General Development Applications

(5/e) Application No: PAP/2021/0605 and PAP/2021/0651

a) PAP/2021/0605

Land at Smorrall Lane, Astley

The construction of an agricultural building, renewable energy generating station comprising ground mounted photo-voltaic solar arrays together with substation, inverter/transformer stations, grid connection infrastructure, grid cable route, battery energy storage, site accesses, access gates, car parking, attenuation pond, internal access tracks, security measures, other ancillary infrastructure, landscaping and bio-diversity enhancements for

The Barrs Family Enterprises Ltd

b) PAP/2021/0651

Land at Nuthurst Lane, Astley

The construction and operation of a solar PV Farm and battery energy storage, plus ancillary infrastructure and equipment, landscaping and access for

Tor Energy Solar Ltd

1. Introduction

The receipt of these two applications is reported together, as they relate to similar proposals and are located within the same general area of the Borough – its south-east corner. Each will have to be determined on its own merits, but the Board should also be aware that there may be cumulative impacts which may amount to material planning considerations in their respective determinations.

Members should also be aware that a third and similar application in the same general location as the two above, is likely to be submitted shortly. The applicant is likely to commence his own public consultation on that scheme prior to submission and it will become public at that time.

At present therefore, it is proposed just to outline the content of the two submitted applications, such that Members are aware of their background as early as possible.

A plan at Appendix A identifies their locations.

2. An Outline of Application PAP/2021/0605 - Smorrall Lane

a) The Site

This site comprises four fields of agricultural land to the north of Smorrall Lane and to the east of Breach Oak Lane where these two roads have a junction, about 100 metres north of the Corley M6 Motorway Services Area. The fields are enclosed with mature tree lined boundary hedgerows. Great Lynes Wood borders the south-east corner of the site.

The site falls from its highest point along its northern boundary towards the south – a fall of around 20 metres. The land rises again on the other side of the Motorway.

There are a few residential properties along Smorrall Lane, but there is a larger frontage of residential property on the other side of Breach Oak Lane more or less extending from its junction along the whole of the site's western and treed hedgerow boundary.
An 11kv overhead power line runs south across the site.

A public footpath – the M334 – crosses the northern portion of the site in an east/west direction.

b) The Proposal

The solar array would be oriented west/east across the whole site with the panels being angled so as to face south. These would be 2.5 metres off the ground at their highest point and 800 mm at their lowest. There would be a three and a half metre open corridor between the lines of panels. Other infrastructure would be concentrated to the immediate north west corner of Great Lynes Wood and this would comprise the substation, the battery compound as well as containing the associated electrical infrastructure - inverter and transformer units (2.6 metres tall) and the containers housing the batteries and for storage (2.6 metres tall). The connection to the grid would be made via a new underground cable linking the site to Astley Lane – almost a kilometre and a half to the north-west.

The proposals also contain an agricultural building measuring 60 by 35 metres and 6 metres to its ridge which would have a direct connection to the electricity generated from the solar array. This would be timber clad with a sedum roof. It would be located in the extreme south-west corner of the site at the junction of the two roads. Its "yard", parking and delivery area would be on its east facing elevation. This building is to be used for the growing of green produce "vertically" using some of the electricity generated by the solar arrays, recycled water and no use of pesticides. The applicant suggests the "grow time" for this produce would be between 5 and 25 days, lower than the 6/7 weeks of a conventional greenhouse and with 20 times greater yields and 95% less water. The produce would comprise baby leaf vegetables, greens and herbs.

The building would have a 31 space car park and delivery area on its eastern side and an anticipated 6 to 12 delivery and pick up movements a week using LGV's rather than HGV's. Up to 30 people would be employed occupied during day time hours.

There would also be a direct underground cable connection to the Corley Motorway Services Area to the south, particularly to provide the increased demand for EV charging at the Area.

Access to the farm building would be from a new access onto Smorrall Lane leading to a loss of some hedgerow. Access into the solar farm for maintenance and emergencies once operational would be via the track from the north-east corner of the site to Astley Lane. Construction traffic would use the new access off Smorral Lane. The gated access at the northern end of the site's western boundary at Breach Oak Lane would not be used.

A two-metre tall deer fence would be constructed around the site's perimeter with a single vehicular access off Smorrall Lane being a five metre deer gate. Pole mounted infra-red CCTV cameras would be located at intervals around the perimeter, mounted on steel poles at three metres above ground level.

It is said that there would be a 44% gain in habitat diversity achieved through providing wild-life corridors both outside and inside of the perimeter fence and through enhancing and infilling existing hedgerows and planting new ones particularly along the northern boundary. Additional tree planting is proposed.

Surface water naturally drains to the south of the site and this together with run-off from the new building is to be collected in a series of attenuation ponds at the extreme south of the site between Smorrall Lane and the proposed farm building, before it is discharged into an existing ditch.

Construction is expected to take six months with HGV traffic amounting to 14 two-way movements a day and hours of operation from 0800 to 1800 on weekdays and 0800 to 1330 on Saturdays. Routing would be along Smorrall Lane to Junction 3 on the M6.

The site is expected to generate 16.5 MW of electricity a year for the Grid which is equivalent to the use of electricity by 3880 households. In addition, the on-site battery storage facility would be utilised to reinforce the power generation of the solar farm – storing energy at times of low demand and releasing it to the grid at other times.

The proposal has a life of 40 years and the development would be de-commissioned at that time.

An illustration the layout and the elevations of the various infrastructure components are at Appendices B to G, with the elevations of the agricultural building at Appendix H.

c) Submitted Documentation

The following documents have been submitted in support of the application.

A Noise Assessment Report details the existing background sound climate at the nearest noise-sensitive properties as well as outlining the impact of the potential noise emissions from the development on that background. This concludes that noise emissions will be equal to or below the measured day and night-time background levels at these properties thus leading to a conclusion of there being no observed adverse effects.

A Glint and Glare Assessment outlines that there are some 90 residential properties within a kilometre of the site and eight aerodromes within a thirty-kilometre radius. In respect of the dwellings, the assessment indicates that some 32 properties could possibly be affected by solar reflection, but that existing screening and its enhancement would significantly obstruct the views of the panels. There are however three dwellings on Smorrall Lane which would be moderately affected for part of the day. Additional tree screening is recommended at an appropriate height. In respect of the aviation impact, the report concludes that there would be no impact predicted at either Coventry or Birmingham Airports.

A Flood Risk Assessment identifies the closest watercourse as the Breach Brook. It runs from the west of Breach Oak Lane under Smorrall Lane in a culvert 40 metres to the west of its junction with Breach Oak Lane. It then flows on the south side of Smorrall Lane past the application site to pass under the M6 1.5km to the east. A smaller watercourse drains south through the centre of the northern part of the application site passing under Smorrall Lane and into the Breach Brook. There is also a roadside ditch alongside the northern side of Smorrall Lane in the vicinity of the site. This joins the Brook via culverts under the Lane. There is a foul water sewer beneath Breach Oak Lane and Smorrall Lane. The site is in Flood Zone 1 indicating that it is a low-risk area for fluvial flooding but the main concern from flooding is considered to be the capacity of the culverts under Smorrall Lane. Most of the site will be retained as grassland but internal tracks should be of a permeable construction and gravel trenches should surround other structures. However, there will need to be attenuation of surface water arising from the farm building and its surrounds. This has therefore resulted in the attenuation measures in the southwest corner of the site together with valves to control discharge into the ditch. The size of the pond will largely depend on the capacity of the culverts.

An Agricultural Land Classification Note indicates that 58% of the site is Grade 3b and 42% is Grade 3a. It is concluded that there would be no impact as a consequence of this development as the land would not be “lost” from agriculture in the longer term. The Note also states that the management of land under solar PV panels can improve soil health such as increasing soli organic matter and hence soil organic carbon.

An Arboricultural Assessment identifies over 50 trees, 23 group features and 37 lengths of hedgerow, the majority of which are considered to be of high and moderate quality. Great Lynes Wood is an Ancient Replanted Woodland and this designation carries significant weight in planning terms. As such there should be at least a 15-metre buffer between its boundary and the proposed development. Only one individual tree and two small sections of hedgerow are proposed to be removed with the proposal. The tree (an oak) is of moderate quality but is located very close to the overhead line and would in all probability need to be removed as it continues to grow. The hedgerows are of moderate quality and their loss is compensated by the extensive new planting that is proposed. Overall, the Assessment concludes that the proposal would have no or only low potential negative impact on the retained trees provided that precautions are taken during construction to avoid root protection areas.

An Ecological Appraisal describes the site as intensively managed arable land with external hedgerow and woodland boundaries. There are no European or National Statutory Nature Conservation Sites affected, but there are four non-statutory sites within two kilometres of the site – Newdigate Colliery, Colliery Wood, Cowley Wood and

Woodland Buffers all to the north-east. Due to the separation distances and the nature of the proposed development, it is extremely unlikely that there would be any impact on these sites. Great Lynes Wood comprises a pine plantation with very little ground flora. There are however deciduous trees around its perimeter. The proposals retain native hedgerows wherever possible and there is no proposed loss of any of the surrounding woodland or that on site. As a consequence, there is a very limited impact, and the main issues should be mitigation and enhancement of existing habitats as well as providing sufficient buffer zones with hedgerows and around Great Lynes Wood. From a habitat assessment, the site has negligible potential for amphibians, reptiles and riparian fauna. It has greater potential for bat roosts and badger sets. Additional survey work is thus needed in respect of these species. Suitable mitigation measures will be needed commensurate with the conclusions of this work.

A Statement of Community Involvement describes a public consultation events as well as meetings with the Astley and Corley Parish Councils. 40 residents attended a community consultation in May. The Statement says that the draft proposal as presented at that time was then modified so as to move the whole development further away from the Breach Oak Lane boundary by an additional five metres so as to allow more planting alongside the existing hedgerow and secondly to remove solar panels adjacent to the public footpath so as to provide more rough grassland and a new hedge line to the south. There was also an expression of interest to look at community benefit from the electricity generation.

A Heritage Impact Assessment identifies that very little archaeological fieldwork has taken place in this area but the character of the field boundaries, historic land use and location relative to other farms and historic settlements imply diminished archaeological potential. Any identified features are likely to be medieval or post-medieval as well as field systems. A pre-commencement evaluation would be recommended. In respect of indirect impacts, most of the designated heritage assets in the wider area are located some distance away – Corley Camp Hillfort, Breach Oak Farmhouse, Holly Farmhouse and Corley Hall. However, a combination of the high level of several of the assets and their interlinking on a landscape scale, means that some impact is unavoidable, but the overall impact is assessed as being minor.

A Landscape and Visual Impact Assessment has been carried out. This concludes that there would be local landscape impacts rather than broad landscape impacts. This is because of the topography in the area and the degree of self-containment provided by the existing boundary hedgerows and trees as well as by Great Lynes Wood. There are however some direct and filtered impacts within this radius. Such impacts reduce beyond around 1.5 kilometres from the site as although agricultural land remains the dominant landscape type in the area, there has already been a degree of development/urbanisation in the broader area. Mitigation measures to replace, plant new and enhance existing hedgerows and the planting of new trees would assist in reducing the immediate local adverse impacts. The changes consequential to the public engagement events will enhance the value of these measures. Notwithstanding these measures the landscape and visual impacts from the other side of the Motorway remain as residual impacts.

A Green Belt Assessment looks at the impact of the proposals on the five purposes of including land within the Green Belt. It acknowledges that the site lies within Broad Area 10 of the Coventry and Warwickshire Joint Green Belt Study of April 2016. This

concludes that this Area is “considered to make a significant contribution to Green Belt purposes”. The applicant’s assessment of the impact of the actual proposal on the five purposes concludes that there would be no harm to the purposes of checking unrestricted sprawl of large built-up areas, to preventing neighbouring towns merging or to preserving the setting of historic towns. It concludes however that there would be “limited” harm to the purpose of safeguarding the countryside from encroachment. This is said to arise from the site being visually self-contained to within a kilometre and a half distant and to the impact of the mitigation measures. It is also pointed out that the development is reversible – having a 40 year life.

A Planning Statement brings all of these matters together within the final planning balance. It outlines the Development Plan policies as well as the range of other material planning considerations applicable to the case. The harms are identified and the applicant’s considerations are set out. Appendix I is a copy of the applicant’s case – the first sections set out the “harm” side of the balance referring to the various conclusions from the documents reported above (paras 5.2 to 5.9.2 of Appendix I). The applicant’s case is then outlined in the concluding paragraphs of Appendix I. The considerations that the applicant is advancing are said to cumulatively clearly outweigh the harms. The considerations are increasing renewable energy generation, the climate emergency, energy security, the best available technology, good design, the reversible impacts, net bio-diversity gain, soil regeneration and farm diversification.

3. An Outline of Application PAP/2021/0651 – Nuthurst Lane

a) The Site

This site comprises five fields of agricultural land on the Arbury Estate amounting to 40 hectares in area, just short of a kilometre to the west of Nuthurst Lane at Astley and around 400 metres north of Park Lane. It is also around 200 metres south of the built-up edge of New Arley.

The site is separated from New Arley by the Astley Gorse Wood which is immediately to the north of the site. A corridor of this wood extends southwards into the site. There is also a smaller area of woodland in the southern portion containing a pond. Hedgerows and small isolated clusters of trees extend out from this woodland. The highest point of the site is in its north-west corner and the land falls towards the south and south-east with a fall of around 15 metres.

Apart from New Arley, the closest residential properties are at Fitzroy Farm (750 metres to the north-east); Holly Bush Farm (900 metres to the east) the hamlet of Astley (900 metres to the east) and Park Lane Farm (200 metres to the south).

There are three overhead lines mounted on low wooden poles crossing the site from north-east to south-west.

Public footpath (M341) runs from Park Lane northwards along the whole of the western boundary to the site and into New Arley. The M342 crosses land to the north of the site running from Hill Top at Arley, south-eastwards towards Nuthurst Lane at Astley.

b) The Proposal

The solar array would be oriented west/east across the whole site with the panels being angled so as to face south. These would be three metres off the ground at their highest point and 800 mm at their lowest. There would be a three-metre open corridor between the lines of panels. Other associated infrastructure is located throughout the site grouped into five general locations – one in each of the five fields. These locations would contain inverter units (2.6 metres tall) and the containers housing the batteries (2.6 metres tall). The connections from the panels and units would link to a substation in the north-east corner of the site measuring 5 metres by 3 and 4 metres tall. The connection to the grid would be made under the access track so as to connect at Nuthurst Lane. A two-metre tall deer fence would be constructed around the site's perimeter with a single vehicular access also in the north east corner being a five metre deer gate. Pole mounted infra-red CCTV cameras would be located at intervals around the perimeter mounted on steel poles at three metres above ground level.

Because of the natural slope of the land surface water drainage would be to the south where a collection of swales would be provided in order to contain surface water prior to discharge into existing ditches.

The perimeter hedgerows are to be enhanced and "filled -in" so as to reach a height of between 2.5 and three metres together with a five-metre wide "buffer" being left open around the inside of the deer fence.

Access to the site for all site traffic would be gained from Nuthurst Lane via existing agricultural access tracks that are already in use by the farmer. These would be strengthened to accommodate the HGV construction traffic. A temporary construction compound would utilise an existing farm storage/set down area at the north east corner. Construction is expected to take around 30 weeks with no working on Sundays and Bank Holidays and 8 two-way HGV movements expected daily.

The site is anticipated to generate some 21 MWh of electricity a year – equivalent to the use of around 5120 homes. In addition, the on-site battery storage facility would be utilised to reinforce the power generation of the solar farm – storing energy at times of low demand and releasing it to the grid at other times.

The proposal has a life of 40 years and the development would be de-commissioned at that time.

A plan at Appendix J illustrates the layout of the proposals and as the infrastructure is the same as reported above for the Smorrall Lane case, Members are referred to Appendices C to G.

c) Submitted Documentation

The application is accompanied by a number of supporting documents.

A Noise Assessment details the existing background sound climate at the nearest noise-sensitive properties as well as outlining the impact of the potential noise emissions from the development on that background. This concludes that noise

emissions will be equal to or below the measured day and night-time background levels at these properties thus leading to a conclusion of there being no observed adverse effects.

A Glint and Glare Assessment outlines that there are some 46 residential properties within a kilometre of the site and eight aerodromes within a thirty kilometre radius. Analysis was undertaken at half of the properties and at four runways and two air traffic control towers. That concludes that there would be no adverse glint and glare impacts at the residential properties and no impact predicted at Coventry or Birmingham Airports. No mitigation is thus proposed.

A Flood Risk Assessment identifies no rivers within a kilometre of the site but there are a number of ditches within and surrounding the site together with a number of on-site ponds. The natural drainage direction is towards the east because of the sloping topography. The site is in Flood Zone 1 indicating that the entire site is at “low risk” from fluvial flooding. Areas with a higher risk of surface water flooding are within the vicinity of the main ditches in the area – the Astley Gorse Brook in the north eastern corner of the site and the Wood Brook to the south east – together with isolated “ponding” in the vicinity of the existing ponds. However, these are low level risks. As the development is almost wholly elevated above ground level there is a negligible risk of flows being impeded or diverted. The various structures will have gravel perimeter trenches and the access road would be strengthened with impermeable material. No further mitigation is recommended, although some new swales are included along the downslope boundaries of the site.

No Traffic Assessment was included, but a draft Traffic Construction Management Plan was submitted. This outlines the route for both in and outbound traffic which will be from Junction 3 of the M6; the A444, Newton Road, Heath Road in Bedworth, Smorrall Lane, Astley Lane and into Nuthurst Lane. HGV traffic is expected to amount to four HGVs accessing the site daily through the construction period. Working hours are to be between 0800 and 1800 hours on weekdays and 0800 and 1300 on Saturdays.

An Ecological Appraisal describes the site as being an area of intensively managed agricultural land predominantly under arable rotation. There are limited areas of improved grassland within the fields whilst native hedgerows with mature trees provide field boundaries throughout the site, some of which have associated ditches. Woodland and scrub are seen on site plus some scattered trees. There are ten ponds within or immediately adjacent to the site. There are no European or National Statutory Nature Conservation Sites affected but there are two non-statutory sites within two kilometres of the site – Dafferns Wood and Ansley Cutting. Due to the separation distances and the nature of the proposed development, it is extremely unlikely that there would be any impact on these sites. The proposals retain native hedgerows wherever possible and there is no proposed loss of any of the surrounding woodland or that on site. The ponds are to be retained. As a consequence, there is a very limited impact and the main issues should be mitigation and enhancement of existing habitats. Additional survey work is needed in respect of the potential for bats and badgers being present on the site. Suitable mitigation measures will be needed commensurate with the conclusions of this work. Survey work for great crested newts found no traces of their presence on the site.

A Heritage Appraisal concludes that given the historic use of the fields as agricultural land, if archaeological features do survive, they are very likely to be only in the larger and deeper cut examples. However, the land was farmed from the former Dukes Farm – the site of the construction compound – and this could be late 18th Century or earlier and linked to the deer park of Astley Castle. This part of the site therefore has greater interest. In terms of indirect impacts, the Appraisal says that the designated assets in the wider area are some distance from the site – Astley Castle and its associated buildings, Astley Church, Astley Lodge, Arbury Hall and its Park. The landscape setting of these assets is such that they are partly or wholly insulated from the effects of the development by intervening trees, topography and modern intrusions. However, a combination of the high value of several of the assets and their interlinking in the landscape means that the scale of the development and its location on higher ground, will have an impact - albeit limited.

An Agricultural Land Classification Note indicates that 60% of the site is Grade 3b; 30% is Grade 3a and 8% is Grade 2. It is concluded that there would be no impact as a consequence of this development as the land would not be "lost" from agriculture in the longer term. The Note also states that the management of land under solar PV panels can improve soil health such as increasing soli organic matter and hence soil organic carbon.

A Landscape and Visual Impact Assessment has been carried out. This concludes that there would be local landscape impacts rather than broad landscape impacts. However, these would be significant within a kilometre of the site because of the change away from an agricultural backcloth. Beyond a kilometre distance from the site these impacts would lessen to moderate to minor and beyond two kilometres they would be minor to insignificant. Mitigation measures to replace and enhance existing hedgerows and the planting of new trees would assist in reducing the immediate local adverse impacts. In respect of visual impacts then the general conclusions reflect those above, but because of the elevated position there would sections of the site that would be visible between 1 and 1.5 kilometres distant. Again, mitigation measures would reduce these impacts.

A Statement of Community Involvement outlines the programme of public consultation that was undertaken. This describes an in-person public exhibition together with engagement with the Astley Parish Council. Additionally, a brochure was circulated to over 1000 residents and to 30 local businesses. There was also a project website. Of the 16 people who attended the exhibition or completed the online survey, 10 were in favour and there were 4 objections with 2 offering no opinion. The key matters raised were – construction traffic and potential visual impact.

A Green Belt Assessment looks at the impact of the proposals on the five purposes of including land within the Green Belt. It acknowledges that the site lies within Broad Area 10 of the Coventry and Warwickshire Joint Green Belt Study of April 2016. This concludes that this Area is "considered to make a significant contribution to Green Belt purposes". The applicant's assessment of the impact of the actual proposal on the five purposes concludes that there would be no harm to the purposes of checking unrestricted sprawl of large built-up areas, to preventing neighbouring towns merging or to preserving the setting of historic towns. It concludes however that there would be "very limited" harm to the purpose of safeguarding the countryside from encroachment. This is said to arise from the site being visually self-contained to within a kilometre

distant and to the impact of the mitigation measures. It is also pointed out that the development is reversible – having a 40 year life.

A Planning Statement brings all of these matters together within the final planning balance. It outlines the Development Plan policies as well as the range of other material planning considerations applicable to the case. The harms are identified and the applicant's considerations are set out. Appendix K is a copy of the applicant's case – the first sections set out the "harm" side of the balance referring to the various conclusions from the documents reported above (paras 5.1 to 5.12.1 of Appendix K). The applicant's case is then outlined in the concluding paragraphs of Appendix K. The considerations that the applicant is advancing are said to cumulatively clearly outweigh the harms. The considerations are increasing renewable energy generation, the climate emergency, energy security, the best available technology, good design, the reversible impacts, net bio-diversity gain, soil regeneration and farm diversification.

4. Development Plan

The North Warwickshire Local Plan 2021 – LP1 (Sustainable Development); LP3 (Green Belt), LP13 (Rural Employment), LP14 (Landscape), LP15 (Historic Environment), LP16 (Natural Environment), LP23 (Transport Assessments), LP29 (Development Considerations), LP30 (Built Form) and LP35 (Renewable Energy and Energy Efficiency)

5. 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
The Coventry and Warwickshire Joint Green Belt Study 2016

Observations

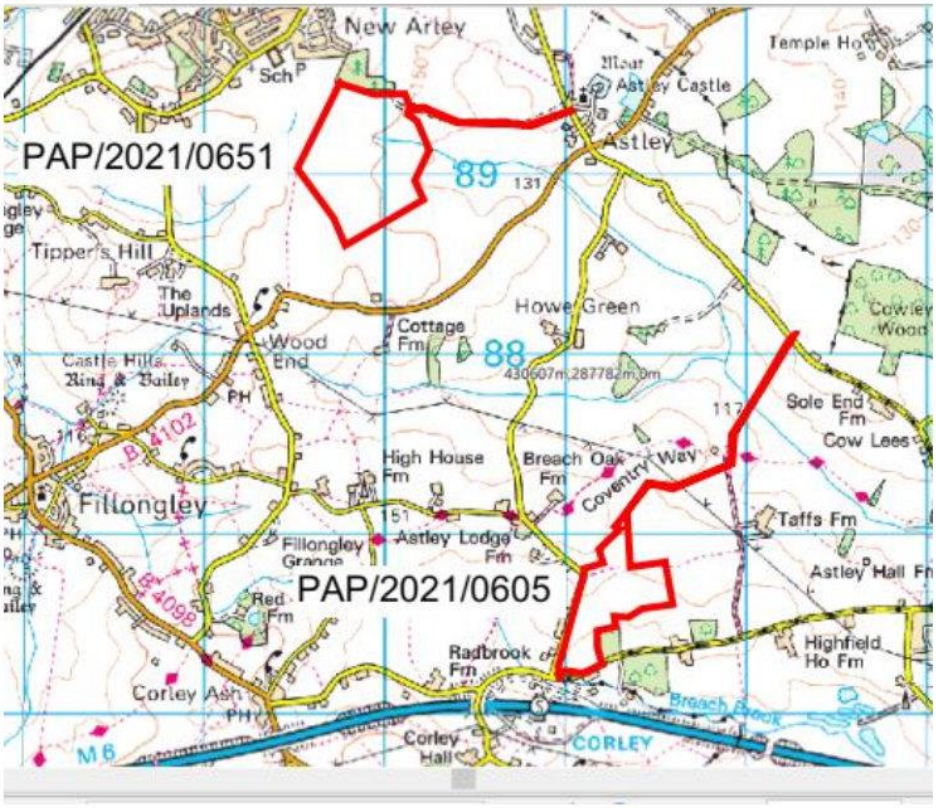
As explained above, this is an introductory report bringing these applications to the attention of the Board at an early stage. It describes both of the sites as well as the respective proposals for each. They are clearly similar but the Smorrall Lane one has the additional agricultural building. The relevant parts of the Development Plan are identified as well as a number of other material planning considerations.

It is considered that the Board would benefit from looking at the two sites in order to best assess their respective impacts as well as to better appreciate any cumulative impacts. A joint visit is thus recommended prior to determination.

Recommendation

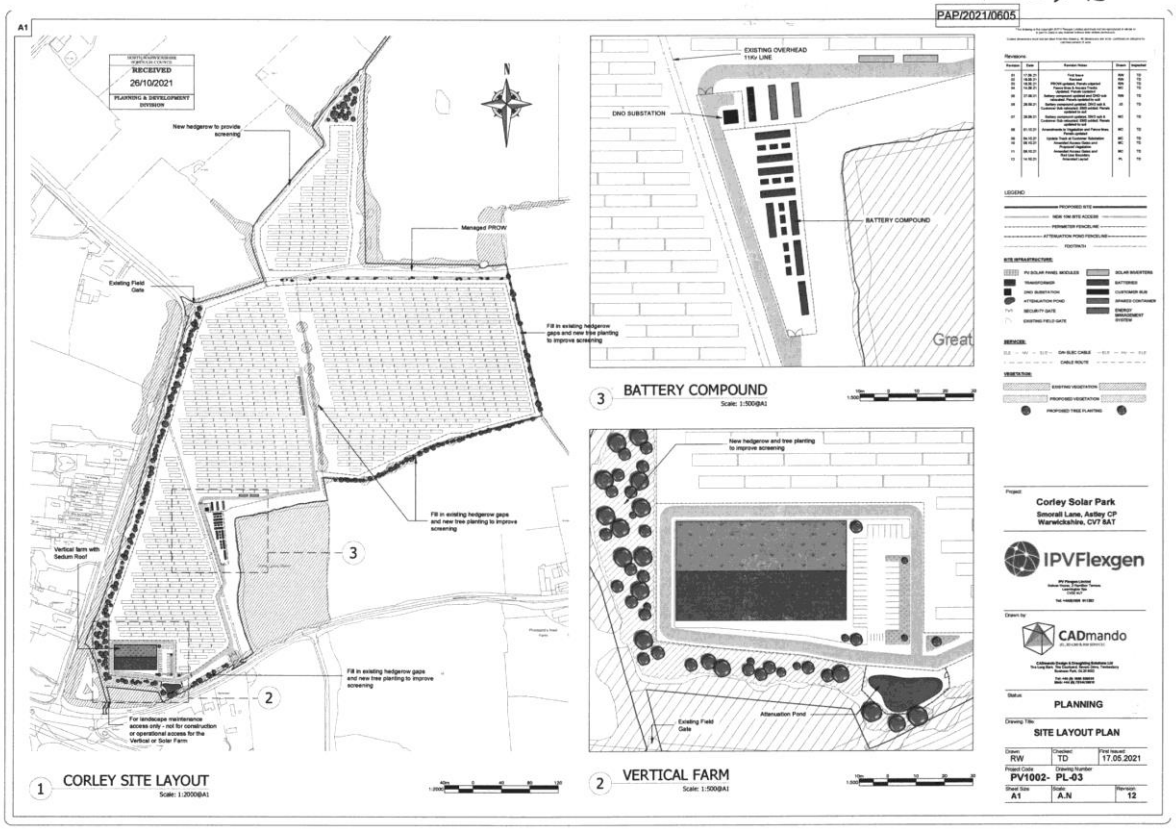
That the Board visits both of the sites prior to determination.

Appendix – A


PAP/2021/0651
PAP/2021/0605
New Arley
Sch
Temple Ho
Astley Castle
Astley
89
131
Tipper's Hill
The Uplands
Wood End
Cottage Fm
Howe Green
88
Castle Hills
Ring & Bailey
PH
B 4102
Fillongley
High House Fm
Breach Oak Fm
Coventry Way
Sole End Fm
Cow Lees
Taffs Fm
Astley Hall Fm
Fillongley Grange
Astley Lodge Fm
151
B 4098
Red Fm
Radbrook Fm
Highfield Ho Fm
Corley Ash
PH
Corley Hall
CORLEY
M6

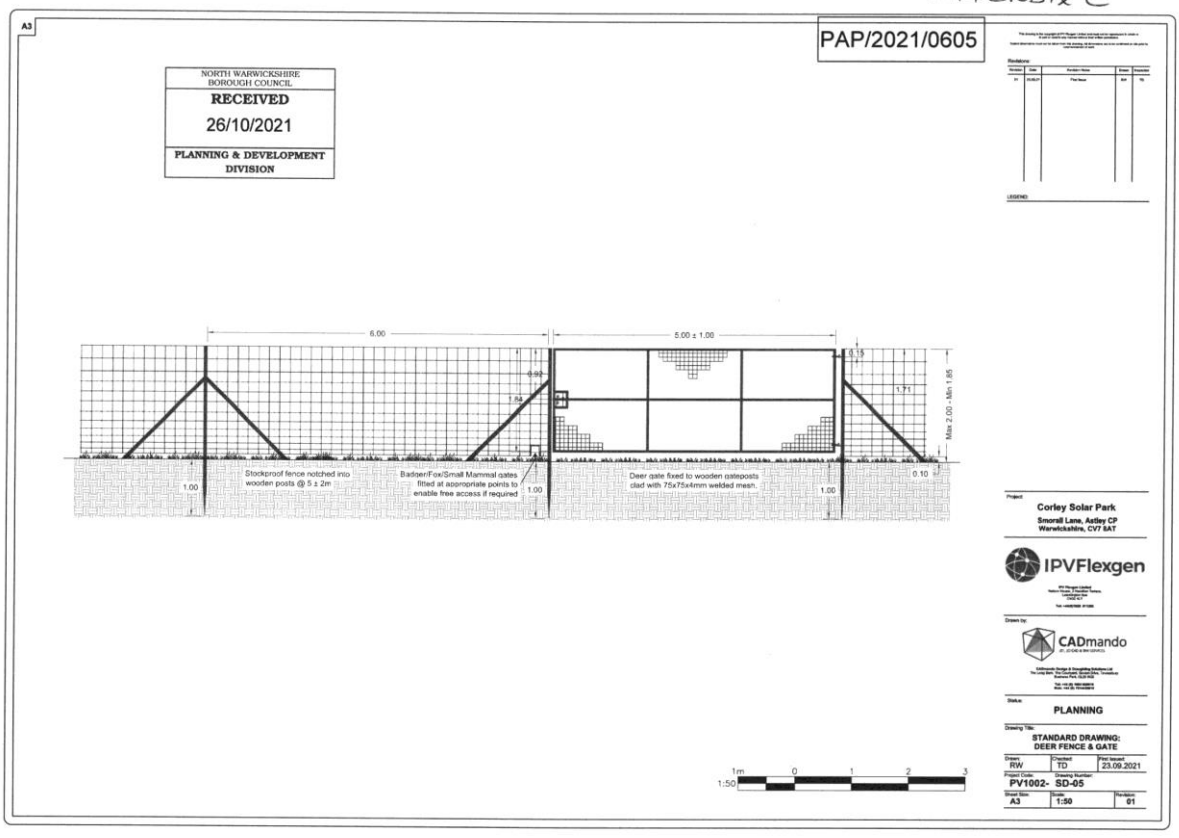
APPENDIX B

PAP/2021/0605



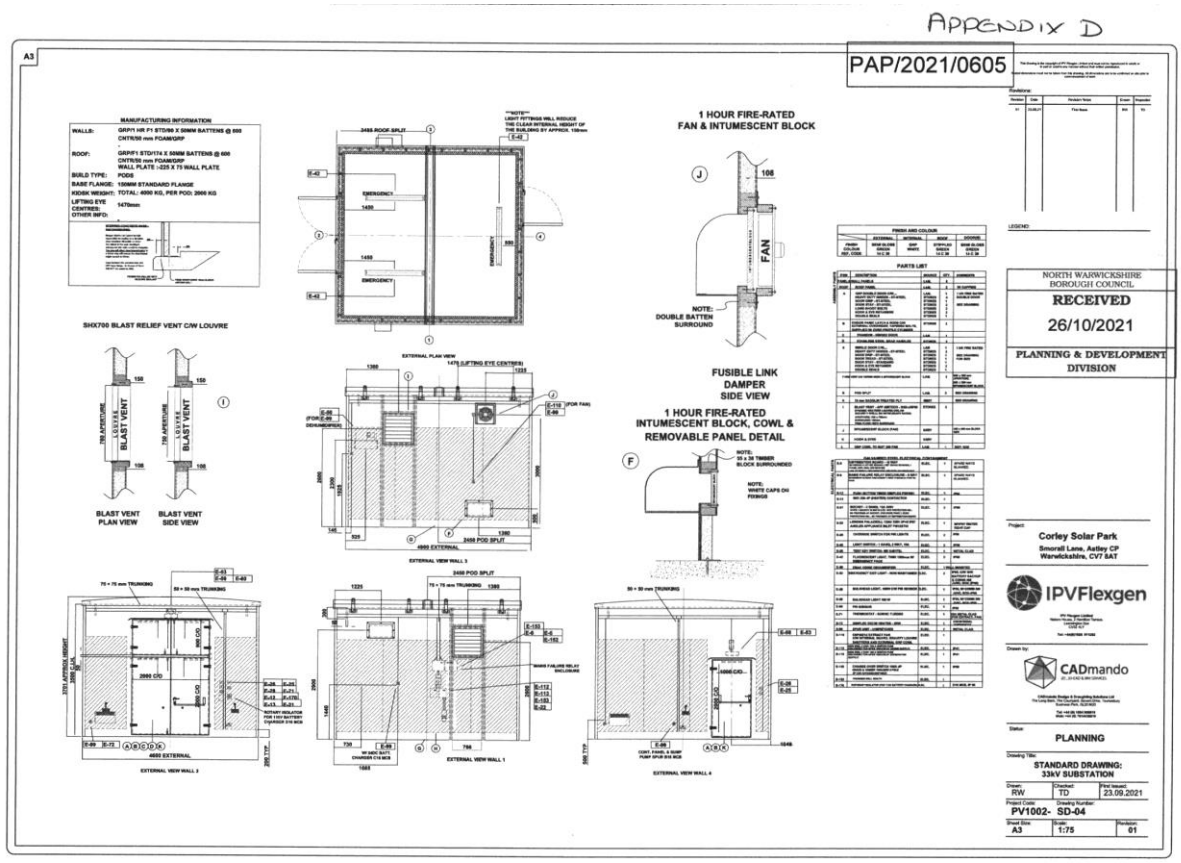
APPENDIX C

PAP/2021/0605



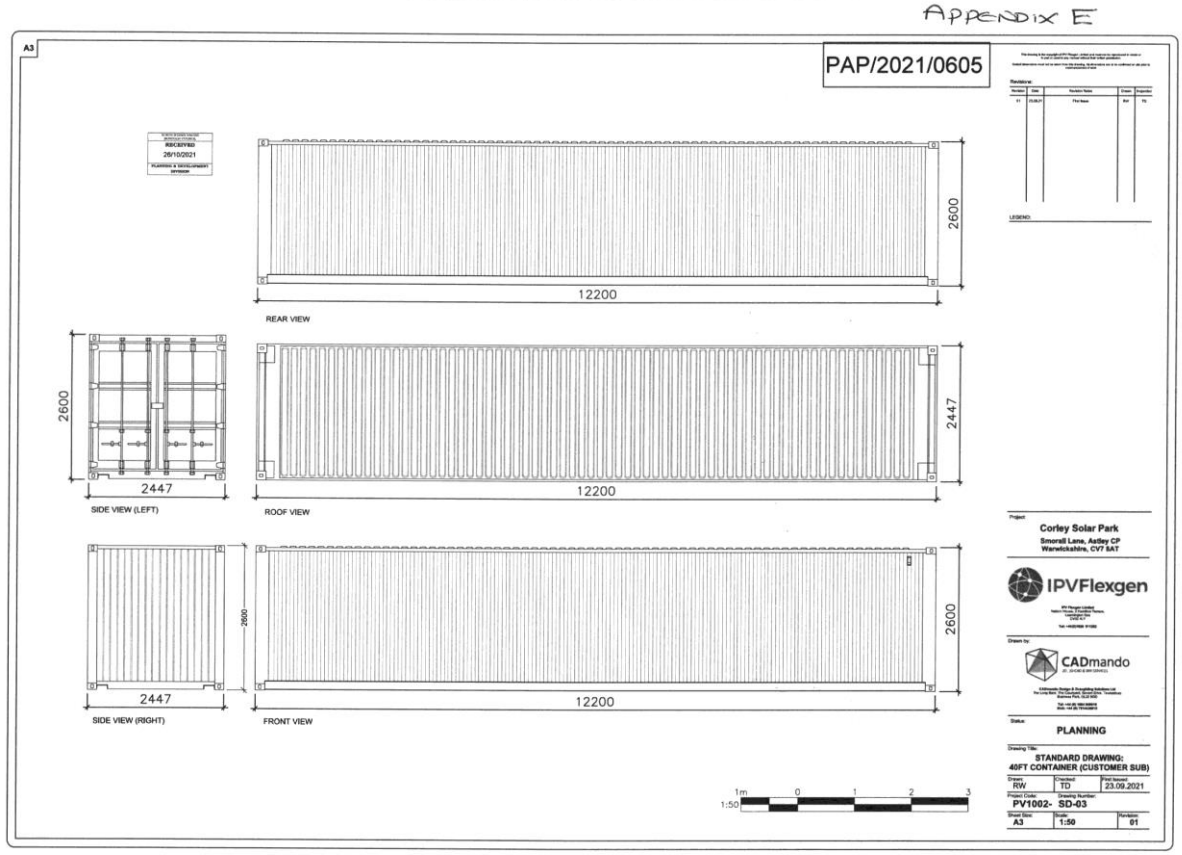
APPENDIX D

PAP/2021/0605



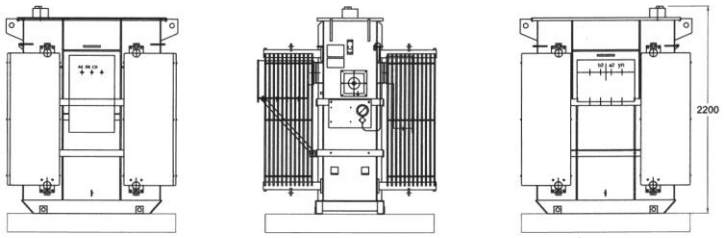
APPENDIX E

PAP/2021/0605

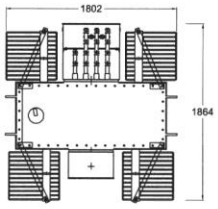


APPENDIX F

PAP/2021/0605



NORTH WARWICKSHIRE BOROUGH COUNCIL
RECEIVED
26/10/2021
PLANNING & DEVELOPMENT DIVISION



Corley Solar Park
Smorrall Lane, Astley CP
Warwickshire, CV7 8AT

IPVFlexgen

CADmando

PLANNING

STANDARD DRAWING: TRANSFORMER

Drawn	Checked	First Issued
RW	TD	23.09.2021

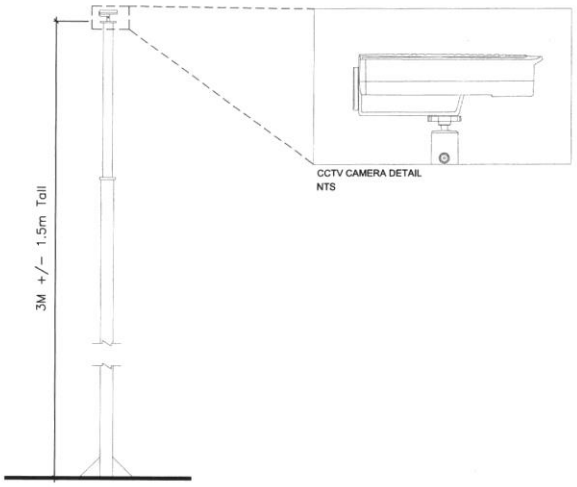
Project Code: PV1002- Drawing Number: SD-12
Sheet Size: A3 Scale: 1:30 Revision: 01

600mm 0 600 1200 1800
1:30

APPENDIX G

PAP/2021/0605

NORTH WARWICKSHIRE BOROUGH COUNCIL
RECEIVED
26/10/2021
PLANNING & DEVELOPMENT DIVISION



Corley Solar Park
Smorrall Lane, Astley CP
Warwickshire, CV7 8AT

IPVFlexgen

CADmando

PLANNING

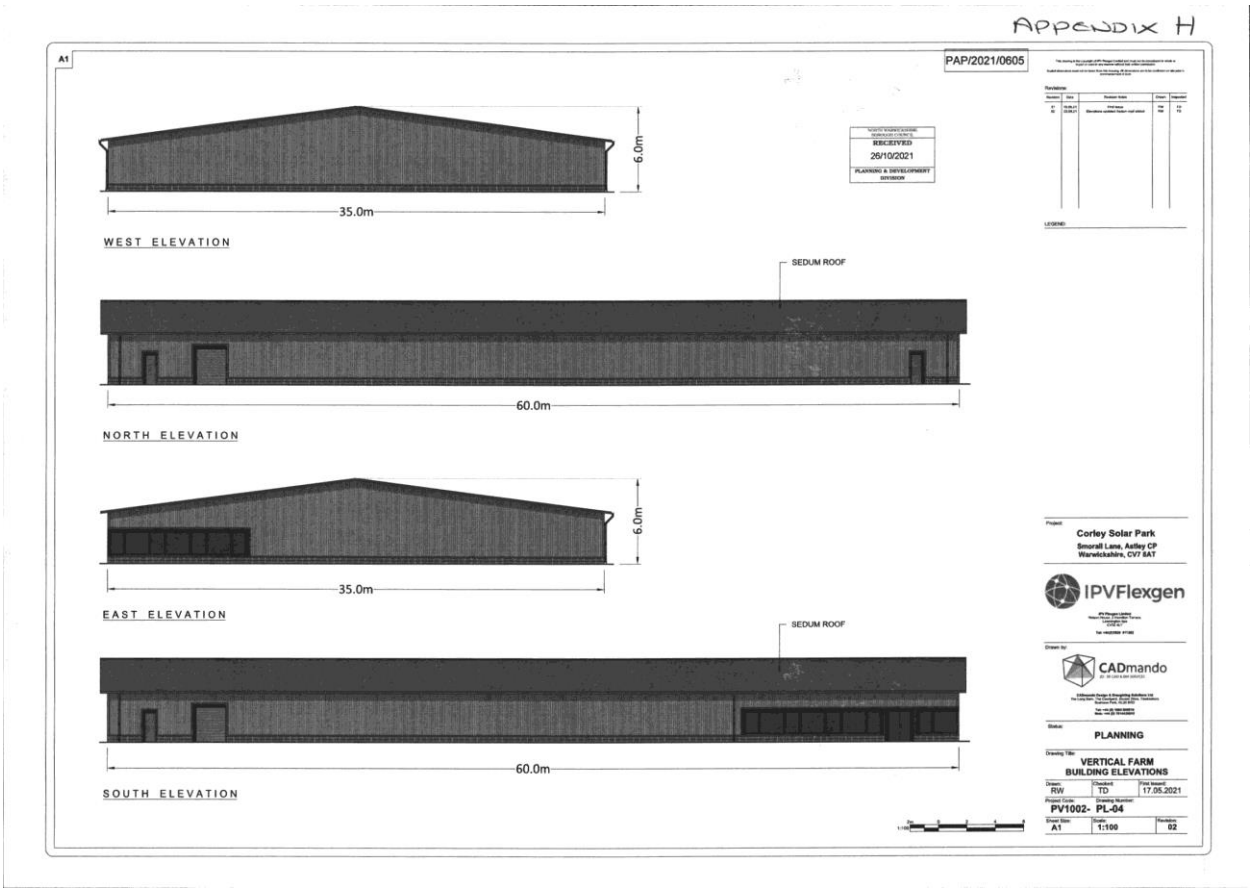
STANDARD DRAWING: CCTV COLUMN DETAIL

Drawn	Checked	First Issued
RW	TD	23.09.2021

Project Code: PV1002- Drawing Number: SD-02
Sheet Size: A3 Scale: 1:20 Revision: 01

400mm 0 400 800 1200
1:20

APPENDIX H


A1
PAP/2021/0605
RECEIVED
26/10/2021
PLANNING & DEVELOPMENT DIVISION
6.0m
35.0m
WEST ELEVATION
SEDUM ROOF
60.0m
NORTH ELEVATION
6.0m
35.0m
EAST ELEVATION
SEDUM ROOF
60.0m
SOUTH ELEVATION
LEGEND
Project
Corley Solar Park
Smorall Lane, Astley CP
Warwickshire, CV7 8AT
IPVFlexgen
Drawn by
CADmando
Status
PLANNING
Drawing Title
VERTICAL FARM
BUILDING ELEVATIONS
Drawn
RW
Checked
TD
Print Issued
17.05.2021
Project Code
PV1002-
Drawing Number
PL-04
Sheet Size
A1
Scale
1:100
Revision
02

In applying the relevant national and local policy therefore regarding the principle of the development for a new agricultural building which will house a modern vertical farm and renewable energy, it is clear that the Proposed Development is fully compliant.

5.2 Landscape and Visual

The LVIA submitted with the application found it apparent that the landform, landcover and landscape elements significantly altered and, in some cases, blocked views to the site that were thought to be evident within the desk study assessment and the ZVT. This is especially the case beyond the 1.5km distance with topography, wooded areas, tall hedgerows and buildings forming visual barriers in views towards the site. The most notable impact will be the physical change in landscape character of the proposed development site from an open arable field to a solar farm / vertical farm.

The impact upon the ancient woodland specifically Great Lynes Wood will also be minimal, as the scheme is being held back from the boundary with a buffer zone as per the recommendations in the arboricultural and ecological surveys, to enable sufficient space for protection and conservation.

The impact upon local houses / buildings, initially during the construction of the development will have a significant but temporary short term impact, especially those on Breach Oak Lane and Smorrall Lane who are closest. But once the development is completed due to the mainly static nature of the solar farm, minimal maintenance required plus the screening vegetation both existing and proposed, this will lessen.

Several opportunities exist to reduce the visual impact of the proposed development and improve and conserve the character of the area in line with the recommendations made within the landscape character assessment and have been incorporated into the submitted layout design.

Creating access for the development immediately off Smorrall Lane straight into the site for the duration of the build and lifespan of the development is a positive point, ensuring works will not be undertaken at any distance from the site, limiting the change in character that will be undertaken. The change in character will be contained to the main fields only.

The colour of the proposed vertical farm is an important factor. The appearance of the building should assist in blending the development into its surroundings. The LVIA recommends that potentially on the different aspects of the proposed building different colours/materials could be used to break down further the scale and massing of the proposed development and the applicant is willing to discuss this further and agree the approach to materials and finishes with the Council.

The use of deer fencing as the perimeter fence (2m tall supported by wooden fence posts located at 6m intervals) is a practical option, ensuring it is in keeping with the area and in a natural unobtrusive material as possible.

Land adjacent to the solar panels cannot be densely planted to deflect views and screen the site as this would compromise the solar gain (overshadowing), but space has been left outside of the perimeter fence, and within the site boundary to be planted with grassland seed mixes relevant to the soil types, and where needed the site boundary will be strengthened either by installing new hedgerows, infilling gappy hedgerows, creation of woodland planting and the planting of individual trees.

The proposed planting measures will assist in the integration of the infrastructure into the surrounding landscape and will help to deflect and screen views over time as well as increase the biodiversity and strengthen wildlife corridors.

It is also recommended in the LVIA that all the proposed shrubs / trees planted as part of the site improvements should be selected to complement existing species found within the site and the local

area, with specific shrubs / trees that will bring an even greater benefit to the site having regard to the existing ecology. Evergreen plants will comprise an element of the native / naturalised planting mix. This can be agreed by way of condition for a planting plan to be submitted for agreement by the Council.

Not using external artificial lighting within the larger element that is the solar farm, will ensure that the night scene will not change, and the majority of the field will remain in darkness. The lighting of the entrance and the vertical farm will of course change the night scene, but with the proposed hours of working it is envisaged unless an emergency happens or a movement initiates the lights on site, there should be minimal light pollution from the site.

It is therefore considered in the LVIA that any landscape or visual impacts will be highly localised to the development site or to the adjacent fields around site to a distance of approximately 1.5km as the study suggests and this will be for the 40 year duration only. Any affects beyond this extent will be moderate / minor during construction decreasing to low and negligible on completion.

5.3 Heritage

The proposed site lies in the parish of Astley, Warwickshire. This was a Domesday Manor held by the Astley Family for much of the medieval period. Passing to the Greys of Ruthin in the 15th century, it was forfeited to the Crown in the mid-16th century, and sold to the Chamberlaine and then Newdigate Families, the latter holding it into the 20th century. The Site is located on the southern edge of Astley parish.

The three fields comprising the Site were created in the later 20th century through the amalgamation of 14 smaller fields; the slight earthworks of some of those lost field boundaries are still visible on the ground. Also visible are the infilled remains of several ponds or marl pits. The character of the field boundaries, historic landuse, and its location relative to other farms and the historic settlement of Astley would imply it was more marginal and thus of diminished archaeological potential. Whilst there is moderate potential suggested by the surrounding landscape, the walkover survey would suggest that the archaeological potential for the site is low, the identified features likely reflecting medieval and post-medieval agriculture and field systems as well as quarrying activity. However, earlier Prehistoric or Romano-British features cannot be ruled out. Any development of the site is likely to encounter and destroy the buried archaeological resource.

In terms of indirect impacts, most of the very few designated heritage assets in the wider area are located at such a distance as to minimize the impact of the proposed development, or else the contribution of setting to overall significance is less important than other factors. The landscape context of many of these buildings and monuments is such that they would be partly or wholly insulated from the effects of the proposed development by a combination of local blocking from trees, topography, buildings, or embankments, or that other modern intrusions have already impinged upon their setting. However, a combination of the high value of several of the assets and their interlinking on a landscape scale means that the scale of the proposed development and its position overlooked by higher ground with surrounding agricultural fields means that impact is unavoidable. There is also the issue of local infrastructure meaning that during the construction phase heavy goods vehicles may be regularly passing close to some of the assets, though this impact will only be temporary.

The overall impact of the proposed development has been assessed as negative/minor. The impact of the development on any buried archaeological resource may be permanent and irreversible but can be mitigated through an appropriate programme of archaeological investigation and recording.

5.4 Use of Agricultural Land

Both the NPPF and Local Plan Policy LP13 supports farm diversification and development of new uses of land supporting the rural economy.

An assessment of agricultural land quality, involving a desktop study and an ALC survey has determined that agricultural land at the Site is limited by soil wetness to Subgrade 3a (42% of the Site) and Subgrade 3b (58% of the Site). Development of the site for a time limited period would not result in the permanent loss of Best and Most Versatile (BMV) agricultural land. The installation of the solar farm is reversible, i.e. the agricultural land can be returned to its former agricultural productivity once the generation of renewable electricity has ceased, and the solar panels and associated infrastructure is removed.

The proposed agricultural building will house a vertical farm which will produce leaf crops all year round going into the local food chain thus reducing food miles, transport costs and emissions by reducing the need for out of season overseas food imports. A garazing management plan for the area between and under the solar panels would allow low intensity livestock grazing for the duration of the development.

Vertical farms are highly energy and space efficient and positively contribute to decarbonisation and the green economy. Vertical farms use no pesticides, no herbicides and 4% of the water that would be in growing the same crop outside.

The diversification of agricultural income can help helping farmers afford to offset land for biodiversity and sustainability measures without relying on government subsidy and will create new green jobs in agriculture at various entry levels in growing, marketing, and the distribution supply chain, improving skills and opportunities in the local economy and positively contributing to regional decarbonisation.

Planning Practice Guidance also recognises that the duration of the development and its remediability, taking into account any provisions to return the land to its original state or to an equivalent state of openness is a factor to be taken into account when considering development within the WMGB.

The agricultural land at the Site is currently used mainly in arable rotation. In many respects, the management of the land under solar panels as grassland can benefit soil health. It is likely that soil health will be improved over the operational life of the generating station, i.e. increase in soil organic matter, increase in the diversity of soil flora, fauna and microbes, and improve soil structure.

Therefore, development of agricultural land at this Site would not significantly harm national agricultural interests in accordance with paragraph 171 of the NPPF.

5.5 Farm Diversification

There is support in national (NPPF paragraph 84 (b)) and Local Plan policy LP13 for farm diversification projects that meet sustainable development objectives and help sustain the rural economy and encourage agricultural enterprise, subject to development proposals being well designed and of a use and scale appropriate to the location when considering landscape, heritage and environmental impacts and safe and acceptable site access and highway impacts.

Due to the relatively low income from farming, many farmers have had to diversify to secure an economically sustainable profit. Farm diversification is broadly defined as '*the entrepreneurial use of farm resources for a non-agricultural purpose for commercial gain*'. Hence, diversification reflects the reduced dependence of farmers on agriculture as a source of income. Diversification also implies entrepreneurial activity on behalf of the farmer.

The Proposed Development will be an important stream of farm diversification income whilst allow underpinning the continuation of the overall farming businesses.

Farming businesses play a vital role in the rural economy, particularly supporting the agricultural supply chain to include feed merchants, machinery sales, maintenance and repair businesses, local builders, delivery drivers and professional services, to name but a few – therefore farm diversification is key to the long-term overall survival of farms. The Proposed Development would help to support the local agricultural supply chain via the income to the farming business.

Renewable energy is an important form of farm diversification, recognised by the National Farmers Union (NFU) as an important step towards making British agriculture carbon neutral within two decades. As farming is responsible for around a tenth of UK greenhouse gas emissions, supporting renewable energy farm diversification projects will be a vital step to reaching net zero.

5.6 Amenity

The need to protect the amenity of the local area and nearby sensitive receptors through minimising visual and noise impacts and effects of glint and glare is a requirement of both national and local planning policy. Visual impacts have been assessed in the LVIA and found to be acceptable, the effects of noise and glint and glare are considered in turn below.

Overall, the Proposed Development is acceptable in amenity terms and meets the requirements of the NPPF and Local Plan Policy.

Noise

A Noise Impact Assessment has been produced to accompany the Application.

The assessment considers the potential noise generation from the plant associated with the Proposed Development, with respect to existing sound levels in the area. The assessment methodology contained in British Standard 4142:2014+A1:2019 *Method for rating and assessing industrial and commercial sound* has been used in conjunction with supplementary acoustic guidance.

The assessment identifies that the Proposed Development will give rise to rating noise levels that are typically below the measured day and night-time background sound levels in the area, at the closest assessed residential receptors, thus giving rise to a Low Impact.

Consequently, the assessment demonstrates that the Proposed Development will give rise to noise impacts that would be categorised as No Observed Adverse Effect Level (NOAEL) within the Noise Planning Practice Guidance - Noise.

The amenity of the closest residential receptors would therefore not be affected by noise arising from the Proposed Development.

Glint and Glare

Solar panels are made up of silicon based PV cells that are encased in a glass covering. Glass does not have a true specular reflection but does reflect a certain magnitude of light. Reflection of sunlight from PV panels is unwanted by the Applicant. This is because the greater the amount of light which can be captured at the PV cell, the greater the amount of electricity that can be produced. The manufacturers of the panels therefore use anti–reflective coating in the glass that changes the reflectivity from specular distribution to diffuse distribution. Therefore, as light falls onto the PV panels, most of the sunlight is transmitted to the cell beneath the glass with only a small amount reflected back in a multiple of angles and magnitudes. The result is an object that is perceived to have very little glare.

Nonetheless, and for the purposes of completeness and a robust impact assessment of the Proposed Development a Glint and Glare Assessment has been prepared and submitted. The assessment pertains to the possible effects upon surrounding road users and dwellings.

The glint and glare assessment has shown that the proposed landscape screening will be sufficient to remove all views of the reflective areas therefore no impact on dwellings is expected. For road receptors the impact is moderate and mitigation is recommended along Smorrall Lane. The Applicant has proposed strengthening of the site boundaries thereby no impact is expected.

5.7 Flood Risk

The requirements for Flood Risk Assessment (FRA) are provided in the NPPF and its associated Planning Practice Guidance, together with the Environment Agency's Guidance Notes. This policy and associated guidance have been followed in the preparation of the FRA submitted with the application.

The EA's flood map for planning indicates that the site is at 'low to very low' risk of flooding from fluvial, surface water and other flood sources. Most of the solar array site will retain existing grassland either beneath solar panels or around associated infrastructure. The footprint of ancillary buildings will be small, and it is recommended in the FRA that access tracks are constructed of permeable material.

The proposed layout will not encroach on existing drainage paths through the site. Therefore, run-off conditions from the solar array site are not expected to significantly change from existing greenfield conditions.

The Vertical Farm will create an area of low permeability surfaces and the increased surface run-off will need to be managed to limit increased flood risk to properties along the opposite, southern, side of Smorrall Lane.

Ground conditions at the site are assessed as being unsuitable for soakaways and it is therefore proposed to attenuate run-off from the Vertical Farm by means of an attenuation pond as shown on the site layout plan and in the submitted cross section drawing (Document ref. R003).

Overall, the Proposed Development is acceptable in flood risk terms and meets the requirements of the NPPF and Local Plan Policy on meeting the challenges of climate change and in particular increased risk of flood events.

5.8 Traffic and Access

A CTMP has been prepared and accompanies the Application. This explains in detail the proposed Site access points, vehicle movements and the construction vehicle route from the strategic highway network to the Site. A temporary construction compound positioned at the southern end of the site on the footprint of the agricultural building near the access from Smorrall Lane will ensure all construction traffic and activities will be within the application boundary.

It is expected that during the main construction phases there will only be approximately five HGVs per day (10 two-way movements) accessing the Site over the construction period. There will also be construction workers arriving at the Site in the morning and departing in the evening, although the numbers involved are forecast to be relatively low on a day-to-day basis and will occur outside of peak hours.

The level of traffic forecast during the temporary construction phase is therefore low. It is concluded that construction traffic associated with the Proposed Development will not have a material effect on the safety or operation of the local highway network. Mitigations measures have also been proposed

to further minimise impact from resulting construction activities on the local road network and are provided in the CTMP.

Once operational, traffic is very low, at approximately one to two light van maintenance visits per month. As well as the main access to the vertical farm and solar farm from Smorrall Lane, existing farm accesses to the site from Smorrall Lane and Breach Oak Lane will occasionally be used for maintaining the landscape planting and biodiversity benefits.

The existing PRoW that crosses the northern end of the site is not proposed to be diverted or closed and will remain open to users during the temporary construction period and during operations. Once operational there will be a 15m corridor for the PRoW and a new hedgerow planted along the southern side as it crosses the solar site.

Overall, the Proposed Development is acceptable in traffic and access terms and meets the requirements of the NPPF and Local Plan Policy LP23.

5.9 Green Belt

In regard to assessing the Proposed Development in the Green Belt (see Appendix 1), the starting point is as set out by the NPPF:

"The Government attaches great importance to Green Belts. The fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and their permanence" (para 137).

Paragraph 138 goes on to state that:

"Green Belt serves five purposes:

a) *to check the unrestricted sprawl of large built-up areas;*
b) *to prevent neighbouring towns merging into one another;*
c) *to assist in safeguarding the countryside from encroachment;*
d) *to preserve the setting and special character of historic towns; and*
e) *to assist in urban regeneration, by encouraging the recycling of derelict and other urban land."*

Paragraph 147 states that inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances.

Paragraph 148 states:

"When considering any planning application, local planning authorities should ensure that substantial weight is given to any harm to the Green Belt. "Very special circumstances" will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other hard resulting from the proposal, is clearly outweighed by other considerations."

Very special circumstances is thereby the outcome of a planning balancing exercise and the harms must be clearly outweighed by the benefits.

The policies in the NPPF set out those types of development that are appropriate (i.e. not inappropriate) in the Green Belt. The Proposed Development does not fall into any of the exceptions listed in paragraphs 149 and 150 of the NPPF. The Proposed Development is therefore considered to be inappropriate development within the LMGB.

The NPPF does however provide provision for renewable energy projects in the Green Belt. At paragraph 151 it states:

"When located in the Green Belt, elements of many renewable energy projects will comprise inappropriate development. In such cases developers will need to demonstrate very special circumstances if projects are to proceed. Such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources" (our emphasis).

Paragraph 145 of the NPPF adds, in relation to the improvement of the Green Belts, *"Once Green Belts have been defined, local planning authorities should plan positively to enhance their beneficial use, such as looking for opportunities to provide access; to provide opportunities for outdoor sport and recreation; to retain and enhance landscapes, visual amenity and biodiversity; or to improve damaged and derelict land."*

Therefore, it is necessary to carry out a planning balancing exercise (which is a matter of planning judgement) to establish whether any harm to the Green Belt is clearly outweighed by other considerations including benefits of the Proposed Development and allowing for mitigation as the NPPF allows; and whether the necessary very special circumstances exist to approve the Application.

The Local Plan specifically relates to development in the Green Belt stating that the there is a general presumption against inappropriate development within the Green Belt, as defined on the Policies Map and such development will not be permitted unless very special circumstances exist. In the case of the proposed development the agricultural building is an exception and not considered inappropriate development within the green belt so this section specifically refers to the renewable energy development and associated infrastructure elements of the proposal.

5.9.1 Openness

The concept of "openness" in paragraph 137 of the NPPF is naturally read as referring back to the underlying aim of Green Belt policy that is *"to prevent urban sprawl by keeping land permanently open..."*. Openness is the counterpart of urban sprawl and is also linked to the purposes to be served by the Green Belt. It is not necessarily a statement about the visual qualities of the land, though in some cases this may be an aspect of the planning judgement involved in applying this broad policy concept. Nor does it imply freedom from any form of development; some forms of development are appropriate and as such are compatible with the concept of openness.

The word 'openness' is open-textured, and a number of factors are capable of being relevant when it comes to applying it to the particular facts of a specific case. Prominent among these will be factors relevant to how built up the Green Belt is now and how built up it would be if redevelopment occurs...and factors relevant to the visual impact on the aspect of openness which the Green Belt presents. Clearly, visual impact is a factor that may be material to the assessment of openness, and it will be for the decision maker to determine whether or not it is to be taken into account in any individual case.

One factor which can affect appropriateness, the preservation of openness and conflict with Green Belt purposes, is the duration of development and the reversibility of its effects. The Application for the renewable energy part of the proposal is proposed for a lifetime of 40 operational years and is therefore considered to be relevant to its acceptability within the Green Belt.

The National Planning Policy Guidance provides further guidance to the decision maker under the heading of:

'What factors can be taken into account when considering the potential impact of development on the openness of the Green Belt?':

"Assessing the impact of a proposal on the openness of the Green Belt, where it is relevant to do so, requires a judgment based on the circumstances of the case. By way of example, the courts have identified a number of matters which may need to be taken into account in making this assessment. These include, but are not limited to:

- *openness is capable of having both spatial and visual aspects – in other words, the visual impact of the proposal may be relevant, as could its volume;*
- *the duration of the development, and its remediability – taking into account any provisions to return land to its original state or to an equivalent (or improved) state of openness; and*
- *the degree of activity likely to be generated, such as traffic generation."*

Paragraph 13 of the Planning Policy Guidance also provides specific guidance on solar farms stating that *"The deployment of large-scale solar farms can have a negative impact on the rural environment, particularly in undulating landscapes. However, the visual impact of a well-planned and well-screened solar farm can be properly addressed within the landscape if planned sensitively."*

In so far as visual impacts are considered relevant to the assessment of the impact on openness, it is necessary to draw upon the LVIA. As set out above the Site in general is visually well-contained by a combination of existing hedgerows, tree belt and woodland vegetation that are located within and along the Site's boundaries, which assist in reducing the visibility of the Site.

The Site's visual connectivity to the wider landscape is, in general, limited to its local context up to 1.5km. Coupled with the landscape-led iterative design process, the Proposed Development has sensitivity sited various elements of the scheme to reduce landscape and visual effects and potential harm to the Green Belt. This has involved the confinement of solar panels to the existing fields present within the Site and the siting of the proposed agricultural building, grid infrastructure and battery storage facility at the lower elevation at the southern end of the site.

The Proposed Development would also retain the existing vegetation on-site in-combination with proposals to strengthen it with new planting where necessary. This would be positively managed (through the relaxation of cutting and management) to allow them to grow out and further restrict potential visibility of the Proposed Development. The nature of the Proposed Development means that site fabric and characteristics of the Site such as the vegetative network, field pattern and topography would remain intact and legible.

Notwithstanding the above, the duration of the solar farm would be entirely reversible after its 40-year operational phase.

A comprehensive assessment of the Site in relation to the purposes prescribed under paragraph 134 of the NPPF is provided in Appendix 1 which concludes the Proposed Development would result in limited harm to three of the four relevant purposes of the WMGB, and the strategic performance and function of the remaining WMGB would prevail.

5.9.2 Other Harm

As demonstrated above, consideration has been given to 'other harm' regarding heritage, biodiversity, agricultural land, farm diversification, amenity, flood risk, traffic and landscape and visual impacts which have also been assessed in relation to landscape character and visual receptors.

The supporting assessments are clearly set out below in Table 5.1, indicating mitigation measures taken to reduce harm as part of the Proposed Development:

Assessment	Mitigation Measures	Harm
Landscape and Visual	Input into the design to strengthen existing vegetation corridors and boundaries, ensure suitable distance from the PRoW, and location of key infrastructure such as the onsite substation and battery storage facility.	Limited Temporary Harm (40 years)
Heritage	The overall impact of the proposed development can be assessed as negative/minor on heritage assets and low on archaeology.	Limited, Indirect and Reversible Harm (40 years)
Biodiversity	Suitable avoidance measures applied for both habitats and species identified. Enhancement measures incorporated within the planting plan 44% habitat biodiversity net gain and 19% hedgerow biodiversity net gain	Enhancement
Use of Agricultural Land	Over 58% of land is not BMV. Land will be retained in agricultural use through grazing. The proposal is a temporary use of the land and fully reversible. Benefits demonstrated to soil health due to change in management of the land.	Enhancement
Farm Diversification	The site would support the rural economy by providing farm diversification for the landowner and direct power supply to a new agricultural facility	Benefit
Amenity	Noise: location of noise generating equipment has been moved as far as practicable from sensitive receptors. Glint and Glare: choice of technology, configuration of technology, site topography, new vegetative screen planting and positive management of existing planting to improve screening	Noise: No Harm Glint and Glare: Limited Temporary Harm
Flood Risk	FRA and drainage strategy undertaken to ensure suitable siting of equipment and sustainable drainage methods.	Limited Temporary Harm
Traffic and Access	Liaison with Highway Authority to agree safe access design. Inclusion of signage, procedures and pre-commencement and post condition	Limited Temporary Harm

	surveys to further minimise impacts on the local road network.	

Table 5.1: Mitigation measures taken to reduce harm as part of the Proposed Development

It is concluded from the accompanying assessments that limited weight should be applied to "other harm" when undertaking the planning balance in accordance with paragraph 148 of the NPPF and local policies.

5.9.3 Very Special Circumstances

It is a key planning policy requirement that very special circumstances need to exist for inappropriate development to be approved in the Green Belt.

It is incorrect to suggest that every circumstance in itself has to be 'very special'. Some factors which are quite ordinary in themselves could, cumulatively, become very special circumstances. Thus, the correct approach is to consider whether the very special circumstances relied upon by an applicant (and any other identified by the decision maker), when considered as a whole, are sufficient to outweigh any harm to the Green Belt and any other harm arising from the Proposed Development.

The following are considered to be benefits of the Proposed Development:

5.9.3.1 Increasing Renewable Energy Generation

The proposed development comprises of a 16.5MWp solar photovoltaic (PV) array, with associated infrastructure and landscaping. Based on the local solar irradiation level data, the development is anticipated to generate approximately 15,646MWh per year (after anticipated system losses). This is the equivalent of 3,887 North Warwickshire homes (4,025 kWh/pa/household) and displacement of 5,601 t/CO2 (conversion factor 0.358t/CO2e) compared with conventional fossil fuel generation sources.

As demonstrated extensively above, the UK, Warwickshire and NWBC is at a time of climate emergency and there is an urgent requirement for renewable energy infrastructure, particularly when considered in the context of the June 2019 ambitious target to reduce greenhouse gas emissions to net zero by 2050 in accordance with the Climate Change Act 2008.

Whilst there is no requirement for an applicant to demonstrate the need for renewable energy in planning policy, national energy policy makes clear that renewable and low carbon energy is vital to our economic prosperity and social well-being and that it is important to ensure that the UK:

- Transitions to a low carbon economy and reduces greenhouse gas emissions to address the predominant challenge of our time, climate change;
- supports an increased supply from renewables;
- continues to have secure, diverse and resilient supplies of electricity as the UK transitions to low carbon energy sources and to replace closing electricity generating capacity;
- increases electricity capacity within the system to stay ahead of growing demand at all times whilst seeking to reduce demand wherever possible; and
- delivers new low carbon and renewable energy infrastructure as soon as possible- the need is urgent.

In the most recent 2020 Progress Report to Parliament, the Committee on Climate Change state that the path to achieving net-zero emissions by 2050 will necessarily entail a steeper reduction in emissions over the intervening three decades and to reach the UK's new Net Zero target, emissions will need to fall on average by around 14 $MtCO_2e$ every year, equivalent to 3% of emissions in 2019.

The report goes on to state that reaching net-zero emissions in the UK will require all energy to be delivered to consumers in zero-carbon forms (i.e. electricity, hydrogen, hot water in heat networks) and come from low carbon sources (i.e. renewables and nuclear etc).

When located in the Green Belt, paragraph 151 is clear in stating that "*Such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources*".

The NPS EN-1, EN-3 (both current draft consultation versions) and NPPF (2021) state that renewable energy and associated infrastructure should be supported in the planning system, as part of working towards a radical reduction of greenhouse gases to tackle climate change. Paragraph 155 encourages local planning authorities to maximise the potential for renewable energy and to approve such applications where their impacts are acceptable.

This is afforded significant weight in the planning balance.

5.9.3.2 Climate Emergency

In May 2019 a national climate emergency was declared by the UK Parliament. MPs called on Government to make changes that included the setting of a radical and ambitious new target of reaching net zero emissions before 2050.

Warwickshire as a County (including all sub districts) declared a Climate Emergency in 2019.

The Proposed Development would make a significant and valuable contribution to achieving emission targets on a national and local level.

This is afforded substantial weight in the planning balance.

5.9.3.3 Energy Security

The Proposed Development supplies clean renewable energy to a new economic rural enterprise and to the National Grid, comprising secure, distributed and diversified energy generation which accords with the Government's policy on energy security as identified within NPS EN-1 which explains the need for energy security allied with a reduction in carbon emissions.

This is afforded substantial weight in the planning balance.

5.9.3.4 Best Available Technology

The use of best available and state of the art technology on the Site aims to maximise the use and productivity of the land for the generation of renewable energy. The Proposed Development proposes utilising high-efficiency panels at a fixed tilt of between 20-30 degrees and orientated broadly facing south. Modern panels (bifacial) absorb light on both sides of the panel, both directly on the top-side, and reflected light is also absorbed on the rear-side. The panel technology also utilises high efficiency monocrystalline cells meaning fewer panels are required to be installed on the site to achieve the

target capacity. The combination of high-efficiency bifacial panels and optimised configuration increases the production of electricity from the site by 4% compared to monofacial systems.

The battery storage facility would be utilised to reinforce the power generation of the solar farm, maximising renewable energy production from the Site whilst providing security of supply to the new agricultural facility as well as into the local distribution grid to local residential and commercial properties.

This maximises renewable energy production from the Site whilst providing security of supply in accordance with Government Policy in reducing the reliance on fossil fuel generation as back up, thereby avoiding the adverse environmental and climate effects.

This is afforded significant weight in the planning balance.

5.9.3.5 Good Design

In addition to using best available technology, through undertaking an iterative design process and pre-application engagement, as outlined in the Design and Access Statement, the design of the Proposed Development has been a key consideration in the layout of the site to minimise harm and provide significant benefits to the development as a whole, delivering significant biodiversity net gain.

This is afforded moderate weight in the planning balance.

5.9.3.6 Alternatives

The Alternatives statement submitted sets out the alternatives considered as part of the evolution of the design and location of the Proposed Development.

Overall, it concludes that within the defined Study Area, there are no alternative sites (in particular brownfield sites) which are suitable and available for the Proposed Development that could accommodate both the agricultural facility and the solar farm proximate to a viable grid connection or other direct connection opportunities such as Corley Services.

This is afforded substantial weight in the planning balance.

5.9.3.7 Temporary and Reversible Impacts

The Application is proposed for a lifetime of 40 operational years. After the 40-year period the generating station would be decommissioned. All electricity generating equipment and built structures associated with the Proposed Development would be removed from the Site and it would continue in agricultural use. It is therefore considered that the Proposed Development is considered a temporary development.

This also aligns with paragraph 13 of the Planning Practice Guidance which states that solar farms are normally temporary structures and planning conditions can be used to ensure that the installations are removed when no longer in use and the land is restored to its previous use.

Construction traffic associated with the Proposed Development will be limited to the construction period of approximately 23 weeks and will not have a material effect on the safety or operation of the local highway network.

This is afforded substantial weight in the planning balance.

5.9.3.8 Biodiversity Net Gain

The Proposed Development proposes a significant number of biodiversity benefits within the accompanying LEMP.

This will primarily be achieved through:

- Significantly enhance the overall biodiversity value of the Site, including for protected and notable species and habits and locally designated sites;
- Protect and enhance the existing characteristics and features of value of the Site including the field structure, mature trees, hedgerows and ditches;
- Create a strong structural planting framework and protect, restore and maintain the existing vegetation network, which would also provide enhanced screening of close- and middle-distance views of the Proposed Development.
- Create greater opportunities for protected species' and species of conservation concern;
- Facilitate opportunities for engagement with the natural environment and renewable energy;
- Protect and enhance recreational amenity from Public Rights of Way (PRoW);
- Secure the long-term future management of the Site for the duration of the development.

The significant enhancement of the biodiversity of the Site is demonstrated by the Net Biodiversity Gain Statement which concludes that there will be biodiversity would be significantly improved with a 44% habitat biodiversity net gain and 19% hedgerow biodiversity net gain through the implementation of the Proposed Development.

This is afforded substantial weight in the planning balance.

5.9.3.9 Soil Regeneration

Aims and objectives for safeguarding and, where possible, improving soil health are set out in the Government's 'Safeguarding our soils: A strategy for England'. The Soil Strategy for England, which builds on Defra's 'Soil Action Plan for England (2004-2006), sets out an ambitious vision to protect and improve soil to meet an increased global demand for food and to help combat the adverse effects of climate change.

As demonstrated within the ALC, the greatest benefits in terms of increase in soil organic matter (SOM), and hence soil organic carbon (SOC), can be realised through land use change from intensive arable to grasslands. Likewise, SOM and SOC are increased when cultivation of the land for crops (tillage) is stopped and the land is uncultivated (zero tillage). Global evidence suggests that zero tillage results in more total soil carbon storage when applied for 12 years or more. Therefore, there is evidence that conversion of land from arable to grassland which is uncultivated over the long-term (>12 years), such as that under solar farm arrays, increases SOC and SOM.

This is afforded moderate weight in the planning balance.

5.9.3.10 Farm Diversification

As demonstrated above, the additional income generated by the Proposed Development will help to secure the farming business. Farm diversification is supported in both the NPPF and local plan policy as a means of securing a robust and strong rural economy.

Renewable energy is an important form of farm diversification, recognised by the National Farmers Union (NFU) as an important step towards making British agriculture carbon neutral within two decades. As farming is responsible for around 10% of UK greenhouse gas emissions, supporting renewable energy farm diversification projects will be a vital step to reaching net zero.

This is afforded moderate weight in the planning balance.

5.9.4 Conclusion

In accordance with paragraph 148 of the NPPF, in addition to the harm by reason of inappropriateness, weight must be attributed to the harm to openness of the Green Belt and other harm presented.

As recognised above the renewable energy elements of the Proposed Development is inappropriate development, thereby it is acknowledged that substantial weight is to be applied to the openness of the WMGB through the imposition of built form, however the reversibility of the Proposed Development and limited impact on the purposes of the Green Belt are a key consideration in the planning balance.

Accompanying assessments have been undertaken to assess "other harm" regarding heritage, biodiversity, agricultural land, farm diversification, amenity, flood risk and traffic and access. Landscape and visual impacts have also been assessed in relation to landscape character and visual receptors. It is concluded from these assessments that limited weight should be applied to "other harm" when undertaking the planning balance.

Paragraph 148 is clear that very special circumstances will not exist unless the potential harm to the WMGB by reason of inappropriateness, and any other harm resulting from the Proposed Development, is clearly outweighed by other considerations. It is a key planning policy requirement that very special circumstances need to exist for inappropriate development to be approved in the WMGB.

The significant public benefits outlined above of the Proposed Development, taking into account the urgent need for renewable energy generation, climate emergency and other key considerations of the Proposed Development such as achieving a 44% habitat biodiversity net gain and 19% hedgerow, all of which are material consideration in accordance with the policy tests identified in paragraphs 148 and 151 of the NPPF.

On balance, it is considered that the benefits of the Proposed Development outweigh the limited, temporary and reversible harm by reason of inappropriateness and any other harm identified. As such very special circumstances exist to justify the Proposed Development in the WMGB.

6 Conclusion

For the reasons outlined in this Planning Statement, it is considered that the Proposed Development is in accordance with the relevant planning policies and guidance at both the national and local levels.

The Site is located within the Green Belt and therefore in line with policy tests in paragraph 144 of the NPPF, harm resulting from the Proposed Development must be clearly outweighed by other considerations.

The Proposed Development represents a clear form of sustainable development, creating a new modern environmental agricultural facility, creating up to 30 new local job opportunities and drawing on clean renewable energy generated immediately adjacent to it from a new solar PV farm thereby helping reduce carbon emissions which are required to meet the Climate Act 2050 net zero target. Very special circumstances mare recognised in National Planning Policy as including the wider environmental benefits associated with increased production of energy from renewable sources as demonstrated in this Proposal.

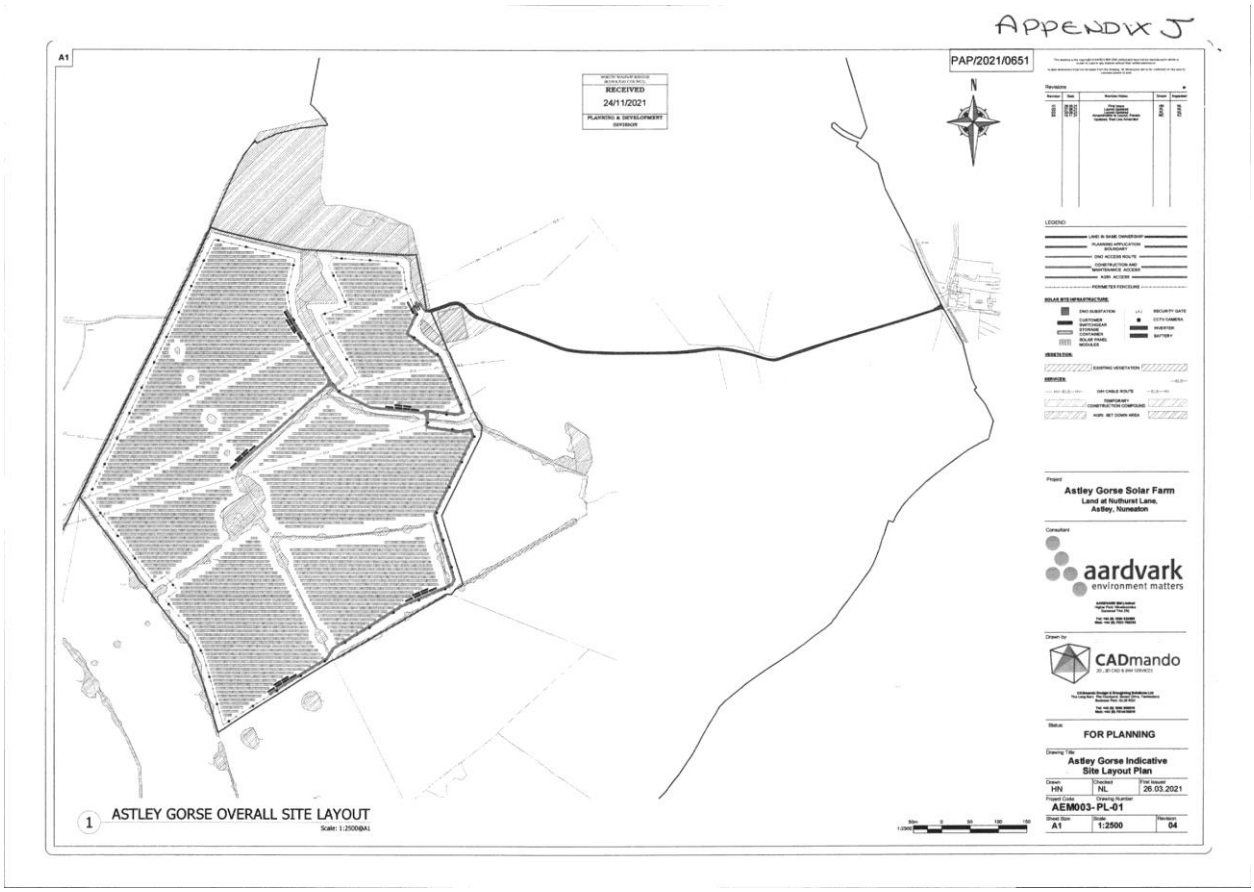
Overall, there is an urgent requirement for the Proposed Development; it is entirely suitable to the Site and its surroundings; it accords with national and local planning policy and all relevant material planning considerations; and will deliver significant environmental benefits.

Given the urgent need to ensure the introduction of measures to meet both government and local Climate Change commitments, NWBC as the Local Planning Authority should interpret its new Local Plan as a means for addressing the urgent need of the nationally and locally declared climate emergency and support this Proposal by approving the application.

In summary, based on the Proposed Development and assessments undertaken, the Site is deemed suitable for a development of this nature in terms of planning policy and guidance and planning permission should be granted. It is considered that in line with paragraphs 11 and 47 of the NPPF (2019) and Section 38(6) of the Planning and Compulsory Purchase Act 2004, when undertaking the planning balance, the Proposed Development would accord with the local development plan and that there are no material considerations which indicate otherwise.

Appendix 1: Green Belt Statement

APPENDIX J


A1
PAP/2021/0651
RECEIVED
24/11/2021
PLANNING & DEVELOPMENT
DIVISION
N
Revisions
LEGEND
Project
Astley Gorse Solar Farm
Land at Nuthurst Lane,
Astley, Nuneaton
Consultant
aardvark
environment matters
Drawn by
CADmando
Status
FOR PLANNING
Drawing Title
Astley Gorse Indicative
Site Layout Plan
Drawn
HN
Checked
NL
Plot Issued
26.03.2021
Project Code
AEM003-PL-01
Drawing Number
Sheet Size
A1
Scale
1:2500
Revision
04
1 ASTLEY GORSE OVERALL SITE LAYOUT
Scale: 1:2500@A1

APPENDIX K.

5 The Planning Appraisal

In determining an application for planning permission, a decision maker is required by Section 70(2) of the Town and Country Planning 1990 Act to have regard to the provisions of the development plan so far as material to the application. Section 38(6) of the Planning and Compulsory Purchase Act 2004 requires that a determination "must be in accordance with the plan unless material considerations indicate otherwise".

The Courts have determined that it is enough that a proposal accords with the Development Plan when considered as a whole. It is therefore not necessary to accord with each and every policy contained within the Development Plan. Indeed, it is not at all unusual for Development Plan policies to pull in different directions4.

The local development plan for the purposes of determining the application for the Proposed Development is set out above in so far as they are consistent with the NPPF.

The NPPF is also a key material consideration. It holds a presumption in favour of sustainable development which states that for decision making this means "approving development proposals that accord with an up to date development plan without delay" (paragraph 11c) and in paragraph 12 reminding decision makers that that the presumption in favour of sustainable development does not change the statutory status of the development plan as the starting point for decision making.

This section contains a detailed analysis of the Proposed Development against the identified relevant national and local planning policies and other material planning considerations. The key issues for the determination of the Application are:

- The principle of the development as renewable energy;
- Landscape and visual impacts;
- Green Belt
- Heritage impacts
- Biodiversity impacts;
- The use of agricultural land;
- Farm diversification;
- Impacts on amenity;
- Flood risk impacts; and
- Traffic impacts and access.

5.1 The Principle of the Development as Renewable Energy

The Proposed Development will provide a reliable source of clean renewable energy as a renewable energy generating station supplying up to 30MW of clean energy to the National Grid.

Based on the local solar irradiation level data, the development is anticipated to generate approximately 21,350MWh per year (after anticipated system losses). This is the equivalent of 5,122 North Warwickshire homes (4,025 kWh/pa/household) and displacement of 7,643 t/CO_2 (conversion factor 0.358t/CO2e) compared with conventional fossil fuel generation sources.

[4] Laura Cummins and London Borough of Camden, SSETR and Barrett Homes Limited [2001]; R. v Rochdale MBC ex parte Milne [2000] & City of Edinburgh Council v. Secretary of State for Scotland [1997]

The battery storage facility would be utilised to reinforce the power generation of the solar farm. Storing energy at times of low demand and releasing to the grid, in periods of higher demand or when solar irradiance is lower, as well as providing balancing services to maintain National Grid stability.

There is an urgent requirement for renewable energy generation which the Proposed Development would help fulfil; whilst being suitable to the Site and its surroundings; according with national and local planning policy and relevant material planning considerations; and delivering significant biodiversity benefits.

The Glossary of the NPPF defines renewable energy as covering those energy flows that occur naturally and repeatedly in the environment including from the sun. The Proposed Development meets the definition therefore of renewable energy as defined in national planning policy.

National policy is strongly supportive of renewable energy as a means of meeting our increasing energy demands, tackling climate change and transitioning to a prosperous and low carbon sustainable economy. Privately funded, large scale solar developments such as the Proposed Development are recognised as being not just necessary but central to meeting an urgent need. Moreover, with the battery storage proposed, the Application goes further by helping to address the intermittency issues associated with renewables generally and will help shift the reliance away from fossil fuels such that the role they play becomes one of a back-up option.

No-where in national or local policy is there a requirement to demonstrate the need for renewable energy development. The urgency of the need for substantially greater quantities of renewable energy (including large scale solar) is self-evident in light of the step change in Government energy policy driven by its declared Climate Emergency to achieve a 100% reduction in greenhouse gas emissions by 2050 (Net Zero). This is a legally binding target.

Warwickshire as a County (including all sub districts) declared a Climate Emergency in 2019, committing to a target of becoming carbon neutral by 2050. Its Climate Change Strategy commits the Council to matching challenging national targets on low carbon and renewable energy.

The NPPF paragraph 11 contains a presumption in favour of sustainable development – meeting the needs of the present without compromising the ability of future generations to meet their own needs (paragraph 7 of the NPPF).

NPPF paragraph 148 states that the planning system should support the transition to a low carbon future and support renewable and low carbon energy and associated infrastructure. Paragraph 157 goes onto state that in determining planning applications, local planning authorities should expect new development to *"take account of landform, layout, building orientation, massing and landscaping"*. With paragraph 158 concluding 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 recognise that even small-scale projects provide a valuable contribution to cutting greenhouse gas emissions"* and *"approve the application if its impacts are (or can be made) acceptable"*.

Making prudent use of natural resources is one of the Government's four aims for sustainable development and is reflected in the objectives of the Core Strategy. It is therefore considered by the Council important for the Local Plan to contain policies, which help to secure a more efficient use of natural resources.

The recently adopted Local Plan stresses that the promotion of renewable energy technology, subject to adequate mitigation of any adverse impacts, is supported by the Council. The Council considers that it is preferable for carbon omissions to be reduced through sustainable design and construction, before requirements for on-site renewable energy generation or allowable solutions are considered. Larger, commercial renewable energy source developments, whilst broadly acceptable in principle,

will need to be considered on their merits including their impact on designated and non-designated landscapes in the Green Belt. The Council recognises that embracing climate change may require historic notions of urban design to be challenged.

The Proposed Development would supply clean renewable electricity for distribution to the National Grid, contributing to the objective of sustainable development in accordance with NPPF paragraph 11, adopted Local Plan Policy and increasing renewable energy generation in accordance with NPPF paragraph 152. This quantity of additional renewable energy is a significant contribution to meeting both national and local renewable energy targets and presents a significant environmental benefit.

This diversification of agricultural income can help helping farmers afford to offset land for biodiversity and sustainability measures without relying on government subsidy and will create new green jobs in agriculture at various entry levels in growing, marketing, and the distribution supply chain, improving skills and opportunities in the local economy and positively contributing to regional decarbonisation.

The proposed site as mitigated would not significantly adversely affect landscape designations, biodiversity (in fact a significant biodiversity net gain of at least 10% habitat and hedgerow biodiversity net gain would be delivered) or the historic environment. Designated heritage assets are suitably screened and distant from the Site so as to avoid significant adverse impacts. Safe road access is already in place as an established agricultural access on to Nuthurst Lane. The supporting documents demonstrate that residential amenity is protected from noise and glint and glare impacts. Soil health would be improved as a result of the Proposed Development and there would be no significant loss of best and most versatile agricultural land, the site being largely assessed as being Grades 3a and 3b.

Livestock grazing around the solar arrays would maintain the land in agricultural use and the temporary (albeit long term) nature of the development means the detail of a consent would secure the return to agricultural land use.

The Proposed Development would offer an important form of farm diversification of benefit to the local economy. The Best Available Technology is being used to maximise the energy efficiency of the Proposed Development. It is therefore, a sustainable form of development.

In applying the relevant national and local policy therefore regarding the principle of the development as a sustainable low carbon renewable energy source, it is clear that the Proposed Development is fully compliant. The assessments undertaken to inform the scheme design have not indicated any material reason to do otherwise than approve this proposal.

5.2 Landscape and Visual

The LVIA submitted with the application found that the proposed development should not cause unacceptable landscape and visual impacts especially in the wider landscape, and that any landscape or visual impacts will be highly localised to the development site or to the adjacent fields around site to a distance of approximately 1km (and for the 40 year duration only). Any affects beyond this extent will be moderate / minor during construction decreasing to low and negligible on completion.

Several opportunities exist to reduce the visual impact of the proposed development and improve and conserve the character of the area in line with the recommendations made within the landscape character assessment and have been incorporated into the submitted layout design.

The use of deer fencing as the perimeter fence (2m tall supported by wooden fence posts located at 6m intervals) is a practical option, ensuring it is in keeping with the area and in a natural unobtrusive material as possible.

Land adjacent to the solar panels cannot be densely planted to deflect views and screen the site as this would compromise the solar gain (overshadowing), but a 5m buffer has been designed in around the outside of the perimeter fence, and within the site boundary to be planted with grassland seed

mixes relevant to the soil types. Where needed, the site boundary will be strengthened either by installing new hedgerows, infilling gaps in hedgerows, creation of woodland planting and the planting of individual trees.

The proposed planting measures will assist in the integration of the infrastructure into the surrounding landscape and will help to deflect and screen views over time as well as increase the biodiversity and strengthen wildlife corridors.

It is also recommended in the LVIA that all the proposed shrubs / trees planted as part of the site improvements should be selected to complement existing species found within the site and the local area, with specific shrubs / trees that will bring an even greater benefit to the site having regard to the existing ecology. Evergreen plants will comprise an element of the native / naturalised planting mix. This can be agreed by way of condition for a planting plan to be submitted for agreement by the Council.

No fixed external artificial lighting will be installed which protects the night scene, avoids light pollution and retains dark night skies. This has local amenity, character and wildlife benefits for the local area. Some PIR emergency lighting is required to serve the DNO substation, but this will not be in constant use and the location of this part of the site has been selected where it is well screened by existing woodland, hedges and trees.

The NPPF (paragraph 127) and local development plan policy LP32 requires the protection or enhancement of the landscape and visual quality of the area. In particular, within Special Landscape Areas development will only be permitted where the special landscape qualities of the area are maintained or enhanced.

The likely landscape and visual impacts of the Proposed Development have been fully assessed in the submitted LVIA (Document Reference R010).

Both the Design and Access Statement (Document Ref: R004) and the LEEP contained within the LVIA (Document Ref R010) it, make clear that great care has been taken in designing a high-quality proposal, with the site layout taking its lead from the environmental and community sensitivities where-ever possible.

5.3 Heritage

A desk-based study, walkover survey and site visits have been carried out in order to identify assets that may be affected by the Proposed Development and establish their current condition and baseline setting. A Geophysical survey has been carried out and interim results have also informed the assessment.

The site lies in the parish of Astley, Warwickshire, on the parish boundary with Arley. Both manors were small Domesday estates of two ploughlands each but sharing extensive woodland resources.

The proposed development is located on the Astley side of the parish boundary with Arley. It covers four fields and part of a fifth, with the access track to the east connecting with Nuthurst Lane. All these fields are large, slightly irregular in shape but with straight field boundaries. The Heritage Assessment considers that these are either late enclosures from waste or the results of complete landscape organisation in the late 18th/early 19th century – but determines that, on balance, it is possible it is the deer park associated with Astley Castle (the 'Great Park' enlarged in c.1500 and located within an extensive area of wood pasture recorded by the Domesday Book).

Most of this area is likely to have been farmed from Duke's Farm, a courtyard farmstead located to the north-east side which was demolished in the late 1970s/early 1980s. The geophysical survey failed to identify anything of archaeological interest in this part of the site and its archaeological potential is assessed to be low to negligible.

In terms of indirect impacts, most of the (few) designated heritage assets in the wider area are located at such a distance as to minimize the impact of the proposed development, or else the contribution of setting to overall significance is less important than other factors. The landscape context of many of these buildings and monuments is such that they would be partly or wholly insulated from the effects of the proposed development by a combination of local blocking from trees, topography, buildings, or embankments, or that other modern intrusions have already impinged upon their setting. However, a combination of the high value of several of the assets and their interlinking on a landscape scale means that the scale of proposed development and its position overlooked by higher ground with surrounding agricultural fields means that some impact is unavoidable, even though individually the impact on each asset is minimal.

The overall impact of the proposed development is assessed to be negligible to negative/minor. The impact of the development on any buried archaeological resource would be permanent and irreversible but could be mitigated against through an appropriate programme of monitoring and recording, but with the exception of the site of Duke's Farm its archaeological potential would appear to be minimal.

5.4 Use of Agricultural Land

Both the NPPF and Local Plan Policy LP13 supports farm diversification and development of new uses of land supporting the rural economy.

An assessment of agricultural land quality, involving a desktop study and an ALC survey has determined that agricultural land at the Site is limited by soil wetness to just 5% being Grade 2 (very good), Subgrade 3a (23% of the Site) and Subgrade 3b (69% of the Site). Development of the site for a time limited period would not result in the permanent loss of Best and Most Versatile (BMV) agricultural land (Paragraph 175 of the NPPF). The installation of the solar farm is reversible, i.e. the agricultural land can be returned to its former agricultural productivity once the generation of renewable electricity has ceased, and the solar panels and associated infrastructure is removed.

The diversification of agricultural income can help helping farmers afford to offset land for biodiversity and sustainability measures without relying on government subsidy and will create new green jobs in agriculture at various entry levels in growing, marketing, and the distribution supply chain, improving skills and opportunities in the local economy and positively contributing to regional decarbonisation.

Planning Practice Guidance also recognises that the duration of the development and its remediability, taking into account any provisions to return the land to its original state or to an equivalent state of openness is a factor to be taken into account when considering development within the WMGB.

The agricultural land at the Site is currently used mainly in arable rotation. In many respects, the management of the land under solar panels as grassland can benefit soil health. It is likely that soil health will be improved over the operational life of the generating station, i.e. increase in soil organic matter, increase in the diversity of soil flora, fauna and microbes, and improve soil structure.

Therefore, development of agricultural land at this Site would not significantly harm national agricultural interests in accordance with paragraph 175 of the NPPF.

The maintenance, and improvement, of soil health is a material consideration when deciding if a development is appropriate on agricultural land. It is relevant to this assessment that the Proposed Development is temporary and reversible, and that *"the management of the land under solar PV panels as grassland can benefit soil health."* The Assessment explains how soil structure can impact the movement of water through the soil and that well aerated soil encourages healthy plant (crop) growth and an abundance of soil fauna and aerobic microbes and states:

"Soils are habitats for millions of species, ranging from bacteria, fungi, protozoa, and microscopic invertebrates to mites, springtails, ants, worms and plants. Soil biota are strongly influenced by land

management. Modern farming has led to the loss of soil biodiversity. Changes in land management practice and land use can have large effects on soil biodiversity over relatively short time scales. Reducing the intensity of management, introducing no-tillage management, and converting arable land to pasture, such as grassland under solar PV arrays, has substantial beneficial effects."

After adjusting the figures in the initial report to account for the amended site boundaries, the additional note provided by Askew Land and Soil (Ref C815 on 17/11/2021) demonstrates how the site area was refined to impact a smaller proportion of the better grades of land.

Grade	% of *Study Area*	% Revised of Final *Site Area*
Subgrade 2 (Very Good)	7.9%	5%
Subgrade 3a (Good)	30.2%	22.7%
Grade 3b (Moderate)	59.8%	68.9%
Other Land / Non-agricultural (woodland, farm tracks)	2.1%	3.4%

Table 3: Agricultural Land Classification Impacts

Given that the management of grassland under solar PV panels can improve soil health, such as increasing soil organic matter (SOM), and hence soil organic carbon (SOC), increasing soil biodiversity, and improving soil structure which is consistent with aims and objectives for improving soil health in the Government's 25 Year Plan for the Environment.

5.5 Farm Diversification

There is support in national (NPPF paragraph 84 (b)) and Local Plan policy LP13 for farm diversification projects that meet sustainable development objectives and help sustain the rural economy and encourage agricultural enterprise, subject to development proposals being well designed and of a use and scale appropriate to the location when considering landscape, heritage and environmental impacts and safe and acceptable site access and highway impacts.

Due to the relatively low income from farming, many farmers have had to diversify to secure an economically sustainable profit. Farm diversification is broadly defined as '*the entrepreneurial use of farm resources for a non-agricultural purpose for commercial gain*'. Hence, diversification reflects the reduced dependence of farmers on agriculture as a source of income. Diversification also implies entrepreneurial activity on behalf of the farmer.

The Proposed Development will be an important stream of farm diversification income whilst allow underpinning the continuation of the overall farming businesses.

Farming businesses play a vital role in the rural economy, particularly supporting the agricultural supply chain to include feed merchants, machinery sales, maintenance and repair businesses, local builders, delivery drivers and professional services, to name but a few – therefore farm diversification is key to the long-term overall survival of farms. The Proposed Development would help to support the local agricultural supply chain via the income to the farming business.

Renewable energy is an important form of farm diversification, recognised by the National Farmers Union (NFU) as an important step towards making British agriculture carbon neutral within two decades. As farming is responsible for around a tenth of UK greenhouse gas emissions, supporting renewable energy farm diversification projects will be a vital step to reaching net zero.

5.6 Amenity

The need to protect the amenity of the local area and nearby sensitive receptors through minimising visual and noise impacts and effects of glint and glare is a requirement of both national and local planning policy. Visual impacts have been assessed in the Landscape and Visual Impact Assessment (Document Ref R010) and found to be acceptable (refer to section 5.2 above), the effects of noise and glint and glare are considered in turn below.

5.7 Noise

A Noise Impact Assessment has been produced to accompany the Application.

The assessment considers the potential noise generation from the plant associated with the Proposed Development, with respect to existing sound levels in the area. The assessment methodology contained in British Standard 4142:2014+A1:2019 Method for rating and assessing industrial and commercial sound has been used in conjunction with supplementary acoustic guidance.

The assessment identifies that the Proposed Development will give rise to rating noise levels that are typically below the measured day and night-time background sound levels in the area, at the closest assessed residential receptors, thus giving rise to a Low Impact.

Consequently, the assessment demonstrates that the Proposed Development will give rise to noise impacts that would be categorised as No Observed Adverse Effect Level (NOAEL) within the Noise Planning Practice Guidance - Noise.

The amenity of the closest residential receptors would therefore not be affected by noise arising from the Proposed Development.

5.8 Glint and Glare

Solar panels are made up of silicon based PV cells that are encased in a glass covering. Glass does not have a true specular reflection but does reflect a certain magnitude of light. Reflection of sunlight from PV panels is unwanted by the Applicant. This is because the greater the amount of light which can be captured at the PV cell, the greater the amount of electricity that can be produced. The manufacturers of the panels therefore use anti–reflective coating in the glass that changes the reflectivity from specular distribution to diffuse distribution. Therefore, as light falls onto the PV panels, most of the sunlight is transmitted to the cell beneath the glass with only a small amount reflected back in a multiple of angles and magnitudes. The result is an object that is perceived to have very little glare.

Nonetheless, and for the purposes of completeness and a robust impact assessment of the Proposed Development a Glint and Glare Assessment has been prepared and submitted. The assessment pertains to the possible effects upon surrounding road users and dwellings.

The glint and glare assessment has shown that there will be no glint and glare effects for any receptors (residential, road or airport) and so no mitigation is required. The effects of glint and glare and their impact on local receptors has been analysed in detail and the impact on all receptors is predicted to be 'None', and therefore 'Not significant'.

5.9 Flood Risk

The requirements for Flood Risk Assessment (FRA) are provided in the NPPF and its associated Planning Practice Guidance, together with the Environment Agency's Guidance Notes. This policy and associated guidance have been followed in the preparation of the submitted FRA.

The EA's flood map for planning indicates that the Site is located within Flood Zone 1 (low risk). Considering the lower elevation compared to the Site and the distance of the Flood Zone extents, it is concluded that the Site will remain in Flood Zone 1 for its operational lifetime.

The EA's risk of flooding from surface water mapping identifies that the majority of the Site has a very low risk of flooding from surface water and some areas have up to a high surface water flood risk.

The low-risk depths are almost entirely less than 300 mm with limited areas with depths greater than 300 mm. Where some areas are identified as greater than 600 mm they are in the vicinity of the River Anker and the FRA notes that the surface water flood modelling is unlikely to include the culvert underneath the access road, and those flood depths may be overestimated.

The Site is potentially at risk of flooding from groundwater and sewers; however, flood risk to the Site from these sources are low and a sequential approach has been taken in the layout whereby the most vulnerable parts of the development will be located in the areas at lowest risk of flooding.

Overall the FRA demonstrated that the Proposed Development will be safe and that it would not increase flood risk elsewhere. The Proposed Development is classified as 'essential infrastructure' and is considered appropriate in relation to the flood risk vulnerability classifications set out in Annex 3 of the NPPF. The development should therefore be considered acceptable in planning policy terms.

5.10 Traffic and Access

A CTMP has been prepared and accompanies the Application. This explains in detail the proposed Site access points, vehicle movements and the construction vehicle route from the strategic highway network to the Site.

It is expected that there will be on average six HGVs per day (10 two-way movements) accessing the Site over the construction period. There will also be construction workers arriving at the Site in the morning and departing in the evening, although the numbers involved are forecast to be relatively low on a day-to-day basis and will occur outside of peak hours. The level of traffic forecast during the temporary construction phase is therefore low. It is concluded that construction traffic associated with the Proposed Development will not have a material effect on the safety or operation of the local highway network. Mitigation measures have also been proposed to further minimise impact from resulting construction activities on the local road network and are provided in the CTMP.

Operational traffic is very low, being just one to two light van maintenance visits per month.

The existing PRoW is not proposed to be diverted or closed and will remain open to users during the temporary construction period and during operations.

Overall, the Proposed Development is acceptable in traffic and access terms and meets the requirements of the NPPF and Local Plan Policy LP25.

5.11 Green Belt

In regard to assessing the Proposed Development in the Green Belt (see Appendix 1), the starting point is as set out by the NPPF:

- *"The Government attaches great importance to Green Belts. The fundamental aim of Green Belt policy is to prevent urban sprawl by keeping land permanently open; the essential characteristics of Green Belts are their openness and their permanence" (para 133).*

Paragraph 134 goes on to state that:

- *"Green Belt serves five purposes:*

a) *to check the unrestricted sprawl of large built-up areas;*

b) *to prevent neighbouring towns merging into one another;*

c) *to assist in safeguarding the countryside from encroachment;*

d) *to preserve the setting and special character of historic towns; and*

e) *to assist in urban regeneration, by encouraging the recycling of derelict and other urban land."*

Paragraph 147 states that inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances.

Paragraph 148 states:

> *"When considering any planning application, local planning authorities should ensure that substantial weight is given to any harm to the Green Belt. "Very special circumstances" will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other hard resulting from the proposal, is clearly outweighed by other considerations."*

Very special circumstances is thereby the outcome of a planning balancing exercise and the harms must be clearly outweighed by the benefits.

The policies in the NPPF set out those types of development that are appropriate (i.e. not inappropriate) in the Green Belt. The Proposed Development does not fall into any of the exceptions listed in paragraphs 149 and 150 of the NPPF. The Proposed Development is therefore considered to be inappropriate development within the LMGB.

The NPPF does however provide provision for renewable energy projects in the Green Belt. At paragraph 151 it states:

> *"When located in the Green Belt, elements of many renewable energy projects will comprise inappropriate development. In such cases developers will need to demonstrate very special circumstances if projects are to proceed. Such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources"* (our emphasis).

Paragraph 145 of the NPPF adds, in relation to the improvement of the Green Belts, *"Once Green Belts have been defined, local planning authorities should plan positively to enhance their beneficial use, such as looking for opportunities to provide access; to provide opportunities for outdoor sport and recreation; to retain and enhance landscapes, visual amenity and biodiversity; or to improve damaged and derelict land."*

It is therefore necessary to apply the two tests of harm set out in the paragraph 148:

a. The amount of harm (if any) to the Green Belt; and

b. The amount of other harm (through the impact of development on highways, visual amenity or otherwise).

Thereafter it is necessary to carry out a planning balancing exercise (which is a matter of planning judgement) to establish whether any harm to the Green Belt is outweighed by other considerations including benefits of the Proposed Development and allowing for mitigation as the NPPF allows; and whether the necessary very special circumstances exist to approve the Application.

The Core Strategy specifically relates to development in the Green Belt stating that the there is a general presumption against inappropriate development within the Green Belt, as defined on the Policies Map and such development will not be permitted unless very special circumstances exist. Development proposals, including those involving previously developed land and buildings, in the Green Belt will be assessed in relation to the NPPF.

The Core Strategy does underline that the promotion of renewable energy technology, subject to adequate mitigation of any adverse impacts, is supported by the Council. The Council considers that it is preferable for carbon omissions to be reduced through sustainable design and construction, before requirements for on-site renewable energy generation or allowable solutions are considered. Larger, commercial renewable energy source developments, whilst broadly acceptable in principle, will need to be considered on their merits including their impact on designated and non-designated landscapes in the Green Belt. The Council recognises that embracing climate change may require historic notions of urban design to be challenged.

5.12 Openness

The concept of "openness" in paragraph 137 of the NPPF is naturally read as referring back to the underlying aim of Green Belt policy that is *"to prevent urban sprawl by keeping land permanently open..."*. Openness is the counterpart of urban sprawl and is also linked to the purposes to be served by the Green Belt. It is not necessarily a statement about the visual qualities of the land, though in some cases this may be an aspect of the planning judgement involved in applying this broad policy concept. Nor does it imply freedom from any form of development; some forms of development are appropriate and as such are compatible with the concept of openness[5].

The word 'openness' is open-textured, and a number of factors are capable of being relevant when it comes to applying it to the particular facts of a specific case. Prominent among these will be factors relevant to how built up the Green Belt is now and how built up it would be if redevelopment occurs, and factors relevant to the visual impact on the aspect of openness which the Green Belt presents6. It is clear from 'Samuel Smith' that visual impact is a factor that may be material to the assessment of openness, and it will be for the decision maker to determine whether or not it is to be taken into account in any individual case.

One factor which can affect appropriateness, the preservation of openness and conflict with Green Belt purposes, is the duration of development and the reversibility of its effects[7]. The Application is proposed for a lifetime of 40 operational years and is therefore considered to be relevant to its acceptability within the Green Belt.

The National Planning Policy Guidance provides further guidance to the decision maker under the heading of: *'What factors can be taken into account when considering the potential impact of development on the openness of the Green Belt?'*[8]*:*

> *"Assessing the impact of a proposal on the openness of the Green Belt, where it is relevant to do so, requires a judgment based on the circumstances of the case. By way of example, the courts have identified a number of matters which may need to be taken into account in making this assessment. These include, but are not limited to:*
>
> - *openness is capable of having both spatial and visual aspects – in other words, the visual impact of the proposal may be relevant, as could its volume;*

[5] R (oao Samuel Smith Old Brewery (Tadcaster) and others v North Yorkshire County Council [2020] UKSC 3 at [22]

[6] per Sales LJ Turner v Secretary of State for Communities and Local Government [2016] EWCA Civ 466 at [14]

[7] Europa Oil and Gas Ltd v Secretary of State for Communities and Local Government [2013] EWHC 2643 (Admin) at [67]; (upheld at [2014] EWCA Civ 825)

[8] Ref. ID: 64-001-20190722 published 22 July 2019

- *the duration of the development, and its remediability – taking into account any provisions to return land to its original state or to an equivalent (or improved) state of openness; and*
- *the degree of activity likely to be generated, such as traffic generation."*

Paragraph 13 of the Planning Practice Guidance also provides specific guidance on solar farms stating that *"The deployment of large-scale solar farms can have a negative impact on the rural environment, particularly in undulating landscapes. However, the visual impact of a well-planned and well-screened solar farm can be properly addressed within the landscape if planned sensitively."*

In so far as visual impacts are considered relevant to the assessment of the impact on openness, it is necessary to draw upon the LVIA. As set out above the Site in general is visually well-contained by a combination of existing hedgerows, tree belt and woodland vegetation that are located within and along the Site's boundaries, which assist in reducing the visibility of the Site in all but very local views of the Site.

The Site's visual connectivity to the wider landscape is, in general, limited to its local context up to 1km. Coupled with the landscape-led iterative design process, the Proposed Development has sensitivly sited various elements of the scheme to reduce landscape and visual effects and potential harm to the Green Belt. This has involved the locating the substation where it is screened by existing woodland and selection of fields which offer least impact on local views.

The Proposed Development would also retain the existing vegetation on-site in-combination with proposals to strengthen it with new planting where necessary. This would be positively managed (through the relaxation of cutting and management) to allow them to grow out and further restrict potential visibility of the Proposed Development. The nature of the Proposed Development means that site fabric and characteristics of the Site such as the vegetative network, field pattern and topography would remain intact and legible.

Notwithstanding the above, the duration of the Proposed Development would be entirely reversible after its 40-year operational phase.

A comprehensive assessment of the Site in relation to the purposes prescribed under paragraph 134 of the NPPF is provided in Appendix 1.

5.12.1 Other Harm

As demonstrated in the sections above, consideration has been given to 'other harm' regarding heritage, biodiversity, agricultural land, farm diversification, amenity, flood risk, traffic and access. Landscape and visual impacts have also been assessed in relation to landscape character and visual receptors.

The supporting assessments are clearly set out below in Table 4: Mitigation measures taken to reduce harm as part of the Proposed Development, indicating mitigation measures taken to reduce harm as part of the Proposed Development:

Assessment	Mitigation Measures	Harm
Landscape and Visual	Input into the design to ensure suitable distances from PRoW, and location of key	Limited Temporary Harm (40 years)

	infrastructure such as the onsite substation and battery storage facility. Enhancement measures incorporated within the LEMP (See Document Ref: R009)	
Heritage	Undertook a partial geophysical survey and targeted trial trenching prior to submission to identify any unknown archaeology on Site. All trenches were considered archaeologically sterile.	Limited, Indirect and Reversible Harm (40 years)
Biodiversity	Suitable avoidance measures applied for both habitats and species identified. Enhancement measures incorporated within the LEMP (See Document Ref: R008). Minimum of 10% habitat and hedgerow biodiversity net gain	Enhancement
Use of Agricultural Land	Over 70% of land is not BMV. Land will be retained in agricultural use through sheep grazing. Temporary use and fully reversible. Benefits demonstrated to soil health due to change in management of the land.	Enhancement
Farm Diversification	The site would support the rural economy by providing farm diversification for the landowner.	Benefit
Amenity	Noise: location of noise generating equipment has been moved as far practicable from sensitive receptors. Glint and Glare: choice of technology, configuration of technology, site topography, new vegetative screen planting and positive management of existing planting to improve screening	Noise: No Harm Glint and Glare: Limited Temporary Harm
Flood Risk	Liaison with the Environment Agency to ensure suitable siting of equipment and sustainable drainage methods.	Limited Temporary Harm
Traffic and Access	Liaison with Highway Authority to agree safe access design. Inclusion of signage, procedures and pre-commencement and post condition surveys to further minimise impacts on the local road network.	Limited Temporary Harm

Table 4: Mitigation measures taken to reduce harm as part of the Proposed Development

It is concluded from the accompanying assessments that limited weight should be applied to "other harm" when undertaking the planning balance in accordance with paragraph 148 of the NPPF and local policies.

5.12.2 Very Special Circumstances

It is a key planning policy requirement that very special circumstances need to exist for inappropriate development to be approved in the Green Belt.

It is incorrect to suggest that every circumstance in itself has to be 'very special'. Some factors which are quite ordinary in themselves could, cumulatively, become very special circumstances. Thus, the correct approach is to consider whether the very special circumstances relied upon by an applicant (and any other identified by the decision maker), when considered as a whole, are sufficient to outweigh any harm to the Green Belt and any other harm arising from the Proposed Development.

The following are considered to be benefits of the Proposed Development:

5.12.3 Increasing Renewable Energy Generation

The Proposed Development would supply up to 30MW to the National Grid, providing the equivalent annual electrical needs of approximately 5100 family homes. The anticipated CO_2 displacement is around 7,650 tonnes per annum, which represents an emission saving equivalent of a reduction in c.2500 cars on the road every year.

As demonstrated extensively above, the UK and NWBC is at a time of climate emergency and there is an urgent requirement for renewable energy infrastructure, particularly when considered in the context of the June 2019 ambitious target to reduce greenhouse gas emissions to net zero by 2050 in accordance with the Climate Change Act 2008.

While there is no requirement for an applicant to demonstrate the need for renewable energy in planning policy, national energy policy makes clear that renewable and low carbon energy is vital to our economic prosperity and social well-being and that it is important to ensure that the UK:

- Transitions to a low carbon economy and reduces greenhouse gas emissions to address the predominant challenge of our time, climate change;
- supports an increased supply from renewables;
- continues to have secure, diverse and resilient supplies of electricity as the UK transitions to low carbon energy sources and to replace closing electricity generating capacity;
- increases electricity capacity within the system to stay ahead of growing demand at all times whilst seeking to reduce demand wherever possible; and
- delivers new low carbon and renewable energy infrastructure as soon as possible - the need is urgent.

In the most recent 2020 Progress Report to Parliament, the Committee on Climate Change state that the path to achieving net-zero emissions by 2050 will necessarily entail a steeper reduction in emissions over the intervening three decades and to reach the UK's new Net Zero target, emissions will need to fall on average by around 14 $MtCO_2e$ every year, equivalent to 3% of emissions in 2019.

The report goes on to state that reaching net-zero emissions in the UK will require all energy to be delivered to consumers in zero-carbon forms (i.e. electricity, hydrogen, hot water in heat networks) and come from low carbon sources (i.e. renewables and nuclear etc).

When located in the Green Belt, paragraph 151 is clear in stating that "*Such very special circumstances may include the wider environmental benefits associated with increased production of energy from renewable sources*".

The NPS EN-1, EN-3 and NPPF state that renewable energy and associated infrastructure should be supported in the planning system, as part of working towards a radical reduction of greenhouse gases to tackle climate change. Paragraph 155 encourages local panning authorities to maximise the potential for renewable energy and to approve such applications where their impacts are acceptable.

This is afforded significant weight in the planning balance.

5.12.4 Climate Emergency

In May 2019 a national climate emergency was declared by the UK Parliament. MPs called on Government to make changes that included the setting of a radical and ambitious new target of reaching net zero emissions before 2050.

Warwickshire as a County (including all sub districts) declared a Climate Emergency in 2019.

The Proposed Development would make a significant and valuable contribution to achieving emission targets on a national and local level.

This is afforded substantial weight in the planning balance.

5.12.5 Energy Security

The Proposed Development supplies clean renewable energy to the National Grid, comprising secure, distributed and diversified energy generation which accords with the Government's policy on energy security as identified within NPS EN-1 which explains the need for energy security allied with a reduction in carbon emissions.

This is afforded substantial weight in the planning balance.

5.12.6 Best Available Technology

The use of best available and state of the art technology on the Site aims to maximise the use and productivity of the land for the generation of renewable energy. The Proposed Development proposes utilising high-efficiency bifacial panels at a fixed tilt of between 20-30 degrees and orientated broadly facing south. Bifacial panels absorb light on both sides of the panel, both directly on the top-side, and reflected light is also absorbed on the rear-side. The panel technology also utilises high efficiency monocrystalline cells meaning fewer panels are required to be installed on the site to achieve the target capacity. The combination of high-efficiency bifacial panels and optimised configuration increases the production of electricity from the site by 4% compared to monofacial systems.

The battery storage facility would be utilised to reinforce the power generation of the solar farm, maximising renewable energy production from the Site whilst providing security of supply.

This maximises renewable energy production from the Site whilst providing security of supply in accordance with Government Policy in reducing the reliance on fossil fuel generation as back up, thereby avoiding the adverse environmental and climate effects.

This is afforded significant weight in the planning balance.

5.12.7 Good Design

In addition to using best available technology, through undertaking an iterative design process, as outlined in the Design and Access Statement (see Document Ref: R004), the design of the Proposed

Development has been a key consideration in the layout of the site to minimise harm and provide significant benefits to the development as a whole.

This is afforded moderate weight in the planning balance.

5.12.8 Temporary and Reversible Impacts

The Application is proposed for a lifetime of 40 operational years. After the 40-year period the generating station would be decommissioned. All electricity generating equipment and built structures associated with the Proposed Development would be removed from the Site and it would continue in agricultural use. It is therefore considered that the Proposed Development is considered a temporary development.

This also aligns with paragraph 13 of the Planning Practice Guidance which states that solar farms are normally temporary structures and planning conditions can be used to ensure that the installations are removed when no longer in use and the land is restored to its previous use9.

Construction traffic associated with the Proposed Development will be limited to the construction period of 26 weeks and will not have a material effect on the safety or operation of the local highway network.

This is afforded substantial weight in the planning balance.

5.12.9 Biodiversity Net Gain

The Proposed Development proposes a significant number of biodiversity benefits within the accompanying LEEP (see Document Ref: R010).

The LVIA and accompanying LEEP set out how the Proposed Development would:

- Significantly enhance the overall biodiversity value of the Site;
- Protect and enhance the existing characteristics and features of value of the Site including the field structure, mature trees and hedgerows;
- Create a strong structural planting framework and protect, restore and maintain the existing vegetation network, which would also provide enhanced screening of close- and middle-distance views of the Proposed Development;
- Create greater opportunities for protected species' and species of conservation concern;
- Enhance the Green Infrastructure (GI) connectivity within the Site and wider landscape, contributing positively to aspirations set ouwithin the Thurrock Green Infrastructure Plan;
- Protect and enhance recreational amenity from PRoW; and
- Secure the long-term future management of the Site for the duration of the development.

This significant enhancement of the biodiversity of the Site is demonstrated by the Net Biodiversity Gain Statement Accompanying the Preliminary Ecological Appraisal (Document Ref. R011), which

[9] Paragraph: 013 Reference ID: 5-013-20150327, published 27 March 2015

concludes that there will be a net gain of over 10% for habitats and hedgerows through the implementation of the Proposed Development.

This is afforded substantial weight in the planning balance.

5.12.10 Soil Regeneration

Aims and objectives for safeguarding and, where possible, improving soil health are set out in the Government's 'Safeguarding our soils: A strategy for England'104. The Soil Strategy for England, which builds on Defra's 'Soil Action Plan for England (2004-2006), sets out an ambitious vision to protect and improve soil to meet an increased global demand for food and to help combat the adverse effects of climate change.

As demonstrated within the ALC report (see Document Ref: R012), the greatest benefits in terms of increase in soil organic matter (SOM), and hence soil organic carbon (SOC), can be realised through land use change from intensive arable to grasslands. Likewise, SOM and SOC are increased when cultivation of the land for crops (tillage) is stopped and the land is uncultivated (zero tillage). Global evidence suggests that zero tillage results in more total soil carbon storage when applied for 12 years or more. Therefore, there is evidence that conversion of land from arable to grassland which is uncultivated over the long-term (>12 years), such as that under solar farm arrays, increases SOC and SOM.

This is afforded moderate weight in the planning balance.

5.12.11 Farm Diversification

As demonstrated above, the additional income generated by the Proposed Development will help to secure the farming business.

Renewable energy is an important form of farm diversification, recognised by the National Farmers Union (NFU) as an important step towards making British agriculture carbon neutral within two decades. As farming is responsible for around a tenth of UK greenhouse gas emissions, supporting renewable energy farm diversification projects will be a vital step to reaching net zero.

This is afforded moderate weight in the planning balance.

[10] 4 Department for Environment, Food and Rural Affairs (2009). Safeguarding our soils: A strategy for England

6 Conclusion

- For the reasons outlined in this Planning Statement, it is considered that the Proposed Development is in accordance with the relevant planning policies and guidance at both the national and local levels.
- The Proposed Development would supply up to 30MW to the National Grid, providing the equivalent annual electrical needs of approximately 5,100 family homes11 in North Warwickshire. The anticipated CO_2 displacement is around 7,650 tonnes per annum[12], which represents an emission saving equivalent of a reduction of over 2500 cars[13] on the road every year.
- The Proposed Development has been designed to a high standard. It will provide significant biodiversity enhancements (minimum 10% net gain), allow for soil regeneration, it does not increase flood risk, will appropriately protect residential amenity, has safe highway accesses and will improve green infrastructure corridors and connectivity benefitting both wildlife and the recreational amenity experience of PRoW users.
- In accordance with paragraph 148 of the NPPF, in addition to the harm by reason of inappropriateness, weight must be attributed to the harm to openness of the Green Belt and other harm presented.
- As recognised above the Proposed Development is inappropriate development, thereby it is acknowledged that substantial weight is to be applied to the openness of the WMGB through the imposition of built form, however the reversibility of the Proposed Development and limited impact on the purposes of the Green Belt are a key consideration in the planning balance.
- Accompanying assessments have been undertaken to assess "other harm" regarding heritage, biodiversity, agricultural land, farm diversification, amenity, flood risk and traffic and access. Landscape and visual impacts have also been assessed in relation to landscape character and visual receptors. It is concluded from these assessments that limited weight should be applied to "other harm" when undertaking the planning balance.
- Paragraph 148 is clear that very special circumstances will not exist unless the potential harm to the WMGB by reason of inappropriateness, and any other harm resulting from the Proposed Development, is clearly outweighed by other considerations. It is a key planning policy requirement that very special circumstances need to exist for inappropriate development to be approved in the WMGB.
- The significant public benefits outlined above of the Proposed Development, taking into account the urgent need for renewable energy generation, climate emergency and delivery of net biodiversity gain, all of which are material considerations in accordance with the policy tests identified in paragraphs 148 and 151 of the NPPF.

---

[11] Department for Business, Energy & Industrial strategy, Region and local authority electricity consumption statistics 2020 - https://www.gov.uk/government/statistical-data-sets/regional-and-local-authority-electricity-consumption-statistics

[12] This metric is aligned with the International Finance Institution (IFI) Harmonisation of Standards for GHG accounting. United Nations, Climate Change - https://unfccc.int/climate-action/sectoral-engagement/ifis-harmonization-of-standards-for-ghg-accounting

[13] Department for Business, Energy & Industrial Strategy, Greenhouse gas reporting: conversion factors 2020 - https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2020

- On balance, it is considered that the benefits of the Proposed Development outweigh the temporary and reversible harm by reason of inappropriateness and any other harm identified. As such very special circumstances exist to justify the Proposed Development in the WMGB.