. The locations of ancillary elements, such as fencing, Battery Storage, Inverters, Transformers and Switchgears will be important in reducing visual impacts as these could appear more conspicuous than uniform PV arrays – their location should be carefully considered in relation to visual receptors, but also relating to the PV Arrays. The final size and location of all these ancillary elements should be provided and indicated on the layouts when available to enable their impact to be understood; and

3. We do not feel we can provide more detailed feedback or suggested viewpoint locations at this stage on the sub-station location(s) until further information is provided. However, we would expect the LVIA to provide a clear evaluation and likely effects of these.

For detailed comments on the proposed viewpoints, please refer to the appended schedule provided to us by Stephenson Halliday. The detailed comments have been added to an additional column to aid clarity.

The following additional comments are in regards to visibility of the site from general groups of receptors and viewpoints, and we have also marked up the plan provided to us by Stephenson Halliday, appended to this memo, which locates the comments below. We would suggest the comments provided are discussed further prior to finalising. If it is considered that suggested views of the site and development are not attainable from any identified areas, or viewpoints not appropriate, a statement to this effect should be provided to aid transparency. It is important that all viewpoint photography should provide the most advantageous views of the site and proposed development, and avoid any obstructions to a clear view such as cars:

A. **Longer distance views identified (X2, X1, X3) are unlikely to provide views of the Development, and at this stage views from receptors in these areas to the west, such as communities at Waddington, Navenby, Wellingore or Welbourn or along the A607, or PROW in these areas. However, a view from more sensitive receptors in these areas would be useful to demonstrate this, such as along the eastern settlement edge.**

B. **Potential additional viewpoint included from the area around Thompson's Bottom and western boundary.** This would provide a clear view east to the site adjacent to the OH line and will include views of the A15 and also longer range views to the east;

C. **Please review visibility and potential views of the site and development from the area south west of VP C12, around Church of St John the Baptist.** While intermittent vegetation and landform will screen some views, there are potentially sensitive receptors in this area and the upper extents of development may be visible. This may not require a viewpoint, however views from this location should be considered within the assessment.

D. **Please review visibility and potential views of the site and development from within Bloxham Wood Nature Reserve.** Subject to the location of the substation, it is unlikely that this would require an additional viewpoint, as we have assumed Viewpoints I20 and I18 would provide an illustrative view of this), however views from this location should be considered within the assessment as it is unclear as to the extent as to which vegetation would screen views of the development from this location as a path runs close to the southern edge of the woods;

E. **Please review visibility and potential views of the site and development from PROW Temp/1/1 and Temp/2/1 at junction of the A15.** Views from this location (and along the PROW to the east and west) would likely be more sensitive and close range than from Viewpoint C17. Would a viewpoint from this location be appropriate, either relocated C17 or an additional view)?

F. **Views from PROW within Eastern Parcel (e.g. H8, H18, D8 etc.):** these are from sensitive receptors and viewpoints from these PROW will be required to illustrate these views. Locations for photographs should be selected to ensure the most advantageous views of the site and proposed development are illustrated with proposals centre to the view, avoiding obstructions where possible;

G. While views along the B1191 between Scopwick and RAF Digby are covered by Viewpoints H12 and H14, would a view **covering Scopwick Mill and PROW Scop/13/1** be required to cover more sensitive receptors in this area? Alternatively, these views may be covered by the assessment when discussing potential receptors, however it is important to identify these.

H. Viewpoint B15 provides a clear view north to the Site from users of the A15. The heritage asset of Dunsby Village lies just to the south. Is there a way to capture this in the view without compromising the clear view to the Site, or would B15 be representative of this potential view?

As stated, at this stage we do not have details on the final location and appearance/extent of taller/larger elements that for part of the development which would likely have visual impacts that may require additional viewpoints beyond those initially identified.

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29 June 2023

Legend:

- Proposed Site Boundary
- Photo Locations

Coordinate System: British National Grid
Projection: Transverse Mercator
Datum: OSGB 1936
Units: Meter

Rev	Date	Description	Drn	Chk	App
00	09/06/23	First Draft	MP	JI	

Springwell Solar Farm

Springwell Solar Farm

DOCUMENT:
Consultation

TITLE:
Shortlisted Viewpoint Selection for Discussion with NKDC/LCC

FIGURE NUMBER:

0 0.5 1
Kilometers

Scale: 1:50,000 @ A3

REV 00

Path: C:\Users\mo.pamplin.RSKHELSBY\RSK Group\SH Projects 200s - 0297 - Acre Lane Solar Farm\05 Working Files\02 GIS\P663620.aprx\Consultation Photo Locations

0297 - Springwell Photography Details

Photo Location reference	*Location Name*	*Coordinates*	Co-ordinates *X*	*Y*	*Time*	*Date*	*Potential Viewpoint?*	**AAH/LCC/NKDC initial Comments on Viewpoints (to be read in conjunction with AAH TM02)**
A3	Spires and Steeples Trail junction with Trundle Lane - N of Scopwick	TF 06972 58430	506972	358430	11.47am	07.02.23	Yes - view from SAST at shouth east corner of Eastern parcel	Agree
A5	Scop/3/1 at junction with Main Street, Scopwick	TF 07616 58049	507616	358049	12.16pm	07.02.23	Maybe - no view of development. Demonstrates no view from Scopwick	Views from these sensitive receptors are important, however selection would be dependant upon final layouts and visibility of development
A10	Spires and Steeples Trail SE of Scopwick - Loctaion 3	TF 07529 57509	507529	357509	01.12pm	07.02.23	Maybe - no view of development. Demonstrates no view from SAST south of Scopwick	Views from these sensitive receptors are important, however selection would be dependant upon final layouts and visibility of development
A12	Scop 7/1 at junction with B1191	TF 08651 57963	508651	357963	02.31pm	07.02.23	Yes - view from PROW immeiately north of Kirkby Green	Agree
A13	Scop 7/2 at junction with Scop 7/1	TF 08583 58371	508583	358371	02.47pm	07.02.23	Maybe - PROW approaching site	Views from these sensitive receptors are important, however selection would be dependant upon final layouts and visibility of development
A17	B1188 jct with Bloxholm Lane - east side of junction	TF 06649 58523	506649	358523	03.44pm	07.02.23	Yes - B1188 at site access	Agree
B3	B1189 Moor Lane, Blankney	TF 10040 60859	510040	360859	10.42am	09.02.23	Maybe - View from B1189 (negligible glimpse of site through vegetation)	Fine - would illustrate potential eastern views.
B5	B1191, west of Junction with B1189 and Station Road	TF 11142 58573	511142	358573	11.17am	09.02.23	Maybe - Illustrates no view from B1191	Is this required? B3 may represent eastern receptors. B5 not particularly sensitive, and asssume no view.
B7	Main Street, west of junction with B1188, Lincoln Road	TF 07720 54830	507720	354830	12.05pm	09.02.23	Maybe - Illustrates negligible view from Digby	Assume limited view?
B10	Church Lane, north of All Staints' Church, Brauncewell	TF 04546 52463	504546	352463	1.06pm	09.02.23	Yes - glimpse view from Brauncewell	Agree: Subject to final location, sub-station may be visible in this location also. If so, assume view would also represent PROW to east
B11	North of junction of A15 and Church Lane	TF 03622 52628	503622	352628	1.22pm	09.02.23	Yes - southern boundary of western parcel	Agree
B14	Junction of Footpath Brau/10/1 and Long Lane	TF 01514 51973	501514	351973	2.16pm	09.02.23	Yes - view from south east of western parcel	Agree
B15	Junction of A15 and local road east of Dale Farm	TF 03847 51623	503847	351623	2.31pm	09.02.23	Yes - view from southern approach on the A15	Agree, would this view include heritage receptor Dunsby Village? If viewpoint relocated to south would the view likely be screened?
B20	The Viking Way / High Dike south of Temple Road	SK 99250 52993	499250	352993	4.18pm	09.02.23	Yes - Distant view from High Dike	Fine. Potentially senstive receptor, however long range view.
C1	Green Man Lane	TF 04209 59058	504209	359058	9.33am	10.02.23	Yes - distant view from minor road to the north	Fine: would this also represent potential views from PROW to the south (Scop/12/2, Scop/1/2, and Scop/1/1) which would likely be more sensitive?
C4	Field entrance, Temple Road	TF 03023 53125	503023	353125	10.50am	10.02.23	Yes - View from Temple Road	Agree
C7	Temple Road east of Temple Bruer	TF 01437 53626	501437	353626	11.18am	10.02.23	Maybe - demonstrates negligible view of site approaching from the west	A useful view to demonstrate visibility from the west
C9	Heath Lane, east of House Farm	TF 00420 57509	500420	357509	11.56am	10.02.23	Yes - View towards potential substation location	Fine. Not particularly sensitive, however provides views of potential substation from north. Could it be clarified if panels would be visible - if not, may be a useful northern view to demonstrate lack of visibility.
C10	Junction of Gorse Hill Lane and A15	TF 02355 56574	502355	356574	12.20pm	10.02.23	View from A15 on northern boundary of site	Agree
C12	New England Lane	TF 01271 55547	501271	355547	12.47pm	10.02.23	Yes - view from PROW near substation/BESS	Agree
C17	Junction of A15 and Green Man Lane	TF 01926 58598	501926	358598	2.02pm	10.02.23	Yes - View from A15 approaching site from the north	Is this the best location? Would an additional view, or potentially moving this viewpoint further south to intersection with PROW Temp/1/1 and Temp/2/1 be appropriate?
D8	Jct of Scop/738/1 and Scop/8/1	TF 09001 59249	509001	359249	11.52am	15.02.23	Maybe - one of several potential viewpoints on footpaths between Scopwick and Blankney	Views from these sensitive receptors are important, however selection would be dependant upon final layouts and visibility of development
D10	Jct of BLN/4/3, BLN/4/2 and BLN/738/1	TF 08662 60144	508662	360144	12.23pm	15.02.23	Maybe - one of several potential viewpoints on footpaths between Scopwick and Blankney	Views from these sensitive receptors are important, however selection would be dependant upon final layouts and visibility of development
D12	Permissive Path Between Scop /1134/1 and BLN/4/2	TF 08016 59686	508016	359686	1.00pm	15.02.23	Maybe - one of several potential viewpoints on footpaths between Scopwick and Blankney	Views from these sensitive receptors are important, however selection would be dependant upon final layouts and visibility of development
D17	Jct of Bridleway Scop/1135/4 and Acre Lane (Restricted Byway)	TF 08239 58901	508239	358901	2.11pm	15.02.23	Maybe - one of several potential viewpoints on footpaths between Scopwick and Blankney	Views from these sensitive receptors are important, however selection would be dependant upon final layouts and visibility of development
D19	Junction of Acre Lane and Scop/3/1	TF 08241 58453	508241	358453	2.28pm	15.02.23	Maybe - one of several potential viewpoints on footpaths between Scopwick and Blankney	Views from these sensitive receptors are important, however selection would be dependant upon final layouts and visibility of development
E2	Blankney Stepping Out Car Park Picnic Area	TF 07418 60577	507418	360577	13.16pm	23.02.23	Yes - view from Stepping out picnic area on edge of Blankney	Agree: sensitive receptors and hih (relative) number of users.
F3	Heath Road at Slate House Farm	TF 04123 54238	504123	354238	12.26pm	24.02.23	Yes - illlustartes experience travelling along Heath Road	Fine - important views along this road between settlements, however, will proposals be visible from this location with plots to the east of Heath Road shown as not being developed? Assume this would also represent views from PROW Ashl/3/1 at Heath Road? Selection would be dependant upon final layouts and visibility of development
G1	A15 at junction with Warren Lane	TF 02761 55278	502761	355278	2.42pm	02.03.23	Yes - View from A15 mid way along the western parcel	Agree - openclose range view. Suggest multiple sheets to cover wide extents of view.
H5	Spires and Steeples Trail	TF 06855 59445	506855	359445	10.29am	08.03.23	Yes - View from SAST	Agree. Views from these sensitive receptors are important
H8	SCOP/1135/3	TF 07537 58946	507537	358946	11.23am	08.03.23	Maybe - one of several potential viewpoints on footpaths between Scopwick and Blankney	Views from these sensitive receptors are important, however selection would be dependant upon final layouts and visibility of development
H9	Main Street, Ashby de la Launde	TF 05269 55085	505269	355085	12.07pm	08.03.23	Yes - illustrates view from Ashby de la Launde	Agree - if located at filed gate/access would offer an alternative more open view south than H10
H10	Junction of Heath Road (B1191) and Navenby Lane	TF 04815 55349	504815	355349	12.17pm	08.03.23	Yes - illlustartes experience travelling along Heath Road	Agree - important views along this road between settlements.
H12	Heath Road (B1191) near Digby Quarry	TF 05316 57209	505316	357209	12.56pm	08.03.23	Yes - illlustartes experience travelling along Heath Road	Agree - important views along this road between settlements. Would this adequately consider PROW Scop/13/1 and Scopwick Mill?
H14	B1191 Western Edge of Scopwick	TF 06358 57964	506358	357964	1.25pm	08.03.23	Maybe - demonstrates negligible view from western edge of Scopwick	Good location to demonstrate limited/no visibilit along B1191 and western edge of Scopwick. Will depend upon final layouts.Would this adequately consider PROW Scop/13/1 and Scopwick Mill?
H16	B1188 South of Long Wood Lane	TF 06745 59653	506745	359653	2.42pm	08.03.23	Maybe - demonstrates no view from B1188 leaving Blankney	Good location to demonstrate limited/no visibilit along B1188 and southern edge of Blankley. Will depend upon final layouts.
H18	BLAN/4/2	TF 07771 60245	507771	360245	3.08pm	08.03.23	Maybe - one of several potential viewpoints on footpaths between Scopwick and Blankney	Views from these sensitive receptors are important, however selection would be dependant upon final layouts and visibility of development
H19	Blankney Walks Lane near Brickyard Cottage	TF 08370 60628	508370	360628	3.26pm	08.03.23	Yes - view from Blankney Walks Lane	Agree - VP from this location required
I1	Footpath Rows/5/1 west of Sheffield House	TF 06401 56655	506401	356655	09.00am	23.03.23	Yes - view from footpath through central parcel	Agree - views from PROW 5/1 required. How will the view from each three propose differ - are three required?
I5	Footpath Rows/5/1 north-east of The Maltings	TF 06086 56557	506086	356557	09.43am	23.03.23	Yes - view from footpath through central parcel	Agree - views from PROW 5/1 required. How will the view from each three propose differ - are three required?
I8	Footpath Rows/5/1 north of The Maltings	TF 05581 56426	505581	356426	09.59am	23.03.23	Yes - view from footpath through central parcel	Agree - views from PROW 5/1 required. How will the view from each three propose differ - are three required?
I10	Access track south of Rowston Cottages	TF 05142 56524	505142	356524	10.11am	23.03.23	Maybe - demonstrates limited view from RAF Digby looking east	While likely a limited view, would be useful to illustrate extent/lack of visibility from this aspect, as well as views from RAF Digby, and B1191 which together would have a relatively large number of receptors
I18	AshL/11/1 in Long Plantation (on field boundary)	TF 04464 53376	504464	353376	12.02pm	23.03.23	Yes - view from Stepping Out Walk through Bloxham Woods	Agree - final location may depend upon substation location.
I20	Bloxham Wood Nature Reserve Car Park	TF 03758 53324	503758	353324	12.32pm	23.03.23	Yes - view along Heath Road at entrance to Bloxham Woods	Agree - final location may depend upon substation location.
X1	A607 Boothby Graffoe	SK 98683 59338	498683	359338			Maybe - not yet visited and possibly no view but added to shortlist following meeting with NKDC/LCC on 01.06.23	Views of site and development appear unlikely. Suggest single view, maybe from edge of settlement to demonstrate extent/lack of visibility
X2	Viking Way north of Harmston	SK 97398 63178	497398	363178			Maybe - not yet visited and possibly no view but added to shortlist following meeting with NKDC/LCC on 01.06.23	
X3	A607 Leadenham	SK 96080 51557	496080	351557			Maybe - not yet visited and possibly no view but added to shortlist following meeting with NKDC/LCC on 01.06.23	

AAH consultants

Technical Memorandum 3: AAH TM03

Lincolnshire County Council and North Kesteven District Council, Springwell Solar Project

Visual Amenity: Viewpoint Comments

Following issuing AAH TM02 (Initial Viewpoint Comments), AAH and Stephenson Halliday/RSK held a meeting on the 3rd July to further discuss the project and potential viewpoints and seek agreement on the selection. Stephenson Halliday/RSK subsequently provided follow up email correspondence on 17th July 2023 which contained meeting minutes (from the 3rd July), proposed final list of viewpoints spreadsheet, plan of the location of the final proposed viewpoints, ZTVs of the solar PV development, and ZTVs of siting zones for infrastructure of various sizes including the National Grid and project substation. AAH on behalf of Lincolnshire County Council (LCC) and North Kesteven District Council (NKDC) have subsequently reviewed the information and provide comments as follows:

1. The meeting minutes provided by Stephenson Halliday/RSK from July 3rd provide an accurate reflection of the conversation held;

2. The viewpoints proposed by Stephenson Halliday/RSK in the email correspondence on 17th July 2023 provide a good spread of representative views that is proportional to the project and extent of potential visual receptors. At this stage no additional viewpoints would be required, however if the development layout and design parameters change from that currently presented, additional viewpoints may be required;

3. All viewpoint photography should be taken in accordance with *LI TGN 06/19: Visual Representation of Development Proposals*. To ensure transparency of the assessment process and reduce queries as to potentially downplaying effects, photography locations should be micro sited to safely provide the most advantageous unobstructed view of the site and proposed development which should be presented centrally to the view, be taken on clear bright days away from the sun to avoid dark images, and be clear of isolated obstructions within the view such as cars or wayward branches/vegetation etc.

4. Regarding any potential AVRs of the viewpoints that would be identified at the next stages, it would be beneficial to discuss and understand the rationale on selecting these: such as on a view by view basis or an approach as to where those that are expected to have significant or cumulative effects. We would also recommend the selection, level and type of visualisations are discussed and agreed through consultation;

5. The proposed 3km study area is appropriate from the solar PV development and 5km from the National Grid and Project Substation and National Grid connecting towers. However, the LVIA should clearly state the justification for these study areas, and thoroughly assess and confirm no significant views are available from beyond the study area. Also, as it is not confirmed as to whether the National Grid Substation and National Grid connecting towers are to be included within the redline boundary, and if so both the final location and design of these elements, and the Project Substation, is yet to be confirmed, therefore while every effort has been made to accommodate this with the viewpoint selection, additional viewpoints and extension of the 5km study area may be required subject to confirmation of these aspects.

6. In regards to landscape character areas in the North Kesteven Landscape Character Assessment, we agree that LCA 11 Central Clays and Gravels and LCA 7 Limestone Heath would form part of the baseline, and would likely be directly affected by the proposed development. LCA 6 Lincoln Cliff and LCA 13 Fenland sit to the fringes of the proposed study areas, and are unlikely to experience significant effects and subsequently are acceptable to be scoped out, however we would recommend these LCAs are identified in the LVIA, and if scoped out a brief statement is provided that recognises their proximity to the red line boundary and the rationale as to why they have been scoped out.

We are available to discuss these points, as well as the evolving scheme and pertinent information, such as LVIA methodology, as required and welcome a continuing dialogue and consultation with Stephenson Halliday/RSK on the project.

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15 August 2023

AAH consultants

Technical Memorandum 4 (AAH TM04)

Lincolnshire County Council and North Kesteven District Council, Springwell Solar: PEIR Landscape and Visual Comments

Introduction

AAH Consultants have reviewed the Springwell Solar Farm: *Preliminary Environmental Information Report* (**PEIR**), on behalf of Lincolnshire County Council (**LCC**) and North Kesteven District Council (**NKDC**), in relation to Landscape and Visual matters. Information downloaded from: www.springwellsolarfarm.co.uk and the documents that have been referenced, are as follows:

- **Preliminary Environmental Information Report Volume 1**
  - Chapter 1: Introduction
  - Chapter 2: Description of the Proposed Development
  - Chapter 3: Reasonable Alternatives Considered
  - Chapter 4: Approach to EIA
  - Chapter 6: Biodiversity
  - Chapter 9: Landscape and Visual
  - Chapter 12: Traffic and Transport
  - Chapter 14: Glint and Glare
  - Chapter 15: Cumulative Effects
- **Preliminary Environmental Information Report - Volume 2: Supporting Figures:**
  - Chapter 1
    - Figure 1.1 – Location Plan
  - Chapter 2
    - Figure 2.1 Environmental Features Plan
    - Figure 2.2 Site Boundary
    - Figure 2.3 Zonal Masterplan
    - Figure 2.4 Indicative Height Parameter Plan
    - Figure 2.5 Indicative Green Infrastructure Parameter Plan
    - Figure 2.6 Indicative Operational Access and Movement Parameters Plan
    - Figure 2.7 Indicative Cable Route
    - Figure 2.8 – Indicative Construction Compounds
    - Figure 2.9 – Indicative Construction Accesses Parameter Plan
  - Chapter 3
    - Figure 3.1 – Environmental Considerations
    - Figure 3.2 – Solar PV Design Development
  - Chapter 6
    - Figure 6.1 – Local Wildlife Sites
  - Chapter 8
    - Figure 8.1 – Non-designated heritage assets
    - Figure 8.2 – Designated heritage assets
    - Figure 8.3 – Sensitive Heritage Receptors
  - Chapter 9
    - Figure 9.1 – Landscape Study Area, Context and Designations
    - Figure 9.2 – Landscape Character
    - Figure 9.3 – Visual Receptors
    - Figure 9.4 – Viewpoint Location Plan

    - Figure 9.5 – Solar PV Standard ZTVs
    - Figure 9.6 – Solar PV Detailed Screening ZTV
    - Figure 9.7 – Siting Zone 6m ZTVs
    - Figure 9.8 – Siting Zone 12m ZTVs
    - Figure 9.9 – Residential Property Location Plan
  - Chapter 10
    - Figure 10.1 Agricultural Land Classification Survey
  - Chapter 11
    - Figure 11.1 Baseline Noise Locations
    - Figure 11.2 Receptor Locations
  - Chapter 12
    - Figure 12.1 Local Roads
    - Figure 12.2 Accident Severity
    - Figure 12.3 Sensitive Receptors
  - Chapter 15
    - Figure 15.1 – Cumulative Long-List Radius
- **Preliminary Environmental Information Report - Volume 3: Supporting Reports:**
  - Chapter 1
    - Appendix 1.1 – Glossary and Abbreviations
  - Chapter 4
    - Appendix 4.1 – EIA Scoping Report
    - Appendix 4.2 – Scoping Opinion from PINS
    - Appendix 4.3 – Scoping Opinion Response Matrix
  - Chapter 9
    - Appendix 9.1 LVIA Methodology and Assessment Criteria
    - Appendix 9.2 Extracts from Published Landscape Character Assessments
    - Appendix 9.3 Landscape Sensitivity Appraisal
    - Appendix 9.4 Preliminary Viewpoint Analysis
    - Appendix 9.5 Preliminary Residential Visual Amenity Assessment
  - Chapter 15
    - Appendix 15.1 – Longlist of other developments
- **Preliminary Environmental Information Report - Volume 4: Landscape Viewpoints:**
  - Viewpoints 1 to 14
  - Viewpoints 15 to 20
  - Viewpoints 21 to 38

The review takes into account previous AAH comments (Refer to Springwell Technical Memos *AAH TM01*, *AAH TM02* and *AAH TM03*), as well as meetings/workshops held with the Applicant team and any subsequent meeting minutes. The comments provided are intended to assist in guiding the next stage of the development process, refinement of the content of the LVIA chapter and the overall development proposals. It is not a final review of any of the preliminary findings or initial assessments.

PEIR Landscape and Visual Comments

A. Main Overarching Comments on the PEIR:

1. The proposed development is subject to EIA, and a Scoping Report was issued by the developer: *Springwell Solar Farm Scoping Report* 21st March 2023, prepared by RSK, which contained a section on Landscape and Visual. Subsequently, a Scoping Report Review was carried out by LCC (20th April 2023) and NKDC (19th April 2023) which were appended to the *Scoping Opinion* issued by PINS dated: 02nd May 2023. Overall, the landscape and visual elements of the PEIR and subsequent scope of the LVIA chapter is generally aligned with the scoping report and scoping opinion, as well as other AAH comments (*AAH TM01, AAH TM02* and *AAH TM03*), and meetings/workshops held with the Applicant.

2. Para. 2.1.9. of the PEIR clarifies that the *"National Grid Navenby Substation and National Grid connecting towers no longer form part of the Proposed Development".* Therefore, the PEIR has accounted for a grid connection corridor to this National Grid Substation, and subsequently the site boundary has been amended since the scoping opinion and report were issued, however the PEIR states that the *"Proposed Development remains materially the same"* than that subject to the scoping opinion. Para. 2.1.10. goes on to clarify further that the National Grid substation is *"not now proposed to form part of the Springwell DCO application and consent",* and will be applied for separately.

   However, as these elements are interdependent and operationally 'indivisible' from the scheme as well as currently planned to be in close proximity, we expect the LVIA will incorporate a **cumulative assessment** (PINS advice note 17) of the scheme along with the National Grid Substation in the northern area of Springwell West. Viewpoints have been identified previously in an attempt to ensure these potential cumulative views are captured, however these should be reviewed if more information becomes available.

3. As outlined within Chapter 1 (para. 1.14), the PEIR *"does not represent the final design"* and Chapter 2 of the PEIR clarifies that the development proposals are still being developed and finalised. This includes the type of PV panel and location of taller/larger elements such as project substations, satellite collector compounds and battery storage. While it is understood that some aspects of the scheme cannot be confirmed at this stage as they would be dependent upon individual contractors selected at the tender stage (para. 2.1.3) we would expect a reasonable design fix for the final ES and subsequent application which would clearly set out the parameters of the development, such as heights and locations of elements that have been used in the assessment, which if there are still some outstanding design and layout elements to be finalised would be based on a '*worst case*' scenario to ensure any effects are not underplayed. This is particularly important for larger and taller elements.

4. It is requested that further landscape and visual consultation is carried out between AAH/LCC/NKDC and the Applicant following the conclusion of this second formal consultation phase. This would likely cover the PEIR comments as well as development proposals and mitigation scheme, including any cable route corridor and location of any larger structures or buildings such as the project substation, extent of vegetation loss for highways works, and also subsequent knock-on effects such as any requirement for additional viewpoints or visualisations.

5. Notwithstanding other comments made on the overall scheme, Springwell West is likely to be of particular concern in regards to landscape and visual matters, being located within a much more open landscape with development currently illustrated in close proximity to visual receptors (particularly the A15). We have briefly summarised what the NKDC LCA 2007 says about the Limestone Heath/A15 area 'baseline' for consideration (paragraph refences provided):
    - Utility Infrastructure, which although sparse, makes an impact on the landscape including prominent pylons and the main A15 running north to south. (8.1)
    - The ridges and dips run in an east-west direction following shallow 'dry' valleys, and this is particularly apparent when travelling along the A15 which falls and rises with the topography (8.1.3)
    - There are extensive 360° views throughout the sub-area afforded by the generally low relief, large field size and absence of field boundaries. The sense of relative elevation is obvious and the general lack of tree cover or other features accentuates the feeling of exposure and emptiness. (8.1.3)
    - Obtrusive infrastructure elements are present in the two lines of large pylons and high voltage electricity cables running across the landscape to the eastern fringe of the area and also across its south-west quadrant. (8.1.11)
    - The road pattern is distinctive with the straight main road (A15) running from north to south (Lincoln to Sleaford) dividing the character sub-area in two and acting as a central communications spine (8.1.14)

B. Detailed Comments on PEIR Volume 1: Report:

1. In regards to the landscape and visual matters of the design proposals (**Chapter 2 of Volume 1**), comments are as follows:
    - As stated in previous correspondence (refer to *AAH TM02*), at this stage, we do not have details on the final location and appearance/extent of taller/larger elements that form part of the development. However, Para 2.3.2 clarifies that *"it is the Applicant's intention to use the 'Rochdale Envelope' approach within parameter ranges"*. This is a reasonable approach and has been utilised recently on other NSIP solar schemes within Lincolnshire, with the scheme design accommodated within certain limits and parameters, allowing for flexibility and likely significant effects to be presented as a reasonable *'worst case'*.
    - However, while the '*Rochdale Envelope'* approach is reasonable for the PV panels, which are identified within Table 2.1 as being up to 3.5m high except in areas of flood risk which will be at 4m AGL, we have concerns in regards to the larger and taller elements, such as project (or '*Springwell*') substation and associated offices and structures (up to 12m in height), switchgear (up to 6m in height) Collector Compounds (up to 6m in height), BESS (up to 6m in height) and more conspicuous elements. The final location and layout of these elements will likely have greater visual effects in this open, rural landscape than PV panels.
    - Therefore, we would expect the location and '*worst case'* extent (footprint or extent of layout) of these elements to be identified clearly within the ES and submission documents, through works plans and/or parameter plans, and clearly identified for the LVIA to allow for a better understanding of the potential landscape and visual effects, and ZTV figures produced on the worst-case parameters.
- Section 2.8 provides further detail on the project substation, with the potential locations presented in Figure 2.3 showing the area to the north west of '*Springwell West'*. The location of this large element (Table 2.5 identifying the compound at approximately

62,500m² with a height up to 12m AGL) is in a relatively open landscape and its positioning, detailing and subsequent secondary mitigation will need careful consideration. However, through working with the Applicant on viewpoint locations we have pre-empted this and selected viewpoints to cover this area for any visual assessment. However, subject to the final location and any changes to the design parameters, additional viewpoints may be required. We would welcome further discussion in regards to the siting of this element as designs progress.

- Regarding Overhead/ground lines: Could it be clarified if any above-ground lines and associated poles are proposed. Paragraph 2.9.18 identifies some cabling above ground (between modules and inverters) on site, and further detail would be required to understand the potential visibility of these.

- Regarding fencing and security (paras. 2.10.1 to 2.10.8), the use of palisade fencing should be avoided or minimised in favour of less visually intrusive fencing where possible. Deer-proof fencing up to 3m in height is identified in Table 2.8 to be installed around operational areas, however experience has shown that operational areas often require weld mesh security fencing (or similar) which can be much more visually intrusive than deer-proof fencing, and can be more '*urban*' in character affecting rural characteristics of the existing landscape character. While we understand the fencing height of 3m is the maximum, this is a relatively high fence and we would seek for the maximum height to be reduced to be closer to 2.4m maximum, or lower if possible.

- Paragraph 2.10.5 identifies pole mounted CCTV at a maximum height of 5m. These elements, at regular spacing around perimeters can appear quite jarring, being out of character and the regular spacing appearing incongruous with a more natural context, being a regularly repeating element appearing above boundary hedgerows. We would welcome proposals that would reduce the height and spacing of these features, and encourage design solutions and locations that would be less visible.

- Regarding above ground drainage features (drainage covered in paras. 2.10.9 to 2.10.14), these should be utilised to be as multi-functional as possible while embodying SuDS principles, coordinating their design between civil engineers, ecologists and landscape architects to exploit opportunities for additional habitat creation, as well as surface water retention.

- Regarding vegetation loss:
  - The extent of any vegetation loss to facilitate construction access or permanent site access points identified in paragraphs 2.10.16 to 2.10.19, is not identified at this stage. Also, any vegetation loss to facilitate any potential wider highways works for construction traffic, abnormal loads, plant and deliveries, is not identified. We would expect this to be coordinated with the transport assessment and any associated swept path analysis or sight line requirements and all vegetation works, including removal or pruning/trimming/crown lifting etc. to be clearly illustrated and included within any assessment as this has the potential to remove existing features (that make up the character area) and open up views into or across the site.
  - Existing breaks in field boundaries should be utilised for both construction and permanent access to minimise vegetation loss. Vegetation removal to facilitate sight line or swept path requirements should be clearly identified, and again minimised where possible.

- We would expect any proposed vegetation removal to be surveyed to *BS:5837 Trees in Relation to Design, Demolition and Construction to Construction* so it is clear what the arboricultural value is (to aid assessment) and subsequently is appropriately mitigated against if required. Retained vegetation should also be protected to *BS:5837* and full details provided.

- We welcome and encourage the development of recreation and amenity improvements and Green Infrastructure as part of the scheme, and these elements should be maximised where possible and expect this to be integrated into the entire scheme, rather than token elements that are bolted or added on to the peripheries. A continued dialogue with LCC and NKDC, as well as other interested parties in regards to these parts of the scheme is encouraged.

2. In regards to the landscape and visual chapter (**Chapter 9 of the PEIR**):

- Para. 9.1.3 clarifies that Chapter 9 is a preliminary assessment, due to insufficient information at this stage, which we would expect as this is an evolving and iterative process. The preliminary assessment is therefore based on the current parameter plans (Figures 2.4, 2.5 and 2.6 of Volume 2) and that *"a full LVIA will be presented in the subsequent ES based on the proposals comprising the DCO application."*. We request that the LVIA is explicit in regards to the development proposals it is assessing, and that the parameters are clearly defined in regards to the size/height/footprint, but also the location of both built elements and mitigation areas are fixed through parameter or works plans. These should subsequently be reflected on any visualisations or ZTV figures.

- Para. 9.2.2 identifies that consultation in relation to landscape and visual matters has been carried out, and AAH/LCC/NKDC have held meetings and workshops with the Applicant, summarised in table 9.1. Table 9.1 provides a narrative on discussions regarding viewpoints to be included within the assessment, and clarifies *"Annotated baseline photographs from the agreed viewpoints are presented in Volume 4 of this PEIR".* It is requested that further landscape and visual consultation is carried out between AAH/LCC/NKDC and the Applicant following the conclusion of this second formal consultation phase.

- Paras. 9.2.8 to 9.2.17 identify the extent of the preliminary assessment Study Area of 3km from Solar PV areas to 5km from any structures up to 12m in height. A narrative and justification of the study area is provided which is reasonable. Para. 9.2.16 clarifies that the study area will be reviewed at the ES stage, which we encourage and recommend that the LVIA Chapter should include a clear statement on the justification for the extent of the final Study Area used.

- Relevant planning policy at paragraph 9.3.2 should be updated in the DCO submission to reflect the adopted 2023 EN1, 3 and 5 Statements which came into effect on 17th January 2024. CLLP policies S53 'Design and Amenity' and S59 'Green and Blue Infrastructure Network' are not included at paragraph 9.3.3 and should be added.

Methodology:

- The methodology is provided in Section 9.4, with para. 9.4.10 clarifying that the preliminary assessment has assumed a 'worst case scenario' with solar modules at 4m in

height and a siting zone for elements up to 12m in height: *"the assessment assumes that development could be 12m in height anywhere within this zone".* Para. 9.4.11 goes on to clarify that other elements such as the BESS, Collector Compounds and Springwell Substation are included within potential siting zones, as illustrated in Figure 2.3: Zonal Masterplan, and the assessment assumes that these elements may be in any part of each zone. This provides a robust and clear approach to assessing the '*worst case scenario'* in both location and height in the absence of detailed design layouts, and we assume this approach will be carried forward to the LVIA.

- With reference to paragraph 9.4.14 the applicant should justify the choice of buffer/stand off zones and whether this is set out in guidance, good practice, precedent from other NSIP solar projects or professional judgement or a combination. The Council raises concerns at this stage regarding the suggestion of new landscaping (where appropriate) being proposed within 15m either side from existing or proposed PROW if newly planted hedgerows are then maintained at 3.5m high by ongoing management, and which might appear overbearing (pending ongoing detailed design).

- Paragraphs 9.4.15 to 9.4.44 provide an overview of the methodology, which is further detailed in Appendix 9.1. Further comments are provided on the proposed methodology under the Appendix 9.1 heading below.

<u>Identification of receptors and potential effects:</u>

- The PEIR identifies a range of landscape and visual receptors within the Study Area. The visual receptors and viewpoints were previously discussed with AAH/LCC/NKDC, as were the potential locations of viewpoints. Table 9.2 presents receptors that are proposed to be scoped out of the assessment, along with a narrative on the justification for this. This list seems reasonable, as do the justifications. However, we recommend this information is presented in the final LVIA to aid transparency, and the justifications will allow for understanding of interested parties that these elements have been considered as part of the assessment process and why they have not been brought forward to the assessment. This is particularly important for the view from villages/hamlets identified to be scoped out, despite the ZTV information presented on Figures 9.5 to 9.8, which illustrates potential visibility.

- National Character Areas (NCAs) and District Landscape Character Types (LCTs) and subsequent Landscape Character Areas (LCA) have been identified and referred to within the PEIR which cover a range of scales. We agree that there is the potential to scope out character areas that would not be affected by the development, however a clear statement as to why these have been judged to omit should be provided in the LVIA. We would not expect that National Character Areas be a receptor to be assessed as they are at a large scale and typically provide context only.

- Only two potential landscape receptors are identified for consideration in the LVIA within with para. 9.5.9 identifying: "*Springwell West and Springwell Central fall within LCA 7 - The Limestone Heath LCA whilst Springwell East falls within LCA 11 - The Central Clays and Gravels LCA."* Will the LVIA include a more local assessment? We would suggest a finer-grained character assessment is carried out and identification of individual elements or features of the landscape character areas to form the baseline.

- In regards to landscape effects, the scale or size of a character area should not be a determining factor in assessing effects. We would urge caution in regard to larger landscape character areas, which often are assessed as having limited magnitudes of change as the change would be small scale and/or extent (development site) would only affect a small percentage of the overall, much larger, character area. We would encourage the LVIA assess what the change would be in that part of the character area and what identified key elements identified within the character areas are impacted, and how development change would affect those.

- It would be useful to take into account the information collated as part of the Historic landscape characterisation project: *The Historic Character of The County of Lincolnshire (September 2011)*, to ensure that the development is sensitive to the historic landscape. The project documents and the mapping can be accessed here: Historic Landscape Characterisation – Lincolnshire County Council

- Paras. 9.5.15 to 9.5.31 describe the visual receptors to be included within, and those that are scoped out of, the assessment. These are clearly summarised and listed within Table 9.8, which also provides information on judgements of sensitivity and value. Thirty-eight viewpoints have been identified that represent the main landscape and visual receptors. The receptors and viewpoints represent those discussed and agreed to date with AAH/LCC/NKDC, however as the design is still evolving, we would suggest this dialogue continues to pick up on any changes, which may necessitate additional viewpoints or scoping in of additional receptors. Further comments on viewpoints and photography are made below.

- The Approach to mitigation and residual effects in the LVIA, outlined in paras. 9.6.8 to 9.6.12 is appropriate, and we would encourage multi discipline coordination and synergy of disciplines (e.g. heritage, ecology, civils and landscape) to provide multi-functional spaces that not only mitigate adverse effects but has the potential to enhance to local landscape (as outlined in section 9.7). AAH/LCC/NKDC are available to provide input into the process of developing mitigation as required.

- With reference to Table 9.8, additional information and justification should be provided for the B1188, B1191 roads (which are assessed as 'medium' susceptibility and sensitivity) and the A15 (which is defined as 'low'). Table 9.3 states that *"a large volume of traffic passes along these two roads which have a largely open view across part of the Site. Receptors are generally not of high sensitivity but the views are likely to be experienced by large numbers of people from these two roads"* (B1191 and A15). The A15 should therefore be reclassified, having open views across the landscape from a high number of receptors, and therefore receptors more susceptible to changes in view. On this basis the Council does not currently support the conclusion set out in Table 9.9 which suggests moderate/minor changes and no significant effects.

- The development would be set close to receptors on the A15, and located within an open landscape, and therefore conspicuous in the view, and subsequent established mitigation planting that is intended to screen proposals would likely foreshorten views, which would be a conspicuous change to the baseline. The mitigation solution along the A15 needs to be fully considered, and a balance struck between screening and integration, while respecting open views and the wider landscape character. We understand that continued

consultation with the local community is ongoing in regards to this, which is encouraged and we would welcome the opportunity to input into the final mitigation solutions. However, it is assumed that there is subsequently an error in Table 9.10 with reference to the A15 given that the operational phase assessment, with mitigation, assumes a substantial/moderate/significant effect, but assume this would be clarified following the final layout and mitigation solutions.

- Table 9.9 and Table 9.10 provide an initial assessment of likely effects at construction, operation (year 1 and year 10) and decommissioning. The layout of these tables provides a clear and accessible summary of the assessment process and the judgements made by the author. However, as the scheme is still being developed, we have not provided detailed judgements against all these preliminary findings. Though, by reason of its mass and scale, our opinion is that the scheme would likely lead to significant adverse effects on landscape character and visual amenity at all phases of the scheme. The Development has the potential to transform the local landscape by altering the character on a large-scale. This landscape change also has the potential to affect wider landscape character, by replacing large areas of agricultural or rural land with solar development, affecting the current open agricultural character.

C. Detailed Comments on PEIR - Volume 2: Supporting Figures (Chapter 9 LVIA):

1. Generally: Figures associated with the landscape and visual chapter are well presented and read well.

D. Detailed Comments on PEIR - Volume 3: Supporting Reports (Chapter 9 LVIA):

Review of Appendix 9.1 LVIA Methodology and Assessment Criteria

1. The methodology, overall, is commensurate to what we would expect to be used to assess landscape and visual effects of the proposed development.

2. Pg 3 provides an overview of the assessment of Landscape effects. This identifies that the baseline should include both *Landscape fabric/elements*; and *Landscape key characteristics*. This information should be clearly presented within the LVIA, and would expect that as well as published character assessments, a finer-grained assessment be carried out and identification of individual elements or features of the landscape character areas to form the baseline to understand how these may be affected by the development. However, if the applicant judges the published character assessments provide this information, it should be clearly stated within the LVIA, but we would still expect the key elements of the landscape be identified as part of these overall receptors.

3. Pg 9 and 10 provide narrative on the Significance of Landscape and Visual Effects, and we support the approach that effects classified as '*Major or Major/Moderate'* are likely significant effects and that for '*Moderate*' effects, professional judgement will be applied. However, where Moderate effects have been deemed '*not significant*' we request a brief narrative accompanies the judgement to allow for transparency as typically effects of this magnitude are deemed *'significant'*.

4. Visualisations are shown as Type 1 in the PEIR. We recommend further consultation to agree the number (location) and Type of Visualisations to be included within the LVIA that would

be most appropriate to illustrate the proposals. We will expect there to be a number of Type 3 and possibly Type 4 visualisations provided within the LVIA and ES – these will be important to illustrate the scheme and the effectiveness of any mitigation, particularly to members of the community. A clear Visualisation Methodology should also be included. This should provide full details/parameters of the elements that have been modelled (Solar arrays, substation etc.) for transparency of what is being illustrated, and enable this to be referenced against the 'worst case' design parameters (e.g. if shown at maximum heights, or lower than maximum provided in design parameters).

Review of Appendix 9.2 Extracts from Published Landscape Character Assessments:

5. No further comments on the published landscape character assessments at this stage.

Review of Appendix 9.3 Landscape Sensitivity Appraisal

6. No comments on the Landscape Sensitivity Appraisal at this stage, however we refer back to our previous comments regarding the landscape baseline only covering the two relevant published LCA, however "*observations made in the field during the baseline assessment of landscape character"* is noted as included within the baseline assessment of sensitivity.

Review of Appendix 9.4 Preliminary Viewpoint Analysis

7. No further comments on the Preliminary Viewpoint Analysis at this stage.

Review of Appendix 9.5 Preliminary Residential Visual Amenity (RVA)

8. With reference to RVA:
   - Tables 9.9 and 9.10 note that for *'Individual/ Isolated Residential Properties'*, and adopting a '*worst case'* scenario, at this stage it is assumed that there may be up to a substantial magnitude of change at a small number of individual isolated properties potentially give rise to a significant effect even after mitigation. These properties should be clearly identified on submitted plans and addressed in the ES chapter.

   - The Appendix 9.5 Preliminary Residential Visual Amenity Assessment makes reference to a figure 9.11, however it is assumed that this is actually figure 9.9. The Appendix 9.5 RVA states that there is no standard criteria for defining a RVAA study area and this is determined on a case by case basis. It quotes TGN 02/19 guidance which states that *"other development types including potentially very large but lower profile structures and developments such as road schemes and housing are unlikely to require RVAA, except potentially of properties in very close proximity (50-250m) to the development."*

   - Figure 9.9 then illustrates a study area drawn from TGN 02/19 guidance which identifies properties within 200m of any Solar PV development; 400m of any siting zones for structures up to 6m and 800m from any siting zones for structures up to 12m (i.e. including the siting zones for the project substation). Table A9.5-2 '*Preliminary Analysis of Residential Properties within RVVA Study Area'* then sets out initial observations of impact for 23 properties or grouped properties based on the application of the 200m/400m/800m buffer and siting zones.

   - However, cross reference to the Heckington Fen solar NSIP 'Volume 1: Technical Chapters Chapter 7: Residential Visual Amenity' notes that an initial 1km area from the order limit boundary was adopted. Paragraph 7.5.1 of that document notes that design mitigation

measures included providing increased physical separation from nearby residential properties to the closest panelled areas (initially located 200m from the receptor) to *'avoid the risk of failing the so-called 'Lavender* Test'. With one exception (separation distance of 140m to panelled areas), the closest panelled areas at Heckington Fen are now no closer than between 240m-270m to the nearest residential property (NKDC Local Impact Report – paragraph 13.9).

- Whilst it is accepted that each case must be assessed on its own merits, the Council is concerned that the draft RVA has adopted a much narrower assessment buffer, down to 200m, than initially presented at Heckington Fen. There is nothing in the draft RVA which makes the link between the TGN 02/19 guidance, solar development and the Springwell project. The examples given in the TGN 02/19 guidance are for road and housing projects. We accept that the guidance cannot be exhaustive however these proposals are of a significantly greater scale and footprint that the examples given in the guidance note and as set out in the Councils scoping response a concern here is the degree to which certain properties or zones might have limited visual relief from the development; even with the amendments to the zonal masterplan and the buffer adopted.

- Noting the minimum separation distance of the bulk of residential property at Heckington Fen, there are a number of properties confirmed through the Springwell RVA and Figure 9.9 which are less than (or on the cusp of) 200m from the closest panelled areas. Some are much closer, namely 1 & 2 Peacock Lodge Cottages, Tollbar Cottage, Lupus Lair, 1-2 Ashby Lodge Co□age, Sheffield House, Scopwick Low Field Farm, Brickyard Farm and RAF Digby Mallory Road.

- Table A9.5-2 'Preliminary Analysis of Residential Properties within RVVA Study Area' proposes to scope out assessment on 6 of the 23 named properties/groups of properties however this is on the basis of initial assessments whose detail is not presented in the draft document. This could have included images and close up mapping extracts where necessary annotating the layout of dwellings, the direction of outlooks, location of existing landscape filters etc. Therefore, from the information presented the Council cannot yet agree that these properties should be scoped out, and as above there remain a large number of properties at closer physical proximity/with lesser separation that at Heckington Fen which as above typically achieved a 250m-270m separation and where the TGN 02/19 guidance gives an outer range of 250m albeit for road and housing projects.

E. <u>Review of Volume 4 - Landscape Viewpoints:</u>

1. Thirty-eight viewpoints have been identified and presented that represent the main landscape and visual receptors. The receptors and viewpoints represent those discussed and agreed to date with AAH/LCC/NKDC, however as the design is still evolving, we would suggest this dialogue continues to pick up on any changes, which may necessitate additional viewpoints or scoping in of additional receptors.

2. The photographs presented are clear, well labelled and the indication of siting areas aids legibility. The legibility is aided with colour coding of the three different Springwell areas (West, Central and East). This would be useful to carry through to the LVIA.

3. VP30: View may provide more indication of visibility of elements up to 12m in height in siting area if either rotated to the right, or if extended (additional sheet) to capture more of the western extents. These are potentially large components, and the context would also be useful to include within the view.

4. VP31: While a long-distance view, this viewpoint is to towards the siting area – could this be labelled and also would an additional sheet to the left of the view be required to capture this? The potential height of 12m of these elements may be visible, as illustrated on the ZTV.

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19th February 2024

AAH consultants

Technical Memorandum 5: AAH TM05

North Kesteven District Council and Lincolnshire County Council: Springwell Solar Project

Visual Amenity: Final Viewpoint Comments

A meeting was held between representatives from AAH, Lincolnshire County Council (LCC) and North Kesteven District Council (NKDC) with the applicant on 19th June 2024, to discuss final viewpoint selection and photomontages. Following this, the applicant forwarded an email on 26th June with a list of proposed locations for photomontages, an updated ZTV, a plan of all proposed viewpoints and several additional alternative viewpoints for the final Springfield ES with a view to reach agreement.

Therefore, we have the following comments and requests:

1. The overall viewpoint selection is appropriate and we are happy with the viewpoints selected to be taken through to the LVIA chapter of the ES;

2. Viewpoint 30 may benefit from either being rotated to the right, or additional sheets to capture any cumulative views or the NG substation and BESS.

3. Regarding potential additional viewpoints J4 or J5, to the south west of the scheme and NG Substation: We would suggest taking viewpoint J5 through to the LVIA chapter of the ES as it provides a more panoramic view and may include cumulative views of the development alongside higher elements of the NG substation and proposed BESS to the north, and therefore suggest the view is either rotated or expanded to include views towards these elements. We also agree that a visualisation from this viewpoint would be useful;

4. We agree that Viewpoint J3 should replace Viewpoint 37;

5. Regarding Viewpoint J1, while we are generally in agreement that there are unlikely to be views of the scheme, it is likely that at the examination stage there would be queries in regards to views of the scheme, and in particular cumulative views with the NG substation and BESS scheme, so would suggest it is kept in the LVIA to clearly demonstrate this view has been considered.

6. Regarding proposals for viewpoints to be illustrated as Year 1 and Year 10 photomontages:
    A. We are generally happy with the selected views and these provide a good variety of views and location; however
    B. The views proposed are predominantly very close to panels, so would suggest that a couple of visualisations that are slightly more offset from the redline are provided to illustrate how the solar development will appear in the wider landscape. This would be particularly useful from VP 13 and 14 as these views are offset slightly and show a wider context, as well as capture views that are more sensitive in relation to heritage assets (edge of conservation area). VP 13 would likely benefit from the inclusion of views towards the settlement of Blankley and the church by rotating or adding an additional sheet.
    C. Viewpoint 27 has the potential to be developed as a visualisation as it shows a more panoramic, elevated longer-range view and several development parcels. However,

we would also suggest an additional sheet is provided that includes the coloured areas (as currently presented) demarking development as these provide an effective way of identifying development areas, which may appear as grey masses on any visualisations.

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10th July 2024

APPENDIX B

Landscape Institute Technical Guidance Note 1/20 (10 Jan 2020): Reviewing Landscape and Visual Impact Assessments (LVIAs) and Landscape and Visual Appraisals (LVAs)

Landscape Institute Technical Guidance Note

Reviewing Landscape and Visual Impact Assessments (LVIAs) and Landscape and Visual Appraisals (LVAs)

Technical Guidance Note 1/20 (10 Jan 2020)

The purpose of this guidance is to establish a framework for carrying out reviews of LVIAs and LVAs, analysing in a structured and consistent way if the assessment reflects the approach advocated in GLVIA3 and has led to reasoned and transparent judgements. Use of this framework should in due course further raise the standard of assessments

1. Introduction

The third edition of the *Guidelines for Landscape and Visual Impact Assessment* (GLVIA3) was published in April 2013. It has been widely welcomed, accepted and adopted for use in assessing the effects of projects on landscape and visual amenity and since publication been promoted by Landscape Institute (LI) training events.

GLVIA3 sets out that assessment of effects on the landscape and visual resource that may result from a development proposal may be undertaken formally as Landscape and Visual Impact Assessment (LVIA) typically as part of an Environmental Impact Assessment (EIA) or less formally as a Landscape and Visual Appraisal (LVA). The LI strongly recommends that GLVIA 3 is followed when undertaking these assessments and that the resulting LVIAs and LVAs should be objective with clear thinking, easy to follow, and demonstrate how they have informed appropriate siting, design, and mitigation.

The main difference between an LVIA and LVA is that in an LVIA the assessor is required to identify 'significant' effects in accordance with the requirements of Environmental Impact Assessment Regulations 2017, as well as type, nature, duration and geographic extent of the effect whilst an LVA does not require determination of 'significance' and may generally hold less detail.

In the case of LVIAs, The Regulations have further implications for landscape professionals:

- Reg. 18 (5) stipulates that the developer must ensure that the ES is prepared by '*competent experts'* and that the developer must include a statement "*outlining the relevant expertise or qualifications of such experts".*

- Reg 4 (5) places obligations on the relevant planning authority or the Secretary of State because they "…*must ensure they have, or have access as necessary to, sufficient expertise to examine the Environmental Statement."*

Note that the terms 'competent expert' and 'sufficient expertise' are not defined in the EIA Regulations. The Landscape Institute, in the absence of formal certification of specific competence, considers that a 'competent expert' would normally be a Chartered Member of the Landscape Institute who, has substantive experience of undertaking and reviewing LVIAs. This may be evidenced by the assessor's CV, by reference to previous assessments, and by endorsement by other senior professionals.

Following on from GLVIA3, which focusses on how to *undertake* LVIAs/LVAs, this document provides guidance on how to *review* LVIAs or LVAs prepared by others. Such review may be undertaken from within the organisation which produced the LVIA/LVA, e.g. as part of a QA process, or by third parties on receipt of LVIAs and LVAs, such as landscape and or planning professionals in public sector bodies.

This guidance sets out a framework for carrying out such reviews in a structured and consistent way that reflects the approach to assessment advocated in GLVIA3 and use of it should further raise the standard of assessments.

2. Existing advice and guidance

GLVIA3 Chapter 8, under the heading "Review of the landscape and visual effects content of an Environmental Statement", says:

"8.35 Competent authorities receiving Environmental Statements will often subject the documents to formal review of both the adequacy of the content and of their quality. The review process will usually check that the assessment:

- *meets the requirements of the relevant Regulations;*
- *is in accordance with relevant guidance;*
- *is appropriate and in proportion to the scale and nature of the proposed development;*
- *meets the requirements agreed in discussions with the competent authority and consultation bodies during scoping and subsequent consultations.*

8.36 The summary good practice points in this guidance should assist in review of the landscape and visual effects content of an Environmental Statement. In addition, several existing sources may also help anyone involved in reviewing this topic to decide what to look for:

- *IEMA has developed a series of general criterial for reviewing Environmental Statements and registrants for the EIA Quality Mark*[1] *must meet the criteria…*
- *The former Countryside Commission published criteria for reviewing the landscape and countryside recreation content of Environmental Statements…*
- *Appendix 1 of Scottish Natural Heritage's Handbook on EIA* [2]*contains useful tests to help judge the landscape and visual effects content of Environmental Statements…"*

In addition, European Commission guidance on ES review[3], published in 2001 and, although directed at whole ES review rather than topic specific review, has also provided useful pointers.

This review framework has been developed in this context.

[1] IEMA EIA Quality Mark, IEMA website: https://www.iema.net/eia-quality-mark [accessed 200110]

[2] Scottish Natural Heritage, A handbook on environmental impact assessment v5, 2018, SNH website: https://www.nature.scot/sites/default/files/2018-05/Publication%202018%20-%20Environmental%20Impact%20Assessment%20Handbook%20V5.pdf [accessed 200110]

[3] European Commission, Guidance on EIA-EIS Review, Luxembourg: Office for Official Publications of the European Communities 2001 ISBN 92-894-1336-0, EC website: http://ec.europa.eu/environment/archives/eia/eia-guidelines/g-review-full-text.pdf [accessed 200110]

3. Carrying out the review

There are three main components of a review of a LVIA or LVA leading to a report containing the overall conclusion in respect of the completeness, competency and reliability of the LVIA/LVA.

1. **Checking the methodology used to undertake the assessment, the criteria selected (including balance between), and the process followed;**
2. **Checking the baseline, content and findings of the assessment;**
3. **Checking the presentation of the assessment findings.**

As a starting point when undertaking a review, the reviewer will need to define the structure and process to be followed by for example setting out a set of headings or questions against which the LVIA or LVA is examined. Setting out standard or systematic questions will allow consideration being given to each step and each element covered in the assessment. The "good practice" bullet points at the end of each chapter in GLVIA3, noted above, may provide a starting point for such an approach. It is also important to bear in mind the principle of proportionality (cf. EIA Directive). Both the LVIA (or LVA) and the Review should have a defined scope and level of detail which is proportionate and reasonable to allow an informed decision to be reached.

In order to improve consistency and quality of reviews of LVIAs and LVAs the Landscape Institute has produced this framework. Those who undertake reviews should follow this framework and modify or adapt the framework to the Review being carried out and set out the reasons for such modifications.

Step 1. Checking methodology, criteria and process

In this phase, the reviewer will check the methodology, scope and process used in the assessment and how these relate to GLVIA 3. This involves reviewing the following:

a) Does the scope of the assessment meet the requirements set out in the Scoping Opinion and/ or as defined in the LVIA or LVA and if substantively different, are the reasons clearly set out and explained?
b) What consultations have been carried out and have responses been acted upon?
c) Has the scope and methodology of the assessment been formally agreed with the determining authority? If not, why not?
d) As part of the methodology, has the terminology been clearly defined, have the criteria to form judgements including thresholds been clearly defined and have any deviations from good practice guidance (such as GLVIA3) been clearly explained?
e) Does the assessment demonstrate a clear understanding and provide a separate consideration of landscape and visual effects?
f) Does the assessment demonstrate comprehensive identification of receptors and of all likely effects? and
g) Does the assessment display clarity and transparency in its reasoning, the basis for its findings and conclusions?

Step 2. Check the baseline, content, and findings of the assessment

As part of this stage in the review process the reviewer will consider the description of the baseline, both in narrative as well as in illustrations by plans, photographs and drawings etc. This may also include publicly available aerial photography, books, online resources, local plans and management plans.

The reviewer may also consider that a site visit may be necessary either to complement or to verify baseline information. The site visit and potential visits to viewpoints are also useful to check actual findings of the assessment.

This stage of the review typically includes further tests:

a) What is the reviewer's opinion of the scope, content and appropriateness (detail, geographic extent) of both the landscape and the visual baseline studies which form the basis for the assessment of effects (supported by appropriate graphic such as ZTVs etc as appropriate)?
b) Has the value of landscape and visual resources been appropriately addressed (including but not necessarily limited to) considerations of: local, regional and national designations; rarity, tranquillity, wild-land and valued landscape?
c) Have the criteria to inform levels of sensitivity (both landscape and visual) and magnitude of change have been clearly and objectively defined, avoiding scales which may distort reported results?
d) How well is the cross-over with other topics, such as heritage or ecology, addressed?
e) Is there evidence of an iterative assessment-design process?
f) Is it clear how the methodology was applied in the assessment, e.g.: consistent process, use of terms, clarity in reaching judgements and transparency of decision-making?
g) How appropriate are the viewpoints that have been used?
h) How appropriate is the proposed mitigation, both measures incorporated into the scheme design and those identified to mitigate further the effects of the scheme, and mechanisms for delivering the mitigation?
i) What is the reviewer's opinion of the consistency and objectivity in application of the criteria and thresholds set out in the methodology for assessing the sensitivity of receptors, the magnitude of changes arising from the project, the degree/nature of effects, and the approach to judging the significance of the effects identified, in the case of EIA projects?
j) What is the opinion on the volume, relevance and completeness of the information provided about the development or project including, where relevant, detail about various development stages such as construction, operation, decommissioning, restoration, etc.?
k) Does the document clearly identify landscape and visual effects which need to be considered in the assessment? and
l) Have levels of effect have been clearly defined and, in the case of LVIA, have thresholds for significance been clearly defined and have cumulative landscape and visual effects been addressed?

Step 3. Critique of the presentation of the findings of the assessment

This phase is perhaps the most straightforward. It involves examining the 'presentation' of the assessment including report text, figures/ illustrations, visualisations, and other graphic material forming the LVIA or LVA, and answering the following:

a) Does the LVIA/ LVA display transparency, objectivity and clarity of thinking, appropriate and proportionate communication of all aspects of the assessment of landscape and visual effects, including cumulative effects.
b) Have the findings of the assessment been clearly set out and are they readily understood?
c) Has there been clear and comprehensive communication of the assessment, in text, tables and illustrations?
d) Are the graphics and/or visualisations effective in communicating the characteristics of the receiving landscape and visual effects of the proposals at agreed representative viewpoints?
e) Are the graphics and/or visualisations fit for purpose and compliant with other relevant guidance and standards? and
f) Is there a clear and concise summation of the effects of the proposals?

Overall Conclusion: Report the review

The final step of the review process is to use the reviewer's findings to draft a short report which would include (but need not be limited to):

1. Confirmation of the brief issued to the reviewer setting out the scope of the review;
2. A summary of how the review was undertaken);
3. A summary of findings of the review of the assessment methodology;
4. A summary of findings of the review of the scope of the assessment;
5. A summary of findings of the review of the actual assessment of effects;
6. A summary of findings of the presentation of the assessment;
7. A summary statement by the reviewer in respect of appropriateness, quality, comprehensiveness, compliance and conformity with relevant guidance and regulations;
8. Recommendations for further information to be sought (if necessary); and
9. Overall conclusions on the adequacy of the assessment and whether it is sufficient to support making an informed planning decision.

The report can also include further information not covered here but relevant to reporting on the compliance (or otherwise) of the LVIA or LVA with GLVIA3 or matters of competence or expertise. This guidance provides a summary framework for reviewing and reporting only; the Landscape Institute continues to regard GLVIA3 as the primary source of guidance for undertaking LVIAs and LVAs.

4. Further information

For further information or to provide feedback on the guidance in use, please refer to the Landscape Institute's website, using the search terms GLVIA. At the time of publication, material is likely to be found in the following section: https://www.landscapeinstitute.org/technical/glvia3-panel/

Authored by [redacted] on behalf of the GLVIA Panel and approved by LI Technical Committee
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