North Warwickshire Borough Council

Jeff Brown BA Dip TP MRTPI
Head of Development Control Service
The Council House
South Street
Atherstone
Warwickshire
CV9 1DE

Telephone: (01827) 715341
Fax: (01827) 719225
E Mail: PlanningControl@NorthWarks.gov.uk
Website: www.northwarks.gov.uk

Date: 19 July 2023

Mr Ben Parkins
Wardell Armstrong LLP
City Quadrant
11 Waterloo Square
Newcastle uopn Tyne
NE1 4DP

The Town & Country Planning Acts
The Town and Country Planning (Listed Buildings and Conservation Areas) Act 1990
The Town & Country Planning (General Development) Orders
The Town and Country Planning (Control of Advertisements) Regulations 1992 (as amended)

DECISION NOTICE

Major Full Planning Application

Application Ref: PAP/2022/0544

Site Address
Land 550 Metres East Of Vauls Farm, Astley Lane, Astley,

Grid Ref: Easting 432445.7
Northing 287572.7

Description of Development
Proposed construction of renewable energy generating solar farm together with transformers, inverters, control building, DNO substation, store room, security measures, associated infrastructure and works, landscaping and biodiversity enhancements

Applicant
Industria Solar Bedworth Ltd

Your planning application was valid on 25 October 2022. It has now been considered by the Council. I can inform you that:

Planning permission is **GRANTED** subject to the following conditions:

Standard Condition

1. The development to which this permission relates must be begun not later than the expiration of three years from the date of this permission.

REASON

To comply with Section 91 of the Town and Country Planning Act 1990, as amended by Section 51 of the Planning and Compulsory Purchase Act 2004, and to prevent an accumulation of unimplemented planning permissions.

Defining Conditions

2. The development hereby permitted shall not be carried out except in complete accordance with the following approved plans and documents:

Authorised Officer: [redacted]

Date: **19 July 2023**

a) plan numbers NT15256/001C, 003E, 004, 005A, 107C together with the CCTV details and plans for the control room, cable trenching, the customer substation, the DNO substation, the security fencing, the storage room, the transformer substation and the access road construction.
b) Access plan number NT15256-601E and 602C together with the Technical Note NT15256/001.
c) The Flood Risk Assessment (NT 15256 - Solar End Solar Farm FRA - Rev A) prepared by Wardell Armstrong and received by the Local Planning Authority on 20/12/22.
d) The Construction Environmental Management Plan prepared by Wardell Armstrong dated October 2022.

REASON

In order to define the extent and scope of the planning permission.

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

REASON

In order to confirm that this permission is for a temporary period only.

4. Twelve months prior to the commercial export coming to an end in accordance with Condition 3, or within six months of the cessation period should the solar farm hereby permitted cease to operate for a continuous period of twelve months, then a scheme for the de-commissioning and removal of the solar farm and its ancillary equipment, shall be submitted in writing to the Local Planning Authority. The scheme shall make provision for the removal of the solar panels and associated above and below ground works approved under this permission. The scheme shall also include the details of the management and timing of the de-commissioning works, together with a traffic management plan to address any likely traffic impact issues during the de-commissioning period together with the temporary arrangements necessary at the access onto Astley Lane and an environmental management plan to include details of the measures to be taken during the de-commissioning period to protect wildlife and habitats as well as details of site restoration measures. For the avoidance of doubt, the landscape planting and bio-diversity improvements approved under this permission shall all be excluded from this condition.

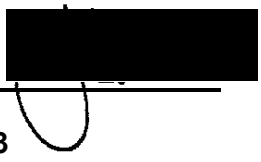
REASON

In order to define the scope of the permission and to confirm that this is for a temporary period.

5. The scheme as agreed in writing by the Local Planning Authority under condition 4 shall be implemented in full within six months of the cessation of the site for the commercial export of electrical power, whether that cessation occurs under the time period set out in Condition 3, but also at the end of any continuous cessation of the commercial export of electrical power from the site for a period of twelve months.

REASON

In order to ensure the satisfactory re-instatement of the land.

Authorised Officer: 

Date: **19 July 2023**

6. Within twelve months of the de-commissioning scheme agreed under condition 4 having been implemented, a Verification Report shall be submitted, to the Local Planning Authority for its consideration so as to discharge condition 5. The Report shall contain evidence to show that the scheme has been completed in full in accordance with that scheme. This condition will not be discharged in writing until the Local Planning Authority is satisfied that the decommissioning works have been implemented in accordance with the de-commissioning scheme agreed under condition 4.

REASON

In the interests of ensuring that the land is fully restored to agricultural use.

Pre-Commencement conditions

7. Notwithstanding the approved plans contained in condition 2, prior to their erection on site, details of the proposed materials and finish, including colour, of all solar panels, frames, ancillary buildings, equipment, fences and enclosures shall be submitted to and approved in writing by the Local Planning Authority. Development shall then be carried out in accordance with the approved details and shall be maintained as such for the lifetime of the development.

REASON

In the interests of appearance of the area.

8. Notwithstanding the submitted details, no works or development shall take place until an Arboricultural Method Statement and Scheme for the protection of any retained tree and hedgerow has first been agreed in writing by the Local Planning Authority. The Scheme shall include a plan showing details and positions of the ground areas to be protected areas and details of the position and type of protection barriers.

REASON

In the interests of the appearance of the area and to ensure that there is no avoidable loss of landscaping and bio-diversity enhancement.

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

REASON

In the interests of the residential amenity of neighbouring occupiers.

10. No development shall take place on site including any site clearance or preparation prior to construction, until all three of the following have been completed.

i) A Written Scheme of Investigation (WSI) for a programme of archaeological evaluative work over the whole site has been submitted to and approved in writing by the Local Planning Authority.

Authorised Officer: [redacted]

Date: **19 July 2023**

ii) The programme of archaeological evaluative fieldwork and associated post-excavation analysis and report production detailed within the approved WSI has been undertaken and a report detailing the results of this fieldwork and confirmation of the arrangements for the deposition of the archaeological archive has been submitted to the Local Planning Authority.
(iii) An archaeological Mitigation Strategy (including a WSI for any archaeological fieldwork proposed) has been submitted to and approved in writing by the Local Planning Authority. The Strategy should mitigate the impact of the proposed development and should be informed by the evaluation work undertaken.

REASON

In the interests of the potential archaeological value of the site.

11. No development shall commence on site until a detailed surface water drainage scheme for the site, based on sustainable drainage principles has been submitted to and approved in writing by the Local Planning Authority. The scheme shall include demonstration of support of the scheme through detailed plans and calculations of the proposed attenuation system and outfall arrangements. The calculations should demonstrate the performance of the designed system for a range of return periods and storm durations including 1 in 1 year, 1 in 2 year, 1 in 30 year, 1 in 100 year and 1 in 100 year plus 40% climate change based on a discharge rate of no more than 2.03 litres per second. Only the scheme that has been approved in writing shall then be implemented on site.

REASON

To prevent the risk of increased flooding, to improve and protect water supply and to improve habitat.

12. No development shall commence on site until the whole of the access arrangements as shown on the approved plans together with the alterations to the highway verge crossing have all been laid out and constructed to the written satisfaction of the Local Planning Authority.

REASON

In the interests of highway safety.

Pre-Operational Use conditions

13. There shall be no commercial export of electrical power from the site until a Drainage Verification Report for the installed surface water drainage system based on the Flood Risk Assessment approved under Condition 2 and the system as approved under Condition 11 has been submitted to and approved in writing by the Local Planning Authority. It should include:

- demonstration that any departures from the approved design is in keeping with the approved principles.
- As-built photographs and drawings.
- The results of any performance testing undertaken as part of the application process.
- Copies of all Statutory Approvals such as Land Drainage Consent for Discharge.
- Confirmation that the system is free from defects, damage and foreign objects.

The Report should be prepared by a suitably qualified independent drainage engineer.

Authorised Officer: [redacted]

Date: **19 July 2023**

REASON

To ensure that the development is implemented as approved and thereby reducing the risk of flooding.

14. There shall be no commercial export of electrical power from the site until a detailed site-specific maintenance plan has been submitted to and approved in writing by the Local Planning Authority. It shall include:

- The name of the party responsible, including contact name, address, email address and phone numbers.
- Plans showing the locations of features requiring maintenance and how these should be accessed.
- Details of how each feature shall be maintained and maintained and managed throughout the lifetime of the development.
- Written in plain English.

REASON

To ensure the maintenance of sustainable drainage structures so as reduce the risk of flooding.

15. There shall be no commercial export of electrical power from the site until a Landscape and Ecological Management Plan has first been submitted to and approved in writing by the Local Planning Authority. The details in that approved plan shall then be implemented on site and be adhered to at all times during the lifetime of the development.

REASON

In the interests of enhancing and protecting bio-diversity.

16. There shall be no commercial export of electrical power from the site until the extension to the access as shown on the approved plan has first been removed and the public highway verge crossing reduced in width and constructed to the written satisfaction of the Local Planning Authority.

REASON

In the interests of highway safety.

Other Conditions

17. The Construction Environment Management Plan dated October 2022 and the amended details set out in the Technical Note from Wardell Armstrong dated February 2023 shall be adhered to at all times throughout the construction of the development.

REASON

In the interests of the residential amenity and in the interests of road safety.

Authorised Officer: [redacted]

Date: **19 July 2023**

Condition 18 - decibel controls

The specific sound level from industrial/commercial sources within the development arising from the operation of solar farm equipment including the transformer/inverter stations, substation including ventilation equipment and batteries each including externally mounted HVAC units, shall not exceed the levels outlined in Table 1 for daytime and Table 2 for night time below.

Table 1. Daytime - existing noise sensitive receptor location

Receptor reference	Location	Approximate distance and direction from noise emitting equipment	LAeq,1hr (dB)
ESR 1	Residential property on Astley Lane	North - 150m	37
ESR 2	Residential properties on Astley Lane	North - 150m	37
ESR 3	Cow Lees Care Home	East - 100m	37
ESR 4	Farmhouses at Taff's Farm	South - 400m	33
ESR 5	Farmhouse at Vaul's Farm	West - 350m	33
ESR 6	Woodhouse Farm	North west - 430m	37

The specific sound levels within Table 1 should be measured or predicted at a height of 1.5m above ground level at the boundary of any residential dwelling between 0700-2300 on any day.

Table 2. Night-time - existing noise sensitive receptor location

Receptor reference	Location	Approximate distance and direction from noise emitting equipment	LAeq,15min (dB)
ESR 1	Residential property on Astley Lane	North - 150m	35
ESR 2	Residential properties on Astley Lane	North - 150m	35
ESR 3	Cow Lees Care Home	East - 100m	35
ESR 4	Farmhouses at Taff's Farm	South - 400m	31
ESR 5	Farmhouse at Vaul's Farm	West - 350m	31
ESR 6	Woodhouse Farm	North west - 430m	32

The specific sound levels within Table 2 should be measured or predicted at a height of 4.5m above ground level at 1m from the façade containing a habitable room with an opening window of any residential dwelling between 2300-0700 on any day. Where the residential dwelling is a bungalow, all measurements heights for day and night time are 1.5m.

The receptor locations ESR 1 to ESR 6 described within Table 1 and Table 2 refer to those identified in 'Table 1, Table 2, Table 4, Figure 1 and Figure 2' within the 'Bedworth Solar Farm, Noise Assessment Report dated March 2023 job no. NT15256' by Wardell Armstrong LLP.

The measurements and/or predictions should demonstrate the noise limits outlined in Table 1 above are met within gardens of the nearest affected noise sensitive receptors at 1.5m above the adjacent ground level as a "free field" level as defined by BS 7445: 2003 Description and measurement of environmental noise [Parts 1 to 3] for an area of not less than 75% of any dwelling garden. The measurements and/or predictions should demonstrate the noise limits outlined in Table 2 above are met at 1m from the façade containing a habitable room with an opening window of the nearest affected noise sensitive receptors at 4.5m above the adjacent ground level as a "free field" level as defined by BS 7445: 2003 Description and measurement of environmental noise [Parts 1 to 3]. The adjustment from a measured 'façade' to 'free field' level will depend on the angle of incidence.

Authorised Officer: [redacted]

Date: **19 July 2023**

REASON

To avoid significant adverse impacts on health and quality of life, to mitigate and minimise adverse impacts on health and quality of life and where possible contribute to the improvement of health and quality of life at noise sensitive receptors. [NPPF paragraph 174, NPPF paragraph 185, Noise Policy Statement for England 2010 and PPG on noise].

Noise condition 19 - Assessment of Compliance with decibel controls

Within six months of the commissioning of the new industrial/commercial development hereby permitted, the applicant shall undertake compliance noise monitoring. The applicant shall submit the results of the noise measurements in writing to the Local Planning Authority. The submission should confirm whether the specific sound level from industrial/commercial sources within the development arising from the operation of the solar farm meet the levels described in condition 1 Table 1 and Table 2. If the specific sound level from industrial/commercial sources within the development operational noise limits set up in noise condition 1 are exceeded, additional mitigation measures should be developed and implemented. Any additional mitigation measures shall be permanently retained and maintained in proper working order for the duration of the operational life of the development. The assessment should be carried out by a suitably qualified professional.

REASON

To demonstrate compliance with condition 1 and promote the aims and objectives of planning policy and guidance as well as national noise policy and planning (and noise) guidance to avoid significant adverse impacts on health and quality of life, to mitigate and minimise adverse impacts on health and quality of life and where possible contribute to the improvement of health and quality of life at noise sensitive receptors.

20. The landscaping scheme as approved under Condition 2, shall be carried out within the first planting season following the date when electrical power is first exported, or as otherwise agreed within the approved scheme. If within a period of five years from the date of planting, any tree, shrub, hedgerow or replacement is removed, uprooted, destroyed or dies, then another of the same species and size of the original shall be planted at the same place.

REASON

In the interests of the appearance of the area and to ensure that this is maintained throughout the life of the permission.

21. No tree works or vegetation clearance shall take place during the bird nesting period (the beginning of March to the end of August inclusive) unless otherwise agreed in writing by the Local Planning Authority on submission of appropriate evidence.

REASON

In the interests of ensuring that the nature conservation value of the site is maintained.

22. No gates shall be located within the vehicular access to the site so as to open within 20 metres of the near edge of the public highway carriageway.

REASON

In the interests of highway safety.

Authorised Officer: [redacted]

Date: **19 July 2023**

23. No security fencing shall be erected on or within 1 metre of any public footpath.

REASON

In the interests of ensuring access to the public footpath network.

24. There shall be no vegetation planted within two metres of the edge of any public footpath.

REASON

In the interests of ensuring access to the public footpath network.

INFORMATIVES

1. The Local Planning Authority has met the requirements of the NPPF in this case through engagement with the applicant in order to overcome technical issues and enhance the mitigation measures, so as to result in a positive outcome.

2 Whilst the applicant has demonstrated the principles of an acceptable surface water management strategy for the site, further information is still required as set out in conditions 11 and 13.

3 The surface water management strategy should be treated as a minimum. Further consideration should be given to other details that might be appropriate on site.

4 The details to be submitted under Conditions 11 and 13 should be close to the level of detail suitable for tender or construction.

5 All public footpaths must remain open and available for public use at all times, unless closed by Legal Order and so must not be obstructed by parked vehicles or by materials.

6 The applicant/developer must make good any damage to the surface of any public footpath caused during construction.

7 Any disturbance or alteration to the surface of any public footpath requires prior authorisation from the Warwickshire County Council, as does the installation of any new gate or other structure on the footpath.

8 Attention is drawn to Sections 149, 151, 163 and 184 of the Highways Act 1980, the Traffic Management Act 2004, the New Roads and Street Works Act 1991 and all relevant Codes of Practice.

APPEALS TO THE SECRETARY OF STATE

1. If you are aggrieved by the decision of the Local Planning Authority to grant permission subject to conditions, you can appeal to the Department for Communities and Local Government under Section 78 of the Town and Country Planning Act 1990.
2. If you want to appeal against your local planning authority's decision, then you must do so within 6 months of the date of this notice.
3. Appeals must be made using a form which you can get from the Planning Inspectorate at Temple Quay House, 2 The Square, Temple Quay, Bristol, BS1 6PN, or online at www.planning-inspectorate.gov.uk and www.planningportal.gov.uk/pcs.

Authorised Officer: [redacted]

Date: **19 July 2023**

4. The Secretary of State can allow a longer period for giving notice of an appeal, but he will not normally be prepared to use this power unless there are special circumstances which excuse the delay in giving notice of appeal.
5. The Secretary of State need not consider an appeal if it seems to him that the Local Planning Authority could not have granted planning permission for the proposed development or could not have granted it without the conditions they imposed, having regard to the statutory requirements, to the provisions of any development order and to any directions given under a development order.
6. The Secretary of State does not refuse to consider appeals solely because the Local Planning Authority based their decision on a direction given by him.

PURCHASE NOTICES

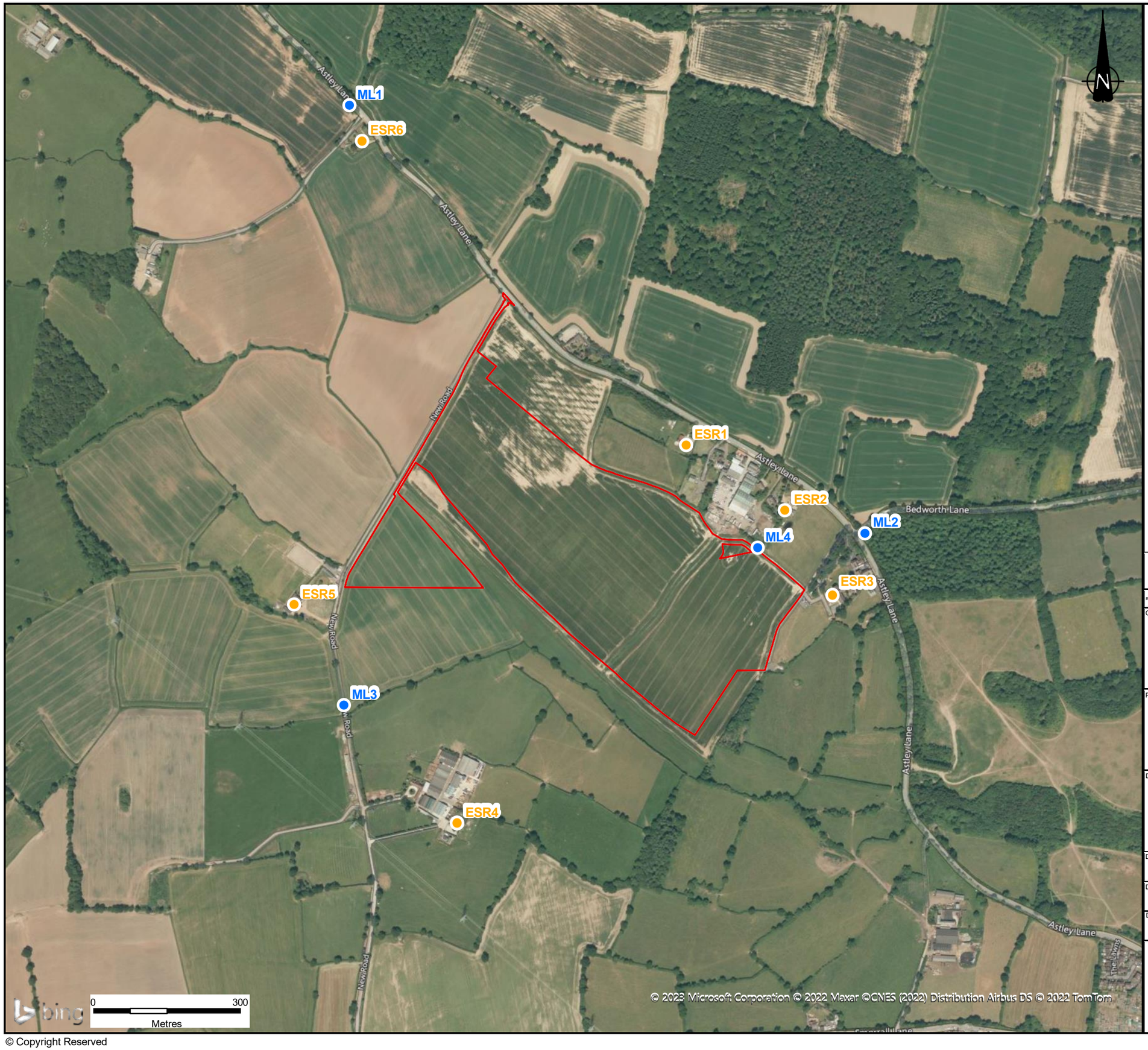
1. If either the Local Planning Authority or the Department for Communities and Local Government grants permission to develop land subject to conditions, the owner may claim that he/she can neither put the land to a reasonably beneficial use in its existing state nor render the land capable of a reasonably beneficial use by the carrying out of any development which has been or would be permitted.
2. In these circumstances, the owner may serve a purchase notice on the Council in whose area the land is situated. This notice will require the Council to purchase his/her interest in the land in accordance with the provisions of Part VI of the Town and Country Planning Act 1990.

NOTES

1. This decision is for the purposes of the Town and Country Planning Act only. It is not a decision under Building Regulations or any other statutory provision. Separate applications may be required.
2. A report has been prepared that details more fully the matters that have been taken into account when reaching this decision. You can view a copy on the Council's web site via the Planning Application Search pages http://www.northwarks.gov.uk/planning. It will be described as 'Decision Notice and Application File'. Alternatively, you can view it by calling into the Council's Reception during normal opening hours (up to date details of the Council's opening hours can be found on our web site http://www.northwarks.gov.uk/contact).
3. Plans and information accompanying this decision notice can be viewed online at our website http://www.northwarks.gov.uk/planning. Please refer to the conditions on this decision notice for details of those plans and information approved.

Authorised Officer: [redacted]

Date: **19 July 2023**



KEY

- Site Boundary
- Existing Sensitive Receptors
- Monitoring Locations

PAP/2022/0544

NORTH WARWICKSHIRE BOROUGH COUNCIL
RECEIVED
13/07/2023
PLANNING & DEVELOPMENT DIVISION

Notes:

Boundaries are indicative. Aerial imagery shown for context purposes only.

REVISION	DETAILS	DATE	DRAWN	CHKD	APP'D

CLIENT

INDUSTRIA SOLAR BEDWORTH LIMITED

PROJECT

BEDWORTH SOLAR FARM

DRAWING TITLE

NOISE MONITORING AND EXISTING SENSITIVE RECEPTOR LOCATION PLAN

DRG No.		REV
NT15256/901		A
DRG SIZE	SCALE	DATE
A3	1:7,500	02/03/2023
DRAWN BY	CHECKED BY	APPROVED BY
EF	SU	SU

wardell armstrong

PAP/2022/0544

KEY

Site Boundary

Other land under the control of the Applicant

NORTH WARWICKSHIRE BOROUGH COUNCIL

APPROVED

19/07/2023

UNDER THE PROVISIONS OF THE TOWN & COUNTRY PLANNING ACTS

SUBJECT TO CONDITIONS ON NOTICE

NORTH WARWICKSHIRE BOROUGH COUNCIL

RECEIVED

20/02/2023

PLANNING & DEVELOPMENT DIVISION

REVISION	DETAILS	DATE	DRAWN	CHKD	APP'D
C	AMENDED BLUE LIBNE BOUNDARY	02/23	SRW	AB	LG
B	AMEND PROJECT & CLIENT NAME	07/22	BRC	BP	LG
A	FIRST ISSUE	02/21	HM	AB	LG

CLIENT

INDUSTRIA SOLAR BEDWORTH LIMITED

PROJECT

BEDWORTH SOLAR FARM

DRAWING TITLE

CONTEXT LOCATION PLAN

DRG No.	REV
NT15256/001	C

DRG SIZE	SCALE	DATE
A3	1:10,000	20/02/2023

DRAWN BY	CHECKED BY	APPROVED BY
HM	AB	LG

wardell armstrong

NEWCASTLE UPON TYNE | TEL 0191 232 0943
WWW.WARDELL-ARMSTRONG.COM

BIRMINGHAM, BOLTON, CARDIFF, CARLISLE, EDINBURGH, GLASGOW, LONDON, MANCHESTER, SHEFFIELD, STOKE ON TRENT

0 500 Metres

PAP/2022/0544

DO NOT SCALE FROM THIS DRAWING

KEY

- SITE BOUNDARY (280,722m^2)
- WILDING AREA
- FOOTPATH ROUTE
- COMPOUND AREA DURING CONSTRUCTION PHASE
- ACCESS GATE DURING CONSTRUCTION AND DECOMISSIONING PHASE
- EXISTING ACCESS GATE

NOTES

- AREA COVERED BY SOLAR PANELS = 93,687m^2
- EXISTING ACCESS GATE TO BE USED DURING OPERATIONAL PHASE

NORTH WARWICKSHIRE BOROUGH COUNCIL
APPROVED
19/07/2023
UNDER THE PROVISIONS OF THE TOWN & COUNTRY PLANNING ACTS
SUBJECT TO CONDITIONS
ON NOTICE

NORTH WARWICKSHIRE BOROUGH COUNCIL
RECEIVED
02/05/2023
PLANNING & DEVELOPMENT DIVISION

REVISION	DETAILS	DATE	DRAWN	CHK'D	APP'D
E	Revised site layout	20.04.23	AB	BP	NB
D	Blue line boundary amended	17.02.23	JW	BP	NB
C	Amendement to blue line boundary and addition to access gates	16.02.23	AB	BP	NB
B	Blue line boundary amended	27.01.23	JW	BP	NB
A	DNO Communication Mast removed	17.01.23	AB	BP	NB

CLIENT
INDUSTRIA SOLAR BEDWORTH LTD.

PROJECT
BEDWORTH SOLAR FARM

DRAWING TITLE
PROPOSED SITE LAYOUT

DRG No.	REV	SUIT. CODE
NT15256-003	E	-

DRG SIZE	SCALE	DATE
A2	1:2500	10-10-2022

DRAWN BY	CHECKED BY	APPROVED BY
PAG/AB	AB	LG

wardell armstrong

0 80 160
metres

N:\NT\NT15256 - VAULS FARM SOLAR FARM\03 - DESIGN\AUTOCAD\NT15256-003- PROPOSED SITE PLAN - REV E.DWG

General Development Applications

(5/h) Application No: PAP/2022/0544

Land 550 Metres East Of Vauls Farm, Astley Lane, Astley,

Proposed construction of renewable energy generating solar farm together with transformers, inverters, control building, DNO substation, store room, security measures, associated infrastructure and works, landscaping and biodiversity enhancements, for

Industria Solar Bedworth Ltd

Introduction

This application was referred to the Board's May meeting, but determination was deferred in order that it could hear from Astley Parish Council which was meeting a couple of days after the Board meeting.

For convenience the previous report is attached in full at Appendix A. It should be considered as an integral part of this further report

Additional Information

The Astley Parish Council met on the 25 May. The applicant and his representatives were present at the meeting. its comments are attached at Appendix B.

At the time of preparing this report, officers had not received a response from the applicant – particularly in regard of the two matters raised by the Parish. The Board will be updated at its meeting, and should a response be received in the interim it will be circulated as soon as possible.

Observations

The comments from the Parish are reflected in the previous report at Appendix A. The letter does however conclude with two matters. It asks the Board and the applicant to consider additional screening along the southern boundary and early planting with more substantive trees so as to enable early screening. Hopefully officers will be able to update Members at the meeting.

Recommendation

A set out in Appendix A together the noise conditions circulated at the May Board meeting

APPENDIX A

General Development Applications

(8/f) Application No: PAP/2022/0544

Land 550 Metres East Of Vauls Farm, Astley Lane, Astley,

Proposed construction of renewable energy generating solar farm together with transformers, inverters, control building, DNO substation, store room,mast, security measures, associated infrastructure and works, landscaping and biodiversity enhancements, for

- Industria Solar Bedworth Ltd

Introduction

1.1 This application was first reported to the Board for information in December followed by a full determination report in April. Members of the Board visited the site prior to that meeting. The Board resolved to defer a decision at its April meeting as it had a series of queries arising from the discussion and because it sought clarification on a number of matters.

1.2 The full report to the April meeting is attached at Appendix One. This also contains a copy of the initial December report. They are both to be considered as an integral part of this further report.

1.3 As a consequence of the deferral, a letter was sent to the applicant outlining the scope of the additional information and clarification sought. This is attached at Appendix Two

1.4 The applicant has responded in full to this through the submission of a full written response which is attached at Appendix Three as well as a Technical Note covering the matter of Alternative Sites which is at Appendix Four.

1.5 In addition the applicant has amended his proposal, in response to several of the observations made at the April meeting and to the representations that had been received. In short, these amendments include:

- a ten metre wide, woodland belt to be provided along the western, northern and eastern site boundaries.
- the relocation of all of the plant and buildings to the north-west corner of the site to the area where the construction compound would be located. These were originally to be located inside the northern boundary closer to established residential property
- the access into the site for maintenance purposes would be relocated to the bottom of the valley away from the northern boundary

1.6 These amendments are illustrated on the plan at Appendix Five

1.7 This has been referred to those who made representations on the initial submission for further comments. Any received will be reported to the Board.

2. The Applicant's Response

2.1 It is not proposed to repeat the applicant's response to the Board's queries as these are fully set out in the Appendices referred to above. In particular Members are referred to the "Key Points" in Appendix Three as these provide the conclusions to the questions asked. However, a number of matters will be highlighted, dealing first with the matter of principle before looking at more detailed matters.

2.2 The Board had asked about the role of this proposal in the supply of renewable energy. The Government's objectives require a significant increase in solar capacity and whilst there is progress, the objective still remains ambitious. Whilst proposals already in the Borough are helping with this, some of these schemes will be decommissioned in twenty years' time and there will be some degradation of earlier technology such that there will be a need to replenish this provision. To do so sites have to be found that can be connected to the National Grid and thus to existing substations that have capacity. The applicant explains that these facilities are at capacity in the North Warwickshire area, but that a connection can be made to the Newdegate substation in Bedworth and this is why proposals are being seen in this part of the Borough. The applicant makes the point that unless there is substantial investment by National Grid to upgrade their substations, there are very unlikely to be further new solar farm proposals in the area.

2.3 Turning to other matters, the Board asked the applicant to review the submitted proposal to see if the visual, wildlife and potential noise impacts could be further reduced beyond the mitigation then proposed. This has resulted in the receipt of the amended plan. This shows a substantial enhancement over the original scheme and is thus a welcome response to the Board's concerns. The new woodland belts will have a significant visual benefit in reducing both visual and landscape impacts over time, by introducing mature woodland into an otherwise very open setting. They too will provide very effective screening of the solar arrays. There is then the associated added substantial benefit of enhancing bio-diversity levels over and above those which already would have been achieved through the original proposals. This is explained in some detail in Appendix Three.

2.4 The move of the plant and buildings to a remote part of the site is a significant change and will have the benefit of removing the likelihood of any adverse noise effects on the residential amenity of the occupiers of the dwellings along Astley Lane. The relocation of the maintenance access will add to this benefit.

2.5 Other matters raised by the Board are covered in Appendix Three – the concerns about wind tunnel effects, the propensity for birds to perceive the panels as water and the impact on soil health by leaving the land uncultivated.

3. Observation

3.1 From a planning perspective the applicant's response is significant. Both National and Local Plan policy support renewable energy development and accelerated progress is required to meet the Government's objectives on solar provision. This has already been highlighted as a material planning consideration of significant

weight in support of this proposal. However, the applicant has identified a critical locational constraint in progressing this objective. This constraint thus becomes a material planning consideration in support of this proposal. Finding a suitable site within proximity to a substation with capacity is a key locational factor in the assessment of the final planning balance.

3.2 In this case, it almost inevitably leads to a site having to be in the Green Belt – see Appendix Four. That means the inappropriateness of the development will always carry substantial weight in the final planning balance. Other "filters" have been introduced by the applicant in order to identify an actual site, such that the other harms likely to be caused are reduced. Here they include the agricultural value of the land, and whether there would be impacts on ecology and heritage assets. This has led the applicant to this site. The applicant has then further amended his proposal in order to reduce the actual Green Belt impact and other potential harms, such that the cumulative harm caused is "limited".

3.3 The previous report set out the applicant's case in paragraphs 5.32 to 5.37 of Appendix One. At that time, it was considered that these were sufficient to clearly outweigh the Green Belt and cumulative harms caused to amount to the very special circumstances necessary to support the proposal. This has now been supplemented by pages 12 to 17 of Appendix Three, together with the receipt of the amended plan. It is considered that these add weight to the case and that they now clearly do outweigh the cumulative harms caused.

3.4 The recommendation set out in Appendix One remains in place.

3.5 The proposed relocation of the plant and buildings will be of benefit from the "noise" perspective too. This has been agreed by the Environmental Health Officer and as indicated in Appendix One. appropriate conditions are to be agreed with him. If this is the case prior to the meeting, the draft conditions will be circulated to Members.

3.6 The April Board also asked about the position in respect of the Astley Parish Council. It is understood that it is to meet on 25 May. However, the content of paragraphs 5.28 and 5.29 of Appendix One remains. The offer of a Community Fund and the Parish Council's acceptance of that or not, is not a material planning consideration in the determination of this application.

Recommendation

As set out in Appendix One, with a variation to condition 2 to accommodate the revised plan numbers and for the noise conditions as agreed by the Environmental Health Officer to be included.

APPENDIX 1

General Development Applications

(9/c) Application No: PAP/2022/0544

Land 550 Metres East Of Vauls Farm, Astley Lane, Astley,

Construction of a renewable energy generating solar farm together with transformers, inverters, control building, DNO substation, storeroom, security measures, associated infrastructure and works, landscaping and bio-diversity enhancements for

Industria Solar Bedworth Ltd

1 Introduction

1.1 The receipt of this case was reported to the Board on 5th December and a copy of that report is attached at Appendix A.

1.2 The site location is illustrated at Appendix B

1.3 The Board resolved to visit the site and a note of this will be circulated prior to the meeting.

1.4 Since the date of the last report, the applicant has removed the mast from the proposal together with providing additional landscaping and amending the details of the access arrangements. Amended plans have been submitted to reflect this position --- see Appendices C and D.

1.5 As that report indicated, should the Board be minded to support the proposal, the case will need referral to the Secretary of State under the 2009 Direction. A refusal would not need to be referred.

1.6 There have been no changes to the Development Plan or to other material planning considerations since the date of the last report.

2. Consultations

Warwickshire County Council (Forestry) - No objection

Warwickshire County Council (Public Rights of Way) - No objection subject to conditions

Warwickshire County Council as Lead Local Flood Authority - No objection subject to conditions

Warwickshire County Council as Highway Authority – No Objection in principle, but amendments should be made to the access onto Astley Lane in order to improve safe ingress and egress. As indicated above, these have now been submitted leading to the withdrawal of the objection subject to conditions.

Warwickshire County Archaeologist – No objection subject to conditions

Ramblers Association - No objection on footpath grounds, but it objects on the impact on the Green Belt and the loss of agricultural land

Nuneaton and Bedworth BC - No objection

Warwickshire Police (Architectural Liaison) – No objection but have made detailed design comments

Birmingham Airport – No objection

Environment Agency – No comments

Environmental Health Officer – There was an initial objection as it had not been shown that there would be no unacceptable impacts, as there are several private houses close by. As a consequence, a fresh Noise Assessment has been undertaken and submitted.

There is now no objection subject to the imposition of conditions identifying noise thresholds at the most affected properties.

3. Other Material Planning Considerations

Climate Change Act 2008 (2050 Target Amendment) Order 2019

Energy Security Strategy 2012

UK Solar PV Strategy 2014

National Policy Statements EN1 and EN3

National Planning Policy Framework

North Warwickshire Climate Emergency

North Warwickshire Landscape Character Assessment 2010

British Energy Security Strategy 2022

4. Representations

4.1 Four objections have been received referring to:

- loss of agricultural land
- impact on the Green Belt
- additional traffic
- Adverse landscape impact
- Loss of habitat and the impact on wildlife
- Potential surface water flooding
- The visual intrusion of the tower
- CCTV protocols need to be adhered to
- Buildings should have solar panels on their roof
- Risks from leaks from the batteries

- Light and noise pollution
- How are the panels and batteries to be disposed?
- This is not a temporary development
- Meadowland is not appropriate mitigation – it should be trees

4.2 One of these covers a variety of other matters – this is attached in full at Appendix E.

4.3 Corley Parish Council objects and its letter includes many of the above matters, but majors on the adverse impact on the Green Belt which it considers should be protected

4.4 Craig Tracey MP has written pointing out the concerns expressed to him by the local community.

5. Observations

i) Green Belt

5.1 The site is in the Green Belt. Members will be aware that the construction of new buildings is defined by the NPPF as being inappropriate development in the Green Belt.

This would include the construction of all of the structures connected to the solar farm included in this proposal. As such, this proposal is harmful, by definition, to the Green Belt and should not be approved except in very special circumstances. In respect of "renewable energy projects", the NPPF says that many of the elements of these projects will comprise inappropriate development, and thus the applicant has to demonstrate very special circumstances if such projects are to proceed. The NPPF continues by saying that such circumstances, "may include the wider environmental benefits associated with increased production of energy from renewable sources".

5.2 The NPPF says that elements of these projects will comprise inappropriate development, but this definition not conclusive. This needs to be resolved from the outset. In this case the various elements associated with the proposal – the fences, panels and substations – are all built development and because of the size of the proposal, there is an underlying premise here that this can be reasonably said to constitute inappropriate development. In order to confirm this, it is necessary to see if the proposal as a whole would preserve the openness of the Green Belt and whether it would conflict with the purposes of including land within it. Members will be aware that there is no definition of openness in the NPPF, but Government Guidance provides four factors to look at. In respect of the first, then spatially, the proposal is large in terms of ground cover and there is also some height to many of these structures. The setting is wholly within open countryside. The land-form hereabouts is one of a small and shallow valley sloping towards the watercourse. This effectively means that the site sits on one side of a shallow "bowl". There is built development along its northern boundary, but otherwise there is little built form hereabouts. There is woodland further to the east. The proposal would introduce new built development into this setting. However, despite its size, the new development structures are low in height and the existing topography helps to contain the site. The removal of the mast from the proposal is also significant in this context. Given all of these factors, the spatial impact on openness would be local in extent, not impacting on the wider landscape. The second factor is a visual one. Here there would be very limited impact on neighbouring scattered residential property

because of the topography, but not from the neighbouring farm units. There would also be a visual impact as the proposal would be visible from the public domain from the footpaths that run along the site boundaries. Again because of the topography, these impacts would be local rather than affecting wider visibility. As above, the removal of the mast is a benefit. Whilst the impact from the footpath would be transitory, that from residential property would not and this would be adverse. In terms of the third factor then there would be very little activity associated with the proposal once operational. Activity would thus be akin to that associated with the current agricultural use of the site.

Finally, the proposal is not permanent, albeit the "life" is said to extend to 40 years. In all of these circumstances, it is considered that the openness of the Green Belt would not be preserved. Additionally, there would be some conflict with one of the purposes of including land within the Green Belt – i.e., safeguarding the countryside from encroachment. In conclusion therefore, the proposal does constitute inappropriate development and substantial weight has to be given to this definitional harm. However, the actual Green Belt harm caused is limited rather than substantial for all of the spatial, visual and activity reasons set out above.

ii) Landscape Harm

5.3 The site is within the "Church End to Corley (Arden Hills and Valleys)" Landscape Character Area as defined by the 2010 North Warwickshire Landscape Character Assessment and Study. This is described as being "an elevated farmed landscape of low, rounded hills, steep scarps and small incised valleys. This landform combined with extensive hilltop woodland and tree cover creates an intricate and small-scale character, punctuated by numerous scattered farms and hamlets". It continues by saying that "the majority of the character area is deeply rural and the tranquil Ancient Arden Landscape is apparent in the complex pattern of woodland, former wood pasture and heath, frequently sunken hedged lanes and scattered farms and hamlets".

Additionally, "To the south of Ansley and New Arley, numerous hedgerow trees around larger semi-regular arable fields, combine to provide a sense of Parkland character towards Arbury Park located just to the east within the Nuneaton and Bedworth District".

5.4 The previous report at Appendix A, identified the applicant's conclusion that following an Impact Assessment, there would be a local, long term but reversible change in the landscape, but with proposed mitigation, the overall harm would only be slightly adverse. This impact would be local in extent and scale and thus not impact on the broad character as described in paragraph 5.3. This overall assessment is agreed. The site is in a wholly rural setting and is within an expansive open area of countryside that is elevated and has extensive views. The landscape here is thus sensitive to change.

However, the site is generally confined to one side of a noticeable valley, which Members saw on their visit. As a consequence, whilst there will clearly be change introduced through this proposal, that would not be prominent in the wider or middle-distant surrounding landscape and thus it is not considered to be significant. This is because the built development here is not of significant height and it is spread through existing fields where there is existing hedgerow cover. The loss of the mast from the proposal is of particular benefit here. The landscape is capable of enhancement too

through the mitigation measures including the strengthening of the hedgerow cover, which are likely to strengthen the overall landscape character.

5.5 Local Plan policy LP14 says that development should "conserve, enhance and where appropriate restore landscape character". Additionally, "new development should as far as possible retain existing trees, hedgerows and nature conservation features such as water bodies and strengthen visual amenity through further landscaping". Whilst the proposal may not fully accord with these objectives, it is considered on balance, that the overall landscape harm caused will be local and thus "limited".

iii) Visual Harm

5.6 The applicant's assessment comes to a similar conclusion in respect of the visual impacts, for the same reasons.

5.7 Public footpaths run along the western and southern boundaries – the M337 and the M335. Although these paths follow the whole of these boundaries over their whole length making the development noticeable even with enhanced planting, that impact would be transitory.

5.8 It is unlikely that the site would be visible by drivers using Astley Lane because of the separation distances and particularly the topography. Whilst the panels in the field on the southern side of the site might be visible from the Lane, this would be a glimpsed view and very transitory.

5.9. It is agreed that the site is isolated with scattered residential property and thus the likelihood of adverse visual impact on residential occupiers is likely to be limited. Those most affected would be the grouping at Sole End. The development is some 100 metres distant with existing hedgerow cover. Because of these matters and particularly the topography, it is considered that any adverse visual impacts would be limited in extent – mainly confined to first floor rooms. Mitigation measures would assist here. Occupiers of the business units at Sole End Farm would however have open views from the very rear of the site. There too would be visibility from some parts of the Cow Lees Care Home.

These impacts can be mitigated through additional planting. Vaul's Farm is the closest property and residents will experience open views into the bulk of the site because of the rising land on the northern side of the valley. Even with additional planting this impact would be significant. Taff's Farm to the south is within a range of farm buildings and is some distance away. Visual impacts would be limited.

5.10 Overall therefore it is considered that adverse visual impacts with mitigation would be local in extent and limited in scale, but with greater impact on the properties closest to the site.

5.11 Local Plan Policy LP14 is again the most relevant policy here and the conclusion on visual impact is also one of limited adverse impacts.

iv) Heritage Impacts

5.12 There are a number of matters to consider here. Members will be aware that heritage harms are defined by the NPPF as being "substantial", "less than substantial" or no harm. An assessment of the heritage impacts has to be considered in this context. The Council is under a Statutory Duty to pay special attention to the desirability of preserving or enhancing the character and appearance of a Conservation Area in the determination of an application within such a designated Area. The nearest Conservation Area to this application site is that in Fillongley. Because of the separation distances and the intervening topography there is no inter-visibility with that Area or any of the buildings within it such that there is no heritage harm caused to its character or appearance.

5.13 The Council is also under a Statutory Duty to have special regard to the desirability of preserving a Listed Building, or its setting or any features of special architectural or historic interest which possesses. There are a number of designated buildings in the vicinity – the closest being Astley Church and Astley Castle. The former is a Grade 1 Listed Building and the latter is Grade 2 star. Associated buildings such as the stable block and Lodge are Listed under Grade 2. In general terms this group of heritage assets is a kilometre and a half to the north-west of the application site. There is no direct impact on their architectural and historic fabric, or the special attributes of these buildings. However, their setting when treated cumulatively is of high significance. This is because of the combination of historic, architectural and landscape characteristics as well as their community and social value. In this case the prime significance of this group of buildings is the contained and compact settlement of Astley with its surrounding tree cover and the visibility of the Church within a wholly rural and open landscape. The proposal will have no direct impact on this setting because of the intervening separation, no inter-visibility, the topography, tree cover and the nature of the proposed development. As a consequence, appreciation of Astley in the overall landscape would still be retained. However, the combined heritage significance of this setting is of high value. The NPPF says that the more important the asset, the greater the weight that should be given to its conservation. Nevertheless, because of the factors identified above, it is considered that any harm to the setting of this group of assets would be at the lower end of less than substantial.

5.14 Arbury Hall and its Park are also heritage assets further to the north-east. Again, these are of high value – the Hall having a combination of Grade 1, 2 star and 2 Listed Buildings with the Park and Garden being registered as Grade 2 star. Again, there is no direct impact on any of these assets, because of the significant separation distances, intervening topography, woodland and the nature of the proposal. The assessment again rests on whether there is any harm caused to the setting of this group of high value assets. As with the Astley grouping, the significance of the Arbury group is substantial and thus great weight has to be given to its conservation. As with the Astley group, it is considered that any harms caused would be less than substantial and at the lower end of that scale.

5.15 Finally, it is necessary to look at whether there would be any direct impact on the heritage value of the site itself. The Warwickshire County Planning Archaeologist considers that there is a potential for the site to contain archaeological remains from the pre-historic, Roman, and Anglo-Saxon periods. However, he considers that this potential can be investigated pre-commencement rather than pre-determination. This

judgement is made on the basis of a phased trial trenching investigation proposed by the applicant together with his agreement to use construction methods that would avoid any below ground impacts should the fieldwork identify important archaeological remains requiring preservation in situ. This carries substantial weight.

5.16 Overall therefore it is concluded that the proposal would accord with Local Plan Policy LP15 in that it would cause less than substantial harm and that such harm would be at the lower end of that scale.

v) Ecology

5.17 The nearest statutory nature conservation site is at Ensor's Pool some 3.5 kilometres from the site, but this has no ecological or hydrological connections with the site. There are three Local Nature Reserves between 2.5 and 4 kilometres from the site – Bedworth Sloughs, Galley Common and Daffern's Wood, but as above, there is no connectivity between them and given the nature of the development, there is no adverse impact identified.

5.18 The site itself comprises three large arable fields bounded by hedgerows with a number of trees and a drainage ditch running along the southern boundary. It has a generally low overall ecological value and a limited variety of habitats. The proposals include a number of mitigation measures to ensure that there is bio-diversity nett gain associated with the development. These include strengthening existing hedgerows, creating 2.8 kilometres of new hedgerow, creating new meadow land and the provision of a new pond. As a consequence, the nett gain would be in excess of the statutory requirement. The site itself has poor quality foraging habitats for bats, but the adjacent plantation would not be affected by the proposal. The site contains suitable habitats for badger foraging and sett creation, but none have been identified. Providing the existing hedgerows are retained and strengthened and the panels are set away from the hedgerows, the proposal would not be harmful to badger activity. The site supports a wide range of bird species including barn owls, but the proposal would not cause harm to their continued presence. All water bodies within 250 metres of the site were evaluated for Greater Crested Newts. One of these was found to contain a low population of newts. No newt ponds are being lost through the development. However, in order to enhance the overall population and to increase the available habitat for the existing population, a new pond is proposed within the site as part of the mitigation measures.

5.19 Local Plan policy LP16 seeks to protect and enhance the quality, character and local distinctiveness of the natural environment as appropriate to the nature of the development proposed. A bio-diversity nett gain has been shown to be provided here. It is considered that the enhancements and the fact that the site is to be left uncultivated, provide the appropriate comforts to conclude that there will be no unacceptable level of harm.

vi) Highways

5.20 As recorded in Appendix A, all access would be gained from Astley Lane via improvements to the existing agricultural access track that already is in use. A temporary construction compound would be provided off this track. Construction traffic would be to and from the M6 via Heath Road and Astley Lane with all traffic arriving

from and leaving to the east. This would reduce throughout the four-month construction period – from around 60 two-way vehicle movements a day to 30 (both HG and LG) vehicle movements. Once operational, the site would average one visit a week.

5.21 The Highway Authority has not objected in principle but asked for changes to the access itself. These are not unreasonable and can all be achieved. The applicant has responded by submitting amended plans which has resulted in the County Council being satisfied. There is thus not considered to be an unacceptable highway impact with the proposal as it would then accord with Local Plan Policy LP29 (6).

vii) Agricultural Land

5.22 It is agreed that the land here would be taken out of agricultural production. As already indicated in Appendix A, only 15% of the site is good quality agricultural land – grade 3a. This would be still a harmful impact to be considered in the final planning balance. However, the land would not be permanently lost and there would be the opportunity for sheep grazing and resting the soils leading to their overall improvement.

In all of these circumstances it is not considered that significant harm would be caused.

viii) Other Matters

5.23 Following the receipt of additional information, the Lead Local Flood Authority is now satisfied subject to conditions, and this is of significant weight in concluding that there would be no unacceptable drainage impact

5.24 Further information requested by the Environmental Health Officer in respect of potential noise impacts has been submitted leading to there being no objection subject to conditions. These conditions would "mirror" those used on similar cases in the Borough.

5.25 Given the separation distances to residential property, the intervening topography and vegetation, it is considered that there would be no adverse impact on the residential amenity of occupiers.

5.26 It is of note that the Airport has not objected on potential glint and glare impacts. Similarly, the Fire and Rescue Service has not objected.

5.27 Many of the matters that are referred to in Appendix E are not planning matters.

ix) The Proposed Community Fund

5.28 The applicant is proposing a local community fund for use in Astley Parish. This would either be an annual £5,000 payment for the duration of the development, or a one-off £50,000 payment. The Parish Council has not yet responded.

5.29 Members should be aware that this a not a material planning consideration in the Board's determination of this application. It is a "private" consideration between the Parish and the applicant.

x) Cumulative Impacts

5.30 It is necessary to assess whether there is any cumulative harm caused by this and other recent approvals. The two other approved sites are several kilometres apart and there is no visual intervisibility, highway or footpath network connection or nature conservation corridor or linkage between the two sites. In landscape terms they are located in different settings and with no overlapping impacts. There is thus no cumulative landscape harm. However, all of the sites are in the Green Belt and taken together there is an argument that the Green Belt is not being protected. However, the essential characteristics of the Green Belt as defined by the NPPF are its openness and permanence. There would be no cumulative loss of openness as each of the proposals has been shown to preserve openness and the proposals, although long-term are all time-limited and are all reversible. It is not therefore considered that cumulative harm should amount to a recommendation of refusal.

d) The Harm Side of the Planning Balance

5.31 From the above assessments it is considered that the "harm" side of the planning balance in this case comprises substantial definitional Green Belt harm, limited actual Green Belt harm, less than substantial heritage harm, and the loss of a small amount of good quality agricultural land.

e) The Applicant's Case

5.32 The applicant's case has to provide sufficient weight to amount to the very special circumstances needed to "clearly" outweigh the cumulative level of harm caused. He has put forward a number of considerations which he considers do carry that weight when treated together – see paragraph 4.14 of Appendix A. It is not proposed to repeat the case as set out in that Appendix.

5.33 A number of these relate to the need to increase renewable energy generation and to ensure its supply. The applicant says that energy generation from the site would be 16MWh of electricity a year – equivalent to the use of around 5200 homes. National Energy and Planning Policy fully support these objectives and Members are referred to Section 3 above, which identifies the relevant documentation. In a planning context, then the NPPF at paragraph 152 says that the "planning system should support the transition to a low carbon future and support renewable and low carbon energy and associated infrastructure". More particularly at paragraph 158 it says that "when determining planning 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 importantly, "approve the application if its impacts are (or can be made) acceptable". This is complemented by Policy LP35 of the North Warwickshire Local Plan which says that "renewable energy projects will be supported where they respect the capacity and sensitivity of the landscape and communities to accommodate them. In particular, they will be assessed on their individual and cumulative impact on landscape quality, sites or features of natural importance, sites or buildings of historic or cultural importance, residential amenity and the local economy". In respect of proposed renewable developments in the Green Belt, then the NPPF at paragraph 151, says that in respect of making a case for very special circumstances, applicants "may include the wider environmental benefits associated with increased production of energy from renewable sources". Additionally, the most recent Supply

Strategy Statement from the Government reflects the focus on renewable sources, as well as sustaining its supply. As a consequence of all of these matters, it is considered that these considerations put forward by the applicant, carry substantial weight.

5.34 Further considerations revolve around the use of using the best available technology and good design. This revolves around maximising the productivity of the site for renewable energy whilst minimising visual and environmental harm. This is a relevant consideration as it assists in reducing land take and storing energy on site so as to release it to the grid as and when it might be needed. In so doing the design has retained existing field boundaries and tree cover and used ground levels to its advantage. If the renewable energy objective is acknowledged, then it is considered that that these "design" considerations should carry significant weight in order to reduce a range of potential adverse impacts.

5.35 The applicant considers that the impacts here will be reversible in that the site would be de-commissioned after 40 years. This is acknowledged as a consideration, but this period is lengthy and any residual impacts even if mitigated, would still be apparent throughout this time. As a consequence, this consideration can only be afforded moderate weight.

5.36 The final considerations revolve around bio-diversity gain and soil regeneration. It is considered that bio-diversity gain should be given weight, but this objective will become a mandatory requirement in any event next year. Soil regeneration is considered to be a benefit of some weight and farm diversification would accord with Local Plan Policy LP13. As such this set of considerations would carry moderate weight.

5.37 In conclusion therefore, the need to provide sustained renewable energy carries substantial weight and the employment of good design and the best available technology to do so, carries significant weight. Moderate weight is afforded to the timespan of the development and to the ecological benefits associated with the proposal.

f) The Final Planning Balance

5.38 The final planning balance is thus coming to a planning judgement on whether the weight to be given to the applicant's case as summarised in paragraph 5.34 "clearly" outweighs the cumulative weight of the harms identified in para 5.28 above.

5.39 It is considered that it does for the following reasons.

5.40 It is recognised that solar farms may result in some landscape and visual harmful impacts, as well as being inappropriate development in the Green Belt. However national and local planning policy indicate that a positive approach should be taken, indicating that development can be approved in very special circumstances and those circumstances can include the benefits arising from renewable energy generation. Here, through a combination of topography, existing screening and landscape mitigation, the adverse effects on the openness of the Green Belt, landscape harm and visual impact would be localised and thus limited. Moreover, as the proposed mitigation progressively matures, there would be a reduction in these residual adverse impacts. Additionally, the bio-diversity gains are a significant benefit. Whilst there would be some localised harm, greater weight is attached to the overall societal and national benefit arising from the

need to tackle climate change through support of renewable energy generation and its sustainable supply. Material considerations here are the 40-year life of the project and the very recent Energy Supply Strategy. These would make it unreasonable to limit the life of the development to a shorter period when the technology and design of the proposal ensures a sustainable energy supply.

5.41 It was found that there was less than substantial heritage harm and that this was at the lower end within this definition. The NPPF says that even in this circumstance, the harm still carries great weight. It has to be weighed against the public benefits of the proposal. It is considered that the need to tackle climate change as recognised in legislation, national energy policy and Development Plan policy and the substantial benefits of the scheme, when taken together do outweigh the less than substantial harm to the heritage assets involved.

5.42 Whilst the proposal would take agricultural land out of active production, there would no loss of that land given the reversible nature of the proposal and there would be some enhancement through enabling the soil to improve.

5.43 The proposal would make a contribution to the objective of achieving an increase in renewable energy generation and ensure that this is a sustainable increase. When national and local plan policy is taken together as a whole, the proposal would not conflict with their objectives.

Recommendation

That, once agreement has been reached on the wording of "noise" conditions, this matter is referred to the Secretary of State under the 2009 Direction, as the Council is minded to support the grant of planning permission, subject to the following conditions and those agreed in respect of noise:

Standard Condition

1. The development to which this permission relates must be begun not later than the expiration of three years from the date of this permission.

   REASON

   To comply with Section 91 of the Town and Country Planning Act 1990, as amended by Section 51 of the Planning and Compulsory Purchase Act 2004, and to prevent an accumulation of unimplemented planning permissions.

Defining Conditions

2. The development hereby permitted shall not be carried out except in complete accordance with the following approved plans and documents:

   a) plan numbers NT15256/001C, 003D, 004, 005, 107A together with the CCTV details and plans for the control room, cable trenching, the customer substation, the DNO substation, the security fencing, the storage room, the transformer substation and the access road construction.

b) Access plan number NT1526/601D and 602C together with the Technical Note NT15256/001.
c) The Flood Risk Assessment (NT 15256 – Solar End Solar Farm FRA – Rev A) prepared by Wardell Armstrong and received by the Local Planning Authority on 20/12/22.
d) The Construction Environmental Management Plan prepared by Wardell Armstrong dated October 2022.

REASON

In order to define the extent and scope of the planning permission.

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

   REASON

   In order to confirm that this permission is for a temporary period only.

4. If the solar farm hereby permitted, ceases to operate for a continuous period of twelve months, then a scheme for the de-commissioning and removal of the solar farm and its ancillary equipment, shall be submitted in writing to the Local Planning Authority within six months of the cessation period. The scheme shall make provision for the removal of the solar panels and associated above ground works approved under this permission. The scheme shall also include the details of the management and timing of the de-commissioning works, together with a traffic management plan to address any likely traffic impact issues during the de-commissioning period together with the temporary arrangements necessary at the access onto Astley Lane and an environmental management plan to include details of the measures to be taken during the de-commissioning period to protect wildlife and habitats as well as details of site restoration measures. For the avoidance of doubt, the landscape planting and bio-diversity improvements approved under this permission shall all be excluded from this condition.

   REASON:

   In order to define the scope of the permission and to confirm that this is for a temporary period.

5. The scheme as agreed in writing by the Local Planning Authority under condition 4 shall be implemented in full within twelve months of the cessation of the site for the commercial export of electrical power, whether that cessation occurs under the time period set out in Condition 3, but also at the end of any continuous cessation of the commercial export of electrical power from the site for a period of twelve months.

   REASON

   In order to ensure the satisfactory re-instatement of the land.

Pre-Commencement conditions

6. Notwithstanding the approved plans contained in condition 2, prior to their erection on site, details of the proposed materials and finish, including colour, of all solar panels, frames, ancillary buildings, equipment, fences and enclosures shall be submitted to and approved in writing by the Local Planning Authority. Development shall then be carried out in accordance with the approved details and shall be maintained as such for the lifetime of the development.

   REASON

   In the interests of appearance of the area.

7. Notwithstanding the submitted details, no works or development shall take place until an Arboricultural Method Statement and Scheme for the protection of any retained tree and hedgerow has first been agreed in writing by the Local Planning Authority. The Scheme shall include a plan showing details and positions of the ground areas to be protected areas and details of the position and type of protection barriers.

   REASON

   In the interests of the appearance of the area and to ensure that there is no avoidable loss of landscaping and bio-diversity enhancement.

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

   REASON

   In the interests of the residential amenity of neighbouring occupiers.

10. No development shall take place on site including any site clearance or preparation prior to construction, until all three of the following have been completed.

i) A Written Scheme of Investigation (WSI) for a programme of archaeological evaluative work over the whole site has been submitted to and approved in writing by the Local Planning Authority.
ii) The programme of archaeological evaluative fieldwork and associated post-excavation analysis and report production detailed within the approved WSI has been undertaken and a report detailing the results of this fieldwork and confirmation of the arrangements for the deposition of the archaeological archive has been submitted to the Local Planning Authority
(iii) An archaeological Mitigation Strategy (including a WSI for any archaeological fieldwork proposed) has been submitted to and approved in writing by the Local Planning Authority. The Strategy should mitigate the impact of the proposed development and should be informed by the evaluation work undertaken.

REASON

In the interests of the potential archaeological value of the site

11.No development shall commence on site until a detailed surface water drainage scheme for the site, based on sustainable drainage principles has been submitted to and approved in writing by the Local Planning Authority. The scheme shall include demonstration of support of the scheme through detailed plans and calculations of the proposed attenuation system and outfall arrangements. The calculations should demonstrate the performance of the designed system for a range of return periods and storm durations including 1 in 1 year, 1 in 2 year, 1 in 30 year, 1 in 100 year and 1 in 100 year plus 40% climate change based on a discharge rate of no more than 2.03 litres per second.

Only the scheme that has been approved in writing shall then be implemented on site.

REASON

To prevent the risk of increased flooding, to improve and protect water supply and to improve habitat.

12.No development shall commence on site until the whole of the access arrangements as shown on the approved plans together with the alterations to the highway verge crossing have all been laid out and constructed to the written satisfaction of the Local Planning Authority.

REASON

In the interests of highway safety.

Pre-Operational Use conditions

13.There shall be no commercial export of electrical power from the site until a Drainage Verification Report for the installed surface water drainage system based on the Flood Risk Assessment approved under Condition 2 and the system as approved under Condition 11 has been submitted to and approved in writing by the Local Planning Authority. It should include:

- demonstration that any departures from the approved design is in keeping with the approved principles
- As-built photographs and drawings
- The results of any performance testing undertaken as part of the application process
- Copies of all Statutory Approvals such as Land Drainage Consent for Discharge
- Confirmation that the system is free from defects, damage and foreign objects.

The Report should be prepared by a suitably qualified independent drainage engineer.

REASON

To ensure that the development is implemented as approved and thereby reducing the risk of flooding.

14.There shall be no commercial export of electrical power from the site until a detailed site- specific maintenance plan has been submitted to and approved in writing by the Local Planning Authority. It shall include:

- The name of the party responsible, including contact name, address, email address and phone numbers
- Plans showing the locations of features requiring maintenance and how these should be accessed.
- Details of how each feature shall be maintained and maintained and managed throughout the lifetime of the development.
- Written in plain English

REASON

To ensure the maintenance of sustainable drainage structures so as reduce the risk of flooding.

15. There shall be no commercial export of electrical power from the site until a Landscape and Ecological Management Plan has first been submitted to and approved in writing by the Local Planning Authority. The details in that approved plan shall then be implemented on site and be adhered to at all times during the lifetime of the development.

REASON

In the interests of enhancing and protecting bio-diversity.

16. Within three months of the first commercial export of electrical power from the site until the extension to the access as shown on the approved plan has first been removed and the public highway verge crossing reduced in width and constructed to the written satisfaction of the Local Planning Authority.

REASON

In the interests of highway safety

Other Conditions

17.The Construction Environment Management Plan dated October 2022 and the amended details set out in the Technical Note from Wardell Armstrong dated October 2022 shall be adhered to at all times throughout the construction of the development.

REASON

In the interests of the residential amenity and in the interests of road safety.

18. Noise condition to be agreed as per the recommendation.

19. Within six months after the first commercial export of electrical power from the development hereby approved, the applicant shall undertake compliance noise monitoring. The applicant shall submit the results of the noise measurements undertaken in writing to the Local Planning Authority. The submission should confirm whether the specific sound levels from industrial/commercial sources within the development arising from the operation of the solar farm, meet the requirements set out in Condition 18. If the specified sound levels are exceeded, additional mitigation measures should be developed and implemented. Any such mitigation measures shall first be agreed by the Local Planning Authority in writing and permanently retained and maintained in proper working order for the duration of the operational life of the development.

REASON

To demonstrate compliance with condition 18 and thus to accord with Local Planning Policy LP29 and NPPF paragraph 174 so as to minimise adverse sound levels at neighbouring residential property.

20. The landscaping scheme as approved under Condition 2, shall be carried out within the first planting season following the date when electrical power is first exported, or as otherwise agreed within the approved scheme. If within a period of five years from the date of planting, any tree, shrub, hedgerow or replacement is removed, uprooted, destroyed or dies, then another of the same species and size of the original shall be planted at the same place.

REASON

In the interests of the appearance of the area and to ensure that this is maintained throughout the life of the permission.

21. No tree works or vegetation clearance shall take place during the bird nesting period (the beginning of March to the end of August inclusive) unless otherwise agreed in writing by the Local Planning Authority on submission of appropriate evidence.

REASON

In the interests of ensuring that the nature conservation value of the site is maintained
22. No gates shall be located within the vehicular access to the site during the construction and de-commissioning phases, so as to open within 20 metres of the near edge of the public highway carriageway.

REASON

In the interests of highway safety.

23. No security fencing shall be erected on or within 1 metre of any public footpath.

REASON

In the interests of ensuring access to the public footpath network

24. There shall be no vegetation planted within two metres of the edge of any public footpath.

REASON

In the interests of ensuring access to the public footpath network

Notes:

1. The Local Planning Authority has met the requirements of the NPPF in this case through engagement with the applicant in order to overcome technical issues so as to result in a positive outcome
2. Whilst the applicant has demonstrated the principles of an acceptable surface water management strategy for the site, further information is still required as set out in conditions 11 and 13.
3. The surface water management strategy should be treated as a minimum. Further consideration should be given to other details that might be appropriate on site.
4. The details to be submitted to discharge conditions 11 and 13 should be close to the level of detail suitable for tender or construction.
5. All public footpaths must remain open and available for public use at all times, unless closed by legal Order and so must not be obstructed by parked vehicles or by materials.
6. The applicant/developer must make good any damage to the surface of any public footpath caused during construction
7. Any disturbance or alteration to the surface of any public footpath requires prior authorisation from Warwickshire County Council as does the installation of any new gate or other structure on the footpath.
8. Attention is drawn to Sections 149, 151, 163 and 184 of the Highways Act 1980, the Traffic Management Act 2004, the New Roads and Street Works Act 1991 and all relevant Codes of Practice.

APPENDIX A

General Development Applications

(7/c) Application No: PAP/2022/0544

Land South of Astley Lane, Bedworth

Construction of a renewable energy generating solar farm together with transformers, inverters, control building, DNO substation, store-room, mast, security measures, associated infrastructure and works, landscaping and bio-diversity enhancements for

Industria Solar Bedworth Ltd

1. Introduction

1.1 This report is brought to the Board in order to acknowledge its receipt, such that Members can review the proposals and the planning background prior to a full determination report being referred to the Board.

1.2 Members will be aware that the Board recently granted planning permission for two other solar farm applications in this same general area of North Warwickshire.

1.3 The cumulative impacts of these two recent consents with this current case will need to be assessed.

1.4 The proposal may fall under the 2009 Direction whereby there would need to be referral to the Secretary of State in the event that the Council was minded to support the proposal given its Green Belt location.

2. The Site

2.1 The site comprises three arable fields with a total of 28 hectares located around 100 to 125 metres south of Astley Lane – the C13 road – which runs from Astley to the north-west into Bedworth to the south-east. The land between the Lane and the site is essentially level and flat. Two of the fields which comprise the largest segment of the site are closest to Astley Lane and they are beyond this level ground. They slope noticeably down to water course – named as the River Sowe - which runs along their southern edge. The third much smaller field is to the south-west and is on the other side of the watercourse on the up-slope from it to higher land to the south. The difference in levels from the north -i.e. the level ground - to the water course is around 20 metres and from the south to the watercourse is around 5 metres. There is an overhead electricity line crossing the northwest corner of the easternmost field.

2.2 The setting of the site is rural being open countryside. There are a few residential properties fronting the south side of Astley Lane on the level ground referred to above and these are concentrated around Sole End Farm. This is a large range of former and current agricultural buildings many of which are now used for commercial purposes – known as the Sole End Farm Business Park. Further to the east along the Lane is the Cow Lees Care Home. To the west along the Lane are Soar End Farm – now a "book-farm" – and Wood Farm house. Astley village is about two kilometres to the west and the edge of Bedworth is around a kilometre to the east.

2.3 On the other side of the valley are two isolated farmsteads – Vaul's Farm and Taff's Farm. The latter is accessed from Smorral Lane to the south whereas the former has access onto Astley Lane.

2.4 A public footpath – the M337 Coventry Way - runs alongside almost the whole southern site boundary running in an east/west direction. The M335 runs north/south from Smorral Lane and past Vaul's Farm, crossing the MJ337, to exit onto Astley Lane. Another path the M336 joins the M335 at Taff's Farm again running up from further east along Smorral Lane.

2.5 The site is illustrated at Appendix A.

2.6 The site along with those of the two recent permissions is at Appendix B.

3. The Proposals

3.1 The solar array would be oriented east/west across the whole site with the panels being angled so as to face south. These would be 2.7 metres off the ground at their highest and 800mm at their lowest. There would be a three and a half metre open corridor between the lines of panels as well as other "stand-off" distances from fencing, other structures, hedgerows and trees. In terms of dimensions of other infrastructure, then the transformers would measure 3 by 2.45 metres and be 2.6 metres tall; the substation would be 9.5 by 2.4 and 2.8metres tall. The DNO substation would be 6.5 by 5.9 metres and 3.7 high. Additionally, there would be a store-room of 6 by 2.4 metres and 2.7 tall and a communication mast 1.2 metres wide and 20 metres tall. This mast would be located in the north-east of the site close to and behind the Sole End Farm range of buildings. A two metre tall perimeter security fence together with pole-mounted CCTV cameras would surround the site. All buildings are to be coloured dark green.

3.2 Access into the site would be from Astley Lane using an existing farm access up to Vaul's Farm. This would need

3.3 The point of connection to the grid would be at an existing substation on Woodlands Lane about 2 kilometres to the east and to route from the site would be within existing farm tracks and then in the highway.

3.4 The Construction compound would be in the far north-western corner.

3.5 A plan illustrating the layout is at Appendix C

3.5 In terms of landscaping then a mixture of wildflower meadow plants would be planted across the site; water tolerant wildflower meadow would be planted either side of the water course, a shade tolerant mix in the south-east outside of the site but in the same ownership, existing hedgerows would be retained but new ones planted so as to replicate the 1880 arrangement running down the slope together with a new pond in the north-east corner of the site. It is said that there would be a 250% biodiversity nett gain for habitats as a consequence and a 134% gain for hedgerows.

3.6 These are illustrated at Appendix D.

3.7 The construction period is estimated last for four to five months. It is anticipated that there would be an average daily flow of some 61 two-way vehicle movements into and out of the site during the initial phase of construction.

3.8 The proposal would generate renewable energy to power 5225 homes per year over its 40-year life.

3.9 A Community fund is being proposed either as a one-off payment or an annual sum throughout the proposals 40-year operational life. It is suggested that this might be arranged through the Parish Council.

3.10 There is a significant amount of supporting documentation submitted and this is summarised below.

4. Submitted Documentation

4.1 A Transport Assessment describes the condition of the access onto Astley Lane and the characteristics and setting of that road. The construction phase is anticipated to last for four months with an average of 61 movements per day (34 HGV's and 27 Car and LGV's) in the first month reducing to 28 in the final month (1 HGV and 27 Car and LGV's). Construction traffic would be routed via Bedworth to the M6 Motorway. The existing access geometry will need improvement. Once operational, the site would attract around 50 visits a year by either a van or a 4x4 vehicle.

4.2 A Ground Conditions Survey concludes that the site has always been in agricultural use. It is also within a Coal Authority Low Risk Area. There were also some small infilled former pits within the north of the site possibly used previously for the quarrying of sandstone. Because of the age of the infill – probably pre-1950 - the potential risks of gas emissions and leachable contamination are low. Overall, the survey concludes that there is low geo-environmental risk.

4.3 A Preliminary Ecological Appraisal concludes that there are no significant ecological constraints to the development and that with appropriate mitigation measures and additional assessments, the ecological value of the site would not be adversely affected. The proposed measures of meadow grassland, new hedgerows and the pond would enhance the overall value. The site lies wholly outside of the designated Ensor's Pool SSSI being 3.5 km away. Due to the low impact nature of the proposal, the separation distance and there being no ecological connectivity, there would be negligible direct or indirect impact. Similarly, the same conclusion is reached in respect of the site being at least 2.5 km and 4km away from three Local Nature Reserves. The site however is adjacent to Black Fir's Spinney – a local wildlife site – but due to the low impact of the proposal, any impacts are considered to be negligible. No further surveys are considered necessary for badgers or bats due to the low intensity of the development and there being no loss of trees or hedgerows. However additional survey work is needed for great crested newts given there is a pond within 250 metres of the site.

4.4 The Great Crested Newt Survey as recommended above has been undertaken. This showed that there are no ponds being lost as a consequence of the proposal, but that there may be some disturbance to them during construction when they are not present in the nearby pond referred to above. This would not normally require mitigation, but with proposed bio-diversity enhancements being proposed on site, the

opportunity is taken to provide an additional pond on site. The construction period is to be monitored by a qualified ecologist and one who is licensed to deal with newts and the creation of a potential new habitat for them.

4.5 An Environmental Management Plan describes in more detail how the bio-diversity enhancements are to be implemented and maintained.

4.6 A Noise Impact Assessment concludes that noise from the proposed development will cause a low impact at noise sensitive receptors and thus no mitigation is proposed. The report identifies these as being the residential properties along Astley Lane, Cow Lees Care Home, Taff's Farm, Vaul's Farm, Woodhouse Farm and the Astley Book Farm. The dominant existing noise source was found to be road traffic noise.

4.7 A Glint and Glare Assessment concludes that there would not generally be a material impact on residential properties around the site. However, two areas were identified where there may be some susceptibility to glint at certain times of the day – the northern portion of Astley Lane and the track to Vaul's Farm. The mitigation proposed in terms of proposed screening would have an impact in reducing this effect.

4.8 An Archaeological Appraisal indicates that an initial assessment has identified potential for archaeological remains from the medieval period onwards of agricultural use and it is suggested that a pre-commencement evaluation is the preferred way forward. The initial evidence does not suggest that the evaluation should be at pre-determination stage.

4.9 A Heritage Impact Statement identifies two Scheduled Ancient Monuments, a Grade 2 star and a Grade 2 Registered Park and Garden within five kilometres of the site, together with One Grade One, six Grade 2 star and 13 grade 2 listed buildings. It concludes that there is no direct impact on the fabric of any of these assets or their individual historic or architectural attributes. The main issue is the potential impact of the proposal on their settings both as individual assets and cumulatively. The Statement concludes that in general terms, due to the topography of the site, there is no intervisibility between these assets and the development and that the site is not within an area where the understanding of an asset might be prejudiced. Neither would there be any acoustic or lighting impacts on the settings. However, there are two instances that are identified. Views of the site would be possible from the top of the Astley Church tower. However, this is not a public viewpoint, but looking the other way, the tower would also have some visibility from the site. However, the Statement concludes that these would not be the "key" views of the tower. The other instance is that the site might have glimpsed and distant views from the lych-gate of the Corley Church. As above the Statement concludes that there would be no harm to the setting.

4.10 A Flood Risk Assessment identifies the majority of the site as being within Flood Zone 1. Surface water is to be discharged at four locations into the watercourse running along the southern boundary.

4.11 An Agricultural Land Classification Assessment says that the site is dominated by heavy textured soils which support land with mostly a Grade 3b (21 hectares – around 70%). The balance is made up of Grade 3a (3 hectares), Grade 2(1 hectare) and Grade 4 (3 hectares). The higher quality soils are lighter soils in the southwest of the site.

4.12 A Landscape and Visual Impact Assessment concludes that the proposal would lead to a local, long term but reversible change in the landscape, but that with the proposed mitigation the overall harm would be slightly adverse. In respect of the visual impact the Assessment concludes that the whilst the site is relatively open but constrained by the topography and the surrounding vegetation. It is well screened from long and middle-distance views, but the greatest impacts would be at the local closer distances – from Vaul's and Taff's Farm, property on Astley Lane and users on the footpaths. With mitigation, this would be still be moderately adverse.

4.13 A Statement of Community Involvement describes the pre-application consultation undertaken by the applicant. Community engagement is said to have taken the form of an interactive website; letters to around 540 properties around the site and contact with the Astley Parish Council. Of the 23 respondents on the website, 19 were from local address points. The main issues raised were the impact of views, property prices, public health, wildlife, loss of agricultural land and the lack of community benefits. Overall, 55% approved the proposal, 27% were unsure or preferred not to say and 18% objected.

4.14 A Planning Statement draws together all of these matters and discusses them within the national and local planning context. In particular the Statement identifies the applicant's considerations which are said to clearly outweigh the cumulative Green Belt and other harms caused so as to amount to the very special circumstances necessary to support the proposal.

These are:

- The proposal is for renewable energy generation in response to climate change.
- Energy security
- lack of alternative sites
- Temporary and reversible impacts
- Significant bio-diversity gain
- Resting the soil from intensive farming
- Positive economic impacts

5. Development Plan

The North Warwickshire Local Plan 2021 – LP1 (Sustainable Development); LP3 (Green Belt), LP14 (Historic Environment), LP15 (Landscape), LP16 (Natural Environment), LP29(Development Considerations), LP30 (Built Form) and LP35 (Renewable Energy and Energy Efficiency)

6. Other Material Planning Considerations

The National Planning Policy Framework – (the "NPPF")

National Planning Practice Guidance – (the "NPPG")

The North Warwickshire Landscape Character Assessment 2010

The Town and Country Planning (Consultation) (England) Direction 2009

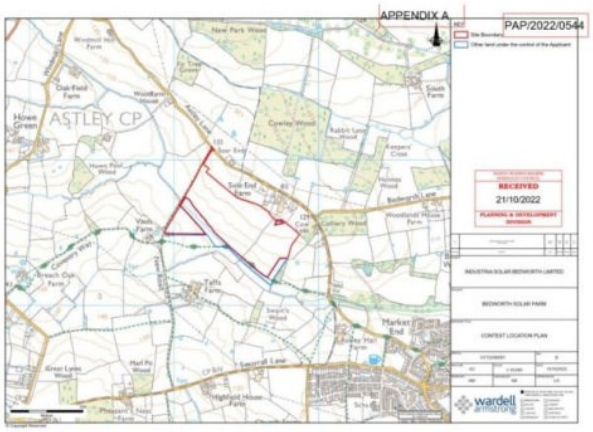
7. Observations

7.1 As explained above, this report is an introductory report bringing the application to the attention of the Board at an early stage. It describes the site as well as the proposal. The relevant parts of the Development Plan are identified a well as a number of other material planning considerations.

7.2 It is considered that the Board would benefit from looking at the site in order to best assess the impacts of the proposal.

Recommendation

That the report be noted and that Members visit the site prior to determination.



7C/25

9c/34

8f/62

APPENDIX B

Appendix B

5E/36

5f/179

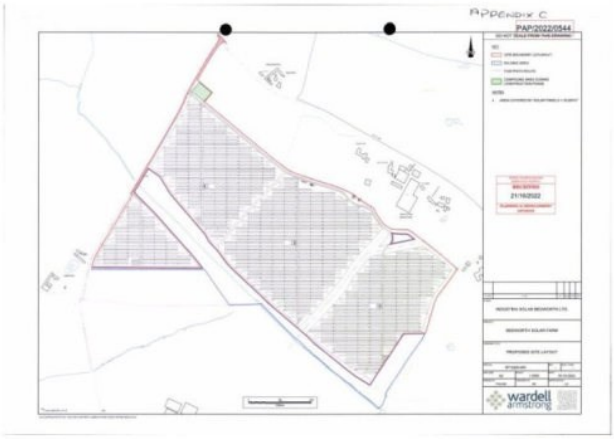
Page 47 of 105

7C/26

9c/35

8f/63

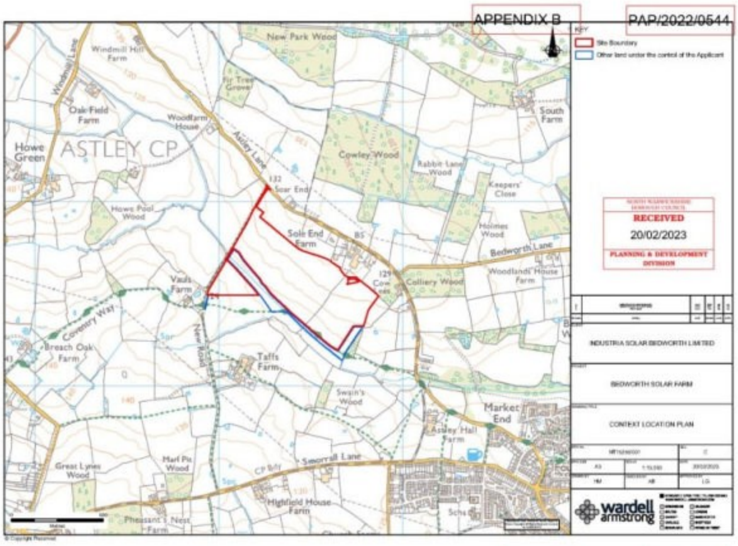
5h/179



7C/27

9c/36

8f/64


APPENDIX B
PAP/2022/0544
KEY
Site Boundary
Other land under the control of the Applicant
ASTLEY CP
Windmill Hill Farm
New Park Wood
Oak Field Farm
Woodfarm House
Howe Green
Astley Lane
Cowley Wood
Rabbit Lane Wood
Keepers' Close
South Farm
Soar End
Sole End Farm
Howe Pool Wood
Holmes Wood
Bedworth Lane
Colliery Wood
Woodlands House Farm
Vauls Farm
Coventry Way
New Road
Breach Oak Farm
Taffs Farm
Swan's Wood
Market End
Astley Hall Farm
Smorrall Lane
Great Lynes Wood
Marl Pit Wood
Highfield House Farm
Pheasant's Nest Farm
NORTH WARWICKSHIRE BOROUGH COUNCIL
RECEIVED
20/02/2023
PLANNING & DEVELOPMENT DIVISION
INDUSTRIA SOLAR BEDWORTH LIMITED
BEDWORTH SOLAR FARM
CONTEXT LOCATION PLAN
wardell armstrong


APPENDIX C
PAP/2022/0544
NORTH WARWICKSHIRE BOROUGH COUNCIL
RECEIVED
20/02/2023
PLANNING & DEVELOPMENT DIVISION
INDUSTRIA SOLAR BEDWORTH LTD
BEDWORTH SOLAR FARM
PROPOSED SITE LAYOUT
wardell armstrong

9c/38

8f/66

APPENDIX E6.

Opposition to Fillongley Solar Panels
February 2023

[redacted]

The following paper outlines why planning permission MUST be **refused** for the solar panel farm in Fillongley.

1. Solar Panels are inefficient

Whilst there are 3 different types of solar panels (Monocrystalline, Polycrystalline, and Thin-firm) that range in efficiency they also vary in cost. In general, solar panels are rated to perform at peak efficiency between 59F (15C and 35C) and 95F. This means that the panels will be most efficient during the summer when electricity demand is at its lowest. Outside of this temperature range the efficiency by which the panels decrease does depend on the panel type but for every one degree above 25C the maximum efficiency will decrease by 0.38%. This means that as the temperatures in the UK in the summer months continue to rise the efficiency of the solar panel continues to reduce. (www.bostonsolar.us)

Notwithstanding the temperature range within which the panels operate they are only able to convert around 20% of sunlight into usable energy. Whilst this has increased from the previous 15% this still renders them highly inefficient. The most expensive solar panel conversion rate is only 23%. This means that even when they are working at full temperate capacity, they will still only be able to convert around 20% of the sunlight they capture anyway. Battery storage can improve the situation slightly but storing some of this energy for later use. This means that any houses that are alleged to benefit from the panels will still be heavily reliant on (fossil fuel power produced by) the National Grid.

A report by Netzerowatch.com states that 'it has been calculated that most UK solar farms will never get beyond 12% of their true capacity in the course of a year'. In April 2021, a month that was unusually sunny, dry and warm solar panels only contributed 7% to the National Grid. In December 2020 the contribution was a little as 0.67% of the total energy produced by the grid. (www.netzerowatch.com Solar farms: A toxic blot on the landscape)

In terms of the longevity of the efficiency of the panels manufacturers of the panels typically warrantee them to retain 80% of their 20% efficiency for around 20 years. This means that they will lose around 1% of their efficiency every year. (www.hazardouswasteexperts.com)

New research on the coming solar panel crisis along with rising blackouts from renewables, reinforces the inherent flaws in solar and other forms of renewable energy. Over-relying on solar panels and underestimating the need for nuclear and natural gas, resulted in California's blackouts in 2020. (www.forbes.com Dark Side of Solar? More reports tie panel production to toxic pollution)

A 140- acre solar park is said to only be capable of supplying electricity to about 9,000 homes. This is incredibly inefficient in comparison to off-shore wind farm. One wind turbine in the North Sea can power 18,000 homes.

2. UK relies too heavily on food importation; we should and need to be self-sufficient!

The UK currently only produces 60% of its domestic food consumption. In 2020 only 71% of the UK is used for agricultural production. Domestic production faces a number of long-term and short-term risks, including soil degradation, drought and flooding, diseases, risks to fuel and fertiliser supplies, and a changing labour market. (www.gov.uk United Kingdom Food Security Report 2021: Theme 2: UK Food Supply Sources). As more and more agricultural land is used to house solar panel farms clearly solar panels need to be added to that list.

The UK only produces a little over 50% of vegetables it consumed domestically, and only 16% of fruit. It is therefore not self-sufficient and has to rely heavily on imports. The consequence of this is that in February 2023 supermarkets are rationing vegetable purchases due to issues with production and importations from other countries. This is on top of increasing food costs. The UK must utilise its agricultural land and produce more of its own fruit and vegetables in order to become increasingly self-sufficient; the consequences of not doing this could be devastating for future generations. The reasons for the shortages are cited as, including, Brexit, cold weather in Spain and extreme weather in Morocco. (www.telegraph.co.uk Why are UK supermarkets rationing fruit and vegetables?).

We must improve food security in the UK and help to tackle austerity for both now and future generations. Producing home grown fruit and vegetables enhances the environment (human health, reducing pollution in the atmosphere, and for wildlife) and reduces the carbon footprint of imports. Growing our own fruit and vegetables and minimising importation would be arguably far more beneficial for the environment than the little return that solar panels may offer.

In spite of cold weather in the UK it is possible to grow fruits such as tomatoes in the winter (one of the fruits currently being rationed). According to experts these fruits can be grown in greenhouses in the winter. (www.express.co.uk 'Ideal place for them': How to grow tomatoes in winter successfully – it's essential'). This is, after all is how fruit and vegetables are produced in Spain in the winter months.

Taking away agricultural land prevents the UK from utilising its land to become self-sufficient in the growth and consumption of fruit and vegetables. Importing such high volumes of food is not environmentally sustainable and air miles contradict claims of caring for the environment and reducing our carbon foot print. Surely becoming self-sufficient in terms of food would be more helpful for our carbon footprint and to achieve this we need our arable land for farming. Use arable land for farming ant not destructive solar panels.

3. Already far too much land has been lost to solar panels in North Warwickshire

153 acres of arable land in Nuneaton, land that should be used for growing food, has already been shamefully handed over for a solar panel farm. Notwithstanding the inefficiencies noted in this paper, all of this land has been lost in the interests of powering a mere 5,500 homes in North Warwickshire. (www.astleygorsesolarfarm.com). It's hard to

imagine how this can ever be approved or justified. This equates to mass destruction of countryside and desperately needed arable fields for the sake of some of the power (mostly during the summer months) for 5,500 houses.

4. UK government (PM Rishi Sunak) has vowed to prevent agricultural land from being used for solar panel farms.

The Prime Minister has stated that he will not support solar panels to be put on agricultural land. (www.telegraph.co.uk Rishi Sunak: We won't lose out best farmland to solar panels. 18 August 2022). Consenting to any planning request for a solar farm in Fillongley flies in the face to the Conservative governments policy. Surely a Conservative Council agrees with a Conservative government.

5. Agricultural land used for panels cannot always be returned to agriculture

Land is being taken out of cultivation at the rate of almost 100,000 acres per year. The yields from the land, due to global warming, are also declining meaning that arable land is more valuable than ever; food importation is contributing to climate change. The amount of arable land in the UK in 2018 stood at 14.8 million acres; the lowest since World War 2.

Solar panels can leak chemicals into the ground through poor manufacturing and extreme weather conditions. (www.unboundsolar.com Can Solar Modules Harm Underlying Soil?). Given that the UK is in the grip of increasing weather extremities, high winds, rainfall/flooding, water and drought it can only be concluded that such instances of toxic leaking through weather damage will become increasingly more common. (www.earth.org The Future of Extreme Weather Events and Climate Change in the UK).

Where toxic chemicals leak from the panels into the ground it can mean that the ground will no longer be suitable for arable use in the future. (www.discovermagazine.com Solar Panel Waste: The Dark Side of Clean Energy).

6. Threat to wildlife

Solar panels are responsible for the deaths of tens of thousands of birds every year. In 2016, a study in the US estimated that solar farms may kill nearly 140,000 birds annually. Whilst the study was unable to cite why this is the case a leading theory suggests that the birds mistake the glare of the panels for the surface of a lake and swoop in to land. (www.wired.com Why do solar farms kill birds? Call in the AI bird watcher)

Nesting pair of Red Kites – a protected species
The Red Kite became extinct in England in 1871 and in Scotland in 1879. Whilst reintroduction has been successful it is now a protected bird in the UK under the Wildlife and Countryside Act, 1981 (www.wildlifetrusts.org The Red Kite). There are nesting and breeding Red Kites in the fields/surrounding fields that are subject to the planning consent for the Fillongley Solar Panel farm.

Other bird species
This means that the panels would present a danger to all birds in the area, including but not limited to other protected birds such as, Buzzards, Kestrals, Hobby's and Owls (to name but a few of the birds in the area in question).

Bats
There are a number of bats in the area and the same can be said for them. Whilst the aforementioned study did not include bats it can be assumed that they will also mistake the glass for water, thereby resulting in their death. (www.cpreherts.org.uk The problem with solar farms). Bats are also seen over the land and are presumed to be nesting in that area. Bats are protected by national and international law. All species of bat, their breeding sires and resting places are strictly protected in England under the Wildlife and Countryside Act 1981.

Deer and Badgers
In addition to the birds in the area there is a great deal of other wildlife that will be affected. Transitory animals, such as deer, have their traditional routes blocked and can be driven onto the roads. There are also badgers present on the land and both badgers and their sets are protected under the Protection of Badgers Act 19912 in England and Wales.

7. Panels can leak toxic chemicals into the waterways

Studies have shown that that heavy materials in solar panels, namely lead and cadmium, can leach out of the cells and get into ground water this will have longer term effects on the land upon which they sit. These materials have been shown to have a detrimental effect on human health. (www.discovermagazine.com Solar Panel Waste: The Dark Side of Clean Energy). There are streams and waterways on the land in question.

8. The parts for the panels are immorally made by cheap labour

A major concern that is seldom highlighted, and a major issue that needs to be addressed, is that both the key materials and the panels themselves are being made by forced labour in Xinjiang province in China. (www.forbes.com Dark Side of Solar? More reports tie panel production to toxic pollution)

China has been reported to use 'forced labor in conditions that the U.S government representatives [...] describes as "genocide" and "slavery"'. Goldman Sachs, reported that 'the Chinese government admits that it operates "surplus labor" programs to relocate millions of people from their homes in Xinjiang. It simply denies that it uses coercion in such relocations. Whilst claims have been made that the process is being automated the truth is that the panel are simply too delicate and 'they can be easily broken if not handled properly'. (www.public.substack.com China Made Solar Cheap With Coal, Subsided, And "Slave" Labor – Not Efficiency)

9. Carbon footprint of solar panels

Questions clearly remain about whether the production and waste of panels creates more pollutants than the fossil fuels they aim to replace.

The component parts and well as the panels themselves are made in Xinjiang province of China. "Xinjiang has become a major polysilicon production hub in China, as the industry requires extensive amounts of energy, and that makes relatively cheaper electricity and abundant thermal power..." The panels are them shipped around the world. (www.public.substack.com China Made Solar Cheap With Coal, Subsided, And "Slave" Labor – Not Efficiency). The carbon footprint for production is therefore high as are the air miles for shipping them around the world.

Notwithstanding these costs the manufacturing of solar panels often requires the use of several noxious chemicals. The panels require pure silicon because the crystal structure it forms is most conductive to letting electrons flow. Production commonly include, nitrogen trifluoride and sulphur hexafluoride, some of the most harmful greenhouse gasses around. Normally silicon can be recycled but the added chemicals of lead and cadmium make this very difficult. The lifespan of these panels is between 20 and 30 years and disposing of them is difficult. (www.discovermagazine.com Solar Panel Waste: The Dark Side of Clean Energy)

The toxic nature of solar panels makes their environmental impacts worse than just the quantity of waste. Solar panels are delicate and break easily and when they do they instantly become hazardous due to their heavy content. They are in fact classified as hazardous waste. (www.forbes.com Dark Side of Solar? More reports tie panel production to toxic pollution)

Research finds that solar panels in use degrade twice as fast as the industry claimed and another report found that panels have been suffering a rising failure rate even before entering service. (www.forbes.com Dark Side of Solar? More reports tie panel production to toxic pollution). Thereby potentially creating yet more waste.

The EU requires solar companies to collect and recycle their panels with these costs built into the build costs but as outlined about this carries a significant carbon footprint. A study published in *Harvard Business Review* (HBR), finds that the waste produced by solar panels will make electricity from solar panels four times more expensive than the world's leading energy analysts thought and will 'darken quickly as the industry sinks under the weight of its own trash'. (www.forbes.com Dark Side of Solar? More reports tie panel production to toxic pollution)

Most solar recycling plants simply remove the silver and copper from the cells and recycle the contaminated glass and plastic casing by burning them in cement ovens. 100% of the aluminium and 95% of the glass is used again. The temperature required to separate these parts of 500C, no doubt achieved by the use of fossil fuels; even the recycling process carries a heavy carbon footprint.

This is time-consuming and costly so most companies simply export the waste to third world countries. Most third world countries are unable to dispose of these correctly and they are placed in landfill and left to leach the metals into the ground. It is projected that by 2050 there will be 80 million tons of solar waste.

It has been reported in *Forbes* that solar panels aren't in fact clean but rather produce 300 times more toxic waste than high-level nuclear waste. In contrast to nuclear waste, which is safely stored, solar panel waste risks exposing the countryside and air to toxic chemicals. (www.forbes.com Dark Side of Solar? More reports tie panel production to toxic pollution)

10. They are ugly and a blot on the landscape

It cannot be disputed that these solar panel farms present a 'blot on the landscape'. They destroy the aesthetics of the natural beautiful landscape. This landscape is enjoyed by our communities, with people visiting from out of area to enjoy the walks.

11. There are numerous brown filled sites and roofs that could be utilised instead.

If the Council disregards the heavy environmental and humanitarian cost associated by these panels, it should at least only consent to planning for brown filled sites.

Conclusion

In conclusion it is irrefutable that solar panels present a significant carbon footprint. They arguably inflict as much damage onto the environment as they seek to remove, if not much more. Allowing these corporate companies, with an interest in financial gain, to destroy the environment by establishing solar panels must be stopped.

'The idea that humankind should turn our gaze away from urgent problems like genocide, toxic waste, and land use impacts because they complicate longer term concerns is precisely the kind of unsustainable thinking that allowed the world to become dependent on toxic solar genocide panels in the first place'. (www.forbes.com Dark Side of Solar? More reports tie panel production to toxic pollution)

One can only conclude that any Council that grants planning for these solar panel farms has a flagrant disregard for the environment, humanity and the future of the planet. The carbon footprint and humanitarian cost is far greater than any benefit these panels can possibly provide to the environment. The measly amount of energy that these panels actually produce can in no way be considered 'green' when their carbon footprint is examined.

APPENDIX 2.

North Warwickshire Borough Council

Jeff Brown BA Dip TP MRTPI
Head of Development Control Service
The Council House
South Street
Atherstone
Warwickshire
CV9 1DE

Switchboard : (01827) 715341
Fax : (01827) 719225
E Mail :
Website : www.northwarks.gov.uk
This matter is being dealt with by :
Direct Dial : (01827)
Your ref :
Our ref : PAP/2022/0544

Date : 4th April 2023

Mr B Parkins
Wardell Armstrong LLP
City Quadrant
11 Waterloo Square
Newcastle Upon Tyne
NE1 4DP

Dear Ben

Proposed Solar Farm at Astley Lane, Astley

As you are aware this application was referred to the Council's Planning and Development Board on 3rd April. The Board deferred determination for a number of reasons, but essentially it was to request clarification on a number of matters as well to ask your client to consider amendments. I set out these matters below under a series of headings as this is probably the best way to identify the issues.

a) Matters of Principle

- The Board wishes to better understand the essential need for the development given the number of consents already permitted in this part of the Borough, and
- how this then fits into the national picture.
- It seems to the Board that capacity may have been reached in North Warwickshire
- Whilst acknowledging the claim that the proposal would off-set CO2 emissions, the Board has asked for further detail on whether the whole proposal would be "carbon neutral" taking all matters into account – that is including the manufacture of the panels, plant and equipment, their transport to the site and the construction of the development.
- From a planning perspective, the Board requests that your client explicitly sets out the material planning considerations that he considers do clearly amount to the very special circumstances necessary to support the proposal.

b) Visual Impact

- The Board considers that the site has a very open setting with limited hedgerow and tree cover. It therefore requests that your client considers significantly strengthening the proposed landscaping and screening around the perimeter of the site and within it. The main areas of concern are along the northern and western boundaries. Any such strengthening should be made up of a mix of native species and have an associated management plan associated with it.

c) Noise Impacts

- Notwithstanding the position as set out on the Board report, Members remain to be convinced about the scale of the noise impacts arising from the proposal. This is because of the location of the plant along the northern boundary and because there is no information about the potential "wind tunnel" effect of having the arrays within a valley.
- The Board would welcome your client's response to a suggestion that the plant and equipment be relocated to the site of the construction compound, as this in its view would provide greater separation distances from established residential property.

d) Wildlife Impacts

- More information is requested in respect of the findings of any current research that looks at whether solar panel arrays interfere with the flight patterns of birds.
- The Board wishes to have a clearer explanation as to the existing ecological value of the site and its wildlife.
- It then requests an explanation as to how this might be impacted and if appropriate how adverse impacts might be mitigated.
- That would then lead to an explicit set of mitigation measures

e) Other Matters

- The Board would wish to see more evidence that shows that leaving the land uncultivated, leads to an improvement in soil quality.
- The Board is aware of the offer of the Community Fund to the Parish Council, but has asked if there has been any response.

I appreciate that this outline is quite extensive, but I am also aware that some of this is covered in the documentation submitted with the planning application. I therefore think that it might be useful to have a discussion on how best to approach these matters. I do consider that additional landscaping and strengthened boundary treatment will certainly be a positive move and that re-consideration of the location of the plant and equipment warrants further investigation.

The next available Board meeting will be on Monday 22nd May.

I look forward to hearing from you.

Yours faithfully

Jeff Brown
Head of Development Control

APPENDIX 3

INDUSTRIA

Proposed solar farm at Astley Lane, Astley

Response to North Warwickshire Borough Council's Planning and Development Board request for clarifications on 3rd April 2023

21st April 2023

Response to North Warwickshire Borough Council's Planning and Development Board request for clarifications on 3rd April 2023

Dear Sir/Madam,

This response has been complied to specifically address the following questions raised by North Warwickshire Borough Council:-

a) Matters of Principle

1. The Board wishes to better understand the essential need for the development given the number of consents already permitted in this part of the Borough, and
2. how this then fits into the national picture.
3. It seems to the Board that capacity may have been reached in North Warwickshire
4. Whilst acknowledging the claim that the proposal would off-set CO2 emissions, the Board has asked for further detail on whether the whole proposal would be "carbon neutral" taking all matters into account – that is including the manufacture of the panels, plant and equipment, their transport to the site and the construction of the development.
5. From a planning perspective, the Board requests that your client explicitly sets out the material planning considerations that he considers do clearly amount to the very special circumstances necessary to support the proposal.

b) Visual Impact

1. The Board considers that the site has a very open setting with limited hedgerow and tree cover. It therefore requests that your client considers significantly strengthening the proposed landscaping and screening around the perimeter of the site and within it. The main areas of concern are along the northern and western boundaries. Any such strengthening should be made up of a mix of native species and have an associated management plan associated with it.

c) Noise Impacts

1. Notwithstanding the position as set out on the Board report, Members remain to be convinced about the scale of the noise impacts arising from the proposal. This is because of the location of the plant along the northern boundary and because there is no information about the potential "wind tunnel" effect of having the arrays within a valley.
2. The Board would welcome your client's response to a suggestion that the plant and equipment be relocated to the site of the construction compound, as this in its view would provide greater separation distances from established residential property.

d) Wildlife Impacts

1. More information is requested in respect of the findings of any current research that looks at whether solar panel arrays interfere with the flight patterns of birds.
2. The Board wishes to have a clearer explanation as to the existing ecological value of the site and its wildlife.
3. It then requests an explanation as to how this might be impacted and if appropriate how adverse impacts might be mitigated.

4. *That would then lead to an explicit set of mitigation measures*

e) Other Matters

1. *The Board would wish to see more evidence that shows that leaving the land uncultivated, leads to an improvement in soil quality.*
2. *The Board is aware of the offer of the Community Fund to the Parish Council, but has asked if there has been any response.*

The responses detailed within this document have been prepared on behalf of the applicant using verifiable and credible sources of information, including UK Government data, Climate Change Committee report, data issued by BEIS and specialist consultants. The individuals preparing and reviewing the data are:-

Don Lord – MCIBSE, CIBSE Low Carbon Consultant and past contributor to national and international energy standards on behalf of the UK and the Chartered Institute of Building Services Engineers.

Jonathan Hall – BSc (Hons), PGDipMS, MBA

This document is intended to provide the substantiated view of the applicant in relation to specific questions raised by the Local Authority only.

Yours sincerely,

Jonathan Hall

QUESTION – Section a) Matters of principle points 1 – 3

1. *The Board wishes to better understand the essential need for the development given the number of consents already permitted in this part of the Borough, and*
2. *how this then fits into the national picture.*
3. *It seems to the Board that capacity may have been reached in North Warwickshire*

RESPONSE – Section a) Matters of principle points 1 – 3

We have responded to the above and cover the following areas;

1. Government solar targets
2. North Warwickshire Borough Council Climate Emergency
3. Ground mounted solar photovoltaic planning approvals within North Warwickshire Borough Council jurisdiction
4. North Warwickshire Borough Council 'fit' into the national picture

1. Government solar targets

The UK government published their report 'Powering up Britain' in March 2023 which confirms that we have reached 14GW of solar installed to date with a gross target to generate 70 gigawatts (GW) of electricity from solar power by 2035, this is an increase of 56GW . This is part of the government's overall goal to achieve net-zero carbon emissions by 2050, and solar power is seen as a key technology to help meet this target. The 70 GW target is ambitious and requires a significant increase in solar capacity in the UK, but the government has outlined various measures to support this, including changes to planning regulations and funding for research and development.

It should be noted that as the electrification increases across the UK, with for example the increased demand for air source heat pumps and electric vehicles, demand for renewable electricity will increase across the North Warwickshire Borough Council area.

KEY POINTS;

- **UK Government Target of 70GW (70,000MW) installed solar by 2035**
- **14GW of solar installed throughout the UK**
- **69MW approved in the North Warwickshire Borough Council to date (see item 2.)**

2. North Warwickshire Borough Council Climate Emergency

North Warwickshire Borough Council declared a climate emergency in 2019 and set a target to become carbon neutral by 2040. The council has not publicly stated a specific carbon savings target, but it will need to significantly reduce its carbon emissions in order to meet this goal. The exact amount of carbon savings required will depend on the council's current carbon emissions, as well as the extent to which it is able to reduce these emissions through measures such as renewable energy generation, energy efficiency improvements, and sustainable transport initiatives. The council is likely to develop a detailed plan outlining its emissions reduction targets and strategies in the coming years but. Currently the draft plan does confirm;

a. the council need to do something
b. the council has identified its main carbon emissions are from fleet vehicles (39%), heating (33%) and electricity use (23%)
c. the key commitments of North Warwickshire Borough Council as;
    i. Making the Council's activities net-zero carbon by 2030
    ii. Achieving 100% clean energy across the Council's full range of functions by 2030
    iii. Supporting and working with other relevant agencies towards making the entire area zero carbon by 2030
    iv. Ensuring that all strategic decisions, budgets and approaches to planning decisions are in line with a shift to zero carbon by 2030
    v. Reporting on the level of investment in the fossil fuel industry that our pension plan and other investments have, and review the Council's investment strategy
d. As part of their plan they will work with a number of stakeholders incl. Infrastructure & Utilities Providers, achieve biodiversity net gain, reinstate hedgerows, rewild more spaces, engage with landowners including farmers to use their land in sustainable and biodiverse ways.
e. encourage landowners and developers to use land for renewable energy.

KEY POINTS;

- **North Warwickshire Borough Council declared a climate emergency in 2019**
- **Key commitments of the council;**
    - **net zero carbon by 2030**
    - **ensure strategic planning decisions to achieve 2030 net zero target**
    - **work with stakeholders incl. utility providers to increase biodiversity net gain, reinstate hedgerows, rewild more spaces, engage with landowners including farmers to use their land in sustainable and biodiverse ways.**
    - **encourage landowners and developers to use land for renewable energy.**

3. Ground mounted solar photovoltaic approved within North Warwickshire Borough Council jurisdiction

We have reviewed data provided by The Department for Business, Energy & Industrial Strategy (BEIS) Renewable Planning Energy Database Quarterly extract to January 2023 and summarise the results for Ground Mounted Solar Photovoltaic Installations in North Warwickshire as follows;

PROJECT	Capacity (MW)	Status	Planning expiry from connection	Decommission
Warton Lane, Grendon	14.70	1/1/2015	25 years	01/01/2040
Pogmore Spinney	5.00	23/1/2017	25 years	23/01/2042
Coton Road	3.00	Awaiting construction	30 years	TBA
Corley Smorral Lane	16.50	Awaiting construction	40 years	TBA
Park Lane	30.00	Awaiting construction	40 years	TBA
Copes Rough Wood	5.00	Submitted		TBA
Astley Lane	16.00	Submitted		TBA
TOTAL	90.20			

The cumulative total capacity is fluid as the various installations only help to meet the prevailing target while their respective planning grants are current. Capacity will be lost both due to planning expiry and the natural degradation of site output, with each site losing between 0.5% and 0.25% per annum, equating to an average of 15% over a 40 year period.

KEY POINTS;

- **69.20MW approved capacity**
- **19.70MW will not achieve the government net zero 2050 target as planning will be expired and the facility decommissioned**
- **21.00MW awaiting planning approval**
- **15% of the capacity will be lost over a 40 year period through natural degradation**

4. North Warwickshire Borough Council fit into the national picture

North Warwickshire Borough Council (NWBC) is one of many local authorities in the United Kingdom that are actively promoting the adoption of solar power as a means of reducing carbon emissions and meeting national renewable energy targets. While the council's solar capacity is just one part of the national picture, it can contribute significantly to the UK's overall solar power generation.

The UK government has set a target to generate 70 gigawatts (GW) of electricity from solar power by 2035, and local authorities such as NWBC can play an important role in helping to achieve this target. In recent years, there has been a significant increase in solar installations across the UK, and it's likely that this trend will continue as more local authorities, businesses, and homeowners recognize the benefits of solar power for reducing carbon emissions and saving on energy costs.

Although there is no pre-defined metric on how NWBC will fit into the national picture, we have responded to this question in 2 ways by considering a metric considering usable land area based on population and a metric based on useable land area;

Population

UK Population		67,100,000
Less areas unsuitable for solar farm development		
National Parks (circa 6% of population live in national parks)		(4,026,000)
Cities and Towns >10,000		(53,000,000)
UK Population living in areas suitable for ground mounted solar		**10,074,000**
UK Government 2035 solar target	70GW	
Expressed as MW	70,000MW	
This equates to MW installed per capita		**0.007MW/Capita**
In relation to North Warwickshire Borough Council (NWBC)		
NWBC population		64,200
Less areas unsuitable for solar farm development		
Cities and Towns >10,000		(10,128)
NWBC population living in areas suitable for ground mounted solar		**54,072**
Per Capital of population this equates to a solar deployment in NWBC		**250.48MW**

Using the above approach the NWBC portion of UK solar allocation would be 250.48MW however, this does not account for any solar deployment to rooftops. We are aware that some deployment will be on rooftops and therefore we need to make some allowance for roof mounted solar.

It is estimated by Solar Energy UK that 1/3rd of the current installed UK solar capacity is located on rooftops. There are a number of considerations when installing solar on rooftops including but not limited to structural integrity, building status, orientation of roof, state of repair, age of the building, electrical infrastructure and grid capacity but, on roof installations will undoubtedly continue and an allowance must be made.

Therefore, based on this approach the maximum total capacity of ground mounted solar that NWBC could anticipate is to meet its proportional quota is **166.99MW** (2/3^{rds} 250.48MW) or 0.167GW.

Land Area

		Km 2
UK Land area excl. waterbodies		231,930
Less areas unsuitable for solar farm development		
National Parks (circa 6% of population live in national parks)		(23,138)
Cities and Towns >10,000		(9,082)
Road network		(4,190)
Woodland outside of national parks		(31,000)
Areas of SSSI outside of national parks		(8,700)
Mountainous areas outside of national parks (40-50k)		(45,000)
Grade 1 agricultural land		(34,965)
UK Land areas suitable for ground mounted solar		**75,855**
UK Government 2035 solar target	70GW	
Expressed as MW	70,000MW	
This equates to MW per km2		**0.92MW/km2**
In relation to North Warwickshire Borough Council (NWBC)		
NWBC Land area excl. waterbodies		310
Less areas unsuitable for solar farm development		
National Parks (circa 6% of population live in national parks)		(0)
Cities and Towns >10,000		(7)
Road network		(70)
Woodland outside of national parks		(12)
Areas of SSSI outside of national parks		(3)
Mountainous areas outside of national parks (40-50k)		(0)
Grade 1 agricultural land		(29)
NWBC Land areas suitable for ground mounted solar		**189**
Km2 of land equates to a solar deployment in NWBC		**173.88MW**

Using the above approach the NWBC portion of UK solar allocation would be 250.48MW however, this does not account for any solar deployment to rooftops. We are aware that some deployment will be on rooftops and therefore we need to make some allowance for roof mounted solar.

It is estimated by Solar Energy UK that 1/3rd of the current installed UK solar capacity is located on rooftops. There are a number of considerations when installing solar on rooftops including but not limited to structural integrity, building status, orientation of roof, state of repair, age of the building, electrical infrastructure and grid capacity but, on roof installations will undoubtedly continue and an allowance must be made.

Therefore, based on this approach the maximum total capacity of ground mounted solar that NWBC could anticipate is to meet its proportional quota is **115.92MW** (2/3rds 173.88MW) or 0.116GW.

KEY POINTS:

- **There is no pre-defined metric to ascertain how North Warwickshire Borough Council fits into the UK Energy strategy**
- **183.20MW ground mount solar is an estimate of North Warwickshire Borough Council indicative apportionment of the 70GW Government 2035 target (average of 250.48MW and 115.92MW)**

QUESTION – Section a) Matters of principle point 4

Whilst acknowledging the claim that the proposal would off-set CO2 emissions, the Board has asked for further detail on whether the whole proposal would be "carbon neutral" taking all matters into account – that is including the manufacture of the panels, plant and equipment, their transport to the site and the construction of the development.

RESPONSE – Section a) Matters of principle point 4

It is correct to state the proposed solar site would operate as a carbon neutral power plant as renewable energy sources such as wind, solar and hydro do not emit carbon dioxide or other greenhouse gases during their operation, unlike fossil fuel power plants. The Department for Business, Energy & Industrial Strategy (BEIS) is responsible for calculating and publishing the carbon intensity of the electricity grid (total carbon dioxide equivalent (CO2e)) and this is updated on a regular basis to express the average carbon value of all energy sources making up the UK grid supply, and the renewable portion of the UK grid's electricity generation does not typically include any carbon emissions. The exception being biomass if non sustainable harvesting is used.

Carbon associated with the manufacture of equipment in China, the EU, Canada, regionally in the USA and in the UK all operate under Energy Trading Schemes (ETS). Under the ETS, companies are required to obtain permits for their carbon emissions, with the total number of permits available gradually decreasing over time to help reduce emissions. Companies can trade permits with each other to help meet their emissions reduction targets, with the aim of encouraging the adoption of low-carbon technologies and practices. Therefore whilst there is undoubtedly carbon emissions associated with the equipment manufacture the UK Government does not account for them at the installation and instead relies on a network of ETS schemes to capture and improve on the emissions.

There are several reasons why embodied carbon is not included when declaring renewable energy installations such as Bedworth as carbon-neutral:

1. Scope of accounting: Carbon neutrality assessments typically focus on the direct emissions associated with a particular activity or operation, such as electricity generation or building heating and cooling. Embodied carbon is considered an indirect emission.
2. Scope of impact: While embodied carbon emissions can be significant, they are generally considered to have a smaller impact on the environment and climate than direct emissions from energy production and use. Typically representing no more that 4 years of operation in the case of solar panels.
3. ETS: Many companies now operate ETS or schemes similar to the ETS where carbon offset can reduce or neutralise the effects of manufacture and transport. For example the EU ETS has been successful in reducing emissions from power and heat production covered by the EU ETS decreased by 41% between 2005 and 2019 and encourages countries to meet emissions targets, with the system having a range of penalties and enforcement mechanisms to ensure compliance.

Notwithstanding the above, numerous academic studies have been undertaken on the concept of carbon debt. The concept of carbon debt, also known as carbon payback time or carbon offset time, refers to the amount of time it takes for a technology or product to offset the carbon emissions generated during its production, transportation and disposal.

Solar panels do have a carbon debt, which refers to the greenhouse gas emissions generated during their manufacture, transportation etc. The amount of carbon debt varies depending on a number of factors such as type of solar panels, manufacturing process and manufacturing location.

Studies have shown that the carbon debt of solar panels can be paid back in a relatively short period of time - typically **1 – 4** years depending on location, installation, orientation and use of the panels. Once the carbon debt is paid back the solar panels become a net positive contributor to reducing greenhouse carbon emissions and mitigating climate change.

It is worth noting that the carbon debt can be further reduced by using renewable energy sources such as wind, hydropower, solar etc in the manufacturing and transportation processes.

- Solar panels only generate carbon emissions during the manufacture and transportation process.
- A solar panel can generate carbon-free electricity for decades after the brief payback period.
- Solar panels don't produce emissions while generating energy.
- Numerous academic experts have calculated that solar panels typically pay back their carbon debt between one and four years.

Finally Solar panels offer other environmental benefits, including but not limited to;

1. Reducing greenhouse gas emissions: Solar panels generate electricity without producing any greenhouse gas emissions, unlike traditional fossil fuels like coal and natural gas. By using solar energy, we can reduce our reliance on fossil fuels and help to mitigate climate change.
2. Conserving water: Traditional power plants require a lot of water to generate electricity. However, solar panels do not require any water to produce electricity, which means that they can help conserve our precious water resources.
3. Reducing air pollution: Solar energy generation does not emit any harmful pollutants or particulate matter, unlike traditional power plants which contribute to air pollution. By using solar energy, we can improve the air quality in our communities.
4. Lowering the carbon footprint: The production process of solar panels does require energy and resources, but the carbon footprint associated with solar panels is significantly lower than that of traditional fossil fuel-based electricity generation.
5. Promoting sustainable development: Solar panels are a key part of the transition to a more sustainable energy future. By investing in solar energy, we can create new jobs and promote economic growth while also protecting our environment.

KEY POINTS;

- **Proposed solar site will operate as a carbon neutral power plant after construction.**
- **No carbon emissions are allocated to the site for the manufacture or transportation of the panels, these are managed by the manufacturer under the Energy Trading Scheme.**
- **Solar panels generate carbon free electricity for decades**
- **Typical 'carbon debt' of solar panel manufacture is repaid within 1 – 4 years**
- **Numerous environmental benefits to solar;**
  - **Reduce greenhouse gases**
  - **Conserve water**
  - **Reduce air pollution**
  - **Reduce carbon footprint**
  - **Sustainable development**

QUESTION – Section a) Matters cf principle point 5

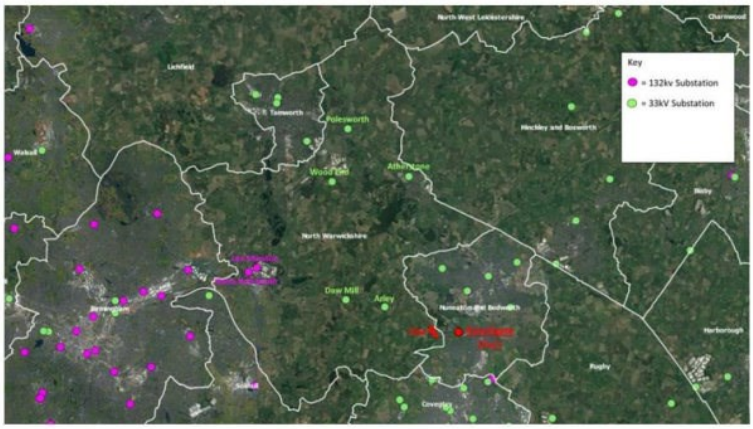
5. *From a planning perspective, the Board requests that your client explicitly sets out the material planning considerations that he considers do clearly amount to the very special circumstances necessary to support the proposal.*

RESPONSE – Section a) Matters cf principle point 5

Saturated energy grid with few points of connection available

1. Finding a substation with sufficient grid capacity is a major constraint to the deployment of green energy. Once a substation with capacity is identified, then identifying an available and suitable site for solar development is the next biggest challenge. Installation costs increase significantly the further the site is from the point of connection, therefore proximity to the substation is key. As it can be appreciated from the list below, all DNO substations (for which data is available) in North Warwickshire are classified RED due to upstream generation. Importantly, this is information based on the most recent publicly available data (Published by DNO 20th April 2023). This does not take into account the influence of new connections and generators on the network which is dynamic and cannot be modelled sufficiently by the DNO.

Map of DNO 132kV Substations



Hams Hall A

- No data available on DNO Network Capacity Map

Lea Marston

- No data available on DNO Network Capacity Map

Wood End

- Capacity: -1.62MVA
- Classified **RED** on heatmap due to upstream generation headroom constraint (-31.96 MVA) and substation reverse power headroom constraint (-1.62MVA)

Polesworth

- Capacity: 5.83 MVA
- Classified **RED** on heatmap due to upstream generation headroom constraint (-31.96 MVA)

Atherstone

- Capacity: 7 MVA
- Classified **RED** on heatmap due to upstream generation headroom constraint (-31.96 MVA)

Daw Mill

- No data available on DNO Network Capacity Map

Arley

- Capacity: 5.95 MVA
- Classified **RED** on heatmap due to upstream generation headroom constraint (-10.81 MVA)

As you can see from the above data, the substations in the North Warwickshire Borough Council area have minimal available capacity to accept generation, if any at all. The substations that do have minimal capacity to accept generation are however restrained and cannot be connected due to the upstream generation headroom constraint, these are denoted on the DNO website as RED. This is because the constraint is upstream on the Coventry 132kV group and the Lea Marston 132kV group.

Industria Solar Bedworth Limited have secured and locked in grid, designed the project to achieve the fault level restrictions and secured a statement of works with national grid allowing connection to the grid.

Significant investment would be required to add more capacity to the grid in this area

2. Although there have been planning applications for solar farms in North Warwickshire, significant DNO and National Grid substation upgrades would be required to add a substantial number more than what is currently in the planning pipeline.

Renewable energy and reducing CO2 emissions

3. The proposed solar farm would produce renewable energy, thereby reducing the energy grid's CO2 emissions, in the fight against climate change. In real terms, this solar farm would generate approximately 21.5GWh of electricity p.a. – this is enough to power 5,225 homes annually and is the equivalent of offsetting 3,078 tonnes of CO2 emissions per year.

4. An Alternative Site Assessment (including an Addendum exercise prepared for committee members), has been undertaken. These documents outline the methodology used to assess any potential alternative sites for the proposed solar farm development. The purpose of carrying out these assessments is due to the site being located in the Green Belt, and so show consideration that the site chosen is in the most commercially viable and environmentally friendly location. A search area of 2km from the agreed point of connection for the purposes of financial viability. This has resulted in much of the search area comprising of existing built development or Green Belt land.

5. After taking into consideration the potential for interest from landowners, a review of the environmental constraints of each area and those associated with large-scale solar farms were taken into consideration, resulting in the western area of the search area being most favourable. An agreement with one the landowners has since been established in the preferred area, which is a difficult matter to establish and determines much of the viability of any development. Even the most environmentally acceptable sites are sometimes not available, although in this case, the agreed site is considered to be the most optimal for solar development. It is considered that, on balance, this is the best site within reasonable proximity to the DNO substation.

The use of bi-facial panels

6. The proposed solar farm would use high efficiency bifacial solar panels. These modern panels absorb light from both sides - direct sunlight from above, as well as reflected light on the underside of the panel. These panels use high efficiency monocrystalline cells, which increase the electricity generation by approximately 4% compared to standard mono-facial panels. The use of these panels ensures that the least amount of space is being used to achieve the 16MW export to the grid. This is particularly important given the site's Green Belt location, whereby the physical coverage of the arrays would have needed to be larger to achieve the same 16MW export with mono-facial panels.

Improving soil health

7. As the physical impact of solar farms on the ground is very small, resting land around the solar panels frames by setting to grass and possibly grazing can have benefits for soil health, especially where soil has been exhausted of nutrients and compacted by farm machinery. There is also evidence that soil moisture is better retained on fields with solar panels, and less prone to effects of Climate Change. Furthermore, the use of bi-facial panels allow for the growth of microorganisms beneath the arrays, thus improving soil quality.

Energy Security

8. The spike in post-pandemic energy demand, in part linked to global problems including Russia's invasion of Ukraine and the international community's response to this, have caused energy prices to soar. This actioned the UK Government to prepare and issue the British Energy Security Strategy (April 2022) updated 2023 – this document clearly recognises that harnessing solar energy is critical and necessary to minimise the UK's dependence on energy imported from abroad and instead allow the UK to become more self-sufficient. The strategy states that a government ambition is to achieve 70GW of solar capacity by 2035. However, there is currently only 14GW split between large-scale projects to smaller-scale rooftop solar. Ensuring the sustained deployment of solar PV therefore plays a key role in the UK Government's strategy to significantly improve energy security.

9. Furthermore, it is also important to diversify energy supply within the renewables sector in order to ensure continuity of supply should there be, for instance, prolonged periods of low wind speeds. The UK Energy in Brief (2022) states that in 2021, renewable electricity accounted for 39.7% of electricity generated in the UK, however only 5% was generated by solar PV. This is because the renewable energy sector is largely dominated by bioenergy (63%) and wind (25%). To maintain energy supply

security, renewable energy should also be more diversified, and this in turn would also support the decline in fossil fuel consumption when generating electricity.

Positive economic impacts in terms of employment and supporting the entire solar supply chain

10. In terms of economic benefits, the proposed development would help sustain and create employment opportunities in engineering, construction and transportation. This would also support the local and regional economy by bolstering local purchasing power for goods and services. This development also provides opportunities for those in employment who would like to move into higher skilled positions, as well as providing career opportunities for those currently unemployed.

11. This development would also benefit the entire solar farm supply chain – this includes for instance, PV manufacturing and the design of all the various electronic components, as well as onsite biodiversity and habitat management throughout the lifetime of the development and equipment maintenance. Particularly important during these times of economic turmoil and high inflation, the proposed development would result in direct and indirect economic benefits.

Farm diversification, including supporting viability of agricultural production

12. Climate Change is directly affecting the agricultural sector, such as with prolonged dry weather or intense rain, resulting in crop failure. The applicant would lease the land from the landowner, guaranteeing a secure, long term and diversified form of income for the farmer. Farm diversification is supported by both the NPPF (Paragraph 84) and the Local Plan (Policy LP13), as it secures and supports a robust rural economy. This is particularly important when seen against the backdrop of:

    - A period of existing economic instability, which is expected to continue for the medium term.
    - High levels of inflation, adding significant pressure to the agricultural unit's operational costs.
    - High fuel prices, further exacerbating the agricultural unit's operational costs and negatively impacting profit margins.

13. Furthermore, Section 11 of the NPPF 'Making effective use of land' states, amongst other things, that planning should "encourage multiple benefits from both urban and rural land, including through mixed use schemes and taking opportunities to achieve net environmental gains" – this includes new habitat creation, flood risk mitigation, cooling/shading, carbon storage and food production. This is an important guiding principle for this planning application in the context of use of open land. This planning application is in accordance with this policy.

14. The benefits of farm diversification were recognised in a planning appeal decision (Treswarrow Farm, Trelights, Port Isaac, Cornwall PL29 3TN (APP/D0840/A/14/2213107), in which the inspector acknowledged that the proposed development "has to be seen in the context of farm diversification that will support the overall farm business". The development of a solar farm would provide far greater economic security than many other forms of agricultural diversification. The financial subsidy would provide the farming business with a guaranteed index-linked stream of income for as long as

the solar farm is operating, while also continuing agricultural use of the wider landholding, including much needed biodiversity improvements.

Temporary and reversible impacts

15. The Planning Practice Guidance states within its 'Renewable and low carbon energy' section, that solar farm is a temporary development after which the land would then be reinstated to its original state (Paragraph 013, Reference ID: 5-013-20150327). The proposed development would have a lifespan of 40 years after which all electricity generating equipment and built structures associated with the proposed development would be removed from the site, restoring the site to its original agricultural use. The hedgerows and trees however would remain, thereby leaving behind a lasting legacy of biodiversity improvements to the benefit of local wildlife and the local community.

Significant biodiversity improvements

16. Following the departure from the European Union (EU), the UK government devised the Environment Land Management Scheme (Elms) which paid farmers for delivering environmental benefits on their land, such as biodiversity improvements or carbon capture. The scheme now appears to be under review and may revert back to a similar model as to how it was under the EU, whereby farmers received payments based on the size of the agricultural unit. Regardless of the arguments in favour or against the ELMs payment model, it is reasonable to assume that a likely effect of this policy change would be the reduction of biodiversity improvements that would have otherwise been implemented on agricultural land.

17. There is currently therefore no guarantee that in the near future there would be a publicly funded economic model that would incentivise farmers to carry out biodiversity improvement works on their land. In light of this uncertainty, development projects such as this solar farm, are a certain way of enabling and levering the finance to deliver these biodiversity improvements.

18. The Biodiversity Net Gain Assessment states that the application, post development, would deliver 134.39% total net increase in hedgerows units and 258.77% in total net increase in habitat units. These figures may need to be adjusted slightly given the significant increase in woodland belt cover, but the point remains that the biodiversity benefits are substantial.

19. The Warwickshire Wildlife Trust Local Biodiversity Action Plan for Warwickshire, Coventry and Solihull (November 2021), has as one of its objectives to 'expand the length of hedgerows in the sub-region by planting 162km of native species-rich hedges' by 2030. The planting of 1.5km, which is a substantial amount, will make a very valuable contribution to reaching this target.

20. The proposal, by virtue of creating approximately 30ha of species rich grassland, would contribute to the Local Biodiversity Action Plan for 'Lowland Neutral Grassland' target of creating 663ha by 2030.

21. The 'Ponds' Local Biodiversity Action Plan has a target of creating 100 new open water bodies by 2030, with this site making a small but nonetheless valuable contribution of one pond.

22. These biodiversity benefits, which include the reinstatement of an old hedgerow lost to agricultural intensification, are inarguably very significant and are highly unlikely to be delivered without solar development enabling this to take place.

QUESTION – Section b) Visual Impact point 1

1. The Board considers that the site has a very open setting with limited hedgerow and tree cover. It therefore requests that your client considers significantly strengthening the proposed landscaping and screening around the perimeter of the site and within it. The main areas of concern are along the northern and western boundaries. Any such strengthening should be made up of a mix of native species and have an associated management plan associated with it.

RESPONSE – Section b) Visual Impact point 1

Following these comments, the Landscape Strategy Plan has been updated to now include a 10m wide tree belt along the west, north and eastern boundary of the site. This will provide effective screening of the site, as well as be of great benefit to local wildlife. Please see Drawing NT15256/107 Rev B - 'Landscape Strategy Plan'.

QUESTION – Section c) Noise Impacts point 1 (Wind tunnel effect)

1. *Notwithstanding the position as set out on the Board report, Members remain to be convinced about the scale of the noise impacts arising from the proposal. This is because of the location of the plant along the northern boundary and because there is no information about the potential "wind tunnel" effect of having the arrays within a valley.*

RESPONSE – Section c) Noise Impacts point 1

When considering potential for wind induced noise from structures such as solar panels on windy days, the height of the structure above the ground is a key factor. Due to the wind shear effect, wind speeds near the ground are always much lower compared to wind speeds several metres above the ground. The solar panels would sit near the ground and therefore would unlikely be exposed to the very high wind speeds that would otherwise be observed higher up. In addition, the existing and proposed hedgerows and trees would also likely screen the panels from some wind directions. As such, it is very unlikely that noise from high winds channelling through or under the solar panels will be a noticeable feature.

QUESTION – Section c) Noise Impacts point 2 (Repositioned substation and control room)

2. *The Board would welcome your client's response to a suggestion that the plant and equipment be relocated to the site of the construction compound, as this in its view would provide greater separation distances from established residential property.*

RESPONSE – Section c) Noise Impacts point 2

Based on the previous site layout, the Noise Assessment concluded that:

- The solar farm would be emitting less noise than the measured background noise levels.
- Likewise, the solar farm noise would be sufficiently low, so as to not add to background noise levels.
- The solar panels would not be operating in darkness thus resulting in a lower load and lower specific sound levels from the inverters at night.

Following feedback however, the substation and control room have now been moved further away from the residential properties on Astley Lane - please see Drawing NT15256/107 Rev B - 'Landscape Strategy Plan'. As the new location is considered an improvement, it follows that the solar farm would have even less of a noise impact.

QUESTION – Section d) Wildlife Impacts point 1

1. More information is requested in respect of the findings of any current research that looks at whether solar panel arrays interfere with the flight patterns of birds.

RESPONSE – Section d) Wildlife Impacts point 1

There is little evidence available to suggest that solar farms in the UK have a net negative impact on birds. However, a 2016 report produced by Natural England titled "Evidence review of the impact of solar farms on birds, bats and general ecology (NEER012)" concludes that "some scientific and grey literature data, based upon carcass searches around solar PV developments, suggests that bird collision risk from solar panels is very low".

The RSPB has issued a Position Statement (May, 2017) on solar power, concluding:

"While solar energy technologies can impact upon birds and other wildlife, the RSPB considers that if deployed in suitable locations and appropriate mitigation measures are taken, solar energy technologies can be deployed in harmony with nature. In many cases, there may in fact be opportunities to enhance biodiversity on solar array sites."

Table 1: Types of solar energy and the RSPB's policy position on each

Type of Solar Energy	Description	RSPB Position
Solar photovoltaic (PV) arrays – *the focus of this briefing*	Large arrays of PV panels mounted on agricultural fields or other unsealed land.	Supportive, at the current scale of deployment, unless there are site-specific concerns. Concerns are most likely when located in or close to protected areas, or close to water features where development could pose risks to aquatic invertebrates.
Solar PV (built environment)	Small PV arrays (or single panels) mounted on roof tops, or previously sealed land such as car parks. On S/SW sloping roofs they may be integrated / flush with roofing materials.	Supportive. Possible risks of disturbing roof-nesting / roosting birds and bats. Installation should take place outside the breeding season, and avoid blocking access points.
Solar thermal	Panels used to raise water temperature for space heating and/or hot water supply. Usually roof-mounted.	Supportive. Similar issues to solar PV (built environment).
Passive solar	Use of building orientation and design (e.g. large areas of south-facing windows) to reduce space heating loads and use of mirrors to reflect sunlight into dark areas of buildings.	Supportive.
Floating solar (PV)	PV panel arrays mounted on floats installed on bodies of water e.g. reservoirs, lakes.	Supportive, as long as developments meet the appropriate planning criteria and the ecological quality of the water is maintained or improved.
Concentrated solar power	Use of mirrors to concentrate solar energy for thermal or PV electricity generation.	Supportive, as long as our potential concerns are addressed (see above). However, this technology is unlikely to be used on a commercial scale in the UK.

RSPB Position Statement on Solar Power, 2017:
https://www.rspb.org.uk/globalassets/downloads/documents/positions/climate-change/solar-power-briefing---may-2017-update-revised.pdf

Research by Rob Shotton over a two-year period for a Worcester University final year thesis, makes the following observations:

- *"Solar farms are being used by birds at a similar level compared to other land use types [i.e. the control sites]. There was also a significantly higher variation of species found on solar farms compared to arable fields which suggest that solar farms provide a habitat for a range of farmland birds.*
- *The arrays within the solar farm are a valuable addition to the landscape with birds of all types from buzzard to wren recorded using them for resting, singing or foraging. Birds would often enter the solar farm from the established boundaries and fly directly to the arrays then hop down to the ground between and underneath the arrays to feed. Birds were using the arrays in a similar way to hedgerows when feeding themselves by making foraging trips between the arrays before returning to the arrays to eat whilst remaining alert to nearby threats. Birds that were raising young behaved differently making trips from the hedgerow over the margins to the arrays before returning to the nest with invertebrates for chicks".*

See: https://community.rspb.org.uk/ourwork/b/science/posts/bird-use-on-solar-farms-final-results

Conclusion

Despite the limited research available, measures such as hedgerow and tree planting, as well as creating swards of wildflower meadows, with generous field boundaries are beneficial for bird foraging and breeding. Therefore, in the absence of UK evidence to the contrary, it is considered that bird species overall do benefit from well-managed solar farms.

QUESTION – Section d) Wildlife Impacts point 2

2. The Board wishes to have a clearer explanation as to the existing ecological value of the site and its wildlife.
3. It then requests an explanation as to how this might be impacted and if appropriate how adverse impacts might be mitigated.
4. That would then lead to an explicit set of mitigation measures

Existing site conditions

The site consists of agricultural land with a degree of screening offered by surrounding boundary vegetation and woodland toward the southeast of the site, with further vegetation screening available to the northeast. These boundaries consist of species rich hedgerows with trees. The Preliminary Ecological Appraisal confirmed that the site supports a range of species, including bats, badger, brown hare, and hedgehogs. It also supports a range of bird species, such as Blackbird, Blue tit, Common buzzard, Chiffchaff, Dunnock, House martin, Meadow Pipit, Skylark, Song thrush, and Yellowhammer, as well as the probable presence of barn owls. A Great Crested Newt (GCN) survey revealed that one of the ponds (outside the site) contains GCNs but only with a low population. In general terms, arable land is considered to have low ecological value, whereas managed wildflower meadows, hedgerows, trees, and water bodies, are considered to be more beneficial for local wildlife.

Mitigation measures during construction

The Preliminary Ecological Appraisal sets out the mitigation measures to be implemented to ensure that local wildlife is protected during construction works, namely:

Badgers
As hedgerows scrub shall be avoided, the proposals are unlikely to adversely impact on any setts (should any be created prior to works commencing). However, a badger sett check would take place prior to construction works as a precaution.

Birds
Avoiding works in the bird breeding season, or else to ensure a check for breeding birds is undertaken prior to works by a suitably qualified ecologist.

Nocturnal animals
Night-time work should be avoided whenever possible to reduce the potential for disturbance to nocturnal animals.

Biodiversity enhancement measures

- The creation of approximately 30ha (74 acres) of wildflower meadows, to the great benefit of pollinators whose numbers have been declining over a long period.
- The planting of approximately 1.85km of new native species hedgerow, including the reinstatement of a 800m line of historic hedgerow lost to agricultural intensification.
- Where a retained hedgerow is in poor condition, and/or with poor species diversity, the following enhancement work would be undertaken:
    - Gapping up the hedgerow with suitable local species.

    - Management to establish at least one hedgerow tree for approximately every 50m length of hedgerow, including allowing elm species to mature into standard trees within the hedgerows.

- Introduction of a management regime to facilitate use of the hedgerow by wildlife, as well as ensure the entire site's green assets are managed to maximise their benefit to local wildlife. To this end, a Landscape and Environmental Management Plan can be conditioned as part of any forthcoming permission.

- Hedgerow species to include:
    - Field maple
    - Hazel
    - Hawthorn
    - Holly
    - Blackthorn
    - Dog Rose
    - Elder

- As per Drawing NT15256/107 Rev B 'Landscape Strategy Plan', the creation of a woodland belt of approximately 1.5km, 10m wide. This is the equivalent of creating 3.7acres (1.5ha) of tree belt habitat. Woodland belt mix to include:
    - Field maple
    - Hazel
    - Hawthorn
    - Holly
    - Blackthorn
    - Horse Chestnut
    - Alder
    - Silver Birch
    - Wild Cherry
    - Oak
    - Goat Willow
    - Rowan
    - Lime
    - Elm

- Creation of a pond to attract wildlife.

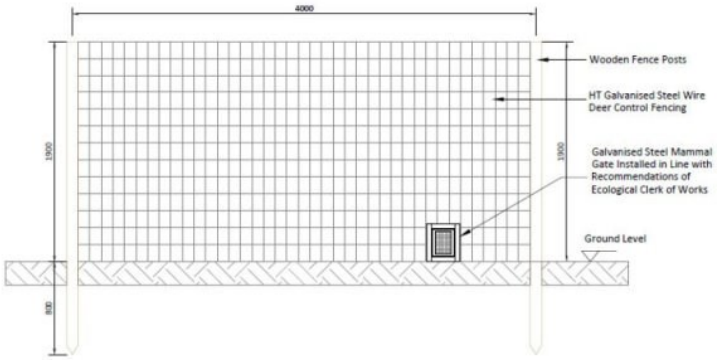
Benefitting local species

There are a variety of measures that could be implemented as part of the development proposals to enhance the site for a range of wildlife including bats, common reptiles, and breeding birds, including species which are S.41 Priority listed and Local BAP species. These include, but are not limited to the following:

- Installation of a mix of bird nest boxes suitable for dunnock and other birds onto trees.
- Habitat creation and inclusion of native species.
- The provision of bat boxes on trees and integrated bat boxes onto trees, which target local biodiversity priority species.
- Provision of a hibernaculum for the benefit of common reptiles.
- Provision of insect hotels, wood piles / loggery would benefit invertebrates.

- Use of hedgehog houses within the scheme can provide enhancement and opportunities for this species.
- The use of deer fence with mammal gates, thereby allowing local wildlife to flow through the site.

Example of a mammal gate installed within a deer fence



Significant Biodiversity Net Gain

By retaining and enhancing the ecological conditions of the site through the creation of new habitat and planting, the proposed development would result in an approximate figure of **258.77%** Biodiversity Net Gain. This is significantly higher than the minimum 10% net gain requirement coming into force later in 2023.

QUESTION – Section e) Other Matters point 1

1. The Board would wish to see more evidence that shows that leaving the land uncultivated, leads to an improvement in soil quality.

RESPONSE – Section e) Other Matters point 1

Soil health and carbon storage

Operational phase:

1. As well as absorbing light, bifacial panels allows sunlight to go through the panel, and are optimised to capture the sunlight reflected from the ground. It also captures diffused sunlight hitting the back of the panel.
2. The soil beneath the panels is therefore not in full shade, with the light then feeding into the microorganisms and wildflower meadows beneath. Soils with increased microbial content absorb carbon and become carbon stores.
3. Cultivating land by traditional methods of ploughing releases stored carbon from the soil. In fact, the Soil Association states that minimal tilling, or no tilling, offers the following benefits:
    - Less damage to soil structure, aiding water infiltration and water retention, making them more resilient in the face of droughts or floods.
    - Less risk of soil erosion.
    - Less environmental damage from nitrogen leaching and pesticide run-off.
    - Environmental benefits such as increased soil fauna and habitat for birds.

Soil Association (2018). To plough or not to plough: Tillage and soil carbon sequestration. https://www.soilassociation.org/media/17472/to-plough-or-not-to-plough-policy-briefing.pdf

Construction phase:

Up to date soil protection measures would be implemented during the construction and decommissioning phases. These include, but are not limited to:

a. Using low-bearing machinery which minimises ground compaction by spreading the weight over a larger area.
b. No trafficking/driving of vehicles/plant or materials storage to occur outside designated areas.
c. Where cables will be laid, the topsoil would be stripped and deposited on one side of the trench line and subsoil would be deposited on the opposite side of the trench. The soil would be returned in reverse order, reinstating the soil to its original state.
d. The ground will be seeded with a species-rich grass mixture post-construction to prevent erosion and ponding.

QUESTION – Section e) Other Matters point 2

2. The Board is aware of the offer of the Community Fund to the Parish Council, but has asked if there has been any response.

RESPONSE – Section e) Other Matters point 2

Industria Solar Bedworth Limited proposed a community fund of £50,000 paid on first export of electricity into the grid. The fund was for Astley Parish Council to provide to local charitable organisations or good causes.

Industria Solar Bedworth propose to provide a unilateral undertaking which is similar to a S106 agreement. The unilateral undertaking is a deed where we covenant to provide the £50,000, but unlike a S106 agreement it doesn't have to be entered into by the local authority. The unilateral undertaking would come into effect on successful planning approval.

The unilateral undertaking would afford Astley Parish Council time to properly assess all applications and provide funding to the projects they consider most suitable.

A unilateral agreement can be provided over the coming weeks but in any case prior to the next planning committee meeting.

APPENDIX 4

Technical Note

CLIENT:	**Industria Solar Bedworth Ltd**
PROJECT:	**Bedworth Solar Farm**
SUBJECT:	**Alternative Site Assessment**
JOB NO.:	**NT15256**
DATE:	**19 April 2023**
PREPARED BY:	**Gilly Slater MRTPI CEnv – Associate Director (Energy & Climate Change)**

This Technical Note has been prepared as an addendum to the Alternative Site Assessment prepared for Bedworth Solar Farm, due to the site's location within the Green Belt. It will detail the relevant constraints that need to be considered in site finding exercises, and demonstrates that there are limited alternative sites available for a solar farm within the search area.

The search area was set at 2km from the grid connection point at the Newdigate 33kV Substation. This comprises the only area of land within several kilometres that does not fall within the Green Belt designation or a built-up area. Alternative grid connection points in the area are also located within the Green Belt (Nuneaton 33kV Substation and Arley 33kV Substation).

Within the area that does not fall within the Green Belt designation, there are constraints related to the woodland that intersperses the fields, which fall within the Priority Habitat Inventory – Deciduous Woodland designation. This sterilises a large area of land for solar development, as the removal of these woodlands should be avoided. Along with this, approximately 50% of the remaining available land is designated for housing development, which further reduces available space for a solar farm. The boundaries of the allocated sites immediately adjoin the only undesignated area that would potentially be suitable for a solar farm (outlined in pink below). Due to the proximity to residential areas, protected woodland areas and the Green Belt, this site would not be suitable for solar development. This is due to the potential for landscape and visual impacts to occur as a result of locating the solar farm close to a high number of sensitive receptors, along with any solar development here extending the built form of the settlement.

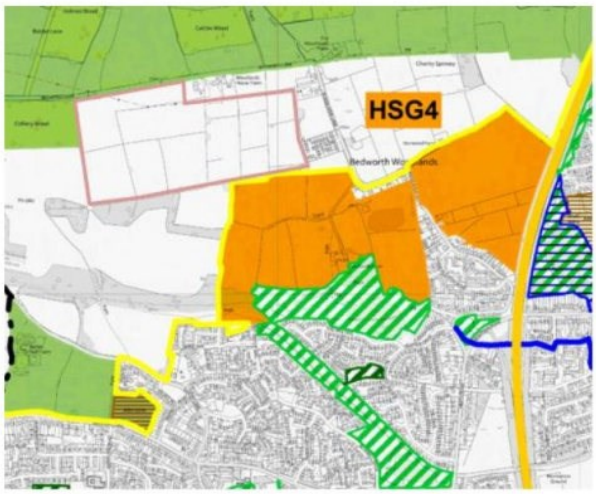


Figure 1 - Allocated Land within Vicinity of Grid Connection Point

Having ruled out the land outside the Green Belt due to incompatible neighbouring land use and ecological constraints, the next available option is lower grade agricultural land within the Green Belt. The land within the search area predominantly comprises Grade 3 agricultural land, which is split into two categories – 3a (good) and 3b (moderate). Grade 3a land is considered to fall within the "Best and Most Versatile" category of agricultural land, along with Grade 1 (excellent) and Grade 2 (very good). The remaining land within the search area is either Grade 2 or urban. Agricultural land mapping does not show the subcategories of Grade 3, meaning that without on-site soil surveys, the true grade cannot be determined. Given that Grade 3 is the lowest category of agricultural land within the search area, for the purposes of the Alternative Site Assessment, alternative sites are sought within Grade 3 land rather than Grade 2.

The only Grade 3 land within the search area that would have suitable access for construction vehicles is located in close proximity to a Registered House and Garden at Arbury Hall. This is a designated heritage asset and the development of a solar farm in this location would be likely to result in unacceptable impacts to this asset. As such, there are no appropriate alternative sites within the search area that fall within agricultural land classification Grade 3.

The proposed site is located within Grade 3 agricultural land, 85% of which falls within the Grade 3b (moderate) category, meaning that only 15% of the site comprises Grade 3a or Best and Most Versatile agricultural land. It has good access for construction vehicles, is sufficiently distant from residential properties to avoid unacceptable visual impacts, and is within an appropriate distance from the grid connection point to avoid electrical losses between the site and the substation. As such, the proposed site is the most appropriate for solar development within the search area.

APPENDIX 5


DO NOT SCALE FROM THIS DRAWING
RECEIVED
26/04/2023
PLANNING & DEVELOPMENT DIVISION
ASTLEY LANE
INDUSTRIA SOLAR BEDWORTH LTD.
BEDWORTH SOLAR FARM
LANDSCAPE STRATEGY PLAN
wardell armstrong

APPENDIX B

Astley Parish Council

www.aslteyparishcouncil.org.uk

Objections to Solar Farm PAP/2022/0544

Strong objections to Sole End Solar Farm were received from the residents present and via email to the Parish Clerk prior to the meeting held on 25th May 2023.

Whilst it is understood that updates have been made to the planning application to address previous objections, residents feel that the following issues are cause to object:

- Belief that the planning application does not accurately detail information about the history of the farming land on which it is proposed to be built.
- A feeling that the planners had only taken into consideration views from the road, and not taken into consideration the impact on residents who will have a direct view of the site (see image below).

- The impact on neighbouring farmers for moving cattle and carrying out tractor work.
- Despite most residents understanding the importance of solar farms, they felt that it was wrong to use green belt and farming land which can be used to grow food, for this purpose.
- Residents believe contradictions have been made in terms of the planners trying to promote the positive aspects, in particular by saying that wildflower meadow will be planted, but that sheep may be able to graze there. It was pointed out that sheep will most likely eat the meadow grass, thus reducing any benefits that are proposed by planting it.
- It was felt that there are no direct benefits to the residents of Astley Parish (e.g. a reduction in electricity bills for all residents due to the presence of the solar farm).
- Whilst it was explained that the type of panel used would prevent glare, there were still concerns and uncertainty as to whether this will really be the case.
- Concerns still remain that this project will destroy the views of the local land, not just for residents but for walkers.

Thursday, 25 May 2023

- Whilst it is understood that a change has been made to the proposed access for the site, it is still considered to be a busy and dangerous road, and local residents feel that this will only be of detriment.
- Other concerns have been raised about the true environmental impacts of the solar farm.

Outcome:

The councillors present **voted unanimously against** the Solar Farm planning application, as they feel that it provides no direct benefit to Astley Parish.

Residents understand that the decision of Astley Parish Council does not mean that the planning application will be rejected. They have therefore asked The Parish Council to request certain considerations of the planning board on the 12th June 2023:

- Can anything further be offered to provide and improve screening for residents (to the South side of the site) so that they will not be impacted so much by the presence of the solar farm?
- Can any trees planted be tall enough early on to provide good screening from the start of the project?

The Community Fund

Residents were told that the community fund is offered if planning is to go ahead, and this this offer still stands even if Astley Parish Council vote against the site.

Whist residents still object to the stie, the agree that this is at least something that is a little more positive and agreed that further discussions and consultation would be required, should the planning application be approved, so that ideas for how to benefit the parish could be discussed.

Overall, the feeling was that, should planning go ahead, it would be better for the Parish Council to receive an annual sum of £5,000.