



Report to Planning Committee 9 November 2023

Business Manager Lead: Lisa Hughes – Planning Development

Lead Officer: Honor Whitfield, Planner, 01636 655827

Report Summary			
Application Number	22/00976/FULM		
Proposal	Construction of a solar farm, access and all associated works, equipment and necessary infrastructure.		
Location	Field Reference Number 2227, Hockerton Road, Caunton (Muskham Wood)		
Applicant	Muskham Solar Limited	Agent	Pegasus Planning Group Ltd - Emma Ridley
Web Link	22/00976/FULM Proposed solar development, access and associated works. Field Reference Number 2227 Hockerton Road Caunton (newark-sherwooddc.gov.uk)		
Registered	01.06.2022	Target Date	31.08.2022
		Extension To	17.11.2023
Recommendation	That Planning Permission is APPROVED subject to conditions and securing a S106 agreement as set out at Section 10.0.		

This application is being presented to the Planning Committee in line with the Council’s Scheme of Delegation as South Muskham and Little Carlton Parish Council has objected to the application which differs to the professional officer recommendation. Cllr S Saddington has also requested the Application is presented to Planning Committee due to concerns relating to:

- Highways Safety
- Landscape Character and Visual Impact
- Cumulative Impact

1.0 The Site

The application site comprises approximately 69 Ha of agricultural land located in a rural area between the settlements of Hockerton, Caunton, Bathley and Averham/Kelham. Given the isolated nature of the site it falls to be designated as Open Countryside. The site is located on

agricultural land and to the north-west and west are a number of large-scale poultry units. Muskham Wood, which is regarded as a Local Wildlife Site, is located to the south of the site with agricultural fields on all other sides.

The site itself forms part of a larger agricultural holding and contains mature hedgerow and/or trees along many of its boundaries. An electricity pylon and 2 wind turbines can be seen in the distance to the east. The topography of the land appears to rise in gradient with a high point along the centre. Muskham Woodhouse Farm buildings (regarded as non-designated heritage assets) can be seen on raised land to the east of the site.

Two public footpaths cross through the site. Footpath South Muskham FP5 follows a broadly north-south alignment starting from the eastern edge of Muskham Wood and running between the southern field and the two eastern fields and passing outside of the site along the eastern boundary. Footpath South Muskham FP6 follows an east-west alignment from the Poultry Farm, through the site, crossing FP5 and onwards to properties to the east.

The site lies within Flood Zone 1 as defined by the Environment Agency, which means it is at low risk of main river flooding and Caunton Airfield is located adjacent to the north of the site. Views into the site are achievable from the highway (Hockerton Road) at various points due to gaps within the hedgerows.

2.0 Relevant Planning History

Site to the North, Knapthorpe Lodge 22/00975/FULM - Proposed solar development, access and associated works – Pending Consideration at this Planning Committee.

Land at Foxholes Farm, Bathley Lane, North Muskham - 22/01983/FULM – Construction of Solar farm with associated works, equipment and necessary infrastructure – Pending Consideration.

20/SCR/00006 - Request for screening opinion for a proposed solar installation (for the developments cumulatively and individually) – EIA not required.

14/01414/FUL - Erection of a Steel Portal Frames Building with Composite cladding designed to house a BioMass boiler and fuel store for burning on site poultry litter to heat the site – permission 02.10.2014

01/01444/RMA - Erection of two agricultural workers' dwellings to serve proposed poultry rearing unit – permission 18.10.2001

00/01799/OUT - Erection of two agricultural workers dwellings to serve proposed poultry rearing unit – permission 02.08.2001

00/01615/FUL - Erection of 12 poultry rearing houses and feed hoppers, generator building with store and staff facilities. Installation of ancillary works, surface water attenuation pond and new access – permission 26.02.2001

3.0 The Proposal

The application seeks planning permission to construct a 49.9MW solar farm on approximately 69Ha of land (albeit the actual land take of the development would be 59.7Ha as not all land within the site area would have panels or ancillary development sited on it). The solar farm would be a temporary use of the land as the equipment would be removed and the land returned to its former condition when the development is decommissioned following 40 years from the date of the first export of electricity to the electrical grid.

The solar farm would comprise solar panels arranged on a metal framework supported by pile driven foundations, laid out in rows across the site in east-west orientation facing south to form tables ("arrays"), without the need for concrete foundations. The maximum height at the rear of the tables would be 4m. The panels are designed to move and track the movement of the sun across the day, increasing their efficiency and are proposed to be spaced to avoid any shadowing effect from one panel to another with topography dictating exact row spacing. There would be at least 0.8 m between the bottom of the panels and the ground. The panels would be dark blue or black.

The site would be enclosed by c.2.4m high mesh fencing with pole mounted CCTV cameras at 2.6m in height positioned inside and around the site in order to provide security.

The 49.9MW proposal would provide electricity equivalent to the average electrical needs of 15,400 typical UK homes (approx.) annually and assist towards reducing CO² emissions saving approx. 20,690t of CO² per annum. Based on similar projects, construction is expected to take place over approximately 6 months (up to 26 weeks).

Supporting infrastructure includes:

- Low voltage switchgear cabinet;
- High voltage transformer and DNO substation;
- Boundary fencing (deer fencing mounted on timber posts) around the edge of the site, with access gates into the site;
- Associated access tracks connecting transformer and switchgear substations; and
- A pole mounted CCTV system located at strategic points around the site.

Access to the site would be off an existing access to the east of Hockerton Road which passes to the north of the Poultry Farm and into the site. The site access would serve the entire site and would be connected to a network of internal roads within the site. Existing public rights of way are proposed to be retained in their existing locations, enclosed with perimeter fencing with a 10m off set either side (20m corridor).

Landscaping mitigation proposals include:

- 35m wide native structural planting buffer along the eastern boundary of the southern portion of the site (either side of FP6);
- Retention, protection and enhancement, where appropriate, of existing trees and hedgerows, using native tree and hedgerow species;
- Provision of new native infill planting where gaps are present in the existing field boundary hedgerows, including unused field access points, to define site boundaries and provide additional visual enclosure;

- Provision of new native hedgerows to define field boundaries where none are present, or have been lost over time;
- Provision of new hedgerow tree planting, where appropriate, to break up the massing of the proposed development and filter views from neighbouring areas;
- Existing and proposed native hedgerows managed to a height of 3m or over to enhance visual enclosure; and
- Ongoing management of all new planting during the lifetime of the solar farm.

Documents assessed in this appraisal:

- Application Form
- Planning Design and Access Statement (deposited 18 May 2022)
- Heritage Statement (deposited 18 May 2022)
- Glint and Glare Assessment (deposited 18 May 2022)
- Memorandum report (deposited 05 January 2023)
- Flood Risk Assessment and Surface Water Drainage Strategy (deposited 18 May 2022)
- Construction Traffic Management Plan (deposited 18 May 2022)
- Agricultural Land Classification, Soil Resource Assessment (deposited 18 May 2022)
- Statement of Community Involvement (deposited 23 June 2022)
- Preliminary Ecological Appraisal (deposited 01 June 2022)
- Noise Impact Assessment (deposited 15 June 2022)
- Landscape and Visual Impact Assessment (deposited 15 June 2022)
- Arboricultural Assessment (deposited 01 June 2022)
- Letter from Agent – NSIP Consideration (deposited 25 July 2022)
- Letter from Agent – LVIA Rebuttal (deposited 19 October 2022)
- Geophysical Survey Report (deposited 05 January 2023)
- Ecological Impact Assessment (deposited 05 January 2023)
- Planning Addendum Additional Information (deposited 05 January 2023)
- Transport Technical Note (deposited 03 July 2023)
- Distances Between Residential Properties and Nearest Panels (deposited 03 July 2023)
- Heritage Addendum (deposited 03 July 2023)
- Biodiversity Management Plan Rev 1 (deposited 03 July 2023)
- Cover Letter (deposited 03 July 2023)
- Arboricultural Impact Assessment Report (deposited 03 July 2023)
- Biodiversity Metric (deposited 21 August 2023)
- Agent Supporting Email 21 August 2023
- Memorandum Report [Glint & Glare] (deposited 14 September 2023)
- Archaeological Evaluation Interim Report (deposited 22 September 2023)

Plans:

- Site Location Plan – Ref. P21-1380.001 Rev. D
- Layout Plan – Ref. P21-1380.002 Rev. I
- Landscape & Ecological Masterplan – Ref. P21-1380.003 Rev. H
- Typical Panel Elevations – Ref. P21-1380.101
- Typical Client and DNO Substation Detail – Ref. P21-1380.102
- Typical Inverter Detail – Ref. P21-1380.103
- Typical CCTV, Post and Security Speaker Details – Ref. P21-1380.104
- Typical Fence detail – Ref. P21-1380.105
- Typical Access Track Detail – Ref. P21-1380.106

- Additional Viewpoint Locations – Ref. P21-1380-EN-100
- Compound Area Plan – Ref. P21-1380.004
- Analysis of Existing Vegetation – Ref. P21-1380.005
- Composite Layout Plan Showing Both Schemes – Ref. P21 13801 006 Rev. C
- Cable Routing Plan
- Proposed Skylark Plots – Ref. P21-1380. 100 Rev. A

4.0 Departure/Public Advertisement Procedure

Occupiers of 23 properties have been individually notified by letter. Site notices have also been displayed around the site and an advert has been placed in the local press.

Site Visit undertaken on: 10.06.2022 and 27.03.2023

5.0 Planning Policy Framework

The Development Plan

Newark and Sherwood Amended Core Strategy DPD (2019) (ACS)

Spatial Policy 3 – Rural Areas
 Spatial Policy 7 – Sustainable Transport
 Core Policy 9 – Sustainable Design
 Core Policy 10 – Climate Change
 Core Policy 12 – Biodiversity and Green Infrastructure
 Core Policy 13 – Landscape Character
 Core Policy 14 – Historic Environment

Allocations & Development Management DPD (2013) (ADMDDP)

Policy DM4 Renewable and Low Carbon Energy Generation
 Policy DM5 – Design
 Policy DM7 – Biodiversity and Green Infrastructure
 Policy DM8 – Development in the Open Countryside
 Policy DM9 – Protecting and Enhancing the Historic Environment
 Policy DM12 – Presumption in Favour of Sustainable Development

Other Material Planning Considerations

- National Planning Policy Framework (NPPF) 2023
- National Planning Practice Guidance (on-line resource)
- Landscape Character Assessment SPD (Adopted December 2013)
- The Climate Change Act 2008
- UK Government Solar Strategy 2014
- EN-1: Overarching National Policy Statement for Energy (July 2011);
- EN-3: National Policy Statement for Renewable Energy Infrastructure (July 2011)
- Written Ministerial Statement on Solar Energy: protecting the local and global environment made on 25 March 2015
- Commercial Renewable Energy Development and the Historic Environment Historic England Advice Note 15 (February 2021)
- The Climate Crisis: A Guide for Local Authorities on Planning for Climate Change (October

2021)

- Planning (Listed Buildings and Conservation Areas) Act 1990

6.0 Consultations

NB: Comments below have been summarised. Full Consultee comments can be found on the online planning file.

(a) Statutory Consultations

Natural England – No objection - The proposed development will not have significant adverse impacts on statutorily protected nature conservation sites or landscapes.

Environment Agency – No objection.

NCC Lead Local Flood Authority – No objection subject to a condition relating to the submission of a detailed surface water drainage scheme based on the Flood Risk Assessment (FRA).

Historic England – No comments to make.

NCC Highway Authority – No objection subject to conditions.

Ministry of Defence – No safeguarding objection.

National Air Traffic Services – No safeguarding objection.

(b) Town/Parish Council

Little Carlton and South Muskham Parish Council (Host) – Object – Concerns raised:

- Concerns regarding the visual impact of the development
- Concerns regarding the loss of Grade 3 agricultural land
- Concerns regarding the impact on the PRoW and users
- Glint and glare has not been satisfactorily addressed as the panels are moveable and would follow the sun during the day. This would impact adjacent properties through glare
- The sun tracking of the panels will create noise nuisance
- Concerns regarding heavy construction traffic and the impact on adjacent roads
- Concerns regarding the impact on local people's health and wellbeing due to the loss of countryside vista and access
- Concerns regarding the ecological impact due to fencing the site in and restricting wildlife access
- Concerns that the impact on the adjacent airfield has not been properly considered and the potential economic impact if this is forced to close due to glint and glare
- Concerns regarding the cumulative impact on the area
- Insufficient local engagement has been undertaken, other than a flyer drop.
- Concerns that water supplies to existing properties could be damaged and queries over long term maintenance

- Concerns about discrepancies and misrepresentation in the documents
- Concerns about archaeological impact

Caunton Parish Council (Host) – No comments received.

Winkburn Parish Council – No comments received.

(c) Representations/Non-Statutory Consultation

Caunton Airfield – No comments received.

NSDC Conservation Officer – No objection – The panels would be at least 50m from the scheduled monument which will help mitigate the visual impact of the development. However, defer to Historic England for an assessment.

NSDC Archaeological Advisor – No objection subject to conditions.

NSDC Environmental Health – No objection subject to a condition relating to the plant noise limits specified in the noise assessment.

NCC Ecology – No comments received.

Nottinghamshire Wildlife Trust – No objection subject to conditions relating to precautionary best practice and mitigation measures.

NSDC Biodiversity and Ecology Officer – No objection subject to conditions.

NSDC Trees and Landscape Officer - No objection - Comments relate to the requirement for an offset from the Ancient Woodland, requirement for screening of the PRow and appropriate landscape planting.

NCC Rights of Way – No objection – informative notes advised.

Ramblers Association – Object given the width of the PRow corridor is not defined, nor is there any proposed planting to screen the fencing and create a green lane for the benefit of walkers and wildlife.

NCC Planning Policy – No objection.

Campaign to Protect Rural England Nottinghamshire – Object – Concerns raised:

- Concerns that the plans have not been developed with the local community and are not supported by local people.
- The development would take agricultural land out of production for 40 years at a time when the UK needs to become more self-sufficient in food for food security and climate reasons.
- The landscape impact would be significant and would not be mitigated.
- The applications are contrary to the development plan policies DM4 and DM5.

Comments have been received from 9 third parties/local residents that can be summarised as follows:

Visual, Character and Heritage Impact:

- Concerns regarding the visual impact on the countryside.
- Concerns about the heritage impact.
- Concerns that the impact assessment has not considered properties in closest proximity to the site.
- Concerns that the geophysical survey has not been conducted on the entire site due to fields containing crops.
- Concerns that the landscape and visual impact assessment has not been carried out correctly and does not consider the impact on the closest residential receptors.
- Concerns that the Glint and Glare assessment has not been carried out from closest neighbouring properties.
- Dispute of the conclusions from the Glint and Glare report, it is considered that Wheaten House is significantly elevated from the site and the impact will be major-adverse.
- Concerns that the Archaeological Trial Trenching has not been undertaken correctly.

Agricultural Land:

- The need for greener energy is important but we must consider the impact of the loss of agricultural fields and land that is classed as best and most versatile agricultural land.
- The site is not appropriate as the agricultural land grade is good.

Sustainability:

- Whilst solar panels are recyclable, they are expensive to recycle and there is not an effective way of disposing of them cost effectively at this time which is not environmentally friendly if they are put to landfill.

Amenity:

- Concerns about the noise impact of the development on sensitive receptors.
- Concerns about the impact through glint and glare on nearby properties and roads.
- Impact on children occupying nearby houses.

Ecology:

- Skylarks nest within the field and would be disturbed as part of the proposals.
- The site is home to various species such as roe deer, fallow deer, hares, buzzards, red kites, adders, grass snakes and wetland mammals.
- Muskhams Wood which borders this development is an ancient woodland and provides habitats for many species.

Highways:

- The local road system is made up of single carriage farm lanes, whilst the report acknowledges HGVs will be using them there is no mention of making good any additional road damage that may occur.
- Concerns about the impact of fencing off footpaths and the enjoyment of these routes through the site.

- Concerns that the Glint and Glare study has not adequately considered local highway infrastructure/lanes.

Other:

- Concerns that the Glint and Glare assessment shows adverse impacts on the local airfield.
- Concerns about the credibility of the reports and their conclusions.
- Wheaten House is incorrectly referred to as Muskham Woodhouse Farm.
- Concerns about the ongoing maintenance of the solar farm.
- The development is just to create more money for the landowner at the expense of residents.
- Concerns regarding the lack of/inadequate community engagement prior to submission.
- Concerns that this application and the Knapthorpe Grange application cumulatively should be considered as nationally significant infrastructure projects (NSIP).
- Concerns about the impact on local water supplies, drainage infrastructure and ongoing maintenance.
- Concerns that other land in the vicinity will be developed for similar uses in the future.
- Concerns about the physical and mental health implications of the proposal.
- Concerns about fire risk.
- Concerns that the soil assessment shows the land has agricultural value and the report omits the fact that spring barley as well as Oil seed rape is grown on the site.
- Concerns that the CCTV poles would infringe people's privacy.

7.0 Comments of the Business Manager – Planning Development

The key issues are:

1. Procedural Matters
2. Principle of Development
3. Loss of Agricultural Land/Alternative Sites
4. Landscape Character and Visual Impacts
 - a. Landscape Effects
 - b. Landscape Character
 - c. Visual Impact
 - d. Cumulative Effects
 - e. Glint and Glare
5. Impact upon Heritage (including Archaeology)
6. Impact upon Public Rights of Way
7. Impact upon Highway Safety
8. Impact upon Flood Risk
9. Impact upon Ecology
 - a. Trees
 - b. Biodiversity Net Gain
10. Impact upon Residential Amenity
11. Other Matters
 - a. Length of Temporary Consent
 - b. Public Consultation

The National Planning Policy Framework (NPPF) promotes the principle of a presumption in favour of sustainable development and recognises the duty under the Planning Acts for planning applications to be determined in accordance with the development plan, unless material considerations indicate otherwise, in accordance with Section 38(6) of the Planning and Compulsory Purchase Act 2004. The NPPF refers to the presumption in favour of sustainable development being at the heart of development and sees sustainable development as a golden thread running through both plan making and decision taking. This is confirmed at the development plan level under Policy DM12 of the Allocations and Development Management DPD.

Procedural Matters

It is noted that there is a concurrent application for a 49.9MW solar farm and associated infrastructure that has been submitted on c. 76.5Ha of land directly to the north and north-west of this application site (ref. 22/00975/FULM, hereby referred to as the Knapworth Grange Site). If both this Muskham Wood and the Knapworth Grange proposals were considered as a single application, then it would qualify as a Nationally Significant Infrastructure Project (NSIP) requiring a Development Consent Order (as it would exceed the 50MW threshold) and would be decided by the Secretary of State. In light of this and given the close proximity of the application sites and the fact that the applications have been submitted simultaneously, advice has been sought from the Planning Inspectorate (PINS) and the Council's Legal Officer as to whether the Council is the correct determining authority for these applications.

The advice received from PINS did not purport to give legal advice and explained that only the Courts could provide a definitive interpretation of legislation – at that point, as far as PINS were aware, there had been no case law on this point under the Planning Act 2008 (PA 2008) regime. However, to assist the Council in coming to its decision on whether it is the correct determining authority, PINS provided a series of questions to put to the Applicant to ascertain whether the Sites could be considered as different generating stations.

Firstly, the Applicant states that the sites would be owned by separate entities – in this case the owners of the sites are different legal entities, however further investigation does show that both Muskham Solar Limited¹ and Knapthorpe Solar Limited² have the same registered offices, the same 'Person of Significant Control' which is Staythorpe Power Limited and the same two directors. This does raise the question as to how entirely separate the entities are, however for legal purposes the two companies are separate.

The Applicant also asserts in their submissions that the Solar Farms on the two sites would operate entirely independently of each other and would be separate generating stations. They state that each of the solar farms would have a separate grid connection comprising one export cable per project to separate connection bays at a new collection point. The connection is proposed to the transmission network, rather than the distribution network,

¹ [MUSKHAM SOLAR LIMITED people - Find and update company information - GOV.UK \(company-information.service.gov.uk\)](#)

² [KNAPTHORPE SOLAR LIMITED overview - Find and update company information - GOV.UK \(company-information.service.gov.uk\)](#)

and so there would be no Distribution Network Operator (DNO) involvement. The Applicant has explained that there are agreements with the National Grid in place, providing capacity for each solar farm to operate unconstrained. However, in the event of any constraints on capacity, a grid sharing agreement would have to be entered into between the projects to regulate the use of the grid connection. In this respect, a recent judgement³ for two solar farms considered the sharing of infrastructure and whether this factor would trigger simultaneous applications to be considered as NSIPs and concluded that the sharing of cabling and a common substation between two solar farms which were one mile apart was insufficient to mean that they constituted a single generating station.

PINS advised that another important consideration would be whether the developments are considered to require an Environmental Impact Assessment (EIA). A detailed assessment of this application both individually and cumulatively with the Knapworth Grange scheme will follow in the appraisal, however ultimately, having reviewed the nature and magnitude of likely impacts upon the environment, it is considered that the developments would be unlikely to have *significant effects* on the environment of any more than local importance. It is therefore not considered that these proposals require an EIA.

In terms of the construction and maintenance the Applicant has advised that the sites are unlikely to be constructed simultaneously with movements to and from the site(s) being controlled by the final Construction Traffic Management Plan (CTMP). Given the scale of the construction operation it is anticipated that the construction phases will be undertaken separately from one another with separate connection infrastructure.

Essentially the Applicant asserts that neither solar farm is dependent on the other solar farm, and each are capable of being consented and constructed separately. They do not form part of the same substantial development, would not form one singular generating station, and they are not dependent on one another. The Council's Legal Officer has therefore concluded that each application can be determined separately, by NSDC, under the Town and Country Planning Act 1990 on the basis that the two solar farms are separate applications, do not share infrastructure and would be wholly independent of each other.

Principle of Development

The site is located within the open countryside. Policy DM8 (Development in the Open Countryside) of the ADMDPD is silent on the appropriateness of renewable energy in the open countryside. However, the District Council's commitment to tackling climate change is set out in Core Policy 10 (Climate Change). This provides that we will encourage the provision of renewable and low carbon energy generation within new development. Policy DM4 (Renewable and Low Carbon Energy Generation) provides that permission shall be granted for renewable energy generation schemes unless there are adverse impacts that outweigh the benefits. This approach is also echoed by the NPPF which states that *'when determining planning applications for renewable and low carbon development, local planning authorities should: a) not require applicants to demonstrate the overall need for renewable or low carbon energy and recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions; and b) approve the application if its impacts are (or can be made) acceptable'*.

³ [Sheraton-Judgment-final-for-hand-down_cover-page.pdf \(cornerstonebarristers.com\)](#)

In determining this application, it is necessary to balance the strong policy presumption in favour of applications for renewable technologies against the site-specific impacts. The wider environmental and economic benefits of the proposal are also a material consideration to be given significant weight in this decision. Site-specific considerations including further consideration of Paragraph 13 (Reference ID: 5-013-20150327) of the National Planning Practice Guidance (NPPG) which outlines a number of factors which local planning authorities need to consider in the assessment of large-scale ground-mounted solar farms, are set out below.

Loss of Agricultural Land/Alternative Sites

Policy DM8 states that *'proposals resulting in the loss of the most versatile areas of agricultural land, will be required to demonstrate a sequential approach to site selection and demonstrate environmental or community benefits that outweigh the land loss'*.

The Planning Practice Guidance outlines a number of factors which local planning authorities will need to consider in the assessment of large-scale ground-mounted solar farms. The stance of the Guidance is to encourage the effective use of land by focussing large scale solar farms on previously developed and non-agricultural land. Paragraph 13 goes on to qualify that where a proposal involves greenfield land, the local planning authority will need to consider whether the proposed use of agricultural land has shown to be necessary and where it has, that poorer quality land has been used in preference to higher quality land, and that the proposal allows for continued agricultural use and/or encourages biodiversity improvements around arrays. The Written Ministerial Statement of 25 March 2015 also relates to the unjustified use of agricultural land and expects any proposal for a solar farm involving the best and most versatile agricultural land (BMV) to be justified by the most compelling evidence. This approach is also reflected in the NPPF, which suggests that where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality.

It is recognised that agricultural land is an important natural resource and how it is used is vital to sustainable development. The Agricultural Land Classification system classifies land into 5 grades, with Grade 3 subdivided into sub-grades 3a and 3b. The NPPF defines BMV land as Grades 1, 2 and 3a as land which is most flexible, productive and efficient in response to inputs, and which can best deliver food and non-food crops for future generations. Sub-grade 3b is then described as *"moderate quality agricultural land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass harvested over most of the year"*.

The application has been supported by an Agricultural Land Classification (ALC) report undertaken by qualified experts in this field. The report concludes that the site comprises 4 agricultural enclosures in arable use (growing oil seed rape under sown with a grass cover crop at the time of the survey), all of which has been graded as being of Grade 3b quality (69.59Ha), thus not constituting BMV agricultural land. The survey concludes that the development will require agricultural land to be removed from arable production but will not preclude use of the land for grazing of smaller animals and/or poultry, grass cutting for conservation nor establishment of a biodiversity or pollination area for the duration of the

scheme. Impacted land will remain capable of maintaining a basic agricultural function that can be sympathetically managed for the lifetime of the development.

It is however recommended that a land and soil management plan be formulated and implemented for the duration of the scheme and for a minimum of five years after decommissioning to ensure that the land/vegetation is managed in a sympathetic manner leading to suitable soil profiles and healthy plant growth in the longer term.

Natural England is a statutory consultee on development that would lead to the loss of over 20ha of BMV agricultural land, however, as the entire site is classified as 3b the proposal would not have significant adverse impacts on BMV agricultural land and it is noted that Natural England have raised no objection to the proposal. However, it is still necessary to consider whether the proposal represents effective use of land in line with the abovementioned PPG which encourages the siting of large-scale solar farms on previously developed and non-agricultural land.

The applicant has provided reasons for selecting this site within the Planning Addendum (dated December 2022). This explains why the application site was selected based on issues around technical suitability and capacity, grid connection feasibility, site availability and planning constraints. The fundamental reason for selecting this site is because this locality was identified as an area with grid capacity availability and a viable connection point to the network. Evidence has also been supplied during the course of this application to demonstrate the proposed connection point and how this could be completed under Electricity Undertakings Permitted development. Given the significant land take involved, Officers are not aware of any alternative brownfield sites that could accommodate the scale of development proposed that could be utilised in order to access this connection point in the vicinity. Overall, it is therefore considered that the reasons why the site has been selected in principle are acceptable.

Furthermore, Officers are mindful that the proposal would not lead to significant long-term loss of agricultural land as a resource for future generations, given the solar farm would be in situ for a temporary period. This is because the solar panels would be secured to the ground by steel piles with limited soil disturbance and could be removed in the future with no permanent loss of agricultural land quality likely to occur. Although some components of the development, such as construction of the sub-station and other buildings, may permanently affect agricultural land, this would be limited to small areas. Officers are also mindful that it is proposed that the land between the rows of solar panels would be grassland which could be used for grazing (which would allow for continued agricultural use as supported by PPG) and could improve the land/soil quality long-term.

The proposal would provide electricity equivalent to the average electrical needs of approx. 15,400 typical UK homes annually and assistance towards reducing CO₂ emissions. As such, this would result in a substantial benefit of the scheme in terms of renewable energy production. The NPPF supports renewable and low carbon development, with Paragraph 158 stating that authorities should approve such applications if the impacts can be made acceptable. Overall, it is therefore considered that it would be difficult to justify refusal solely on the grounds that the proposal would be on agricultural land in this instance as the proposal is considered to comply with the aims of national planning policy in this regard.

Landscape Character and Visual Impacts

Core Policy 9 (Sustainable Design) states that new development should achieve a high standard of sustainable design and layout that is of an appropriate form and scale to its context complementing the existing built and landscape environments. Core Policy 13 (Landscape Character) requires the landscape character of the surrounding area to be conserved and created.

Paragraph 174 of the NPPF states that *'Planning policies and decisions should contribute to and enhance the natural and local environment by: recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland.'*

To support this application a Landscape and Visual Impact Assessment (LVIA) has been submitted to identify and assess the likely significance of the landscape and visual effects of the proposed development on the surrounding area. For clarity, landscape impact is the effect of a proposed development on the fabric, character and quality of the landscape and concerns the degree to which a proposed development will become a significant or defining characteristic of the landscape. Visual impacts concern the degree to which the proposed development will become a feature in particular views (or sequences of views), and the impact this has upon the people experiencing those views. An assessment of these elements will now be taken in turn.

Landscape Effects

The LVIA includes a detailed assessment of each landscape feature and elements that may be impacted by the proposal – in summary the development would result in:

- A minor adverse effect on on-site topography;
- No discernible effect on on-site water features;
- A moderate adverse effect on land use within the Site;
- A major adverse effect on the character of the PRowS which cross the Site; and
- A moderate beneficial effect on on-site vegetation (hedgerows, trees and cropped vegetation).

In respect of the major adverse effect identified on the PRow - there are two footpaths which cross the site – the nature and character of these routes is of countryside routes crossing arable farmland, albeit in the context of existing poultry production units to the west and with wind turbines visible to the east. The susceptibility of the character of these routes to development of the type proposed is high as the installation of solar arrays close to the routes would alter that character from crossing arable farmland to passing through relatively low-level renewable energy infrastructure. The overall sensitivity is therefore considered to be high. The LVIA explains that the scheme would result in changes to the surroundings of the routes, particularly during the construction phase. But by setting the solar arrays back from the routes (within a 20m corridor) and maintaining and enhancing existing native vegetation (trees and hedgerows) in the vicinity of the routes, such changes would be limited, and would only affect limited sections of the routes (two separate sections of approximately 670m and 150m of South Muskham FP5, and approximately 840m of South Muskham FP6) – the remainder of the routes which lie outside of the Site would still be across open farmland.

Existing retained and enhanced field boundary vegetation surrounding the Proposed Development would also help to limit visibility of the solar arrays and other infrastructure from elsewhere on these routes beyond the site boundaries. There would be no direct effects on the rest of the wider local PRoW network. The LVIA concludes that changes to the character of these routes would be medium in scale, and predominantly limited to within the Site - such changes would be long-term, but reversible when the solar farm is decommissioned, and the land returned to agriculture. The magnitude of change to the character of these routes is assessed as medium during the construction phase and at Years 1 and 5. With high sensitivity, this would result in a major adverse effect.

Due to the technical nature of an LVIA assessment the Council has sought independent advice from consultants at Influence who have undertaken their own independent assessment of the Applicant's LVIA. Their assessment does not dispute any of the abovementioned conclusions in relation to the Landscape Effects of the proposal.

Landscape Character

The site is located in Natural England National Character Area (NCA) 48 Trent and Belvoir Vales - the LVIA concludes that the development is not considered likely to result in any perceptible effects on landscape character at this national scale and to remain proportionate to the small scale of the site in relation to the NCA, focus is placed upon the local landscape character.

The LVIA concludes that the Proposed Development would result in the conversion of the fields within the Site from intensively farmed arable farmland to a solar farm (with species-rich grassland managed by sheep grazing beneath the solar arrays). This would result in a long-term major adverse effect on the landscape character of the Site and its immediate environs, reducing to moderate adverse with increasing distance from the Site. By Year 5, the growth and development of retained, enhanced and newly planted hedgerows and trees within the Site would reduce the visibility of the Proposed Development from the landscape surrounding the Site, with a corresponding reduction in the scale of effect on this landscape to moderate or minor-moderate adverse.

For Policy Zone MN30: Knapthorpe Village Farmlands with Ancient Woodland, within the Mid-Nottinghamshire Farmlands Landscape Character Area (LCA), the overall scale of effect on landscape character is concluded to be moderate adverse, reducing to minor adverse with increasing distance from the Site. In the context of the Landscape Character impact on this policy zone, these effects are not considered to be significant. For other nearby LCAs and Policy Zones which may undergo indirect perceptual/experiential effects, the scale of effect is concluded to be negligible.

Turning to the landscape character of the site and its immediate environs the LVIA concludes that the landscape is considered to be of medium value and medium susceptibility to change, resulting in medium sensitivity. Direct effects on the landscape character of the Site would be large in scale, limited to the Site itself, long-term in duration, but reversible following decommissioning of the site at the end of its life. Effects on the field boundary vegetation within the Site would be very limited. The magnitude of change to the landscape character of the Site is therefore assessed as large. The short length of the construction phase means that

although there would be greater levels of activity on the Site during this period, the overall level of change to landscape character would be broadly the same during the construction phase and at Years 1 and 5. With medium sensitivity, the scale of effect would be major adverse within the Site.

For the landscape immediately surrounding the Site, the effects would be indirect/perceptual, medium in scale, and predominantly experienced within close proximity to the Site. Effects would be long-term in duration, but reversible following decommissioning of the site at the end of its life. The magnitude of change is therefore assessed as large immediately adjacent to the Site, decreasing to medium within increasing distance from, and decreasing visibility of, the Proposed Development. With medium to high sensitivity, the scale of effect would be major adverse, decreasing to moderate adverse with increasing distance from the Site. Again, the short length of the construction phase means that although there would be greater levels of activity on the Site during this period, the overall level of change to landscape character would be broadly the same during the construction phase and at Year 1.

Post-construction, the development of intervening (field boundary) vegetation would mean that the decrease in effect with increasing distance from the Site would become more noticeable over time. The magnitude of change would decrease to small by Year 5, resulting in a minor-moderate adverse effect within the more distant surroundings to the Site. All adverse effects on landscape character would be fully reversed following decommissioning of the proposed solar farm at the end of its life, with all site infrastructure being removed. Any enhancements to field boundary vegetation would remain after the decommissioning of the Site.

Influence have confirmed that the Applicant's assessment of the site's Landscape Sensitivity is aligned with their own professional judgements – in this case, although the site is in a rural location with good scenic quality, Influence have advised that the landscape is not distinctive, it is typical of tracts of the surrounding countryside and is not *designated*. They also conclude that they are in agreement that there would be a major adverse effect on the landscape character of the site and the immediate environs for the duration of the scheme that would decrease with increasing distance from the site and reduce to minor-moderate adverse after Year 5.

Visual Impact

The initial LVIA assessed six viewpoints for this application, which Influence commented advising that on the face of it appeared a disproportionately small number considering the surrounding receptors and the size of the application in this specific location. Whilst Influence agreed with the sensitivities set out in Tables 7.1 of the LVIA for the residential, recreational and road receptors they noted there were a number of locations where additional viewpoints should be recorded to ensure that the baseline is robust and to provide a visual reference when reading the conclusions in Table 7.1.

At this stage it is important to clarify that the LVIA and the review undertaken by Influence refers to '*Muskham Woodhouse Farm*' as being the closest property with its curtilage abutting the boundary of the site, however this is incorrect as this property has been known as '*Wheaten House*' for some time. Whilst understanding the frustration of local residents about

this error of reference, for the purposes of the assessment both names are considered to be synonymous.

The LVIA concludes that major effects on visual amenity would be limited to receptors within the Site or within approximately 500m of the Site boundary (or within approximately 750m to the north). The assessment by Influence concludes that visually, the receptors most likely to receive the greatest effects from the Proposed Development are:

- Users of Caunton FP2
- Users of South Muskham FP6
- Residents of Muskham Woodhouse Farm/Wheaten House (E), the property on Caunton FP4 (W), Knapthorpe Manor (to the NW)

The combination of the topography and the vegetation on and surrounding the site are noted to reduce the extent of the visual effects. However, each of the receptors above have been assessed as experiencing a major-moderate adverse impact and as set out in Table 7.1, landscape mitigation will have very little effect on reducing this level up to and after Year 5. In the context of a proposal of this scale the number of receptors that would be adversely affected is relatively small. However, given that there are a relatively small number of sensitive receptors that would potentially receive the greatest level of effect, Influence advised that the Proposed Layout Plan did not respond well to the findings of the LVIA and seek to mitigate some of these impacts. A number of recommendations were therefore made to improve the scheme and reduce/mitigate some of the impacts.

Additional Viewpoints (VP) 14 and 15 were surveyed which has assisted in clarifying the baseline position for this part of the PRoW FP5 which previously was not recorded visually. These VPs now show the relationship of the concave rising ground on the east of the PRoW towards Muskham Woodhouse Farm/Wheaten House and the convex rolling ground to the west towards Knapworth Lodge. Views of people using this PRoW will switch between the fields in either direction of travel on this part of the route and these additional VPs demonstrate that ultimately, they will lose most of the views of the features in this landscape as a result of the development. Influence therefore requested clarity on the buffer around the PRoW within the site, noting that for a reasonable portion of their length they would become enclosed with solar arrays, which would be compounded in this case due to the arrays proposed to be sun tracking. Following clarification, the plans have been amended to show the PRoW within a 20m wide corridor from the solar arrays which Influence have welcomed and have advised would help mitigate the impact to users of these PRoW.

The assessment from Influence also highlighted their main concern in relation to the visual effects of this Application was the land on the eastern side of the Site which steps over the PRoW and is on rising ground to properties around Wheaten House. Influence note that this part of the landscape feels slightly separated by the vegetation which restricts most visual connections into the main area of the proposal but is more sensitive due to the rising topography. Conversely the land to the east and south of the poultry farm have the least sensitivity due to Muskham Wood to the south and the Poultry Farm to the west. It was therefore recommended that the solar panels be reduced on the eastern side of the site to provide a greater off set from residential properties and their private amenity spaces (and it was suggested that should the Applicant wish to consider relocating these panels they could look at siting them to the west where the site has less sensitive visual receptors). Following

negotiations an amended plan has been submitted showing a 35m off-set from the eastern boundary (see plan below) with additional structural buffer planting (maintained at 3m in height) and semi-mature trees planted at 4.5-5m in height. Influence have concluded that this would assist in reducing the scale of effect on the closest properties but would not prevent the overall major-adverse impact recorded on these properties for the duration of the scheme.



Proposed Site Layout Plan showing green buffer off-set from properties to the east

Overall, in respect of visual effect there would be major to moderate effects on sensitive receptors – local residents and users of the PRoW network – however, Influence have advised that these are limited in number (particularly for a proposal of this scale), and the layout has also been amended in an attempt to mitigate those impacts.

Cumulative Effects

In addition to this Proposal, planning applications for two other solar farms have been submitted in the vicinity of Muskham Wood – at Foxholes Farm (approximately 3.3km to the north-east of the Site) and Knapthorpe Lodge, immediately to the north of the Site. Whilst each solar farm would be a standalone entity and could be implemented in isolation from one another (or not at all), it is nevertheless necessary to assess the likely cumulative landscape and visual effects that might arise from the Proposed Development in conjunction with these other two proposed solar farms should they all be constructed.

In respect of Landscape Character, the cumulative magnitude of change to the Landscape Immediately Surrounding the Site is assessed as large, and with medium sensitivity, the cumulative scale of effect would be major adverse. However, the LVIA concludes that this localised effect would not result in a notable change in the overriding landscape character of the wider Policy Zone MN30 as a whole, *i.e. intensively managed farmland with views often enclosed by (field boundary) vegetation*. It is accepted that there would be highly localised major adverse cumulative effects on landscape character in the immediate environs of the two sites, however in the context of the LCA as a whole it is concluded that there would be a moderate adverse cumulative effect, reducing to minor adverse with increasing distance from the Site.

In respect of visual effect, the Cumulative Zone of Theoretical Visibility (ZTV) Map in the LVIA demonstrated that there a number of areas where there would be theoretical visibility of both the Proposed Development and one or both of the other schemes. However, the LVIA explains that the field survey has shown that field boundary and other vegetation within the landscape which is not modelled in the Cumulative ZTV means that there would be only very limited, if any, locations from where the Muskham Wood site and the Foxholes Farm would be visible. Where there may be visibility of both sites, the separation distance between the sites themselves, and between potential cumulative receptors and the site, means that any cumulative effects on the landscape character and visual amenity would be very limited.

Conversely, being located immediately adjacent to each other, the LVIA concludes that there would be more notable cumulative visibility (and therefore potential effects on landscape character and visual amenity) of the Muskham Wood and Knapthorpe Lodge sites. However, the field survey has shown that the locations from which there may be cumulative visibility is considerably reduced by unmodelled intervening vegetation and is likely to be limited to:

- Properties at Wheaten House/Muskham Woodhouse Farm which would experience a major adverse effect (albeit it is noted that the cumulative magnitude of change arising from the Proposed Development in combination with the Knapthorpe Lodge solar farm would be no greater than that arising from the Proposed Development on its own, i.e., large);
 - Properties to the immediate north-west of the poultry farm adjacent to the Site which would experience a negligible cumulative effect;
 - Properties at Middlethorpe Grange and Dean Hall Farm which would experience a negligible cumulative effect;
 - Properties at Lodge Farm and Lodge Cottages on the A616 which would experience a minor adverse cumulative effect;
 - Sections of Caunton Road (between the Bedmax plant and the A616) and Certain properties on Caunton Road:
 - Occupiers of two properties and users of Caunton Road to the north of Knapthorpe would experience a major adverse cumulative effect.
 - Other properties in Knapthorpe would experience a major adverse cumulative effect (albeit it is noted that the cumulative magnitude of change arising from the Proposed Development in combination with the Knapthorpe Lodge solar farm would be no greater than that arising from the Proposed Development on its own, i.e., large).
 - Users of Caunton Road to the south of Knapthorpe would experience a moderate adverse effect (which would similarly be no greater than the effect arising from the Proposed Development on its own, i.e., medium);
 - Footpath Caunton FP2 and very limited parts of Caunton FP3 (within the Knapthorpe Lodge site) which would experience a major adverse cumulative effect (which would be no greater than the effect arising from the Proposed Development on its own, i.e., medium-large);
 - Footpaths South Muskham FP5 and FP6 (within the Site) which would experience a major adverse cumulative effect (which would be no greater than the effect arising from the Proposed Development on its own, i.e., very large);
 - Footpath Caunton FP4 which would experience a major adverse cumulative effect;
- and

- Footpath Bathley FP1 which would experience a moderate adverse cumulative effect.

Overall, the LVIA concludes that in respect of cumulative visual effect, there would be a small number of receptors where the cumulative effect would be greater than moderate adverse and, in these cases, they would not be notably greater than those which would arise from the Proposed Development on its own.

Influence have reviewed the overall cumulative assessment and concluded that the assessment clearly sets out the potential landscape and visual impacts of the proposals cumulatively and that there would be notable adverse effects on landscape character and visual amenity arising from the developments both separately and cumulatively, however the impacts will be largely localised and would not be notably greater than those which would arise from the Proposed Development on its own. Given the scale of the proposed development, the number of receptors that would be impacted is relatively small scale and where these have been identified the proposed site layout and planting plans have been amended to mitigate localised impacts as far as possible.

Summary

From a landscape and visual perspective, notable effects which would arise from the Proposed Development would be limited to:

- long-term effects on the nature and character of the two PRoWs which cross the Site;
- long-term effects on the landscape character of the Site;
- short to medium-term effects on the character of landscape within the immediate environs of the Site;
- long-term effects on visual amenity experienced by receptors occupying residential properties within approximately 500m of the Site; and
- long-term effects on visual amenity experienced by users of the two PRoWs which cross the Site and certain other PRoWs within up to approximately 750m of the Site.

In the context of the scale of the Scheme in isolation (and cumulatively with the adjacent Knapthorpe Grange scheme) these adverse effects on landscape character and visual amenity would be limited to the Site and its immediate environs.

Drawing the above together, it is inevitable that located in a countryside location a solar farm of this scale (in addition to the adjacent Knapthorpe Grange proposal and the scheme at Foxholes Farm further north-east) would have some adverse and visual impacts. However, through a combination of topography, separation, landscape mitigation and amendments made throughout the course of this application, the adverse effects have been somewhat reduced and would be localised and progressively mitigated over time as existing and proposed planting matures. Whilst the 40-year lifetime of the Proposal(s) is significant, once the solar farm(s) is decommissioned there would be no residual adverse landscape or visual effect. In these circumstances, whilst there would be some localised harm to landscape character and some visual harm to a small number of receptors which would be in conflict with relevant development plan policies and the Landscape Character Assessment SPD, the imperative to tackle climate change, as recognised in legislation and energy policy, and the very significant energy production benefits of the Scheme(s) is considered to clearly and decisively outweigh this identified harm. Therefore, subject to conditions including the

submission of a landscape scheme to provide additional screening and mitigation planting, the proposal is considered to be acceptable in this regard.

Glint and Glare

In terms of the visual impact of the proposed development, the NPPG advises that one of the factors LPA's will need to consider is '*...the effect of glint and glare and on neighbouring uses and aircraft safety*' and that there is '*potential to mitigate landscape and visual impacts through, for example, screening with native hedges*'.

In general, solar photovoltaic (PV) systems are constructed of dark, light-absorbing material designed to maximise light adsorption and minimise reflection. However, the glass surfaces of solar PV systems also reflect sunlight to varying degrees throughout the day and year, based on the incidence angle of the sun relative to ground-based receptors.

A Glint and Glare (G&G) Survey have been submitted to accompany this application which identifies receptors in the vicinity of the site that could be impacted by G&G from the development. The site lies less than 50m to the south of Caunton Airfield, there are also road networks in the vicinity and residential dwellings. The initial survey identified two dwellings that would have a view of the solar farm within 1km of the proposed development (noting all other dwellings were identified as being screened by existing vegetation such as Muskham Wood). Caunton Road is also identified as being within 1km of the development and the survey concludes that direct views of the development could be geometrically possible from this road at two separate points. No railway infrastructure has been identified but aviation infrastructure (Caunton Airfield) has been identified in close proximity to the site.

The G&G survey identifies that there would be a *moderate impact* on the two dwellings identified in the survey as having visibility of the solar farm with glare being identified for certain periods of the day at different points of the year. However, as the hedgerows around the site would be grown and managed at a height of 3m the visibility of glare from these properties would be reduced (to max 42/43 mins per day during affected months (between the hours of 14:30-18:00 in winter and 18:30-20:45 in summer)). The survey also concludes that there would be a low impact on users of Caunton Road which would have limited and sometimes obscured views dependent upon hedgerow management and existing intervening development. However, the original G&G survey concluded that there would be *unacceptable impacts* for all four approach flight paths assessed using Caunton Airfield posing a risk to aviation receptors.

Following discussions with the Applicant a G&G Memorandum has been submitted which considers users of Caunton Airfield and the potential impact of the development in greater detail. The memorandum considers some recent changes to the Federal Aviation Administration policy in relation to Solar Energy projects which was updated to focus on Airport Traffic Control Towers only as: "*in most cases, the glint and glare from solar energy systems to pilots on final approach is similar to glint and glare pilots routinely experience from water bodies, glass-façade buildings, parking lots, and similar features*" and not considered to pose an unacceptable risk. The memorandum explains that based on this guidance the predicted glare from the solar farm (at certain times of the day and parts of the year) would not pose an unacceptable risk towards the airfield operations and users. Furthermore, with

four runway options, if a pilot experienced glare at a certain time of day from one angle of approach, they would have the option to use an alternative runway.

The memorandum explains that the methodology of the original G&G assessment is more applicable to larger aircrafts using large, licensed airports and aerodromes, that incorporate a long final approach, which is not applicable to Caunton Airfield. As such the memorandum considers the actual approach flight paths used by smaller aircrafts which are significantly smaller (in length/size) than detailed in the original G&G survey – as a consequence, the duration of glare experienced would decrease (but would not be eliminated altogether). A review of the Glare modelling has been provided in the memorandum (incorporating the actual approach paths and altitude profile for smaller aircrafts) which explains that glare from the proposal would be limited and would not prevent pilots from using any of the four runways or endanger them during the landing process such that the risk towards the airfield can be considered as being *acceptable*.

A further memorandum report has also been submitted to consider the potential effect on local residents to the east of the site who have raised concerns about the impact of the solar farm on the access road to their properties (i.e., travelling east-west towards the Site to access their properties). This memorandum (Sept 2023) explains that technical modelling is not undertaken for local roads or access roads, where traffic densities are likely to be relatively low. Any solar reflections from the proposed development that are experienced by a road user along an access road would be considered '*low impact*' in the worst-case in accordance with G&G guidance, nevertheless upon request this modelling has been undertaken. The memorandum concludes that with the additional screening/planting proposed as part of the Proposal on the eastern boundary the impacts of glare on the access track would be *low* (limited to between 10-25 mins/day at different points of the year, generally in the latter half of the day). A *low* impact is also identified for three other properties to the east of the site which would experience sporadic glare for less than 60 mins per day during less than 3 months of the year. Overall, subject to the management of the existing hedgerows and new planting proposed around the site to a height of 3m, it is concluded that the Proposal would not pose a significant risk towards the assessed receptors in accordance with G&G guidance criteria.

Comments received from third parties in relation to these new conclusions are noted, however given the memorandums have been provided by a specialist and have not been countered by any comments from Caunton Airfield users (who have been consulted on this application) or National Air Traffic Safeguarding, it is not considered that the impacts identified in relation to glint and glare would be sufficient to warrant withholding permission on this basis, particularly given any identified G&G to residential receptors and road users would only reduce over time as planting establishes. The application is therefore considered to be acceptable in this regard.

Impact on Heritage (including Archaeology)

By virtue of their scale, form and appearance, solar farms are capable of affecting the historic environment. As set out under Section 66 of the Planning (Listed Buildings and Conservation Areas) Act 1990, special regard must be given to the desirability of preserving listed buildings, including their setting. In this context, the objective of preservation means to cause no harm, and is a matter of paramount concern in the decision-taking process. Fundamentally, when

considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation, and the more important the asset, the greater the weight should be.

Core Policy 14 (Historic Environment) and DM9 (Protecting and Enhancing the Historic Environment) of the Council's LDF DPDs, amongst other things, seek to protect the historic environment and ensure that heritage assets are managed in a way that best sustains their significance. The importance of considering the setting of designated heritage assets, furthermore, is expressed in Section 16 of the NPPF and the accompanying PPG. The NPPF advises that the significance of designated heritage assets can be harmed or lost through alterations or development within their setting. Such harm or loss to significance requires clear and convincing justification. The NPPF also makes it clear that protecting and enhancing the historic environment is sustainable development (paragraph 8.c).

Planning practice guidance also states '*...great care should be taken to ensure heritage assets are conserved in a manner appropriate to their significance, including the impact of proposals on views important to their setting. As the significance of a heritage asset derives not only from its physical presence, but also from its setting, careful consideration should be given to the impact of large-scale solar farms on such assets. Depending on their scale, design and prominence, a large-scale solar farm within the setting of a heritage asset may cause substantial harm to the significance of the asset*' in relation to large solar farm applications.

Heritage Assets nearby include:

- The land as an archaeological resource.
- Scheduled Monument: Moated site, fishponds and decoy pond 490m to the north-west of Parking Spring Farm (LEN 1018120) approx. 1km to the west of the site.
- Averham Park House Grade II* Listed Building (NHLE ref. 1046003) approx. 930m to the south of the site
- South Farm, Averham Grade II Listed Building (NHLE ref. 1046004) approx. 930m to the south of the site

The submitted Heritage Assessment explains that no designated heritage assets within the Site or beyond the 1km study area were considered to have the potential to experience any change to their setting through the development of the Site. The Council's Conservation Officer has not raised any concerns with this conclusion.

Impact upon Archaeology

Turning now to the potential archaeological impact of the scheme, Core Policy 14 sets out that the Council will seek to secure the continued preservation and enhancement of the character, appearance and setting of the District's heritage assets and historic environment including archaeological sites. Policy DM9 states that development proposals should take account of their effect on sites and their settings with potential for archaeological interest. Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and where necessary a field evaluation.

The Historic Environment Record contains records of archaeological remains within the site boundary and close to it. Not least there is a record for cropmarks that covers part of the northern area and an early post-medieval coin hoard. Extensive crop marks are recorded adjacent and to the north of the site and a trackway is recorded to the south and likely extends onto the site. The original Heritage Statement suggests a generally low potential for archaeology which the Council's Archaeological Advisor (CAA) initially noted was clearly incorrect, even with the evidence that the Heritage Statement presents. The CAA noted that the archaeological potential of the site should be considered very high. A geophysical survey and trial trench evaluation was therefore requested.

The Geophysical Survey identified areas of medieval and post-medieval agricultural activity and some modern activity. It also recorded multiple anomalies that were classified as 'undetermined' where it was not possible to determine the origin and formation process. It was also noted to be possible that the extensive medieval ridge and furrow agricultural activity recorded across the site could be masking earlier activity in the data set. Trial-trenching evaluation was therefore recommended and carried out between August-October 2023 comprising 232 trenches.

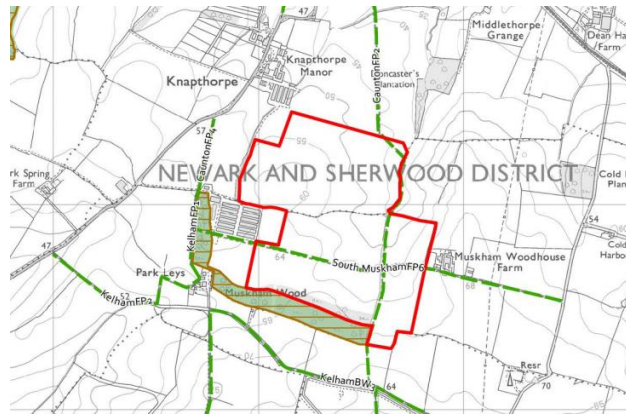
The CAA has reviewed this interim evaluation report provided which suggests limited archaeological activity across the site and where there is activity, that this is confined to several small areas. The full details of this evaluation have yet to be provided and the CAA has advised that the extent and nature of any further archaeological mitigation work will be dependent on the results presented in the final evaluation reports. However, in light of the conclusions of the interim report the CAA has advised that there would be no objection on archaeological grounds to development of the site as detailed, subject to provision for further archaeological mitigation work to be carried out post-consent, if permission is granted. On this basis the CAA has recommended a number of conditions be imposed to enable any remaining archaeology which currently survives on this site to be properly recorded prior to any impact from construction.

Overall, subject to the conditions as suggested by the CAA and in the absence of any objection from them on archaeological grounds, the proposal is not considered to result in any adverse impact upon archaeological remains in accordance with Policies CP14 and DM9.

Impact upon Public Rights of Way

The NPPF highlights the important of public rights of way and access, as the effect of a development on a right of way is a material planning consideration. Public Rights of Way are also the minor highway element of the public highway network and are afforded the same level of protection and control as the major highway network.

Two public footpaths cross through the site. Footpath South Muskham FP5 follows a broadly north-south alignment starting from the eastern edge of Muskham Wood and running between the southern field and the two eastern fields and passing outside of the site along the eastern boundary. Footpath South Muskham FP6 runs follows an east-west alignment from the Poultry Farm, through the site, crossing FP5 and onwards to Properties to the east (see map below).



PRoW Map from the LVIA (Fig. 2)

Full consideration is given to impact on the setting and users of these Rights of Way (RoW) in the 'Landscape and Visual Impacts' section of this report. The County Council's RoW team reviewed the application and initially queried the offset provided between the development and PRoW network and the maintenance regime for the surfacing of the RoW in a seed mix as shown on the Landscape Master Plan. However, the amended Layout Plans has clarified that there would be an off set of 10m either side of the PRoW (a 20m corridor) and the Applicant has clarified that the grassed areas proposed would be maintained by a management company as part of the wider management of the operational scheme – the future management and maintenance of the Site can also be controlled by a suitably worded condition. The RoW Team have raised no objection to the application on this basis. Overall, it is therefore not considered that the physical routes of existing PRoW would be adversely affected by the proposed development.

Impact upon Highway Safety

Policy DM5 (Design) is explicit in stating that provision should be made for safe and inclusive access to new development whilst Spatial Policy 7 (Sustainable Transport) encourages proposals, which are appropriate for the highway network in terms of the volume and nature of traffic generated, and ensure that the safety, convenience and free flow of traffic using the highway are not adversely affected.

Access into the site would be taken off Cauntoun Road to the west via an existing farm track. Whilst it is acknowledged that there would be an increase in highways movement during the construction period, it is not anticipated that outside of this time, the proposed development would generate a high number of trips.

The submitted Construction Traffic Management Plan (CTMP) sets out that on average the construction period for such schemes is approx. 6 months. An average of 50 construction workers are forecast on site at peak times, assuming a six-month construction period, a six-day working week (144-day total) there is estimated to be on average around 7 HGV deliveries (14 movements) per day approx. by the largest vehicles. In addition to this there would also be several construction movements associated with smaller vehicles such as waste management, transport of construction workers etc. Once the site is in operation it is anticipated that there would be 20 visits per year required for equipment maintenance.

The CMP concludes that "[...] the level of traffic during the temporary six-month construction

phase is not considered to be material and it is considered that this will not have a detrimental impact on the safety or operation of the local or strategic highway network.” The Highway Authority have reviewed this application and have advised that the greatest impact on the local highway network will not be once constructed, but the construction period itself which will result in a temporary increase in traffic flows utilising Hockerton Road, from the direction of the A616 to access the site. However, once constructed and operational, the level of anticipated traffic will be negligible. The Highways Authority note that the application has been supported by a thorough Construction Traffic Management Plan (CTMP), the contents of which they recommend should be conditioned to ensure that the CTMP is strictly adhered to in terms of pre, and post construction surveys of the adjacent highway network, construction traffic routing and how detritus will be prevented from discharging onto Hockerton Road. Subject to this condition they raise no objection to the proposal. It is noted that the CTMP does not cover the decommissioning phase of the proposal and that the Highway Authority has not commented on this element of the scheme, however the same traffic management procedures are equally applicable to the decommissioning phase and a condition is therefore recommended to capture the decommissioning phase of the development.

In relation to the potential cumulative highway impact the Supporting Document submitted 05.01.2023 explains that if both solar schemes are constructed at the same time (which they state is unlikely) then there could be up to 14 HGVs per day (28 movements) during the temporary construction period. Local roads all have two lanes and are suitable to accommodate construction traffic associated with both sites and the mitigation and management measures set out in the respective CTMPs are proposed to be implemented to minimise the impact on background traffic. Once operational, traffic flows associated with both sites are likely to be within the daily variation of traffic flows on the local highway network. On this basis it is not considered that there would be any significant cumulative impact on the public highway as a result of both this proposal and the Knapthorpe Grange scheme together.

Therefore overall, subject to conditions, it is not considered that any adverse impact upon highway safety or efficiency would result in accordance with Spatial Policy 7 and Policy DM5 of the DPD.

Impact upon Flood Risk

Core Policy 9 (Sustainable Design) and DM5 (Design) require new development proposals to pro-actively manage surface water. The land is classified as being within Flood Zone 1. As such, it is not at risk from flooding from any main river flooding. However, given the size of the development site a Flood Risk Assessment has been submitted with the application.

The solar panels would be raised above the ground, and it is proposed to allow the site to predominately drain naturally with run-off intercepted by a series of shallow swales/filter trenches adjacent to the proposed internal access roads and swales located at the lower parts of the site to collect and slow surface water run-off prior to discharging to the existing watercourses. The Flood Risk Assessment (FRA) explains that the transformers and a substation will be raised by approx. 500mm above ground level. Access tracks would be permeable in nature. The extent of impermeable cover as a result of the Solar Farm would

also be minimal in terms of a percentage of the total site area (3-5%). Consequently, the FRA concludes that the run-off from the post-development site *“would remain almost exactly as the existing land use. It is therefore proposed to allow the development to drain to the soil surface, where infiltration to the underlying soils would occur, to mimic the existing hydrological characteristics of the site.”*

Furthermore, utilising ground management measures such as chisel-ploughing and cultivating the land with native meadow grass and wildflowers has the potential to increase infiltration rates and reduce runoff rates from the site. Such land management therefore has the potential to provide betterment to the existing land use in terms of surface water runoff rates and downstream flood risk (albeit the precise extent of this has not been quantified/explained in the FRA). Overall, the FRA does not identify that the proposal would lead to any increase in flood risk. Having reviewed the submitted documents, no objection has been raised by the LLFA. The Proposed drainage Strategy at Appendix C of the submitted FRA reflects the principles put forward by the submitted FRA, subject to a condition requiring submission of the finalised drainage strategy (that also incorporates amendments made to the proposed layout throughout the course of this application) this is considered to be acceptable.

Taking the above into account it is considered that the applicant has adequately demonstrated that the development would not adversely impact on flooding or drainage in accordance with the aims of Core Policy 9 of the Core Strategy, Policy DM5 of the DPD and the provisions of the NPPF, subject to conditions.

Impact upon Ecology

Core Policy 12 (Biodiversity and Green Infrastructure) of the Core Strategy seeks to secure development that maximises the opportunities to conserve, enhance and restore biodiversity. Policy DM5 of the DPD states that natural features of importance within or adjacent to development sites should, wherever possible, be protected and enhanced.

Policy DM7 (Biodiversity and Green Infrastructure) states *‘On sites of regional or local importance, including previously developed land of biodiversity value, sites supporting priority habitats or contributing to ecological networks, or sites supporting priority species, planning permission will only be granted where it can be demonstrated that the need for the development outweighs the need to safeguard the nature conservation value of the site.’* The impacts of the proposed development on any local wildlife or geodiversity sites also needs to be considered in line with paragraphs 175 and 179 of the NPPF.

The site comprises four large fields, bound by native hedgerows. Ponds have been identified in and around the perimeter of the site and immediately adjacent to the south of the site is Muskham Wood, a semi-natural Ancient Woodland and Local Wildlife Site/BioSINC (non-statutory designated site). The site is located in a rural context and the surrounding landscape is dominated by large arable fields with hedgerow boundaries with occasional woodland parcels. Hedgerows, woodlands and watercourses in the surrounding area provided direct connectivity to the site, and these features in the landscape may provide opportunities for protected species to move through the site and utilise the on-site habitats.

A Preliminary Ecological Appraisal (PEA) has been submitted with this application which starts

by identifying local sites of ecological consideration. The nearest SSSI is located approx. 1.2km to the north-west of the site (Coppice, Mather and Lady Woods) and 8 Local Wildlife Sites/BioSINC's are identified within a 2km radius of the site. The survey concludes that direct impacts on statutory designated sites as a result of the proposed development are considered unlikely, and although the site is within the Impact Risk Zone of Mather Wood SSSI (approximately 1.6km west) the site is not listed under the defined risk categories, meaning it is not anticipated that developments of this type will have any discernible impact on the SSSI.

The closest Local Wildlife Site is Muskham Wood, a semi-natural Ancient Woodland immediately adjacent to the Site's southern boundary. Due to its proximity to the site, indirect impacts from construction-related activity are identified as being possible during the construction phase of the development. As such, the report and Ancient Woodland Assessment sets out recommendations of appropriate measures to avoid impacts to nearby designated sites during this phase of work. The Ancient Woodland Assessment has been reviewed by the Council's Tree Officer (TO) who has provided advice relating to the potential heat island effect and the change in the microenvironment of the Ancient Woodland due to the proximity of solar panels and the potential for drainage hydrology to impact the water table of the woodland. In response the Applicant's Agent has explained that there is little agreement in literature as to the impact solar panel installations can have on the surrounding area – some studies report warming directly above/below the panel area but no impact to the surrounding area, others have reported heat island effects, and some suggest a cooling effect can be experienced. In light of the conflicting conclusions of the literature the Applicant has adopted a 15m buffer (as recommended by Ancient Woodland standing advice) as a sufficient off-set to mitigate any adverse effect on the woodland. Similarly, this buffer would minimise any potential drainage/hydrological changes to the woodland as a result of the Proposal. There is no intention for the site to be permanently illuminated and therefore there would be no concerns through light pollution impact adjacent to the woodland either. In light of the adoption of a 15m buffer from the Ancient Woodland which aligns with standing advice it is considered that the proposal would not have an unacceptable impact on the woodland in this respect.

Habitats on site have been evaluated as having '*local*' value in relation to the immediate surroundings and a regional context. The site is identified as being dominated by large, intensively managed arable fields which are considered to have limited biodiversity value. However, Habitats of Principal Importance (HPI) were noted to be present on and adjacent to the site, such as native hedgerows and broadleaved woodland. Appropriate mitigation measures are therefore recommended to be implemented during site clearance and construction to minimise indirect impacts to valuable habitats. The submitted surveys also explain that the nature of the proposal provides opportunities to enhance habitats beneath the arrays and within the buffer zones proposed around the site in addition to the hedgerow boundaries meaning that habitats could be mitigated to a 'positive' impact through a detailed Landscape Ecological Management Plan (LEMP) guided by a Biodiversity Impact Assessment.

Specific consideration has been given to species such as (but not limited to): Birds, Bats, Amphibians, Reptiles, Hedgehog and Brown Hare alongside other species and invasive species. Comments have been received from local residents which query the findings of the ecology surveys, however having reviewed the PEA and Ecological Impact Assessment (EclA)

findings, which have been prepared by professional ecologists Officers have no reasons to question the reliability of results obtained from the surveys. The surveys conclude that no significant adverse impact upon protected species have been identified albeit mitigation and enhancement measures are recommended and summarised in Table A (pg.8 of the EclA) to ensure that any effect on protected species is neutral or positive. These mitigation measures include securing a LEMP and Construction Environmental Management Plan (CEMP), provision bat boxes, creation of new habitats, enhancement of existing field margins and hedgerows to provide favourable habitats for a range of species.

Comments have been received from Nottinghamshire Wildlife Trust (NWT) and the Council's Biodiversity and Ecology Officer (BELO) which confirm that survey methodologies employed within the submitted documents are satisfactory and that they are in agreement with the conclusions and recommendation. They did however query the conclusions in relation to ground Nesting Birds given the proximity to Muskham Wood itself which provides a suitable habitat for such species, however, following additional information relating to compensation for the loss of potential Skylark nesting sites the Council's BELO has advised that the proposed 8 plots shown on the submitted plan equate to approximately 1.2 plots/ha which is well within the Biodiversity Management Plan recommendation for there to be no more than 2 skylark plots/ha. Due to the nature of providing Skylark plots, which includes farmland management during crop sowing and harvesting, the position of these Skylark plots will change slightly every year and due to the nature and timing of their delivery. Given the land proposed to be used for these Skylark Plots lies outside of the red line of the Application Site (but within the blue line) this will need to be secured through a S106 agreement.

Overall, the Biodiversity and Ecology Officer has advised that so long as all mitigations and recommendations are adhered to and implemented (through the use of suitable planning conditions and development of a LEMP and CEMP), no detrimental impact to the wildlife and habitats on site is likely to occur. They did however query the conclusions in relation to post construction monitoring, which were not originally recommended, however Officers have been advised that there should be a level of post construction monitoring to assess the establishment of newly created and enhanced habitats as a minimum requirement and this could be controlled by a suitably worded condition.

Trees

An Arboricultural Impact Assessment (AIA) including tree survey and constraints and protection plans have been submitted with the application in addition to the Ancient Woodlands Assessment already discussed. The AIA survey recommends partial removal from Hedgerow H3 in two locations to facilitate the proposed access tracks through the centre of the site. T29 (mature common ash) and T31 (semi-mature common oak), two Category U trees, are also recommended for removal irrespective of development due to their significantly poor condition. All other trees identified within the report are to be retained and protected via Construction Exclusion Zones (CEZs). The survey concludes that due to the nature of the development, it is unlikely there will be any major impacts on trees with higher landscape and amenity values if CEZs are established and a buffer zone from Muskham Wood (a designated Ancient & Semi-Natural Woodland) is implemented (as discussed above).

The Council's Tree Officer raises no objection subject to amendments to the tree species

proposed within the submitted landscape scheme, precise details of which would also be controlled by condition in any event. Overall, considering the conclusions of the AIA, the proposal is unlikely to significantly adversely affect existing trees and green infrastructure if robust protection measures are implemented prior to any installation.

Biodiversity Net Gain (BNG)

Development provides opportunities to secure net gains for biodiversity and wider environmental gains, as outlined in the NPPF. In terms of Biodiversity Net Gain (BNG) the Biodiversity Management Plan (BMP) details that a net gain calculation has been undertaken to provide quantified evidence of the change in biodiversity with the implementation of the proposed layout and landscape planting. This calculation considers land take, habitat loss/change and habitat creation that will accompany the proposed development, assessed using the Defra Metric Biodiversity Net Gain Calculator with an overall net gain of 71.8% in habitat units and 4.7% net gain in hedgerow units calculated (with no change to river units). This net gain could be achieved through the proposed landscape planting, habitat enhancements and long-term management as set out in the BMP and Site Layout and Landscape Strategy.

The proposed BNG would significantly exceed the minimum 10% as stipulated by the Environment Act 2021, with the biodiversity net gain requirement coming into force in January 2024 for certain developments submitted after this time (Regulations are awaited to define which ones). Until then the NPPF requires measurable net gains without providing a percentage increase, therefore any increase over the existing biodiversity value is considered to comply with national policy.

Summary

Subject to conditions requiring the development to take place in accordance with the revised landscape and ecological master plan, the Ecological Impact Assessment (which includes a requirement for Reasonable Avoidance Measures (RAMS)), BMP, Arboricultural Impact Assessment and condition to control lighting, it is considered that the proposed development would comply with the aims of Core Policy 12 and Policy DM5 of the DPD in addition to the provisions of the NPPF which is a material consideration. The permission would also be subject to the completion of a S106 agreement to secure provision, management and monitoring of the proposed Skylark Plots within the land edged in blue on the Site Location Plan (Ref. P21-1381.001 Rev. C).

Impact upon Residential Amenity

Policy DM5 (Design) of the DPD states that development proposals should ensure no unacceptable reduction in amenity including overbearing impacts and loss of privacy upon neighbouring development. The NPPF seeks to secure high quality design and a high standard of amenity for all existing and future occupants of land and buildings.

The nearest residential properties are Park Leys Bungalow (approx. 200m south-west of the site boundary) and properties to the east of the site boundary (including Wheaten House). A Noise Assessment has been submitted with the application which explains that the proposed

fixed plant items to be installed are yet to be finalised, therefore fixed plant noise limits have been proposed (which could be controlled by condition) to prevent any adverse noise impact. The proposed fixed plant noise limits are proposed at a level not exceeding the existing representative day or night-time background noise level, based on the results of the noise survey undertaken at the nearest noise sensitive receptors. The Council's Environmental Health Officer has advised that subject to a condition requiring fixed plant noise levels to not exceed the stated noise levels in the assessment they raise no objection to the proposal.

Whilst not included within the survey HGV movements and construction/decommissioning may also generate noise for a temporary period - it is therefore considered reasonable that restricted hours of construction/deliveries and a construction management plan are imposed by planning condition.

Considering the potential cumulative noise impact of the Application Scheme and the proposal for Knapworth Grange to the north, the submitted Noise Assessments both conclude that the fixed plant noise limits proposed would be acceptable to all nearby properties, substations are also proposed to be located at an appropriate distance from each other on each respective scheme such that their combined noise is unlikely to result in any undue disturbance if the schemes are delivered together. The EHO has not raised any objection in this respect.

Therefore, given the low-level nature of the development and the restricted output in terms of noise emissions proposed, subject to conditions, it is not considered that the proposal would have any significant adverse impact on neighbouring land uses in accordance with the aims of the NPPF and Policy DM5 of the DPD.

Other Matters

Length of Temporary Consent

The solar farm would be a *temporary use* of the land as the equipment would be removed and the land returned to its former condition when the development is decommissioned following 40 years from the date of the first export of electricity to the electrical grid. In the past, 25-year permissions have ordinarily been sought for solar farm developments. There is no government-imposed limit on the lifetime of solar farms as far as Officers are aware set out in national guidance. It is understood that a 25-year permission was ordinarily imposed as this was the typical warranty period offered by manufacturers at the time and therefore used for modelling the viability of projects by developers. However, it is understood that solar farms are now more efficient for longer than previously anticipated which is extending warranties and hence improving the business models for companies that maintain solar farms. Whilst this in its own right is not necessarily a material planning consideration, the economic and environmental benefits of increasing the length of operation of the solar farm are and the benefits of renewable energy production would be a benefit for longer as a consequence. Nevertheless, 40 years is more than a generation and therefore should not be regarded as an insignificant amount of time.

Public Consultation

It is noted that several comments received from local residents criticise the public consultation process undertaken by the Applicant prior to the submission of this planning application. The submitted Statement of Community Involvement (SCI) sets out the public consultation the Applicant undertook pre-submission which included undertaking a virtual public consultation, rather than hosting an in-person event, due to the Covid-19 pandemic at the time.

128 leaflets were posted to residents and businesses within 2km radius of the application site which provided information on the development proposals. Electronic versions of the leaflet were also emailed to the local MP, Ward Councillor, County Councillor and Clerk of the Parish Council. The leaflet provided the opportunity for the submission of comments and those consulted were invited to provide feedback on the proposals via email, via the website or via the freepost tear-off slip. A project website (www.knapthorpegrangesolar.co.uk) was also launched in September 2021, providing information that would ordinarily have been presented at a public consultation exhibition. The weblink was also provided on the public consultation leaflet. A comments facility for people to provide their feedback was also provided. The online comments facility was open for a 4-week period until 18th October 2021.

Whilst concerns from local residents and the Parish Council are noted in relation to the Developer's community engagement, the Applicant did engage with the local community prior to submission and local residents and the Parish Councils were consulted as part of this application process.

8.0 Implications

In writing this report and in putting forward recommendations officers have considered the following implications; Data Protection, Equality and Diversity, Financial, Human Rights, Legal, Safeguarding, Sustainability, and Crime and Disorder and where appropriate they have made reference to these implications and added suitable expert comment where appropriate.

9.0 Conclusion

Both national and local planning policy place great emphasis on the creation of energy through renewable schemes where the impacts of the development are (or can be made through appropriately worded conditions) acceptable.

The development supports the Government's policy for the UK's transition to achieving a low carbon economy and assists in meeting the pressing need for deployment of renewable energy generation in the UK to meet legally binding obligations for renewable energy consumption and more challenging targets in 2030 and onwards to net-zero emissions by 2050. This 49.9MW proposal would provide electricity equivalent to the average electrical needs of 15,400 typical UK homes (approx.) annually and assist towards reducing CO₂ emissions saving approx. 20,690t of CO₂ per annum. In accordance with the provisions of the NPPF, these factors attract significant positive weight in the determination of this application, which should not be underestimated.

There would be a reduction of agricultural productivity over the whole development area, however the site does not contain any best and most versatile agricultural land –

nevertheless, the general loss of the land is a negative factor to be weighed in the overall planning balance. However, this is tempered by the fact that this loss would be for a temporary period of 40 years when the land would be returned to agriculture. As such limited weight attaches to this harm.

The proposal would also indisputably alter the landscape character and visual appearance of site, however, through a combination of topography, separation, landscape mitigation and amendments made throughout the course of this application, the adverse effects have been reduced, would be localised and progressively mitigated over time as existing and proposed planting matures. This conclusion is drawn when considering the application both separately and cumulatively with other solar farm proposals in the immediate vicinity. Whilst the 40-year lifetime of the proposal is significant, once the solar farm is decommissioned there would be no significant residual adverse landscape or visual effect. Nevertheless, the scale of landscape character and visual harm identified that would last (albeit reducing over time) for the 40-year lifetime of the scheme attracts significant weight given the impact this would have on the visual amenity of local residents.

Subject to conditions, the application has been found to be acceptable with regards to impact on trees/hedgerow, ecology including adjacent/nearby SSSIs and Local Wildlife Sites, residential amenity, heritage, archaeology, highways and would not result in any increased flood risk/drainage issues. These elements are therefore all neutral in the planning balance.

In addition to the energy generation benefits of the proposal, it has been concluded that the development could provide biodiversity net gains of c.71.8% in habitat units and c.4.7% in hedgerow units through the proposed landscape planting, habitat enhancements and long-term management as set out in the supporting documents to this application. The proposed BNG would significantly exceed the minimum 10% as stipulated by the Environment Act 2021 (coming into force in January 2024 for certain developments). Notwithstanding the fact that the BNG must be balanced against the initial disruption to local biodiversity during construction, the potential biodiversity enhancements that would be delivered by the proposal represents a significant benefit of the development.

Although once in operational phase, the proposal is unlikely to result in significant jobs opportunities, there is no doubt that the construction and decommissioning phases of the development would contribute to employment in the area, even though these economic benefits would be for a limited period, which represent a moderate positive weighting.

Drawing the above together, Officers consider that the proposal would make a material and early contribution to the objective of achieving the decarbonisation of energy production. When considering the imperative to tackle climate change, as recognised in legislation and energy policy, and the very significant benefits of the scheme it is considered that these would clearly and decisively outweigh the (temporary) harm that have been identified. As such, approving the proposed solar farm would not conflict with the objectives of the development plan and national planning policy when read as a whole. Accordingly, and having taken all other matters into account, it is recommended that planning permission is granted subject to conditions and completion of a S106 agreement as set out below.

10.0 Recommendation

Approve, subject to the:

a) the completion of a S106 Agreement requiring

- (i) Provision, management and monitoring of the proposed Skylark Plots within the land outlined in blue on the Proposed Skylark Plots and Suitable Mitigation Area plan (Ref. P21-1380.100 A) which is within the land edged in blue on the Site Location Plan (Ref. P21-1380.001 Rev. D); and
- (ii) A Highway Condition Survey as indicatively described in the Construction Management Plan (Ref. P21-1380/TRO1, April 2022) by Pegasus Group and once construction has completed and the site is operational, a further Conditions Survey report, together with measures to address any issues identified, together with a timetable.

b) and the following conditions:

01

The development hereby permitted shall not begin later than three years from the date of this permission.

Reason: To comply with the requirements of Section 51 of the Planning and Compulsory Purchase Act 2004.

02

The planning permission hereby granted shall be for a temporary period only, to expire 40 years and 6 months after the first export date of electrical power from this development. Written confirmation of the first export date shall be provided to the Local Planning Authority within one month after the first export.

Reason: The proposal is not suitable for a permanent permission and in accordance with the applicant's expressed intent.

03

If the solar farm hereby permitted ceases to operate for a continuous period of 12 months, then a scheme for the decommissioning and removal of the solar farm and ancillary equipment, shall be submitted within 6 months of the end of the cessation period to the Local Planning Authority for its written approval. The scheme shall make provision for the removal of the solar panels and associated above ground works approved under this permission. The scheme shall also include the management and timing of any works and a traffic management plan to address likely traffic impact issues during the decommissioning period, an environmental management plan to include details of measures to be taken during the decommissioning period to protect wildlife and habitats, and details of site restoration measures.

Reason: In the interests of visual amenity in accordance with Core Policy 13 of the Amended Core Strategy (2019) and the aims of the National Planning Policy Framework and National Planning Policy Guidance.

04

Within 6 months of the final cessation of the export of electrical power from the site, or within a period of 39 years and 6 months following the first export date, a Scheme for the decommissioning of the solar farm and its ancillary equipment, and how the land is to be restored, to include a programme for the completion of the decommissioning and restoration works, shall be submitted to and agreed in writing by the Local Planning Authority.

Reason: In the interests of visual amenity.

05

The solar farm and its ancillary equipment shall be dismantled and removed from the site and the land restored in accordance with the approved Scheme and, in any event shall be removed within a period of 40 years and 6 months following the first export date.

Reason: In the interests of visual amenity and in accordance with the applicant's expressed intent.

06

The development hereby permitted shall not be carried out except in complete accordance with the following approved plans reference:

- Site Location Plan – Ref. P21-1380.001 Rev. D
- Layout Plan – Ref. P21-1380.002 Rev. I
- Landscape & Ecological Masterplan – Ref. P21-1380.003 Rev. H
- Typical Panel Elevations – Ref. P21-1380.101
- Typical Client and DNO Substation Detail – Ref. P21-1380.102
- Typical Inverter Detail – Ref. P21-1380.103
- Typical CCTV, Post and Security Speaker Details – Ref. P21-1380.104
- Typical Fence detail – Ref. P21-1380.105
- Typical Access Track Detail – Ref. P21-1380.106
- Compound Area Plan – Ref. P21-1380.004

Reason: So as to define this permission.

07

Prior to their erection on site details of the proposed materials and finish including colour of all solar panels, frames, ancillary buildings, equipment, and enclosures shall be submitted to the Local Planning Authority for approval in writing. Development shall be carried out in accordance with the approved details and be maintained as such for the lifetime of the proposed development.

Reason: To ensure the appearance of the development is satisfactory in the interests of the character and appearance of the surrounding area in accordance with Core Policy 13 of the Amended Core Strategy and Policy DM5 of the Allocation and Development Management Development Plan Document.

08

No works or development shall take place until the Local Planning Authority has approved in writing the full details of the tree, shrub, and hedgerow planting (including its proposed location, species, size and approximate date of planting) and details of tree planting pits including associated irrigation measures, tree staking and guards. The landscaping scheme should be based on the Species List for the Mid Nottinghamshire Farmlands Landscape Character Type included within the Newark and Sherwood Landscape Character Assessment.

Reason: In the interests of visual amenity and biodiversity in accordance with the aims of the National Planning Policy Framework, Core Policy 12-13 of the Amended Core Strategy and Policies DM5 and DM7 of the Allocations and Development Management DPD.

09

The approved landscaping scheme shall be carried out within the first planting season following the date when electrical power is first exported ("first export date"). If within a period of 7 years from the date of planting any tree, shrub, hedgerow, or replacement is removed, uprooted, destroyed, or dies then another of the same species and size of the original shall be planted at the same place.

Reason: To ensure the work is carried out within a reasonable period and thereafter properly maintained, in the interests of visual amenity and biodiversity in accordance with the aims of the NPPF, Core Policy 12-13 of the Amended Core Strategy and Policies DM5 and DM7 of the Allocations and Development Management DPD.

10

Notwithstanding the submitted details, no works or development shall take place until an Arboricultural Method Statement and scheme for protection of the retained trees/hedgerows shall be submitted to the Local Planning Authority for approval in writing. This scheme shall include:

- a. a plan showing details and positions of the ground protection areas.
- b. details and position of protection barriers.
- c. details and position of underground service/drainage runs/soakaways and working methods employed should these runs be within the designated root protection area of any retained tree/hedgerow on or adjacent to the application site.
- d. details of any special engineering required to accommodate the protection of retained trees/hedgerows (e.g., in connection with foundations, bridging, water features, hard surfacing).

- e. details of construction and working methods to be employed for the installation of access tracks within the root protection areas of any retained tree/hedgerow on or adjacent to the application site.
- f. details of timing for the various phases of works or development in the context of the tree/hedgerow protection measures.

All works/development shall be carried out in accordance with the approved arboricultural method statement and tree/hedgerow protection scheme.

Reason: In the interests of visual amenity and biodiversity.

11

The following activities must not be carried out under any circumstances:

- a. no fires to be lit on site within 10 metres of the nearest point of the canopy of any retained tree/hedgerow on or adjacent to the proposal site.
- b. no equipment, signage, fencing etc shall be attached to or be supported by any retained tree on or adjacent to the application site.
- c. no temporary access within designated root protection areas without the prior written approval of the local planning authority.
- d. no mixing of cement, dispensing of fuels or chemicals within 10 metres of any retained tree/hedgerow on or adjacent to the application site.
- e. no soakaways to be routed within the root protection areas of any retained tree/hedgerow on or adjacent to the application site.
- f. no stripping of topsoil(s), excavations or changing of levels to occur within the root protection areas of any retained tree/hedgerow on or adjacent to the application site.
- g. no topsoil, building materials or other to be stored within the root protection areas of any retained tree/hedgerow on or adjacent to the application site.
- h. no alterations or variations of the approved works or protection schemes shall be carried out without the prior written approval of the local planning authority.

Reason: In the interests of tree protection, visual amenity and biodiversity.

12

Except for emergency works, construction works on the site shall not take place outside 0800 hours to 1800 hours Mondays to Fridays and 0800 hours to 1400 hours on Saturdays and at no time on Sundays or Bank Holidays.

Reason: To protect the amenity of occupiers of nearby properties from noise and disturbance in accordance with the aims of the NPPF and Policy DM5 of the Allocations and Development Management DPD.

13

The rating level of sound emitted from any fixed plant and/or machinery associated with the development shall not exceed the stated noise levels set out at Table 4.1 of the Noise Impact

Assessment undertaken by ENS, dated 19.05.2022 at the nearest sound-sensitive premises. All measurements shall be undertaken in accordance with the methodology of BS4142 (2014) (Methods for rating and assessing industrial and commercial sound) and/or its subsequent amendment(s). Where access to the nearest sound-sensitive property is not possible, measurements shall be undertaken at an appropriate location and corrected to establish the noise levels at the nearest sound sensitive property.

Reason: To protect the amenities of nearby residents.

14

Prior to the commencement of development, a land and soil management plan shall be submitted to the Local Planning Authority for approval in writing. All works shall thereafter be carried out in accordance with the approved details.

Reason: In the interests of maintaining and enhancing the agricultural land and soil quality.

15

Prior to the commencement of development, a Public Rights of Way Management Plan shall be submitted to the Local Planning Authority for approval in writing which details the future management and maintenance of the site and Public Rights of Way. The Public Rights of Way Management Plan shall thereafter be implemented for the lifetime of the development.

Reason: In the interests of maintaining existing public Rights of Way through the site.

16

The development hereby permitted shall be carried out in strict accordance with the pre, post and during construction habitat retention, protection, creation, mitigation/enhancement, management and monitoring measures outlined within the Biodiversity Management Plan (Ref. BG21.211.3 Rev. 1, March 2023 by Brindle & Green), Ecological Impact Assessment (Ref. BG21.211, October 2022 by Brindle & Green) and Landscape and Ecological Masterplan (Ref. P21-1380.003 Rev. H)). All described measures should be carried out and/or installed in accordance with the timescales embodied within the Biodiversity Management Plan (BMP) and work schedule following the cessation of construction works. The BMP and Landscape and Ecological Masterplan shall be implemented for the lifetime of the development. To assess the implementation and success of the BMP, a Monitoring Report shall be prepared by a qualified Ecologist and submitted to the Local Planning Authority (LPA) during the 12th month following the commencement of the development and thereafter during the 12th, 24th and 48th month after the first report, and thereafter every five years until 40 years after the date of first export. Should the Monitoring Report(s) conclude that any of the Biodiversity Management measures are unsuccessful a Remedial Scheme shall be submitted to and approved in writing by the Local Planning Authority and thereafter implemented in accordance with the approved details.

Reason: In the interests of maintaining and enhancing biodiversity to ensure compliance with NSDC Amended Core Strategy Core Policy 12 'Biodiversity and Green Infrastructure' and

secure development that maximises opportunities to conserve, enhance and restore biodiversity.

17

Prior to the commencement of development (including ground works and vegetation clearance) a Construction Environmental Management Plan (CEMP) shall be submitted to the Local Planning Authority for approval in writing. The approved CEMP shall thereafter be adhered to and implemented throughout the construction period strictly in accordance with the approved details.

For the avoidance of doubt the CEMP shall include the following:

- (a) Risk assessment of potentially damaging construction activities;
- (b) Identification of "biodiversity protection zones" where required;
- (c) Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts during construction (may be provided as a set of method statements);
- (d) The location and timing of sensitive works to avoid harm to biodiversity features;
- (e) The times during construction when specialist ecologists need to be present on site;
- (f) Responsible persons and lines of communication;
- (g) The role and responsibilities on site of an ecological clerk of works or similarly competent person;
- (h) Use of protective fences, exclusion barriers and warning signs;
- (i) Details for the control and management of noise and dust during the construction phase; and
- (j) Shall have due consideration of noise guidance contained within BS 5228:2009+A1:2014.

Reason: In the interests of protecting, maintaining and enhancing biodiversity.

18

Prior to the commencement of development, a Landscape and Ecological Management Plan (LEMP) shall be submitted to the Local Planning Authority for approval in writing. The content of the LEMP shall include the following:

- (a) Description and evaluation of features to be managed;
- (b) Ecological trends and constraints on site that might influence management;
- (c) Aims and objectives of management;
- (d) Appropriate management options for achieving aims and objectives;
- (e) Prescriptions for management actions;
- (f) Preparation of a work schedule (including an annual work plan capable of being rolled forward over a five-year period);
- (g) Details of the body or organisation responsible for implementation of the plan;
- (h) Ongoing monitoring and remedial measures.

The plan shall also set out (where the results from monitoring show that conservation aims and objectives of the LEMP are not being met) how contingencies and/or remedial action will

be identified, agreed and implemented so that the development still delivers the fully functioning biodiversity objectives of the originally approved scheme. The approved LEMP shall be implemented in accordance with the approved details for the lifetime of the development.

Reason: In the interests of protecting, maintaining and enhancing biodiversity.

19

Prior to the commencement of development, a Woodland Management Plan for the part of Muskham Wood which is adjacent to the southern boundary of the site and within the land edged in blue on the Site Location Plan (Ref. Ref. P21-1380.001 Rev. D) shall be submitted to the Local Planning Authority for approval in writing and thereafter implemented in accordance with the approved details for the lifetime of the development.

Reason: In the interests of maintaining and enhancing biodiversity.

20

No tree works or vegetation clearance shall take place during the bird nesting period (beginning of March to end of August inclusive) unless a precautionary pre-start nesting bird survey has been carried out by a qualified ecologist/ornithologist and the findings have been submitted to and approved in writing by the Local Planning Authority.

Reason: To ensure that adequate provision is made for the protection of nesting birds.

21

No external lighting (other than low level lighting required on ancillary buildings during occasional maintenance and inspection visits) shall be erected/used on site unless precise details of any lighting are first submitted to and approved in writing by the Local Planning Authority. The lighting shall be installed and thereafter maintained in accordance with the approved details for the lifetime of the development.

Reason: in the interests of visual amenity and biodiversity.

22

No development or demolition shall take place until an Archaeological Mitigation Strategy for the protection of archaeological remains is submitted to and approved in writing by the Local Planning Authority. The Mitigation Strategy will include appropriate Written Schemes of Investigation for each element or phase of mitigation work as necessary. These schemes shall include the following:

1. An assessment of significance and proposed mitigation strategy (i.e. preservation by record, preservation in situ or a mix of these elements)
2. A methodology and timetable of site investigation and recording
3. Provision for site analysis
4. Provision for publication and dissemination of analysis and records

5. Provision for archive deposition

6. Nomination of a competent person/organisation to undertake the work

The scheme of archaeological investigation must only be undertaken in accordance with the approved details.

Reason: To ensure the preparation and implementation of an appropriate scheme of archaeological mitigation in accordance with the National Planning Policy Framework.

23

The archaeological site work must be undertaken only in full accordance with the approved written schemes referred to in the above Condition. The developer will notify the Local Planning Authority of the intention to commence at least fourteen days before the start of archaeological work in order to facilitate adequate monitoring arrangements. No variation shall take place without prior consent of the Local Planning Authority.

Reason: To ensure satisfactory arrangements are made for the recording of possible archaeological remains in accordance with the National Planning Policy Framework.

24

The post-investigation assessment and final report of the archaeologist's findings shall be submitted to the Local Planning Authority and the Historic Environment Record Officer at Nottinghamshire County Council within 3 months of the archaeological works hereby approved being commenced (or a longer timescale as agreed in writing with the Local Planning Authority). The post-investigation assessment must be completed in accordance with the programme set out in the approved Written Scheme of Investigation and shall include provision for analysis, publication and dissemination of results and deposition of the archive being secured.

Reason: In order to ensure that satisfactory arrangements are made for the investigation, retrieval and recording of any possible archaeological remains on the site in accordance with the National Planning Policy Framework.

25

No part of the development hereby approved shall commence until a detailed surface water drainage scheme based on the principles set forward by the approved Pegasus Group Flood Risk Assessment (FRA) and Surface Water Drainage Strategy dated February 2022 ref P21-1380, has been submitted to and approved in writing by the Local Planning Authority. The scheme shall be implemented in accordance with the approved details prior to completion of the development. The scheme to be submitted shall:

- Demonstrate that the development will use SuDS throughout the site as a primary means of surface water management and that design is in accordance with CIRIA C753.
- Limit the discharge rate generated by all rainfall events up to the 100 year plus 40% (for climate change) critical rain storm 5 l/s rates for the developable area.

- Provision of surface water run-off attenuation storage in accordance with 'Science Report SCO30219 Rainfall Management for Developments' and the approved FRA
- Provide detailed design (plans, network details and calculations) in support of any surface water drainage scheme, including details on any attenuation system, and the outfall arrangements. Calculations should demonstrate the performance of the designed system for a range of return periods and storm durations inclusive of the 1 in 1 year, 1 in 2 year, 1 in 30 year, 1 in 100 year and 1 in 100 year plus climate change return periods.
- For all exceedance to be contained within the site boundary without flooding new properties in a 100year+40% storm.
- Details of STW approval for connections to existing network and any adoption of site drainage infrastructure.
- Evidence of how the on-site surface water drainage systems shall be maintained and managed after completion and for the lifetime of the development to ensure long term betterment.

Reason: A detailed surface water management plan is required to ensure that the development is in accordance with National Planning Policy Framework and local planning policies. It should be ensured that all major developments have sufficient surface water management, are not at increased risk of flooding and do not increase flood risk off-site.

26

Development shall take place in strict accordance with all the mitigation measures set out in the Construction Traffic Management Plan (Ref. P21-1380/TRO1, April 2022) by Pegasus Group.

Reason: In the interests of residential amenity and highway safety.

27

No construction shall take place until the accesses are surfaced in a hard bound material for a minimum of 20 metres to the rear of the highway boundary, with measures to prevent the egress of surface water onto the highway.

Reason: In the interests of highway safety

Informatives

01

Notes from NCC Rights of Way:

A Temporary Closure of Footpaths may be granted to facilitate public safety during the construction phase subject to certain conditions. Further information and costs may be obtained by contacting the Rights of Way section. The applicant should be made aware that at least 6 weeks' notice is required to process the closure and an alternative route on should be provided if possible.

02

Notes from NCC Highways:

- Planning consent is not permission to work on or adjacent to the public highway, therefore prior to any works commencing on site including demolition works you must contact Highways Network Management at licences@viaem.co.uk to ensure all necessary licences and permissions are in place.
- It is an offence under S148 and S151 of the Highways Act 1980 to deposit mud on the public highway and as such you should undertake every effort to prevent it occurring.
- It is strongly recommended that the developer contact the Highway Authority at an early stage to clarify the codes etc. with which compliance will be required in the circumstance, and it is essential that design calculations and detailed construction drawings for the proposed works are submitted to and approved by the County Council (or District Council) in writing before any work commences on site. All correspondence with the Highway Authority should be addressed to: hdc.north@nottsc.gov.uk.

03

Notes from Archaeologist:

With respect to the attached archaeological conditions, please contact the Historic Places team at Lincolnshire County Council, Lancaster House, 36 Orchard Street, Lincoln, LN1 1XX, 07880420410, email Matthew.Adams@lincolnshire.gov.uk to discuss the requirements and request preparation of a brief for the works.

It is recommended the resulting mitigation strategy and Written Schemes of Investigation are approved by the LCC Historic Environment Officer prior to formal submission to the Local Planning Authority. Ten days' notice is required before commencement of any archaeological works.

04

This application has been the subject of discussions during the application process to ensure that the proposal is acceptable. The District Planning Authority has accordingly worked positively and pro-actively, seeking solutions to problems arising in coming to its decision. This is fully in accord Town and Country Planning (Development Management Procedure) (England) Order 2015 (as amended).

05

The applicant is advised that all planning permissions granted on or after the 1st December 2011 may be subject to the Community Infrastructure Levy (CIL). Full details of CIL are available on the Council's website at [www.newark-sherwooddc.gov.uk /cil/](http://www.newark-sherwooddc.gov.uk/cil/)

The proposed development has been assessed and it is the Council's view that CIL is not payable on the development given that the development comprises a structure(s) and/or buildings that people only enter for the purpose of inspecting or maintaining fixed plant or machinery.

BACKGROUND PAPERS

Except for previously published documents, which will be available elsewhere, the documents listed here will be available for inspection in accordance with Section 100D of the Local Government Act 1972.

Application case file.

Committee Plan - 22/00976/FULM

