Planning Proof Of Evidence Appendices.

Evidence of Nigel Cussen.

Land East of Hawksworth and Northwest of Thoroton, Nottinghamshire, NG13 9DB.

On behalf of Renewable Energy Systems (RES) Ltd.

Date: May 2024 | Pegasus Ref: P24-0105

Appeal Ref: APP/P3040/W/23/3330045 | LPA Ref: 22/02241/FUL

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Appendices contents.

Appendix 1.1 – Agricultural Evidence addressing LPA Issues

LAND EAST OF HAWKSWORTH AND NORTH OF THOROTON, NOTTINGHAMSHIRE

AGRICULTURAL EVIDENCE ADDRESSING THE COUNCIL'S ISSUES

BY

TONY KERNON BSc(Hons) MRICS FBIAC

APP/P3040/W/23/3330045

May 2024

KERNON
COUNTRYSIDE CONSULTANTS LIMITED

LAND EAST OF HAWKSWORTH AND NORTH OF THOROTON, NOTTINGHAMSHIRE

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May 2024

Authorised By APK 05/24

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CONTENTS

Appendices

1 INTRODUCTION TO THE WITNESS

1.1 This evidence has been prepared by Tony Kernon. I am a Chartered Surveyor and a Fellow of the British Institute of Agricultural Consultants. I have specialised in assessing the effects of development proposals on agricultural land for over 35 years, and act nationwide for local planning authorities and applicants alike across England and Wales.

1.2 I have been involved in many applications for solar farm development. I have witnessed the installation process and I have visited established and operating solar farms to assess their agricultural use and soil profiles.

1.3 My Curriculum Vitae is at **Appendix KCC1**. As a Chartered Surveyor giving evidence, I am bound by the RICS Practice Statement "Surveyors Acting as Expert Witnesses", 4th Edition (February 2023). A declaration is provided below.

1.4 In accordance with the requirements of the Royal Institution of Chartered Surveyors Practice Statement, "Surveyors acting as expert witnesses" (4th edition, amended 2023):

(i) I confirm that my report has drawn attention to all material facts which are relevant and have affected my professional opinion.

(ii) I confirm that I understand and have complied with my duty to this Appeal as an expert witness overrides any duty to those instructing or paying me, that I have understood this duty and complied with it in giving my evidence impartially and objectively, and that I will continue to comply with that duty as required.

(iii) I confirm that I am not instructed under any conditional or other success-based fee arrangement.

(iv) I confirm that I have no conflicts of interest.

(v) I confirm that my report complies with the requirements of the Royal Institution of Chartered Surveyors (RICS), as set down in "*Surveyors acting as expert witnesses"*: RICS practice statement (2023).

Signed: 

(Tony Kernon)

Dated: 14th May 2024

2 INTRODUCTION TO THE ISSUES AND EVIDENCE

2.1 At the Case Management Conference (CMC) held on 23rd April, the Inspector noted that the Council had introduced two further issues, including matters relating to Best and Most Versatile agricultural land (BMVAL). This, it was noted, was also a concern to other parties.

2.2 The Council and the Rule 6 Party (R6P) raise different agricultural issues. The Council raises the matter of alternative sites and potential for lower quality land to be used. This Statement focuses on those matters.

2.3 The matters are described in sections 7.5 – 7.9 of the Council's Statement of Case (SoC). In short the Council now considers that there is a need to consider whether there is land available that is of lower quality and could be used, in order to show that the use of BMV is necessary and that poorer quality land has been used in preference to higher quality land.

2.4 Other agricultural matters have been raised by the Rule 6 Party (R6P). They are addressed in a separate Statement.

Structure of the Response

2.5 This response is structured as follows:

(i) **section 3** identifies the Council's late concern;

(ii) **section 4** summarises and comments on the relevant policy and advisory considerations;

(iii) **section 5** reviews agricultural land quality in the search area;

(iv) and **section 6** assesses the Council's late position;

(v) ending with conclusions in **section 7**.

3 THE COUNCIL'S LATE CONCERN

The Issue

3.1 The Council's SoC (April 2024) sets out the matter in section 7.

3.2 Paragraph 7.6 identifies that the Council has been advised of the assessment set out in the Planning Practice Guidance paragraph 013. This sets out that, where a proposal involves greenfield land:

(i) whether the proposed use of agricultural land has been shown to be necessary and poorer quality land has been used in preference; and

(ii) the proposal allows for continued agricultural use where applicable and/or encourages biodiversity improvements around arrays.

3.3 Paragraph 7.9 sets out that:

> "**As no further information has been provided on alternative sites in the area, it is considered that there is insufficient evidence to adequately benchmark the site against other locations, and address whether the proposed use of any BMV agricultural land has been shown to be necessary, and poorer quality land has been used in preference to higher quality land**".

Commentary

3.4 The Council is not, so far as they have identified in their Statement of Case, alleging that the use of agricultural land has not been demonstrated to be necessary.

3.5 The Council has not set out in their Statement of Case that they are alleging that continued agricultural use is not possible, and/or biodiversity improvements around the arrays will not result.

3.6 Accordingly the Council's late point of concern is limited to the part of the NPPG paragraph 013 which considers whether or not it has been shown that "**poorer quality land has been used in preference to higher quality land**".

3.7 Further the Council's Statement of Case does not suggest, or provide any supporting evidence, that poorer quality land is available. The Council's case only goes so far as to state that there is "**insufficient evidence to adequately benchmark the site against other locations**".

4 PLANNING POLICY AND GUIDANCE OF RELEVANCE

Introduction

4.1 Planning policy is addressed in the planning evidence, so this section provides only a summary of the key policy directly relevant to the issue identified.

The Local Plan

4.2 The Rushcliffe Local Plan Part 2 (2019) Policy 1 sets out, at criterion 12, that "**development should have regard to the best and most versatile agricultural classification of the land, with a preference for the use of lower quality over higher quality land**".

4.3 The Council's SoC makes no suggestion that this policy is conflicted.

4.4 Similarly the SoC makes no allegation of conflict with Policy 16 criterion d) "**best and most versatile agricultural land**".

NPPF

4.5 The NPPF sets out relevant policy in paragraph 180, advising that the economic benefits of BMV land should be "recognised". The Council's SoC does not allege any conflict with this policy.

4.6 The NPPF paragraph 163 identifies that when determining applications for renewable and low carbon development local planning authorities should not require applicants to demonstrate the overall need for renewable or low carbon energy, and approve applications if impacts are, or can be made, acceptable. There is no suggestion that this part of the NPPF is not complied with.

Practice Guidance

4.7 The Council's late concern relates only to the NPPG. Whilst the Council's extract refers to the two speeches by various ministers, the SoC draws no attention to any particular paragraph or reference or conflict with what was stated in those speeches.

4.8 Accordingly the issue raised lately by the Council is limited only to whether or not sufficient evidence has been provided to show that consideration has been given to using poorer quality land in preference.

Inspectorate's Views

4.9 The Council has not placed reliance upon the Written Ministerial Statement (WMS), but they do append the full text of the WMS.

4.10 The extent to which this is relevant is set out in the planning evidence. I note the following two references:

(i) in the Cutler's Green decision (3319421) at paragraph 166 the Inspector concluded that various changes since the WMS including the subsequent declaration of a climate emergency, amendments to the NPPF, the issuing of NPS EN-1 and EN-3, and legally binding Net Zero targets all amounted to the most compelling evidence;

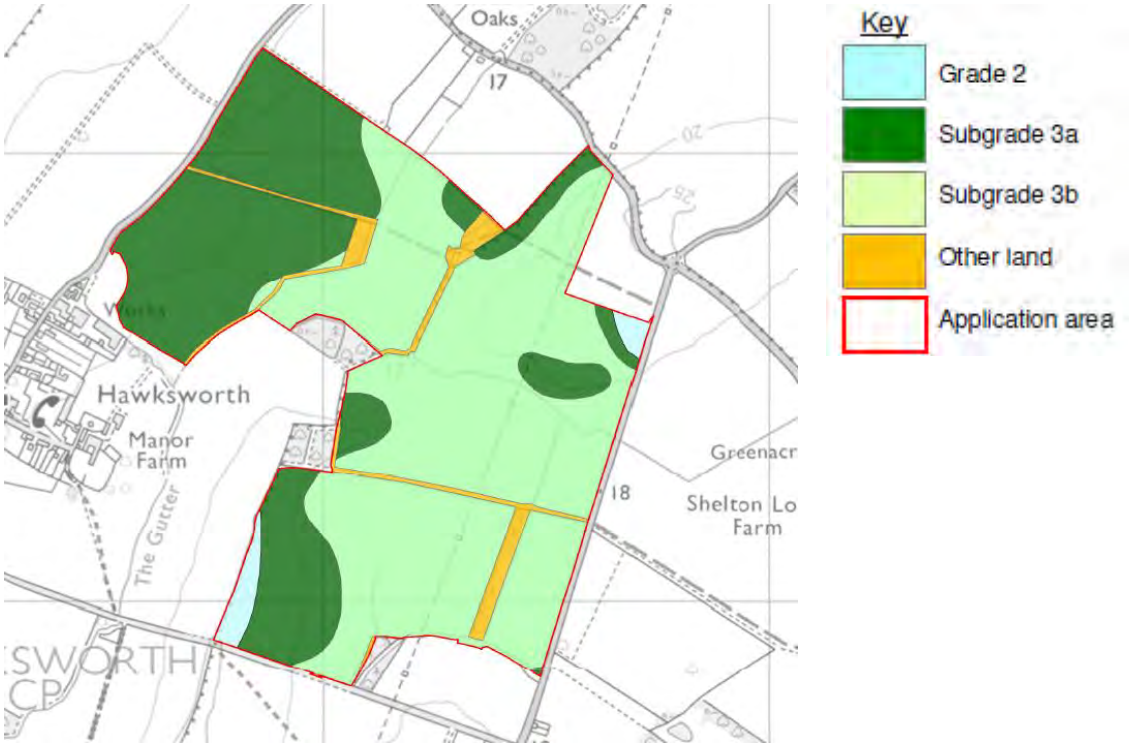
(ii) in the Sheephurst Lane decision (3321094) the Inspector noted that the WMS did not alter the underlying message that the use of BMV must be properly justified (paragraph 46), that the recent judgement in Bramley did not mandate the consideration of alternatives (paragraph 47), and requiring extensive, expensive and time-consuming land quality assessments of alternative sites would be a disproportionate and unreasonable burden on prospective developers (paragraph 49).

5 LAND QUALITY OF THE SITE IN CONTEXT

Land Quality of the Site

5.1 The Site's land quality is shown on the following plan, extracted from the Agricultural Land Classification (ALC) report by Land Research Associates.

Insert 1: ALC Results



5.2 The land by area and proportion is shown below.

Table 1: ALC Results

Grade	Description	Area (ha)	Proportion (%)
2	Very good	1.7	2
3a	Good	33.7	36
3b	Moderate	54.0	58
Other	Other land	3.9	4
Total		**93.3**	**100**

5.3 The proposals have been revised and do not propose solar PV arrays on all of the Site. The area proposed for solar PV arrays, including the areas between the fence and the field boundary, are summarised below.

Table 2: Areas for Solar Development

Grade	Description	Area (ha)	Proportion (%)
2	Very good	1.5	2
3a	Good	28.7	33
3b	Moderate	53.8	61
Other	Other land	3.9	4
Total		**87.9**	**100**

Available Data on Land Quality of the Borough

5.4 Agricultural land classification involves an intrusive soil survey. It cannot be estimated with any satisfactory accuracy without a field survey. With a progress of circa 25 points per day in the field, and a similar time involved in admin, calculations and reports etc, progress of surveying is about 13ha per man day. Consequently there is limited field survey data available.

5.5 The ALC system is described in Natural England's Technical Information Note TIN049, reproduced in **Appendix KCC2**.

5.6 Identifying the grade of land in a wider area is therefore difficult and has significant limitations. In assessing whether or not there is poorer quality land available, this limitation is a major factor.

5.7 In the 1970s MAFF produced "provisional" ALC maps. They were produced using available soil data and some site survey but were never intended to be used for site-specific use (see TIN049).

5.8 Since they were produced the ALC system has twice been revised, most significantly in 1988 (which is now the adopted system). The provisional maps have not, however, been updated.

5.9 Based on the provisional maps, the land quality of the Borough is shown in the table below. TIN049 estimates that approximately 42% of England is Grades 1, 2 and 3a, and as a consequence mathematically approximately 40% of Grade 3 would fall into Subgrade 3a.

5.10 The table shows the published figures plus, as highlighted, the estimate of the subgrades of Grade 3 using the 40:60 split.

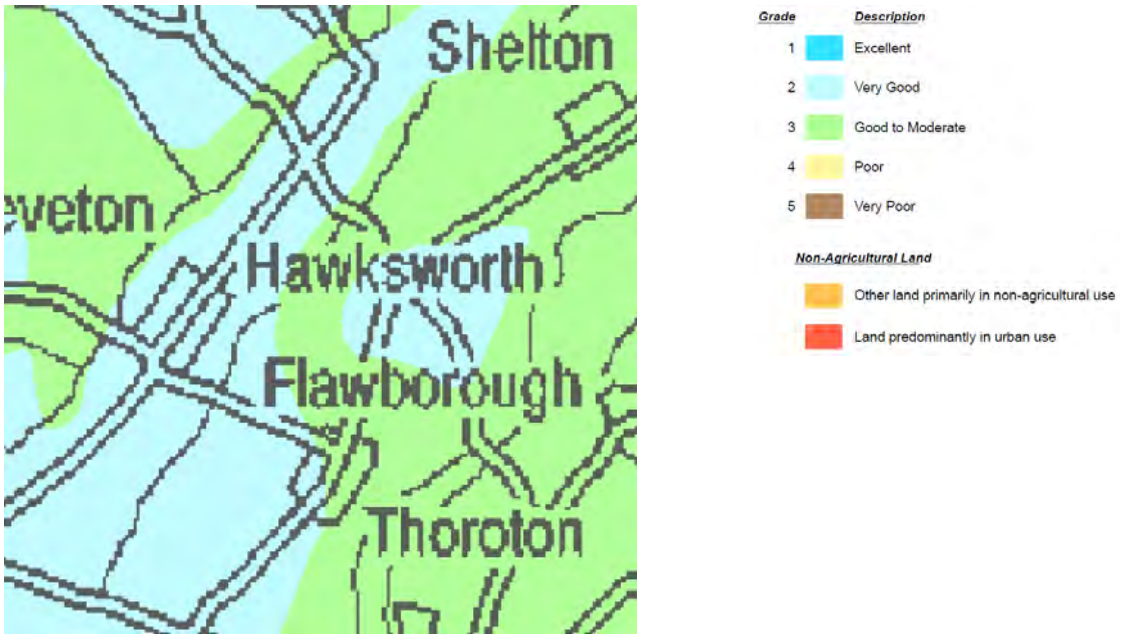
Table 3: ALC of Rushcliffe Borough

Grade	Description	Area (ha)	Proportion (%)
1	Excellent	0	0.0
2	Very good	12,774	32.9
3	Good to moderate	24,839	64.0
Estimated 3a	Good	9,936	25.6
Estimated 3b	Moderate	14,903	38.4
4	Poor	1,224	3.1
5	Very poor	0	0.0
Total		38,837	100.0

5.11 Based on that analysis, the proportion of BMV in the Rushcliffe Borough is 58.5%. The majority of agricultural land in the Borough is of BMV quality, therefore. The Site, with 39.6% of agricultural land of BMV, is well below the Borough average. It is also below the national average of 42%.

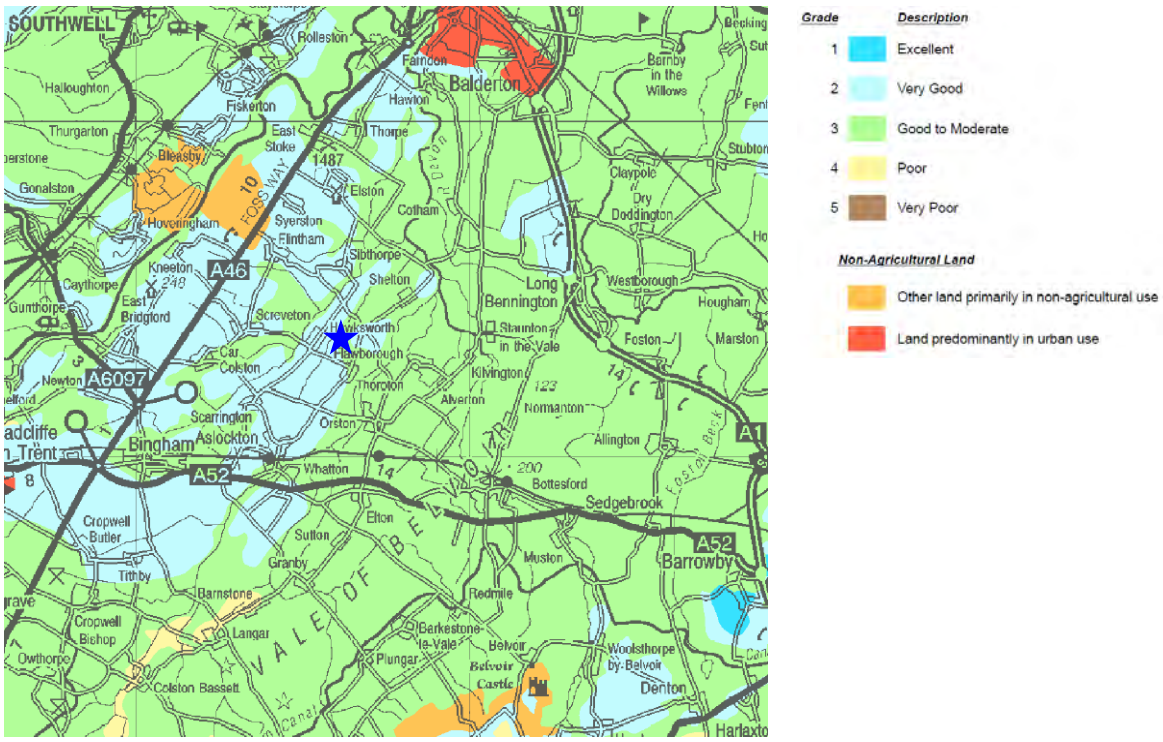
5.12 The Site is shown on the provisional maps as mostly undifferentiated Grade 3 with Grade 2 on the western and southern parts of the Site.

Insert 2: Provisional ALC



5.13 The provisional map, with the Site identified and showing approximately 10km either side, is shown below.

Insert 3: Provisional ALC



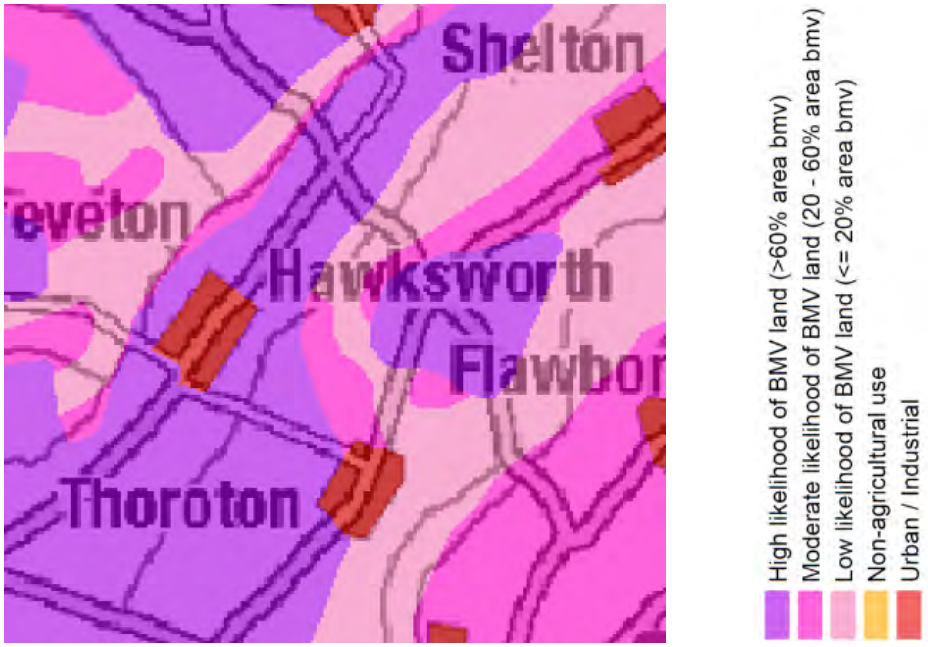
5.14 The Site is shown as mostly Grade 3, with some Grade 2 to the west. The wider area is mostly undifferentiated Grade 3, with large areas of Grade 2 to the west.

5.15 In 2017 Natural England published predictive "Likelihood of BMV" maps, dividing the country into three categories:

- low likelihood (<20% area BMV);
- moderate likelihood (20 – 60% area BMV);
- high likelihood (>60% area BMV).

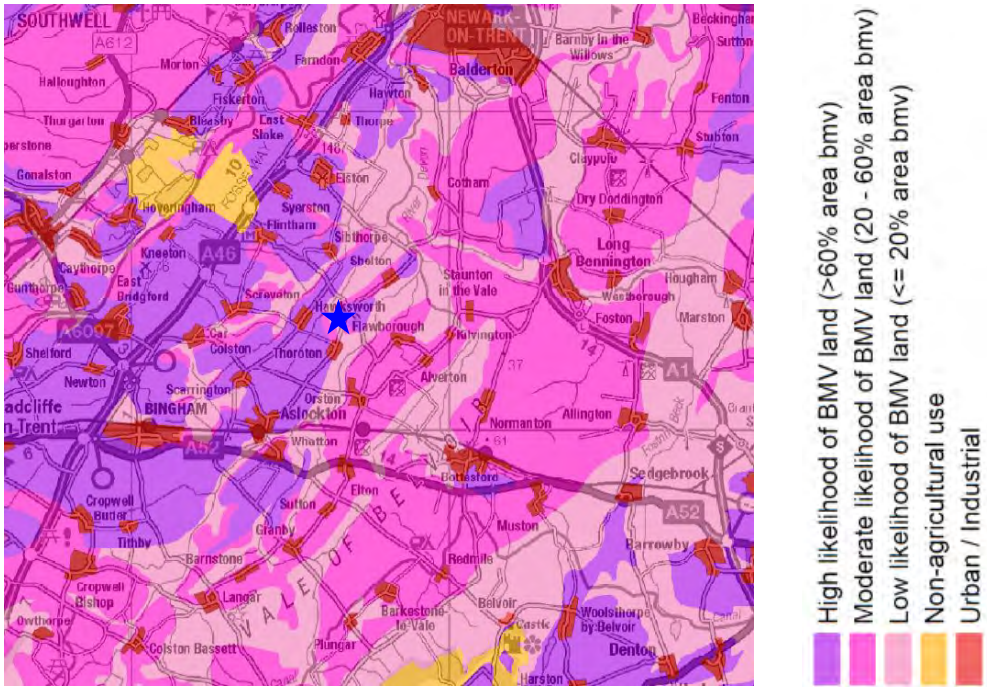
5.16 The Site is shown as in the low and moderate likelihood, with some high likelihood to the west and south.

Insert 4: Likelihood of BMV



5.17 The BMV likelihood of the wider area is shown below. Low likelihood is associated with watercourses, otherwise the likelihood is moderate or high.

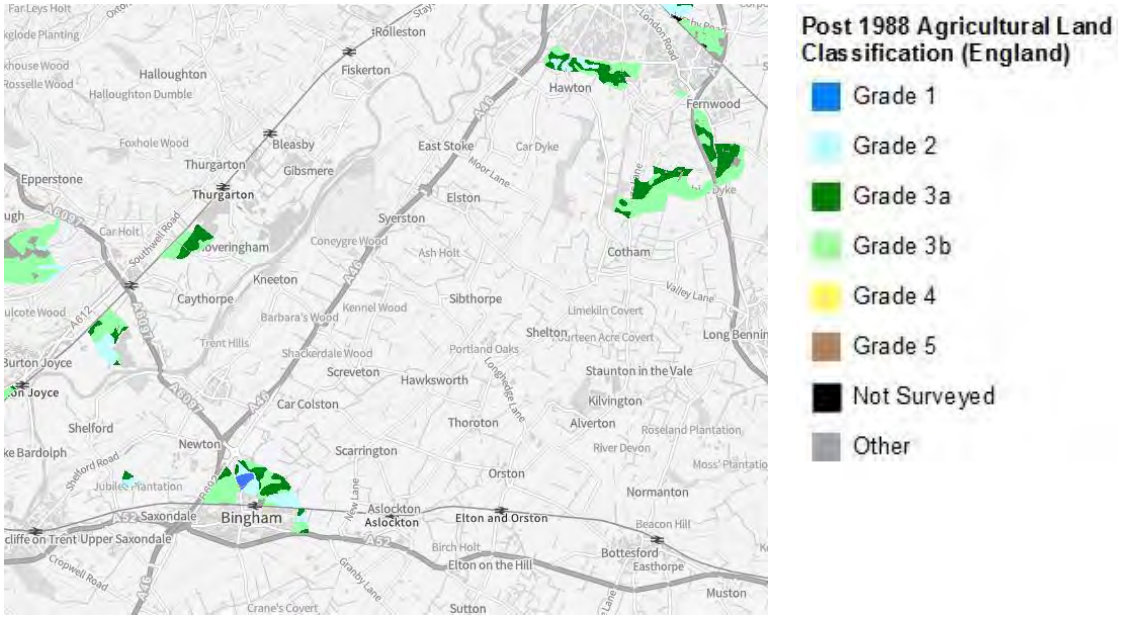
Insert 5: Likelihood of BMV



Published Survey Data

5.18 Where ALC surveys have been carried out by MAFF they are available via www.magic.gov.uk. The results locally are limited, as shown below.

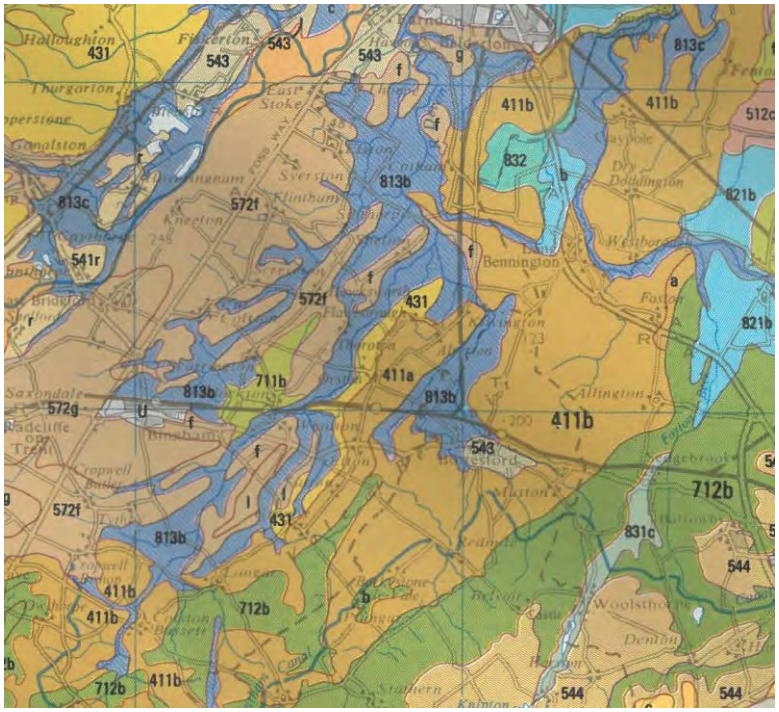
Insert 6: Published ALC Results



Soils Information

5.19 Available soil information is shown below. The Site is mostly on 813b soils Fladbury 1 stoneless clayey soils, associated with the watercourses as can be seen. To the west the predominant soil type is 572f Whimple 3, being reddish fine loamy or fine silty over clayey soils. To the east and south the main soils are 411a Evesham 1 and 411b Evesham 2 soils, and further to the southeast the soils change to 712b Denchworth soils, which are seasonally waterlogged clayey soils.

Insert 7: Extract from the Soil Survey of England and Wales Sheet 3: Soils of Midland and Western England



Conclusions

5.20 The published data available, especially the soil type maps, suggest that towards the southern edge of the Borough, and further south, there is an area of heavy clay soils, which will likely be mostly of poorer quality land. Across the majority of the Borough the soils are mixed, with most of the area in the medium (20 – 60%) and high (>60%) likelihood of BMV. Statistically an estimated 58.5% of the agricultural land in the Borough is of BMV quality.

6 ASSESSMENT

Analysis

6.1 The Appellants, as part of the site surveys, requested that the ALC cover the whole of Thoroton Farm. The results were provided to the Council, although not mapped, with the results set out in the tables in the LRA ALC.

6.2 The extended ALC identified:

(i) land to the east of the lane running north from Thoroton was a mixture of Subgrades 3a and 3b;

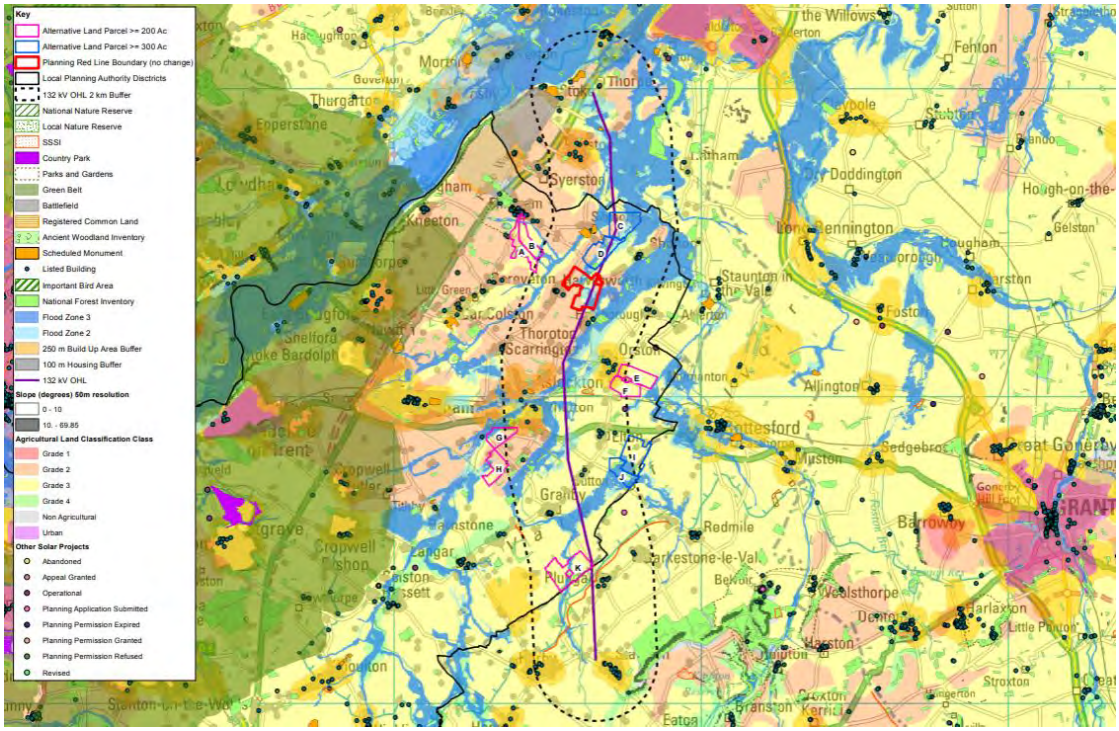
(ii) land south of the Appeal site but north of the lane from Hawksworth was a mix of mostly Subgrade 3b with some 3a;

(iii) land south of the lane from Hawksworth and west of the settlement was mostly Grade 2 and Subgrade 3a (on the boundary with Subgrade 3b), with the Subgrade 3b closest to the settlement.

6.3 In terms of reducing the amount of BMV and still delivering the same area for solar PV arrays, there is poorer quality land available close to the settlement of Thoroton. This was discounted for aesthetic purposes.

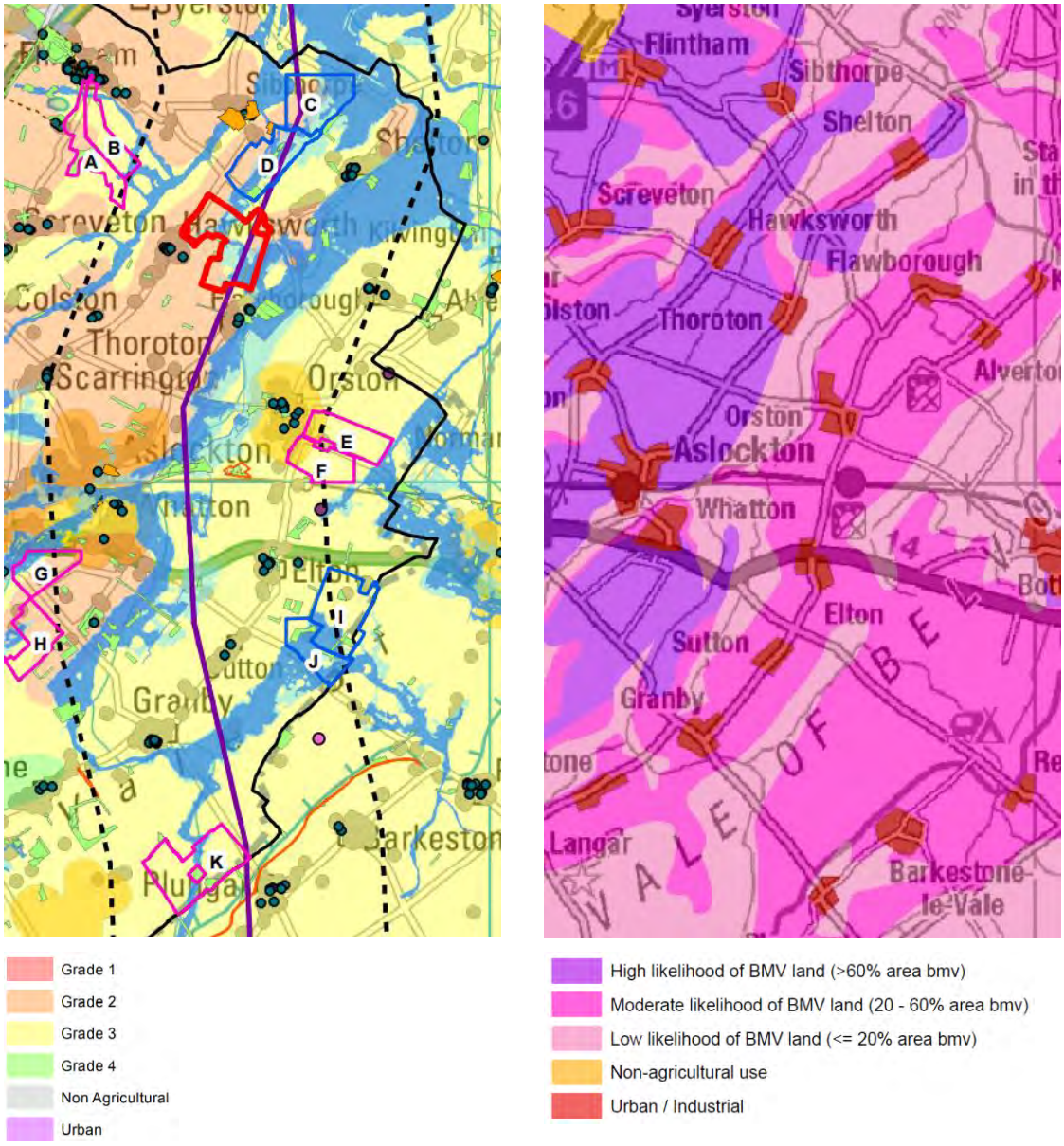
6.4 In terms of taking a wider look, the Appellants have considered the potential for other sites within a corridor that extends to 2km either side of the 132KV power line. They have plotted the land quality, although to avoid confusion with other factors mapped the colours have been amended from the standard ALC colours. The map is shown below.

Insert 8: Analysis of Alternatives



6.5 Within the Rushcliffe administrative boundary, they have identified a number of possible sites of broadly comparable size. I show below the corridor compared to the provisional likelihood of BMV maps.

Inserts 9 and 10: Alternative Sites and BMV Likelihood Map



6.6 The table below compares the predictive likelihood of BMV of the appeal Site to the alternatives identified.

Table 4: BMV Likelihood Analysis

Site Ref	Likelihood of BMV
Appeal Site	Low, medium and high
A	Low, medium and high
B	Low, medium and high
C	Low, medium and high
D	Mostly high
E	Mostly medium, some low
F	Medium
G	Mostly high, some low by river
H	Mostly high
I	Mostly medium, some low
J	Medium and low
K	Medium and low

6.7 The analysis identifies that none of the sites fall into the wholly "low likelihood" of BMV. All sites have at least part of their area within the medium likelihood (20 – 60% area BMV), and many have at least part of the site in the high likelihood of BMV, including the appeal Site.

Implications

6.8 Rushcliffe Borough has a majority of land expected to fall into the BMV category. As estimated above, of the order of 58.5% of the agricultural land in the Borough is expected to be of BMV quality.

6.9 The England average is 42% BMV.

6.10 The Site has 38% BMV (39.6% of agricultural land), and calculated excluding the areas not proposed for solar PV arrays this falls to 35% (36.0% of agricultural land).

6.11 The Appellants identified some poorer quality land within the same ownership close to Thoroton village, but this was not proposed for development due to its proximity to the village. That was a planning balance.

6.12 Wider afield they have identified a number of possible sites. The two at the southern end of the Borough are the ones with the least potential for BMV, but they are still likely to contain some BMV.

6.13 Overall there is no indication that there are obvious, similar areas that will contain mostly non-BMV land.

6.14 This would only be known if a detailed ALC was to be carried out over those areas. Policy does not require that level of survey. Policy does not require an assessment of alternative sites, it only requires that the existence of BMV has been recognised, and that where possible poorer quality land is used in preference.

6.15 In this case, in common with solar farm development generally, the land quality is not adversely affected. The BMV resource is not lost. The economic and other benefits of BMV have been recognised.

7 CONCLUSIONS

7.1 The Council has, in its Statement of Case, raised a concern that the Appellants have not provided sufficient evidence to benchmark the Site against other locations.

7.2 The Council's late position does not allege that the use of agricultural land has not been demonstrated to be necessary, or that continued agricultural use and/or biodiversity enhancements are not possible. The Council's concern relates to a narrow part of the Planning Practice Guidance from 2015.

7.3 The extent to which the Planning Practice Guidance remains up to date and relevant is set out in the planning evidence.

7.4 This response reviews the potential agricultural quality of the wider area, and of possible sites identified in other assessments. It is concluded that:

- the proportion of agricultural land in Rushcliffe projected to be BMV is 58.5%;
- that is above the national average of 42%;
- that is above the proportion of the Site proposed for solar development which is 36.0%.

7.5 Further afield, it is concluded that:

- to the north and west the land quality is expected to be generally a higher proportion of BMV than across the appeal Site;
- to the south and east the land quality is predicted to be a comparable mix of quality to the appeal Site;
- only land near watercourses, including the appeal Site, is predicted to be in the low likelihood of BMV;
- and in general terms the land at the southern end of the Borough, moving into a high clay area, is expected to be the poorest.

7.6 Agricultural land quality of the Site is not adversely affected.

Appendix KCC1

Curriculum Vitae

KERNON
COUNTRYSIDE CONSULTANTS LIMITED

CURRICULUM VITAE

ANTHONY PAUL KERNON

SPECIALISMS

- Assessing the impacts of development proposals on agricultural land and rural businesses
- Agricultural building and dwelling assessments
- Equestrian building and dwelling assessments (racing, sports, rehabilitation, recreational enterprises)
- Farm and estate diversivification and development
- Inputs to Environmental Impact Assessment
- Expert witness work

SYNOPSIS

Tony is a rural surveyor with 35 years experience in assessing agricultural land issues, farm and equestrian businesses and farm diversification proposals, and the effects of development proposals on them. Brought up in rural Lincolnshire and now living on a small holding in Wiltshire, he has worked widely across the UK and beyond. He is recognised as a leading expert nationally in this subject area. Married with two children. Horse owner.

Tony's specialism is particularly in the following key areas:

- assessing the need for agricultural and equestrian development, acting widely across the UK for applicants and local planning authorities alike;
- farm development and diversification planning work, including building reuse and leisure development, Class Q, camping etc;
- assessing development impacts, including agricultural land quality and the policy implications of losses of farmland due to residential, commercial, solar or transport development, and inputs to Environmental Assessment;
- and providing expert evidence on these matters to Planning Inquiries and Hearings, court or arbitrations.

QUALIFICATIONS

Bachelor of Science Honours degree in Rural Land Management, University of Reading (BSc(Hons)). 1987. Awarded 2:1.
Diploma of Membership of the Royal Agricultural College (MRAC).
Professional Member of the Royal Institution of Chartered Surveyors (MRICS) (No. 81582). (1989).

OTHER PROFESSIONAL ACTIVITIES

Co-opted member of the Rural Practice Divisional Council of the Royal Institution of Chartered Surveyors. (1994 - 2000)
Member of the RICS Planning Practice Skills Panel (1992-1994)
Member of the RICS Environmental Law and Appraisals Practice Panel (1994 - 1997).
Fellow of the British Institute of Agricultural Consultants (FBIAC) (1998 onwards, Fellow since 2004).
Secretary of the Rural Planning Division of the British Institute of Agricultural Consultants (BIAC) (1999 – 2017).
Vice-Chairman of the British Institute of Agricultural Consultants (2019 – 2020)
Chairman of the British Institute of Agricultural Consultants (2020 – 2022)

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RICS

BIAC
Professional Advisers to Rural Business and on the Environment

EXPERIENCE AND APPOINTMENTS

1997 ------> **Kernon Countryside Consultants.** Principal for the last 27 years of agricultural and rural planning consultancy specialising in research and development related work. Specialisms include essential dwelling and building assessments, assessing the effects of development on land and land-based businesses, assessing the effects of road and infrastructure proposals on land and land-based businesses, and related expert opinion work. Tony specialises in development impact assessments, evaluating the effects of development (residential, solar, road etc) on agricultural land, agricultural land quality, farm and other rural businesses.

1987 - 1996 **Countryside Planning and Management**, Cirencester. In nearly ten years with CPM Tony was involved in land use change and environmental assessment studies across the UK and in Europe. From 1995 a partner in the business.

1983 - 1984 **Dickinson Davy and Markham**, Brigg. Assistant to the Senior Partner covering valuation and marketing work, compulsory purchase and compensation, and livestock market duties at Brigg and Louth.

RECENT RELEVANT EXPERIENCE

TRAINING COURSES

Landspreading of Non Farm Wastes. Fieldfare training course, 24 – 25 November 2009
Foaling Course. Twemlows Hall Stud Farm, 28 February 2010
Working with Soil: Agricultural Land Classification. 1 – 2 November 2017

TRANSPORT ENVIRONMENTAL ASSESSMENT CONTRIBUTIONS

1992	**Port Wakefield Channel Tunnel Freight Terminal, Yorkshire**
1993	**A1(M) Widening, Junctions 1-6 (Stage 2)**
1994 - 1995	**A55 Llanfairpwll to Nant Turnpike, Anglesey (Stage 3)**
1994 - 1995	**A479(T) Talgarth Bypass, Powys (Stage 3)**
1995	**Kilkhampton bypass (Stage 2)**
1997	**A477 Bangeston to Nash improvement, Pembroke**
2000	**Ammanford Outer Relief Road**
2001	**A421 Great Barford Bypass**
2001	**Boston Southern Relief Road**
2003 A40	**St Clears - Haverfordwest**
2003	**A470 Cwmbrach – Newbridge on Wye**
2003	**A11 Attleborough bypass**
2003 - 2008	**A487 Porthmadog bypass (Inquiry 2008)**
2004	**A55 Ewloe Bypass**
2004	**A40 Witney – Cogges link**
2005 – 2007	**A40 Robeston Wathen bypass (Inquiry 2007)**
2005 – 2007	**East Kent Access Road (Inquiry 2007)**
2006	**M4 widening around Cardiff**
2007 – 2008	**A40 Cwymbach to Newbridge (Inquiry 2008)**
2007	**A483 Newtown bypass**
2008 – 2009	**A470/A483 Builth Wells proposals**
2009 – 2017	**A487 Caernarfon-Bontnewydd bypass (Inquiry 2017)**
2009 – 2010	**North Bishops Cleeve extension**
2009 – 2010	**Land at Coombe Farm, Rochford**
2009 – 2011	**A477 St Clears to Red Roses (Inquiry 2011)**
2010 – 2011	**Streethay, Lichfield**
2010 – 2012	**A465 Heads of the Valley Stage 3 (Inquiry 2012)**
2013 – 2016	**A483/A489 Newtown Bypass mid Wales (Inquiry 2016)**
2013 - 2016	**High Speed 2 (HS2) rail link, Country South and London: Agricultural Expert for HS2 Ltd**
2015 – 2017	**A487 Dyfi Bridge Improvements**

2016 – 2018 **A465 Heads of the Valley Sections 5 and 6 (Inquiry 2018)**
2017 - 2018 **A40 Llanddewi Velfrey to Penblewin**
2017 – 2018 **A4440 Worcester Southern Relief Road**
2019 – 2020 **A40 Penblewin to Red Roses**
2019 – 2020 **A55 Jn 15 and 16 Improvements**

NSIP/DCO SOLAR INPUTS

2020 – 2023 **Heckington Fen**
Mallard Pass
Penpergwm
Parc Solar Traffwll
Alaw Môn
Parc Solar Caenewydd
Tween Bridge Solar Farm
Gate Burton
Great North Road Solar
Helios Renewable Energy Project
Dean Moor
Oaklands Solar

EXPERT EVIDENCE GIVEN AT PUBLIC INQUIRIES AND HEARINGS

1992 **Brooklands Farm**: Buildings reuse
Chase Farm, Maldon: Removal of condition
Bonehill Mill Farm: New farm building

1993 **Haden House**: Removal of condition
Manor Farm: New farm dwelling

1994 **Brooklands Farm**: 2nd Inquiry (housing)
Barr Pound Farm: Enforcement appeal
Fortunes Farm Golf Course: Agric effects
Cameron Farm: Mobile home
Land at Harrietsham: Enforcement appeal

1995 **Village Farm**: New farm dwelling
Claverdon Lodge: Building reuse
Harelands Farm: Barn conversion
Castle Nurseries: Alternative site presentation
Attlefield Farm: Size of farm dwelling
Bromsgrove Local Plan: Housing allocation
Lichfield Local Plan: Against MAFF objection
Hyde Colt: Mobile home / glasshouses

1996 **Church View Farm**: Enforcement appeal
Flecknoe Farm: Second farm dwelling
Highmoor Farm: New farm dwelling
Gwenfa Fields: Removal of restriction

1997 **Basing Home Farm**: Grain storage issue
Viscar Farm: Need for farm building / viability
Lane End Mushroom Farm: Need for dwelling
Yatton: Horse grazing on small farm
Newbury Local Plan: Effects of development

1998 **Moorfields Farm**: New farm dwelling
Maidstone Borough LPI: Effects of dev'ment
Glenfield Cottage Poultry Farm: Bldg reuse
Two Burrows Nursery: Building retention
Dunball Drove: Need for cattle incinerator

1999 **Holland Park Farm**: Farm dwelling / calf unit
Northington Farm: Existing farm dwelling
Lambriggan Deer Farm: Farm dwelling

2000 **Twin Oaks Poultry Unit**: Traffic levels
Meadows Poultry Farm: Farm dwelling
Hazelwood Farm: Beef unit and farm dwelling
Shardeloes Farm: Farm buildings
Aylesbury Vale Local Plan: Site issues
Deptford Farm: Buildings reuse
Coldharbour Farm: Buildings reuse
Heathey Farm: Mobile home
Wheal-an-Wens: Second dwelling
Apsley Farm: Buildings reuse
Home Farm: Size of grainstore
A34/M4 Interchange: Agricultural evidence

2001 **Lambriggan Deer Farm**: Farm dwelling
Blueys Farm: Mobile home
Weyhill Nursery: Second dwelling
Mannings Farm: Farm dwelling

2002 **A419 Calcutt Access**: Effect on farms
Cobweb Farm: Buildings reuse / diversification
Philips Farm: Farm dwelling
West Wilts Local Plan Inquiry: Dev site
Manor Farm: Building reuse
Land Adj White Swan: Access alteration
Happy Bank Farm: Lack of need for building
Lower Park Farm: Building reuse / traffic
Stourton Hill Farm: Diversification

2003 **Fairtrough Farm**: Equine dev and hay barn
Hollies Farm: Manager's dwelling
Darren Farm: Impact of housing on farm
Greenways Farm: Farm diversification

	Land at Springhill: Certificate of lawfulness	**Land at Four Marks**: Dev site implications
	Oak Tree Farm: Mobile home	
2004	**Chytane Farm**: Objector to farm dwelling	**Oldberrow Lane Farm**: Relocation of buildings
	Crown East: Visitor facility and manager's flat	**Forestry Building, Wythall**: Forestry issues
	Swallow Cottage: Widening of holiday use	**Lower Dadkin Farm**: Mobile home
	Etchden Court Farm: New enterprise viability	**Villa Vista**: Viability of horticultural unit
	Attleborough Bypass: On behalf of Highways Agency	
2005	**Howells School**: Use of land for horses	**Newton Lane**: Enforcement appeal
	Otter Hollow: Mobile home	**Manor Farm**: Change of use class
	Springfield Barn: Barn conversion	**South Hatch Stables**: RTE refurbishment
	Ashley Wood Farm: Swimming pool	**Trevaskis Fruit Farm**: Farm dwelling
	The Hatchery: Mobile home	**Tregased**: Enforcement appeal
	Stockfields Farm: Building reuse	
2006	**Manor Farm**: Replacement farmhouse	**Bhaktivedanta Manor**: Farm buildings
	Sough Lane: Farm dwelling	**Military Vehicles**: Loss of BMV land
	Whitewebbs Farm: Enforcement appeal	**Ermine Street Stables**: Enforcement appeal
	Land at Condicote: Farm dwelling	**Featherstone Farm**: Replacement buildings
	Rye Park Farm: Enforcement appeal	**Flambards**: Mobile home and poultry unit
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	Walltree Farm: Retention of structures	**Terrys Wood Farm**: Farm dwelling
	Weeford Island: Land quality issues	**Etchden Court Farm**: Mobile home
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2007	**Woolly Park Farm**: Manager's dwelling	**Barcroft Hall**: Removal of condition
	Park Gate Nursery: Second dwelling	**Kent Access Road**: Effect on farms
	Penyrheol Ias: Retention of bund	**Greys Green Farm**: Enforcement appeal
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	The Green, Shrewley: Mobile home	**Woodland Wild Boar**: Mobile homes
	Brook Farm: Retention of polytunnels	
2008	**Weights Farm**: Second dwelling	**Whitegables**: Stud manager's dwelling
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	Relocaton of Thame Market: Urgency issues	**Point to Point Farm**: Buildings / farm dwelling
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	Porthmadog bypass: Road scheme inquiry	
2009	**Claverton Down Stables**: New stables	**Meadow Farm**: Building conversion
	Hailsham Market: Closure issues	**Bishop's Castle Biomass Power Station**: Planning issues
	Gambledown Farm: Staff dwelling	**Foxhills Fishery**: Manager's dwelling
	Oak Tree Farm: Farm dwelling	**Bryn Gollen Newydd**: Nuisance court case
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2010	**Poultry Farm, Christmas Common**: Harm to AONB	**Stubwood Tankers**: Enforcement appeal
	Wellsprings: Rention of mobile home	**Meridian Farm**: Retention of building
	Redhouse Farm: Manager's dwelling	**Swithland Barn**: Retention of building
	Lobbington Fields Farm: Financial test	
2011	**Fairtrough Farm**: Enforcement appeal	**A477 Red Roses to St Clears**: Public Inquiry
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	Trottiscliffe Nursery: Mobile home	**North Bishops Cleeve**: Land quality issues
2012	**Tickbridge Farm**: Farm dwelling	**Langborrow Farm**: Staff dwellings
	Blaenanthir Farm: Stables and sandschool	**Heads of the Valley S3**: Improvements

	Land at Stonehill: Eq dentistry / mobile home	**Seafield Pedigrees**: Second dwelling
	Cwmcoedlan Stud: Farm dwelling with B&B	**Beedon Common**: Permanent dwelling
2013	**Barnwood Farm**: Farm dwelling	**Upper Youngs Farm**: Stables / log cabin
	Spring Farm Barn: Building conversion	**Tithe Barn Farm**: Enforcement appeal
	Baydon Road: Agricultural worker's dwelling	**Lower Fox Farm**: Mobile home / building
	Stapleford Farm: Building reuse	**Tewinbury Farm**: Storage barn
	Meddler Stud: Residential development	**Church Farm**: Solar park construction
	Deer Barn Farm: Agricultural worker's dwelling	
2014	**Land at Stow on the Wold**: Housing site	**Land at Elsfield**: Retention of hardstanding
	Allspheres Farm: Cottage restoration	**Queensbury Lodge**: Potential development
	Land at Stonehill: Equine dentistry practice	**Kellygreen Farm**: Solar park development
	Spring Farm Yard: Permanent dwelling	**Spring Farm Barn**: Building conversion
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	Sandyways Nursery: Retention of 23 caravans	**The Mulberry Bush**: Farm dwelling
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	Harefield Stud: Stud farm / ag worker's dwelling	**Emlagh Wind Farm**: Effect on equines
	Newtown Bypass: Compulsory purchase orders	**Fox Farm**: Building conversion to 2 dwellings
	Barn Farm: Solar farm	**Wadborough Park Farm**: Farm buildings
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	Five Oaks Farm: Change of use of land and temporary dwelling	
2016	**Clemmit Farm**: Redetermination	**Meddler Stud**: RTE and up to 63 dwellings
	The Lawns: Replacement building	**Land off Craythorne Road**: Housing dev
	Land at the Lawns: Cattle building	**Berkshire Polo Club**: Stables / accomm
2017	**Low Barn Farm**: Temporary dwelling	**Harcourt Stud**: Temporary dwelling
	High Meadow Farm: Building conversion	**Clemmit Farm**: Second redetermination
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2018	**Thorney Lee Stables**: Temporary dwelling	**Watlington Road**: Outline app residential
	Benson Lane: Outline app residential	**A465 Heads of the Valley 5/6**: Agric effects
	Park Road, Didcot: Outline app residential	**The Old Quarry**: Permanent dwelling
	Coalpit Heath: Residential development	**Chilaway Farm**: Removal of condition
2019	**Mutton Hall Farm**: Agric worker's dwelling	**Leahurst Nursery**: Temporary dwelling
	Clemmit Farm: Third redetermination	**Icomb Cow Pastures**: Temp mobile home
	Ten Acre Farm: Enforcement appeal	**Forest Faconry**: Construction of hack pens
	Harrold: 94 Residential dwellings	
2020	**Stan Hill**: Temp dwelling/agric. buildings	**Hazeldens Nursery**: Up to 84 extra care units
	Allspheres Farm: Enlargement of farm dwelling	**Leahurst Nursery**: Agricultural storage bldg
2021	**Ruins:** Dwelling for tree nursery	**Sketchley Lane, Burbage**: Industrial and residential development
2022	**Thornbury**: Local BMV	**Park Solar Traffwl**: Solar Hearing
	Penpergwym: Solar Farm Hearing	
2023	**Mudds Bank**: Equestrian workers dwelling	**Scruton Solar Farm**: Effects on BMV and food
	Mallard Pass NSIP: Issue specific hearing	**Land at East Burnham**: Equestrian facilities
	Bramford Solar: Loss of BMV / food	**Fladbury**: Housing on BMV land
	Gate Burton NSIP: BMV and Food	**Pound Road, Axminster**: BESS and BMV
	Heckington Fen NSIP: Issue Hearing	**Wymondley Solar**: Use of BMV
	Cutlers Green Solar: Use of BMV	**Little Acorn Farm, St Keyne**: Worker's dwelling
	Twigworth, Glos: Use of BMV land	
2024	**Sheepwash Solar, Kent**: Use of BMV land	

Appendix KCC2
Natural England's Technical Information Note TIN049

Natural England Technical Information Note TIN049

Agricultural Land Classification: protecting the best and most versatile agricultural land

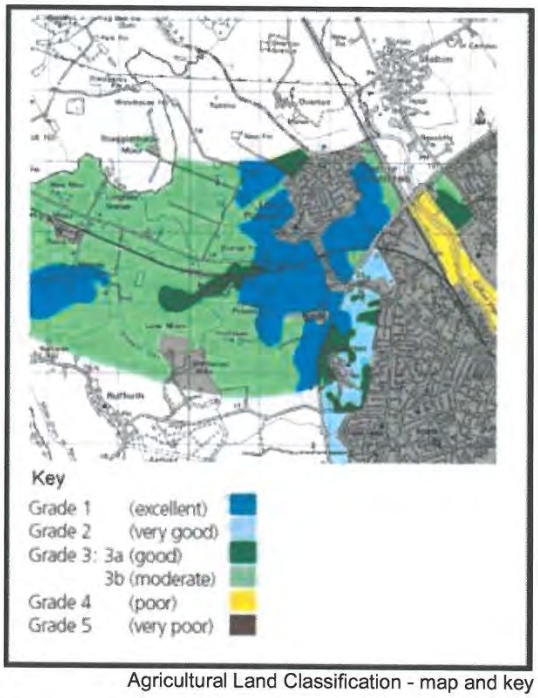
Most of our land area is in agricultural use. How this important natural resource is used is vital to sustainable development. This includes taking the right decisions about protecting it from inappropriate development.

Policy to protect agricultural land

Government policy for England is set out in the National Planning Policy Framework (NPPF) published in March 2012 (paragraph 112). Decisions rest with the relevant planning authorities who should take into account the economic and other benefits of the best and most versatile agricultural land. Where significant development of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of higher quality. The Government has also re-affirmed the importance of protecting our soils and the services they provide in the Natural Environment White Paper The Natural Choice:securing the value of nature (June 2011), including the protection of best and most versatile agricultural land (paragraph 2.35).

The ALC system: purpose & uses

Land quality varies from place to place. The Agricultural Land Classification (ALC) provides a method for assessing the quality of farmland to enable informed choices to be made about its future use within the planning system. It helps underpin the principles of sustainable development.



Agricultural Land Classification - map and key

Second edition 19 December 2012
www.naturalengland.org.uk

NATURAL ENGLAND

Agricultural Land Classification: protecting the best and most versatile agricultural land

The ALC system classifies land into five grades, with Grade 3 subdivided into Subgrades 3a and 3b. The best and most versatile land is defined as Grades 1, 2 and 3a by policy guidance (see Annex 2 of NPPF). This is the land which is most flexible, productive and efficient in response to inputs and which can best deliver future crops for food and non food uses such as biomass, fibres and pharmaceuticals. Current estimates are that Grades 1 and 2 together form about 21% of all farmland in England; Subgrade 3a also covers about 21%.

The ALC system is used by Natural England and others to give advice to planning authorities, developers and the public if development is proposed on agricultural land or other greenfield sites that could potentially grow crops. The Town and Country Planning (Development Management Procedure) (England) Order 2010 (as amended) refers to the best and most versatile land policy in requiring statutory consultations with Natural England. Natural England is also responsible for Minerals and Waste Consultations where reclamation to agriculture is proposed under Schedule 5 of the Town and Country Planning Act 1990 (as amended). The ALC grading system is also used by commercial consultants to advise clients on land uses and planning issues.

Criteria and guidelines

The Classification is based on the long term physical limitations of land for agricultural use. Factors affecting the grade are climate, site and soil characteristics, and the important interactions between them. Detailed guidance for classifying land can be found in: *Agricultural Land Classification of England and Wales: revised guidelines and criteria for grading the quality of agricultural land* (MAFF, 1988):

- **Climate:** temperature and rainfall, aspect, exposure and frost risk.
- **Site:** gradient, micro-relief and flood risk.
- **Soil:** texture, structure, depth and stoniness, chemical properties which cannot be corrected.

The combination of climate and soil factors determines soil wetness and droughtiness. Wetness and droughtiness influence the choice of crops grown and the level and consistency of yields, as well as use of land for grazing livestock. The Classification is concerned with the inherent potential of land under a range of farming systems. The current agricultural use, or intensity of use, does not affect the ALC grade.

Versatility and yield

The physical limitations of land have four main effects on the way land is farmed. These are:

- the range of crops which can be grown;
- the level of yield;
- the consistency of yield; and
- the cost of obtaining the crop.

The ALC gives a high grading to land which allows more flexibility in the range of crops that can be grown (its 'versatility') and which requires lower inputs, but also takes into account ability to produce consistently high yields of a narrower range of crops.

Availability of ALC information

After the introduction of the ALC system in 1966 the whole of England and Wales was mapped from reconnaissance field surveys, to provide general strategic guidance on land quality for planners. This Provisional Series of maps was published on an Ordnance Survey base at a scale of One Inch to One Mile in the period 1967 to 1974. These maps are not sufficiently accurate for use in assessment of individual fields or development sites, and should not be used other than as general guidance. They show only five grades: their preparation preceded the subdivision of Grade 3 and the refinement of criteria, which occurred after 1976. They have not been updated and are out of print. A 1:250 000 scale map series based on the same information is available. These are more appropriate for the strategic use originally intended and can be downloaded from the Natural England **website**. This data is also available on 'Magic', an interactive, geographical information website **http://magic.defra.gov.uk/**.

Since 1976, selected areas have been re-surveyed in greater detail and to revised

guidelines and criteria. Information based on detailed ALC field surveys in accordance with current guidelines (MAFF, 1988) is the most definitive source. Data from the former Ministry of Agriculture, Fisheries and Food (MAFF) archive of more detailed ALC survey information (from 1988) is also available on **http://magic.defra.gov.uk/**. Revisions to the ALC guidelines and criteria have been limited and kept to the original principles, but some assessments made prior to the most recent revision in 1988 need to be checked against current criteria. More recently, strategic scale maps showing the likely occurrence of best and most versatile land have been prepared. Mapped information of all types is available from Natural England (see *Further information* below).

New field survey

Digital mapping and geographical information systems have been introduced to facilitate the provision of up-to-date information. ALC surveys are undertaken, according to the published Guidelines, by field surveyors using handheld augers to examine soils to a depth of 1.2 metres, at a frequency of one boring per hectare for a detailed assessment. This is usually supplemented by digging occasional small pits (usually by hand) to inspect the soil profile. Information obtained by these methods is combined with climatic and other data to produce an ALC map and report. ALC maps are normally produced on an Ordnance Survey base at varying scales from 1:10,000 for detailed work to 1:50 000 for reconnaissance survey

There is no comprehensive programme to survey all areas in detail. Private consultants may survey land where it is under consideration for development, especially around the edge of towns, to allow comparisons between areas and to inform environmental assessments. ALC field surveys are usually time consuming and should be initiated well in advance of planning decisions. Planning authorities should ensure that sufficient detailed site specific ALC survey data is available to inform decision making.

Consultations

Natural England is consulted by planning authorities on the preparation of all development plans as part of its remit for the natural environment. For planning applications, specific consultations with Natural England are required under the Development Management Procedure Order in relation to best and most versatile agricultural land. These are for non agricultural development proposals that are not consistent with an adopted local plan and involve the loss of twenty hectares or more of the best and most versatile land. The land protection policy is relevant to all planning applications, including those on smaller areas, but it is for the planning authority to decide how significant the agricultural land issues are, and the need for field information. The planning authority may contact Natural England if it needs technical information or advice.

Consultations with Natural England are required on all applications for mineral working or waste disposal if the proposed afteruse is for agriculture or where the loss of best and most versatile agricultural land agricultural land will be 20 ha or more. Non-agricultural afteruse, for example for nature conservation or amenity, can be acceptable even on better quality land if soil resources are conserved and the long term potential of best and most versatile land is safeguarded by careful land restoration and aftercare.

Other factors

The ALC is a basis for assessing how development proposals affect agricultural land within the planning system, but it is not the sole consideration. Planning authorities are guided by the National Planning Policy Framework to protect and enhance soils more widely. This could include, for example, conserving soil resources during mineral working or construction, not granting permission for peat extraction from new or extended mineral sites, or preventing soil from being adversely affected by pollution. For information on the application of ALC in Wales, please see below.

Further information

Details of the system of grading can be found in: *Agricultural Land Classification of England and Wales: revised guidelines and criteria for grading the quality of agricultural land* (MAFF, 1988).

Please note that planning authorities should send all planning related consultations and enquiries to Natural England by e-mail to **consultations@naturalengland.org.uk**. If it is not possible to consult us electronically then consultations should be sent to the following postal address:

Natural England
Consultation Service
Hornbeam House
Electra Way
Crewe Business Park
CREWE
Cheshire
CW1 6GJ

ALC information for Wales is held by Welsh Government. Detailed information and advice is available on request from Ian Rugg (**ian.rugg@wales.gsi.gov.uk**) or David Martyn (**david.martyn@wales.gsi.gov.uk**). If it is not possible to consult us electronically then consultations should be sent to the following postal address:

Welsh Government
Rhodfa Padarn
Llanbadarn Fawr
Aberystwyth
Ceredigion
SY23 3UR

Natural England publications are available to download from the Natural England website: **www.naturalengland.org.uk**.

For further information contact the Natural England Enquiry Service on 0300 060 0863 or e-mail **enquiries@naturalengland.org.uk**.

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Appendix 1.2 – Agricultural Evidence addressing Rule 6 Party Issues

LAND EAST OF HAWKSWORTH AND NORTH OF THOROTON, NOTTINGHAMSHIRE

AGRICULTURAL EVIDENCE ADDRESSING THE RULE 6 PARTY'S ISSUES

BY

TONY KERNON BSc(Hons) MRICS FBIAC

APP/P3040/W/23/3330045

May 2024

LAND EAST OF HAWKSWORTH AND NORTH OF THOROTON, NOTTINGHAMSHIRE

AGRICULTURAL EVIDENCE ADDRESSING THE RULE 6 PARTY'S ISSUES

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TONY KERNON BSc(Hons) MRICS FBIAC

APP/P3040/W/23/3330045

May 2024

Authorised By APK 05/24

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CONTENTS

Appendices

1 INTRODUCTION TO THE WITNESS

1.1 This evidence has been prepared by Tony Kernon. I am a Chartered Surveyor and a Fellow of the British Institute of Agricultural Consultants. I have specialised in assessing the effects of development proposals on agricultural land for over 35 years, and act nationwide for local planning authorities and applicants alike across England and Wales.

1.2 I have been involved in many applications for solar farm development. I have witnessed the installation process and I have visited established and operating solar farms to assess their agricultural use and soil profiles.

1.3 My Curriculum Vitae is at **Appendix KCC1**. As a Chartered Surveyor giving evidence, I am bound by the RICS Practice Statement "Surveyors Acting as Expert Witnesses", 4th Edition (February 2023). A declaration is provided below.

1.4 In accordance with the requirements of the Royal Institution of Chartered Surveyors Practice Statement, "Surveyors acting as expert witnesses" (4th edition, amended 2023):

(i) I confirm that my report has drawn attention to all material facts which are relevant and have affected my professional opinion.

(ii) I confirm that I understand and have complied with my duty to this Appeal as an expert witness overrides any duty to those instructing or paying me, that I have understood this duty and complied with it in giving my evidence impartially and objectively, and that I will continue to comply with that duty as required.

(iii) I confirm that I am not instructed under any conditional or other success-based fee arrangement.

(iv) I confirm that I have no conflicts of interest.

(v) I confirm that my report complies with the requirements of the Royal Institution of Chartered Surveyors (RICS), as set down in "*Surveyors acting as expert witnesses"*: RICS practice statement (2023).

Signed: 

(Tony Kernon)

Dated: 14th May 2024

2 INTRODUCTION TO THE ISSUES AND EVIDENCE

2.1 At the Case Management Conference (CMC) held on 23rd April, the Inspector noted that the Council had introduced two further issues, including matters relating to Best and Most Versatile agricultural land (BMVAL). This, it was noted, was also a concern to other parties.

2.2 The Council and the Rule 6 Party (R6P) raise different agricultural issues. The Council raises the matter of alternative sites and potential for lower quality land to be used. The R6P raises a number of other matters, set out in their Statement of Case (under the heading of "Suggested Reason for Dismissal 3") and elsewhere, including:

- that substantial areas of land within 5 km are likely to be poorer quality;
- that building a solar farm can cause significant, long-term damage to the soil and loss of agricultural land;
- that full restoration to agricultural use will take many years or may never be possible;
- that soil inversion for ecological reasons will cause lasting damage to soil;
- that increased flood risk is likely due to compaction, built area etc;
- sheep grazing is not practical;
- there will be a loss or displacement of food production.

2.3 This document responds to the R6P's matters. There is some overlap between the Council and the R6P's issues, in that both raise the matter of the likelihood of lower quality land being available, should that be a necessary matter to assess. That is primarily addressed in a separate Statement responding only to the Council's concerns.

2.4 This response focuses on the R6P's comments.

Structure of the Response

2.5 This response is structured as follows:

(i) **section 3** summarises and comments on the relevant policy considerations against which the proposal is assessed;

(ii) **section 4** considers the land quality of the Site, the soils, the agricultural use and related matters;

(iii) **section 5** addresses the R6P's comments about the effect on soils, agricultural land quality, short and long-term effects and decommissioning effects, and makes reference to numerous recent appeal decisions on these matters. This section also addresses the R6P's concerns about soil inversion for ecological works, which is not proposed, and other matters raised including food production and security.

(iv) ending with a summary and conclusions in **section 6**.

3 PLANNING POLICY AND GUIDANCE OF RELEVANCE

Introduction

3.1 Planning policy is addressed in the planning evidence. This section provides a summary of the key policy and guidance directly relevant to the matters raised lately by the Council and the R6P.

Agricultural Land Quality

3.2 Agricultural land is measured under a system of Agricultural Land Classification (ALC). This grades land based on the long-term physical limitations of land for agricultural use, including climate (temperature, rainfall, aspect, exposure and frost risk), site (gradient, micro-relief and flood risk) and soil (texture, structure, depth and stoniness) criteria, and the interactions between these factors determining soil wetness, droughtiness and utility. The system is described in Natural England's Technical Information Note TIN049 (2012) (**Appendix KCC2**). A description of how ALC is carried out is provided in **Appendix KCC3**.

3.3 Land is divided into five grades, 1 to 5. Grade 3 is divided into two subgrades. Land falling into ALC Grades 1, 2 and Subgrade 3a is the "**best and most versatile**" (BMV) (as defined in the National Planning Policy Framework (2021), Annex 2). Natural England estimate that 42% of agricultural land in England is of BMV quality (see TIN049 in **Appendix KCC2**).

3.4 The site comprises a mixture of Grades 2, 3a and 3b. Each grade is defined in the ALC Guidelines, an extract from which is reproduced as **Appendix KCC4**. The description highlights variability of production possibilities within each of the grades, so that the grading may reflect yield, or versatility, but not necessarily both.

The Local Plan

3.5 The R6P sets out in its Statement of Case that the development is considered to be contrary to the Rushcliffe Local Plan Part 2 (LPP2) policies 1 and 16.

3.6 Policy 1 supports new development provided that certain criteria are met. Criterion 12 notes "**development should have regard to the best and most versatile agricultural classification of the land, with a preference for the use of lower quality over higher quality agricultural land. Development should also aim to minimise soil disturbance as far as possible**".

3.7 Policy 16 notes that proposals for renewable energy schemes will be granted provided that they are acceptable in terms of, inter alia, "**d) best and most versatile agricultural land**", and "**k) the decommissioning and reinstatement of land at the end of the operational life of the development**".

3.8 Neither policy places a bar on the use of BMVAL. Neither policy introduce a food-production or agricultural land use requirement, and neither policy nor supporting text requires that agricultural land be used for agricultural use.

NPPF

3.9 The National Planning Policy Framework (NPPF) (December 2023) sets out, in paragraph 180 (b), that the economic benefits of BMV land should be recognised. Footnote 62, in the context of plan making in paragraph 181, advises that where significant development of agricultural land is involved, poorer quality land should be used in preference.

3.10 In the December 2023 amendments, footnote 62 was expanded to include that "**the availability of agricultural land used for food production should be considered, alongside other policies in this Framework, when deciding what sites are most appropriate for development**". The consultation question, and the Government's response, are set out in **Appendix KCC5**. This makes clear that Government considers this applicable where significant areas of higher quality land are demonstrated to be necessary compared to areas of poorer quality land.

National Policy Statements

3.11 The **Overarching National Policy Statement for Energy (EN-1)** (November 2023) may be a material consideration for all applications. The extent to which the NPS will be relevant will depend upon a case-by-case judgement depending upon the extent to which the matters are already covered by existing planning policy. Paragraph 5.11.4 notes that "**development of land will affect soil resources, including physical loss of and damage to soil resources, through land contamination and structural damage. Indirect impacts may also arise from changes in the local water regime, organic matter content, soil biodiversity, and soil process**". Paragraph 5.11.12 notes that "**applicants should seek to minimise impacts on the best and most versatile agricultural land identified as land in Grades 1, 2 and 3a of the Agricultural Land Classification and preferably use land in areas of poorer quality (Grades 3b, 4 and 5)**".

3.12 The **National Policy Statement for Renewable Energy Infrastructure (EN-3)** (November 2023) sets out at 1.1.1 that "**there is an urgent need for new electricity generating capacity to meet our energy objectives**". Paragraph 1.1.2 notes that "**electricity generation from renewable sources is an essential element of the transition to net zero and meeting our statutory** targets". The document then sets out specific guidance for different technologies, with section 2.10 covering "Solar Photovoltaic Generation".

3.13 Paragraph 2.10.28 is set under the subtitle of "factors influencing site selection and design". It advises that while land type should not be a predominating factor in determining the suitability of the site's location, applicants should, where possible use non-agricultural land. Where the use of agricultural land has been shown to be necessary, poorer quality land should be preferred to higher quality land.

3.14 The development of ground mounted solar arrays is not prohibited on land of ALC Grades 1, 2 or 3a paragraph 2.10.30 advises, but the impacts must be considered. Paragraphs 2.10.31 and 32 recognise that, at the NSIP scale, it is likely that applicants will use some agricultural land. Consideration should be given to whether continued agricultural use can continue to maximise the efficiency of land use. Paragraphs 2.10.33, 34, 68, 89, 127 and 145 provide advice regarding soils and land quality.

Guidance

3.15 There is no definition of what is "significant" development in the context of footnote 62 of the NPPF. The threshold for consultation with Natural England is where there will be the loss (by sealing-over or downgrading rather than a change of use) of more than 20 ha of BMV agricultural land (as set out in Appendix 4 (y) of the Town and Country Planning (Development Management Procedure) (England) Order 2015) (DMP Order).

3.16 There is no definition of what is meant by "loss" in the DMP Order. The IEMA Guide "A New Perspective on Land and Soil in Environmental Impact Assessment" (February 2022) defines impacts for EIA purposes as "**permanent, irreversible loss of one or more soil functions or soil volumes (including permanent sealing or land quality downgrading)** …" (Table 3, page 49). The IEMA Guide notes that this can include "**effects from temporary developments**", which is defined as follows: "**temporary developments can result in a permanent impact if resulting disturbance or land use change causes permanent damage to soils**".

3.17 Therefore, in respect of the guidance, the “loss” of agricultural land is where there is an irreversible loss of agricultural land or a downgrading of ALC value through permanent damage to soils.

3.18 The Planning Practice Guidance suite section on “Renewable and Low-carbon energy” advises at 5-013-20150327 that particular factors a local planning authority will need to consider include whether the proposed use of agricultural land has been shown to be necessary and poorer quality land has been used in preference, and the proposed use allows for continued agricultural use.

3.19 The weight to be given to the written ministerial statement is addressed in the planning evidence. This was considered in the appeal decision at Cutlers Green (3319421, 18th December 2023) where, at paragraph 166, the Inspector made the following decision:

> “**I recognise that the 2015 WMS requires the most compelling evidence for the development of solar farms on BMV. However, this must be read in light of more up to date events. This includes Parliament’s declaration in 2019 that the UK is facing a climate change emergency; the support in the NPPF, most recently amended in 2023, for renewable development; the statements in several policy documents on energy and climate change issued since 2015, as set out above; and the draft NPS EN-1 and EN-3. It must also be viewed against the increasing imperative to tackle climate change, and to meet the legally binding Net Zero targets. Together with the specific considerations in this case, I conclude that these factors provide the most compelling evidence to justify the use of BMV in this instance**”.

4 LAND QUALITY AND LAND USE

Application Information

4.1 Agricultural matters were set out in "Volume 1: Planning Statement" (November 2022) at 1.279 to 1.288. These note, inter alia:

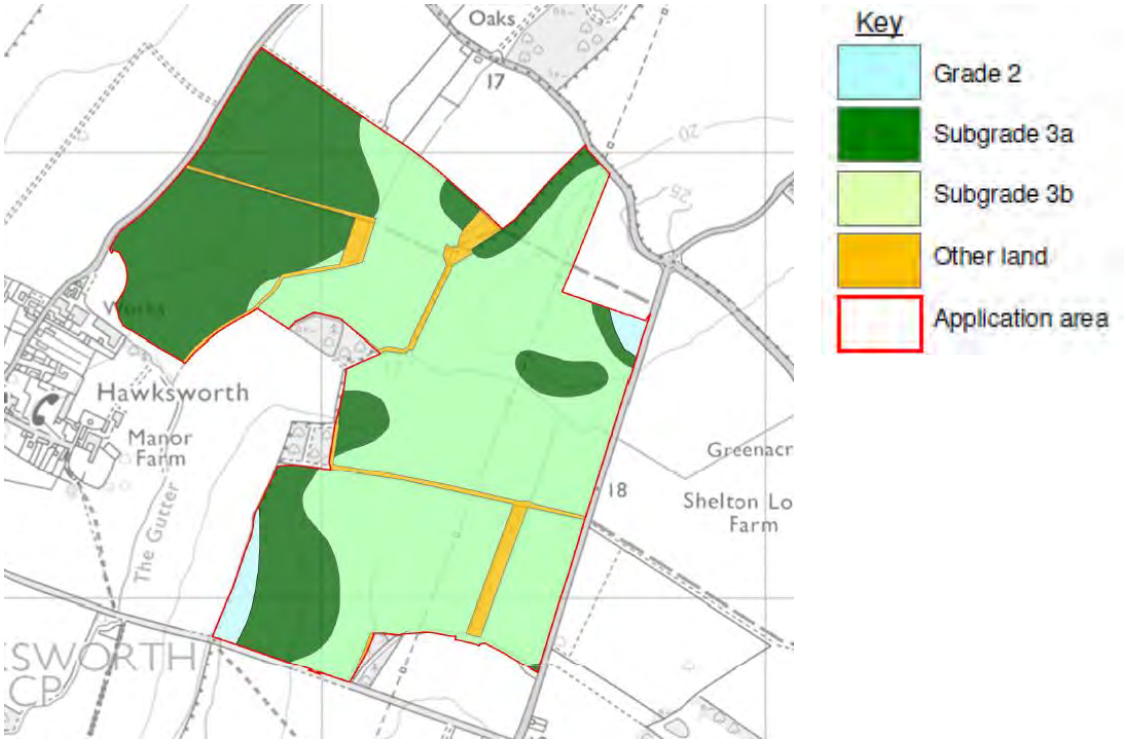
- the ground disturbance is 3.95%;
- the disturbance from the piling for the panels is less than 0.05% of the Site;
- the greatest threat to food production comes from the effects of climate change;
- the scheme has been designed to enable the grazing of the Site by sheep;
- the amount of land used by solar development is 0.1% and would increase to of the order of 0.3% if the Government's objectives are met;
- the Site is predominantly Subgrade 3b (details were provided in the ALC report in Appendix 9).

Land Quality

4.2 The Council and R6P's comments are directly primarily, but not exclusively, at the use of BMVAL.

4.3 The land quality and soils were described in the ALC report by Land Research Associates. The ALC results are shown below.

Insert 1: ALC Results



4.4 The ALC results across the site were identified in the ALC report, as follows.

Table 1: ALC Results

Grade	Description	Area (ha)	Proportion (%)
2	Very good	1.7	2
3a	Good	33.7	36
3b	Moderate	54.0	58
Other	Other land	3.9	4
Total		**93.3**	**100**

4.5 Not all of the area surveyed is proposed for the development of solar PV arrays. The following compares the site plan with the ALC. It can be seen that an area of Subgrade 3a to the west, and the top northeast corner (Grade 2 and Subgrades 3a and 3b) are not proposed for panel deployment, and can continue in arable agricultural use.

Inserts 2 and 3: Comparison of Layout With ALC

4.6 The ALC by area within the panel development area is as follows.

Table 2: ALC Results Panel Area

Grade	Description	Area (ha)	Proportion (%)
2	Very good	1.5	2
3a	Good	29.8	34
3b	Moderate	52.7	60
Other	Other land	3.9	4
Total		**87.9**	**100**

Soils

4.7 It can be seen that the BMV land within the Site is principally in two locations, notably along the western side of the Site. These areas, and their soils, are shown in the following photographs, taken as shown on the plans.

Insert 4: Location of Photographs

Photo 1: Looking southwest and south

Photos 2 – 4: Points 2, 3 and 4 - Grades 2, 3a and 3b soils

4.8 The patches of BMV in the northeast corner are shown below. The solar PV arrays will mostly not be placed on the Grade 2.

Insert 5: Location of Photographs

Photo 5: Looking South from View 5

Photo 6: Archaeological Trench

4.9 The small patch of Subgrade 3a shown in photograph 7 is slightly elevated, as can be seen below, but forms a small area in the corner of the field.

Photo 7: Over Subgrade 3b towards 3a

4.10 The following photograph is included because it shows how variable land can be over short distances. In particular I draw attention to the colour of the subsoil removed in the archaeological trenching, as indicated by the arrows.

Photo 8: Highlighting Different Soil Colours

4.11 Variability of soils over short distances is particularly noticeable in the Subgrade 3a to the west. This was highlighted to me by the farmer. The photographs are located as follows. His soil map is at **Appendix KCC6**. It can be seen that almost every field contains three different types of soil.

Insert 6: Location of Photographs

4.12 The field, looking east, is shown below.

Photo 9: The Western Field

4.13 As shown in photographs 10 to 12, the soils at the western side of the field are much sandier, getting heavier in the centre of the field, and are alluvial dark heavy clay loams, much shallower, at the western end of the field.

Photos 10 – 12: Soils in the Western Field

Land Use

4.14 As can be seen in the photographs, the Site is wholly in arable uses. The Site forms part of a farm that extends to approximately 340ha (850 acres). The block at Thoroton Farm extends to 160ha, with 180ha at Old Hall Farm, Car Colston.

4.15 The land is cropped on a rotation, normally winter wheat and barley with various break crops depending on soil type and autumn/spring rainfall, being maize (for a local anaerobic digester), field beans and spring oats. The farming operations are undertaken by contractors. There are no buildings at Thoroton Farm, and all buildings and storage are at Car Colston.

4.16 The cropping across the Thoroton and Car Colston Farms is mostly for non-food uses. Currently just under 40% of the Appeal Site is used for producing food. Across the two farms normally 30-40% of the land area is in food production, with the remainder producing non-food crops, in conservation uses, fallow, woodland on non-farmed land.

5 THE RULE 6 PARTY CONCERNS

The Issues Raised

5.1 This section considers the matters raised in the R6P's Statement of Case (SoC) as follows, with reference to the SoC section/page, in the order the matters are raised:

1) whether the proposal would entail the development of significant areas of BMVAL (1 (3), page 1);
2) whether there is poorer quality land that could/should be considered (last two paragraphs of 3, page 7). [This is primarily addressed in the separate Statement addressing the Council's late-raised concerns.] It is asserted on page 16 that substantial areas within 5km are likely to include land of poorer grades;
3) whether the proposed development will result in the loss of 34.4ha of BMVAL, whether this is significant and in conflict with LLP1 policy 1 and LPP2 policy 16 (page 16);
4) whether the construction process will result in "**significant, long-term damage to the soil**" and whether full restoration to agricultural use "**will take many years or may never be possible**" (page 16);
5) whether soil inversion for ecological enhancement will "**cause lasting damage to the soil**" (page 16);
6) whether the panels will result in increased flood risk "**due to soil compaction and built area**" (page 17);
7) sheep grazing matters (pages 25 and 26);
8) the development is on BMVAL and "**land classed 3b, and therefore capable of producing a wide range of crops. The development would displace food production**" (conclusions, page 29).

Order of Response

5.2 I address these in the following order:

- whether land is "lost", whether there is long-term soil damage, whether this is in conflict with policy (issues 1, 3, 4);
- whether poorer quality land is available (issue 2);
- whether there will be soil inversion (issue 5);
- whether there will be increased consequential flood risk (issue 6);
- sheep grazing and food production matters (issues 7 and 8).

Whether Land Is Lost (Issues 1, 3, 4)

5.3 The installation process does not adversely affect land quality (except for limited areas such as tracks) and, if done in suitable conditions, does not adversely affect soils. Where soils are adversely affected this is capable of easy rectification.

5.4 The location for the legs is marked out by pegs, after which a team, usually with a tractor and trailer and small loader, bring in the legs and lay them out.

5.5 A team of workers then arrives to knock the stanchions / legs in. From operations I have observed it takes a little over a minute per leg to knock the leg into the ground and move the machine to the next leg[1]. This operation is shown in the photograph below. This was inserting legs into a clay soil, and therefore comparable to the Appeal Site.

Photo 13: Legs Being Installed

5.6 The limited impact on the land and soils from installing legs is illustrated below. It can be seen that there is no evidence of damage to the soils, even with works taking place in winter, but obviously it depends upon site conditions at the time.

Photo 14: Legs Installed (this at Bentham Farm, Purton, Summer 2015)

[1] This observation was made on clay soils at the Purton Solar Farm, Wiltshire, in 2015. Ground conditions will inevitably affect installation speed.

Photo 15: Legs Being Installed (this at Tiln Farm, Retford, in Janaury 2023)

5.7 The minimal damage, if carried out in dry conditions, of the process of bolting-on the panels is shown below. It can be seen that the ground has not been affected.

Photo 16: After Panels Bolted-on

5.8 It is necessary to connect electric cables between the panels and to run the cables back to the substation. This involves trenches, dug with a machine. Immediately after digging this can look disruptive to the soil, but cables are installed in a similar way to field drainage pipes. Typically topsoil and subsoil are separated, as below. They are replaced in the same order, with no long-term effect on soils or land quality.

Photo 17: Trenching Works

5.9 There are occasions when the weather makes the soils susceptible to disturbance from vehicular traffic. An example is shown below. This happens in farming activities as well. The soils are readily restored once they are dry, using typical and normal machinery, as illustrated below.

Photo 18: An Example of Winter Installation Affecting Soils

5.10 That area was restored, as shown below.

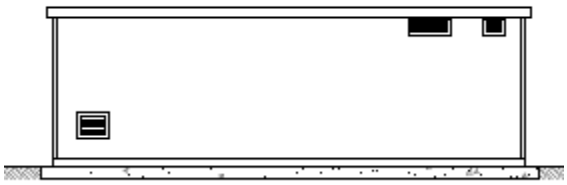
Photo 19: The Area Ready for Seeding

5.11 Disturbance caused by vehicle travel is normally limited to the main access routes and can be restored readily as the following example shows.

Photo 20: An Example of Track Restoration

5.12 The tracks and transformer bases are usually constructed by removing the topsoil, storing that to the side for replacement at decommissioning, laying a membrane, adding stone and a surface material. The tracks and base are permeable.

Photo 21 and Insert 7: Typical Tracks and Inverters



5.13 All of these areas are capable of restoration back to comparable ALC grade on decommissioning.

5.14 The construction compound is a temporary works, with an example shown below.

Photo 22: Example of Construction Compound

5.15 The substation is considered as a permanent loss of land.

5.16 The areas affected by ALC grade are shown below.

Table 3: Fixed Equipment by ALC Grade (rounded up to nearest 0.1ha)

Component	**Area by ALC Grade**			**Total**
	2	**3a**	**3b**	
Substation	0	0	0.8	0.8
Inverter and hardstanding	0	0.1	0.1	0.2
Tracks (ave 4m wide)	0	0.5	1.1	1.6
Total	**0**	**0.6**	**2.0**	**2.6**

5.17 Accordingly the area of BMV land affected temporarily for the operational period is only 0.6ha.

5.18 That the land is not lost or adversely affected has been widely accepted in many recent appeals. Some recent examples include:

(i) in the appeal decision for the solar farm at Bramley, Hampshire (APP/H1705/W/22/3304561) the Inspector, noting that 53% of the site was of BMV, noted (para 58) "**The agricultural land would not be permanently or irreversibly lost, particularly as pasture grazing would occur between the solar panels. This would allow the land to recover from intensive use, and the soil condition and structure to improve. The use of the soils for grassland under solar panels**

should serve to improve soil health and biodiversity and the proposed LEMP, which could be secured by a condition attached to any grant of planning permission, includes measures to improve the biodiversity of the land under and around the panels";

(ii) in the NSIP decision at Longfield Solar Farm of 26th June 2023, (EN 010118) the Secretary of State agreed with his Examining Authority that the use of 150 ha of BMV, as part of a larger site, should be ascribed "**a small amount of negative weight in the planning balance**" (para 4.59). It was concluded that about 6 ha would be lost, and the rest would be lost temporarily;

(iii) in the planning appeal decision on 27th June 2023 for land south of the Leeming Barr substation, the Inspector considered whether or not land was Grade 2 or subgrade 3b. In her decision (APP/G2713/W/23/3315877) the Inspector noted:

- agricultural use could continue during the operational phase (para 20);
- there would likely be improvements to soil health from being rested from intensive arable use (para 21);
- a change from arable to grassland use is not a matter subject to planning controls (para 22);
- there would not be temporary or permanent loss of BMV land (para 25);

(iv) in the decision on land west of Thaxted of 18th December 2023 (APP/C1570/W/23/3319421), which involved 55 ha of BMV, the Inspector was clear that the land would not be adversely affected except for areas of tracks and fixed infrastructure, and any woodland planting that is not removed at decommissioning. The Inspector noted, inter alia:

- whilst careful consideration needs to be given to BMV, none of the policy or guidance prohibits its use for large scale solar farms (paragraph 96);
- the agricultural land quality of the majority of the site would not be affected (paragraph 112);

(v) in the decision for a 47MW solar farm at Little Cheveney Farm, Marden (APP/U2235/W/23/3321094), a site containing 47% BMV, the Inspector noted the preference to use poorer quality land (paragraph 46), and that the land would not be lost but would retain some grazing use (paragraph 50). He noted the benefits for soil and concluded that the temporary loss of some BMV was of limited weight (paragraph 51);

(vi) in the decision at Kemberton, Telford (APP/L3245/W/23/3329815) the Inspector noted that the piling "**would cause minimal disturbance to the soil and the quality of the land**" (which in that case was 29% Subgrade 3a) (paragraph 52). Overall he

was satisfied that there would be no temporary or permanent loss of BMV (paragraph 54) and overall there was no conflict with the development plan or Framework (paragraph 60).

5.19 Accordingly I conclude, on R6P's issues 1, 3 and 4, that:

- there will not be significant loss of BMV land, with only very small areas temporarily affected;
- there will not be a loss of 34.4ha of BMVAL;
- construction will not result in significant long-term damage to soils, and restoration at decommissioning will not result in damage nor will it take many years to restore.

Whether Poorer Quality Land Is Available (Issue 2)

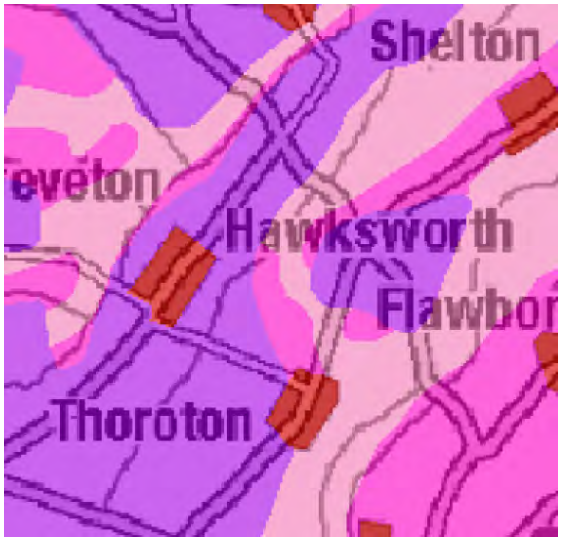
5.20 R6P's issue 2 asserts that there are likely to be substantial areas of land within 5 km that are of poorer quality. This is primarily set out in the evidence in response to the Council's late-raised concerns.

5.21 This is not a "BMV site". It is a generally poorer-quality site with small patches and a modest area of BMV land, totalling 38% of the site surveyed, and a smaller proportion (36%) of the area proposed for solar PV arrays.

5.22 The analysis shows that in the general wider area the land quality is expected to be similar or better. The southern part of the Borough is expected to contain the highest proportion of poorer quality land, but within 5km there is no land shown as poorer than undifferentiated Grade 3, and within 10km only a small area of Grade 4. As set out in the evidence in response to the Council's Statement of Case, based on the provisional ALC maps the percentage of BMVAL in Rushcliffe Borough is 58.5%, compared to the national (England) average of 42%. Across the areas proposed for panels within the Site the proportion is 36%.

5.23 The Site is shown on the provisional ALC maps, and the 2017 Likelihood of BMV maps, as follows.

Inserts 8 and 9: Provisional and Predictive BMV Maps



Grade	Description
1	Excellent
2	Very Good
3	Good to Moderate
4	Poor
5	Very Poor

Non-Agricultural Land

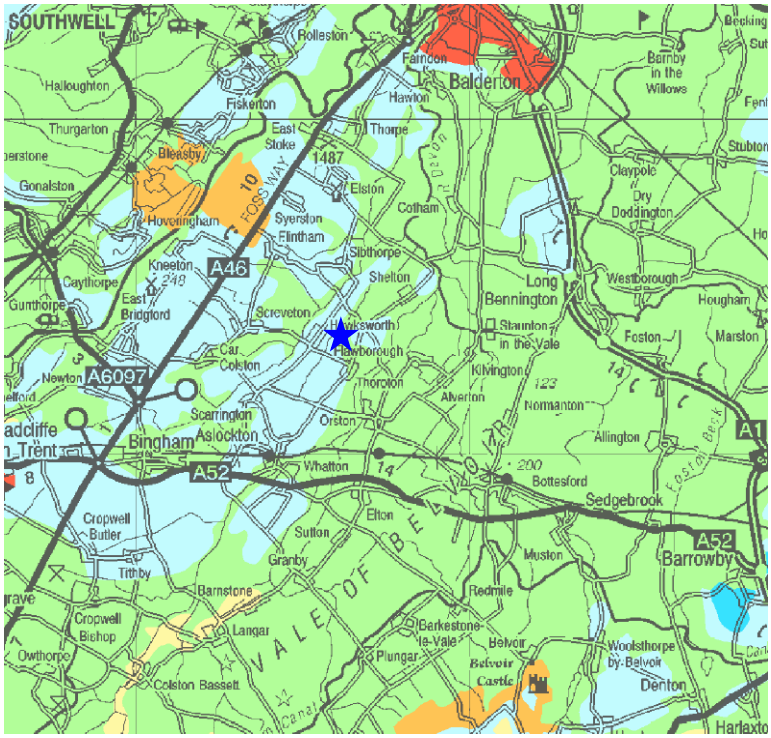
- Other land primarily in non-agricultural use
- Land predominantly in urban use

Predictive BMV Land Assesment © Defra

- High likelihood of BMV land (>60% area bmv)
- Moderate likelihood of BMV land (20 - 60% area bmv)
- Low likelihood of BMV land (<= 20% area bmv)
- Non-agricultural use
- Urban / Industrial

5.24 The wider area is shown below.

Insert 10: Provisional ALC (site shown with star)



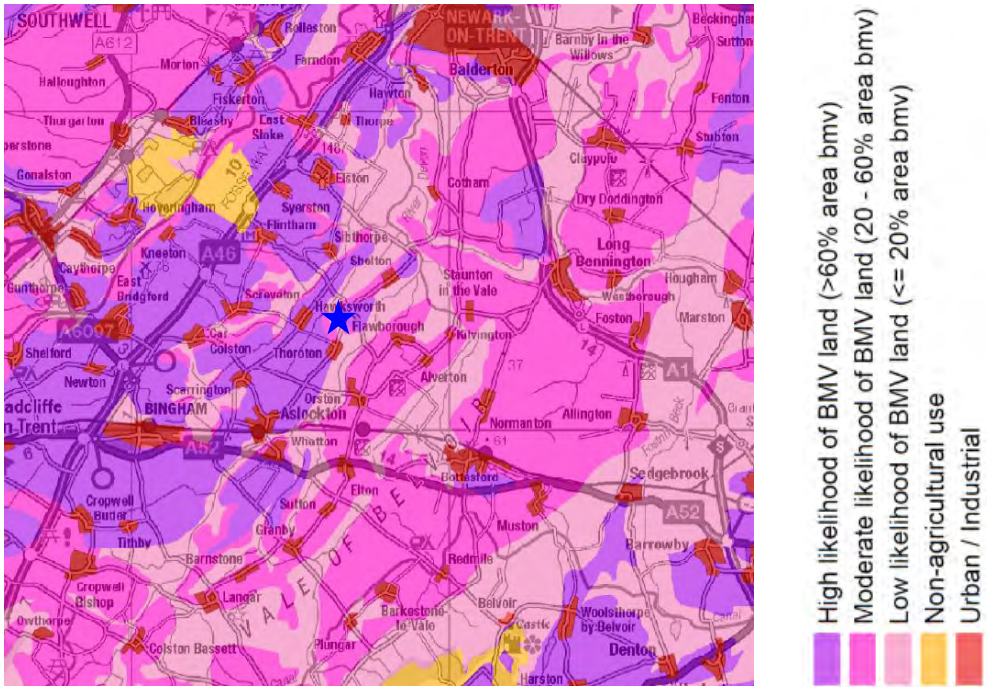
Grade	Description
1	Excellent
2	Very Good
3	Good to Moderate
4	Poor
5	Very Poor

Non-Agricultural Land

- Other land primarily in non-agricultural use
- Land predominantly in urban use

5.25 The predictive Likelihood of BMV maps identify the western part of the Borough is generally higher quality than the eastern part but, except for areas mostly associated with watercourses (such as through the centre of the Appeal Site), most of the area within 5km (and indeed 10km) is in the 20 – 60% BMV, or >60% BMV category.

Insert 11: Likelihood of BMV



5.26 There is no obvious evidence that within 5km there are substantial areas of land that are poorer quality, or with a poorer quality proportion, than the Appeal Site.

Soil Inversion and Consequential Damage (Issue 5)

5.27 The R6P's SoC states that their soil expert will show "**that soil inversion as proposed by the Appellant to create conditions for a species-rich grassland will cause lasting damage to the soil**".

5.28 I have checked this with the Appellants and the ecologists. There is no inversion of topsoil proposed. It is recognised that soil inversion was recommended in section 1.73 of Appendix 2.1 "Biodiversity Management Plan". The contract with the landowner requires the land to be returned as it is now, so no such inversion will be undertaken. This has been confirmed to me by the Appellant and their ecologists Neo Environmental.

Increased Flood Risk (Issue 6)

5.29 There will not be an increase in water run-off from the Site. This is addressed principally in the planning evidence.

5.30 The R6P's concern is based on "**soil compaction and built area**". There will be no soil compaction affecting drainage, so there will be no increased risk as a consequence of the construction process.

5.31 The land cover will be grassland. Grassland is much less prone to run-off, and to related soil erosion (both by water and by wind) than bare soils, as are part of the current cropping regime.

5.32 Further, the water is not concentrated at the run-off point from the panels as is often perceived by third parties. The panels obviously cover the ground, but they have gaps and water is able to reach the soil under the panels both directly and as water flows laterally through the soils.

5.33 The following photographs are of a very low panel design (from 2014/2015), but the gaps and water underneath the panels are clearly visible.

Photos 23 and 24: Details of Panels

5.34 The R6P's concerns are misplaced.

Sheep Grazing and Food Security

5.35 The R6P's SoC sets out comments that they consider sheep grazing unlikely and that even if it did occur it "**would not amount to continued agricultural use and should not attract any weight**".

5.36 The weight to be accorded this matter in the planning balance is addressed in the planning evidence. This section seeks to demonstrate that sheep grazing is effective, is widely practised, and is an achievable and logical management mechanism.

5.37 Solar farms are very commonly grazed by sheep. It makes a great deal of sense, because the sites are securely fenced and grazing with sheep is an income-generating use not a cost, and a lot easier than mechanical maintenance.

5.38 A couple of photographs are shown below of sheep grazing solar farms, both taken by myself. The top one is deliberately taken at sheep-dog-eye level, because whilst humans have difficulty seeing across the solar farm whilst standing up, sheep and sheep dogs do not.

Photos 25 and 26: Sheep Grazing Under Panels

5.39 The R6P's SoC references the displacement of food production in the conclusion, although it is not mentioned earlier. This response therefore presumes that the concern is

that the use of BMV land, which can be expected to yield higher than non-BMV land, will affect food security.

5.40 There is no research of which I am aware that records the difference in production between BMV land and non-BMV land. As a crude measure I show the difference between high and average production of winter wheat and oilseed rape, based on a standard budget book.

Table 4. Assessment of Economic of Farmed Land

Item	Winter Wheat		Oilseed Rape	
	Average	**High**	**Average**	**High**
Yield (t/ha)	8.6t/ha	10.0t/ha	3.5t/ha	4.0t/ha
Output (£)	£1,813/ha	£2,086/ha	£1,523/ha	£1,740/ha
Gross Margin (£)	£1,116/ha	£1,389/ha	£944/ha	£1,161/ha
Uplift (£)	-	£273/ha	-	£217/ha

John Nix Pocketbook for Farm Management, September 2023

5.41 Therefore the difference between yields for wheat would be 1.4t/ha, and for oilseed rape 0.5t/ha.

5.42 For the full 35.4ha of BMV within the Site, and taking wheat (hence the maximum difference), moving the panels from the BMV land within the Site to poorer quality land nearby would have the effect of maintaining just under 50 tonnes of wheat per year.

5.43 Parts of the BMV will remain in arable use (should the farmer so wish). Excluding those areas, the maximum incremental increase from 31.3ha of BMV would be just under 44 tonnes of wheat/year.

5.44 The UK produced almost 22 million tonnes of cereals in 2023 (14 million tonnes of wheat, 7 million tonnes of barley and 0.8 million tonnes of oats), plus 1.2 million tonnes of oilseed rape (Cereal and Oilseed Production in the UK 2023, Defra (21 December 2023)).

5.45 There are numerous appeal decisions which have examined this issue in the last year, but perhaps the clearest is the decision dated 27th June for land at Leeming Bar, Northallerton. On the subject of food production the Inspector at paragraph 22, reported as follows:

> "**I note the concerns that the productivity and versatility of the land would be reduced. Nevertheless, the specific way agricultural land is used is not a matter that is subject to planning controls. As such, there would be nothing in planning terms to prevent the farmers using the fields that form the appeal site for the grazing of sheep at present or even leaving them fallow. Given this, the**

fact that the proposal would limit the ability to carry out any arable farming does not, in my opinion, mean that it results in the loss of agricultural land when it can still be used for other agricultural uses. Furthermore, current government schemes actually encourage farmers to take land out of production and put it to grass, meadows, or trees for carbon capture".

5.46 In the appeal at Cutlers Green, Thaxted the Inspector summarised her findings on food production, in a case involving 55 ha of BMV land in cereal production, in paragraph 102. This stated:

"**I heard no compelling evidence that taking out of production almost 55 ha of BMV on the appeal site, for a 40 year duration, would have a significant negative impact on food security either on its own or cumulatively with other BMV losses, nor that it would be likely to increase imports from other countries. The Government Food Strategy, published in 2022, stated that the UK is largely self-sufficient in wheat, most meats, eggs, and some sectors of vegetable production. Nothing in the Government food strategy policy paper changes the Government's policy towards the development of BMV as set out above**".

5.47 In respect of national policies, the analysis above and the Inspector's conclusions referenced clearly conclude that there is no conflict with national policy or guidance in respect of food production. The amended footnote to the NPPF, footnote 62, in the contact of plan making, specifies food production as a consideration, but does not elevate the weight to be given. As a matter of fact, food production will continue throughout via sheep production. This is more likely to go into the human food chain than arable cropping, which could be for food for humans, or for food for animals, or for industrial purposes, or for biomass, or a non-producing agri-environmental use.

5.48 In a Press Release of 6th December 2022, from Defra, the Government's stated position is that "**the UK has a large and highly resilient food supply chain. Our high degree of food security is built on supply from diverse sources: strong domestic production as well as imports through stable trade routes**" (Defra Press Release 6th December 2022). This is reproduced at **Appendix KCC7**.

5.49 Currently significant areas of arable land are being funded to be used for grassland or non-productive purposes. As of 1st April 2023 some 161,000 ha, statistically at least 42% of which will be BMV, were being funded under the Countryside Stewardship Scheme for uses such as 2 year legume leys (AB15), field margins (SW1, SW4), flower rich margins

(AB8), arable reversion to grassland with low fertiliser (SW7) and nectar flower mixes (AB1)[2] (CSS codes in brackets for reference).

5.50 In August 2023 Government published its Biomass Strategy[3] which aims to encourage increased biomass production from agricultural land. Currently 121,000 ha is in biomass production. The details of the strategy are not important for this appeal, but the fact that Government is prioritising non-food land uses is important. It shows that food production is not a concern or key objective of Government.

5.51 There is no need for farmland to be used to is full productive capacity, or for growing. The position is made clearly by Government.

5.52 In comparison it is my understanding that solar PV arrays currently account for about 23,000 ha of land use, as set out in the House of Commons "Planning and Solar Farms" pack (18/7/23). It is estimated that they will need 70,000 ha by 2035 (0.3% of the UK's land surface).

5.53 In the United Kingdom Food Security Report 2021: Theme 1 Global Food Availability, the key messages were that global food supply and availability has improved since 2010. In respect of risks, bullet 4 on page 3 noted that "**several factors threaten the stability and long-term sustainability of global food production: climate change and climate viability, biodiversity loss caused by agricultural land expansion, and overexploitation of natural capital resources, including fish stocks and water resources**".

5.54 Government's concern is that climate change poses the greater risk, and that food supplies are secure.

[2] Defra "Countryside Stewardship and Environmental Stewardship Option Summaries at 1st April 2023" (31st August 2023)
[3] Department for Energy Security and Net Zero, Biomass Strategy (10th August 2023)

6 SUMMARY AND CONCLUSIONS

6.1 There is no reason for refusal relating to agricultural matters. The planning officer concluded that the proposals would not have an unacceptable impact on agricultural land. In its Statement of Case, however, the Council has raised the matter of alternative sites. That is dealt with in a separate Statement.

6.2 The Rule 6 Party have raised a number of matters relating to agricultural land, including the availability of poorer quality land. That is covered briefly in this Statement, which focuses on the other agricultural matter raised through the R6P's Statement of Case.

6.3 None of those should result in dismissal of the Appeal. None of the reasons raised identify that the proposals are contrary to policy.

6.4 Addressing them in the order they are raised in the R6P's SoC:

1) the proposed development includes 35.4ha of BMV land. It does not entail development of significant areas of BMV land, and construction works affect only 0.6ha temporarily;
2) the Site is a majority of poorer quality land. There is not likely to be a similarly-sized site nearby involving a significantly lower proportion of BMV;
3) the proposal has very limited effects on BMV land. There will not be a loss of BMV land;
4) nor will there be significant long-term (or indeed short-term) damage to soil from construction or decommissioning;
5) soil inversion, mentioned in the Biodiversity Management Plan, is not proposed for the Site as the land has to be returned, contractually, in the same condition;
6) the panels will not prevent water reaching soils and will not result in increased run-off;
7) sheep grazing is feasible and the Site will be available for that use, mixed with biodiversity enhancement;
8) food production will be reduced but can continue, but there is no production policy or concern and Government policies do not seek to require food production.

6.5 The BMV resource is unharmed. There are no policies harmed by the proposals, including in the LPP2.

Appendix KCC1

Curriculum Vitae

KERNON
COUNTRYSIDE CONSULTANTS LIMITED

CURRICULUM VITAE

ANTHONY PAUL KERNON

SPECIALISMS

- Assessing the impacts of development proposals on agricultural land and rural businesses
- Agricultural building and dwelling assessments
- Equestrian building and dwelling assessments (racing, sports, rehabilitation, recreational enterprises)
- Farm and estate diversivification and development
- Inputs to Environmental Impact Assessment
- Expert witness work

SYNOPSIS

Tony is a rural surveyor with 35 years experience in assessing agricultural land issues, farm and equestrian businesses and farm diversification proposals, and the effects of development proposals on them. Brought up in rural Lincolnshire and now living on a small holding in Wiltshire, he has worked widely across the UK and beyond. He is recognised as a leading expert nationally in this subject area. Married with two children. Horse owner.

Tony's specialism is particularly in the following key areas:

- assessing the need for agricultural and equestrian development, acting widely across the UK for applicants and local planning authorities alike;
- farm development and diversification planning work, including building reuse and leisure development, Class Q, camping etc;
- assessing development impacts, including agricultural land quality and the policy implications of losses of farmland due to residential, commercial, solar or transport development, and inputs to Environmental Assessment;
- and providing expert evidence on these matters to Planning Inquiries and Hearings, court or arbitrations.

QUALIFICATIONS

Bachelor of Science Honours degree in Rural Land Management, University of Reading (BSc(Hons)). 1987. Awarded 2:1.
Diploma of Membership of the Royal Agricultural College (MRAC).
Professional Member of the Royal Institution of Chartered Surveyors (MRICS) (No. 81582). (1989).

OTHER PROFESSIONAL ACTIVITIES

Co-opted member of the Rural Practice Divisional Council of the Royal Institution of Chartered Surveyors. (1994 - 2000)
Member of the RICS Planning Practice Skills Panel (1992-1994)
Member of the RICS Environmental Law and Appraisals Practice Panel (1994 - 1997).
Fellow of the British Institute of Agricultural Consultants (FBIAC) (1998 onwards, Fellow since 2004).
Secretary of the Rural Planning Division of the British Institute of Agricultural Consultants (BIAC) (1999 – 2017).
Vice-Chairman of the British Institute of Agricultural Consultants (2019 – 2020)
Chairman of the British Institute of Agricultural Consultants (2020 – 2022)

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Website: www.kernon.co.uk

RICS

BIAC
Professional Advisers to Rural Business and on the Environment

EXPERIENCE AND APPOINTMENTS

1997 ------> **Kernon Countryside Consultants.** Principal for the last 27 years of agricultural and rural planning consultancy specialising in research and development related work. Specialisms include essential dwelling and building assessments, assessing the effects of development on land and land-based businesses, assessing the effects of road and infrastructure proposals on land and land-based businesses, and related expert opinion work. Tony specialises in development impact assessments, evaluating the effects of development (residential, solar, road etc) on agricultural land, agricultural land quality, farm and other rural businesses.

1987 - 1996 **Countryside Planning and Management**, Cirencester. In nearly ten years with CPM Tony was involved in land use change and environmental assessment studies across the UK and in Europe. From 1995 a partner in the business.

1983 - 1984 **Dickinson Davy and Markham**, Brigg. Assistant to the Senior Partner covering valuation and marketing work, compulsory purchase and compensation, and livestock market duties at Brigg and Louth.

RECENT RELEVANT EXPERIENCE

TRAINING COURSES

Landspreading of Non Farm Wastes. Fieldfare training course, 24 – 25 November 2009
Foaling Course. Twemlows Hall Stud Farm, 28 February 2010
Working with Soil: Agricultural Land Classification. 1 – 2 November 2017

TRANSPORT ENVIRONMENTAL ASSESSMENT CONTRIBUTIONS

1992	**Port Wakefield Channel Tunnel Freight Terminal, Yorkshire**
1993	**A1(M) Widening, Junctions 1-6 (Stage 2)**
1994 - 1995	**A55 Llanfairpwll to Nant Turnpike, Anglesey (Stage 3)**
1994 - 1995	**A479(T) Talgarth Bypass, Powys (Stage 3)**
1995	**Kilkhampton bypass (Stage 2)**
1997	**A477 Bangeston to Nash improvement, Pembroke**
2000	**Ammanford Outer Relief Road**
2001	**A421 Great Barford Bypass**
2001	**Boston Southern Relief Road**
2003 A40	**St Clears - Haverfordwest**
2003	**A470 Cwmbrach – Newbridge on Wye**
2003	**A11 Attleborough bypass**
2003 - 2008	**A487 Porthmadog bypass (Inquiry 2008)**
2004	**A55 Ewloe Bypass**
2004	**A40 Witney – Cogges link**
2005 – 2007	**A40 Robeston Wathen bypass (Inquiry 2007)**
2005 – 2007	**East Kent Access Road (Inquiry 2007)**
2006	**M4 widening around Cardiff**
2007 – 2008	**A40 Cwymbach to Newbridge (Inquiry 2008)**
2007	**A483 Newtown bypass**
2008 – 2009	**A470/A483 Builth Wells proposals**
2009 – 2017	**A487 Caernarfon-Bontnewydd bypass (Inquiry 2017)**
2009 – 2010	**North Bishops Cleeve extension**
2009 – 2010	**Land at Coombe Farm, Rochford**
2009 – 2011	**A477 St Clears to Red Roses (Inquiry 2011)**
2010 – 2011	**Streethay, Lichfield**
2010 – 2012	**A465 Heads of the Valley Stage 3 (Inquiry 2012)**
2013 – 2016	**A483/A489 Newtown Bypass mid Wales (Inquiry 2016)**
2013 - 2016	**High Speed 2 (HS2) rail link, Country South and London: Agricultural Expert for HS2 Ltd**
2015 – 2017	**A487 Dyfi Bridge Improvements**

2016 – 2018 **A465 Heads of the Valley Sections 5 and 6 (Inquiry 2018)**
2017 - 2018 **A40 Llanddewi Velfrey to Penblewin**
2017 – 2018 **A4440 Worcester Southern Relief Road**
2019 – 2020 **A40 Penblewin to Red Roses**
2019 – 2020 **A55 Jn 15 and 16 Improvements**

NSIP/DCO SOLAR INPUTS

2020 – 2023 **Heckington Fen**
Mallard Pass
Penpergwm
Parc Solar Traffwll
Alaw Môn
Parc Solar Caenewydd
Tween Bridge Solar Farm
Gate Burton
Great North Road Solar
Helios Renewable Energy Project
Dean Moor
Oaklands Solar

EXPERT EVIDENCE GIVEN AT PUBLIC INQUIRIES AND HEARINGS

1992	**Brooklands Farm**: Buildings reuse	**Bonehill Mill Farm**: New farm building
	Chase Farm, Maldon: Removal of condition	
1993	**Haden House**: Removal of condition	**Manor Farm**: New farm dwelling
1994	**Brooklands Farm**: 2nd Inquiry (housing)	**Cameron Farm**: Mobile home
	Barr Pound Farm: Enforcement appeal	**Land at Harrietsham**: Enforcement appeal
	Fortunes Farm Golf Course: Agric effects	
1995	**Village Farm**: New farm dwelling	**Attlefield Farm**: Size of farm dwelling
	Claverdon Lodge: Building reuse	**Bromsgrove Local Plan**: Housing allocation
	Harelands Farm: Barn conversion	**Lichfield Local Plan**: Against MAFF objection
	Castle Nurseries: Alternative site presentation	**Hyde Colt**: Mobile home / glasshouses
1996	**Church View Farm**: Enforcement appeal	**Highmoor Farm**: New farm dwelling
	Flecknoe Farm: Second farm dwelling	**Gwenfa Fields**: Removal of restriction
1997	**Basing Home Farm**: Grain storage issue	**Yatton**: Horse grazing on small farm
	Viscar Farm: Need for farm building / viability	**Newbury Local Plan**: Effects of development
	Lane End Mushroom Farm: Need for dwelling	
1998	**Moorfields Farm**: New farm dwelling	**Two Burrows Nursery**: Building retention
	Maidstone Borough LPI: Effects of dev'ment	**Dunball Drove**: Need for cattle incinerator
	Glenfield Cottage Poultry Farm: Bldg reuse	
1999	**Holland Park Farm**: Farm dwelling / calf unit	**Lambriggan Deer Farm**: Farm dwelling
	Northington Farm: Existing farm dwelling	
2000	**Twin Oaks Poultry Unit**: Traffic levels	**Coldharbour Farm**: Buildings reuse
	Meadows Poultry Farm: Farm dwelling	**Heathey Farm**: Mobile home
	Hazelwood Farm: Beef unit and farm dwelling	**Wheal-an-Wens**: Second dwelling
	Shardeloes Farm: Farm buildings	**Apsley Farm**: Buildings reuse
	Aylesbury Vale Local Plan: Site issues	**Home Farm**: Size of grainstore
	Deptford Farm: Buildings reuse	**A34/M4 Interchange**: Agricultural evidence
2001	**Lambriggan Deer Farm**: Farm dwelling	**Weyhill Nursery**: Second dwelling
	Blueys Farm: Mobile home	**Mannings Farm**: Farm dwelling
2002	**A419 Calcutt Access**: Effect on farms	**Land Adj White Swan**: Access alteration
	Cobweb Farm: Buildings reuse / diversification	**Happy Bank Farm**: Lack of need for building
	Philips Farm: Farm dwelling	**Lower Park Farm**: Building reuse / traffic
	West Wilts Local Plan Inquiry: Dev site	**Stourton Hill Farm**: Diversification
	Manor Farm: Building reuse	
2003	**Fairtrough Farm**: Equine dev and hay barn	**Darren Farm**: Impact of housing on farm
	Hollies Farm: Manager's dwelling	**Greenways Farm**: Farm diversification

	Land at Springhill: Certificate of lawfulness	**Land at Four Marks**: Dev site implications
	Oak Tree Farm: Mobile home	
2004	**Chytane Farm**: Objector to farm dwelling	**Oldberrow Lane Farm**: Relocation of buildings
	Crown East: Visitor facility and manager's flat	**Forestry Building, Wythall**: Forestry issues
	Swallow Cottage: Widening of holiday use	**Lower Dadkin Farm**: Mobile home
	Etchden Court Farm: New enterprise viability	**Villa Vista**: Viability of horticultural unit
	Attleborough Bypass: On behalf of Highways Agency	
2005	**Howells School**: Use of land for horses	**Newton Lane**: Enforcement appeal
	Otter Hollow: Mobile home	**Manor Farm**: Change of use class
	Springfield Barn: Barn conversion	**South Hatch Stables**: RTE refurbishment
	Ashley Wood Farm: Swimming pool	**Trevaskis Fruit Farm**: Farm dwelling
	The Hatchery: Mobile home	**Tregased**: Enforcement appeal
	Stockfields Farm: Building reuse	
2006	**Manor Farm**: Replacement farmhouse	**Bhaktivedanta Manor**: Farm buildings
	Sough Lane: Farm dwelling	**Military Vehicles**: Loss of BMV land
	Whitewebbs Farm: Enforcement appeal	**Ermine Street Stables**: Enforcement appeal
	Land at Condicote: Farm dwelling	**Featherstone Farm**: Replacement buildings
	Rye Park Farm: Enforcement appeal	**Flambards**: Mobile home and poultry unit
	Woodrow Farm: Buildings reuse	**Manor Farm**: Effect of housing on farm
	Rectory Farm: Retention of unlawful bldg	**Goblin Farm**: Arbitration re notice to quit
	Walltree Farm: Retention of structures	**Terrys Wood Farm**: Farm dwelling
	Weeford Island: Land quality issues	**Etchden Court Farm**: Mobile home
	College Farm: Relocation of farmyard	**Hollowshot Lane**: Farm dwelling and buildings
2007	**Woolly Park Farm**: Manager's dwelling	**Barcroft Hall**: Removal of condition
	Park Gate Nursery: Second dwelling	**Kent Access Road**: Effect on farms
	Penyrheol Ias: Retention of bund	**Greys Green Farm**: Enforcement appeal
	Huckshott Farm: New beef unit in AONB	**A40 Robeston Wathen bypass**: Underpass
	The Green, Shrewley: Mobile home	**Woodland Wild Boar**: Mobile homes
	Brook Farm: Retention of polytunnels	
2008	**Weights Farm**: Second dwelling	**Whitegables**: Stud manager's dwelling
	Hill Farm: Mobile home	**Balaton Place**: Loss of paddock land
	Relocaton of Thame Market: Urgency issues	**Point to Point Farm**: Buildings / farm dwelling
	Spinney Bank Farm: Dwelling / viability issues	**Norman Court Stud**: Size of dwelling
	Higham Manor: Staff accommodation	**High Moor**: Temporary dwelling
	Robeston Watham bypass: Procedures Hearing	**Land at St Euny**: Bldg in World Heritage Area
	Monks Hall: Covered sand school	**Baydon Meadow**: Wind turbine
	Porthmadog bypass: Road scheme inquiry	
2009	**Claverton Down Stables**: New stables	**Meadow Farm**: Building conversion
	Hailsham Market: Closure issues	**Bishop's Castle Biomass Power Station**: Planning issues
	Gambledown Farm: Staff dwelling	**Foxhills Fishery**: Manager's dwelling
	Oak Tree Farm: Farm dwelling	**Bryn Gollen Newydd**: Nuisance court case
	A470 Builth Wells: Off line road scheme	**Swithland Barn**: Enforcement appeal
	Hill Top Farm: Second dwelling	**Woodrow Farm**: Retention of building
	Sterts Farm: Suitability / availability of dwelling	
2010	**Poultry Farm, Christmas Common**: Harm to AONB	**Stubwood Tankers**: Enforcement appeal
	Wellsprings: Rention of mobile home	**Meridian Farm**: Retention of building
	Redhouse Farm: Manager's dwelling	**Swithland Barn**: Retention of building
	Lobbington Fields Farm: Financial test	
2011	**Fairtrough Farm**: Enforcement appeal	**A477 Red Roses to St Clears**: Public Inquiry
	Etchden Court Farm: Farm dwelling	**Upper Bearfield Farm**: Additional dwelling
	Trottiscliffe Nursery: Mobile home	**North Bishops Cleeve**: Land quality issues
2012	**Tickbridge Farm**: Farm dwelling	**Langborrow Farm**: Staff dwellings
	Blaenanthir Farm: Stables and sandschool	**Heads of the Valley S3**: Improvements

	Land at Stonehill: Eq dentistry / mobile home	**Seafield Pedigrees**: Second dwelling
	Cwmcoedlan Stud: Farm dwelling with B&B	**Beedon Common**: Permanent dwelling
2013	**Barnwood Farm**: Farm dwelling	**Upper Youngs Farm**: Stables / log cabin
	Spring Farm Barn: Building conversion	**Tithe Barn Farm**: Enforcement appeal
	Baydon Road: Agricultural worker's dwelling	**Lower Fox Farm**: Mobile home / building
	Stapleford Farm: Building reuse	**Tewinbury Farm**: Storage barn
	Meddler Stud: Residential development	**Church Farm**: Solar park construction
	Deer Barn Farm: Agricultural worker's dwelling	
2014	**Land at Stow on the Wold**: Housing site	**Land at Elsfield**: Retention of hardstanding
	Allspheres Farm: Cottage restoration	**Queensbury Lodge**: Potential development
	Land at Stonehill: Equine dentistry practice	**Kellygreen Farm**: Solar park development
	Spring Farm Yard: Permanent dwelling	**Spring Farm Barn**: Building conversion
	Land at Valley Farm: Solar park	**Land at Willaston**: Residential development
	Land at Haslington: Residential development	**Bluebell Cottage**: Enforcement appeal
	Manor Farm: Solar farm on Grade 2 land	**Clemmit Farm**: Mobile home
	Penland Farm: Residential development	**Honeycrock Farm**: Farmhouse retention
	Sandyways Nursery: Retention of 23 caravans	**The Mulberry Bush**: Farm dwelling
2015	**The Lawns**: Agricultural building / hardstanding	**Redland Farm**: Residential dev issues
	Harefield Stud: Stud farm / ag worker's dwelling	**Emlagh Wind Farm**: Effect on equines
	Newtown Bypass: Compulsory purchase orders	**Fox Farm**: Building conversion to 2 dwellings
	Barn Farm: Solar farm	**Wadborough Park Farm**: Farm buildings
	Hollybank Farm: Temporary dwelling renewal	**Delamere Stables**: Restricted use
	Five Oaks Farm: Change of use of land and temporary dwelling	
2016	**Clemmit Farm**: Redetermination	**Meddler Stud**: RTE and up to 63 dwellings
	The Lawns: Replacement building	**Land off Craythorne Road**: Housing dev
	Land at the Lawns: Cattle building	**Berkshire Polo Club**: Stables / accomm
2017	**Low Barn Farm**: Temporary dwelling	**Harcourt Stud**: Temporary dwelling
	High Meadow Farm: Building conversion	**Clemmit Farm**: Second redetermination
	Windmill Barn: Class Q conversion	**Stonehouse Waters**: Change of use of lake
	Land at Felsted: Residential development	
2018	**Thorney Lee Stables**: Temporary dwelling	**Watlington Road**: Outline app residential
	Benson Lane: Outline app residential	**A465 Heads of the Valley 5/6**: Agric effects
	Park Road, Didcot: Outline app residential	**The Old Quarry**: Permanent dwelling
	Coalpit Heath: Residential development	**Chilaway Farm**: Removal of condition
2019	**Mutton Hall Farm**: Agric worker's dwelling	**Leahurst Nursery**: Temporary dwelling
	Clemmit Farm: Third redetermination	**Icomb Cow Pastures**: Temp mobile home
	Ten Acre Farm: Enforcement appeal	**Forest Faconry**: Construction of hack pens
	Harrold: 94 Residential dwellings	
2020	**Stan Hill**: Temp dwelling/agric. buildings	**Hazeldens Nursery**: Up to 84 extra care units
	Allspheres Farm: Enlargement of farm dwelling	**Leahurst Nursery**: Agricultural storage bldg
2021	**Ruins:** Dwelling for tree nursery	**Sketchley Lane, Burbage**: Industrial and residential development
2022	**Thornbury**: Local BMV	**Park Solar Traffwl**: Solar Hearing
	Penpergwym: Solar Farm Hearing	
2023	**Mudds Bank**: Equestrian workers dwelling	**Scruton Solar Farm**: Effects on BMV and food
	Mallard Pass NSIP: Issue specific hearing	**Land at East Burnham**: Equestrian facilities
	Bramford Solar: Loss of BMV / food	**Fladbury**: Housing on BMV land
	Gate Burton NSIP: BMV and Food	**Pound Road, Axminster**: BESS and BMV
	Heckington Fen NSIP: Issue Hearing	**Wymondley Solar**: Use of BMV
	Cutlers Green Solar: Use of BMV	**Little Acorn Farm, St Keyne**: Worker's dwelling
	Twigworth, Glos: Use of BMV land	
2024	**Sheepwash Solar, Kent**: Use of BMV land	

Appendix KCC2
Natural England's Technical Information Note TIN049

Natural England Technical Information Note TIN049

Agricultural Land Classification: protecting the best and most versatile agricultural land

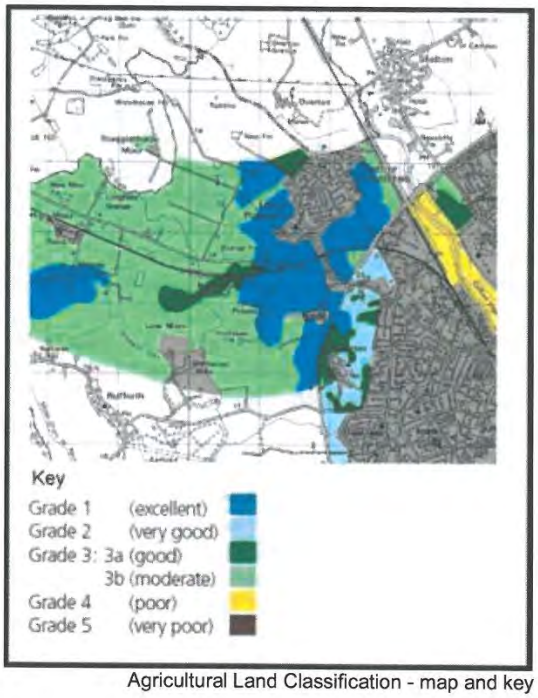
Most of our land area is in agricultural use. How this important natural resource is used is vital to sustainable development. This includes taking the right decisions about protecting it from inappropriate development.

Policy to protect agricultural land

Government policy for England is set out in the National Planning Policy Framework (NPPF) published in March 2012 (paragraph 112). Decisions rest with the relevant planning authorities who should take into account the economic and other benefits of the best and most versatile agricultural land. Where significant development of agricultural land is demonstrated to be necessary, local planning authorities should seek to use areas of poorer quality land in preference to that of higher quality. The Government has also re-affirmed the importance of protecting our soils and the services they provide in the Natural Environment White Paper The Natural Choice:securing the value of nature (June 2011), including the protection of best and most versatile agricultural land (paragraph 2.35).

The ALC system: purpose & uses

Land quality varies from place to place. The Agricultural Land Classification (ALC) provides a method for assessing the quality of farmland to enable informed choices to be made about its future use within the planning system. It helps underpin the principles of sustainable development.



Agricultural Land Classification - map and key

Second edition 19 December 2012
www.naturalengland.org.uk

NATURAL ENGLAND

Agricultural Land Classification: protecting the best and most versatile agricultural land

The ALC system classifies land into five grades, with Grade 3 subdivided into Subgrades 3a and 3b. The best and most versatile land is defined as Grades 1, 2 and 3a by policy guidance (see Annex 2 of NPPF). This is the land which is most flexible, productive and efficient in response to inputs and which can best deliver future crops for food and non food uses such as biomass, fibres and pharmaceuticals. Current estimates are that Grades 1 and 2 together form about 21% of all farmland in England; Subgrade 3a also covers about 21%.

The ALC system is used by Natural England and others to give advice to planning authorities, developers and the public if development is proposed on agricultural land or other greenfield sites that could potentially grow crops. The Town and Country Planning (Development Management Procedure) (England) Order 2010 (as amended) refers to the best and most versatile land policy in requiring statutory consultations with Natural England. Natural England is also responsible for Minerals and Waste Consultations where reclamation to agriculture is proposed under Schedule 5 of the Town and Country Planning Act 1990 (as amended). The ALC grading system is also used by commercial consultants to advise clients on land uses and planning issues.

Criteria and guidelines

The Classification is based on the long term physical limitations of land for agricultural use. Factors affecting the grade are climate, site and soil characteristics, and the important interactions between them. Detailed guidance for classifying land can be found in: *Agricultural Land Classification of England and Wales: revised guidelines and criteria for grading the quality of agricultural land* (MAFF, 1988):

- **Climate:** temperature and rainfall, aspect, exposure and frost risk.
- **Site:** gradient, micro-relief and flood risk.
- **Soil:** texture, structure, depth and stoniness, chemical properties which cannot be corrected.

The combination of climate and soil factors determines soil wetness and droughtiness. Wetness and droughtiness influence the choice of crops grown and the level and consistency of yields, as well as use of land for grazing livestock. The Classification is concerned with the inherent potential of land under a range of farming systems. The current agricultural use, or intensity of use, does not affect the ALC grade.

Versatility and yield

The physical limitations of land have four main effects on the way land is farmed. These are:

- the range of crops which can be grown;
- the level of yield;
- the consistency of yield; and
- the cost of obtaining the crop.

The ALC gives a high grading to land which allows more flexibility in the range of crops that can be grown (its 'versatility') and which requires lower inputs, but also takes into account ability to produce consistently high yields of a narrower range of crops.

Availability of ALC information

After the introduction of the ALC system in 1966 the whole of England and Wales was mapped from reconnaissance field surveys, to provide general strategic guidance on land quality for planners. This Provisional Series of maps was published on an Ordnance Survey base at a scale of One Inch to One Mile in the period 1967 to 1974. These maps are not sufficiently accurate for use in assessment of individual fields or development sites, and should not be used other than as general guidance. They show only five grades: their preparation preceded the subdivision of Grade 3 and the refinement of criteria, which occurred after 1976. They have not been updated and are out of print. A 1:250 000 scale map series based on the same information is available. These are more appropriate for the strategic use originally intended and can be downloaded from the Natural England **website**. This data is also available on 'Magic', an interactive, geographical information website **http://magic.defra.gov.uk/**.

Since 1976, selected areas have been re-surveyed in greater detail and to revised

guidelines and criteria. Information based on detailed ALC field surveys in accordance with current guidelines (MAFF, 1988) is the most definitive source. Data from the former Ministry of Agriculture, Fisheries and Food (MAFF) archive of more detailed ALC survey information (from 1988) is also available on **http://magic.defra.gov.uk/**. Revisions to the ALC guidelines and criteria have been limited and kept to the original principles, but some assessments made prior to the most recent revision in 1988 need to be checked against current criteria. More recently, strategic scale maps showing the likely occurrence of best and most versatile land have been prepared. Mapped information of all types is available from Natural England (see *Further information* below).

New field survey

Digital mapping and geographical information systems have been introduced to facilitate the provision of up-to-date information. ALC surveys are undertaken, according to the published Guidelines, by field surveyors using handheld augers to examine soils to a depth of 1.2 metres, at a frequency of one boring per hectare for a detailed assessment. This is usually supplemented by digging occasional small pits (usually by hand) to inspect the soil profile. Information obtained by these methods is combined with climatic and other data to produce an ALC map and report. ALC maps are normally produced on an Ordnance Survey base at varying scales from 1:10,000 for detailed work to 1:50 000 for reconnaissance survey

There is no comprehensive programme to survey all areas in detail. Private consultants may survey land where it is under consideration for development, especially around the edge of towns, to allow comparisons between areas and to inform environmental assessments. ALC field surveys are usually time consuming and should be initiated well in advance of planning decisions. Planning authorities should ensure that sufficient detailed site specific ALC survey data is available to inform decision making.

Consultations

Natural England is consulted by planning authorities on the preparation of all development plans as part of its remit for the natural environment. For planning applications, specific consultations with Natural England are required under the Development Management Procedure Order in relation to best and most versatile agricultural land. These are for non agricultural development proposals that are not consistent with an adopted local plan and involve the loss of twenty hectares or more of the best and most versatile land. The land protection policy is relevant to all planning applications, including those on smaller areas, but it is for the planning authority to decide how significant the agricultural land issues are, and the need for field information. The planning authority may contact Natural England if it needs technical information or advice.

Consultations with Natural England are required on all applications for mineral working or waste disposal if the proposed afteruse is for agriculture or where the loss of best and most versatile agricultural land agricultural land will be 20 ha or more. Non-agricultural afteruse, for example for nature conservation or amenity, can be acceptable even on better quality land if soil resources are conserved and the long term potential of best and most versatile land is safeguarded by careful land restoration and aftercare.

Other factors

The ALC is a basis for assessing how development proposals affect agricultural land within the planning system, but it is not the sole consideration. Planning authorities are guided by the National Planning Policy Framework to protect and enhance soils more widely. This could include, for example, conserving soil resources during mineral working or construction, not granting permission for peat extraction from new or extended mineral sites, or preventing soil from being adversely affected by pollution. For information on the application of ALC in Wales, please see below.

Further information

Details of the system of grading can be found in: *Agricultural Land Classification of England and Wales: revised guidelines and criteria for grading the quality of agricultural land* (MAFF, 1988).

Please note that planning authorities should send all planning related consultations and enquiries to Natural England by e-mail to **consultations@naturalengland.org.uk**. If it is not possible to consult us electronically then consultations should be sent to the following postal address:

Natural England
Consultation Service
Hornbeam House
Electra Way
Crewe Business Park
CREWE
Cheshire
CW1 6GJ

ALC information for Wales is held by Welsh Government. Detailed information and advice is available on request from Ian Rugg (**ian.rugg@wales.gsi.gov.uk**) or David Martyn (**david.martyn@wales.gsi.gov.uk**). If it is not possible to consult us electronically then consultations should be sent to the following postal address:

Welsh Government
Rhodfa Padarn
Llanbadarn Fawr
Aberystwyth
Ceredigion
SY23 3UR

Natural England publications are available to download from the Natural England website: **www.naturalengland.org.uk**.

For further information contact the Natural England Enquiry Service on 0300 060 0863 or e-mail **enquiries@naturalengland.org.uk**.

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Appendix KCC3

Agricultural Land Classification Surveys

AGRICULTURAL LAND CLASSIFICATION

The ALC System

Agricultural land is measured under a system of Agricultural Land Classification (ALC). This grades land based on the long-term physical limitations of land for agricultural use, including climate (temperature, rainfall, aspect, exposure and frost risk), site (gradient, micro-relief and flood risk) and soil (texture, structure, depth and stoniness) criteria, and the interactions between these factors determining soil wetness, droughtiness and utility. The system is described in Natural England's Technical Information Note TIN049 (2012).

Land is divided into five grades, 1 to 5. Grade 3 is divided into two subgrades. Land falling into ALC Grades 1, 2 and Subgrade 3a is the "**best and most versatile**" (BMV) (as defined in the National Planning Policy Framework (2021), Annex 2). Natural England estimate that 42% of agricultural land in England is of BMV quality (see TIN049.

ALC Methodology

A detailed ALC requires examination of the soils on a regular 100m grid line, to sample at a density of one per hectare. The use of a regular grid seeks to avoid any selective bias.

If the 100m gridline falls on a location that cannot be surveyed, such as within a hedgeline or on a farm track, the auger point will be moved to the closest possible location.

The ALC methodology requires soils to be examined down to, if achievable, 1.2 metres. This is done using a soil auger, such as the example shown below, recording soils as they are removed. Examples are shown below.

Example of Auger Sampling



Periodic pits are dug to determine stoniness and to better describe soil profiles. The size of the pit will depend upon the type of soil. Two examples are shown below.

Examples of Soil Pits


Soil pits are dug at locations considered to represent the soil types found.

Samples of soils that represent the main soil types found may be sent to a laboratory for particle size distribution, to determine the proportion of sand, silt and clay.

Following survey the results are analysed against the criteria in the ALC Guidelines (Agricultural Land Classification of England and Wales: revised guidelines and criteria for assessing the quality of agricultural land, MAFF (October 1988)).

Once the grade of each auger point has been calculated, these are plotted on a map. The surveyor then reviews the patterns, decides if any points are anomalies that are discounted due to pattern limitation, and then estimates the boundaries between the grades.

The areas of each grade are then measured.

Appendix KCC4
Extracts from the ALC Guidelines

Ministry of Agriculture, Fisheries and Food

Agricultural Land Classification

of

England and Wales

Revised guidelines and criteria for grading the quality of agricultural land

OCTOBER 1988

CONTENTS

TABLES

TEXT FIGURES

PREFACE

This report provides revised guidelines and criteria for grading the quality of agricultural land using the Agricultural Land Classification (ALC) of England and Wales. The ALC was devised and introduced in the 1960s and Technical Report 11 (MAFF, 1966) outlined the national system, which forms the basis for advice given by the Ministry of Agriculture, Fisheries and Food (MAFF) and Welsh Office Agriculture Department (WOAD) on land use planning matters. Following a review of the system, criteria for the sub-division of Grade 3 were published in Technical Report 11/1 (MAFF, 1976). The classification is well established and understood in the planning system and provides an appropriate framework for determining the physical quality of the land at national, regional and local levels.

Experience gained has shown that some modifications to the ALC system can usefully be made to take advantage of new knowledge and data, to improve the objectivity and consistency of assessments and standardise terminology. The revised guidelines and criteria in this report have been developed and tested with the aim of updating the system without changing the original concepts. A further aim has been to calibrate the revised criteria with those used previously to maintain as far as possible the consistency of grading. The guidelines and methods used to define grades and subgrades are based on the best and most up to date information available but future revisions may be necessary to accommodate new information and technical innovation.

There is a continuing need to distinguish between the better land in Grade 3 and other land in this Grade but it is no longer considered necessary to maintain a threefold division. Two subgrades are now recognised: Subgrade 3a and Subgrade 3b, the latter being a combination of the previous Subgrades 3b and 3c.

Technical Report 11 included proposals for the development of an economic classification system linked to the physical classification. It also identified a number of significant disadvantages for a national system of economic classification, especially the problems associated with the acquisition of objective, up to date, accurate and consistent farm output data. No satisfactory means have been found of overcoming these problems and for this reason economic criteria for grading land have not been adopted. Similarly site specific crop yield data are not regarded as a reliable indication of land quality, because it is not possible to consistently make allowances for variables such as management skill, different levels of input and short-term weather factors.

The principal changes in this revision concern the criteria used to assess climatic limitations and the main limitations involving a climate-soil interaction, namely soil wetness and droughtiness. The revised methods have been developed and evaluated by the Agricultural Development and Advisory Service (ADAS) in close collaboration with the Soil Survey and Land Research Centre (SSLRC, incorporating the Soil Survey of England and Wales) and the Meteorological Office. A number of new and improved climatic datasets have been compiled on the same collaborative basis and these base data are held in LandIS, a computer information system funded by MAFF and developed by SSLRC. The datasets will also be published by the Meteorological Office (in press) and are described in Appendix 1.

The revised system incorporates some features of the 7-class Land Use Capability Classification formerly used by the Soil Survey of England and Wales (Bibby and Mackney, 1969) in which Classes 5, 6 and 7 broadly correspond to Grade 5 of the ALC system. In common with the Scottish Land Capability Classification for Agriculture (Bibby et al, 1982) some of the concepts now introduced originated from the ADAS Land Capability Working Party which met between 1974 and 1981. Although there are similarities with the Scottish system, the Agricultural Land Classification has been developed and calibrated specifically for use in England and Wales. This report describes the criteria and assessment methods which will be used by MAFF and WOAD to classify land. Wherever possible, definitions and methods common to both ADAS and SSLRC have been used.

Acknowledgements

The Ministry is indebted to the Meteorological Office and Soil Survey and Land Research Centre for their assistance, information and advice provided over a period of years. The climate-related components of the system were revised by a working group chaired by A J Hooper (ADAS) and the contributions of J H Minhinick and J F Keers (Meteorological Office), Dr R J A Jones and J M Hollis (SSLRC), D Hewgill, M R Watson and Dr I P Jones (ADAS) are gratefully acknowledged. Valuable assistance was also provided by F Broughton (ADAS). Evaluations and testing of the revised criteria were co-ordinated by M R Watson and carried out by regional staff of the Resource Planning Group, ADAS.

Ministry of Agriculture, Fisheries and Food
October 1988

SECTION 1

INTRODUCTION

The Agricultural Land Classification provides a framework for classifying land according to the extent to which its physical or chemical characteristics impose long-term limitations on agricultural use. The limitations can operate in one or more of four principal ways: they may affect the range of crops which can be grown, the level of yield, the consistency of yield and the cost of obtaining it. The classification system gives considerable weight to flexibility of cropping, whether actual or potential, but the ability of some land to produce consistently high yields of a somewhat narrower range of crops is also taken into account.

The principal physical factors influencing agricultural production are climate, site and soil. These factors together with interactions between them form the basis for classifying land into one of five grades; Grade 1 land being of excellent quality and Grade 5 land of very poor quality. Grade 3, which constitutes about half of the agricultural land in England and Wales, is now divided into two subgrades designated 3a and 3b. General descriptions of the grades and subgrades are given in Section 2.

Guidelines for the assessment of the physical factors which determine the grade of land are given in Section 3. The main climatic factors are temperature and rainfall although account is taken of exposure, aspect and frost risk. The site factors used in the classification system are gradient, microrelief and flood risk. Soil characteristics of particular importance are texture, structure, depth and stoniness. In some situations, chemical properties can also influence the long-term potential of land and are taken into account. These climatic, site and soil factors result in varying degrees of constraint on agricultural production. They can act either separately or in combination, the most important interactive limitations being soil wetness and droughtiness.

The grade or subgrade of land is determined by the most limiting factor present. When classifying land the overall climate and site limitations should be considered first as these can have an overriding influence on the grade. Land is graded and mapped without regard to present field boundaries, except where they coincide with permanent physical features.

A degree of variability in physical characteristics within a discrete area is to be expected. If the area includes a small proportion of land of different quality, the variability can be considered as a function of the mapping scale. Thus, small, discrete areas of a different ALC grade may be identified on large scale maps, whereas on smaller scale maps it may only be feasible to show the predominant grade. However, where soil and site conditions vary significantly and repeatedly over short distances and impose a practical constraint on cropping and land management a 'pattern' limitation is said to exist. This variability becomes a significant limitation if, for example, soils of the same grade but of contrasting texture occur as an extensive patchwork thus complicating soil management and cropping decisions or resulting in uneven crop growth, maturation or quality. Similarly, a form of pattern limitation may arise where soil depth is highly variable or microrelief restricts the use of machinery. Because many different combinations of characteristics can occur no specific guidelines are given for pattern limitations. The effect on grading is judged according

to the severity of the limitations imposed by the pattern on cropping and management, and is mapped where permitted by the scale of the survey.

The guidelines provide a consistent basis for land classification but, given the complex and variable nature of the factors assessed and the wide range of circumstances in which they can occur, it is not possible to prescribe for every possible situation. It may sometimes be necessary to take account of special or local circumstances when classifying land. For this reason, the physical criteria of eligibility in this report are regarded as guidelines rather than rules although departures from the guidance should be exceptional and based on expert knowledge. Physical conditions on restored land may take several years to stabilise; therefore, the land is not normally graded until the end of the statutory aftercare period, or otherwise not until 5 years after soil replacement.

To ensure a consistent approach when classifying land the following assumptions are made:

1. Land is graded according to the degree to which physical or chemical properties impose long-term limitations on agricultural use. It is assessed on its capability at a good[1] but not outstanding standard of management.

2. Where limitations can be reduced or removed by normal management operations or improvements, for example cultivations or the installation of an appropriate underdrainage system, the land is graded according to the severity of the remaining limitations. Where an adequate supply of irrigation water is available this may be taken into account when grading the land (Section 3.4). Chemical problems which cannot be rectified, such as high levels of toxic elements or extreme subsoil acidity, are also taken into account.

3. Where long-term limitations outside the control of the farmer or grower will be removed or reduced in the near future through the implementation of a major improvement scheme, such as new arterial drainage or sea defence improvements, the land is classified as if the improvements have already been carried out. Where no such scheme is proposed, or there is uncertainty about implementation, the limitations will be taken into account. Where limitations of uncertain but potentially long-term duration occur, such as subsoil compaction or gas-induced anaerobism, the grading will take account of the severity at the time of survey.

4. The grading does not necessarily reflect the current economic value of land, land use, range of crops, suitability for specific crops or level of yield. For reasons given in the preface, the grade cut-offs are not specified on the basis of crop yields as these can be misleading, although in some cases crop growth may give an indication of the relative severity of a limitation.

5. The size, structure and location of farms, the standard of fixed equipment and the accessibility of land do not affect grading, although they may influence land use decisions.

[1] Previously described as 'satisfactory'; no change in the assumed standard of management is intended.

SECTION 2

DESCRIPTION OF THE GRADES AND SUBGRADES

The ALC grades and subgrades are described below in terms of the types of limitation which can occur, typical cropping range and the expected level and consistency of yield. In practice, the grades are defined by reference to physical characteristics and the grading guidance and cut-offs for limitation factors in Section 3 enable land to be ranked in accordance with these general descriptions. The most productive and flexible land falls into Grades 1 and 2 and Subgrade 3a and collectively comprises about one-third of the agricultural land in England and Wales. About half the land is of moderate quality in Subgrade 3b or poor quality in Grade 4. Although less significant on a national scale such land can be locally valuable to agriculture and the rural economy where poorer farmland predominates. The remainder is very poor quality land in Grade 5, which mostly occurs in the uplands.

Descriptions are also given of other land categories which may be used on ALC maps.

Grade 1 - excellent quality agricultural land
Land with no or very minor limitations to agricultural use. A very wide range of agricultural and horticultural crops can be grown and commonly includes top fruit, soft fruit, salad crops and winter harvested vegetables. Yields are high and less variable than on land of lower quality.

Grade 2 - very good quality agricultural land
Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.

Grade 3 - good to moderate quality agricultural land
Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.

Subgrade 3a - good quality agricultural land
Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops.

Subgrade 3b - moderate quality agricultural land
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 which can be grazed or harvested over most of the year.

Grade 4 - poor quality agricultural land
Land with severe limitations which significantly restrict the range of crops and/or level of yields. It is mainly suited to grass with occasional arable crops (e.g. cereals and forage crops) the yields of which are variable. In moist climates, yields of grass may be moderate to high but there may be difficulties in utilisation. The grade also includes very droughty arable land.

Grade 5 - very poor quality agricultural land
Land with very severe limitations which restrict use to permanent pasture or rough grazing, except for occasional pioneer forage crops.

Descriptions of other land categories used on ALC maps

Urban
Built-up or 'hard' uses with relatively little potential for a return to agriculture including: housing, industry, commerce, education, transport, religious buildings, cemeteries. Also, hard-surfaced sports facilities, permanent caravan sites and vacant land; all types of derelict land, including mineral workings which are only likely to be reclaimed using derelict land grants.

Non-agricultural
'Soft' uses where most of the land could be returned relatively easily to agriculture, including: golf courses, private parkland, public open spaces, sports fields, allotments and soft-surfaced areas on airports/ airfields. Also active mineral workings and refuse tips where restoration conditions to 'soft' after-uses may apply.

Woodland
Includes commercial and non-commercial woodland. A distinction may be made as necessary between farm and non-farm woodland.

Agricultural buildings
Includes the normal range of agricultural buildings as well as other relatively permanent structures such as glasshouses. Temporary structures (e.g. polythene tunnels erected for lambing) may be ignored.

Open water
Includes lakes, ponds and rivers as map scale permits.

Land not surveyed
Agricultural land which has not been surveyed,

Where the land use includes more than one of the above land cover types, e.g. buildings in large grounds, and where map scale permits, the cover types may be shown separately. Otherwise, the most extensive cover type will usually be shown.

Appendix KCC5
Consultation and Response on
Amendments to Footnote 62

Consultation 22 December 2022

Scope of consultation

Topic of this consultation:

This consultation seeks views on our proposed approach to updating to the National Planning Policy Framework. We are also seeking views on our proposed approach to preparing National Development Management Policies, how we might develop policy to support levelling up, and how national planning policy is currently accessed by users.

A fuller review of the Framework will be required in due course, and its content will depend on the implementation of the government's proposals for wider changes to the planning system, including the Levelling-up and Regeneration Bill.

Scope of this consultation:

The Department for Levelling Up, Housing, and Communities is seeking views on how we might develop new and revise current national planning policy to support our wider objectives. Full details on the scope of consultation are found within chapter 2. Chapter 14 contains a table of all questions within this document and signposts their relevant scope. In responding to this consultation, we would appreciate comments on any potential impacts on protected groups under the Public Sector Equality Duty. A consultation question on this is found in chapter 13.

Geographical scope:

These proposals relate to England only.

Basic information

Body/bodies responsible for the consultation:

The Department for Levelling Up, Housing and Communities

Duration:

This consultation will begin on 22 December 2022 and close at 11.45pm on 2 March 2023

Recognising the food production value of farmland

10. The government's food strategy highlights that the UK maintains a high degree of food security. The strategy sets out an aim to broadly maintain domestic production at current levels to build the UK's resilience to future crisis and shocks. We have some of the best performing farms in the world, with 57% of agricultural output coming from just 33% of the farmed land area. To emphasise the important role that our best performing farms have on food security, alongside imperatives such as energy security, we are seeking initial views on increasing the consideration given to the highest value farmland used for food production in the Framework for both plans and decision making.

11. The Framework currently expects that planning policies and decisions should contribute to and enhance the natural and local environment by recognising the wider benefits from natural capital and ecosystem services including the economic and other benefits of the best and most versatile agricultural land. Best and Most Versatile land is defined as grades 1-3a in the Agricultural Land Classification. To build on this, we propose a change to the current Framework footnote 58 by adding detail on the consideration that should be given to the relative value of agricultural land for food production, where significant development of higher quality agricultural land is demonstrated to be necessary, compared to areas of poorer quality land. This should not prevent the achievement of government's objectives in relation to nature recovery and creation of ecosystem services to enable and offset development elsewhere.

Q.38 Do you agree that this is the right approach to making sure that the food production value of high value farmland is adequately weighted in the planning process, in addition to current references in the Framework on best and most versatile agricultural land?

Response 19 December 2023

Consultation outcome

Government response to the Levelling-up and Regeneration Bill: reforms to national planning policy consultation

Updated 19 December 2023

Recognising the food production value of farmland

Question 38 – Do you agree that this is the right approach to making sure that the food production value of high value farmland is adequately weighted in the planning process, in addition to current references in the Framework on best and most versatile agricultural land?

Question 38 – response

A total of 1,025 respondents answered yes/no/indifferent to this question. Of those, 530 (52%) agreed with the proposal, 265 (26%) did not and 230 (22%) were indifferent.

Key points:

- Some respondents stated that agricultural land for food production is a finite resource and requires greater protection than it is currently afforded in the planning system and that the amended text also supports the United Kingdom's transition to net zero, through reducing air miles, when importing food from abroad.
- Others noted that agricultural land is already afforded protection in the National Planning Policy Framework para 174b, but some also agreed that the amended text would strengthen protection of the best and most versatile agricultural land and other agricultural land for food production, providing greater food security.
- Respondents stated that local authorities need to ensure that agricultural land for food production is not lost, given the finite availability of our best and most versatile agricultural land, when deciding which sites are most appropriate for development. Others noted planning decisions need to be supported by robust evidence before allowing agricultural land for food production to be lost, whilst at the same time developers need to take an evidence-based approach towards determining the condition of agricultural land, before a development scheme is proposed, which this amendment encourages.
- Some respondents included information about the ability to determine the availability of land. They set out that whilst there is limited data available

when it comes to determining the availability of agricultural land and the mapping of agricultural land at site level is incomplete, specialist surveys can distinguish between Grades 3a and 3b (Grades 1,2 & 3a are best and most versatile agricultural land). These respondents felt that it is essential that developers undertake robust surveys of agricultural land, and an evidence-based approach is considered when making planning decisions, which is essential to ensure land for food production is not lost.

- Respondents stated the amended policy does not conflict with National Policy Statement for Renewable Energy Infrastructure (EN-3) because land type is one of a suite of factors in determining the suitability of the site location for renewable schemes. Therefore, other reasons take precedence when determining the location of renewables schemes.

Government response

The approach proposed in the consultation was to amend the Framework by adding detail on the consideration that should be given to the availability of agricultural land for food production, where significant development of higher quality agricultural land is demonstrated to be necessary compared to areas of poorer quality land.

We welcome the range of views offered on this proposed change. Considering the feedback received, and the majority of responses that support the proposal, the government will make the change set out in the consultation, to ensure the availability of land for food production is adequately weighted in the planning process.

Appendix KCC6

Omnia Soil Texture Analysis

Farmacy
Advisors to Agriculture

Cropping year
2023/2024

Omnia
Digital Farming

Client	**M & C Sheldon Ltd - K L Beeby & Son**	Advisor	**Gerald Abel**
		FACTS number	**FE336**
		BASIS number	**R/E 2157**
Address	**Old Hall Farm, Car Colston, Nottingham NG13 8JG**		

Thoroton Soil Texture Map

This report includes the following documents:

- Soil texture map

M & C Sheldon Ltd - K L Beeby & Son
Advisor: Gerald Abel
Phone: 07976 746561
FACTS: FE336 - BASIS: R/E 2157

Soil texture – Thoroton

Omnia Digital Farming

Clay (C) Silty clay (ZC) Silty clay loam (ZCL) Sandy silt loam (SZL) Sandy clay (SC) Sandy clay loam (SCL) Sandy loam (SL)

Appendix KCC7

Defra Press Release 6th December 2022

Food supply and food security

Defra Press Office, 6 December 2022 - Weekly stories

There has been some coverage of calls by the National Farmers Union (NFU) for more government support for farmers to safeguard the nation's food supplies.

We understand that farmers are facing increasing costs as a result of the impacts of the conflict in Ukraine and global economic shocks including the spike in oil and gas prices, and have announced a range of measures throughout the course of the year to help mitigate these challenges and support industry.

The UK's food supply chain remains resilient, with supply from diverse sources guaranteeing a high level of food security.

A Government spokesperson said:

" The UK has a large and highly resilient food supply chain. Our high degree of food security is built on supply from diverse sources; strong domestic production as well as imports through stable trade routes.The government is in regular contact with the food and farming industries to ensure they are well

prepared for a range of scenarios, and we continue to take all the necessary steps to ensure people across the country have the food they need."

To support the food and farming industry in the face of these pressures, the government has:

- Brought forward 50% of direct payments earlier this year to help farmers with cashflow
- Delayed proposed changes in the use of urea fertiliser back in March to help farmers manage costs and give them more time to adapt
- Brought forward New slurry storage grants which will help farmers reduce their reliance on artificial fertilisers
- Continued progress of the roll out of the Sustainable Farming Incentive scheme, and over 4000 applications have now been started. This pays farmers for actions, including improving soil health, which will reduce dependence on manufactured fertilisers which are linked to gas prices
- Removed the 25% tariff on US maize imports, which are a key ingredient for animal feed
- Brought in The Energy Bill Relief scheme, meaning businesses will be paying less than half of predicted wholesale energy costs this winter
- Cut fuel duty for petrol and diesel by 5p per litre across the UK until March 2023
- Reduced employer national insurance by increasing the Employment Allowance
- Put the brakes on bill increases by freezing the business rates multiplier - worth £9.3 billion over the next five years.
- Relaxed marketing rules so that farmers who breed turkeys, geese or ducks for their meat have the option to slaughter their flocks early and freeze these products
- Brought in Swifter compensation payments to farmers affected by avian influenza
- And earlier this year we confirmed the release of an extra 10,000 visas under the Seasonal Worker Visa Route, with 2,000 of these going to the poultry sector, meaning in total 40,000 visas are available for seasonal workers in 2022 to help ensure businesses have the workforce they need

The Food and Farming Minister met representatives from the UK egg sector on 6 December to discuss the challenges that the industry is currently facing. This is part of our regular and close engagement with the sector.

Follow Defra on Twitter, and sign up for email alerts here.

Tags: direct payments, farming, food security, food supply, gas prices

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Appendix 2 – Flood Risk Technical Note

Project Name: Longhedge Solar Farm

Report Name: Flood Risk (Sequential and Exception Test) Topic Paper

Author: Matthew Sunman

Checked/Approved by: NC

Date: 10th May 2024

Project number: P24-0105

LPA Reference: 22/02241/FUL

Appeal Reference: APP/P3040/W/23/3330045

Contents

1. Introduction

1.1 This Topic Paper sets out the matters with regards to flood risk at land east of Hawksworth and Northwest of Thoroton, Nottinghamshire ('the site') Appeal Ref: APP/P3040/W/23/3330045 ('the Appeal')

1.2 This Topic Paper provides a concise summary of the matters agreed, and not agreed, with Rushcliffe Borough Council in their role as the Local Planning Authority (LPA).

2. Planning Policy Context

National Planning Policy Framework

2.1 Paragraph 167 of the National Planning Policy Framework ('NPPF') provides that local planning authorities should apply a sequential, risk based approach to the location of development so as to avoid, where possible, flood risk to people and property by "a) applying the sequential test and then, if necessary the exception test....."

2.2 Paragraph 168 of the NPPF clarifies the aim of the sequential test is to steer new development to areas with the lowest risk of flooding from any source and confirms that the sequential approach should be used in areas known to be at risk now or in the future from any form of flooding.

2.3 Paragraph 169 of the NPPF then provided as follows:

> "*if it is not possible for development to be located in areas with a lower risk of flooding (taking into account wider sustainable development objectives), the exception test may have to be applied. The need for the exception test will depend on the potential vulnerability of the site and of the development proposed, in line with the Flood Risk Vulnerability Classification set out in Annex 3*".

2.4 Paragraph 170 of the NPPF sets the criteria which must be met to pass the exception test, namely it should be demonstrated that:

> "*a) the development would provide wider sustainability benefits to the community that outweigh the flood risk; and*
>
> *b) the development will safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.*"

2.5 Paragraph 171 of the NPPF confirms that both a) and b) set out above should be satisfied for the development to be permitted, assuming that the sequential assessment is considered to have been passed.

2.6 Finally, paragraph 173 advises that in determining planning applications, Local Planning Authorities should ensure that flood risk is not increased elsewhere and that development should only be allowed in areas at risk of flooding where, in the light of the assessment undertaken (and the sequential and exception tests, as applicable) it can be demonstrated that:

> *"a) within the site, the most vulnerable development is located in areas of lowest flood risk, unless there are overriding reasons to prefer a different location;*
>
> *b) the development is appropriately flood resistant and resilient such that, in the event of a flood, it could be quickly brought back into use without significant refurbishment:*
>
> *c) It incorporates sustainable drainage systems, unless there is clear evidence that this would be inappropriate;*
>
> *d) any residual risk can be safely managed; and*

e) safe access and escape routes are included where appropriate, as part of an agreed emergency plan."

2.7 The Planning Practice Guidance (PPG) provides a definition of 'reasonably available sites' which are considered to be those '*in a suitable location for the type of development with a reasonable prospect that the site is available to be developed at the point in time envisaged for the development*' (paragraph: 028 Reference ID: 7-028-20220825, Revision date: 25 08 2022).

2.8 The PPG augments the content of the NPPF, setting out the details of the sequential approach, the sequential test and then, if necessary, the exception test. It outlines that the hierarchy to flood risk is avoid; control; mitigate; manage residual risk (Paragraph 004 Reference ID: 7-00420220825, Revision date: 25 08 2022).

Local Plan Policies

2.9 Relevant policies from the local plan are Core Strategy policy 2 (Climate Change) as well as Local Plan Policy 17 (Managing Flood Risk) and 18 (Surface Water Management).

2.10 *Core Strategy Policy 2 (Climate Change)* confirms all development proposals will be expected to mitigate against and adapt to climate change, and to comply with national and local targets on reducing carbon emissions and energy use, unless it can be clearly demonstrated that full compliance with the policy is not viable or feasible. This will be achieved through design and adaptation; reducing carbon dioxide emissions; decentralised, renewable and low carbon energy generation; as well as flood risk and sustainable drainage.

2.11 Whilst not defined by the Council, it is only the flood risk element of this policy the Council has requested additional information on, in particular the sequential test.

2.12 Criterion 7 of this policy states "Where no reasonable site within Flood Zone 1 is available, allocations and other development proposals in Flood Zone 2 and Flood Zone 3 will be considered on a sequential basis in accordance with national planning policy on flood risk and the Strategic Flood Risk Assessment".

2.13 *Local Plan Policy 17 (Managing Flood Risk)* This policy confirms how flood risk will be managed in Rushcliffe Borough. Part 1 confirms planning permission will be granted for development in areas where a risk of flooding or problems of surface water disposal exists provided that: a) the sequential test and exception test are applied and satisfied; or b) where the exception test is not required, for example change of use applications, it has been demonstrated that the development and future occupants will be safe from flood risk over the lifetime of the development; or c) refers to minor development not applicable to this proposal; or d) development does not increase the risk of flooding on the site or elsewhere, including through increased run-off due to areas of hardstanding, or reduction in ground water storage as a result of basements.

2.14 Part 2 confirms development proposals in areas of flood risk will only be considered when accompanied by a site specific flood risk assessment. Proposals will be expected to include mitigation measures which protect the site and manage any residual flood risk, such as flood resistance/resilience measures and the provision of safe access and escape routes.

2.15 Local Plan Policy 18 (Surface Water Management) confirms how surface water will be managed within Rushcliffe Borough. Part 1 of this policy requires developments to identify opportunities to incorporate a range of deliverable Sustainable Drainage Systems, appropriate to the size and type of development. The choice of drainage systems should comply with the drainage hierarchy.

2.16 Part 2 is clear planning permission will granted for development which: a) is appropriately located, taking account of the level of flood risk and which promotes the incorporation of appropriate mitigation measures into new development, such as sustainable drainage systems; b) reduces the risk to homes and places of work from flooding; c) delivers a range of community benefits including enhancing amenity (ensuring a safe environment) and providing greater resistance to the impact of climate change; d) contributes positively to the appearance of the area; e) accommodates and enhances biodiversity by making connections to existing Green Infrastructure assets; and f) retains or enhances existing open drainage ditches.

3. Development Proposals and Flood Vulnerability

3.1 Based on the Environment Agency's Flood Mapping for Planning, the Site is mainly in flood zone 1 (approximately 60%). It is partly located in medium flood zone 2 (approximately 20%) and high risk flood zone 3 (approximately 20%).

3.2 The Greater Nottingham 2016 SFRA provides further detail of flood risk and indicates that parts of the site to be at risk of flooding during the 1:20 event (which defines the Functional Floodplain(3b)), the 1 in 100 event (which defines the extent of flood zone 3a), and the 1:1000 event (which defines flood zone 2). However, the map also indicates that approximately 60% of the site would not flood during the 1:1000 event.

4. Sequential Test

4.1 There is no national or local policy or guidance which is prescriptive as to how applicants should approach the selection of sites. However, in this case, solar farms require a point of connection to National Grid electrical network to enable electricity generated by the solar farm to be distributed to consumers.

4.2 NPS EN-3 identifies a number of factors that are likely to influence site selection and design. These include irradiance and site topography; network connection; proximity to dwellings; agricultural land classification and land type; accessibility; public rights of way; and security and lighting. There is no in-principle reason why those factors would be relevant for solar schemes of 50MW but not for schemes just below that level.

4.3 In this case the appeal site is relatively flat and benefits from field hedgerow boundary treatments. There is an existing overhead line running through the site and an agreement has been secured to enable connection to the electrical national grid. A buffer of 100 metres has been provided to the nearest dwellings to the appeal site. Best and Most Versatile (BMV) land has been considered separately and, in the opinion of the Appellant, satisfied. The appeal site will benefit from its own new vehicular access with no objections raised by the Councils Highway Team or National Highways. Public Rights of Way will be safeguarded and there are no objections from the Councils Public Protection/Environmental Health or ecology teams with regards external light or security details such as CCTV. The Council have also not raised highways or access, security, access or public rights of way as issues to be considered by this appeal.

4.4 There is no prescribed guidance or standard on what constitutes a reasonable search area for renewable energy development. Since renewable energy schemes require a viable connection to the existing grid network, it is essential that there is a connection point with sufficient capacity. The grid connection point must be able to offer sufficient capacity and must remain viable for the lifetime of the solar farm (i.e. 40 years). Cable trenching costs and thermal power losses limit the distance of a site from a suitable grid connection to 2km.

4.5 As explained in the Planning Statement, obtaining grid capacity is a major challenge for developers across the UK. The District Network Operator has studied its local distribution network and agreed a connection point to the 132kV rated overhead power line located within the site boundary of Field 8. Any assessment of alternative sites at lower risk of flooding should be limited to 2km of that connection point. There is no justification for a sequential assessment covering the entire borough.

4.6 Consequently alternative sites within a 2km corridor either side of the electricity connection line within Rushcliffe Borough Council's administrative boundary have been considered. In addition, alternative sites would also need to be of a sufficient size. The appeal site measures 233 acres (94.24 hectares (ha)) and therefore the Appellant has searched for sites from 200 acres (80.9 hectares) or more. After 2km and below 200 acres the Appellant considers those alternative sites not to be suitable for the proposed development.

4.7 This approach to a search area for alternative sites has been considered and accepted at numerous appeal sites in similar circumstances such as Staythorpe appeal reference APP/B3030/W/23/3334043 (Appendix 3).

4.8 Both paragraph 169 (in respect of the sequential test) and paragraph 171 (in respect of the exception test) are clear that they relate to ascertaining whether a proposed development is acceptable to be permitted. There is no reference to allocation of weight to such tests in the planning balance. The weight to be attributed to the outcome of the sequential and exceptions tests is for the decision maker and the courts to determine.

4.9 This is supported by the Flood Risk and Coastal Change section of the Planning Practice Guidance ('PPG') (Reference ID:7-004-20220825); which provides at paragraph 023, in considering the aim of the sequential approach, that:

'*...Application of the sequential approach in the plan-making and decision-making process will help to ensure that development is steered to the lowest risk areas, where it is compatible with sustainable development objectives to do so, and developers do not waste resources promoting proposals which would fail to satisfy the test*' (emphasis added).

4.10 Paragraph 024 of this section of the PPG continues, stating:

> *"Where it is not possible to locate development in low-risk areas, the sequential test should go on to compare reasonably available sites*
>
> - *Within medium risk areas; and*
> - *Then, only where there are no reasonably available sites in low and medium risk areas, within high-risk areas"*

4.11 Paragraph 031 of this section of the PPG goes on to provide that:

> *"The Exception Test is not a tool to justify development available, lower risk sites, appropriate for the proposed development. It would only be appropriate to move onto the Exception Test in these cases where, accounting for wider sustainable development objectives, application of relevant local and national policies would provide a clear reason for refusing development in any alternative locations identified."* (emphasis added).

4.12 The need to consider wider sustainable development objectives is repeated at paragraph 035 and then under the 'Site-Specific flood risk assessment: Checklist' section at item 3, which relates to the sequential test, it provides as follows:

"*You can use this section to describe how you have applied the sequential test……to the proposed development……*

…….

c. If you have identified an reasonably available, lower risk site(s), appropriate to the proposed development, do you consider there to be any other wider sustainable development objectives that would make steering the development to these other locations inappropriate? If so, please explain and justify this….' (emphasis added).

4.13 The Government produced checklist tool for applicants explicitly directs applicants to identify and justify wider sustainable development objectives that would render any identified alternative sites as inappropriate and it requests that such be done as part of the sequential test assessment.

Analysis of Potential Alternative Sites

4.14 The sequential approach has considered 11 alternative sites within the search area which are referred to as sites A, B, C, D, E, F, G, H, I. J, and K as shown in Appendix 1.

4.15 The potential alternative sites are identified on the Alternative Site Plan (Appendix 2) and are considered to be a comprehensive list of alternative sites.

4.16 Alternative sites A and B are individual land parcels with the land registry but have been considered individually and together. Sites C and D are individual land parcels with the land registry but have been also been considered individually and together. Sites E and F are individual land parcels with the land registry but have been considered individually and together. Sites G and H are individual land parcels with the land registry but have been considered individually and together. Sites I and J are individual land parcels with the land registry but have been considered individually and together. Site K has been considered on its own.

4.17 After applying buffers (Hedgerow 5 metre buffer, boundary 5 metre buffer, watercourse 8 metre buffer, public right of way 10 metre buffer, National Forestry Inventory (NFI) 10 metre buffer, housing 100 metre buffer and 250 settlement buffer) that were also applied to the appeal site and removing areas within flood zones 2 and 3, woodland, hedgerows and schedule monuments, all of the alternative sites are below 200 acres (80.9 hectares).

4.18 There are therefore no alternative sites suitable for the proposed development that are sequentially preferable in flood risk terms.

4.19 It is the Appellant's position that there are no reasonably available sites appropriate for the proposed development with a lower risk of flooding within the search area. The Appellant therefore considers that the proposal passes the sequential text and thus the exception test needs to be considered.

Exception Test

4.20 The NPPF states that the exception test may have to be applied if it is not possible for the development to be located in areas with a lower risk of flooding (taking into account wider sustainable development objectives). The need for the exception test, the NPPF states, will depend on the potential vulnerability of the site and of the development proposed.

4.21 Table 2 of the PPG (Paragraph: 079 Reference ID: 7-079-20220825 Revision date: 25 08 2022) confirms that the exception test is required for essential infrastructure that is located in Flood Zone 3a and 3b. If the development is considered to fall within the less vulnerable, more vulnerable or highly vulnerable categories then the development should not be permitted in Flood Zone 3b. If it is considered to be water compatible development, then the exception test is not required.

4.22 Approximately 20% of the application site is located in flood zone 3a, none within flood zone 3b. Therefore the exception test also needs to be passed.

4.23 Paragraph 170 of the NPPF sets out the requirements of passing the exception test, it should be demonstrated that:

"a) the development would provide side sustainability benefits to the community that outweigh the flood risk; and

b) the development would be safe for its lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible will reduce flood risk overall."

4.24 Limb (a) of the exception test requires specific test of balancing wider sustainability benefits to the community that the proposed development would provide against the flood risk rather than a more generalised planning balance exercise.

4.25 With regards part a) the proposal will provide sustainable benefits to the local community through electrical generation that is of regional and national importance. The development, once operational, will be operated remotely with access required once a month for maintenance. With regards part b), the development would be safe for its lifetime and flood risk will be managed on site and will not increase flood risk off site.

4.26 The Appellant is of the opinion that part a) and b) are passed.

4.27 Additionally, paragraph 173 of the NPPF indicates the following:

Where appropriate, applications should be supported by a site-specific flood-risk assessment. Development should only be allowed in areas at risk of flooding where, in the light of this assessment (and the sequential and the exception tests, as applicable) it can be demonstrated that:

a) Within the site, the most vulnerable development is located in areas if lowest flood risk, unless there are overriding reasons to prefer a different location;

b) The development is appropriately flood resistant and resilient such that, in the event of a flood, it can be quickly brought back into use without significant refurbishment;

c) It incorporates sustainable drainage systems, unless there is clear evidence that this would be in appropriate;

d) Any residual risk can be safely managed; and

e) Safe access and escape routes are included where appropriate, as part of an agreed emergency plan

4.28 A Flood Risk Assessment was submitted by the Appellant in support of the refused planning application. It sets out the more vulnerable parts of the development such as the substation, invertors, site access are located in lowest flood risk areas on site as required by part a). Flood resistant and resilient is built into the proposals design including finished floor levels would be set no lower than 18.20 metres above Ordnance Datum (AOD) and that Finished floor levels of all other vulnerable infrastructure shall be set no lower than 300mm above ground levels as agreed with the Environment Agency and required by part b). The proposal incorporates sustainable drainage as agreed by Rushcliffe Borough Council and the Nottingham County Council as Lead Local Flood Authority and required by part c). Residual risk can be managed safely as required by part d). and Safe access routes are included as required by part e).

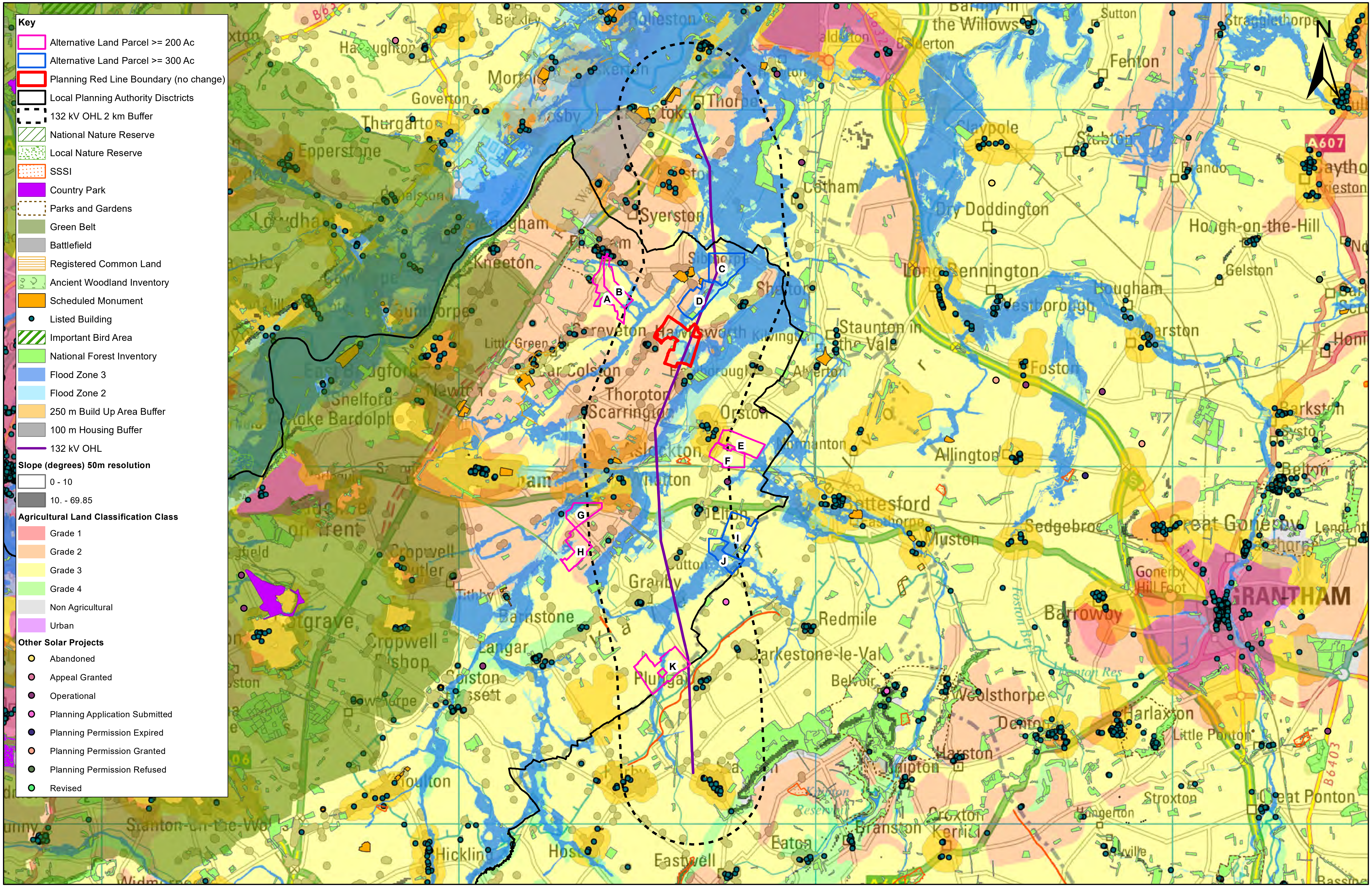
4.29 The Appellant considers that limbs a, b, c, d and e of the exception test is passed and that the proposal complies with the NPPF, PPG, Core Strategy policy 2 (Climate Change)

as well as Local Plan Policy 17 (Managing Flood Risk) and 18 (Surface Water Management) of the development plan on flood matters.

4.30 The Council confirmed within the Planning Committee report (pages 25-27) that the exception test was passed and have not raised this as an issue within their Statement of Case. Therefore the Councils position regarding the exception test has not changed.

Parcel	Acre	Constrained Acres	Percent (%)	Remaining Acres	Combined 2 parcels	Commentary
A	114.2					
Hedgerow 5m		3.6	3.1			
National Forest Inventory 10m		17.9	15.6			
Housing 100m		4.7	4.1			
Watercourse 8m		5.6	5.3			
PRoW 10m		2.7	2.3			
Flood Zone 3		3.1	2.7	82.4		
B	101.1					
Flood Zone 2		2.5	2.5			
Flood Zone 3		2.5	2.5		177.6	Parcels A & B
Watercourse 8m		0.1	0.1			
Hedgerow 5m		5.9	5.8			
PRoW 10m		3.0	2.9	95.2		
C	173.5					
Flood Zone 2		107.8	62.1			
Flood Zone 3		62.8	36.2			
Watercourse 8m		5.6	3.2			
Hedgerow 5m		3.9	2.3			
Housing 100m		9.2	5.3			
PRoW 10m		6.5	3.7	46.1		
D	168.4					
Flood Zone 2		112.2	66.6			
Flood Zone 3		50.8	30.2		68.8	Parcels C & D
Housing 100m		1.5	0.9			
Scheduled Monument 200m		20.1	11.9			
National Forest Inventory 10m		14.2	8.4			1/2 NFI used due to overlap with FZ3
Watercourse 8m		21.7	12.9			
Hedgerow 5m		5.0	3.0			1/2 Hedgerow used due to overlap with FZ
PRoW 10m		2.5	1.5	22.7		
E	123.9					
Hedgerow 5m		4.3	3.5			
Housing 100m		4.9	3.9			
PRoW 10m		0.9	0.7			
250 m Build Up Area		23.4	18.9	90.4		
F	108.2					
250 m Build Up Area		25.8	23.8			
Hedgerow 5m		4.9	4.6		167.9	Parcels E & F
Housing 100m		5.1	4.7	77.5		
G	104.2					
Flood Zone 2		21.6	20.8			
Flood Zone 3		18.4	17.7			
Hedgerow 5m		6.1	5.9			
250m Built up area		5.7	5.5	70.8		
H	112.8					
Flood Zone 2		7.2	6.4			
Flood Zone 3		3.4	3.0		170.2	Parcels G & H
Hedgerow 5m		4.4	3.9			
National Forest Inventory 10m		0.2	0.2			
PRoW 10m		1.7	1.5	99.4		
I	199.1					
Flood Zone 2		39.1	19.7			
Flood Zone 3		36.9	18.5			
National Forest Inventory 10m		4.7	2.4			
Watercourse Buffer 8m		6.1	3.1			
Hedgerow 5m		6.1	3.0			
Housing 100m buffer		0.7	0.3	148.5		
J	105.1					
Flood Zone 2		79.4	75.6			
Flood Zone 3		68.5	65.2		182.6	Parcels I & J
Hedgerow 5m		4.8	4.5			1/2 hedgerow used to take account of NFI and Hedgerow outwith FZ
Housing 100m		9.8	9.4			
National Forest Inventory 10m		15.8	15.0			
Watercourse 8m		10.3	9.8	34.2		
K	232.9					
Flood Zone 2		27.4	11.8			
Flood Zone 3		20.6	8.8			
National Forest Inventory 10m		11.0	4.7			
Watercourse Buffer 8m		5.5	2.4			
Hedgerow 5m		4.3	1.8			
PRoW 10m		5.5	2.4	193.0	193.0	Parcel K. Used only 1/2 of NFI 10m buffer due to overlap with FZ

Longhedge Alternative Sites



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The Planning Inspectorate

Appeal Decision

Inquiry held on 9 April 2024

Site visit made on 12 April 2024

by Jonathan Bore MRTPI

an Inspector appointed by the Secretary of State

Decision date: 3rd May 2024

Appeal Ref: APP/B3030/W/23/3334043
Staythorpe, Newark, NG23 5RG
Grid Ref 475454 353713

- The appeal is made under section 78 of the Town and Country Planning Act 1990 (as amended) against a refusal to grant planning permission.
- The appeal is made by Ecap Staythorpe BESS Ltd against the decision of Newark and Sherwood District Council.
- The application Ref is 22/01840/FULM.
- The development proposed is the construction of a battery energy storage system and associated infrastructure.

Decision

1. The appeal is allowed and planning permission is granted for the construction of a battery energy storage system and associated infrastructure at Staythorpe, Newark, NG23 5RG, Grid Ref 475454 353713 in accordance with the terms of the application, Ref 22/01840/FULM, and the plans listed in Condition 3, subject to the conditions in the attached schedule.

Applications for costs

2. The appellant has made an application for costs against Newark and Sherwood District Council. This is the subject of a separate decision.

Preliminary Matters

3. The layout was amended by the appellant after the appeal was submitted. Plans of the amended scheme are listed in section 1.12 of the Statement of Common Ground dated 12 March 2024. The agreed description of development is set out in paragraph 1.8 of the Statement of Common Ground.

4. The amendments were as follows.

   - Conversion of an area of land (0.7ha) originally allocated for battery storage to landscape and ecological enhancement area.
   - Increase in separation between the acoustic fence and storage units and the nearest residential homes, to approximately 116m.
   - Amendments to the dimensions of the Battery Energy Storage System (BESS) containers, changing from 1.7m wide, 9.3m long and 3.8m in height to 2.4m wide, 6.1m long and up to 3.9m in height.

- Reorientation of the battery energy storage system containers so that they would be side-on rather than end-on when seen from Staythorpe Road.
- Reduction in the number of BESS containers and an increase in the distance between units.
- Reduction of the overall hardstanding from 1.08ha to 1.04ha (a reduction of approximately 4%).
- Minor reconfiguration of the 400kV substation, including the reduction in the number of transformer and switch room structures.
- Minor amendments to the CAT2 Mesh Fence surrounding the 400kV substation.
- Updates to the illustrative Landscape and Ecological Enhancement Plan.

5. At the stage the amendments were proposed by the appellant, I asked the parties:

- whether the proposed revisions would make the scheme appear materially different when seen from beyond the site, notably from public viewpoints and residential property;
- the extent of any such difference, and whether it would increase or reduce the visual impact of the scheme from those locations; and
- whether the revised drawings would introduce other material differences in respect of scheme impacts, and their nature and extent.

6. The Council responded that it considered that the revised scheme had the potential to look materially different from public viewpoints, including Staythorpe Road, residential properties and the public right of way (PROW) FP 1, for a number of reasons; among other things it considered that the north-eastern field would include a larger footprint of development, with additional, re-orientated substations and more linear metres of access track.

7. I decided to accept the revised scheme because the alterations did not amount to a substantial difference or fundamental change to the application. Beyond the site the effect would not be substantial, and there would be no material adverse impact, and a number of improvements. In particular:

- the amended layout increased the distance between the battery storage units and nearby residential properties, and the separation between the acoustic fence and the nearest residential homes;
- notwithstanding the changes in the north-eastern field, the distance between the installation and the residential properties in Staythorpe Road is such that the changes would not appear substantial and would not be materially adverse;
- the change in the perception of the development from the public right of way would be little changed;
- an area of land originally allocated for battery storage would now be a landscape and ecological enhancement area;

- the number of battery energy storage system containers would be reduced and the separation between them would increase;
- the overall hardstanding would be reduced;
- there would be a reduction in the number of transformer and switch room structures;
- the amendments to the CAT2 Mesh Fence surrounding the 400KV substation would be minor;
- the updates to the illustrative landscape and ecological enhancement plan would not have a substantial additional impact.

8. Interested people were notified of the amendments and were invited to submit representations on them. The alterations did not prejudice anyone's interest or cause unlawful procedural unfairness. I have taken into account all representations made in connection with the application and the appeal.

9. The appeal has been determined on the basis of the amended scheme.

10. The appellant also submitted an enhanced mitigation strategy in November 2023 which among other things introduced heavy standard trees to supplement the landscaping scheme and proposed the translocation of 110 metres of roadside hedge. This was not an amendment to the scheme, but provided further information about landscaping, which would be secured by a condition.

Main Issues

11. The main issues in this case are: the benefits of the scheme; the visual impact of the scheme; the impact on landscape character; the effect on flood risk; and the effect on the stock of agricultural land.

Reasons

The benefits of the scheme

12. The proposed battery energy storage system (BESS) would allow intermittent renewable energy such as wind and solar power to be stored when supply is high and released to the electricity grid network during times of peak demand. It would connect to the nearby Staythorpe Substation and would serve the National Grid rather than a specific local generation facility, with the capacity to store 720MWh of surplus energy before feeding it into the grid.

13. Battery storage is an essential part of the system services that will enable the National Grid to handle the change in power flows arising from the growth in power from renewable energy sources and the decommissioning of coal and gas power stations. Without the system services to support zero carbon technologies, stabilising the National Grid will be challenging and will constrain the amount of renewable energy that can be utilised by the grid, ultimately hindering the ability to decommission further coal/gas power plants.

14. Staythorpe Substation is a priority area where power capacity support is needed on the 400kV network. Staythorpe is one of a limited number of substations which have available capacity to accommodate a battery energy storage system of this kind before 2033, and the only one in Nottinghamshire. The scheme would provide an important service in a strategic part of the grid;

the substation has four transmission circuits and can provide balancing services to several regions where coal and gas stations are being decommissioned and where there will be increasing power flow from North Sea windfarms and other renewable sources.

15. In 2019, the Climate Change Act (2050 Target Amendment) Order 2019 increased the UK's commitment to a 100% reduction in carbon emissions by 2050 (net zero), and in 2021 the Government adopted the Sixth Carbon Budget (2033-37) to cut emissions by 78% by 2035. The Government's intention is to have a fully decarbonised electricity system by 2035. ESO Future Energy Scenarios expects that to secure net zero could require as much as 47GW of electricity storage by 2050, of which 31GW would be at transmission level, which is the type of storage represented by the appeal scheme.

16. There is therefore considerable urgency for system services including battery energy storage schemes to come forward to enable the National Grid to handle the transition to low carbon energy sources and to underpin energy security. The appeal scheme is in a position to respond to this urgency. The appellant has a contract in place which would allow for the scheme to be connected to the National Grid in 2026, with procurement, construction and commissioning of the development taking place during the preceding period. The benefits of the proposals would therefore start to be realised in 2026.

17. In respect of the policy framework, Core Policy 10 of the adopted Newark and Sherwood Amended Core Strategy (2019) supports renewable energy, whilst Spatial Policy 3 exercises strict control over development in the open countryside. The policies to deal with development in the countryside are set out in the Newark and Sherwood Allocations and Development Management Document (DPD) 2013. Policy DM4 promotes energy generation from renewable and low-carbon sources subject to certain qualifications concerning, among other things, flood risk, landscape character, heritage assets, amenity, highway safety and ecology. The Council sought to argue that the scheme conflicts with Policy DM8, which does not mention renewable energy as a development suitable in the open countryside. However, Policy DM4, not Policy DM8, is the most directly relevant policy in this case and its criteria clearly envisage that development related to renewable energy may take place in the countryside in certain circumstances. The scheme is not in conflict with the most directly relevant policy.

18. At the level of national policy, National Policy Statements (NPS) EN-1, EN-3 and EN-5 recognise the key role that electricity storage has to play in achieving net zero, providing flexibility in the energy system and ensuring the security and reliability of the UK's energy supply. Support for renewable and low carbon energy and associated infrastructure is also expressed in paragraph 157 of the National Planning Policy Framework (NPPF).

19. For all the above reasons the scheme would have very significant benefits in supporting the transition to net zero and in helping to secure stability and security in energy supply; and there is a very positive planning policy framework both nationally and locally which supports such development, subject to its impacts being acceptable.

The visual impact of the scheme

20. The site consists of 10.1ha of flat agricultural land in two fields, separated by a public right of way. It is largely contained behind a hedge, and although it can be glimpsed from Staythorpe Road, and seen from the windows of some houses, its character is influenced by the presence of nearby Staythorpe Power Station and the adjacent electricity infrastructure, including many pylons. Its main visual contributions to the character and appearance of Staythorpe Road are therefore its agricultural use, its openness and the occasional views of the power station and associated electrical infrastructure.

21. The BESS scheme would be substantial; it would consist of an array of 268 containers each 6.1m by 2.4m, and 3.9m high, raised where necessary on plinths above the design flood level, with an adjacent DC box and inverter, 67 power control units, a substation compound with two transformers, access tracks, perimeter mesh fencing, and a 4m high acoustic fence around the main battery infrastructure. This would clearly change the visual appearance of the site, taking away its open agricultural character and giving it an industrial appearance. However, beyond the site, the scheme's visual impact would be more limited than the extent of the development would suggest, due to a combination of siting and landscaping.

22. The BESS structures would be set well back from the Staythorpe Road boundary. In the more northerly field, there would be an 82m deep landscape buffer between Staythorpe Road and the battery containers. This would contain two bands of planting with advanced nursery stock specimen trees together with scrub and woodland mix and hedgerow planting. Behind this there would be a 4m high acoustic fence. In the more southerly field, there would be a 35m landscape buffer with two bands of woodland planting, again backed by an acoustic fence.

23. The enhanced mitigation strategy would supplement this landscaping, to provide additional screening in the areas near Pingley Lane and Behay Gardens, with heavy standard trees including oak (3m to 3.5m tall at the time of planting), and alder and aspen (3.5 to 4.25 tall). The intention is to implement the planting ahead of the main construction works, some 22 to 24 months prior to the BESS coming into operation, giving it an opportunity to put on some early growth. The long term maintenance of the enhanced mitigation scheme is secured through the planning obligation discussed under paragraph 58.

24. The existing hedgerows on the roadside would be maintained at a height of 3m. Originally the scheme proposed the removal of part of the hedgerow on Staythorpe Road to allow for visibility splays at the site exit, and the Council cited the loss of an ancient hedgerow as part of the reason for refusal. However, ecological investigation has demonstrated that the hedgerow does not qualify as important, and the scheme now proposes to translocate 110m of the hedgerow back by between 2m and 5m from its current alignment. This part of the reason for refusal was not pursued at the inquiry. The translocation will enable the hedgerow to maintain any inherent biodiversity it may have. As with the enhanced mitigation scheme, the long term maintenance of the translocated hedge is secured through the planning obligation discussed under paragraph 58.

25. Seen from Staythorpe Road, structures would be visible within the site in the initial years, and the access and hedge translocation would open up views into the site at first. However, 5 years after first operation (about 7 years after planting), views of the acoustic fence would be partially screened and filtered, and the translocated hedge would be restored to the current baseline position. Although it would take some time for the screening to become fully effective, it would be thick enough and mature enough to provide a degree of mitigation even in the short term. After 15 years of operation (17 years after planting) the planting would be more established and would screen the acoustic fence and BESS structures from Staythorpe Road. It would also screen views of the chimneys of Staythorpe Power Station, especially when the trees are in leaf. The substation, at 12.5m, would be the tallest element of the scheme, but it would be a long way back into the site, located where it would be read with other power infrastructure, and substantially screened as the planting matured. These conclusions take into account the modest drop in level between Staythorpe Road and the site, particularly towards its southern end, and the effect of reduced leaf cover in winter, which would be countered to a large extent by the density and depth of planting.

26. The scheme would be seen initially from some of the front windows of a small number of houses in the area of Staythorpe Road Behay Gardens and Pingley Lane, mainly upper floor windows. The view from some houses is already partially obstructed by front garden planting, but where there is a view of the site, residents would see construction work, and in the early years they would see fencing and operational structures at some distance. It is recognised that the landscaping would take a few years to mature, but over time it would gradually reduce the visual impact of the scheme. These are private views rather than impacts on the public realm, and the scheme would not be so intrusive in those views that it would actually harm residents' living conditions. Overall, the impact of the scheme on those properties falls well short of a reason to resist the scheme.

27. The site is experienced more directly by walking the public right of way that crosses the site, which ultimately leads to the River Trent and to a wider footpath network. Views from the footpath are generally limited by its enclosure by hedges and by the flatness of the nearby landscape. Where the footpath approaches the railway line, it is possible to look back across the site towards Staythorpe and to Upton, but these are unexceptional views, and as the footpath moves further into the site, away from Staythorpe Road, the character of the site is increasingly dominated by the power station and power lines.

28. The impact of the scheme on the public right of way would be greater than that on Staythorpe Road because the battery storage units and fences would be closer and the landscape belt narrower. Instead of being a hedged path through open landscape, the footpath would become a landscaped corridor through a battery storage installation. That said, the existing planting along the footpath would be supplemented by landscaping, and it is not especially unusual for footpaths to be narrowly confined between hedges and fences. Moreover, the part of the footpath that would be affected by the scheme would be relatively short: less than a quarter of the total length of the footpath that leads to the River Trent. A permissive path would be created to enable the route to continue to function during the construction phase and this would be retained thereafter as part of the landscaping scheme.

29. Whilst not underestimating the relevance of the site's openness to people who can see the site from their windows, walk along Staythorpe Road, or use the footpath, its visual contribution to the area is modest. In the short term the scheme would result in very limited visual harm to Staythorpe Road, which would lessen over time as the landscaping matured. The scheme would cause some diminution in the quality of the public right of way through the site. However, the effect on the appearance of the area, including the experience of walking the footpath, would not merit dismissing the appeal.

30. For the above reasons, the scheme would accord with Policy DM5 (3 and 5) of the Allocations and Development Management DPD which aims to protect the quality of living conditions and avoid unacceptable impacts from new development, protect the character of the landscape, and protect and enhance trees, woodlands, biodiversity and green infrastructure.

The impact on overall landscape character

31. The site has the landscape characteristics of a site in the Trent Washlands. It is flat and open, bounded by hedges and a railway line with a tree belt, and is influenced by views of nearby power infrastructure. Its landscape quality is not especially high and it is not widely visible. The scheme would result in the site appearing less open and more planted, but there are examples elsewhere in this landscape of bands of larger scale planting and trees; that along the railway line is only one example of many. Planting is certainly not confined to clipped hedges.

32. The site itself would be changed by the planting and the power infrastructure structures; the visual impact is discussed above. But given the nature of the site, its degree of self-containment, the fact that it is not seen over a wide area, the notable influence of existing power infrastructure, and the congruity with the landscape character of the Trent Washlands, the scheme would not have any significant effect on overall landscape character.

33. For these reasons, the scheme would accord with Policy DM5 (4) of the Allocations and Development Management DPD which seeks to protect the local distinctiveness of the District's landscape character.

Flood risk

34. Policy DM5 (9) of the Allocations and Development Management DPD indicates that the Council will aim to steer new development away from areas at highest risk of flooding; where development is appropriate, it should be demonstrated, by application of the sequential test, that there are no reasonably available sites in lower risk flood zones. Where development is necessary within areas at risk of flooding it will also be necessary to satisfy the exception test by demonstrating it would be safe for the intended users without increasing flood risk elsewhere.

35. About 70% of the site is in Flood Zone 3 and is prone to fluvial flooding from the River Trent. The flood risk assessment and sequential test analysis considered 18 alternative sites, of which 9 had a lower risk of flooding. Of these, some were too small and others were crossed by power lines. The officer's report to committee mentioned site PDA16 as a sequentially preferable site, but the site is subject to a separate application for a BESS proposal and the Council accepts that it should be discounted because it is not reasonably

available. At the inquiry the Council argued that a number of sites could be sequentially preferable. These were discussed individually, but it is clear from the evidence that these are not suitable for a variety of reasons: size, access, difficulty of connection to the grid, unavailability and fragmentation by power lines. The appellant presented credible arguments as to why there are practical constraints to combining groups of smaller sites or developing sites fragmented by power lines. The scheme therefore passes the sequential test.

36. Even if the scheme did not pass the sequential test, it would pass the exception test. It would be designed to deal with a flood event of up to 1% plus 40% climate change allowance and 300mm freeboard; the battery containers in the affected area would be raised on concrete plinths and compensatory water storage would be provided on site to deal with displacement. The scheme would therefore not worsen flooding elsewhere, and peak runoff up to the 1% event would be restricted to the greenfield QBar rate, thus providing a degree of betterment. In normal conditions there would be no operatives on site and an emergency plan would be in operation so risk to personnel would be very low. An operational stage flood incident plan and a detailed surface water management plan are required by condition.

37. It is agreed between the main parties to the appeal that the scheme would not cause flooding or worsen flood risk in any practical sense. The scheme is essential infrastructure, would be safe for its lifetime, and would provide very considerable sustainability benefits to the community in helping to contribute towards the transition towards renewable energy and the reduction in carbon emissions. None of the relevant consultees, including the Environment Agency, the Lead Local Flood Authority, Trent Valley Drainage Board, or Severn Trent Water, object to the proposal. Having regard to all the above, the proposal would accord with Policy DM5 (9) of the Allocations and Development Management DPD and with paragraphs 165 to 175 of the NPPF.

The effect on the stock of agricultural land

38. Policy DM8 of the Allocations and Development Management DPD seeks a sequential approach in respect of the loss of the most versatile areas of agricultural land and requires proposals that cause the loss of such land to demonstrate environmental or community benefits that outweigh the land loss. This approach does not accord with national policy as set out in the National Planning Policy Framework. Moreover, it is unclear as to whether the section on agricultural land within Policy DM8 is intended to apply to categories of development such as renewable energy that are not referred to in that policy. The most relevant policy to the appeal scheme is Policy DM4, which allows for renewable energy schemes subject to certain criteria and does not refer to agricultural land quality as a criterion. But whatever the intention of Policy DM8, it is relevant to consider the effect on agricultural land; the National Planning Policy Framework seeks to protect soils and recognises the benefits derived from natural capital, including the best and most versatile agricultural land.

39. According to the updated agricultural land report, which took into account the influence of potential flooding on part of the site, most of the land is Grade 3b quality. Only 2.4ha, or 23.8%, of this 10.1ha site is Grade 3a agricultural land. Although the site has raised crops, evidence given to the inquiry is that the farm owner regards the land as not viable for agriculture. Even if, despite this

evidence, this 2.4ha were still considered best and most versatile land, the amount of such land that would be lost would be limited in area.

40. The Council argue that since the general agricultural land classification does not distinguish between Grades 3a and 3b, intrusive samples of a wider spread of sites should have been carried out to find out whether there are sites with a greater proportion of lower agricultural quality in the area. But – and notwithstanding other appeal decisions referred to by the Council – to insist on a widespread exercise of this sort on land not in the control of the appellant would be impractical and unreasonable, and would be entirely disproportionate given the small proportion of Grade 3a land that would be lost on the appeal site. In any case, the additional data that has been collected from the detailed surveys of PDAs 4, 5, 16 and 18 shows that it is unlikely that other possible sites would be better in this respect, even leaving aside their other constraints.

41. The BESS would be decommissioned after 40 years and the land restored; an outline soil management plan has been produced and this would be developed as a requirement of the attached landscape condition prior to construction and adhered to during construction and reinstatement. A condition is attached requiring a decommissioning plan. The scheme demonstrates clear environmental benefits in terms of improved biodiversity, and community benefits in supporting the transition to low carbon energy generation.

42. In conclusion, the loss of a small amount of Grade 3a agricultural land during the lifetime of the development would not represent a significant loss in the stock of agricultural land, best and most versatile land, or productive agricultural capacity, and does not constitute a sound reason for dismissing the appeal. The scheme would not conflict with Policy DM8 (even if it were construed to be relevant) and would accord with Policy DM4 and the National Planning Policy Framework.

Other Matters

Health, safety, fire risk and pollution

43. Perception of fire risk was originally cited by the Council as part of its reason for refusal, and although the Council withdrew that part before the inquiry, local residents have continued to express concern about the potential for thermal runaway in the scheme, and about the discharge of fumes and groundwater contamination from such an event. I have read the residents' submissions and the reports attached to them.

44. The appellant provided a Fire Safety Note to the inquiry which was based on expert advice. The note confirms that the proposed development has had regard to all relevant British Standards, guidance and policy in respect of fire safety and is considered to comply with all current legislation, guidance and best practice. The appellant is committed to only selecting suppliers with battery systems certified under UL9540, which is subject to tests under UL9540A at system level. UL9540A is a test methodology at battery cell, battery module and battery system level to assess the level of fire propagation between these subcomponents. This is the strictest test under the UL940A test group.

45. The scheme would be in a secure compound and would be a considerable distance from the nearest homes. It would not contain hazardous substances.

Any fire would be contained to a single container, which is a robust structure. Fire propagation would be mitigated by the current spacing of 3m between containers. Adjacent containers would be unaffected by such an event and the incident would remain within the confines of the site boundary. This builds on best practice and lessons learnt from past incidents such as the 2019 McMicken and 2020 Carnegie Road incidents which were referred to by residents at the inquiry.

46. Best practice for managing a fire event is for the Fire Services to let the container burn from a safe inaccessible distance. As regards the smoke plume from burning lithium-ion batteries, the toxicity of the fumes from a burning BESS are generally accepted as being comparable to those from burning diesel or petrol vehicles. There would be more hydrofluoric gas, but this is highly reactive, and residues have not been found in the analysis of fire incidents at BESS sites. There is no evidence of contamination or high concentrations of toxic gases from either the limited number of BESS fires that have taken place or in laboratory assessments, including large-scale tests by a leading expert in the field. The only recorded BESS incident in the UK was at Carnegie Road, Liverpool in 2020 which led to no damage to the environment or any personal injury. The Hazardous Materials Environmental Protection Officers undertook a comprehensive assessment following the event and did not record any high concentrations of toxic gases.

47. From the number of worldwide BESS sites and the number of fires that have occurred, the Fire Safety Note comes to an estimate of 2.1% of BESS being potentially susceptible to incident during its lifetime, but such incidents are becoming statistically less likely due to improvements in fire safety management plans, technological improvements and lessons learned from other events such as the McMicken incident. Smoke plume modelling has been undertaken and it is estimated that the combined probability of a plume reaching residential properties on Staythorpe Road as a result of a coincidence of wind speed, wind direction and a thermal runaway incident would be 0.01%. This uses an incident rate of 2.1%, which is considered to be dropping.

48. The BESS is designed to remain fully operational during a flood event and would be designed so that it could be safely accessed by the fire and rescue services. If a container were to enter thermal runaway during a flood event, the project would have a detailed management of State of Charge, where the number of BESS containers at 100% charge would be minimised. The affected container alongside its power control system would be isolated and electrically disconnected from the grid and the fire services would cool the area with water surrounding the container. An impermeable membrane would capture fire water, which would be pumped away in a controlled manner by a licenced operator. The Fire Safety Note estimates that the probability of a container fire and a design flood event (an event that would occur on average once in 100 years) occurring at exactly the same time would be very small indeed.

49. A fire safety management plan has been evolved through collaborative working between the appellant, the Council and Nottinghamshire Fire and Rescue Service (NFRS) and it has been independently reviewed by leading experts in the field. The plan includes consultation, organisational roles and responsibilities, fire safety arrangements, monitoring checks, maintenance and testing, audit and review, a risk management plan, an emergency response plan and provision for a post-incidence recovery plan.

50. Table 1 of the appellant's Response Note dated 23 April 2024 demonstrates that the proposed development and the accompanying fire safety management plan would meet, and in a number of instances go beyond, the recommended good practice measures set out in the newly issued good practice guidance document "Health and Safety Guidance for Grid Scale Electrical Energy Storage Systems" (Department for Energy Security & Net Zero, March 2024).

51. NFRS has no objection to the scheme subject to a condition requiring an updated fire safety management plan. Subject to the condition, the scheme would be acceptable in respect of fire safety and would accord with Policy DM10 of the Allocations and Development Management DPD which seeks to control the potential for pollution from development proposals.

Biodiversity and protected species

52. The scheme would provide 27.5% biodiversity net gain (BNG); a condition is attached requiring the submission of a landscaping scheme to secure at least this amount of BNG. The long term maintenance of the biodiversity mitigation measures is secured by the planning obligation discussed under paragraph 58. The translocation of 110m of hedgerow as discussed above would assist in retaining the biodiversity of the existing hedge line.

53. Residents have observed otter in local watercourses. Records from the Nottinghamshire Biological and Geological Records Centre and ongoing surveys for Great North Road Solar Park show that otter is relatively widespread in the local area and is generally associated with larger watercourses, including the River Trent.

54. However, the Records Centre has no pre-existing records of otter within the BESS site. The submitted Ecological Impact Assessment also reported no such records, and surveys have recorded no evidence of the species on the site and only suboptimal aquatic habitat. The Ecological Impact Assessment predicted negligible and unlikely effects from the development and proposes mitigation measures in line with standard good practice. These include the avoidance of works in or near watercourses and the covering of open excavations overnight. Appropriate measures can be included in a construction environmental management plan (CEMP), which is made the subject of a condition. The evidence demonstrates that, as far as reasonably practicable, legal offences will be avoided and therefore a mitigation licence will not be required.

55. For the above reasons the scheme would accord with Core Policy 12 of the Core Strategy and Policy DM5 (7) of the Allocations and Development Management DPD, which seek to conserve and enhance the biodiversity of the District and avoid harm to protected species.

Heritage assets

56. It is agreed that the scheme would have a neutral effect on the setting of The Manor House on Pingley Lane, which is Grade II listed, on the setting of Averham Conservation Area and its listed buildings, and on the Averham Moat and enclosure Scheduled Monument. The proposal would initially cause a small degree of harm to the setting of the nearby non-designated heritage assets along Staythorpe Road, including Grange Farm and Behay Gardens, but with growing maturity the proposed landscaping would mitigate the impact. The degree of harm would be significantly outweighed by the public benefits of the

scheme. A condition is attached requiring the submission of a scheme of archaeological investigation. The proposal would not conflict with Policy DM9 of the Allocations and Development Management DPD.

Conditions

57. In addition to the standard conditions, conditions are attached requiring archaeological investigation, because of the potential for the site to contain archaeological remains; a landscaping scheme and hedge translocation plan, for the reasons discussed in this decision; details of the site access, in the interests of highway safety; a construction environment management plan and construction traffic management plan, to protect the quality of the environment, highway safety and living conditions; a surface water management plan, a flood risk mitigation plan, a fire safety management plan and an operational stage flood incident plan, for the reasons discussed in this decision; a public right of way diversion scheme to address the diversion of the public right of way during construction and the details of the proposed permissive path; details of materials, to control the appearance of the scheme; noise mitigation, to protect the living conditions of nearby residents; details of lighting, to protect the living conditions of residents and mitigate the impact on wildlife; and a decommissioning scheme for the site at the expiry of 40 years or in the event that battery storage ceases at the site.

S106 obligation

58. An obligation dated 30 April 2024 requires the owner and/or the developer to translocate the hedgerow discussed in paragraph 24 and to maintain it until the development is decommissioned or for a period of 30 years from the date of the full implementation of the biodiversity net gain measures, whichever is the later; to maintain the biodiversity net gain measures discussed in paragraph 52 within the same timetable; and to maintain the enhanced mitigation measures discussed above in paragraph 23 until decommissioning. These requirements are necessary to ensure that the landscaping and planting on site remains effective throughout the life of the development.

Conclusions

59. The scheme would have very significant benefits in supporting the transition to net zero and in helping to secure stability and security in energy supply. Planning policies both nationally and locally support such development, subject to its impacts being acceptable. The scheme would accord with Core Policy 10 of the Core Strategy and Policy DM4 of the Allocations and Development Management DPD, National Policy Statements (NPS) EN-1, EN-3 and EN-5, and paragraph 157 of the National Planning Policy Framework.

60. The site's landscape quality is not especially high and is influenced by existing power infrastructure, and its visual contribution to the character of the area is modest. Beyond the site the development would not have a harmful effect on landscape character and the scheme would not harm residents' living conditions. The visual impact of the fencing and structures would be mitigated by extensive planting, which once established would provide effective screening. The scheme's visual and landscape impacts including the effect on openness and the footpath through the site do not outweigh the benefits of the scheme. The proposal would accord with Policy DM5 (3, 4 and 5) of the Allocations and Development Management DPD.

61. In respect of flood risk, the scheme passes the sequential test and even if it did not, it would pass the exception test. The scheme would not cause flooding or worsen flood risk in any practical sense. The proposal would thus accord with Policy DM5 (9) of the Allocations and Development Management DPD and with paragraphs 165 to 175 of the NPPF.

62. The loss of a small amount of Grade 3a agricultural land during the lifetime of the development would not represent a significant loss of best and most versatile land or in productive agricultural capacity; and there is no evidence of any preferable site in this respect. The scheme would thus not conflict with the particular part of Policy DM8 that addresses agricultural land, were this applicable to the scheme, and does not conflict with the relevant part of the NPPF which seeks to protect soils and recognises the benefits derived from natural capital, including the best and most versatile agricultural land.

63. The scheme would be acceptable as regards fire safety and potential pollution and would accord with Policy DM10 of the Allocations and Development Management DPD.

64. Protected species would not be affected and there would be an improvement in biodiversity in accordance with Core Policy 12 of the Core Strategy and Policy DM5 (7) of the Allocations and Development Management DPD.

65. The development would be acceptable in respect of its impact on heritage assets and would accord with Policy DM9 of the Allocations and Development Management DPD.

66. The benefits of the proposal would be very substantial, and none of the scheme's impacts, individually or taken together, would be so significant as to justify dismissing the appeal. I have considered all the other matters raised but they do not alter the balance of my conclusions. For all the reasons given above, the appeal is allowed.

Jonathan Bore

INSPECTOR

ANNEX

Conditions

1) The development hereby permitted shall begin not later than 3 years from the date of this decision.

2) The planning permission hereby granted shall be for a temporary period only, to expire 40 years after the date of the first import of electricity to the development. Written confirmation of the first import date shall be provided to the local planning authority within one month after the first import date.

3) The development hereby permitted shall not be carried out otherwise than in accordance with the following approved plans/drawings:
   i) Site Location Plan (Red Line Boundary) Drawing Ref: 4951-REP-040
   ii) Amended Scheme Enhanced Mitigation Strategy, Drawing Ref: TPLV.3.4, 3.5 and 3.6
   iii) Site Layout Plan, Drawing Ref: Drawing Ref: UK008_LYP (Rev R)
   iv) BESS Battery Container Elevation Plan, Drawing Ref: Drawing Ref: UK008_031 Rev 06
   v) Elevations 400kV Substation, Drawing Ref: 1408-121/1 (Rev A)
   vi) Fence Details, Drawing Ref: UK008_036 (Rev 02)
   vii) CCTV Elevation, Drawing Ref: UK008_037 (Rev 02)

4) Except for archaeological works, no development shall take place until the Phase 2 Written Scheme of Investigation (WSI) has been submitted to and approved in writing by the local planning authority. The Phase 2 WSI shall include:
   i) an assessment of significance and research questions;
   ii) the programme and methodology of site investigation and recording;
   iii) community involvement and/or outreach proposals;
   iv) the programme for post investigation assessment;
   v) Provision to be made for analysis of the site investigation and recording;
   vi) provision to be made for publication and dissemination of the analysis and records of the site investigation;
   vii) provision to be made for archive deposition of the analysis and records of the site investigation; and
   viii) nomination of a competent person or persons/organisation to undertake the works set out within the Written Scheme of Investigation.

   No development shall take place other than in accordance with the approved Phase 2 WSI.

   The development shall not be brought in to use or the site occupied until the site investigation and post investigation assessment has been completed in accordance with the programme set out in the approved Phase 2 WSI and the provision made for analysis, publication and dissemination of results and archive deposition has been secured.

5) Save for any works approved by Condition 6, no site clearance or vegetation clearance works shall be commenced until a detailed hard and soft landscape scheme for the site has been submitted in writing to the local planning authority for approval. The submitted landscaping scheme shall be in accordance with the details set out in the Enhanced Mitigation Plan (drawing number TVLP3) and shall include details of proposed landscape and ecology works, including:

   i) soft landscape details;
   ii) hard surfacing materials;
   iii) proposed finished ground levels;
   iv) species type, size and planting density;
   v) vehicular and pedestrian access;
   vi) soil management measures;
   vii) tree protection measures set out in an Arboricultural Method Statement and a Tree Protection Plan prepared in accordance with BS5837;
   viii) how a biodiversity net gain of at least 27.5% calculated using Metric 4.0 published by the Department for Environment, Food & Rural Affairs will be achieved, comprising at least +15.8% net gain for habitat units, +72.54% net gain for hedgerow units, and +31.2% net gain for river units;
   ix) a implementation timetable; and
   x) a landscape and ecological mitigation, management and maintenance plan.

   The planting proposed adjacent to Staythorpe Road shall be implemented in the first available planting season following the approval of the landscaping scheme, and the remainder of the approved landscaping scheme shall be implemented in its entirety no later than the first available planting season following completion of the development. The approved landscaping scheme shall be retained and managed in accordance with the approved landscaping scheme for the duration of the development.

   If any tree or shrub is removed, dies or becomes seriously damaged or diseased within the lifetime of the development it must be replaced with suitable replacement plants or trees to the approved details.

6) No translocation of the hedgerow identified on the Hedge Translocation Plan (Ref TC.203) shall take place until a translocation method statement, including a timetable for the works, that has been prepared in compliance with BS5837, has been submitted to and approved in writing by the local planning authority. The translocation of the hedgerow shall thereafter be carried out only in accordance with the approved details.

7) No development shall take place until details of the site access have been submitted to and approved by the local planning authority. The details shall be in accordance with the details shown in Site Entrance Junction - Visibility Splays Assessment (Ref: 4951_DR_P_0001 Rev 02) and Emergency Access Junction Design (Ref: 23065/GA/01 Rev B) and include details of necessary vegetation clearance, culverts and a programme for the delivery of the site access works. All works shall be carried out in accordance with the approved details.

8) No development shall commence until a construction environmental management plan (CEMP) has been submitted to and approved in writing by the local planning authority. The CEMP should be prepared in accordance with the outline CEMP dated May 2023 and shall contain the following details:

i) a scheme to control noise and dust;

ii) construction working hours, which shall be limited to 08:00 to 18:00 hours Mondays to Fridays and 08:00 to 14:00 hours on Saturdays;

iii) loading and unloading of plant and materials;

iv) storage of plant and materials used in constructing the development;

v) details of the temporary compound area, including fencing;

vi) full details of any temporary external lighting;

vii) a construction stage flood incident plan;

viii) measures for the protection of habitats and species within the site;

ix) construction stage emergency response plan and incident response system(s), including responsible persons and lines of communication.

The construction of the site shall be carried out only in accordance with the approved CEMP.

9) No development shall commence until a construction traffic management plan (CTMP) has been submitted to and approved in writing by the local planning authority. The CTMP shall be prepared in accordance with the outline CEMP dated May 2023 and shall confirm the following details:

i) deliveries shall not take place outside 08:00 to 18:00 hours Mondays to Fridays and 08:00 to 14:00 hours on Saturdays, unless otherwise agreed for abnormal load deliveries;

ii) an indicative programme for the number of HGV and Articulated Indivisible Load (AIL) movements;

iii) approved access and egress routes for HGV and AIL movements;

iv) a traffic safety management plan showing the location and type of traffic management signage and the location of any traffic marshals required to oversee the access and egress of HGVs and AILs;

v) parking details of vehicles of site operatives and visitors;

vi) wheel washing facilities to prevent mud and debris from migrating on to the adjacent highway.

The construction of the site shall be carried out only in accordance with the approved CTMP.

10) No development shall commence until a surface water drainage scheme has been submitted to and approved in writing by the local planning authority. The surface water drainage scheme shall be in substantial accordance with the principles set out in in the Outline Sustainable Drainage Strategy (dated May 2023). The approved surface water drainage scheme shall be implemented and maintained for the lifetime of the development.

The development shall be implemented and maintained for its lifetime in accordance with the following flood risk mitigation measures:

i) finished floor levels for all battery containers located in land indicated to flood during the design flood event (1 in 100 AEP event plus an appropriate allowance for climate change) shall be 300 mm above the peak flood level during the design flood event;

ii) compensatory flood storage shall be provided in accordance with the principles set out in the Flood Risk Assessment (Rev 2 May 2023).

11) No development shall commence until a public right of way diversion scheme for Staythorpe FP1 has been submitted to and approved by the local planning authority. The diversion scheme shall provide details of:

i) the permissive path shown on Site Layout Plan (UK008_LYP_ Rev R);

ii) any temporary diversions of Staythorpe FP1;

iii) details of the footpath specification;

iv) timing of delivery; and

v) maintenance and public access arrangements to the permissive footpath.

The footpaths shall be implemented for the duration of the development in accordance with the approved public right of way diversion scheme.

12) The battery containers, substation, fencing and associated structures shall not be installed until details of the external materials have been submitted to and approved in writing by the local planning authority. The details shall include an updated site layout plan that shall be in accordance with Site Layout Plan Drawing Ref: UK008_LYP (Rev R) and at a scale of not less than 1:500. The development shall thereafter be carried out only in accordance with the approved details.

13) The development shall not be brought into use until an operational noise mitigation scheme has been submitted to and approved by the local planning authority. The scheme must detail how the following noise limits will be met, determined in accordance with British Standard (BS) 4142:2014+A1:2019 'Methods for rating and assessing industrial and commercial sound'. The rating level of the noise due to the operation of the development shall not exceed 5 dB above the representative daytime (07:00 to 23:00 hours) and night-time (23:00 to 07:00 hours) background sound levels at the noise sensitive receptors listed below:

i) Crossing Cottage (475261 353489)

ii) Orchard House (475266 353610)

iii) 2 Behay Gardens (475273 353662)

iv) Pingley Close (475316 353914)

v) Grange Cottage (475410 353909)

The approved operational noise mitigation scheme shall be maintained for the lifetime of the development.

14) The development shall not be bought into use until an updated fire safety management plan has been submitted to and approved by the local planning authority. The updated plan shall be prepared in accordance with the Fire Safety Management Plan dated November 2023 and the operational stage flood incident plan (Condition 15). The development shall be implemented in accordance with the approved updated fire safety management plan.

15) The development shall not be bought into use until an operational stage flood incident plan has been submitted to and approved by the local planning authority. The plan shall be prepared in accordance with the Flood Risk Assessment (dated May 2023). The development shall be implemented in accordance with the approved operational stage flood incident plan.

16) No permanent external lighting shall be installed until details have been submitted to and approved in writing by the local planning authority. Lighting shall be prepared in accordance with the Outline Lighting Plan (Rev D) and be designed to prevent light spillage and be directed away from sensitive receptors and habitats, such as woodland. External lighting shall be installed in accordance with the approved details.

17) No later than 12 months prior to the expiry of the planning permission, or within 18 months of the cessation of electricity storage on the site, whichever is the sooner, a decommissioning scheme shall be submitted to and approved by the local planning authority. The decommissioning scheme shall include a programme and a scheme of work and shall be implemented in accordance with the approved details.

The operator shall notify the local planning authority in writing within five working days following the cessation of electricity storage.

All buildings, structures and associated infrastructure shall be removed within 12 months of the approval of the decommissioning scheme, and the land restored, in accordance with the approved details.

APPEARANCES

FOR THE APPELLANT:

David Hardy	Barrister and Solicitor, Partner, CMS

He called:

Matthew Sharpe BA (Hons) DipTP, MRTPI	Senior Director, Quod
Lee Morris BSc(Hons) PGDipLA, MA PIEMA CMLI	Managing Director, Tir Collective
Dr Bruce Lascelles BSc (Joint Hons) PhD CEnv FISoilSci MCIEEM	UK Director of Sustainable Land Management, Arcadis
Dr Mike Gray BSc MRes PhD CEnv MCIEEM	Ecology Director, Envams
Andres Blanco MEng PGDip MSc CEng MIET	Managing Director, Blanboz Ltd
Dr Kevin Tilford BSc (Hons) MSc (Eng) PhD	Managing Director, Weetwood
Elena Sarieva MA (Hons) MSc	Head of Planning, Elements Green
David Cowling BEng (Hons) MIET	Head of Power Systems, Elements Green
Mark Noone BSc (Hons)	Head of Development, Elements Green

FOR THE LOCAL PLANNING AUTHORITY:

Howard Leithead	of Counsel, No 5 Chambers, instructed by Newark and Sherwood District Council

He called:

Nigel Wakefield BA (Hons) BA (Hons) BTP DipLA MA UD MRTPI	Managing Director, Node Urban Design Ltd
Jonathan Weekes BSc (Hons) MA MRTPI	Director, Aitchison Raffety

INTERESTED PARTIES:

Mr Ian Bradey	Chair, Averham, Kelham and Staythorpe Parish Council

Ms D Storey	Staythorpe resident and member of Staythorpe Action Group
Ms C Bradbury	Staythorpe resident
Ms P Hall	Staythorpe resident
Ms F Hughes-Stanton	Staythorpe resident
Mr D Gillen	Staythorpe resident

DOCUMENTS, PLANS AND PHOTOGRAPHS	
CD Ref.	Drawing / Document Title
CD1 Application Documents and Plans	
1.1	Application form, ref PP-11545825, 20 September 2022
1.2	Covering letter, ref 4951, September 2022
1.3	Transport Statement, September 2022
1.4	Superseded Noise Impact Assessment, August 2022
1.5	Superseded Outline Battery Safety Management Plan, September 2022
1.6	Schedule of Drawings, 16 September 2022
1.7	Superseded Public Right of Way Statement, September 2022
1.8	Superseded Planning, Design and Access Statement, September 2022
1.9	Superseded Outline Construction Environmental Management Plan, September 2022
1.10	Superseded Landscape and Visual Appraisal (LVA), September 2022
1.11	Superseded Flood Risk Assessment, September 2022
1.12	Flood Risk Assessment - 1 in 20-Year Flood Levels with Layout Fig. 1, Appendix E Flood Incident Plan, Appendix F Infiltration Testing Results, Appendix G Landscape Mitigation Plan, September 2022
1.13	Superseded Fire Safety Management Plan, September 2022
1.14	Superseded Ecological Impact Assessment, September 2022
1.15	Superseded Biodiversity Metric Assessment, September 2022
1.16	Staythorpe BESS consultation feedback form, September 2022
1.17	Air Quality Assessment, September 2022
1.18	Statement of Community Involvement, September 2022
1.19	Sequential Test Analysis/Site Selection Report, September 2022
1.20	Outline Surface Water Drainage Strategy, September 2022
1.21	Ground Stability Non-Residential Report, ref. 61003833524001, April 2022
1.22	Economic Statement, September 2022
1.23	Arboricultural Report, August 2022
1.24	Agricultural Land Classification, May 2022
1.25	Superseded Viewpoints (Figures 1.10c, 1.10d, 1.10e, 1.10f, 1.10g, 1.10h, 1.10i, 1.10j, 1.10k, 1.10l, 1.10m, 1.11a, 1.11b, 1.11c, 1.12a, 1.12b, 1.12c, 1.13a, 1.13b, 1.13c), September 2022
1.26	Superseded Viewpoints (Figures 1.13d, 1.13e, 1.13f, 1.14a, 1.14b, 1.14c, Appendix C Landscape Mitigation Plan 1:1000@A1, 4951-DR-LAN-101 Rev. C August 2022), September 2022
1.27	APPENDIX A BRIEFING REPORT, September 2022
1.28	Superseded APPENDIX 1 BMA CALCS, August 2022
1.29	Superseded Heritage Impact Assessment, September 2022
1.30	ADDENDUM TO APPENDIX 2 ECIA - REPTILE SURVEY REPORT, October 2022
1.32	ADDITIONAL BAT SURVEY, October 2022
1.33	Covering letter, 21 November 2022
1.34	Site Location Plan (Red Line Boundary) Planning Drawing 1, 1:2500@A3, September 2022
1.35	Superseded Landscape Mitigation Plan, 1:1000@A1, September 2022

1.36	Landscape and Visual Appraisal - Landscape Character Areas, Figure 1.7, 1:20000@A3, September 2022
1.37	Landscape and Visual Appraisal – Bare Earth ZTV - Figure 1.4, Screened ZTV – Figure 1.5, Landscape and Related Designations – Figure 1.6, 1:20000@A3, September 2022
1.38	SuDs Strategy - Superseded Outline Surface Water Drainage Layout, Fig. 1, 1:2500@A3, September 2022
1.39	Superseded Landscape and Biodiversity Masterplan Planning Drawing 4, 1:1000@A1, September 2022
1.40	Superseded Civils Site Layout, 1:500 @ A1, August 2022
1.41	Superseded 132kV/33kV COMPOUND LAYOUT GT1 & GT2 CIRCUIT, 1:250 @ A1, July 2022
1.42	STANDARD ELEVATIONS & DETAILS CAT2 MESH FENCE, External Elevation 1:20@A1, Section 1-1 1:20@A1, Detail A 1:5@A1, July 2022
1.43	STANDARD ELEVATION CAT2 5.5m WIDE MESH GATE, 1:50 @ A0, July 2022
1.44	STANDARD ELEVATION CAT3 MESH PEDESTRIAN GATE, 1:10 @ A0, July 2022
1.46	400/132kV Substation Compound Plan View, 1:250@A1, August 2022
1.47	400/132kV Substation Compound Elevation View, 1:100@A0, August 2022
1.48	Superseded 132kV Compound Layout, 1:200@A1, August 2022
1.49	132kV Compound Elevation View, 1:100@A2, September 2022
1.50	Topographical Survey Sheets 1 and 2, 1:500@A0, May/June 2022
1.51	Fence details, 1:50@A2, UK008_036_Rev02, August 2022
1.52	CCTV elevation, 1:50@A3, UK008_037_Rev02, August 2022
1.53	TYPICAL 33KV CABLE CROSS-SECTION, 1:50@A4, UK008_040_Rev02, August 2022
1.55	Wooden Acoustic Fence, 1:50@A2, UK008_042_Rev02, August 2022
1.56	Wooden Fence, 1:50@A2, UK008_043_Rev01, August 2022
1.57	SECTIONS 400kV TRANSFORMER BUND, 1:50 @ A1, UKGC-RCL-UG-004 S2 Rev P3, July 2022
1.58	SECTIONS 132KV TRANSFORMER BUND, 1:50 @ A1, UKGC-RCL-UG-005 S2 Rev P3, July 2022
1.59	OIL INTERCEPTOR TANK 400/132KV CIRCUIT, 1:25 @ A1, UKGC-RCL-UG-010 Rev. P2, July 2022
1.60	OIL DRAW-OFF DETAILS 400/132KV CIRCUIT, 1:20 @ A1, UKGC-RCL-UG-011 Rev P2, July 2022
1.63	PRIMARY COMPOUND ELEVATIONS 400/132kV CIRCUIT SHEET 2 OF 3, 1:100 @ A1, UKGC-RCL-UG-012 S1 Ref P5, 17 November 2022
1.64	OUTLINE SITE LIGHTING PLAN, 1:1500 @A1, Ref UK008_049_RevA, 14 November 2022
1.65	ELEVATIONS 400KV TRANSFORMER BUND, 1:50 @ A1, Ref UKGC-RCL-UG- 004 S3 P1, 11 November 2022

1.66	ELEVATIONS 400KV TRANSFORMER BUND, 1:50 @ A1, Ref UKGC-RCL-UG- 004 S4 P1, 11 November 2022
1.67	ELEVATIONS 132KV TRANSFORMER BUND, 1:50 @ A1, Ref UKGC-RCL-UG- 005 S3 P1, 15 November 2022
1.68	STANDARD ELEVATIONS RELAY & CONTROL ROOMS 400/132KV CIRCUIT, 1:50 @ A1, Ref.UKGC-RCL-UG-009 S1 P2, 16 November 2022
1.69	STANDARD ELEVATIONS RELAY & CONTROL ROOM 132/33KV CIRCUIT, 1:50 @ A1, Ref.UKGC-RCL-UG-009 S2 P3, 16 November 2022
1.70	STANDARD ELEVATIONS STATCOM BUILDING 400/132KV CIRCUIT, 1:50 @ A1, Ref UKGC-RCL-UG-009 S3 P1, 17 November 2022
1.71	PRIMARY COMPOUND ELEVATIONS 400/132KV CIRCUIT SHEET 3 OF 3, 1:100 @ A1, Ref UKGC-RCL-UG-012 P2, 15 November 2022
1.72	PERMANENT_WELFARE_CENTRE_AND_CONTROL_ROOM_ELEVATION_PL A N UK008_44)Rev02 1:50 @ A1
1.73	SUPERSEDED GENERAL ARRANGEMENT PERMANENT WORKS (LAYOUT PLAN), 1:1000@A1, Ref 4951_DR_P_0005, 15 November 2022
1.74	TEMPORARY CONSTRUCTION COMPOUND LAYOUT, 1:1000@A1, Ref 4951_DR_P_0006_P1, 21 November 2022
1.75	ESS BATTERY CONTAINER ELEVATION PLAN, 1:50@A1, Ref UK008_31_Rev04, 3 November 2022
1.76	DC BOX & INVERTER ELEVATION PLAN, 1:50@A2, Ref UK008_32_Rev04, 3 November 2022
1.77	TRANSFORMER STATION, 1:50@A1, Ref UK008_033_Rev04, 3 November 2022
1.78	AUXILIARY TRANSFORMER CONTAINER, 1:50@A3, Ref UK008_034_Rev04, 3 November 2022
1.79	SMART CONTROLLER ELEVATION PLAN, 1:50@A3, Ref UK008_035_Rev04, 3 November 2022
1.80	TEMPORARY WAREHOUSE / WORKSHOP ELEVATION PLAN, 1:50@A3, Ref UK008_41_Rev02, 3 November 2022
1.80b	Permanent Welfare Centre & Control Room Elevation Plan, 1:50@A3, UK008_44_Rev02, 2, 03 Nov 2022
1.81	Water tank, 1:50 @A1, Ref UK008_046_Rev02, 3 November 2022
1.82	GENERAL ARRANGEMENT 400KV TRANSFORMER BUND, 1:50 @ A1 Ref UKGC-RCL-UG-004 S1 P4, 11 November 2022
1.83	GENERAL ARRANGEMENT 132KV TRANSFORMER BUND, 1:50 @ A1, Ref UKGC-RCL-UG-005 S1 P4, 16 November 2022
1.84	SECTIONS 33KV TRANSFORMER BUND, 1:50 @ A1, Ref UKGC-RCL-UG-006 S1 P3, 8 July 2022
1.85	PRIMARY COMPOUND ELEVATIONS 400/132KV CIRCUIT SHEET 1 OF 3, 1:100 @ A1, Ref UKGC-RCL-UG-012 P5, July 2022
1.86	33KV SWITCHROOM AND DISTRIBUTION SUBSTATION OF LV SUPPLY, 1:50 @A1, Ref UK008_051_Rev01, 20 November 2022

1.87	Pre-app advice (July 2022)
CD2 Additional/Amended Reports and/or Plans submitted after validation	
2.1	Email from Applicant on Staythorpe scale, 5 July 2023
2.2	Update note to Flood Risk Assessment and Drainage Strategy, June 2023
2.3	Agent email accompanying an Update note to Flood Risk Assessment and Drainage Strategy, 26 June 2023
2.4	Agent email accompanying Noise Assessment Addendum, Staythorpe BESS, Version 3.0, 26 June 2023
2.5	Noise Assessment Addendum, Staythorpe BESS, June 2023
2.6	Amended Outline Site Lighting Plan, 1:1500@A1, ref. UK008_049 Rev C, June 2023
2.7	Agent email accompanying amended Lighting Plan Outline Site Lighting Plan Rev. C, 23 June 2023
2.8	Battery Energy Storage System site internal site layout swept path analysis preliminary with NFRS fire tender, 1:500@A1, ref. 23065/ATR/02, June 2023
2.9	Amended Fire Safety Management Plan Recommendations, June 2023
2.10	Topic
2.11	Amended ESS Battery Container elevation plan, 1:50@A1, ref. UK008_31_Rev05, June 2023
2.12	Amended MV Control Unit, 1:50@A1, ref. UK008_054_Rev01, June 2023
2.13	NFRS comments and response, June 2023
2.14	Archaeological Evaluation Phase 1, November 2022 (submitted June 2023)
2.15	Staythorpe BESS Fire Smoke Plume Wind Simulations -1392554, June 2023
2.16	Staythorpe BESS Fire Smoke Plume Wind Simulations -1392553, June 2023
2.17	Staythorpe BESS Fire Smoke Plume Wind Simulations -1392552, June 2023
2.18	Staythorpe BESS Fire Smoke Plume Wind Simulations -1392551, June 2023
2.19	Proposed emergency access to Staythorpe Road Battery Energy Storage System site, layout 1:500@ A2, insets 1:250 @ A2, ref. 23065/GA/01 Rev. B, June 2023
2.20	CFD Modelling Report for Staythorpe BESS Fire Smoke Plume Wind Simulations, ref. Report Issue 0, 12 June 2023
2.21	Superseded NFRS comments response sheet 1, June 2023
2.22	Plate 2: Surface Water Bodies Surrounding the Site, June 2023
2.23	Email from Agent providing clarifications, 18 May 2023
2.24	BMA Calculations, 11 May 2023
2.25	Superseded Noise Impact Assessment, May 2023
2.26	Biodiversity Metric Assessment, May 2023
2.27	Flood Risk Assessment, May 2023
2.28	Landscape and Visual Appraisal (LVA), May 2023
2.29	Outline Construction Environmental Management Plan, May 2023
2.30	Public Right of Way Statement, May 2023

2.31	Photomontages (Figures 1.11a, 1.11b, 1.11c, 1.12a, 1.12b, 1.12c, 1.10c, 1.10d, 1.13b, 1.13c, 1.13d, 1.13e, 1.13f, 1.10e, 1.10f, 1.10g, 1.10h, 1.10i, 1.10j, 1.10k, 1.10l, 1.10m, 1.14a, 1.14b, 1.14c), May 2023
2.32	Heritage Impact Statement, May 2023
2.33	Superseded General Arrangement Permanent Works (Layout Plan) Planning Drawing 2, 1:1000@A1, ref. 4951_DR_P_0005_P3, May 2023
2.34	Temporary Construction Compound Layout Planning Drawing 3, 1:1000@A1, ref. 4951_DR_P_0006_P2, May 2023
2.35	Ecological Impact Assessment, May 2023
2.36	Landscape Mitigation Plan, 1:1000@A1, ref. 4951-DR-LAN-101 Rev. E, May 2023
2.37	Emergency Gate, 1:20@A2, ref. UK008_052 Rev. 01, May 2023
2.38	Wooden acoustic gate, 1:20@A2, ref. UK008_053 Rev.01, May 2023
2.39	Civils Site Layout, 1:500 @ A1, ref. UKGC-RCL-UG-001 Rev. P4, May 2023
2.40	400kV & 132kV COMPOUND LAYOUT SGT1, 1:250 @ A1, ref. UKGC-RCL-UG-002 Rev. P7, May 2023
2.41	132kV/33kV COMPOUND LAYOUT GT1 & GT2 CIRCUIT, 1:250 @ A1, ref. UKGC- RCL-UG-003 Rev. P7, May 2023
2.42	PRIMARY COMPOUND ELEVATIONS 400/132kV CIRCUIT SHEET 3 OF 3, 1:100 @ A1, ref. UKGC-RCL-UG-012 S3 Rev. P3, May 2023
2.43	PRIMARY COMPOUND ELEVATIONS 400/132kV CIRCUIT SHEET 1 OF 3, 1:100 @ A1, ref. UKGC-RCL-UG-012 S1 Rev. P6, May 2023
2.44	PRIMARY COMPOUND ELEVATIONS 400/132kV CIRCUIT SHEET 2 OF 3, 1:100 @ A1, ref. UKGC-RCL-UG-012 S2 Rev. P5, May 2023
2.45	Outline Surface Water Drainage Strategy, ref. REVISION 1: MAY 2023, May 2023
2.46	Planning, Design and Access Statement, ref. REVISION 1: MAY 2023, May 2023
2.47	Email chain on additional drawings proposed emergency access to Staythorpe Road battery energy storage system site ref. 23065-GA-01 and Site Layout Plan, Ref. UK008_LYP Rev. H, 15 May 2023
2.48	Example 2 Acoustic Fence, 1 March 2023
2.49	Landscape and Visual Rebuttals Comments, 21 February 2023
2.50	Superseded Secondary means of access for fire safety reasons – alternative mitigation strategy, April 2023
2.51	Vegetation Management near BESS Units, 24 February 2023
2.52	Responses to comments raised by Case Officer, 28 February 2023
2.53	Superseded ECAP Clarifications, 1 March 2023
2.54	Acoustic Fence, March 2023
2.55	BESS clarifications, 22 March 2023
2.56	Staythorpe 400Kv Cable highway Permitted Development Route, 22 March 2023
2.57	Superseded BESS Fire Safety Management Flow Chart, March 2023
2.58	Further clarifications, 29 March 2023
2.59	ECAP Clarifications, 28 March 2023

2.60	Addendum to Appendix 12 Outline Battery Safety Management Plan, 3 April 2023
2.61	Planning Committee Members briefing, March 2023
2.62	Site Entrance Junction Visibility Splay Assessment 2.4m setback distance, 1:1000@A3, ref. 4951_DR_P_0001 Rev. 2, February 2023
2.63	Appendix 2 Response to comments – members of the public, February 2023
2.64	Appendix 1 Statutory consultee summary, February 2023
2.65	Appendix 3 Other approved BESS applications, February 2023
2.66	Agent letter providing responses public consultation, 7 February 2023
2.67	Community Survey Report, January 2023
2.68	LVIA Winter Viewpoints of Site, December 2022
2.69	Schedule of drawings, 21 June 2023
2.70	SUPERSEDED FIRE SAFETY MANAGEMENT PLAN, Ref 70109641.REP.003, 14 June 2023
2.71	Superseded Outline Site Lighting Plan, 1:1500@A1, UK008_049 Rev B, May 2023
2.72	Schedule of drawings, 17 May 2023
2.73	Landscape Mitigation Plan 4951-DR-LAN-101 Rev H @ A1
CD3 Committee Report and Decision Notice	
3.1	Officer's Report 6 July 2023
3.1.1	Minutes of the Meeting Planning Committee 6 July 2023
3.2	Decision Notice 7 July 2023
CD4 The Development Plan	
4.1	Newark & Sherwood Plan Review - Amended Core Strategy 7 March 2019
4.2	Newark & Sherwood Allocations & Development Management Development Plan Document 16 July 2013
4.3	Nottinghamshire Minerals Local Plan March 2021
4.4	Newark & Sherwood Landscape Character Assessment SPD 2013
4.5	Newark & Sherwood Development Contributions and Planning Obligations SPD December 2013
CD5 Emerging Development Plan	
5.1	Second Publication Newark & Sherwood Plan Review Amended Allocations & Development Management Development Plan Document September 2023
CD6 Relevant Appeal and Court Decisions	
6.1.1	Appeal Ref.: APP/N2739/W/22/3300623 - Rawfield Lane, Fairburn, Selby LS25 5JB
6.1.2	Appeal Ref.: APP/P1615/W/22/3307140 – Land off Northington Lane, Awre, GL14 1 EL, Grid Ref Easting: 370092, Grid Ref. Northing: 208722
6.1.3	Appeal Ref.: APP/G2713/W/23/3315877 - Land South of Leeming Substation, west of the village of Scruton, bordering Fence Dike Lane, part of Low Street and Feltham Lane, DL7 0RG
6.1.4	NRS Saredon Aggregates v SSLUCHC & another [2023] EWHC 2795 (Admin)

6.1.5	Appeal Ref: APP/R0335/W/22/3304460 - Athol Villa and Woodside, Westbourne Road, College Town, Sandhurst GU47 0QX
6.1.6	Called in Application ref: APP/A0665/V/15/3013622 – Land at Clifton Drive, Sealand Road, Chester
6.1.7	Appeal Ref: APP/N5090/W/22/3298962 - National Grid Mill Hill Substation, Land west of National Grid Mill Hill Substation, Mill Hill NW7 1NT
6.1.8	High Court Judgment [2024] EWHC 279 (admin) - Mead Realisations Ltd v SSULHC and North Somerset Council; Redrow Homes Ltd v SSULHC and Hertsmere Borough Council
6.1.9	Appeal Ref: APP/D3505/A/13/2204846 - Valley Farm, Wherstead, Ipswich, IP9 2AX
6.1.10	High Court Judgment [2024] EWHC 295(admin) - Lullington Solar Park Ltd & SSULHC and South Derbyshire District Council
6.1.11	Appeal ref: APP/F1040/W/22/3313316 - Lullington Solar Park Ltd
6.1.12	High Court Judgment [2021] EWCA Civ 104 Gladman Developments Ltd v SSULHC, Corby BC and Uttesford DC
6.1.13	Save Stonehenge World Heritage Site Ltd and another -v- Secretary of State for Transport [2021] EWHC 2161 (Admin)
6.1.14	R (Substation Action Save East Suffolk Ltd) v Secretary of State for Business, Energy and Industrial Strategy [2022] EWHC 3177 (Admin)
6.1.15	R (Bramley Solar Farm Residents Group) v Secretary of State LUHC [2023] EWHC 2842
6.1.16	R (Substation Action Save East Suffolk Ltd) v Secretary of State for Business, Energy and Industrial Strategy [2024] EWCA Civ 12
6.1.17	Appeal Ref: APP/L3245/W/23/3329815 - Land to the South of Hall Lane, Kemberton, Telford
6.1.18	Appeal Ref: APP/V2635/W/23/3323065 - Land SE of Poplar Farm, Harps Hall Road, Walton Highway, Wisbech, Norfolk, PE14 7DL
6.1.19	Appeal Ref: APP/L3245/W/23/3332543 - Land west of Berrington, Shrewsbury, Shropshire, SY5 6HA
CD8 Relevant Material Considerations	
CD8.1 Legislation	
8.1.1	Infrastructure Planning (Electricity Storage Facilities) Order 2020
8.1.2	The Climate Change Act 2008 (2050 Target Amendment) Order 2019
8.1.3	The Energy Act 2013
8.1.4	Five Year Review of the Energy Act 2013
8.1.5	Planning and Compulsory Purchase Act 2004 [Section 38(6)]
8.1.6	Planning (Listed Buildings and Conservation Areas) Act 1990 [Section 66]
8.1.7	The Conservation of Habitats and Species Regulations 2017
8.1.8	Natural Environment and Rural Communities Act (2006)
8.1.9	Environment Act 2021
8.1.10	The Hedgerow Regulations 1997
CD8.2 National Planning Policy and Guidance	
8.2.1	National Planning Policy Framework (2023)
8.2.2	Planning Practice Guidance Renewable and Low Carbon Energy
8.2.3	Planning Practice Guidance Flood Risk and Coastal Change

8.2.4	Overarching National Policy Statement for Energy (EN-1) (November 2023)
8.2.5	National Policy Statement for Renewable Energy Infrastructure (EN-3) (November 2023)
8.2.6	National Policy Statement for Electricity Networks Infrastructure (EN-5) (November 2023)
8.2.7	Sustainable Drainage Systems Non-statutory technical standards for sustainable drainage systems (DEFRA, March 2015)
8.2.8	New Perspective on Land and Soil in Environmental Impact Assessment (IEMA, 2022)
CD8.3 National Energy Policy and related documents	
8.3.1	National Infrastructure Assessment (October 2023)
8.3.2	Powering Up Britain. Energy Security Plan (March 2023)
8.3.3	Infrastructure Progress Review 2023 (March 2023)
8.3.4	British Energy Security Strategy (April 2022)
8.3.5	Transitioning to a net zero energy system: smart systems and flexibility plan 2021 (July 2021)
8.3.6	Industrial Decarbonisation Strategy (March 2021)
8.3.7	Energy White Paper. Powering our Net Zero Future (December 2020)
8.3.8	The Committee on Climate Change: The Sixth Carbon Budget. The UK's Path to Net Zero (December 2020)
8.3.9	The Ten Point Plan for a Green Industrial Revolution (November 2020)
8.3.10	National Infrastructure Strategy Fairer, Faster, Greener (November 2020)
8.3.11	Reducing UK Emissions: 2020 Progress Report to Parliament (June 2020)
8.3.12	Net Zero - Opportunities for the Power Sector (March 2020)
8.3.13	Net Zero – The UK's Contribution to Stopping Global Warming (May 2019)
8.3.14	Net Zero - Technical Annex: Integrating Variable Renewables (May 2019)
8.3.15	National Infrastructure Delivery Plan 2016-2021 (March 2016)
8.3.16	National Infrastructure Commission's Smart Power Report (March 2016)
8.3.17	Progress in reducing emissions: 2023 Report to Parliament (June 2023)
8.3.18	UK Battery Strategy (November 2023)
8.3.19	National Grid – Future Energy Scenarios (2022)
8.3.20	Government Press Release (23 Nov 2023: £960 million investment in power network
8.3.21	National Grid: Great Grid Upgrade Projects
CD8.4 Local Energy Policy and related documents	
8.4.1	Energy Strategy 2019-2030 D2N2 Clean Industrial Revolution (March 2019)
8.4.2	Newark and Sherwood District Council Climate Change Emergency Strategy (September 2020)
8.4.3	Newark and Sherwood District Council Community Plan 2023-2027 November 2023
CD8.5 Infrastructure operator related documents	
8.5.1	2023 Future Energy Scenarios (July 2023)
8.5.2	National Grid ESO: Day in the Life 2035 Second Edition Executive Summary (October 2022)

8.5.3	Electricity Ten Year Statement (ETYS) (August 2023)
8.5.4	Electricity Ten Year Statement August 2023 Appendix A
CD8.6 Biodiversity Legislation and Guidance	
8.6.1	UK BAP Biodiversity: The UK Steering Group Report Volume 2 Action Plans (1995)
8.6.2	Buglife.org.uk Ancient and Species Rich Hedgerows
8.6.3	DEFRA Hedgerow Survey Handbook (2nd Edition) 2007
8.6.4	CIEEM Bulletin: InPractice Issue 89: Conservation Translocations (September 2015)
8.6.5	Natural England: Guide to Assessing Development Proposals on Agricultural Land February 2021
CD8.7 Relevant Newark and Sherwood Planning Applications	
8.7.1	Application 23/00317/FULM – Land west of Staythorpe Road and south of A617
8.7.2	Application 23/01837/FULM – Land west of Main Street, Kelham
CD8.8 Heritage related documents	
8.8.1	Newark & Sherwood Non-Designated Heritage Asset Criteria 2021
8.8.2	Historic England Advice Note 15: Commercial Renewable Energy Development and the Historic Environment (February 2021)
8.8.3	Historic England's The Setting of Heritage Assets – Historic Environment Good Practice Advice in Planning 3 (2nd Edition) (2017)
CD8.9 Landscape Guidance	
8.9.1	Guidelines for Landscape and Visual Assessment – GLVIA3
8.9.2	Natural England – National Character Area Profile 48: Trent and Belvoir Vales
8.9.3	Landscape Institutes Technical Guidance Note:2/19: Residential Visual Amenity Assessment
CD9.1 Additional plans, drawings, documents not previously seen by the LPA (further information)	
9.1.1	Agricultural Land Classification Report, November 2023
9.1.2	Enhanced Mitigation Strategy (November 2023) @ A1
9.1.3	Annotated Zone of Theoretical Visibility Analysis, October 2023
9.1.4	Context Views, October 2023
9.1.5 A	Accurate Visual Representations (Pingley Lane), October 2023
9.1.5 B	Accurate Visual Representations (Staythorpe West), October 2023
9.1.6	Residential Visual Amenity Assessment, November 2023
9.1.7	Outline Soil Management Plan
CD9.2 Additional plans, drawings, documents not previously seen by the LPA (Potential Scheme Amendments)	
9.2.1	Superseded Site Layout Plan UK008_LYP Rev Q @ A1
9.2.2	Construction Compound UK008_02_LYP Rev D @ A1
9.2.3	ESS Battery Container Elevation Plan UK008_31 Rev 06 @ A1
9.2.4	Elevations 400kV Substation 1408-121/1 Rev A @ A1

9.2.5	Civil Works Layout 400kV Substation 1408-221 Rev A @ A1
9.2.6	Civil Works Layout 33kV Substation 1408-222 Rev A @ A1
9.2.7	Outline Site Lighting Plan UK008_49 Rev D @ A1
9.2.8	BESS Site Internal Site Layout Swept Path Analysis with NFRS Fire Tender 23065/ATR/02 Rev B @ A1
9.2.9	Amended Scheme Enhanced Mitigation Strategy, November 2023 @ A1
9.2.10	Technical Addendum – Noise (November 2023) v1.0
9.2.11	Fire Safety Management Plan 70109641.REP.005 (November 2023)
9.2.12	Ecological Impact Assessment Addendum (BIOC23-087) V1.0
9.2.13	Site Layout Plan UK008_LYP Rev R @ A1
9.2.14	Hedge Translocation Plan TC.203 @ A1
9.2.15	Standard Elevations 400kV 33kV Relay & Control Rooms UK008_058 Rev P3 @ A1
CD10 Any relevant correspondence with the LPA including any supporting information submitted with the application in accordance with the list of local requirements	
10.1	Archaeology - Historic Environment Officer, 16 December 2022
10.2	Archaeology - Historic Environment Officer, 20 April 2023
10.3	Archaeology - Historic Environment Officer, 15 June 2023
10.4	Archaeology - Historic Environment Officer, 22 June 2023
10.5	Averham, Kelham and Staythorpe Parish Council, 21 December 2022
10.6	Averham, Kelham and Staythorpe Parish Council, 22 December 2022
10.7	Averham, Kelham and Staythorpe Parish Council, 30 January 2023
10.8	Averham, Kelham and Staythorpe Parish Council and Staythorpe BESS Action Group, 5 July 2023
10.9	Staythorpe BESS Action Group, 29 June 2023
10.10	Staythorpe BESS Action Group, 6 July 2023
10.11	Rolleston Parish, 9 February 2023
10.12	National Highways, 6 April 2023
10.13	Nottinghamshire County Council Highways, 21 December 2022
10.14	Nottinghamshire County Council Highways, 22 March 2023
10.15	Nottinghamshire County Council Highways, 31 May 2023
10.16	Nottinghamshire County Council Rights of Way, 15 December 2022
10.17	Nottinghamshire County Council Rights of Way, 1 June 2023
10.18	Conservation Officer – Heritage Advice, 5 January 2023
10.19	Conservation Officer - Heritage Advice, 31 May 2023
10.20	Environmental Health Officer, 6 December 2022
10.21	Environmental Health Officer, 17 April 2023
10.22	Environmental Health Officer, 26 May 2023
10.23	Environmental Health Officer, 23 June 2023
10.24	Environmental Health Officer, 5 July 2023
10.25	Environment Agency, 1 December 2022
10.26	Environment Agency, 11 April 2023
10.27	Health and Safety Executive, 19 December 2022
10.28	Health and Safety Executive, 4 April 2023
10.29	Health and Safety Executive, 18 May 2023
10.30	Historic England, 15 December 2022
10.31	Historic England, 5 April 2023
10.32	Historic England, 23 June 2023
10.33	Natural England, 18 January 2023

10.34	Natural England, 30 May 2023
10.35	Natural England Annexe A, 18 January 2023
10.36	Nottinghamshire County Council Lead Local Flood Authority, 7 December 2022
10.37	Nottinghamshire County Council Lead Local Flood Authority, 20 April 2023
10.38	Nottinghamshire County Council Lead Local Flood Authority, 25 May 2023
10.39	Network Rail, 30 March 2023
10.40	Network Rail Standard Informatives, 30 March 2023
10.41	Network Rail, 14 April 2023
10.42	Nottinghamshire Fire & Rescue Service, 6 January 2023
10.43	Nottinghamshire Fire & Rescue Service, 12 January 2023
10.44	Nottinghamshire Wildlife Trust, 28 February 2023
10.45	Severn Trent Water Ltd, 6 March 2023
10.46	Trent Valley Internal Drainage Board, 2 March 2023
10.47	Nottinghamshire Area Ramblers, 22 January 2023
10.48	Tree and Landscape Officer, 1 February 2023
10.49	Supporting document with tree officer comments
10.50	PLANNING COMMITTEE MEMBERS BRIEFING
10.51	21.02.23 Landscape and Visual Rebuttals Comments, 4 April 2023
10.52	Superseded 28.02.23 secondary means of access for fire safety reasons – alternative mitigation strategy, 4 April 2023
10.53	01.03.23 Vegetation management, 4 April 2023
10.54	01.03.23 BESS PLANNING RESPONSES, 4 April 2023
10.55	Superseded 01.03.23 ECAP STAYTHORPE BESS RESPONSE, 4 April 2023
10.56	01.03.23 Acoustic fence, 4 April 2023
10.57	SUPERSEDED 01.03.23 BIODIVERSITY METRIC ASSESSMENT, 4 April 2023
10.58	Superseded LANDSCAPE MITIGATION PLAN, 1:1000@A1 Ref 4951-DR-LAN-101 Rev D, 4 April 2023
10.59	Superseded 01.03.23 LANDSCAPE AND VISUAL APPRAISAL Rev A, 4 April 2023
10.60	Superseded 01.03.23 BMA APPENDIX 1, 4 April 2023
10.61	Superseded 01.03.23 ECOLOGICAL IMPACT ASSESSMENT, Rev 1 March 2023, 4 April 2023
10.63	08.03.23 SCREENING OPINION OFFICER REPORT, 4 April 2023
10.64	22.03.23 BESS CLARIFICATIONS, 4 April 2023
10.65	22.03.23 STAYTHORPE 400KV CABLE HIGHWAY PERMITTED DEVELOPMENT ROUTE, 4 April 2023
10.66	SUPERSEDED 29.03.23 BESS FIRE SAFETY MANAGEMENT FLOW CHART, 4 April 2023
10.67	29.03.23 ABERDEEN DYCE SITE BLOCK PLAN, 4 April 2023
10.68	29.03.23 DYCE DECISION NOTICE, 4 April 2023
10.69	29.03.23 FURTHER CLARIFICATIONS, 4 April 2023
10.70	29.03.23 ECAP BESS RESPONSE, 4 April 2023
10.71	03.04.23 ADDENDUM TO APPENDIX 12 OUTLINE BATTERY SAFETY MANAGEMENT PLAN, 4 April 2023

10.72	Superseded 03.04.23 GENERAL ARRANGEMENT PERMANENT WORKS (LAYOUT PLAN), 1:1000@A1, Ref 4951_DR_P_0005_P2, 4 April 2023
10.73	01.03.23 EXAMPLE 2 ACOUSTIC FENCE, 5 April 2023
10.74	Superseded SITE LAYOUT PLAN, 1:1500 @A1, Ref UK008_LYP Rev H, 15 May 2023
10.75	Superseded PROPOSED EMERGENCY ACCESS, Layout 1:500 @ A2, Inset 1, 2 and 3 1:250@A2, Ref 23065/GA/01, 15 May 2023
10.76	EMAIL CHAIN RE ADDITIONAL DRAWINGS, 15 May 2023
10.77	Supplement Schedule of Communications 06072023 1600 Planning Committee
10.78	Supplement Second Schedule of Communications 06072023 1600 Planning Committee
10.79	Supplement Third Schedule of Communications 06072023 1600 Planning Committee
10.80	Supplement Additional Supplementary Information - Agenda Items 5 and 6 06072023 1600 Planning
10.81	Supplement Supplementary Information - Agenda Items 5 and 6 06072023 1600 Planning Committee
CD11 Appeal Documents	
11.1	Appeal Form
11.2	Draft Statement of Common Ground
11.2.1	Final Statement of Common Ground
11.2.2	Flood Risk and Sequential Test Topic Paper
11.2.3	Landscape & Visual Topic Paper
11.3	Appellant's Statement of Case
11.4	Core Documents List Rev 6
11.5	Hedgerow Survey
11.6	Suggested Agreed Planning Conditions (24 April 2024 version)
11.7	Draft Unilateral Undertaking (s106 Agreement) [Superseded]
11.7.1	Draft s106 Agreement
11.7.2	Completed s106 Agreement dated 30 April 2024
11.8	Council's Statement of Case
11.9	Summary Description of Development
11.10	BESS Visualisations (CGIs)
CD12 Responses to Amended Scheme Consultation	
12.1	Mrs P Hall – 25/01/2024
12.2	Richard Lomax – 26/01/2024
12.3	Tracey Carlisle – 27/01/2024
12.4	Tracey Carlisle – 27/01/2024
12.5	Marian Ellis – 29/01/2024
12.6	Ian King – 30/01/2024
12.7	Alison Brothwell – 30/01/2024
12.8	S J Brothwell – 30/01/2024
12.9	Tom Clark – 01/02/2024
12.10	Jayne Amat – 02/02/2024
12.11	James Adey – 02/02/2024
12.12	Catherine Townsend – 15/02/2024
12.13	Flora Hughes-Stanton – 16/02/204
12.14	Nigel Britton – 15/02/2024

12.15	Ann Davies – 15/02/2024
12.16	Chris Hall – 12/02/2024
12.17	Andy Fereday – 12/02/2024
12.18	Alison King – 09/02/2024
12.19	Deboarh Storey – 16/02/2024
12.20	Carla Bradbury – 16/02/2024
12.21	Cllr Keith Melton – 16/02/2024
12.22	Diana King – 15/02/2024
12.23	John Hinchliff – 14/02/2024
12.24	Rickie Sandford – 09/02/2024
12.25	Robert Galley – 08/02/2024
12.26	Dale Brain (NSDC EHO) – 05/02/2024
12.27	Nottinghamshire County Council (Lead Local Flood Authority) – 27/12/2023
12.28	Environment Agency – 04/01/2024
CD13 Local Policy and Guidance	
CD13.1	SFRA Review 2016 Consultation Document
CD14 Appellant Proofs of Evidence	
CD14.1.1	Summary Proof of Evidence of Lee Morris of Tir Collective on matters relating to Landscape and Visual Impact
CD14.1.2	Proof of Evidence of Lee Morris of Tir Collective on matters relating to Landscape and Visual Impact
CD14.1.3	Appendices of Lee Morris of Tir Collective on matters relating to Landscape and Visual Impact
CD14.1.4	Landscape and Visual Rebuttal
CD14.1.5	Staythorpe Road section
CD14.2.1	Summary Proof of Evidence of Kevin Tilford of Weetwood in relation to Flood Risk and Drainage
CD14.2.2	Proof of Evidence of Kevin Tilford of Weetwood in relation to Flood Risk and Drainage
CD14.3.1	Summary Proof of Evidence of Bruce Lascelles of Arcadis on matters relating to Agricultural Land
CD14.3.2	Proof of Evidence of Bruce Lascelles of Arcadis on matters relating to Agricultural Land
CD14.3.3	Appendix of Proof of Evidence of Bruce Lascelles of Arcadis on matters relating to Agricultural Land (Agricultural Land Survey Factual Report)
CD14.4.1	Summary Proof of Matthew Sharpe of Quod in relation to Planning
CD14.4.2	Proof of Evidence of Matthew Sharpe of Quod in relation to Planning
CD14.4.3	Appendices of Matthew Sharpe of Quod in relation to Planning [Note: BNG Technical Note and BNG Calculation updated on 4th April 2024]
CD14.4.4	Planning Rebuttal
CD15 Council's Proofs of Evidence	

CD 15.1	Summary Proof of Evidence of Nigel Wakefield of Node on matters relating to Landscape and Visual Impact
CD15.2	Proof of Evidence of Nigel Wakefield of Node on matters relating to Landscape and Visual Impact
CD15.3	Appendices of Nigel Wakefield of Node on matters relating to Landscape and Visual Impact
CD15.4	Summary Proof of Jonathan Weekes of Aitchison Raffety in relation to Planning
CD15.5	Proof of Evidence of Jonathan Weekes of Aitchison Raffety in relation to Planning
CD15.6	LPA Landscape Rebuttal
CD15.7	LPA Agricultural Landscape Classification Rebuttal
CD15.8	LPA Planning Rebuttal
Inquiry Documents	
ID1.1	LPA Opening Submissions
ID1.2	LPA Closing Submissions
ID2.1	Appellant Opening Submissions
ID2.2	Appellant Closing Submissions
ID3	Cllr Ian Bradey Oral Statement Transcript
ID3.1	Councillor Ian Bradey referenced document – McMicken Report
ID3.2	Councillor Ian Bradey Tesla battery article links
ID3.3	Appellant Response to Cllr Ian Bradey Statement (Fire Safety note)
ID4	Debs Storey Oral Statement Transcript with appended documentation referenced
ID5	Carla Bradbury Oral Statement Transcript and supporting documentation
ID6	Paula Hall Oral Statement Transcript
ID8	Dean Gillen Otter Submission
ID8.1	Appellant Otter Technical Note
ID9	Great North Road Preliminary Masterplan Sheet 1
ID9.1	Great North Road Preliminary Masterplan Detail Sheet 1
ID9.2	Annotated Plan 4951-REP-045 (base plan prepared by Arcus) showing All PDA 18 sites and Great North Road site and substation
ID10.1	NSDC Appointment Letter to Nigel Wakefield
ID10.2	NSDC Appointment Letter to Jonathan Weekes
ID11	NSDC Proposed Main Modifications and Clarification Minor Amendments to the Amended Allocations & Development Management DPD (January 2024)
ID12	Accompanied site visit itinerary
ID13	Appellant Schedule of Witnesses
ID14	Council Schedule of Witnesses
ID15	Updated Appendices to Nigel Wakefield's Proof of Evidence
ID16	Winter Views 2 Behay Gardens
ID17	Braintree DC v SSCLG [2018] EWCA Civ 610
ID19.1	Written submission of Debs Storey (15.04.2024)
ID19.2	Attachments to Written submission of Debs Storey: - Staythorpe Power Station Deed of Consent, paragraphs 4, 5 & 6 - BEIS letter reference STC/S36/BEIS/002 - Technical paper "Review of gas emissions from lithium-ion battery thermal runaway failure"

	- pv magazine international article "How safe are lithium iron phosphate batteries" - Carla Bradbury Objection Letter Appendix 3 – Photographs
ID19.3	Appellant response to written submission of Debs Storey
ID20	S106 Compliance Statement
ID21	"Health and Safety Guidance for Grid Scale Electrical Energy Storage Systems" (Department for Energy Security & Net Zero, March 2024)
ID22	Appellant Response Note to "Health and Safety Guidance for Grid Scale Electrical Energy Storage Systems" (23 April 2024)

Appendix 3 – Longhedge Grid Report

POWER FOR GOOD

Land East of Hawksworth and Northwest of Thoroton, Shelton Road, Thoroton.

Grid Connection Feasibility

Author: Patrick Smart

Contents

Personal Background

My name is Patrick Smart and I am Energy Networks Director at RES. I have a degree in Business Studies and have worked in various areas of energy network regulation / grid connection for twenty five years.

As Energy Networks Director, I am responsible for all things grid relating to the RES onshore renewable energy and energy storage portfolio in UK and Ireland. Between 2014 and 2018, I was Chair of the Renewable UK Grid and Systems Group. From 2020 to 2022, I completed a two year contract as an independent advisor on the Northern PowerGrid Customer Engagement Group, a committee established to scrutinise Northern PowerGrid's RIIO ED2 business plan that will run during its next price control between 2023 and 2028. I currently sit on the DESNZ convened Connections Process Advisory Group (CPAG) which advises on delivery of the Government Connection Actions Plan.

Between 1999 and 2005, I held two senior roles within the OFGEM Networks Division and prior to joining RES in February 2011, I was Head of Commercial and Regulatory Consulting at Senergy Econnect, now part of Lloyds Register.

The content of this report has been prepared in accordance with current industry practice and any opinion expressed in it is my own.

I have prepared the following overview of the key restrictions and limiting factors when exploring feasible options for grid connection solutions in respect of the Longhedge solar farm proposal, although the considerations involved here would be applicable to any renewable power station project. The following three factors are of particular importance:

1. Grid connection capacity and design – the capability of electrical plant at different voltages to accommodate additional power generation and the types of plant available.
2. Local Grid Integration – the ability of the existing network to integrate a new point of connection.
3. Wider Grid Reinforcement – the possible need to reinforce that existing grid infrastructure due to the impact of new generation.

The Proposed Longhedge Grid Connection Design

In discussing these connection considerations, it will be helpful to do so in light of the actual connection solution that has been agreed with National Grid Electricity Distribution East Midlands (NGED EM) Longhedge Solar Farm will "loop" into an existing 132kV overhead line that passes through the project site boundary. To achieve this, NGED EM will construct two new terminal towers from which the existing 132kV overhead line will drop into the project substation and short lengths of cable run into the Longhedge Solar Farm substation. All of these works will take place within the Longhedge Solar Farm site boundary and can be completed in a timescale that aligns with completion of construction of the Longhedge Solar Farm. The design, consenting and delivery of the "loop in" works will be the responsibility of NGED EM and aspects of drawings submitted relating to those loop in works are based on information and drawings provided by NGED EM.

The 132kV overhead line into which Longhedge will connect[1] is fed from the Staythorpe Grid Supply Point (GSP) substation. NGED EM and National Grid Electricity Transmission (NGET) have commenced planning on installing a third supergrid transformers (SGTs) at Staythorpe[2]. This work is committed and will complete in October 2030. This work will not delay connection of Longhedge Solar Farm but it will mean that, until the SGT upgrade at Staythorpe is complete, its operation will be occasionally curtailed through the operation of an Active Network Management (ANM) system. This is a common arrangement now deployed by all grid companies in order to maximise integration of essential new renewables onto their network until investment in network infrastructure catches up. Once the SGT works at Staythorpe are complete, the ANM and associated curtailment will be removed from Longhedge Solar Farm's operation.

[1] Staythorpe tee – Hawton tee – Ashfordby – Melton GT1 circuit.
[2] https://www.nationalgrid.co.uk/downloads-view-reciteme/658870

Grid Connection Circuit Capacity and Design Factors

When considering options for design of a grid connection for a new renewable power station, key considerations will be;

- Voltage / capacity
- Overhead Line or underground cable

Voltage / Capacity

New grid capacity tends to be delivered in volumes sufficient to meet new generating capacity. Doing so has to take account of the thermal capacities of typically available cable or overhead line at different voltages. Once constructed, the new grid connection will be adopted by the Distribution Network Operator (DNO) as part of its regulated network and DNOs will only adopt assets for which they have previously given type approval. This places a clear restriction on the grid connection design options in line with the type approved cables and overhead lines of the DNO in question. Even the heaviest typical 33kV overhead lines or conductors operated by DNOs will be of insufficient rating to safely convey generating output of 49.9MW. In practice only 66kV and 132kV cabling will be able to accommodate 49.9MW of new generation capacity and there is no network of 66kV voltage anywhere in the proximity of the Longhedge Solar site.

Overhead Line or Underground Cable

For voltages up to and including 132kV, a single circuit can be carried on a wooden pole structure. Typically, overhead lines bring significantly lower cost of construction than underground cable however they bring increased permanent amenity impacts. Some underground cabling in specific situations can benefit from permitted development rights, but outside of those situations require planning consent as do overhead lines. Once constructed, live overhead lines will impose safety related restrictions on the ability to work underneath or in close proximity to them and will involve acquisition of land rights reflecting those permanent restrictions on the corridor of land through which the overhead line runs. Typical 132kV wood pole support structures will be of elevation between 12.5m and 17m. It will also require a working width corridor in the region of 25m. An image of a typical wood pole structure is set out in Figure 1 below.

An overhead line solution for any new circuit of 132kV, or greater voltage, of a length of 2km or greater would fall outside of the Town and Country Planning Act regime and would require consent under the Planning Act 2008 as a Nationally Significant Infrastructure Project.

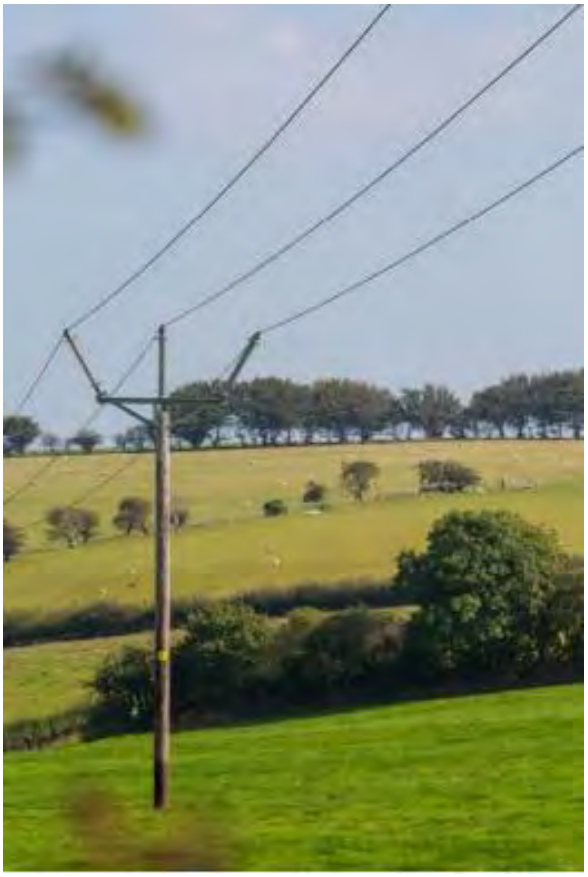


Figure 1 – Typical 132kV Trident Wood Pole structure

Although use of underground cable can in some situations allow use of permitted development rights as the means of obtaining planning consent, installing cables of 132kV voltage is a significant undertaking with a wide range of potential construction impacts depending on the land through which the route has to pass. Minimum installation depth is around one meter and land take is significant which contributes to a much increased unit cost. Underground cable can cost anywhere from 5 times to 10 times more than overhead line. A cross section drawing of a double 132kV circuit underground installation of the type required for Longhedge solar farm is set out on in Figure 2 below. Minimum width of a double 132kV circuit trench is 1.35m but is often wider. A working width in the region of 16 m is needed in addition to the installation width itself both of which together then need to be safeguarded from future surface activities that could compromise the cabling or its future

maintenance, for which permanent land rights would need to be acquired.

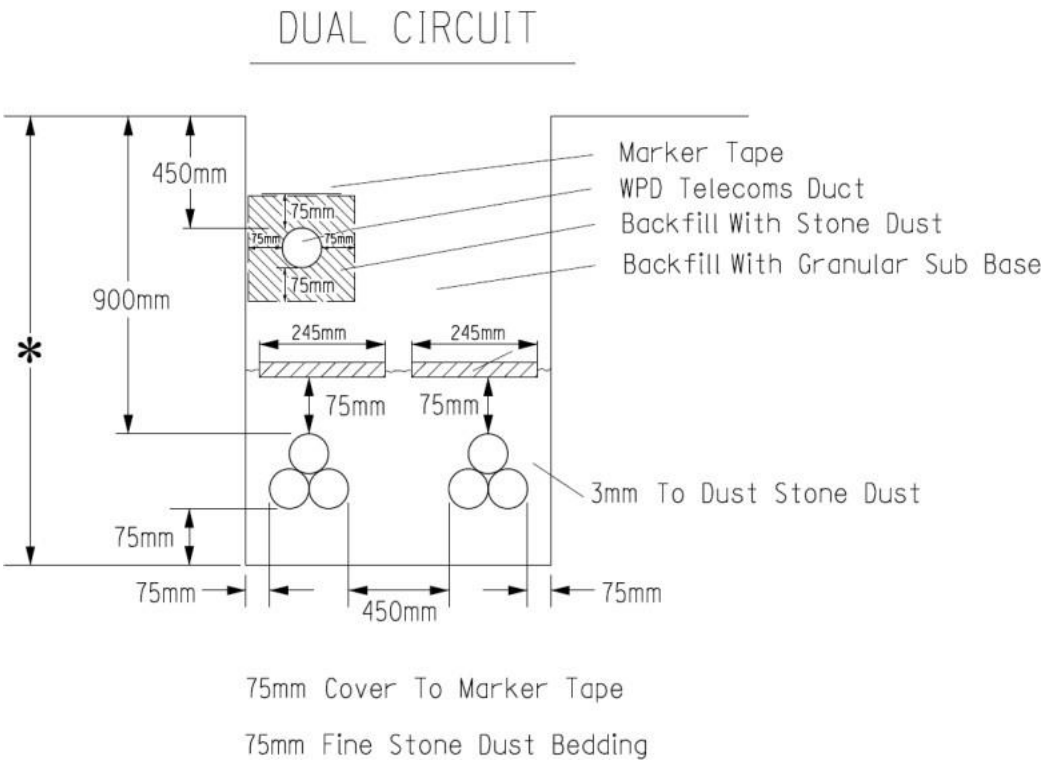


Figure 2 – Cross section of double 132kV cable trench installation

Grid Integration

The following is a summary of the typical approaches to integration of a new grid connection into the existing electricity grid.

Tee in

A new circuit is constructed from the new (in this case renewable) power station substation to a point on an existing DNO circuit, usually requiring "break in" and jointing works. The DNO will adopt the new circuit from the new tee in point to the ownership boundary at the renewable power station substation.

Tee in opportunities are the simplest form of connection but are usually limited by grid company network protection standards which limit the number of ends that a circuit can have. This is to ensure that their protection systems can work safely and efficiently at all times.

Loop in

An existing DNO circuit is redirected through the new power station circuit. This usually requires the construction of 3 switch bays at the new power station substation. Loop in connections deal with protection challenges associated with a tee in connection but can often pose planning and property challenges depending on the extent of the redirection of existing overhead lines that is required.

Busbar extension in Substation

A busbar extension usually involves the construction of a new grid connection circuit from the new power station into an existing grid substation. In order for this to be a possibility, the existing grid substation must either have a spare switch bay or it must at least have the space within the substation compound to extend the existing busbar in order to accommodate a new switch bay.

Network Reinforcement

The integration of a new power station may take the loading of the existing grid systems beyond its

rated capabilities. This may be in relation to the thermal rating of a cable or a transformer but it may also be linked to the fault current rating of switchgear within existing substations or even the impact on the forecast voltage profile of a section of grid. If so, it is often the case that the required reinforcements may be significantly remote from the location of the new power station project in question.

GB Grid Connection Opportunities (the Grid Queue)

Grid companies and regulators have historically focused on minimising short term cost over strategic reinforcement to help integrate renewables that will be essential to meeting the targets of decarbonising our electricity system by 2035 and achieving net zero by 2050. Build out of new grid has not kept pace with progression of demand for new connections from new renewable power stations. This shortfall of grid capability coupled with a new connections process with insufficient rigour has given rise to a very significant "queue" of new renewable generators waiting many years for new connection.

Overview of GB Grid Queue

According to data shared by NGESO, the current state GB grid queue sits at around 700GW of new generating capacity and they expect this number to hit c800GW by the end of the summer. The data set out in Figure 3 below was published by NGESO in January 2024.

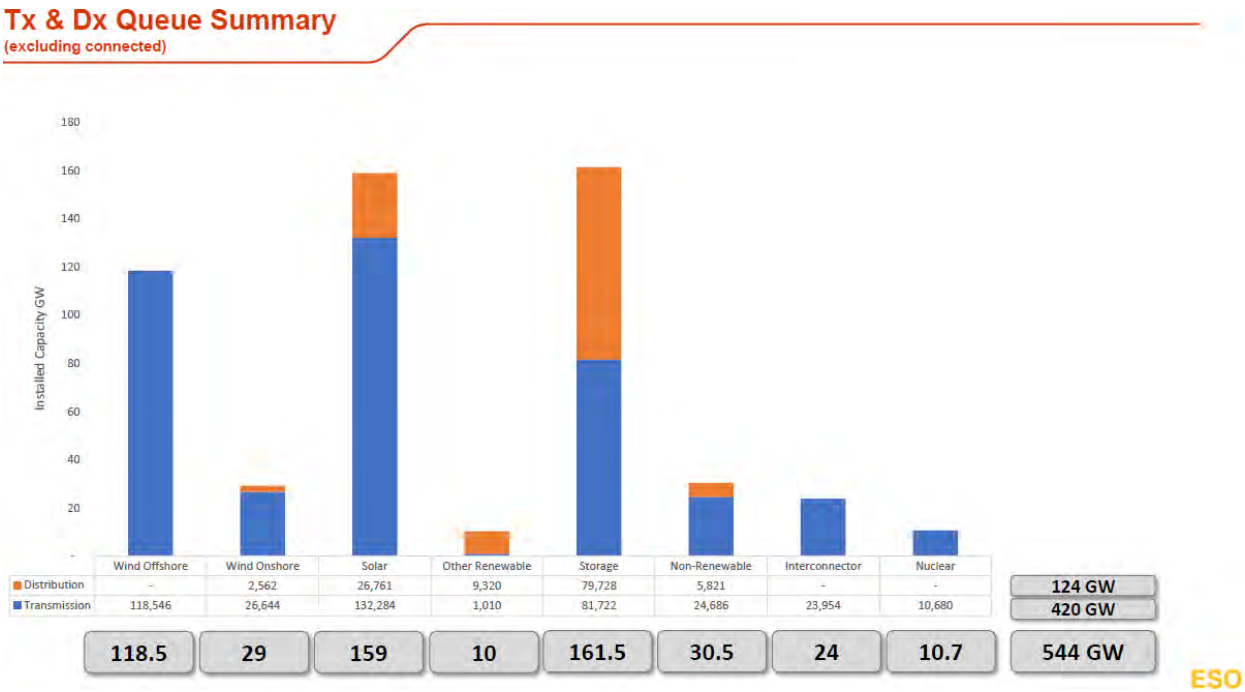


Figure 3 – GB Grid Queue in January 2024

A significant proportion of the accepted grid offers that make up the grid queue are from developers with impractical projects that are still able to exploit the position in the grid queue that they have secured. NGESO has now introduced new rules to remove such projects. Longhedge Solar Farm is clearly not such a project.

Overview of impact of the Grid Queue on "local" grid connection opportunities

One of the key effects of the grid queue is that existing transmission substations with spare switch bays have had those spare bays taken by queue generators and opportunities to extend busbars in those substations have now generally been exhausted. Transmission owners are left with the option of either extending the boundary of an existing substation, an option that will usually involve the securing of new land rights or variation to planning consent before undertaking a major rebuild, or constructing new Grid Supply Point (GSP) Substations.

Key Conclusions of Grid Connection Feasibility for new Renewable Power Stations:

1. In landing on a feasible connection design, developers must find the best balance between visual impact of overhead lines and the much higher cost of construction of underground cables at 132kV.
2. Developers of essential new renewable power station projects are rarely in a position to consider multiple grid connection solution options. Given the extent of demand for new grid connection solutions and the scarcity of technically feasible grid connections, an individual viable grid solution for a new project is increasingly a rare circumstance.
3. Developers are often faced with delays to grid connections of well over a decade as a result of the need to reinforce the existing transmission system through the construction of new GSP substations. National Grid Energy System Operator (NGESO) have quoted for connections as far in the future as 2037 and the terms for connection will involve the acceptance of very significant liabilities in the form of NGESO cancellation charges associated with the required transmission reinforcements.

Longhedge Solar – Grid Connection Key Conclusions

Considering the factors outlined above to the consideration of the best grid connection solution for Longhedge Solar Farm, we arrive at the following conclusions.

- Design (Capacity): In light of the ratings of relevant connection plant type-approved by NGED and the design of existing NGED network in the area, there was no realistic alternative to a grid connection at 132kV for a solar farm rated at 49.9MW. The heaviest 33kV cable or overhead line would have been of inadequate rating.

- Design (Overhead line or Underground Cable): Longhedge Solar Farm was developed on the basis of a 49.9MW design, which falls under the Town and Country Planning (TCPA) regime. If the associated grid connection solution did not also fall within that regime, it

would impose costs and longer timescales that the NSIP regime would impose. Use of existing overhead line infrastructure that has the capacity to accommodate the Longhedge solar project aligns with that strategy and, more importantly, it avoids the construction of new overhead lines or underground cables. By pursuing this design the project avoids construction impacts and the acquisition and / sterilisation of land that is associated with new overhead lines or underground cables.

- Grid Integration: The effect of current state GB connections queue in the area, means that all potential alternative grid solutions, usually involving tracking down a spare switch bay or a substation that has the potential to be extended, have been taken. The NGED EM contracted solution is the only one that enables grid integration within project delivery timescales. The fact that an existing overhead line of suitable voltage and capacity can be looped into the Longhedge Solar Farm substation all within the site boundaries offers obvious benefits to all stakeholders. It means that there is no need for construction of new overhead lines nor underground cables outside of the site boundary thereby keeping visual, ecological and other local impacts to an absolute minimum.

- Network Reinforcement: To secure a grid connection that can be delivered in a timescale that is not delayed by transmission reinforcements is a rare opportunity and one that should be taken to allow Longhedge Solar Farm to contribute to the meeting of UK Decarbonisation and Net Zero targets.

Appendix 4 – Longhedge Technical Report

POWER FOR GOOD

Land East of Hawksworth and Northwest of Thoroton, Shelton Road, Thoroton.

Technical Report

Author: Jean-Christophe Urbani

Contents

Personal Background

My name is Jean-Christophe Urbani, and I am the Global Solar Lead at RES. I have a degree in Physics, Microelectronics and Hydraulics.

As Global Solar Lead at RES, I am responsible for the design and the yield assessment of RES PV projects mainly in UK & Ireland, Germany and Sweden.

Prior to join RES I was a Consulting Director in the Renewable Advisory Business Unit at ERM with a direct lead and execution of Technical Advisory Services of Solar PV and BESS projects.

Previous to this role, I was the Head of the PV & Storage Engineering and Performance activities for an IPP (CVE) committed to creating synergies to reduce technical risks related to development, construction, and operation of solar plants.

I also had the opportunity to work for RES for 7 years with various positions mainly focused on delivering support to the development of renewable energy projects.

With more than 25 years' experience in the high technology industry and 17 years in the renewable sector, acquired through my different roles, I have a solid expertise in the design, the optimization of PV solar plants combined with a broad technical, engineering, project development and commercial knowledge of solar PV development.

This technical note describes the technical considerations regarding DC/AC installed capacity, power factor requirements, GCR and other elements that are taken into account in the design of grid connected Photovoltaic (PV) farm (solar farm).

The evidence that I have prepared is given in accordance with my expertise, and I can confirm that it is my true and professional view.

Capacity of a Solar Farm:

Direct Current, Alternating Current and Maximum Export

Direct Current and Alternating Current

In a solar farm, there are two key elements. The PV modules convert sunlight into direct current (DC) electricity during daylight hours. The inverters transform the electricity generated by the PV modules and turn it into alternating current (AC) electricity.

DC installed capacity is defined as the product of the number of modules by the nameplate wattage/output of each module. AC capacity is defined as the total output of the sum of all inverters.

The output of a solar panel is determined under carefully controlled laboratory settings, which are very different from the real operating conditions. These laboratory conditions are called Standard Test Conditions (STCs). They assume 1000 W/m2 solar irradiance, AM1.5 spectrum, and a cell temperature of 25°C. AM1.5 spectrum refers to a 1.5-atmosphere thickness (air mass or AM) corresponding to a solar zenith angle of around 48° (zenith angle is the angle to the sun relative to a vertical line).

These STCs reflect an idealised scenario that is rarely achieved in reality by a solar farm, and therefore to accommodate this difference in PV module nameplate power rating and real power delivered, solar designers generally oversize the amount of DC capacity compared to the AC. This is known as overplanting. This results in a DC to AC ratio that is greater than 1. This DC to AC ratio of more than 1 allows the maximum inverter capacity to be used more often during the day and more energy to be produced – for example in the early morning and late afternoon as showed in the graph at Figure 1:

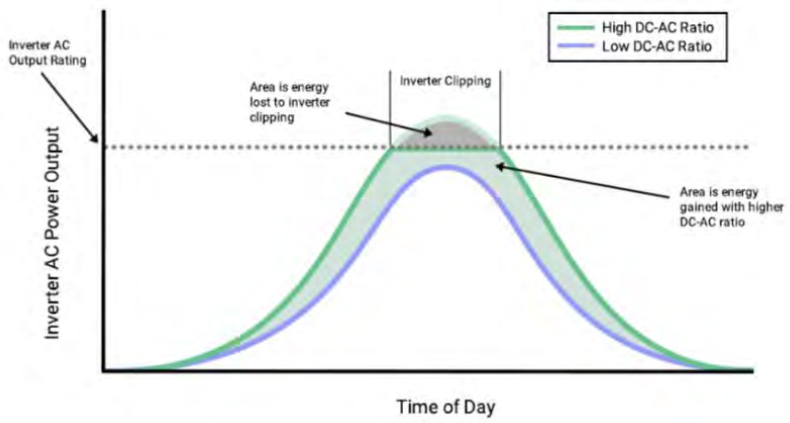


Figure 1

Any electricity that is produced in DC from the solar panels over the 49.9MWac inverter limit is constrained. This is called inverter clipping.

A typical DC/AC ratio of a solar farm is between 1.10 and 1.60 depending on the type of system (tracker/fix tilt), system size and project location.

The efficiency of a solar panel decreases by less than 0.5% each year. This is known as degradation. This results in around 12-15% less power being generated by each panel by the end of its life, which is between 30 and 40 years.

This effect has an impact on the DC/AC ratio over time and has to be take into account in design of the solar farm.

The following data in this report shows how the above considerations (of varying levels of radiance during the day and year and the reduction in efficiency of panels over time) are addressed in the design of the project and the resulting effects on production of renewable energy exported to the grid. A reasonable level of installed DC capacity in the panels proposed in excess of 50MWdc (overplanting) will result in an amount of inverter clipping but will support the amount of time during which the development exports at its maximum export capacity (MEC) of 49.9MWac. It will also contribute to the overall amount of renewable energy exported to the grid in any year. Avoiding any overplanting would avoid inverter clipping but would also involve reducing the amount of time at which the development

ever achieved its MEC and would reduce the overall amount of renewable energy exported to the grid in any year.

Maximum Export Capacity

The grid connection associated with a solar farm also dictates the maximum amount of electricity that can be exported (Maximum Export Capacity or MEC). A Power Park control system is programmed and commissioned not to exceed output greater than registered capacity. All new projects in the National Grid Electricity Distribution (NGED) network include the installation of a local control panel which monitors the MW output. If this were to ever exceed the Maximum Export Capacity the project would risk being tripped off by the NGED. There is also a tariff meter (which takes an average output of the site every 30 minutes). Power quality meters measure real time outputs from the site, which means NGED can monitor and analyse the amount of electricity a project exports and ensure that it is not more than the contracted capacity.

Attached, at Appendix B, are extracts of the connection agreement which show the maximum export capacity 49.9MW.

Other PV design considerations eg GCR and tilt

Another important parameter that characterises the design of a solar farm on the ground is the Ground Coverage Ratio (GCR).

It represents the ratio of module area to land area, or the ratio of array length to row-to-row pitch (L/R in Figure 2). Inter-row shading increases with GCR. β is the tilt angle, and z measures height along the array. The screening angle ψ(z) represents a two-dimensional field-of-view reduction at height z.

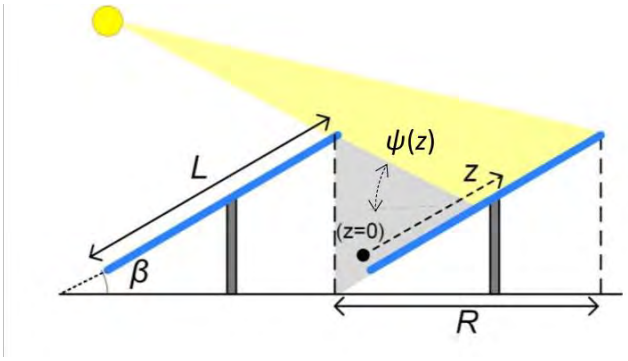


Figure 2

These different parameters (L, R, β, ψ) are usually optimised during the development of the project. The GCR is the result of this optimisation, and it generally varies from 0.35 to 0.75.

There is a minimum spacing of 2m between the rows to enable maintenance, otherwise the site is not workable. Also, if you increase density, you also increase shading losses and make the site less efficient.

The predicted performance of the original layout applied for and the current layout are set out in Appendix A.

I have been asked to address whether an equivalent yearly production of energy could be achieved on a smaller land area by increasing the GCR or using a higher rated panel and if so, what the visible extent of such changes might be:

- We are at what we think is an efficient GCR for this site and increasing it further will lead to higher levels of shading and energy loss for that reason.
- We have also taken account of forecast improvement in module efficiency in proposing the number of panels likely to be used and as for any developer need to retain some flexibility for the site to remain competitive when sourcing components for the final construction.
- Any scope for further changes to GCR or panel rating to affect site area to achieve similar performance to the current appeal layout would be of marginal effect and unlikely to result in changes that would be noticeable to the public.

Number of Inverters / Inverter Capacity

The Longhedge Solar Farm has 26 inverters in the current appeal layout. The maximum AC capacity of all 26 of those inverters will never exceed 49.9MW.

Inverters come in different sizes (including circa 1MW) and a combination of different inverter sizes can be used at a Solar Farm. An example of a 1MW inverter factsheet is supplied at Appendix C to illustrate one technical option that would be suitable for the proposed design. It is also possible to set, to a customised lower figure, the output power of a specific inverter, from its nominal designed capacity. This is done by firmware at the inverter factory or during the commissioning of the plant. In this scenario inverters installed on site will be pre-set to ensure that the maximum MWac of the solar farm never exceeds 49.9MWac.

Bifacial module technology

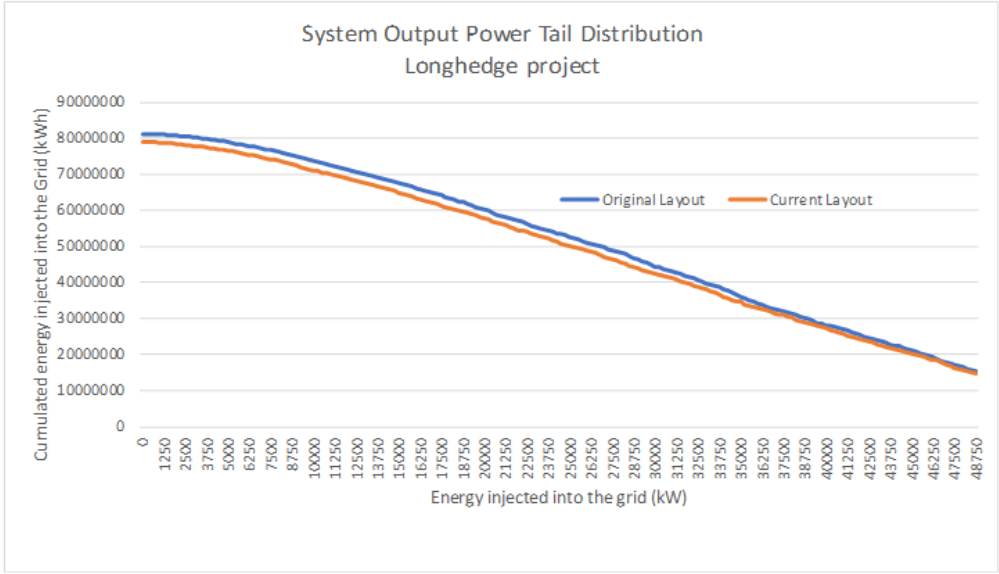
The solar industry evolves continuously, and new technologies now allow the production of some energy from the back of the module.

This is what we call a bifacial module. Because the PV cell architecture is not fully symmetrical the capability of the module to generate from the back is not the same as the front.

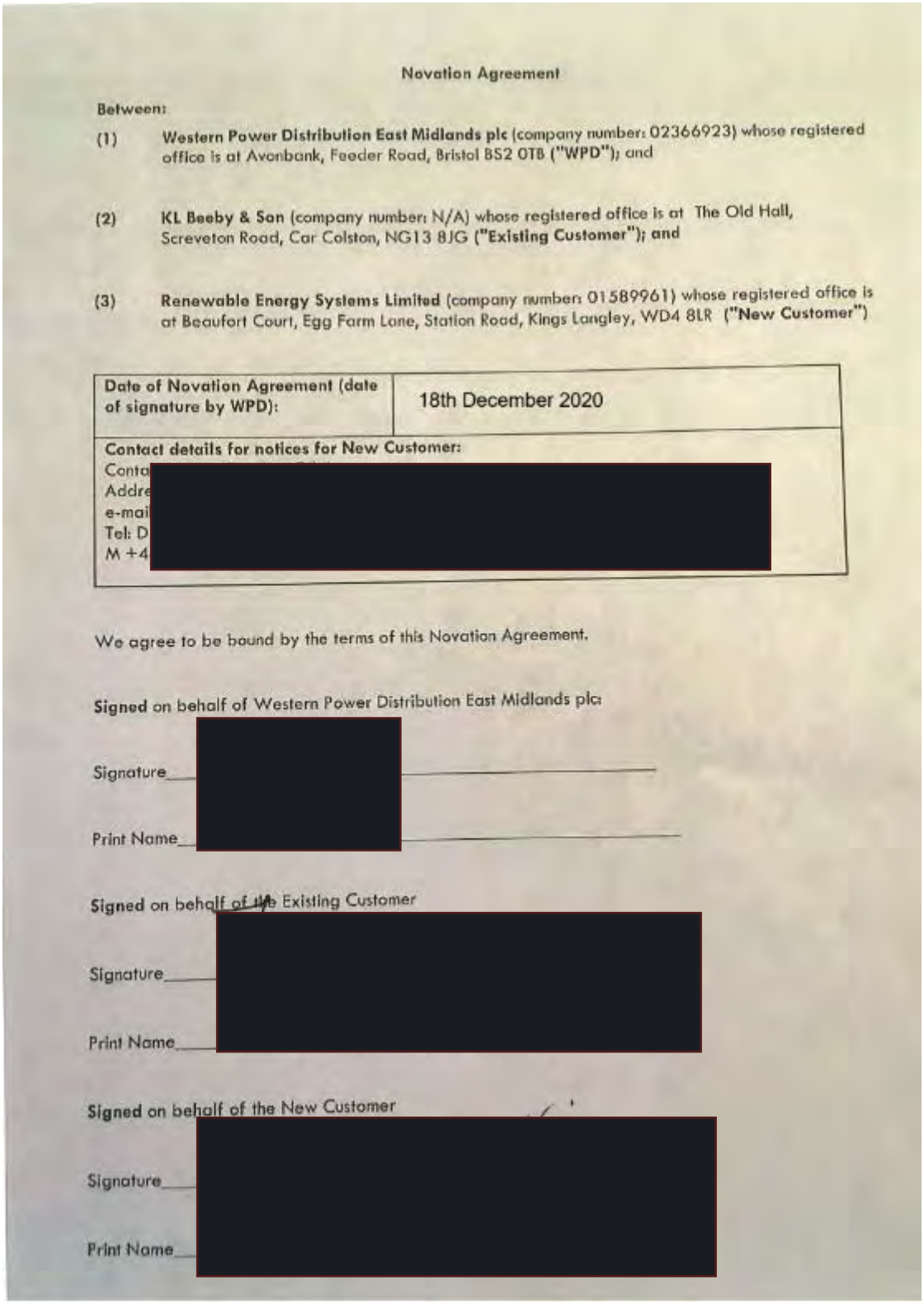
Because solar modules stand on structures facing south and are inclined from around 10 to 35 degrees the irradiation that reaches the backside of the module is very low compared to the energy reaching the front side. It is on average between 2 and 4 % higher than a mono-facial module.

This may seem a low figure, however 2 to 4 % is still significant and allows the maximisation of renewable energy production from the land. The figures at Appendix A have taken into account this bifacial factor.

Appendix A

Parameters/Layout	Original Layout	Current Layout
Yearly production - 1st year (GWh)	80.45	78.20
Difference of yearly production (%)	2.9%	
Maximum capacity injected into the grid (MW)	49.9	49.9
Difference of maximun capacity injected (%)	0.0%	
Energy injected into the grid at 49.9MW (MWh)	13872	13672
Area (acres)	232.9	221.5
Number of panels	147 368	128 752
GCR	0.65	0.62
Graph		

Appendix B



Novation Agreement

Between:

(1) **Western Power Distribution East Midlands plc** (company number: 02366923) whose registered office is at Avonbank, Feeder Road, Bristol BS2 0TB ("**WPD**"); and

(2) **KL Beeby & Son** (company number: N/A) whose registered office is at The Old Hall, Screveton Road, Car Colston, NG13 8JG ("**Existing Customer**"); and

(3) **Renewable Energy Systems Limited** (company number: 01589961) whose registered office is at Beaufort Court, Egg Farm Lane, Station Road, Kings Langley, WD4 8LR ("**New Customer**")

Date of Novation Agreement (date of signature by WPD):	18th December 2020
Contact details for notices for New Customer: [redacted]	

We agree to be bound by the terms of this Novation Agreement.

Signed on behalf of Western Power Distribution East Midlands plc

Signature [redacted]

Print Name [redacted]

Signed on behalf of the Existing Customer

Signature [redacted]

Print Name [redacted]

Signed on behalf of the New Customer

Signature [redacted]

Print Name [redacted]

Background:

(A) WPD and the Existing Customer are parties to the Agreement (as defined below).

(B) The Existing Customer wishes to be released and discharged from the Agreement as if it had never been a party to the Agreement. WPD has agreed to release and discharge the Existing Customer upon the New Customer undertaking to perform the Agreement and to be bound by the terms of the Agreement in place of the Existing Customer as if it had always been a party to the Agreement in place of the Existing Customer.

It is agreed as follows:

1. **Definitions and interpretation**

1.1 In this Novation Agreement, unless the context otherwise requires, the following words have the following meanings:

"Agreement" means the agreement formed on 04/12/2020 between WPD and the Existing Customer upon the acceptance of the Connection Offer by the Existing Customer, a copy of which is attached at the schedule.

"Business Day" means a day (other than a Saturday or a Sunday) on which clearing banks are open for business in the City of London.

"Connection Offer" means the connection offer issued by WPD to the Existing Customer on 07/09/2020 concerning the premises known as Thoroton Solar Plant, Longhedge Lane, Thoroton, Nottingham, NG13 9DS (reference 3740212).

"Novation Agreement" means this agreement (including the schedule) made between WPD, the Existing Customer and the New Customer.

1.2 In this Novation Agreement, unless the context otherwise requires;

(a) words in the singular include the plural and vice versa and words in one gender include any other gender;

(b) a reference to:

(i) any party includes its successors in title and permitted assigns;

(ii) clauses and schedules is to clauses of and schedules to this Novation Agreement and references to sub-clauses and paragraphs are references to sub-clauses and paragraphs of the clause or schedule in which they appear.

2. **Novation**

2.1 In consideration of the rights granted to it under clause 2.2, the New Customer undertakes:

(a) to observe and perform all obligations and discharge all liabilities of the Existing Customer arising under the Agreement whether actual, accrued, contingent or otherwise and whether arising before or after the date of this Novation Agreement; and

(b) to be bound by the terms of the Agreement in every way as if it were an original party to the Agreement in place of the Existing Customer.

2.2 In consideration of the undertaking of the New Customer in clause 2.1 and the release and discharge in clause 2.3, WPD:

(a) releases and discharges the Existing Customer from all duties, obligations, liabilities, claims and demands arising as a result of or in connection with the Agreement (**"Liabilities"**) whether actual, accrued, contingent or otherwise and whether arising before or after the date of this Novation Agreement;

(b) accepts the liability of the New Customer under the Agreement in place of the liability of the Existing Customer; and

(c) agrees to be bound by the terms of the Agreement in every way as if the New Customer were named in the Agreement as an original party in place of the Existing Customer.

2.3 In consideration of the release and discharge in clause 2.2, the Existing Customer releases and discharges WPD from all Liabilities.

2.4 Without prejudice to the generality of clause 2.3, the Existing Customer acknowledges from the date of this Novation Agreement that any duty on WPD to refund or repay the Existing Customer shall be a duty to refund or repay the New Customer.

2.5 Subject to the terms of this Novation Agreement, the Agreement shall remain in full force and effect.

3. **General**

3.1 ***Entire Agreement***

This Novation Agreement and the documents referred to in it sets out the entire agreement and understanding between the parties in respect of the subject matter of this Novation Agreement.

3.2 ***Variation***

No purported variation of this Novation Agreement shall be effective unless it is in writing and signed by or on behalf of each of the parties.

3.3 ***Costs and expenses***

Each party shall bear its own costs and expenses incurred in the preparation, execution and implementation of this Novation Agreement.

3.4 ***Invalidity***

To the extent that any provision of this Novation Agreement is found by any court or competent authority to be invalid, unlawful or unenforceable in any jurisdiction, that provision shall be deemed not to be a part of this Novation Agreement, it shall not affect the enforceability of the remainder of this Novation Agreement nor shall it affect the validity, lawfulness or enforceability of that provision in any other jurisdiction.

4. **Notices**

4.1 Any notice under this Novation Agreement or the Agreement shall be in writing signed by or on behalf of the party giving it and shall, unless delivered to a party personally be left at, or sent by prepaid first class post or facsimile to the receiving party's address for notices as stated, in the case of WPD, on page 1 of the Connection Offer, or in the case of the New Customer, as stated on page 1 of this Novation Agreement, or as otherwise notified in writing from time to time.

4.2 A notice shall be deemed to have been served:

(a) at the time of delivery if delivered personally;

(b) 48 hours after posting; or

(c) 2 hours after transmission if served by facsimile on a Business Day prior to 3 p.m. or in any other case at 10 a.m. on the Business Day after the date of despatch.

4.3 A party shall not attempt to prevent or delay the service on it of a notice connected with this Novation Agreement or the Agreement.

5. **Counterparts**

This Novation Agreement may be executed in any number of counterparts and by the parties on separate counterparts, but shall not be effective until each party has executed at least one counterpart. Each counterpart, when executed, shall be an original of this Novation Agreement and all counterparts shall together constitute one instrument.

6. **Exclusion of third party rights**

Except as expressly provided in the Agreement no express term of this Novation Agreement or any term implied under it is enforceable pursuant to the Contracts (Rights of Third Parties) Act 1999 by any person who is not a party to it.

7. **Governing law**

7.1 This Novation Agreement and any dispute, claim or obligation (whether contractual or non-contractual) arising out of or in connection with it, its subject matter or formation shall be governed by English law.

7.2 Subject to express provision to the contrary in the Agreement, the parties irrevocably agree that the English courts shall have exclusive jurisdiction to settle any dispute or claim (whether

contractual or non-contractual) arising out of or in connection with this Novation Agreement, its subject matter or formation.

This Novation Agreement has been signed on the date stated as the "Date of Novation Agreement" at page 1 of this Novation Agreement.

Summary of the electricity connection requirements

To install two 132kV tee-off towers and 132kV metering substation, forming a looped connection, to provide a maximum Import Capacity of 400kW and a maximum Export Capacity of 49,990kW (subject to curtailment by TANM and DANM systems).

All generation connecting under Staythorpe GSP will be required to participate in a Staythorpe Transmission Active Network Management Scheme (Staythorpe TANM Scheme) to manage reverse power flow through the Super Grid Transformer (SGT). This is considered as a more cost effective solution in comparison with the high reinforcement cost of installing a further SGT. Should you accept this Connection Offer we will include your project within the TANM scheme.

Appendix C

POWER ELECTRONICS®

Power Electronics España S.L.
Polígono Pla de Carrases B
CV-35 Salida 30, 46160
Liria – Valencia

To whom it may concern,

Power Electronics states that a Freesun HEMK Frame 1 at 630 V can be supplied with the following technical characteristics:

		FRAME 1
REFERENCES		FS1000K
AC	AC Output Power (kVA/kW) @40°C[1]	1000
	AC Output Power (kVA/kW) @50°C[1]	930
	Max. AC Output Current (A) @40°C	918
	Operating Grid Voltage (VAC)	630 V ±10%
	Operating Grid Frequency (Hz)	50 / 60 Hz
	Current Harmonic Distortion (THDI)	< 3% per IEEE 519
	Power Factor (CosPhi)[2]	0.5 leading - 0.5 lagging / Reactive power injection at night
DC	DC Voltage Range[3,4]	891 V – 1500 V
	Maximum DC Voltage	1500 V
	Number of Inputs	Up to 10
	Max. DC Continuous Current (A)[3]	1150
	Max. DC Short Circuit Current (A)[3]	1735
EFFICIENCY	Efficiency (Max) (η) (preliminary)	98.85%
	Euroeta (η) (preliminary)	98.45%
CABINET	Dimensions [WxDxH] (ft)	9.8 x 6.5 x 7.2
	Dimensions [WxDxH] (m)	3.0 x 2.0 x 2.2
	Weight (lbs)	11135
	Weight (kg)	5050
	Type of Ventilation	Forced air cooling
ENVIRONMENT	Degree of Protection	NEMA 3R / IP55
	Operating Temperature Range[5]	From -25 °C to +60 °C, >50 °C power derating
	Operating Relative Humidity Range	From 4% to 100% non-condensing
	Storage Temperature Range	From -35 °C to +40 °C
	Max. Altitude (above sea level)	2000 m / >2000 m power derating (max. 4000 m)
CONTROL INTERFACE	Communication Protocol	Modbus TCP
	Power Plant Controller	Optional
	Keyed ON/OFF Switch	Standard
PROTECTIONS	Ground Fault Protection	SFDI and isolation monitoring device
	Humidity Control	Active heating
	General AC Protection	Circuit breaker
	General DC Protection	Fuses, DC switch-disconnectors
	Overvoltage Protection	Type 2 protection for AC and DC
CERTIFICATIONS & STANDARDS	Safety	UL 1741 / CSA 22.2 No.107.1-16 / IEC 62109-1 / IEC 62109-2
	Installation	NEC 2020 / IEC
	Utility Interconnect	UL 1741 SA&SB / RULE 21 / RULE 14H / IEEE 1547.1 / IEC 62116

(1) Values at 1.00 Vac nom and CosPhi=1. Consult Power Electronics for derating curves. The maximum AC output power must be limited to meet the P-Q capability requirement at the inverter level of some grid codes.
(2) Consult P-Q charts available: Q[kVAr]=√(S[kVA]²-P[kW]²).
(3) Consult Power Electronics for derating curves. In the event of overvoltage in the grid, the maximum DC voltage will vary proportionally with the AC voltage.
(4) Consult Power Electronics for Freemag DC/DC connection configurations.
(5) Optional: available for temperatures down to -35 °C.

Product and Applications Department

Valencia, 25th April 2024

Appendix 5 – Longhedge Solar Farm Capacity Note

Appellant's Response to Longhedge Planning Inspector – Longhedge Solar Farm Capacity

1. The Appellant has been asked to submit a concise written statement why its proposed development falls within the Town and Country Planning Act 1990 (TCPA90) and is not a Nationally Significant Infrastructure Project governed by the Planning Act 2008 (PA08).

2. S15 PA08 provides that an onshore generating station is an NSIP when it has a capacity of more than 50 megawatts (MW).

3. PA08 provides no further definition of generating capacity, however NPS EN-3 provides guidance on how that figure should be calculated (para 2.10.53) together with further guidance on capacity and size of solar developments (paras 2.10.50 to 2.10.58 and 2.10.17 – attached overleaf).

4. Applying that guidance to the Longhedge appeal, as the proposed development has a total inverter capacity under 50MW that indicates it is properly considered under TCPA90. Applying the other guidance provided in EN-3 also indicates that it complies with the EN-3 description of a sub 50MW solar development.

	Site Specific Figures for Longhedge Original Layout 565W[1]	**Site Specific Figures for Longhedge Appeal Layout 610W**	**EN3 guidance/reference**
Application Site Area (redline boundary in acres)	233	222	n/a
Application Site Buildable Area (acres)	166	157	125 to 200 acres for 50MW (EN-3 para 2.10.17)
Solar Panels (maximum number)	147368	128752	100,000 to 150,000 for 50MW (EN-3 para 2.10.7)
Candidate panel power rating (Watts)	565W	610W	n/a
Inverters[2] (number of)	28	26	n/a
Maximum Export Capacity (legal grid limit, MWac)	49.9	49.9	n/a
Total maximum inverter capacity (MWac)	49.9[3]	49.9	n/a
MWdc	83.26[4]	78.54	n/a
dc/MEC ratio	1.67	1.57	n/a
Development density (Application Site Buildable Area (acres)/MWdc)	2.79	2.82	2 to 4 acre/MWdc (EN-3 para 2.10.17)

[1] No specific panel power rating has been given in the planning application, but these two examples are indicative of panels that might be used. This footnote applies to both 565W and 610W columns in the table above.

[2] The exact specification of the inverters will be finalised at the procurement stage due to the technology continually advancing, but in no circumstances will exceed the combined total of 49.9MWac as referred to in footnote 3.

[3] No specific capacity for individual inverters has been given in the planning application but the total combined capacity cannot exceed the MEC of 49.9MWac, excluding any capacity to overcome reactive power consumption within the solar farm between the inverters and the connection point, per EN-3 footnote 91. Footnote 3 of this document applies to both 565W and 610W columns in the table above.

[4] The dc capacity in excess of 49.9MW is what is described as "overplanting" in EN-3 para 2.10.55 and footnote 92. This applies to both 565W and 610W columns in the table above.

To ensure that the Planning Inspector's questions in the document entitled 'Inspector's note and timetable' in the email received on Wednesday 10th April at 13:22 are answered clearly, further details are provided below:

- Inspector's question: candidate design for the proposed bifacial panels:
    - Appellant's response: See footnote 1 in the table above. As with inverters, solar panel technology is continually advancing, and in the time between the original submission and the appeal submission, the technology had moved on. Both designs fall within the parameters specified in the PV module drawing of the planning application - Figure 8 Typical PV module and rack detail.

- Inspector's question: number of panels:
    - Appellant's response: 147368 for the original layout, for 128752 for the appeal layout.

- Inspector's question: number and capacity of inverters:
    - Appellant's response: 28 for the original layout, 26 for the appeal layout with a total maximum capacity of 49.9MWac.

- Inspector's question: client/DNO substation connection and route for cabling:
    - Appellant's response: the connection between the National Grid Electricity Distribution Network and the Client/DNO substation can be found in the planning application at Figure 12A Client/DNO substation plan & elevation option 1, and Figure 12B option 2.

- Inspector's question: predicted annual output of renewable energy from the appeal scheme:
    - Appellant's response: the output of the Longhedge Solar Farm is 49.9MWac which is unchanged between the original and appeal layouts, which equates to the electricity required to serve approximately 15,200 homes each year. There is no standard formula for calculating homes served, and different methodologies will result in slightly different figures.

- Inspector's question: clarify any discrepancies between the details submitted with the application, in the appellant's Statement of Case, and the appellant's draft Statement of Common Ground:
    - Appellant's response: The original Planning Application stated 160888 modules, the Appeal Statement of Case stated 139568 modules, which is a smaller number reflecting the reduction in site area between the original design and the appeal design. The precise number is however dependent on the panel rating, and the table above provides two examples of power ratings that could be used and the panel numbers that would result. However, an approved design would be principally limited by the development areas shown in the suite of planning drawings. A precise number of panels would be dependent upon the actual panel type procured at the point of construction.
    - In respect of annual output, this information is unchanged as the information shared to date states an output of 49.9MWac which equates to the electricity required to serve approximately 15,200 homes each year.

16.4.2024

NPS EN-3 Extracts

2.10.17 Along with associated infrastructure, a solar farm requires between 2 to 4 acres for each MW of output. A typical 50MW solar farm will consist of around 100,000 to 150,000 panels and cover between 125 to 200 acres. However, this will vary significantly depending on the site, with some being larger and some being smaller. This is also expected to change over time as the technology continues to evolve to become more efficient. Nevertheless, this scale of development will inevitably have impacts, particularly if sited in rural areas.

Capacity of a site

2.10.50 Solar panels generate electricity in direct current (DC) form. A number of panels feed an external inverter, which is used to convert the electricity to alternating current (AC). After inversion a transformer will step-up the voltage for export to the grid. Because the inverter is separate from the panels, the total capacity of a solar farm can be measured either in terms of the combined capacity of installed solar panels (measured in DC) or in terms of combined capacity of installed inverters (measured in AC).

2.10.51 For the purposes of determining the capacity thresholds in Section 15 of the 2008 Act, all forms of generation other than solar are currently assessed on an AC basis, while a practice has developed where solar farms are assessed on their DC capacity.

2.10.52 Having reviewed this matter, the Secretary of State is now content that this disparity should end, particularly as electricity from some other forms of generation is switched between DC and AC within a generator before it is measured.

2.10.53 From the date of designation of this NPS, for the purposes of Section 15 of the Planning Act 2008, the maximum combined capacity of the installed inverters (measured in alternating current (AC)) should be used for the purposes of determining solar site capacity.

2.10.54 The capacity threshold is 50MW (AC) in England and 350MW (AC) in Wales.[91]

2.10.55 The installed generating capacity of a solar farm will decline over time in correlation with the reduction in panel array efficiency. There is a range of sources of degradation that developers need to consider when deciding on a solar panel technology to be used. Applicants may account for this by overplanting solar panel arrays.[92]

2.10.56 AC installed export capacity should not be seen as an appropriate tool to constrain the impacts of a solar farm. Applicants should use other measurements, such as panel size, total area and percentage of ground cover to set the maximum extent of development when determining the planning impacts of an application.

2.10.57 Nothing in this section should be taken to change any development consent or other planning permission granted prior to the designation of this NPS. Any such permission should be interpreted on the basis upon which it was examined and granted.

2.10.58 In particular, any permissions granted on the basis of a DC installed generating capacity should be built on that basis, unless an amendment is made to that permission and the difference in impacts is considered.

91 The combined maximum AC capacity of the installed inverters may only exceed the aforementioned thresholds for the sole purpose of overcoming reactive power consumption within the solar farm between the inverters and the connection point.

92 “Overplanting” refers to the situation in which the installed generating capacity or nameplate capacity of the facility is larger than the generator’s grid connection. This allows developers to take account of degradation in panel array efficiency over time, thereby enabling the grid connection to be maximised across the lifetime of the site. Such reasonable overplanting should be considered acceptable in a planning context so long as it can be justified and the electricity export does not exceed the relevant NSIP installed capacity threshold throughout the operational lifetime of the site and the proposed development and its impacts are assessed through the planning process on the basis of its full extent, including any overplanting.

Appendix 6 – Longhedge Ecology Update Report

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09/05/2024

LONGHEDGE ECOLOGY UPDATE

Introduction

This update report has been written by myself (Thomas Hill MEnv (Hons)), I can confirm that it is factually correct at the time of writing and recommendations are my own professional opinion(s). I am an ecologist with over five years' experience in the industry. The portfolio of projects I have contributed to vary in scale from small residential adjustments, all the way to national level infrastructure projects and large renewable energy schemes. My office experience consists of multi-disciplinary collaboration, data analysis, project management, and reporting writing numerous document types including Species Specific Reports, Preliminary Ecological Appraisal Reports, Ecological Impact Assessments, and Net Gain Assessments. Regarding fieldwork, I am skilled in a variety of survey methodologies including Phase 1, UK Habitat Classification, Habitat Condition Assessment, Great Crested Newt ("GCN") Habitat Suitability Index Assessment, Bat Emergence/Re-entry, Bat Transect, Otter and Water Vole, and Badger/Otter Pre-commencement alongside other Ecological Clerk of Works assignments. In addition, I have experience as an accredited agent for GCN, and other protected species licence adjacent work and have successfully inputted my expertise into relevant requests for further information and addressed comments as a part of the planning process.

Neo Environmental Ltd was commissioned by RES to undertake ecological surveys at the proposed Longhedge Solar Farm, to ensure any alterations in the baseline habitat are recorded, due to time elapsed since the prior survey effort. These surveys were undertaken in January 2024, by the author of this report (who also completed the initial surveys undertaken), and comprised UK Habitats Classification, Habitat Condition Assessment, and Species Scoping Surveys of the Application Site.

The surveys were completed with in conditions of moderate wind and rain, but these conditions have not materially affected the findings of the survey. During the survey period, areas in the United Kingdon were under a yellow weather warning from the MET office for wind. Whilst this warning did not include the region the Application Site was in, central areas of woodland were omitted from physical survey to ensure surveyor safety and were instead surveyed from a safe distance using binoculars. Additionally, it was noted that gamebird shooting was being undertaken on lands to the South of the Application Site, this is likely responsible for the increased presence in gamebirds and roe deer prints noted during the survey, and as such, this has been omitted as a factor in the below report as it does not accurately represent the baseline usage of the Application Site.

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Whilst it is acknowledged that January is outside the optimal period to survey certain habitats, such as heathland and priority woodland, none of these habitats are present within or immediately adjacent to the Application Site. Therefore, the time of survey does not constitute a limitation to the findings of the survey, and subsequent recommendations and calculations.

These informed the creation of this Ecological Update Report. Additionally, this has informed the recreation of the Biodiversity Net Gain Metric, updating it from the previously submitted v3, to the Statutory Edition, now required for law for all new planning applications.

Habitats

Within the latest iteration of the development boundary of the Application Site, the following habitats are present;

- c1c5 – Winter Stubble: Comprising the vast majority of the Application Site, this land is primarily managed for the cultivation of cereal crops. Certain areas were notably wetter and more waterlogged than previously recorded, this is attributed to the time of year of surveying and therefore determined as seasonally wet (UK Habitat Classification Secondary Code 502). No change in recommendations relating to this habitat comparative to the previously submitted Ecological Reporting.
- g4 – Modified Grassland: Comprising the fringes of the agricultural habitats and riparian zones of the drainage ditches, these areas show relatively low species diversity of limited interest to most protected species. No change in recommendations relating to this habitat comparative to the previously submitted Ecological Reporting.
- h2a5 – Species-rich Native Hedgerow: The hedge noted on the western boundary consisting of hawthorn, blackthorn, willow, ash, and dog rose, amongst other non-woody species, and therefore is considered species rich. No change in recommendations relating to this habitat comparative to the previously submitted Ecological Reporting.
- h2a6 – Other Native Hedgerow: Frequently found throughout the Application Site are hedgerows primarily comprising of hawthorn, with many including mature oak and/or

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ash trees, some of which having potential suitability to support roosting bats. No change in recommendations relating to this habitat comparative to the previously submitted Ecological Reporting.

- h2b – Non-native and Ornamental Hedgerow: A single stand of leylandii hedgerow sheltering game birds noted in the west of the Application Site. No change in recommendations relating to this habitat comparative to the previously submitted Ecological Reporting.
- r2b – Other Rivers and Streams: Most accurately defined as Ditch (UK Habitat Classification Secondary Code 50), encroachment from agricultural activities and likely inputs associated with this management limit the condition of the watercourse. No consistent aquatic vegetation or features of note for specific protected or notable species. No change in recommendations relating to this habitat comparative to the previously submitted Ecological Reporting.
- u1c – Artificial Unvegetated – Unsealed Surface: Areas of track with <10% cover of simple herbaceous vegetation. No change in recommendations relating to this habitat comparative to the previously submitted Ecological Reporting.
- u1e – Built Linear Feature: Numerous routes with no vegetation used for existing management of the Application Site and by local residents as Public Rights of Way
- w1g – Other Broadleaved Woodland: Oak, ash, and willow dominant species of woodland type most commonly noted throughout the Application Site. Ground level remains dominated by undesirable species, whilst noted at a lower level than previously recorded this is attributed to the time of year surveying was undertaken in. No change in recommendations relating to this habitat comparative to the previously submitted Ecological Reporting.
- w1h5 – Other Woodland – Mixed – Mainly Broadleaved: A single naturalising plantation containing a mixture of pine, beech, and silver birch trees with ground flora of limited

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NVC value. No change in recommendations relating to this habitat comparative to the previously submitted Ecological Reporting.

These habitats supersede those identified within the Application Site in previously submitted Ecological Reporting. Changes in habitats recorded are predominately due to the differing industry standard methodologies at time of completion, and how these categories are further classified within the most up to date Biodiversity Metric at the respective times of completion.

Protected Species

Badger prints were noted at numerous points during the January survey however no active setts were noted. Given the 10cm base gap inherent in the design in the security fencing relating to the Proposed Development, commuting badger will not be negatively impacted by following the mitigation recommended by the previously submitted ecological report. Additionally, deer (most likely roe deer) footprints were also found across the Application Site. However, the fencing of the Proposed Developed is designed to prevent accidental injury or trapping of these species, therefore, no changes to the recommendations set forth in the previously submitted ecological report are required.

Some additional features potentially suitable to support roosting bats were identified within the woodland present within the Application Site, however these were fresh features likely caused by the wind occurring at the time of survey, and the noted trees are not anticipated to be affected by the Proposed Development in any way. Additionally, all trees previously identified with bat roost potential have retained their respective suitability. Therefore, the recommendations in the previously submitted ecological reporting relating to bats remain suitable and proportionate.

Overall, no signs of notable or protected species that would be negatively impacted by the Proposed Development were identified during the survey in January 2024, that are not already considered within the integral site design or recommended mitigation measures. As such the implementation of best practice pollution prevention measures, gaps at the base of fencing, pre-commencement surveys for badger, otter, and breeding birds (including the last only if construction begins March to August inclusive) and all other recommendations relating to the mitigation of potential impacts for protected and notable species remain relevant and appropriate.

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Biodiversity Net Gain

Following the changes between editions relating to the Habitat Condition Assessment which informs the Statutory Biodiversity Net Gain Metric, alongside the weighting these habitats receive within the Metric, the baseline biodiversity unit value of the Application Site has decreased, whereas the changes to the Temporal Multiplier (amongst other factors) have increased the value of the Post Development habitats proposed within the LEMP (Landscape and Ecological Management Plan).

The completion of the Statutory Biodiversity Net Gain Metric has been informed by the surveys undertaken in January 2024 and most up to date LEMP[1]. The Statutory Biodiversity Metric identifies that habitat units will increase from 197.22 to 567.21, an increase of 187.60%, hedgerow units will increase from 21.19 to 38.78, an increase of 83.04%, and watercourse units will increase from 8.88 to 9.93, an increase of 11.85%.

All of these are above the 10% legal requirement set by the Environment Act 2021 and highlight the improvements to biodiversity and protected species within the local area as a result of the Proposed Development.

Response to Statement of Case on behalf of the Rule 6 Party

The following paragraphs will respond to points relevant to ecology raised by the Statement of Case of Behalf of the Rule 6 Party (SoCR6P) in respect of its suggested "reasons for dismissal":

- "3 - The proposals would entail the development of significant areas of best and most versatile agricultural land, contrary to policies 1 and 16 of LPP2.
- 5 The proposals pose a significant risk to otters and bats, species protected under the Conservation of Habitats and Species Regulations 2017."

I note that the Council's reasons for refusal do not identify any concerns in respect of best and most versatile land or impacts on protected species. I appreciate that the Council has subsequently raised a

[1] It should be noted that a Landscape Masterplan - Appeal has subsequently been prepared by Pegasus Group (Drawing number P24-0105_EN_02_E) which is presented at Appendix 2 of the Landscape proof of evidence. This reflects the amendments illustrated in Revision F of the Neo Environmental LEMP (NEO00782_023I_F). For more details please refer to the Planning and Landscape proofs of evidence.

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query about the use of best and most versatile land, which is addressed in the evidence of Mr. Tony Kernon.

> *"That soil inversion as proposed by the Appellant to create conditions for a species-rich grassland will cause lasting damage to the soil" – Page 16 of the R6 party's statement of case*

This is an inexact reference to the submitted documentation. Soil inversion as a methodology is only definitively referenced in relation to the Proposed Development at a single place of the submitted documentation (namely paragraph 1.73 of Volume 3, Technical Appendix 2, Appendix 2.2 Biodiversity Management Plan), where it is stated that "it is recommended that soil inversion take place prior to grassland sowing". The inaccuracy lies within the statement that this methodology was to be implemented as part of the landscaping proposals, as opposed to it simply being recommended as a potential management option. For the avoidance of doubt, soil inversion has been removed as a recommendation and will not take place.

> *"The ecology survey recognises that the Appeal Site includes excellent bat habitat with a combination of woodland areas, good quality hedges, watercourses and open land over which bats can forage." – Page 19 of the R6 party's statement of case*

This statement is a misrepresentation of the findings of the ecology survey and subsequent assessment of potential significant impacts due to its generalisation of the findings. When considering habitat suitability for bats the aspects of foraging, commuting, and roosting are considered both independently and collectively when assessing potential impacts. The Ecological Assessment (paragraph 7.32 of Volume 3, Technical Appendix 2) identified the Application Site as containing six trees with low bat roost potential and overall suitable habitat for commuting and foraging (with additional trees of similar suitably found in the January 2024 survey). Further to this however it states that "arable land and improved agricultural grassland are sub-optimal commuting and foraging features". The vast majority of the Application Site comprises these sub-optimal habitat types and the entirety of area habitats proposed to be lost as a part of the Proposed Development. Furthermore, whilst it is acknowledged that the results of the ecology survey could be broadly interpreted as "including excellent bat habitat" when considering the value of hedgerow and watercourses, these habitats are proposed to be retained and enhanced as part of the Proposed Development.

> *"The ecology survey acknowledges that the introduction of fences may interfere with bat flight routes, it asserts that this may be mitigated by providing buffers. There is no evidence to support this mitigation." – Page 19 of the R6 party's statement of case*

Paragraph 7.36 of the submitted Ecological Assessment states that "the proposed fence height of up to 2.4m is unlikely to cause significant disruption" this is due to the average flight heights of bats being

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above 2.4m. Additionally, bats most commonly commute along flight route by following linear features, such as the aforementioned hedges and watercourses, and only species with strong echolocation capabilities will cross open spaces, therefore the proposed buffers will prevent disruption in this manner, along with an undisturbed area for foraging activities.

> *"The appeal proposals must, therefore, be assessed as posing a significant risk to the bat population." – Page 19 of the R6 party's statement of case*

For the reasons outlined above, this statement is inaccurate, as it is based upon generalisations of the results of the ecological survey and a misinterpretation of the potential impacts on bats resulting from the Proposed Development.

> *"The Biodiversity Management Plan (BMP) claims that risks to the otter population would be mitigated by the provision of 2m buffers alongside the drainage ditches, but does not explain how otters would pass through the fences or how the fencing would allow mammals to pass along the drainage ditches." – Page 19 of the R6 party's statement of case*

As part of the integral adopted design measures, referenced in the Ecological Assessment (paragraph 2.3, Volume 3 Technical Appendix 2) amongst other reports and figures, all fencing has a proposed 10cm gap at the base to allow free movement of all mammals through the site. Given the undisturbed nature of the ground beneath, it will allow mammals of a larger size to navigate the site by scraping soil, as naturally occurs when commuting through terrain.

> *"The risk of water pollution from both the construction and operational phases could also damage otter habitats and food sources." – Page 20 of the R6 party's statement of case*

This statement fails to acknowledge or reference the integral best practice design measures proposed within the Outline Construction Environmental Management Plan (Volume 3, Technical Appendix 8) which sets forth suitable and proportionate measures to mitigate the potential risks of the Proposed Development.

Conclusion

Overall, the limited changes to habitats within the design footprint do not constitute a significant change, and no additional species of note were recorded during the updated 2024 survey. Therefore, the findings and recommendations outlined in the previously submitted Ecological Assessment and associated appendices (as amended in 2023 following the removal of panels from the southeastern

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most fields) remain relevant. The calculation of the biodiversity metric under the current statutory version additionally highlights that the Proposed Development remains highly beneficial to nature and the environment comparative to the baseline land use. Lastly, the statements set forth by within the Statement of Case document are contradictory to the determination of Rushcliffe Borough Council, and do not constitute an accurate representation of either the baseline value of the Application Site ecologically, or the potential impacts of the Proposed Development.

Please do not hesitate to contact myself or colleagues if you require any further information.

KIND REGARDS,

THOMAS HILL

MENV (HONS)

SENIOR ECOLOGIST

E: Thomas@neo-environmental.co.uk

Appx 6.1 – Longhedge Biodiversity Metric 2024 headline results

Longhedge Solar Farm

Headline Results

Scroll down for final results ⚠

Return to results menu

On-site baseline	*Habitat units*	197.22	
	Hedgerow units	21.19	
	Watercourse units	8.88	
On-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	567.21	
	Hedgerow units	38.78	
	Watercourse units	9.93	
On-site net change (units & percentage)	*Habitat units*	369.99	187.60%
	Hedgerow units	17.60	83.04%
	Watercourse units	1.05	11.85%

Off-site baseline	*Habitat units*	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site post-intervention (Including habitat retention, creation & enhancement)	*Habitat units*	0.00	
	Hedgerow units	0.00	
	Watercourse units	0.00	
Off-site net change (units & percentage)	*Habitat units*	0.00	0.00%
	Hedgerow units	0.00	0.00%
	Watercourse units	0.00	0.00%

Combined net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	369.99
	Hedgerow units	17.60
	Watercourse units	1.05
Spatial risk multiplier (SRM) deductions	*Habitat units*	0.00
	Hedgerow units	0.00
	Watercourse units	0.00

FINAL RESULTS

Total net unit change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	369.99
	Hedgerow units	17.60
	Watercourse units	1.05
Total net % change (Including all on-site & off-site habitat retention, creation & enhancement)	*Habitat units*	187.60%
	Hedgerow units	83.04%
	Watercourse units	11.85%
Trading rules satisfied?	Yes ✓	

Unit Type	Target	Baseline Units	Units Required	Unit Deficit	
Habitat units	10.00%	197.22	216.94	0.00	No additional area habitat units required to meet target ✓
Hedgerow units	10.00%	21.19	23.31	0.00	No additional hedgerow units required to meet target ✓
Watercourse units	10.00%	8.88	9.76	0.00	No additional watercourse units required to meet target ✓

Appx 6.2 – Longhedge Biodiversity Metric 2024 (Excel Spreadsheet issued electronically)

Appendix 7 – EIA screening response

When telephoning, please ask for : Craig Miles
Telephone No: 0115 914 8560
Our Reference: 22/00638/SCREIA
Date: 7th September 2022

Huw Townsley
Neo-Environmental
(Via Email)

Rushcliffe Borough Council

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Dear Sir/Madam,

Reference:	22/00638/SCREIA
Development:	Environmental Impact Assessment Screening Request for the construction of a solar farm with a potential capacity of 49.9 Megawatts (MW)
Location:	Land at Shelton Road, Thoroton, Nottinghamshire

Town and County Planning (Environmental Impact Assessment) Regulations 2017 (as amended) (the "EIA Regulations") - Request for Screening Opinion

I am writing in response to your Screening Request seeks to determine if the proposals are EIA Development having regard to Regulation 6(2) of the Environmental Impact Assessment) Regulations 2017 (as amended).

The proposals relate to the formation of bi-facial ground mounted solar photovoltaic (PV) panels, new access tracks, battery storage, underground cabling, perimeter fencing with CCTV cameras and access gates, a temporary construction compound, substation and all ancillary grid infrastructure and associated works.

It is considered that the information submitted with the request for a screening opinion complies with Part 2 (Screening) – section 6(2) of the Regulations and that as such the Borough Council has sufficient information to allow it to adopt a screening opinion.

The proposed site is located in a semi-rural setting on lands between the small settlements of Hawksworth (0.1km west) and Thoroton (0.3km southeast), some 15km to the east of Nottingham. It comprises of several agricultural fields covering a total area of c.118 hectares. The site lies on gently undulating lands, ranging between 20m to 25m AOD. Internal field boundaries comprise hedgerows, tree lines and linear strips of woodland shelter belt. External boundaries largely consist of mature to lower hedgerows with individual trees and some evident gaps, providing good enclosure and limiting visibility for local settlements and receptors.

The majority of the site is identified as being within Flood Zone 1 (at little or no risk of fluvial or tidal / coastal flooding), however parts of the site that generally follow the watercourse / field drains within the site are identified as being within Flood Zone 2 and 3 (having a greater risk of flooding).

In terms of public access and public views of the site, there are several recreational routes located within and close to the Proposed Development Site including a bridleway passing through the northern fields, a Bridleway and footpath in closest proximity to the east, in addition to the PRoW to the south and southwest between Hawksworth and

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Thoroton. A National Cycle Network (NCN) route 64 also shares the minor road on the east side of the site.

The site does not form the best and most versatile' agricultural land. Likewise, the site is not located within or is adjacent to an Air Quality Management Area (AQMA).

The proposed solar farm does not lie within any statutory environmental designated sites, and within 15km there are no internationally designated sites.

There is one Site of Special Scientific Interest (SSSI) within 5km, forming Orston Plaster Pits SSSI. It is stated that an Extended UK Habitat and Phase 1 Habitat surveys with protected species scoping took would be undertaken prior to any submission that would include suitable mitigation and enhancement measures to ensure that the proposals would not significantly impact upon any ecological features.

There are no designated or non-designated heritage assets recorded within the boundary of the site, therefore it is considered that no direct effects will occur on known designated assets.

In terms of archaeology, the submission noted that 12 non-designated Historic Environment Records (HER) sites were identified within the site boundary and that the proposed development may have a direct effect. It is stated that a geophysical (magnetometry) survey would be undertaken in order to identify their extents and potential. Mitigation measures would be implemented following the results of this survey in order to ensure the preservation of these features, either in-situ or by record, so that impacts upon these features would not be significant. The above mentioned HER sites consist of cropmark features and findspots which highlight the high archaeological potential of most of the site, particularly in relation to the prehistoric periods, and moderate potential for remains from the Romano-British and Anglo-Saxon periods in the area.

It is stated that a Cultural Heritage Impact Assessment would be carried out in order to assess potential direct impacts resulting from the proposals (prior to submission), including the potential impacts upon unknown sub-surface archaeology. It is noted form the submission that the actual footprint of solar farms typically results in a surface area of circa 5% of the site and therefore significant impacts upon unknown archaeological remains within the site are limited.

In terms of the visual and landscape impacts, the site is located within the Trent and Belvoir Vales National Landscape Character Area (NCA) 48. At a local level, the Greater Nottingham Landscape Character Assessment (2009) provides classification of Landscape Character Types (LCTs), and the site is identified as being within South Nottinghamshire Farmlands: Aslockton Village Farmland. The Melton and Rushcliffe Landscape Sensitivity Study: Wind Energy Development also divides the Borough's landscape into 14 Landscape Character Assessment Units (LCUs). While the latter sensitivity study does not account for solar developments it provides some recent context such as key sensitive features and views.

The proposed development primarily relates to the development of solar panels mounted on frames not exceeding 3.5m high. Given the relative gentle slopes of the site combined with existing hedgerows enclosing the site together with the mixed wooded elements around it, would mean that the visual and landscaping effects of the proposals are likely to be localised and within the defined South Nottinghamshire Farmlands: Aslockton Village Farmland character area – primarily the appearance and character of the large-scale arable fields between Thoroton and Hawksworth.

The perception of the development would be limited from most key points surrounding the two villages where the landscape contributes to the key setting of the villages. It is accepted that the potential visibility would be limited to a small number of local receptors including the nearest residential receptors, road users, walkers and cyclists and that, the

extent of these views could be reduced by appropriate setbacks from settlement edges and the nearest residential properties and further by screening provided by existing trees and hedgerows present within the intervening landscape alongside the mitigation measures (as stated in the submission). It is therefore considered that the anticipated landscape and visual affected would not be so significant to define the proposals as EIA development, considering a Landscape and Visual Impact Assessment (LVIA) and landscaping plan would need to be provided as part of the submission to consider and mitigate any potential harm. The cumulative impact would also be considered as part LVIA, but given the nature of the development, the wider impact of the proposed development would be limited.

It is not therefore considered that the proposed development constitutes Schedule 1 development as defined in the Regulations. Instead, the development falls within the Schedule 2 list of developments under Category 3 – Energy Industry, part a) Industrial installations for the production of electricity, steam and hot water. The scale of the development exceeds that set out in Column 2 and therefore the proposal requires screening, and the Borough Council must therefore take into account the criteria in Schedule 3 of the 2017 Regulations.

Schedule 3 – Selection Criteria for Screening Schedule 2 Development set outs the criteria against which developments should be assessed to establish whether the proposal is likely to have significant effects on the environmental, having regard to; • Characteristics of development • Location of development • Characteristics of potential impacts, *et al*.

Given that the site is not located within a sensitive area for the purposes of Environmental Assessment as set out in the Regulations, that the potential environmental affects would be limited, that they can be considered as part of further assessments (as stated in the submitted information), and further mitigation could be provided, it is considered that proposals do not constitute EIA development.

A separate checklist as recommended by the National Planning Practice Guidance on Environmental Impact Assessments has been completed which arrives at the same conclusion.

This screening opinion relates only to EIA Regulations and does not imply that a favourable recommendation or decision would be forthcoming. This screening opinion is based purely on the information supplied by yourself as assessed against the Regulations current at the date of this response. Should there be any material change in relevant circumstances before an application is submitted, or you become aware that any information is incorrect, it is advised that you write to us again to allow the details to be re-checked as the planning authority is able, in exceptional cases, to request an EIA at a later stage should it subsequently become evident that such a proposal does require such an accompanying submission.

Yours faithfully,

Planning Operations Manager (Interim)

Appendix 8 – International, National Policy

Appendix 8 – Renewable Energy Policy and Legislation (International, UK and Scotland)

International

The COP21 UN Paris Agreement

The Paris Agreement (December 2015) is an international agreement on climate change, with 195 signatory countries, including the UK.

The Agreement came into force on 4 November 2016.

Governments agreed:

- A long-term goal of keeping the increase in global average temperature to well below 2°C above pre-industrial levels.
- To aim to limit the global average temperature increase to 1.5°C, since this would significantly reduce risks and the impacts of climate change.
- On the need for global emissions to peak as soon as possible, recognising that this will take longer for developing countries.
- To undertake rapid reductions thereafter in accordance with the best available science.

Countries would also be obliged to make new post-2030 commitments to reduce emissions every five years.

The Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report and related Press Release and Statements (2021)

The first part of the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6) was published on 9 August 2021.

The key points taken from the report are:

- It is unequivocal that human influence has warmed the atmosphere, ocean and land.
- The scale of recent changes across the climate system as a whole – and the present state of many aspects of the climate system – are unprecedented over many centuries to many thousands of years.
- Human-induced climate change is already affecting many weather and climate extremes in every region across the globe. Evidence of observed changes in extremes such as heatwaves, heavy precipitation, droughts, and tropical cyclones, and, in particular, their attribution to human influence, has strengthened since the last report.
- Global surface temperature will continue to increase until at least mid-century under all emissions scenarios considered. Global warming of 1.5°C and 2°C will be exceeded during the

21st century unless deep reductions in carbon dioxide (CO2) and other greenhouse gas emissions occur in the coming decades.

- Many changes due to past and future greenhouse gas emissions are irreversible for centuries to millennia, especially changes in the ocean, ice sheets and global sea level.
- With further global warming, every region is projected to increasingly experience concurrent and multiple changes in climatic impact-drivers. Changes in several climatic impact-drivers would be more widespread at 2°C compared to 1.5°C global warming and even more widespread and/or pronounced for higher warming levels.

COP26 – The Glasgow Climate Pact (November 2021)

Negotiations were at the COP26 climate summit held in November 2021 under the UN Framework Convention on Climate Change. The aim of COP26 was to keep alive the hope of limiting the rise in global temperature to 1.5C.

IPCC Second AR6 Report (February 2022)

The second part of the IPCC's AR6 Report was published on 28 February 2022. It highlights that climate change has already disrupted human and natural systems. Past emissions, development and climate change have not advanced global climate resilient development. It states that societal choices and actions implemented in the next decade will determine the extent to which medium and long-term pathways will deliver higher or lower climate resilient development. It importantly confirms that development prospects are increasingly limited if current greenhouse gas emissions do not rapidly decline, especially if 1.5°C global warming is exceeded in the near-term. This can only be enabled by inclusive governance, adequate and appropriate human and technological resources, information, capacities, and finance.

IPCC Third AR6 Report (April 2022)

The third part of the IPCC's AR6 Report 'Mitigation of Climate Change' was published on 4 April 2022. It reports the consequences of failing to limit the rise of global temperatures and that reducing emissions is a crucial near-term necessity.

Global GHG emissions in 2030 associated with the implementation of Nationally Determined Contributions announced prior to COP26 would make it likely that warming will exceed 1.5°C during the 21st century. Policies implemented by the end of 2020 would be projected to result in higher global GHG emissions than those implied by NDCs. It suggests that limiting warming to below 2°C would then rely on a rapid acceleration of mitigation efforts after 2030.

IPCC AR6 Synthesis Report (March 2023)

The fourth and final part of the IPCC's AR6 Report, 'The Synthesis Report', was published on 20 March 2023. The Synthesis Report summarises the state of knowledge of climate change, its widespread impacts and risks, and climate change mitigation and adaptation.

It reports that there are multiple, feasible and effective options to reduce greenhouse gas emissions and adapt to human-caused climate change. However, the most important conclusion of this this report is the urgency in meeting mitigation targets at a rapid pace.

United Kingdom

The UK's Sixth Carbon Budget: The UK's Path to Net Zero (December 2020)

The Climate Change Committee (CCC) published the Sixth Carbon Budget: The UK's Path to Net Zero on 9th December 2020. The Sixth Carbon Budget sets out, for the first time, what actions the UK will need to take to achieve net zero emissions by 2050.

The CCC's recommended pathway, the Balanced Net Zero Pathway, aims to decarbonise electricity generation by 2035, with action thereafter focused on meeting new demands in a low-carbon way. The pathway requires a 78% reduction in UK territorial emissions by 2035, a 63% reduction from 2019.

The key features if the scenario are an increasing demand for electricity, decreasing carbon intensity of generation, and a more flexible system.

Department for Business, Energy and Industrial Strategy (BEIS) Outcome Delivery Plan (2021)

The Outcome Delivery Plan sets out four priority outcomes, including tackling climate change. BEIS note within the report:

"*Making sure the UK ends its contribution to global warming by 2050 is a core part of the Department's work. Following the publications of the Prime Minister's Ten point Plan, the Energy White Paper and the Industrial Decarbonisation Strategy, we will work across the government to drive the Green Industrial Revolution. Our ambitious domestic action plan will create growth and jobs in clean technologies, infrastructure and energy in the 4 nations of the UK. Through our upcoming Presidency of COP26 and our Internation Climate Finance we will also provide strong global leadership and set an example to accelerate climate action.*"

The Ten Point Plan for a Green Industrial Revolution (2020)

In November 2020, the Prime Minister announced his Ten Point Plan for the UK to lead the world into a new Green Industrial Revolution. This innovative programme sets out ambitious policies and significant new public investment to support green job creation, accelerate out path to reaching net zero by 2050 and lay the foundations for building back greener. Spanning clean energy, buildings, transport, nature and innovative technologies, the Ten Point Plan will mobilise £12 billion of government investment to unlock 3 times as much private sector investment by 2030; level up regions across the UK , and support up to 250,000 highly skilled green jobs.

Industrialisation Decarbonisation Strategy (2021)

The Industrial Decarbonisation Strategy, published in March 2021, set out complementary plans for the transformation of the UK's energy system and industries, including actions to fully decarbonise electricity generation by 2050. This will help to meet out ambitious Nationally Determined Contribution (NDC) to reduce the UK's emissions by at least 68% by 203, compared to 1990 levels (the highest reduction target for a major economy to date), and meet our Sixth Carbon Budget to cut emissions by 78% by 2035.

This domestic ambition is matched internationally, through the Prime Minister's pledge in September 2019 to double the UK's Internation Climate Finance for developing countries to £11.6 billion for the 5-year period from 2021 to 2025, as part of our Paris Agreement commitments. These commitments lay the steps to build back greener from the pandemic and reach net zero.

Appendix 9 – Local Policy summary

Policy Requirement	Scheme Compliance with Policy
Rushcliffe Local Plan Part 1 – Core Strategy	
<u>Core Strategy Policy 16 – Green Infrastructure, Landscape, Parks and Open Space</u> 1. A strategic approach to the delivery, protection and enhancement of Green Infrastructure will be taken, through the establishment of a network of primary Green Infrastructure corridors and assets (as shown on the Key Diagram), together with corridors and assets of a more local level which will be defined through Local Development Documents. 2. The approach will require that: a) existing and potential Green Infrastructure corridors and assets are protected and enhanced. Priority for the location of new or enhanced strategic Green Infrastructure will be given to locations for major residential development identified in Policy 3, the Strategic River Corridors of the Trent, and Soar rivers, Grantham canal corridor, and Urban Fringe areas; b) Where new development has an adverse impact on Green Infrastructure corridors or assets, alternative scheme designs that have no or little impact should be considered before mitigation is provided (either on site or off site as appropriate). The need for and benefit of the development will be weighed against the harm caused; c) Developments proposed through the Core Strategy should enhance the Strategic Green Infrastructure network (either on-site or off-site or through contributions as appropriate). Non-strategic sites will be assessed through the Local Plan Part 2 (Land and Planning Policies); d) Links to and between the Green Infrastructure network will be promoted to increase access, especially in areas of identified deficit, for recreational and non-motorised commuting purposes, and to allow for the migration of species; and e) Landscape Character is protected, conserved or enhanced where appropriate in line with the recommendations of the Greater Nottingham Landscape Character Assessment. Criteria for the assessment of proposals and any areas of locally valued landscape requiring additional protection will be included the Local Plan Part 2 (Land and Planning Policies).	Green infrastructure across the site is retained, protected and enhanced where practicable and PROWs will remain open and fully functional during all stages of the Proposed Development (Landscape and Ecological Management plan Core Document 1.21.12) and Landscape Masterplan.

Core Strategy Policy 17 – Biodiversity 1. The biodiversity of Rushcliffe will be increased over the Core Strategy period by: a. Protecting, restoring, expanding and enhancing existing areas of biodiversity interest, including areas and networks of priority habitats and species listed in the UK and Nottinghamshire Local Biodiversity Action Plans; b. Ensuring that fragmentation of the Green Infrastructure network is avoided wherever possible and improvements to the network benefit biodiversity, including at a landscape scale, through the incorporation of existing habitats and the creation of new habitats; c. Seeking to ensure new development provides new biodiversity features, and improves existing biodiversity features wherever appropriate; d. Supporting the need for the appropriate management and maintenance of existing and created habitats through the use of planning conditions, planning obligations and management agreements; and e. Ensuring that where harm to biodiversity is unavoidable, and it has been demonstrated that no alternative sites or scheme designs are suitable, development should as a minimum firstly mitigate and if not possible compensate at a level equivalent to the biodiversity value of the habitat lost. 2. Designated national and local sites of biological or geological importance for nature conservation will be protected in line with the established national hierarchy of designations and the designation of further protected sites will be pursued. 3. Development on or affecting other, non-designated sites or wildlife corridors with biodiversity value will only be permitted where it can be demonstrated that there is an overriding need for the development and that adequate mitigation measures are put in place.	There are no designated or non-designated ecology sites within the appeal site and no significant adverse effects on any sites are anticipated as a result of the Proposed Development. A significant net gain in biodiversity of 187.60% for habitats, 38.78% for hedgerows and 11.85% for watercourse units will occur with the implementation of the Landscape Masterplan and Landscape and Ecological Management Plan measures (Core Document 1.21.12). The site is able to demonstrate a biodiversity net gain as part of the Proposed Development. The completion of the Statutory Biodiversity Net Gain Metric has been informed by the surveys undertaken in January 2024 and most up to date LEMP. Therefor the delivered net gains by the proposed development is significantly more than the required net gain of 10%.
Local Plan Part 2: Land and Planning Policies	
Policy 1 – Development Requirements Planning permission for new development, changes of use, conversions or extensions will be granted provided that, where relevant, the following criteria are met:	The proposed involves temporary new development. 1) The amenity of local residents will be safeguard from harm during

1. There is no significant adverse effect upon the amenity, particularly residential amenity of adjoining properties or the surrounding area, by reason of the type and levels of activity on the site, or traffic generated; 2. A suitable means of access can be provided to the development without detriment to the amenity of adjacent properties or highway safety and the provision of parking is in accordance with advice provided by the Highways Authority; 3. Sufficient space is provided within the site to accommodate the proposal together with ancillary amenity and circulation space; 4. The scale, density, height, massing, design, layout and materials of the proposal is sympathetic to the character and appearance of the neighbouring buildings and the surrounding area. It should not lead to an over intensive form of development, be overbearing in relation to neighbouring properties, nor lead to undue overshadowing or loss of privacy; 5. Noise attenuation is achieved and light pollution is minimised; 6. There is no significant adverse effects on important wildlife interests and where possible, the application demonstrates net gains in biodiversity; 7. There is no significant adverse effects on landscape character; 8. The amenity of occupiers or users of the proposed development would not be detrimentally affected by existing nearby uses; 9. There is no significant adverse effect on any historic sites and their settings including listed buildings, buildings of local interest, conservation areas, scheduled ancient monuments, and historic parks and gardens; 10. It can be demonstrated that wherever possible, development is designed to minimise the opportunities for criminal activities; 11. The use of appropriate renewable energy technologies will be encouraged within new development and the design, layout and materials of the proposal should promote a high degree of energy efficiency; and 12. Development should have regard to the best and most versatile agricultural classification of the land, with a preference for the use of lower quality over higher quality agricultural land. Development should also aim to minimise soil disturbance as far as possible.	construction, operation and decommissioning. No objections from the Councils Environmental health Officer subject to conditions for noise levels, hours of construction, compliance with a construction method statement and implementation of mitigation measures for glint and glare secured through additional planting. 2) Construction Traffic Management Plan (CTMP) demonstrates vehicular access to and parking provisions within the site are suitable to serve all phases – construction, operation and decommissioning – without detriment to highway safety or the amenity of residents. No objections from the Councils Highway Team or National Highways. 3) Standard buffers are applied to site constraints to ensure there is sufficient space within the site to accommodate the proposed development. 4) The proposed development, whilst large in scale, is low in height. The application site benefits from existing hedgerows that will screen and soften the proposals appearance. This will also be achieved through use of suitable materials for the proposed development. The scale, density, height, massing, design, layout and materials would not result in an overbearing relationship to neighbouring properties, undue overshadowing or loss of privacy. 5) Noise and lighting will be minimised through condition – no objections from Environmental Health Officers. 6) See response to Core Strategy Policy 17 – Biodiversity. 7) Proof evidence by Mr Cook submitted as part of this appeal demonstrates there is

	no significant adverse impact on landscape character. 8) The proposed development, once operational, would be operated remotely with visits limited to monthly maintenance. The site would not be permanently occupied by residents. 9) The proof of evidence by Ms Garcia will demonstrate heritage assets will be safeguarded from harm as a result of the proposed development. 10) Designing out crime measures include CCTV, fencing, external lighting around buildings on site. 11) Proposal is for renewable energy. 12) Best and Most Versatile agricultural land has been addressed by evidence by Mr Kernon submitted in support of this appeal.
<u>Policy 29 – Development Affecting Archaeological Sites</u> 1. Where development proposals affect sites of known or potential archaeological interest, an appropriate archaeological assessment and evaluation will be required to be submitted as part of the planning application. Planning permission will not be granted without adequate assessment of the nature, extent and significance of the remains present and the degree to which the proposed development is likely to affect them. 2. Where archaeological remains of significance are identified permission will only be granted where: a. The archaeological remains will be preserved in situ through careful design, layout and siting of the proposed development; or b. When in-situ preservation is not justified or feasible, appropriate provision is made by the developer for excavation, recording and for the post-excavation analysis, publication, and archive deposition of any findings (to be undertaken by a suitably qualified party), provided that it can be clearly demonstrated that there are wider public benefits of the development proposal which outweigh	A scheme of archaeological work has been agreed with the Local Planning Authority and has started on site with trial trenching. Archaeology does not form part of the council's reasons for refusal of the development and the additional investigation has been undertaken to understand potential archaeological features of interest within the site. Should any further archaeological work be necessary this will be secured by a planning condition.

harm to heritage assets of archaeological interest in line with NPPF requirements.	
Policy 36 – Designated Nature Conservation Sites Nationally Designated Sites a) Development likely to have an adverse effect on a Site of Special Scientific Interest (either directly or indirectly, or individually or in combination with other developments) will not normally be permitted. b) Where an adverse effect on the site's notified features is likely, an exception should only be made where the benefits of the development's location, clearly outweigh both the impacts that it is likely to have on the features of the site that make it of special scientific interest and any broader impacts on the national network of Sites of Special Scientific Interest. Locally Designated Sites c) Development likely to have a significant adverse effect on a site of local nature conservation value will not be permitted unless it can be clearly demonstrated that there are reasons for the proposal which outweigh the need to safeguard the essential nature conservation value of the site. Locally designated sites include: • Local Wildlife Sites • Local Geological Sites • Local Nature Reserves • Irreplaceable Habitats d) Proposals that are likely to have a significant impact on such sites will be assessed according to the following criteria: a. Whether works are necessary for management of the site in the interests of conservation; b. Whether adequate buffer strips and other mitigation has been incorporated into the proposals to protect species and habitats for which the Local Site has been designated; and c. The development would be expected to result in no overall loss of habitat and, where possible, achieve net gains in habitat. As a last resort, any compensation could be expected to include off-setting habitats adjacent to or within the vicinity of any losses proposed.	There are no designated or non-designated ecology sites within the appeal site and no significant adverse effects on any sites are anticipated as a result of the Proposed Development. The completion of the Statutory Biodiversity Net Gain Metric has been informed by the surveys undertaken in January 2024 and most up to date LEMP. The survey has confirmed that ecological features and species will not be adversely affected by the proposals. The Statutory Biodiversity Metric identifies that habitat units will increase from 197.22 to 567.21, an increase of 187.60%, hedgerow units will increase from 11.92 to 29.51, an increase of 147.78%, and watercourse units will increase from 8.88 to 9.93, an increase of 11.85%. Therefor the delivered net gains by the proposed development is significantly more than the required net gain of 10%.
Policy 37 – Trees and Woodland	The Proposed Development can be undertaken without detriment to the health and longevity of

1. Adverse impacts on mature tree(s) must be avoided, mitigated or, if removal of the tree(s) is justified, it should be replaced. Any replacement must follow the principle of the 'right tree in the right place'. 2. Planning permission will not be granted for development which would adversely affect an area of ancient, semi-natural woodland or an ancient or veteran tree, unless the need for, and public benefits of, the development in that location clearly outweigh the loss. 3. Wherever tree planting would provide the most appropriate net-gains in biodiversity, the planting of additional locally native trees should be included in new developments. To ensure tree planting is resilient to climate change and diseases a wide range of species should be included on each site.	the retained trees, hedgerows, shrubs or amenity of the area as demonstrated within the submitted Arboricultural Impact Assessment (Core Document 1.30).
Policy 38 – Non-Designated Biodiversity Assets and the Wider Ecological network 1. Where appropriate, all developments will be expected to preserve, restore and re-create priority habitats and the protection and recovery of priority species in order to achieve net gains in biodiversity. 2. Developments that significantly affect a priority habitat or species should avoid, mitigate or as a last resort compensate any loss or effects.	The site is able to demonstrate a biodiversity net gain as part of the Proposed Development. The completion of the Statutory Biodiversity Net Gain Metric has been informed by the surveys undertaken in January 2024 and most up to date LEMP. The Statutory Biodiversity Metric identifies that habitat units will increase from 197.22 to 567.21, an increase of 187.60%, hedgerow units will increase from 11.92 to 29.51, an increase of 147.78%, and watercourse units will increase from 8.88 to 9.93, an increase of 11.85%. Therefor the delivered net gains by the proposed development is significantly more than the required net gain of 10%.

Appendix 10 – Third Party Comment summary

Appendix 10	Summary of 3rd party comments
Theme and Key Comments	**Response**
General Observations	
• Reiterate grounds raised as part of the planning application. • Amendments made are so small they have not addressed grounds of objection raised by residents or reasons of refusal by the Council. • Thoroton Village is low on facilities, this has not changed. • Proposal is low efficiency in terms of energy production. • Proposal is affecting the health and well-being of local residents. • Reduction in house prices.	The minor amendments proposed as part of this appeal have been accepted for consideration by the Planning Inspectorate. It is noted that third party objectors agree the amendments are minor. Lack of facilities in Thorton village has no material planning merit for the proposed development. The appellant does not accept solar has low efficiency with regards energy production. Additional information has been provided in relation to capacity of the proposal at Appendices 4 and 5. Solar is supported in planning policy terms and forms part of the energy mix the Government is encouraging to come forward to replace energy from non-renewable sources and to meet the countries future energy needs. Indeed, National Planning policy statement EN1 accepts even small schemes play an important role in meeting the countries energy needs. There is no evidence to suggest the proposed development is resulting in a detrimental impact to the health and well-being of local residents. The planning application consultation response of the Senior Environmental Health Officer (Core Document 6.9) confirms no objection to the proposal. This includes consideration of impacts on public health. Reduction in house prices is not a material planning matter due to the fact there are numerous factors that affect house prices.
Principle of Development/ Planning Policy	
• Proposal is contrary to planning policy of Rushcliffe Council. • Proposal is for 40 years – a significant period of time and not temporary. • Brownfield land and existing building roofs should be used.	As set out in the Council's delegated officer report (Core Document 2.1), the principle of the proposed development is supported by local (policy 1 and policy 2 LPP1 as well as policy 16 and policy 22 of LPP2) and national planning policy as follows: "*The principle of the proposed development is readily supported by both national and local policy, including adopted local policy support for renewable energy generation provided there are no unacceptable impacts.* *In accordance with the NPPF, the adverse impacts of renewable energy generation need to be addressed satisfactorily. It is the impacts of proposals for renewable energy generation that need to be considered rather than the principle of such development. Renewable energy proposals need to be considered favourably within the context that even if a proposal provides no local benefits, the energy produced should be considered a*

	national benefit that can be shared by all communities and therefore this national benefit is a material consideration which should be given significant weight. There is strong in principle support for the proposed renewable energy development. This needs to be considered against the impacts of the proposal and the two are weighed which is a planning judgement subject to other material considerations…." The National Planning Practice Guidance confirms that "*solar farms are normally temporary structures and planning conditions can be used to ensure that the installations are removed when no longer in use and the land is restored to its previous use*". (Core Document 3.2 - Paragraph: 013 Reference ID: 5-013-20150327) Temporary permission can be secured by a planning condition should this appeal succeed and be considered necessary by the Planning Inspector. Such a condition is included in the agreed draft conditions list.
Best and Most Versatile (BMV) Agricultural Land	
• Proposal would result in the loss of the Best and Most Versatile agricultural land. • Loss of recreational value within the area of the site. • No very special circumstances to justify development here. • It is not an efficient use of land. • It would lead to the loss of agricultural land and harm food security. • The agricultural land value of the site can still produce moderate yields, should be protected and considered the best and most versatile. • Appeal site is grade 2 and 3 BMV arable land.	An agricultural land classification report was submitted in support of the application planning application. It sets out 60% of the appeal site is grade 3B and 4% other, therefore 64% of the appeal site does not form BMV agricultural land. A Planning Statement was also submitted in support of the proposed development that sets out the proposals would return an agricultural use through sheep grazing. In these circumstances, the development proposed is a temporary reversible use of the land, which would not result in the permanent loss of good quality agricultural land, and the land would not be permanently unavailable for agricultural use. The Council's Planning Officer concluded the proposal would not have an unacceptable impact upon the agricultural land. However, the Council's Statement of Case, at paragraph 7.9, submitted as part of this appeal states "*As no further information has been provided on alternative sites in the area, it is considered that there is insufficient evidence to adequately benchmark the site against other locations, and address whether the proposed use of any BMV agricultural land has been shown to be necessary, and poorer quality land has been used in preference to higher quality land*." Retention to agricultural use after decommissioning of the proposed solar farm can be secured by condition should this appeal succeed and be considered necessary by the Planning Inspector.

• Proposal is against the prime minister's commitment to safeguard BMV land. • Site should be used for food production and food security, not electricity production. • Loss of open space. • Applicant has not confirmed where core soil samples were taken from and refused independent soil analysis. • Sheep gracing between the panels is not farming. • There is no detailed plan of how the applicant will reinstate the farmland back to its current state if this proposed development is allowed.	Additional information has been submitted by Mr Kernon setting out the proposals impact to BMV land is acceptable (Appendix 1).
Landscape and Visual Amenity	
• Impact and loss of open countryside. • Negative impact on landscape character. • Visual impact of the development would be industrial in appearance not suited to the countryside. • Proposal would be clearly viewed from the existing footpaths and result in unpleasant Glint and Glare. • Loss of hedgerows.	A Landscape and Visual Impact Assessment (LVA) was submitted in support of the proposed development to consider the potential impact the development may have to Landscape and Visual Amenity. It states that the agricultural fields are mostly medium to large scale defined by hedgerows with mature hedgerow trees and that these would be retained and protected throughout construction and operation of the solar farm. There would also be a number of built-in mitigation measures such as new hedgerow planting and management and maintenance of existing trees and vegetation. The approach in the submitted LVA to assess the landscape and visual aspect of the development on the surrounding area has been to prepare a Zone of Theoretical Visibility Map that is a computer modelling that highlights where the development could be seem from. 8 key viewpoints from within the surrounding area are selected "*to offer the clearest view within the vicinity of the chosen point where potentially significant effects are likely to occur*" and then assessed with the overall aim of defining the effect on the landscape and the visual impact of the development. The Council commissioned an independent review that did not fully agree with the conclusions of the appellants LVIA and, ultimately, this formed one of the Council's reasons for refusal.

• Screening would be inappropriate and not year-round. • Proposal would result in harmful impact on views from local footpaths next to the site. • Appeal site is situated within a valued rural landscape. • Allowing this development, will remove a protected landscape. • The "permissive path" on the plan do not add anything or compensate for the loss of the current environment. • The paths will be featureless tracks bordered by solar panels and wire fencing. More prison like rather than the current open landscape. • Proposal is an eyesore and does not fit sensitively into the conservations it adjoins. • Proposal would seriously detract from the visual qualities of the area.	As part of this appeal, a proof of evidence has been prepared by Mr Andy Cook setting out the proposed development does not result in a detrimental impact to landscape and visual amenity. Tree and Hedgerow protection during construction, addition soft planting and future maintenance can be secured by condition should this appeal succeed and be considered necessary by the Planning Inspector.
Impact on Heritage Assets	
• Harmful impact on the setting of Thoroton Conservation Area and Hawksworth Conservation Area. • Conservation status has not prevented an increase in house building within Thoroton Village from 60 to 80 dwellings.	A Heritage Statement was submitted in support of the proposed development that set out the proposals impact to above ground heritage assets in the surrounding area as well as potential archaeology deposits within the appeal site. The Council's Conservation Officer did not fully agree with the conclusions of the Heritage Assessment and set out harm, in the Officers opinion, that would be caused to specific above ground heritage assets. This formed part of the Council's second reason for refusal as follows:

• Appeal site connects two conservation villages. • Allowing this development, will result in a significant negative impact on both conservation villages.	"*The proposed development does not contribute to the preservation or enhancement of the setting of the Hawksworth and Thoroton Conservation Areas and does not contribute to the preservation of the setting of a number of listed buildings within these conservation areas. The harm to the heritage assets would be 'less than substantial. Whilst the significant benefits of the proposal in terms of renewable energy are acknowledged the public benefits do not outweigh the harm to the assets of national and local heritage value*……" Since the planning application was determined, archaeology work has commenced on site to provide further certainty about the site's potential for archaeological features of interest within the appeal site. Should further archaeological work be necessary, this would be secured through a planning condition should this appeal succeed and be considered necessary by the Planning Inspector. Furthermore, as part of this appeal, a proof of evidence has been prepared by Ms Laura Garcia setting out that there will be some less than substantial harm to some heritage assets but that the harms identified are entirely reversible at the decommissioning of the scheme. The less than substantial level of harm identified would be outweighed by the public benefits of the scheme, such that the proposal accords with the local plan policies.
Flood Risk	
• Proposal will lead to flooding. • Appeal site susceptible to flooding, especially in winter months.	A Flood Risk and Drainage Impact Assessment was submitted in support of the planning application setting out most of the appeal site lies within Flood Zone 1, defined as land having a less than 1 in 1000 annual probability of river or sea flooding. Small areas of the site fall within Flood Zone 2 and 3a which follow the watercourse/drains within the site. However, only a small area of solar panels is located in flood zone 2 and 3a. The Council accepted the development passed both the Sequential Test and the Exception Test. Furthermore, the Local Planning Authority also accepted a small proportion of the solar array in Flood Zones 2 is compatible with respect to flood risk. A Sustainable Drainage Strategy submitted in support of the refused planning application, involving the implementation of sustainable drainage in the form of swales at the low points of the application site to intercept extreme storm run-off flows which may already run offsite and as previously mentioned, are a betterment in comparison to the sites current drainage arrangement that does not manage or mitigate extreme storm run-off flows. The strategy comments that the swales do not form part of a formal drainage scheme for the development but are also provided as a form of 'betterment'. The proposed drainage strategy would ensure that the development would have a negligible impact upon site drainage, and surface water arising from the

	developed site would mimic the surface water flows arising from the site prior to the proposed development. The natural drainage regime would be retained except in the extreme storm event when a benefit is achieved by reducing the extreme storm run-off flows. Nottinghamshire County Council as Lead Flood Risk Authority raised no objections to the proposal from a surface water/ flood risk perspective. The Environment Agency also had no objection on the basis that finished floor levels would be set no lower than 18.20 metres above Ordnance Datum (AOD) and that Finished floor levels of all other vulnerable infrastructure shall be set no lower than 300mm above ground levels to be secured by a necessary planning condition should planning permission be granted, or should this appeal succeed. Consequently, the Local Planning Authority confirmed in the officer's report (Core Document 2.1) that the proposed development is acceptable in terms of flood risk and drainage, accords with relevant planning policy and is both an acceptable and an appropriate way to manage the circumstances on the application site. Accordingly, this matter formed no part of the reasons for refusal set out in the decision notice (Core Document 2.2). Since the Local Planning Authority refused planning permission they have since confirmed in paragraph 7.10 of their Statement of Case that this position has changed on the basis that a sequential test had not been submitted with the refused planning application. Thus, the Local Planning Authority are now of the opinion that their previous conclusion was incorrect when applying National Policy on sequential tests. For the avoidance of doubt, the Council is now requesting the Appellant submit a sequential test either at the Statement of Case or Proof of Evidence stage, and the Council will correspondingly respond as to whether the sequential test is passed at either the Proof of Evidence or Proof rebuttal stages. The search area for the sequential test is requested to be Borough-wide, noting the scale of development proposed. In accordance with national policy the onus is on the Appellant to provide a sequential test. A Flood Risk (Sequential Test and Exception Test) Topic Paper has been submitted in support of this appeal (Appendix 2). This document confirms that the proposal passes the sequential and exception tests and complies with the NPPF, NPG and Local Plan Policies in flood matters.

	Drainage and flood risk mitigation can be secured by condition should this appeal succeed and be considered necessary by the Planning Inspector.
Living Conditions (Residential Amenity)	
• The potential impact the development would have on amenity through noise. • The potential impact it may have on user of the footpaths and local road network.	The nature of the proposed development is such that it is unlikely to cause any form of pollution during its operational stage. This is because there are no significant noise sources close to the application site, traffic movements (once constructed) would be very low, and the proposed development would not be lit at night. It would not result in any emissions to air during its operation other than those from vehicles associated with periodic maintenance/inspection visits to the site. Emissions associated with the construction phase would relate to construction vehicles and similarly, it is considered would not be of a level to cause harm to the environment. It should be noted that any emissions during the construction period (or operationally) would be more than offset by the benefits of generating renewable energy at the site. The Glint and Glare Assessment confirms a number of dwellings could theoretically be affected by the proposals, but the computer model takes no account of existing vegetation. Following an assessment of existing vegetation and proposed mitigation planting, it concludes that there would be no adverse impact in relation to Glint and Glare. No objections were raised by the Councils Environmental Health Team (Core Document 6.9) nor Planning Officer in the Councils Officer report (Core Document 2.1). Residential amenity, there would not be unacceptable impact to private residential properties; from potential glint and glare; nor noise or air emission effects arising from the appeal scheme. Construction activities can also be controlled through condition, such as a Construction Environmental Management Plan, should this appeal succeed and be considered necessary by the Planning Inspector.
Design	
• The fence type may not deter crime and would be contrary the recommendations of the Designing Out Crime Officer. • Industrial scale and magnitude of development proposed.	The proposed development would consist primarily of solar panels mounted on a treated metal framework. This is the minimal level of development necessary to ensure that the site performs effectively with regard to its main purpose of generating renewable electricity. The inverters would be set within the rows of panels to reduce visual impact. The Point of Connection tower and substation compound are located in the vicinity of an existing electricity pylon, on the southern part of the site which it is proposed to connect.

• Oversized industrial development. • Large vast industrial scale of development. • Industrial plant into a rural area.	All of the panels and associated infrastructure buildings on the site would be no higher than single storey in height. This would ensure that they would not be significantly visible from most viewpoints outside of the site. Even when viewed from nearby vantage points, the scale of development would not be overbearing due to its low profile. This situation would take on a further positive direction when proposed screen planting matures, which, in addition to the significant existing screening around the site, would effectively assimilate the site into the local landscape over time. The highest structures associated with the proposed development would be transformers within the substation compound, at approximately 3.98m high. It is proposed that the majority of the other structures, including the solar panels, would be no more than 3.1m high which is the height of a mature hedgerow. The scale of the proposed development is appropriate to the location. The containers/cabins and other small buildings would be appropriately coloured or clad to minimise any visual impact and comply as far as practicable with the local vernacular. The Council accepted the proposed development has been designed to respect the character of the landscape and uses the strong field pattern to integrate the scheme as far as practicable. Existing landscape features would be retained, protected and strengthened including the retention of all existing field margins (hedgerows and ditches) except where necessary for access and standoffs from boundary habitats. All trees on the site would be retained and additional planting provided, where necessary, to fill gaps in the existing boundary planting. The landscaping and planting proposals associated with the proposed development would bring about significant ecological benefit when compared to the present situation, including upgrading lower-value, biodiversity-poor, arable land to higher value habitats. The views expressed by consultees have been incorporated into the scheme and have resulted in changes and additions to the proposed development. These include changes to the site layout, to include a 100m buffer to the northern boundary with Old Wood and the formation of additional planting to restrict views of the site form the public footpath. No objections have been raised by the police in terms of designing out crime.

	The Council considered the proposals design is acceptable, the Planning officers report confirming compliance with Policy 10 relating to Design and Enhancing Local Identity Core Document 2.1) Materials can be secured by a necessary condition should this appeal succeed and be considered necessary by the Planning Inspector.
Access and Highway Safety	
• The public road network to the site is not suitable for HGV movements. • Proposal would result in harmful impact to road safety due to the number of anticipated vehicle movements. • Adverse impact on the local road network. • Access to the site from Thoroton Lane is only single width. • Unacceptable burden on narrow bendy country roads with no passing places liable to flooding and need of repair. • Proposal will be to the detriment of other road users – pedal cycles, walkers and horse riders. • Large amounts of traffic generated during the construction period.	It is proposed that the site would be accessed from a new site access point off Thoroton Road and to facilitate this, 13.3m of hedgerow would need to be removed. The local access route is predominantly consisting of roads wide enough for vehicles to pass, however Thoroton Road becomes a single lane road towards the site entrance. This road has good forward visibility and a number of passing places and it is thought that with the addition of some construction traffic management measures that there will be limited impacts on local road users along this stretch of road. Required visibility splays would be achievable. In terms of vehicle movements, a Construction Traffic Management Plan (CTMP) submitted in support of the planning application states that during construction there would be an increased volume of traffic generated by the proposed development, however, the overall volumes of traffic generated are "considered to be quite low". During the anticipated six-month construction period, a total of approximately 1106 HGV deliveries would be made to the site, and during the peak construction, which will be towards the beginning of the construction period, there would be an approximate maximum of 20 daily HGV deliveries per day. During the operational phase of the site, it is anticipated that between 10-15 LGV movements per year would be required for security and maintenance. National Highways Authority raised no objections (Core Document 6.16). The Councils Highway Authority withdrew their initial objection follow submission of a revised CTMP that proposed passing pace and statements made in relation to repair of damage to the highway attributed to the construction traffic is deemed acceptable and could be secured by condition. (Core Document 6.17)

	In respect of vehicular access for construction and operation, acceptable traffic and access arrangements can be achieved during the construction and operational phases of the appeal scheme. Details of the new site access as well as construction matters such as haulage routes and wheel wash facilities can be secured by a condition should this appeal succeed and be considered necessary by the Planning Inspector.
Ecology	
• Wildlife habitat displacement. • Negative impact on protected species. • Site should be left for re-wilding or agriculture. • Sacrifice existing environmental benefits the appeal site already benefits from. • Fencing will prevent free animal movement through the site they currently benefit from.	The planning application was supported by an Ecological Assessment (EcA) to assess the potential impacts on ecology from the Proposed Development. It states that the habitats impacted by the development are identified as arable land / cereal cropland, improved agricultural grassland / modified grassland, a line of trees and hedgerow (Priority Habitat). Brown hare was confirmed within the Survey Site. It also states that the site and adjacent land have potential to support Badger, Otter, Bats, Harvest Mouse, Hedgehog, Brown Hare, Otter, Roe Deer, amphibians, breeding and wintering birds and invertebrates. The report recommends reasonable avoidance measures to avoid impacting on protected species and concludes that there would be no significant negative impact on protected and priority species following proposed mitigation and enhancement. The Council's Ecology and Sustainability Officer has no objections to the proposal and comments that no statutory or non-statutory protected sites are likely to be impacted by this development. The completion of the Statutory Biodiversity Net Gain Metric has been informed by the updated surveys undertaken in January 2024 and most up to date proposed Landscape Ecological Management Plan (LEMP) submitted in support of this appeal. The Statutory Biodiversity Metric identifies that habitat units will increase from 197.22 to 567.21, an increase of 187.60%, hedgerow units will increase from 21.19 to 38.78, an increase of 83.04%, and watercourse units will increase from 8.88 to 9.93, an increase of 11.85%. Therefore, the delivered net gain by the proposed development is significantly more than the required net gain of 10%.

	Ecological protection and mitigation measures (such as trough a Construction Ecological Management Plan (CEMP)) along with BNG and LEMP can be secured by planning conditions should this appeal succeed and be considered necessary by the Planning Inspector.

Appendix 11 – Planning Appeals Summary

Appendix 11 –Planning Appeals

Land North of Halloughton, Southwell, Nottinghamshire (Appeal Reference: APP/B3030/W/21/3279533)

An appeal concerning Land North of Halloughton, Southwell, Nottinghamshire was allowed by Inspector Baird in February 2022, for a 49.9MW solar farm and battery stations, together with all associated works, equipment and necessary infrastructure (Core Document G1).

Inspector Baird set out three key issues in Paragraph 5 of the decision, relating to the landscape and visual impact of the scheme; the effect on heritage assets; and thirdly whether the Proposed Development would conflict with the Development Plan.

With regards to agricultural land quality, Inspector Baird recognised that the Appellant, undertook a robust and appropriate agricultural land classification assessment which demonstrated that the land was not considered to be Best and Most Versatile Agricultural Land, and that only a small proportion of the land would be permanently lost from agricultural use.

In terms of landscape and visual impact, Inspector Baird acknowledges that given the nature and scale of large-scale solar farms, it is inevitable that they may result in landscape harm (Paragraph 11), but that did not mean the scheme was unacceptable. When assessing the visual impacts during construction in Paragraph 22, Inspector Baird stated:

> **"During the construction period and at Year 1, it is agreed that within the site, the scale of effect would be Major and have a Significant adverse effect on landscape character. In my view, this significant adverse effect would be experienced at several places where there are views into the site. However, given the relatively short construction period, some 26 weeks, and at a time when the mitigation planting would be young, such adverse impacts cannot be avoided. Thus, the weight I attach to these early effects is limited. As François Athenase de Charette de la Contrie1 is reputed to have said, "…you cannot make an omelette without breaking a few eggs"."**

In Paragraphs 73 – 78, Inspector Baird conducts the planning balance. I draw the Inspector's attention to the following extract:

> **"74. Both national and development plan policy recognise that large scale solar farms may result in some landscape and visual impact harm. However, both adopt a positive approach indicating that development can be approved where the harm is outweighed by the benefits. This is a planning judgement. Here, through a combination of topography, existing screening and landscape mitigation, the adverse effect on landscape character and visual impact would be limited and highly localised. Moreover, as the existing and proposed planting matures, adverse effects, would be progressively mitigated and once decommissioned there would be no residual adverse landscape effects. Rather the scheme would leave an enhanced landscape consistent with the objectives of development plan policy and the SPD. In these circumstances, whilst there would be some localised harm to landscape character and some visual harm in conflict with the relevant development plan policies, the imperative to tackle climate change, as recognised in legislation and energy policy,**

and the very significant benefits of the scheme clearly and decisively outweigh the limited harm."

Accordingly, in Paragraph 78 Inspector Baird concludes that the proposal would make a material and early contribution to the objective of achieving the decarbonisation of energy production and would not conflict with local and national policy.

In my opinion, the decision of Inspector Baird is clear, demonstrating the strength and weight presently being afforded to addressing climate change. The decision is clear that where the significant benefits outweigh the harms of the Proposed Development (in that case, very localised effects on the landscape and less than substantial harm to the heritage assets), consent should be granted. The decision also emphasises both how the effects are temporary in nature and would be reversible at the end of the 40-year period, but also how the mitigation planting would result in an enhanced landscape after the lifetime of the temporary planning permission.

Land East of Langford Mill and Tye Farm, Langford, Devon (Appeal Ref: APP/Y1138/W/22/3293104) (Core document G5)

I consider a further relevant case is the Secretary of State decision to agree with an Inspector's recommendation to allow an appeal and grant planning permission for the construction of ground-mounted solar PV panels to generate up to 49.9MW (site area 60.78 ha) and battery storage facility together with all associated works, equipment and necessary infrastructure, at Langford in Devon.

The main issues identified in the appeal were:

- Effect of the proposal on the character and appearance of the landscape
- The effect on Langford Court – a designated heritage asset
- The effect on and potential loss of agricultural land
- The safety of the Battery Storage facility (BESS)

In concluding comments regarding the planning balance, the planning inspector identified neutral weight to be accorded to the issues of heritage, the effect on agricultural land and the safety of the BESS.

Landscape effects were identified as the matter causing an element of harm, however the Inspector commented that this

> **"… is unsurprising given that national and local policy recognise that large scale solar farms may result in some landscape and visual harm. But in this instance the topography, existing screening and landscape mitigation lead to very limited and highly localised landscape and visual effects, and these would be progressively mitigated by additional planting."** (Paragraph 155)

With regard to the benefits of the scheme the inspector noted the accordance with National policy stating:

> **The scheme is for a renewable energy proposal which is fully in accordance with the economic, social and environmental dimensions of sustainable development set out in the NPPF. In addition EN-1 and subsequent draft policies state that the Government is committed to cutting greenhouse gas emissions and need for a move away from fossil fuel and towards renewable sources of energy production is supported. The scheme therefore has strong national and local policy support. This matter weighs very heavily in favour of the proposal. (Paragraph 156)**

The inspector also accorded substantial benefits to the financial investment arising from the scheme, the construction and operational jobs to be created. Significant weight was given to the benefit of additional planting which would remain beyond the period of the 40 year temporary permission and the proposed biodiversity net gain of 179.25% in area derived units and 9.82 % in linear derived units. (Paragraph 157)

Although the inspector considered that the proposal accorded with planning policy and accordingly planning permission should be granted, the additional point was made that in the event that the Secretary of State considered that the landscape effects resulted in a conflict with policy, the

> **"…importance of addressing climate change, as recognised in legislation and energy policy, and the very significant benefits of the scheme clearly and decisively outweigh any very limited harm"** (paragraph 160)

Land east & west of A130 and north & south Of Canon Barns Road, East Hanningfield, Chelmsford (Appeal Ref: APP/W1525/W/22/3300222)

I also note a recent appeal at East Hanningfield, Chelmsford, relating to a planning application for Installation of a solar photovoltaic (PV) park generating up to 49.9 MW of electricity spread over three sites and associated infrastructure. (Core Document G4)

The site is agricultural land set within the green belt. The issues considered at the appeal were:

- The effect of the proposal on the openness of, and purposes of including land within, the Green Belt;
- The effects of the development on the settings of the Grade II* listed building Church of St Mary and St Edward, and the Grade II listed building Church House and other non-designated heritage assets;
- The effects of the proposed development on the landscape character and appearance of the area;
- The effect of the proposal on agricultural land;
- The effect of the development on the integrity of the SPA; and

- Whether the harm caused by the proposal, by virtue of being inappropriate development in the Green Belt, and any other identified harm, would be clearly outweighed by other considerations to result in 'Very Special Circumstances'

In concluding on the issues, the inspector noted that the appeal scheme would result in harm to the Green Belt from inappropriateness and loss of openness, affording substantial weight to this harm. In addition it was concluded that the proposal would also result in moderate harm to the landscape character and convey moderate visual harm to the area. Limited adverse harm was also accorded in the planning balance to a small loss of BMV arable land and harm to a non-designated heritage asset.

Against this the Inspector noted the benefits arising from the generation of renewable energy as being substantial, in providing power for around 16,581 households, resulting in a carbon dioxide displacement of around 11,210 tonnes per annum and therefore helping to combat climate change. Paragraph 91 of the Inspectors decision states:

> **"The benefits of renewable energy raise substantial benefits in favour of the proposal. These benefits are recognised in the Council's local policies and guidance and national policy in accordance with the Climate Change Act of 2008. It is also clearly identified, in Section 14 of the Framework, where it seeks to increase the use and supply of renewable and low-cost energy and to maximise the potential for suitable such development. The delivery of suitable renewable energy projects is fundamental to facilitate the country's transition to a low carbon future in a changing climate."**

A further factor taken into account in the decision was the implication of needing a suitable and viable grid connection on the site selection. Paragraph 92 of the appeal decision states:

> **Also, a solar farm requires grid capacity and a viable connection to operate. As such, this requirement places a locational restriction on site selection that limits the number of appropriate sites for such a facility. The Appellant explains that the national grid suffers capacity difficulties and limits suitable points of connection. The Appellant proposes to connect to the adjacent electrical pylons placing the site in an advantageous location satisfying the connection constraints that exist. The Appellant has therefore demonstrated that a rational approach was taken to site selection lending support for the selected site.**

Overall it was concluded that the benefits identified attracted very substantial weight in favour of the scheme, clearly outweighing the substantial harm to the Green Belt and other harm identified.

Land at Land West of New Works Lane, Telford, Shropshire – APP/C3240/W/22/3293667

The Secretary of State approved a recovered appeal for the installation of a Solar Farm and associated infrastructure at New Works Lane, Telford, on 27th March 2023. (Core Document CD 7.14)

Although the appeal Inspector recommended that the appeal be dismissed, the Secretary of State determined that the appeal should be allowed.

The main issues identified were the effect on the landscape character and appearance. It was noted that the site is a component of the Wrekin Forest Strategic Landscape (WFSL) and falls within and contributes to the setting of the AONB.

The Secretary of State agreed with the Inspector that the proposal would introduce a managed landscape and not an open rural one, resulting in a change in character to one of a developed and managed landscape which would be at odds with the Special Qualities of the WFSL.

It is noted at paragraph 12 of the Secretary of States letter that:

> ***Taking into account the fact that solar farms are often located in rural areas, he disagrees that the proposal would extend the urban fringe up to the very edge of the woodlands.***

Under the conclusions on landscape and visual effects, the Secretary of State's letter says:

> ***"For the reasons given at IR10.42 and above, the Secretary of State agrees with the Inspector that the proposal would cause detrimental change to the Strategic Landscape, and would be in conflict with Local Plan Policy NE7". (Paragraph 14)***
>
> ***For the reasons given in IR10.37-10.38 and IR10.58, the Secretary of State agrees that this is a valued landscape in Framework terms (paragraph 174(a)), and is also a landscape that is clearly valued by local residents (IR10.38 and IR10.58). It is also designated as a Strategic Landscape within a recent local plan and forms part of the setting of an AONB. The Secretary of State considers that it is a sensitive site, and agrees with the Inspector at IR10.38 that overall, significant weight should be attributed to the harm to landscape character and appearance" (Paragraph 15)***
>
> ***However, taking into account his conclusions in paragraph 13 above relating to intervisibility and numbers or approaching or leaving the area through the site, the Secretary of State does not consider that it is a highly sensitive site (IR10.38). Further taking into account that the site is not an important gateway site to the WFSL (paragraph 9 above); and his conclusions in paragraphs 12 and 13 above, he does not agree with the Inspector that there is a significant adverse effect on the landscape or the amenity value of the area (IR10.39 and IR10.42), or that there is conflict with Policy WF1 of the AONB Management Plan (IR10.42). He further does not agree at IR10.64 that the harm is unacceptable in this case, or should carry substantial weight. (Paragraph 16)***

It was concluded that, notwithstanding that the proposal was judged to cause detrimental change to the Strategic Landscape and not be in accordance with one development plan policy, the proposal was in accordance with the overarching policy which incorporates consideration of landscape harm. The landscape harm was not considered to be unacceptable and the proposal was deemed in accordance with the development plan taken overall.

In respect of benefits the production of electricity was given significant weight, the additional planting and community benefits which are afforded significant weight; and the economic benefits which are afforded limited weight.

The combined landscape harms were given significant weight, however the accordance with the development plan and other material considerations led the Secretary of State to conclude that the appeal should be allowed.

Land at Steerway Farm, Limekiln Lane, Wellington, Telford – APP/C3240/W/22/3308481

An appeal was allowed on 9th May 2023 for the installation of a ground mounted solar farm with continued agricultural use (grazing), ancillary infrastructure and security fencing, landscape provision and ecological enhancements on Land at Steerway Farm, Limekiln Lane, Wellington, Telford, Shropshire(Core Document CD 7.15).

The main issue considered at the appeal was the impact of the proposal on the character and appearance of the strategic landscape around the Shropshire Hills Area of Outstanding Natural Beauty (AONB), having regard to local public rights of way and any benefits associated to the scheme.

The Inspector noted at paragraph 19 that:

> ***"Although softening and screening planting are proposed, the solar farm would result in an engineered landscape character rather than an open rural one. It would represent a substantial and significant change in character predominantly from the views contained within it.***

Paragraph 20 notes that

> ***"Within the site boundary; from the byway; and where other wider marginal views are possible in small gaps such as field entrances, the changes would materially degrade the experience of using the nearby entry or transit points for the WFSL".***

At paragraph 21 the Inspector states:

> ***"Nevertheless, I also recognise that solar farms are often located in rural areas. The appeal scheme would not extend the urban area fringe. It would be visually distinct from the urban area and separated by the M54."***

In concluding, the Inspector confirms that the proposal would have a material adverse effect on the landscape character and appearance of the site itself and the subsequent contribution it makes to the valued landscape of the Wrekin Forest Strategic Landscape, resulting in localised and contained harm to its special qualities and by virtue of this, very limited harm to the setting of the AONB.

Set against this in the planning balance the Inspector notes that given the 40-year operational lifespan of the proposal, the harm would ultimately be reversible, the proposal provides biodiversity net gain and economic benefits which were accorded limited positive weight. In terms of renewable energy generation, it was concluded that:

"The clean and secure energy production the scheme offers is a substantial overarching benefit even at the lower scale of up to 30MW" *(Paragraph 65**)***

The inspector's overall conclusion was that the overall benefits would substantially outweigh the harms it would cause.

Land west of the village of Scruton, North Yorkshire – APP/G2713/W/23/3315877

In June 2023 an appeal was allowed, and planning permission granted for the installation of a solar photovoltaic array/solar farm with associated infrastructure.

The Council had refused the scheme on the basis of the impact on agricultural land.

The Inspector found that the majority of the land was not BMV (paragraph 18), but also finds that that even if it was neither the development plan nor national policy prevented the use of such land. (paragraph 19),

The Inspector concluded that the height of the panels would enable the growth of grass and enable the grazing of sheep for the duration of the 40-year planning permission. (paragraph 20)

Noting that the majority of the land would continue in agricultural use and that it was the intention to return the land to full agricultural use after the period of the permission, the Inspector was satisfied that resting the land from intensive agriculture would be likely to improve soil health by increasing the organic matter in the soil and improving soil structure and drainage, even if a return to arable farming would then start to reverse this improvement. (paragraph 21)

The Council's case at the hearing was that the loss of productivity of the land for the 40 year duration of the scheme was objectionable, but the Inspector noted that "the specific way agricultural land is used is not a matter that is subject to planning controls…Given this, the fact that the proposal would limit the ability to carry out any arable farming does not, in my opinion, mean that it results in the loss of agricultural land when it can still be used for other agricultural uses. Furthermore, current government schemes actually encourage farmers to take land out of production and put it to grass, meadows, or trees for carbon capture." (paragraph 22).

The Inspector recognised the scarcity of grid connections nationally (paragraph 28), and the fact the site benefited from an immediate grid connection to the nearby substation (paragraph 33). The proposed development would make a valuable contribution to achieving local and national renewable energy goals paragraph 34) as well as achieving a substantial biodiversity net gain.

Land near to Bishop's Itchington near Stratford-Upon-Avon in Warwickshire - APP/J3720O/W/22/3292579

An appeal determined on 1st December 2022 granted planning permission for the construction of a solar farm and associated works on land near to Bishops Itchington, Stratford on Avon.

The single main issue was identified as relating to the impact of the proposal on the character and appearance of the surrounding landscape. The overriding character of the locality was identified as one of a mixed pastoral and arable landscape which is perceived as being deeply rural, having a medium susceptibility to solar energy development and a medium to high value.

The Planning Inspector considered that it is inevitable that an array of solar panels covering almost 55 ha of the appeal site would have an impact on the existing character, changing the character to an area of

countryside with a solar farm in it. The presence of hedgerows and the increase of in hedgerows and tree cover proposed mitigated the impact of this change. The Inspector also noted that the development would be developed in blocks which took account of the existing field pattern (Core Document CD 6.11 Paragraphs 10, 12,13 and 14).

The Inspector concluded that although there would be an impact on the landscape, it had been shown that the impact could be made acceptable and the proposal was deemed to accord with the development plan policy.

In the planning balance the Inspector refers to national policy initiatives requiring the move to renewable sources of energy generation and notes that included in this is the provision of more solar energy. The Inspector agreed with the appellant that the provision pf clean renewable energy which contributes to security of supply attracts substantial positive weight.

The provision of a high level of biodiversity net gain and some enhancement to the land through introduction of flower rich meadows attracted significant weight in favour of the proposal.

Land at Crays Hall Farm, Church Lane, Crays Hill - APP/V1505/W/23/3318171

This appeal related to a solar farm with associated infrastructure where one of the main issues was the effects on the openness of the Metropolitan Green Belt. Paragraph 9 of the IR refers to the National Planning Practice Guidance (PPG) which advises that:

> ***"The deployment of large scale solar farms can have a negative impact on the rural environment particularly in undulating landscapes. However, the visual impact of a well-planned and well-screened solar farm can be properly addressed within the landscape if planned sensitively."***

Openness is addressed at paragraph 10 onwards. The area of Green Belt affected consists in the most part of open arable countryside interspersed with farm buildings, industrial structures and isolated individual dwellings, some semi-detached or in loose clusters.

The introduction of solar panels would detract from the openness of a significant part of the central part of the valley and would be seen alongside existing panels comprising the extended Outwood Solar Farm. The effect on openness would be mitigated by the limited field sizes and odd shapes, undulating ground, frequent hedges with mature trees and the proposed biodiversity enhancements. Photomontages indicate that for the great majority of the time the panels are in place, there would be a good level of vegetation cover of a type already consistent with exiting hedges and field boundaries.

The PPG advises that the reversibility of a scheme is a relevant consideration to assessing the impacts on the openness of the Green Belt. The harm to openness for 40 years nevertheless attracts substantial weight.

In light of the Inspector's analysis, the proposed solar farm was allowed.

for example at Crays Hill, a BNG of 94% in area habitats and 53% linear habitats attracted 'substantial weight'

At Crays Hall, I note that the Inspector accepted that the longer term benefits to soil structure added weight to the environmental benefits of the project overall

At Crays Hill, Basildon the Inspector allowed a 25.6MW solar farm in the Green Belt in August 2023 and in so doing applied "very significant weight" to the renewable energy generation and carbon savings

Land at Sherbourne, Warwick - APP/T3725/W/23/3317247

This appeal relates to a solar farm (20 MW) near Warwick and is located in the West Midlands Green Belt. The IR notes from paragraph 4 onwards dealing with the Green Belt, that the scheme would have a spatial and visual impact on the openness of the Green Belt. It would be seen from nearby roads and public footpath networks and from these viewpoints would appear as encroachment of manmade structures into the countryside. However, views of the installation would not be widespread and would not have a wide visual impact. The development would be seen in the context of nearby road infrastructure which itself has a significant effect on the openness and tranquillity of the surroundings. In this context, the additional visual impact of the scheme on the openness of the Green Belt would be relatively limited. The IR goes on to note the appeal site would largely be contained and the scheme would have a relatively small additional impact on the Green Belt.

The scheme would have a 40 year life with the site returned to open land following decommissioning and removal of the solar farm.

The proposal in practical terms, would cause limited harm to the openness of the Green Belt. This point is reiterated at paragraph 34 noting the impact on the openness of the Green Belt would be limited.

In light of the Inspector's analysis, the proposed solar farm was allowed.

In September 2023 at Sherbourne, a solar farm of about 20MW was also allowed in the Green Belt and the Inspector considered that the proposal would provide a 'very significant environmental benefit" given the clear support given to renewable energy development from a number of sources

Land at Halse Road, south of Greatworth, Northamptonshire APP/W2845/W/23/3315771 ("Copse Lodge")

In November 2023, an appeal was allowed relating to the proposal for a development in 2 parts the main part would comprise the solar panels and associated infrastructure, including battery storage, and would lie south of the Halse Road. This would connect, via underground cabling, to a 132kV substation to be constructed north of Halse Road, which would include, as set out above, a new pylon sited along an existing pylon route that runs roughly northwest to southeast.

The main issues related to the effect on landscaper character and appearance, heritage assets, ecology and the complicate with planning policy and other material considerations.

The Inspector found the proposal would have a material adverse effect on the visual and landscape character of the site and the contribution that the site makes to the wider landscape. Conflict was found with the development plan policy in this regard.

Paragraph 115 of the decision noted the Inspector's view that "*Fundamentally solar farms are becoming part of that landscape and many people view them as a positive addition or, much like the pylons that step across the views here, one that becomes more accepted over time*."

In the planning balance the Inspector afforded "very significant weight" to renewable energy production in respect of and storage from the proposal.

Land at Graveley Lane, Hertfordshire - Appeal Ref: APP/X1925/V/23/3323321

In March 2024 the Secretary of State granted permission for a Proposed solar array with generating capacity of 49.9 mw, with associated battery storage containers and ancillary development, over-ruling an Inspectors recommendation.

The Secretary of state agreed with the Inspector that the proposal would have a damaging effect on character and appearance f the area and would be contrary to local plan policy in this regard.

The secretary of State also agreed that biodiversity enhancements and net gains of 205% in habitat units and 102% in hedgerow units would be a positive contribution carrying significant weight. Proposed grazing was also accepted as enabling continued agricultural use of the land, consistent with the NPPF paragraph 180(b) and footnote 62.

The secretary of state was satisfied with the site selection process, having followed a robust and reasonable approach and that scheme's availability and deliverability and the urgency of addressing the climate crisis, are matters which lend significant support to the proposal, and he considers these matters attract significant weight.

In the planning balance the Secretary of State placed "substantial weight" on the developments contribution towards renewable energy generation

Town & Country Planning Act 1990 (as amended)
Planning and Compulsory Purchase Act 2004

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