

# BELVOIR SOLAR FARM

ENVIRONMENTAL STATEMENT:  
NON- TECHNICAL SUMMARY





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**KEY**

 Site Boundary

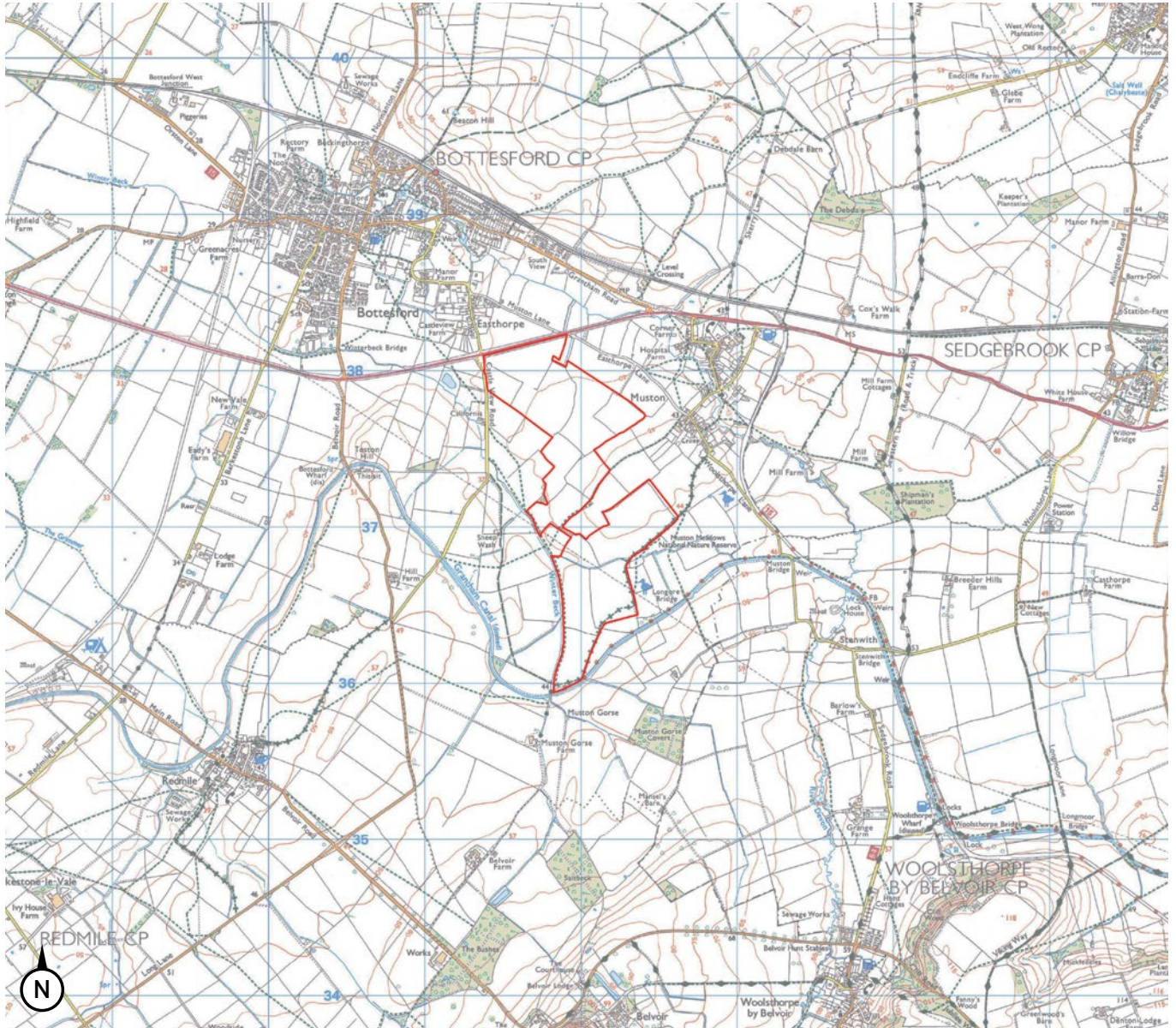


FIGURE 1: SITE LOCATION PLAN

# 1. INTRODUCTION

This document provides a Non- Technical Summary (NTS) of the Environmental Statement (ES) which has been prepared on behalf of JBM Projects 10 Ltd (the “Applicant”) to accompany the planning application for the: “ Construction of a solar farm with all associated works, equipment and necessary infrastructure”, on land within the Belvoir Estate, Grantham, NG32 1PE (“the Application Site”).

The Application Site is situated within the administrative area of Melton Borough Council (MBC). A request for a Screening Opinion was submitted to the MBC in January 2021. The Screening Opinion adopted (reference: 21/00080/EIA) by MBC on the 11th May 2021 confirmed that the Proposed Development was considered against the selection criteria in Schedule 3a ‘Industrial installations for the production of electricity’ of Schedule 2 of the Town and Country Planning Environmental Impact Regulations 2017 (as amended).

The Screening Opinion concluded that under Regulation 5 of the 2017 Regulations, the proposal constituted EIA development and would need to be accompanied by an Environmental Impact Assessment.

The Application Site location is shown on **Figure 1**.



## 2. PURPOSE OF THE ENVIRONMENTAL STATEMENT

The ES comprises a series of studies which have been commissioned to address the environmental issues which are considered pertinent to the construction and operation of the Proposed Development, including consideration of cumulative effects. The ES also identifies any alternatives that have been considered and mitigation measures to avoid or reduce significant adverse effects.

The full findings of these studies and planning application documents will be available to view at the Council's offices and via Melton Borough Council's website (<https://pa.melton.gov.uk/online-applications/>) once the planning application has been registered.

At this time subsequently to the global pandemic, new legislation has been passed by the Government that no paper copy of the Environmental Statement needs to be made available for viewing to the general public. Access to the Environmental Statement on-line is acceptable.

Additional copies of the NTS (no charge) and ES Main Text/ Technical Appendices (£50) are available from Pegasus Group. The complete ES can also be obtained in digital CD format for £10. For copies of any of these please contact:

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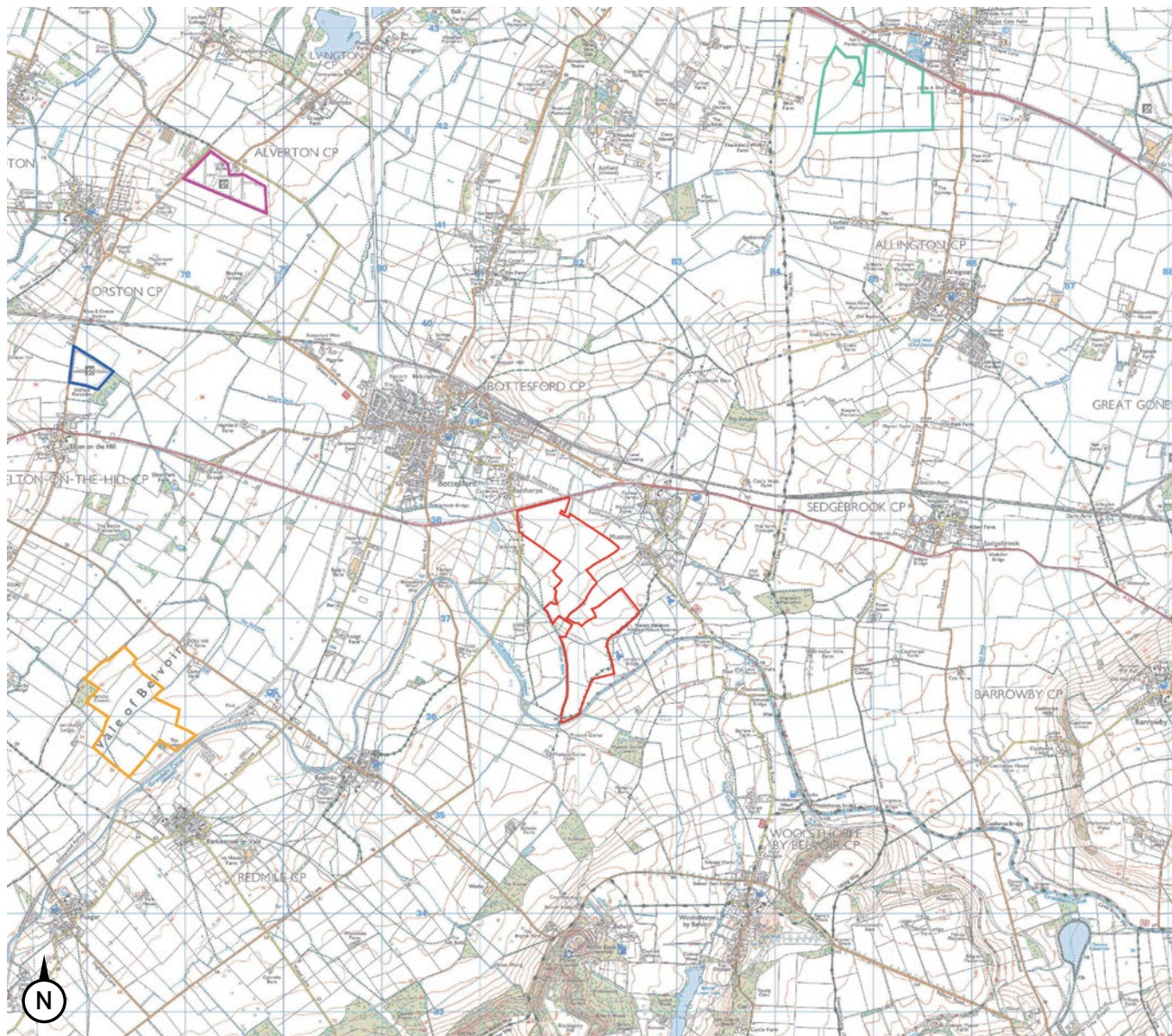
**KEY** Site Boundary 10MW Solar Farm, Land South of The Railway Line and East of Station Road, Elton, Nottinghamshire (Planning Ref: 14/01739/FUL Rushcliffe Borough Council) - Constructed and operational 12.4MW Solar Farm, Lodge Farm, Longhedge Lane, Orston (Planning Ref: 13/01609/FUL Rushcliffe Borough Council) Constructed and operational 49.9MW Solar Farm, Land South of the A1 (Foston Bypass), Foston, Grantham (Planning Ref: S20/1433 South Kesteven Council) Granted permission subject to conditions 1st March 2021 49.9MW Solar Farm, Land East of Jericho Covert, Jericho Lane, Barkestone Le Vale, (Planning Ref: 20/01182/FUL, Melton Borough Council) Validated 15th October 2020, still pending decision.

FIGURE 2: APPLICATION SITE CONTEXT



### 3. ENVIRONMENTAL STATEMENT ASSESSMENT SCOPE AND METHODOLOGY

The Environmental Statement (ES) reports the findings of an Environmental Impact Assessment (EIA) which has been prepared in accordance with the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (as amended).

No formal scoping exercise was carried out for this ES. The environmental topics that have been included within this EIA were based on professional judgement when considering the scheme with the known baseline environment and Schedule 4 of the EIA Regulations 2017 (as amended). The EIA focuses on the potential likely significant effects of the Proposed Development during construction and operational phases only.

Within EIA, cumulative effects are generally considered to arise from the combination of effects from the Proposed Development and from other proposed or permitted schemes in the vicinity, acting together to generate elevated levels of effects. Consideration is given to the following developments as part of the cumulative assessment in the ES:

- 10MW Solar Farm, Land South Of The Railway Line & East Of Station Road, Elton, Nottinghamshire (planning reference: 14/01739/FUL Rushcliffe Borough Council). Constructed and operational. Approximately 4.5km north-west of site.
- 12.4 MW Solar Farm, Lodge Farm, Longhedge Lane, Orston (planning reference: 13/01609/FUL Rushcliffe Borough Council). Constructed and operational. Approximately 4.5km north-west from the site.
- 49.9MW Solar Farm, land south of the A1 (Foston-By-Pass), Foston, Grantham (planning reference: S20/1433 South Kesteven Council). Granted permission subject to conditions 1st March 2021. Approximately 4.9km north-east from the site.
- 49.9MW Solar Farm, land east of Jericho Covert, Jericho Lane, Barkestone Le Vale (planning reference: 20/01182/FUL, Melton Borough Council). Validated 15th October 2020, still pending decision. Approximately 3.8km west of the site.

The location of this sites in relation to the Application Site can be seen on **Figure 2**

**KEY**

- |  |   |  |   |
|--|---|--|---|
|  Site Boundary                      |  Other Routes with Public Access |  Scheduled Monument                           |  Local Wildlife Site |
|  Local Authority Boundary          |  Grade I Listed Building        |  Conservation Area                           |  EA Flood Zone 3    |
|  Sustrans National Route          |  Grade II* Listed Building     |  National Nature Reserve (NNR)              |  EA Flood Zone 2   |
|  Long Distance/Recreational Route |  Grade II Listed Building      |  Site of Special Scientific Interest (SSSI) |   |
|  Public Right of Way              |  Registered Park / Garden      |  Ancient Woodland                           |   |

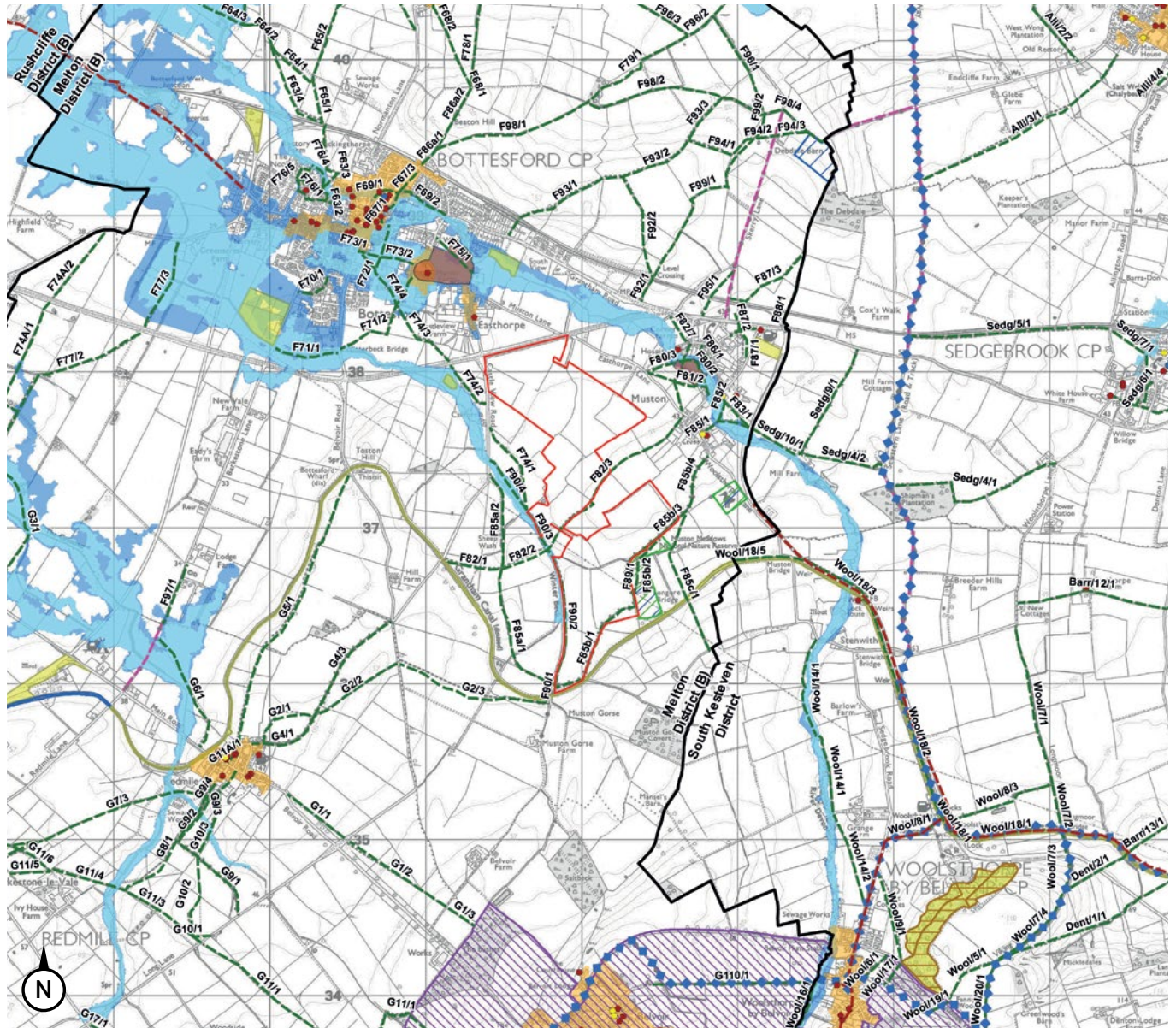


FIGURE 3: ENVIRONMENTAL DESIGNATIONS PLAN

## 4. THE APPLICATION SITE

The Application site extends to 103.53 hectares and comprises agricultural land. The site is located to the west of the settlement of Muston and south-east of Bottesford. The site is described as land within Belvoir Estate, Grantham, NG13 0FG.

The site is located to the immediate south of the A52. Castle View Road partially follows the western site boundary. To the south of the site is the disused Grantham Canal. The Proposed Development will be accessed via the existing access point on Castle View Road. Some existing vegetation and hedgerows are present along field boundaries around and within the site. There are Public Rights of Way located within and in close proximity to the site.

There are no International or European ecological designated sites (Ramsar, Special Protection Area or Special Areas of Conservation) within close proximity of the site. Muston Meadows National Nature Reserve (NNR) and Site of Special Scientific Interest is positioned adjacent to the southern site boundary and is split into two separate land parcels. In terms of local designations, the site is c.800m west of a Local Wildlife Site.

The Proposed Development is not located within any statutory or non-statutory landscape designations. The site is not situated within or near to a designated Area of Outstanding Natural Beauty (AONB).

The entirety of the Application Site is located with Environmental Agency (EA) Flood Risk Zone (FRZ) 1 meaning the site has less than 1 in 1000 annual probability of flooding by river sources.

There are no designated heritage assets within the Site. Several heritage assets are within the surrounding context of the Application Site, including:

- Moated grange with fishpond at Muston (Scheduled Monument)
- Muston village cross (Scheduled Monument)
- Shifted medieval village earthworks and moat at Easthorpe (Scheduled Monument)
- Belvoir Castle, a Grade I listed building is located approximately 2.3km to the south of the site. Belvoir Castle is set within a Registered Park & Garden and Conservation Area.

Within a 1km radius of the site there are ten listed buildings.

The Application Site and surrounding context is shown on the Environmental Designations Plan at **Figure 3**

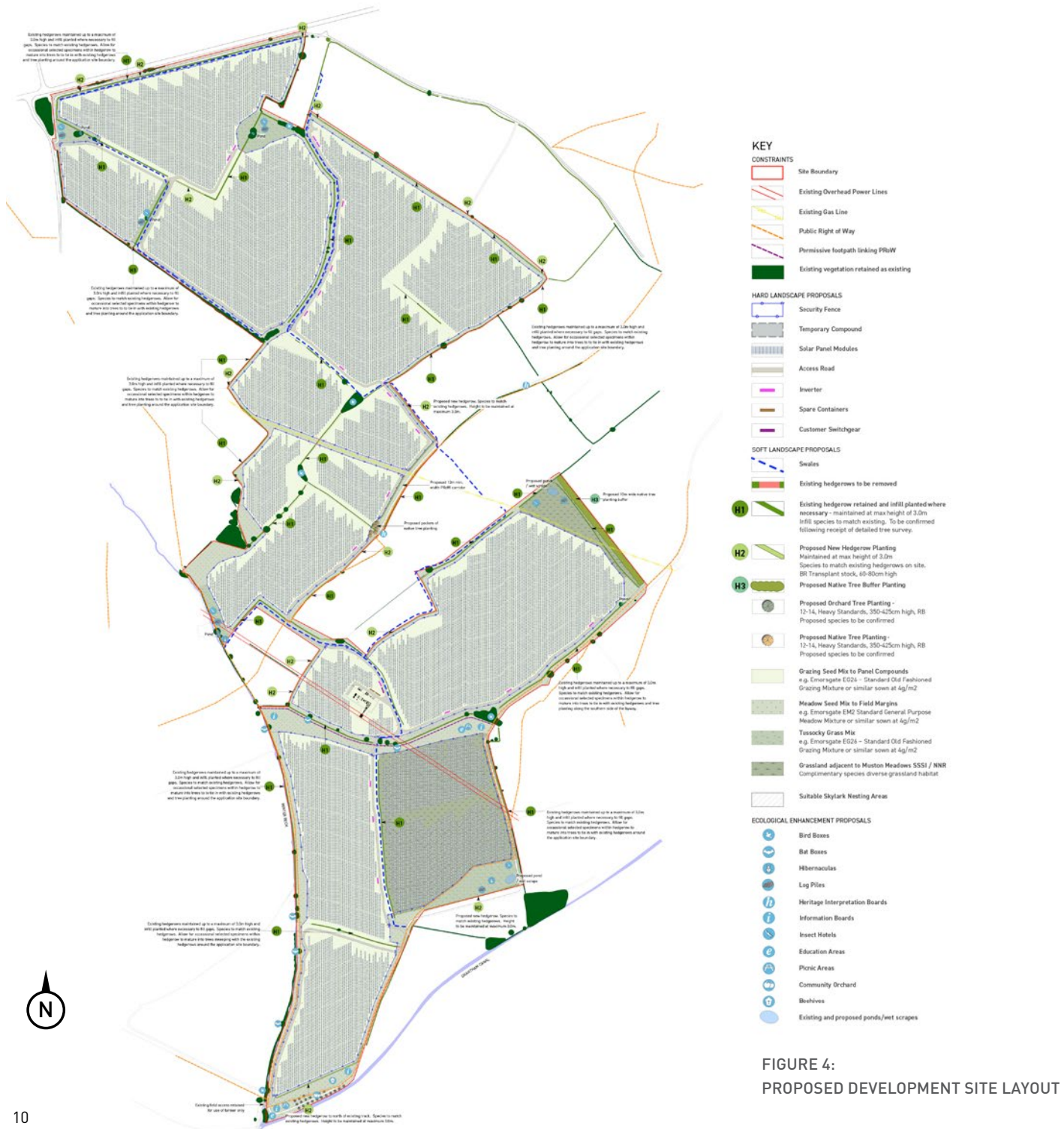


FIGURE 4:  
PROPOSED DEVELOPMENT SITE LAYOUT

## 5. PROPOSED DEVELOPMENT AND ALTERNATIVES

The proposed Solar Farm is anticipated to provide up to 49.9MW of renewable energy, involving solar PV panels and associated infrastructure, and would comprise of the following key components:

- Vehicular access for both construction and operation purposes will be taken via an existing access track off Castle View Road;
- An array of solar PV panels with a maximum height of 3m;
- Production substations including inverters to convert the direct current (DC) electricity generated by the PV panels, into alternating current (AC) for transmission, and transformers;
- Switchgear substations which are the export point for the transmission of electricity;
- A security system to prevent unauthorised access. This will consist of an approximately 2m high post and wire fence enclosing the site, and pole mounted security cameras and infrared sensors at key locations;
- A 132kv substation, Point of Connection (POC) mast and Communications and Weather Station mast; and
- Internal access tracks made of crushed aggregate.

The photovoltaic panels would be mounted on a simple metal framework ('table') to form an 'array' which is driven into the ground, avoiding the need for substantive foundations. The arrays would utilise a tracking system that uses an east/west system (90 degrees in the morning and 270 degrees in the evening) with elevation angles of up to +/- 60 degrees.

It is proposed that the land between and beneath the panels would be planted with species- rich grassland and used for seasonal sheep grazing rather than the current farming practices. Such a process is now common practice across solar farms within the UK.

The Proposed Development Site Layout is shown on **Figure 4**



## Construction, Operation and Decommissioning

The development would export renewable energy to the grid for 40 years. It is envisaged that the construction period would last 6 to 9 months in total. The existing road network can accommodate the extra traffic from construction over this period of time.

At the end of its operational lifetime the development would be decommissioned and all solar panels and supporting structures will be removed from the Site. At this point, the Site could be returned to agricultural use.

## Access

The access into the Application Site will be taken via an existing access track off Castle View Road. The access will be used when the solar farm is in construction and operation. When in full operation, the solar farm will not generate any significant traffic movements, with security and maintenance staff the only likely infrequent visitors who will use the network of internal tracks. Pedestrian access to the solar farm will be restricted for security purposes to prevent theft and vandalism. The routes of the existing public rights of way within the vicinity of the site will be enhanced and maintained at all times linking to the new permissive paths to improve accessibility on site.

## Alternatives

The constraints and opportunities presented by the Application Site have been used to inform the design principles and design evolution, which in turn have helped to refine and structure the Proposed Development including the possible mitigation as well as enhancements. A number of mitigation measures have been implemented during the iterative design process and these relate to the protection of boundary vegetation, location and alignment of access tracks, location of ancillary infrastructure such as the DNO substation, transformers, switchgear substations and AC boxes and the location of the construction compound area.

Agriculture will continue to take place on the Site whilst the panels are operational as sheep will be able to graze the land.

## 6. LANDSCAPE AND VISUAL AMENITY

This assessment has considered the likely significant effects associated with the existing physical landscape and potential changes to its character and the visual amenity. The site lies within an area of relatively flat, agricultural landscape, interspersed with numerous villages and hedgerows set within the Vale of Belvoir. Hedgerow and woodland block vegetation when viewed across a low-lying topography with occasional variations, can combine to limit or expose views towards parts of the site. This effect has been used to positively inform design of a proposed solar development, particularly where there are existing blocks of woodland, and the topography is more consistently flat within the Belvoir Vale.

### Baseline Conditions

The Application Site sits within the expansive gentle 'Vale' landscape and possesses a strong pattern, defined by low, managed hedgerows, surrounding the medium scale arable fields. The Application Site sits on gently undulating land with the central part of the Site rising.

The site is not located within any statutory or non-statutory landscape designations such as a National Park (NP), Area of Outstanding Natural Beauty (AONB) or a local plan Locally Distinctive Area (LDA). The Site is therefore considered to be of relatively low status in the hierarchy of landscape designations. The Proposed Development is designed in such a way as to help comply with the relevant policies relating to landscape character and the need to protect and enhance local landscape features.



LVIA PHOTOMONTAGE (VEIWPOINT 9, YEAR 5)



## Assessment of potential for likely significant effects

The proposals would result in physical effects on the landscape elements within the Site through the introduction of the Proposed Development. The Proposed Development would not require the loss of significant trees, groups or hedgerow. Hedgerow loss would be limited to facilitate construction works which may cause adverse effects, however these would be temporary.

The overall effect of the proposed development on vegetation, land use and topography would range from moderate to minor adverse during construction and at year 1, reducing over time to minor with the implemented landscape strategy.

Following decommissioning at the end of the operational life of the panels, the Application Site can be returned to its current condition. There would be minor long-term benefits to the local landscape character arising from the mitigation measures and the enhancements to landscape features within the Application Site.



## Mitigation and Enhancement

Opportunities to enhance the local distinctiveness, character and biodiversity of the area have been introduced as part of the proposed mitigation measures. These will allow for the infill planting with local native species including trees to soften views towards heritage assets and management of existing hedgerows and grassland.

Proposals include infill of boundary hedgerows, new planting including a species-rich grassland on the land beneath and surrounding the panels which would reinforce and enhance landscape elements, a new community orchard with fruit trees native to local area and provision of outdoor classrooms and picnic areas with information boards as part of a looped walk (**see Figure 4**).

The new and existing landscape features within the Application Site will benefit from an agreed programme of management which would help to ensure their long-term viability within the landscape. Following decommissioning at the end of the operational life of the panels, the Application Site can be returned to its current condition.

## Conclusion

This assessment demonstrates that the Proposed Development could be successfully accommodated within the existing landscape pattern and could be assimilated into the surrounding landscape without causing any long-term significant adverse to the landscape character, visual amenity or existing landscape attributes of the area. The visual assessment shows that visibility would be restricted by a combination of the landform, distance from the Application Site and the enclosure provided by intervening vegetation surrounding the Application Site.

## 7. ECOLOGY

This assessment establishes the likely presence or likely absence of protected or notable species, identifies statutory and non-statutory designated sites for nature conservation in the vicinity of the Proposed Development and evaluates the overall conservation status of the Application Site. The potential for the Proposed Development to have an effect on designated sites and protected and notable species is discussed along with proposed mitigation measures where applicable. Opportunities for biodiversity enhancement are also outlined

The assessment includes a desk study, extended Phase 1 habitat survey, great crested newt HSI assessment, great crested newt e-DNA survey, breeding bird surveys and wintering bird surveys; enabling the determination of the likely ecological effects of the Proposed Development

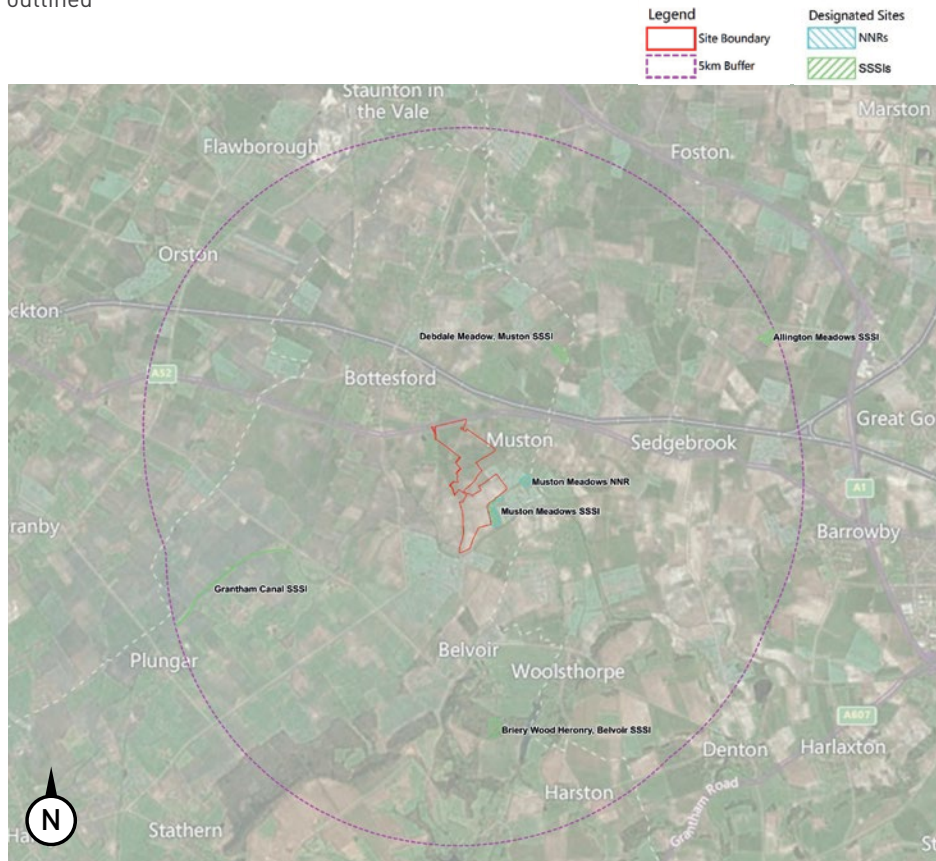


FIGURE 5: STATUTORY DESIGNATED SITE PLAN

# BASELINE CONDITIONS

## Statutory and Non-statutory Designated Sites

The application site does not form part of any statutory designated Site. Six statutory designated sites are located within 5km of the Application Site and two non-statutory Sites are located within 2km of the Application Site, The nearest designated site is Muston Meadows SSSI and NNR located immediately adjacent the Site. **Figure 5 and 6** identifies the statutory and non-statutory designated sites within close proximity to the Application Site.

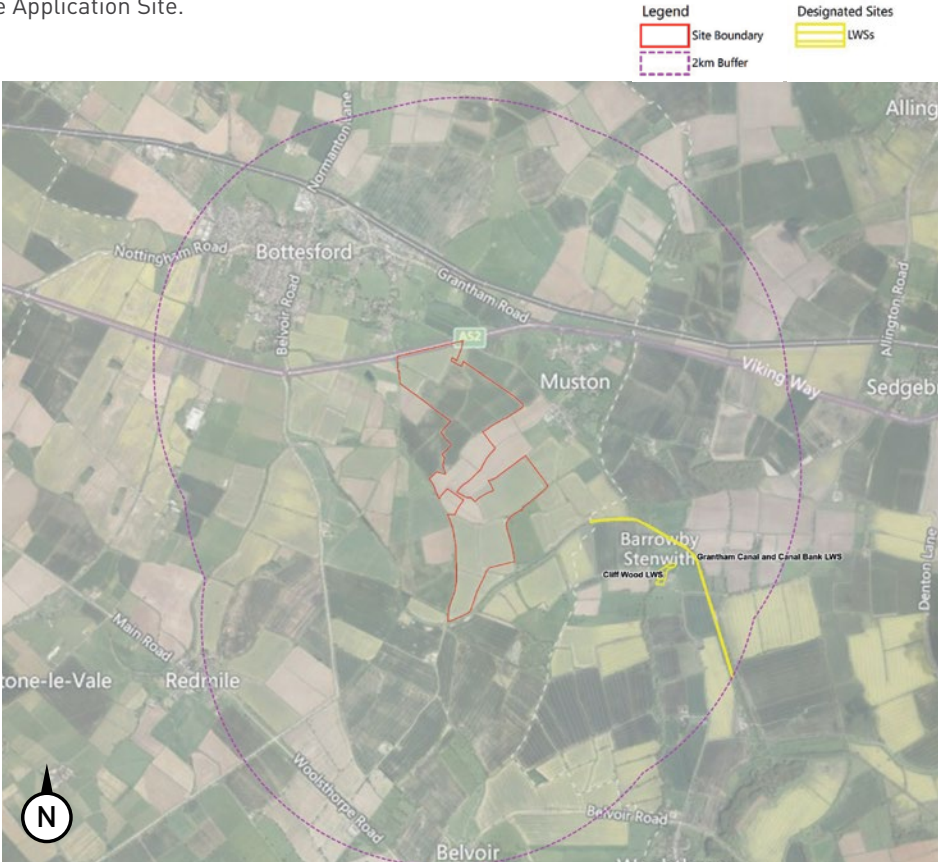


FIGURE 6: NON-STATUTORY DESIGNATED SITE PLAN

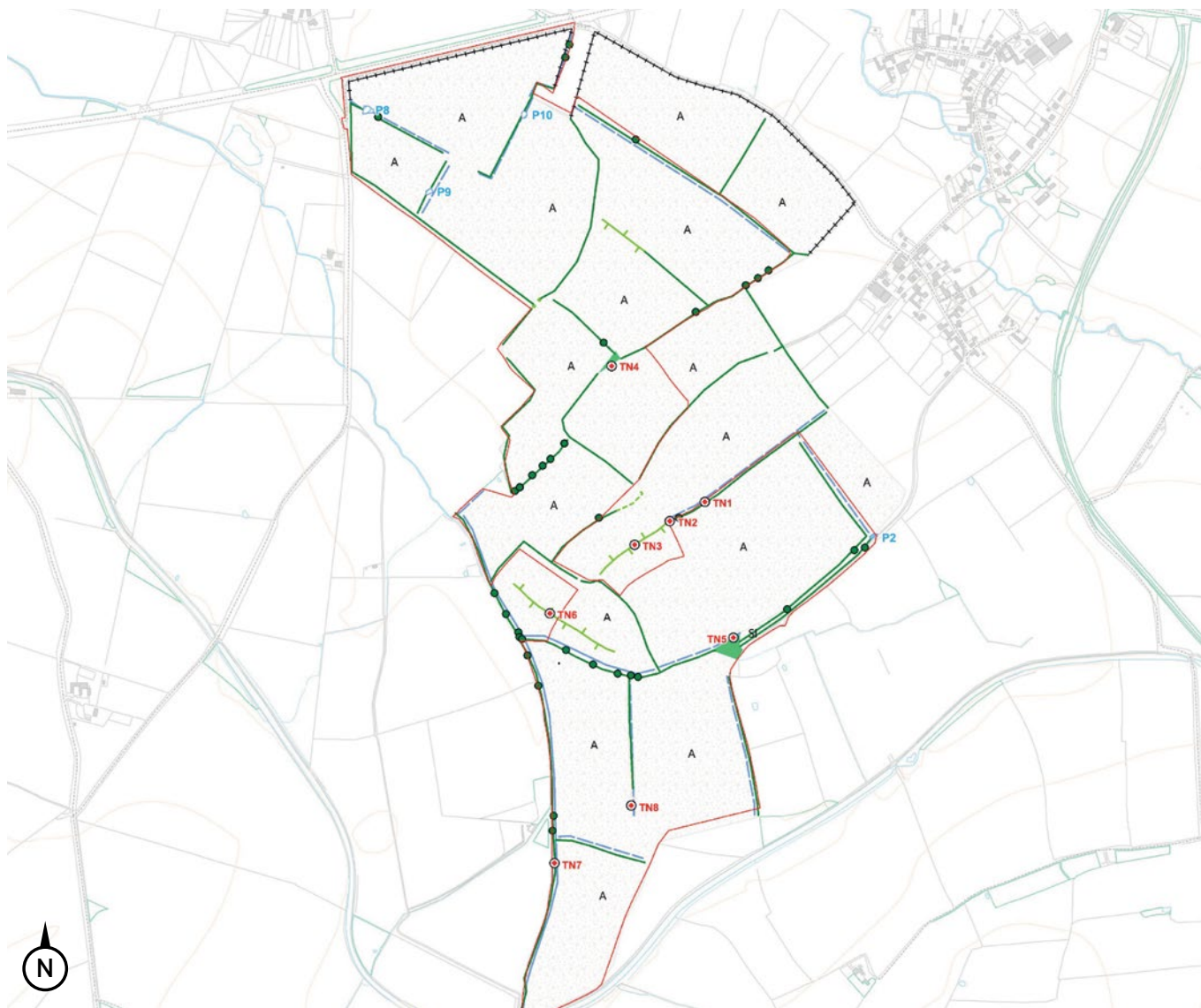


FIGURE 7: PHASE 1 HABITAT PLAN

## Habitats

Habitats within the Application Site are predominantly arable farmland with semi-improved grassland margins. Fields were bounded by species poor hedgerows. Two priority habitats, hedgerows and ponds were present within the Application Site with lowland meadows located adjacent to the Application Site. Four ponds are present within the Application Site, three of which were dry at the time of survey. **Figure 7** identifies habitats and habitat features recorded on Site.

## Species

The suite of surveys undertaken to date on the Site have identified that the Site supports a range of protected and notable species including bats, (roosting, commuting and foraging), otters, water voles, birds, reptiles, amphibians, small mammals and invertebrates. No target wintering bird species were observed during the surveys. One pond on site was suitable for great crested newt but eDNA surveys returned a negative result for the species. Habitat connectivity will be maintained around the Application Site through the retention and protection of hedgerow boundary features.

## Assessment of potential for likely significant effects

With mitigation measures in place, no adverse significant residual effects are anticipated on statutory or non-statutory designed sites or habitats or on protected or notable species including bats, birds, amphibians, or other species.

## Mitigation and Enhancement

Mitigation and enhancement measures will include the following:

- a minimum of five bird boxes erected on mature trees located within the fields and hedgerows within the Site;
- bat roost provision will be made through the inclusion of a minimum of ten bat roost boxes on mature trees located within the fields and hedgerows;
- Creation of refugia and hibernacula for amphibians and reptiles along with new wetland habitat; and
- Creation of 'insect hotels' and the installation of beehives, with pollinators benefitting from the opportunities provided across the extensive new grassland and meadow habitats.

These proposals mean that the Proposed Development achieves a significant biodiversity net gain. The Biological Net Gain (BNG) calculations that have been undertaken based on the Site Layout Plan show that with these design mitigations the Proposed Development will offer a 15.78% BNG gain for hedgerow units and 173.38% gain for habitat units. The habitat creation proposed is well over the minimum 10% BNG required as part of the Environment Act (2021), and will provide significant benefits to improve biodiversity of the area.

## Conclusion

The Proposed Development, following the adoption of the proposed mitigation and enhancement measures, will not have significant adverse effects on any statutory or non-statutory site designated for nature conservation, nor on habitats or protected and notable species.

**KEY**

-  Site
-  HER Monuments
-  HER Monuments
-  HER Monuments

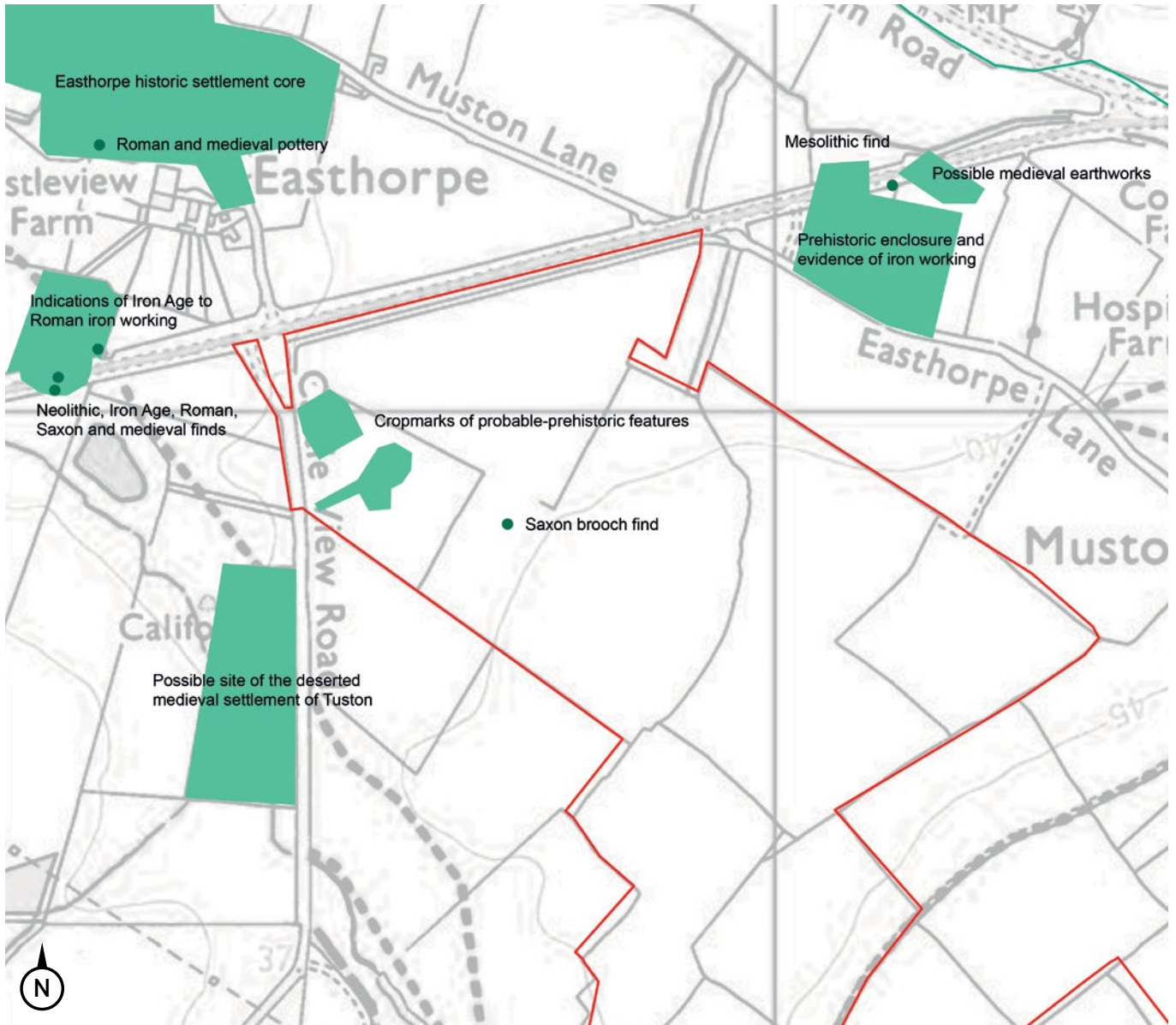


FIGURE 8: SELECTED NON-DESIGNATED HERITAGE ASSETS IN APPLICATION SITE ENVIRONS

## 8. ARCHAEOLOGY AND CULTURAL HERITAGE

An assessment has been undertaken to consider potential effects upon the significance of archaeology and cultural heritage receptors. This includes buried archaeological remains, earthworks, buildings / structures, and all other aspects of the historic environment.

### Baseline Conditions

There are no designated heritage assets located within the Application Site and thereby there will be no direct effect on any asset but within 1km of the application site are two Scheduled Monuments, two Grade II\* Listed Buildings and eight Grade II Listed Buildings. However, the assessment of indirect effects considered assets beyond the 1km study area, including further Listed Buildings, Conservation Areas and a Registered Park and Garden, where necessary.

Known and potential non-designated heritage assets located within the Application Site comprise the buried archaeological remains of a probable-prehistoric ring ditch and up to three sub-rectangular enclosures; and general evidence of historic agricultural activity. There is currently nothing to suggest that any such remains would be of the highest heritage significance.

See **Figure 8** and **Figure 9** for information on Designated and Non-Designated Heritage Assets within close proximity to the Proposed Development.

### Assessment of potential for likely significant effects

No significant effects have been identified, either as a result of direct removal of archaeological remains or indirectly as a result of changes to setting.

**KEY**

- Site
- 1km
- Conservation Areas

**Listed Buildings****Grade**

- ▲ I
- ◆ II
- II\*

- Scheduled Monuments
- Registered Parks and Gardens

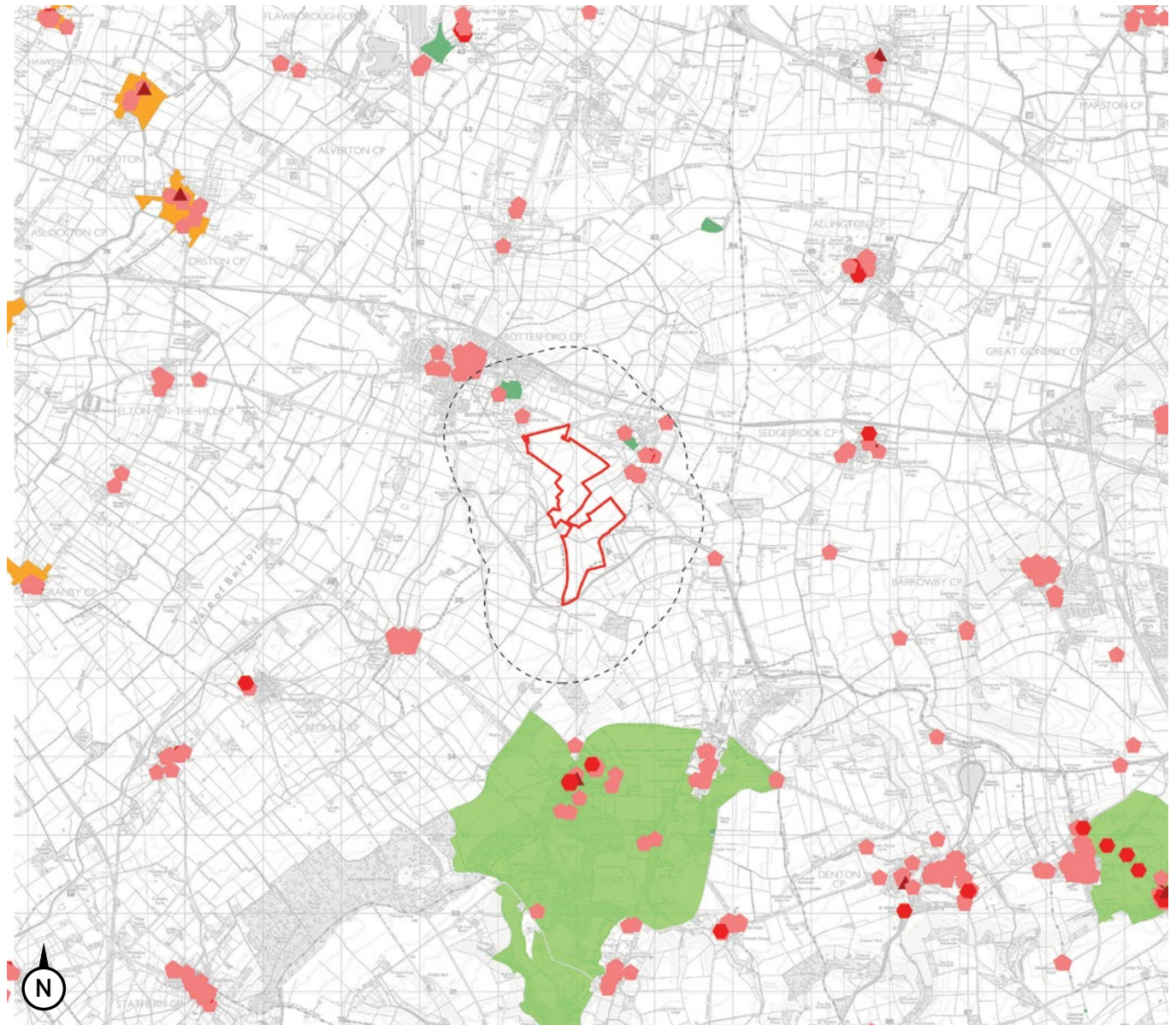


FIGURE 9: DESIGNATED HERITAGE ASSETS IN APPLICATION SITE ENVIRONS



## Mitigation and Enhancement

The Proposed Development includes mitigation by design through the omission of several fields from development to the west of Easthorpe Lane and to the south of the footpath F82. The Proposed Development also includes a Landscape Strategy that preserves hedgerow and tree planting, enhances existing field boundaries or introduces new planting to screen the Proposed Development in views of heritage assets. The design of scheme has ensured areas with solar panels are set back from stretches of any onsite public right of way and include wildflower margins.

Further mitigation may be required post-consent to counter the impact of construction activities upon the buried archaeological resource of the Application Site.

The Proposed Development allows for interpretation of the historic environment to be provided at publicly accessible points in the 'heritage trail'.

## Conclusion

This assessment has identified no significant effects in respect of cultural heritage that would arise from development of the nature and on the scale proposed within the Application Site. The Proposed Development would be acceptable in respect of cultural heritage and archaeology.



## 9. HYDROLOGY AND FLOOD RISK

An assessment has been undertaken of the potential hydrology and flood risk effects of the Proposed Development and in its immediate vicinity. The assessment identifies key hydrology and flood risk sensitivities and addresses the direct and indirect effects of the Proposed Development on these. The assessment of effects is made in the context of both existing conditions (baseline conditions) during construction, operation and decommissioning and predicted conditions accounting for proposed mitigation and enhancement measures.

### Baseline Conditions

The Application Site is entirely greenfield with existing watercourses located to the west and southern parts of the site, as well as existing ditches throughout the development.

The Application Site is located within Flood Zone 1, with a small area within Flood Zone 3 to the far west of the site adjacent to the existing Winter Beck watercourse.

### Assessment of potential for likely significant effects

The likely significant effects of the completed solar farm are beneficial and include a reduction in the risk of silt runoff, improved (i.e. more uniform) flow characteristics in the receiving watercourses and improved runoff quality.

Across the Application Site, the interruption of intensive agricultural activities, particularly arable farming, could have significant beneficial effects on the flood risk and drainage of the site.

### Mitigation and Enhancement

The Contractor will be required to prepare a CEMP which will be reviewed and approved. The CEMP must include measures to prepare for and implement, which will reduce the risk of silt and waste entering the receiving watercourses during construction and until the vegetation has established. Preparation, seeding and protection to encourage early vegetation will be included in the contract. These measures will protect the receiving watercourses from being adversely affected by the works, and on completion will result in improved conditions in the receiving watercourses.

### Conclusion

The assessment has identified that if the mitigation and enhancement strategies are implemented there will be negligible adverse through to moderate beneficial residual significant effects in respect of flood risk and drainage that would arise from operation of the development.

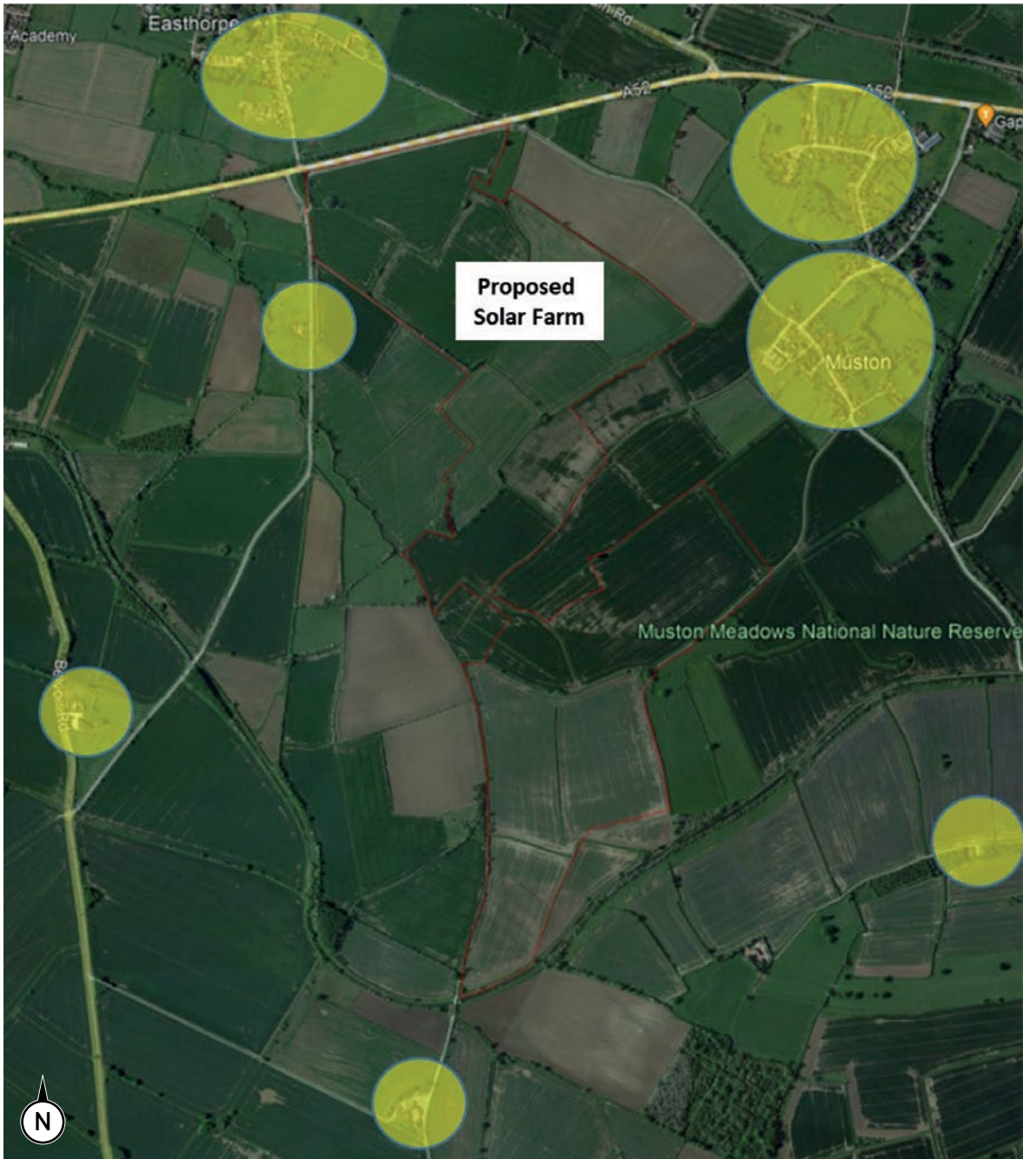


FIGURE 10: NOISE SENSITIVE RECEPTORS

## 10. NOISE

A noise assessment has been undertaken to identify potential impacts associated with the operation of the Proposed Development. The assessment has considered the proposed layout and equipment to be installed and operated on the site.

The assessment has been based upon ensuring potential adverse noise impacts are minimised, based upon the requirements of the relevant British Standard and World Health Organisation guidance.

### Baseline Conditions

The Proposed Development is within a rural location, with noise levels in the surrounding area principally influenced by traffic travelling along the A52. Existing baseline noise levels at the surrounding noise-sensitive receptors have therefore been assumed to be low and influenced by local road traffic and noise from the surrounding environment.

### Assessment of potential for likely significant effects

No adverse noise impacts have been identified during the construction of the Proposed Development. Appropriate control measures would be adopted during the construction to ensure noise levels associated with the construction operations are minimised.

Noise levels associated with the operation of the Proposed Development have been calculated and assessed on the basis of the proposed equipment. The calculations and assessment concluded that there would be no adverse noise impacts at surrounding noise-sensitive receptors. See **Figure 10** to highlight locations of noise sensitive receptors.

### Mitigation and Enhancement

No additional noise mitigation measures have been identified in addition to that which has been incorporated into the design.

### Cumulative and In-combination Effects

No cumulative noise impacts have been identified as a result of the operation of the Proposed Development.

### Conclusion

In summary, with appropriate mitigation and control measures adopted during the construction and within the design of the Proposed Development, potential noise impacts and effects would be minimised and would ensure that no residual adverse noise impacts at the surrounding noise sensitive receptors.

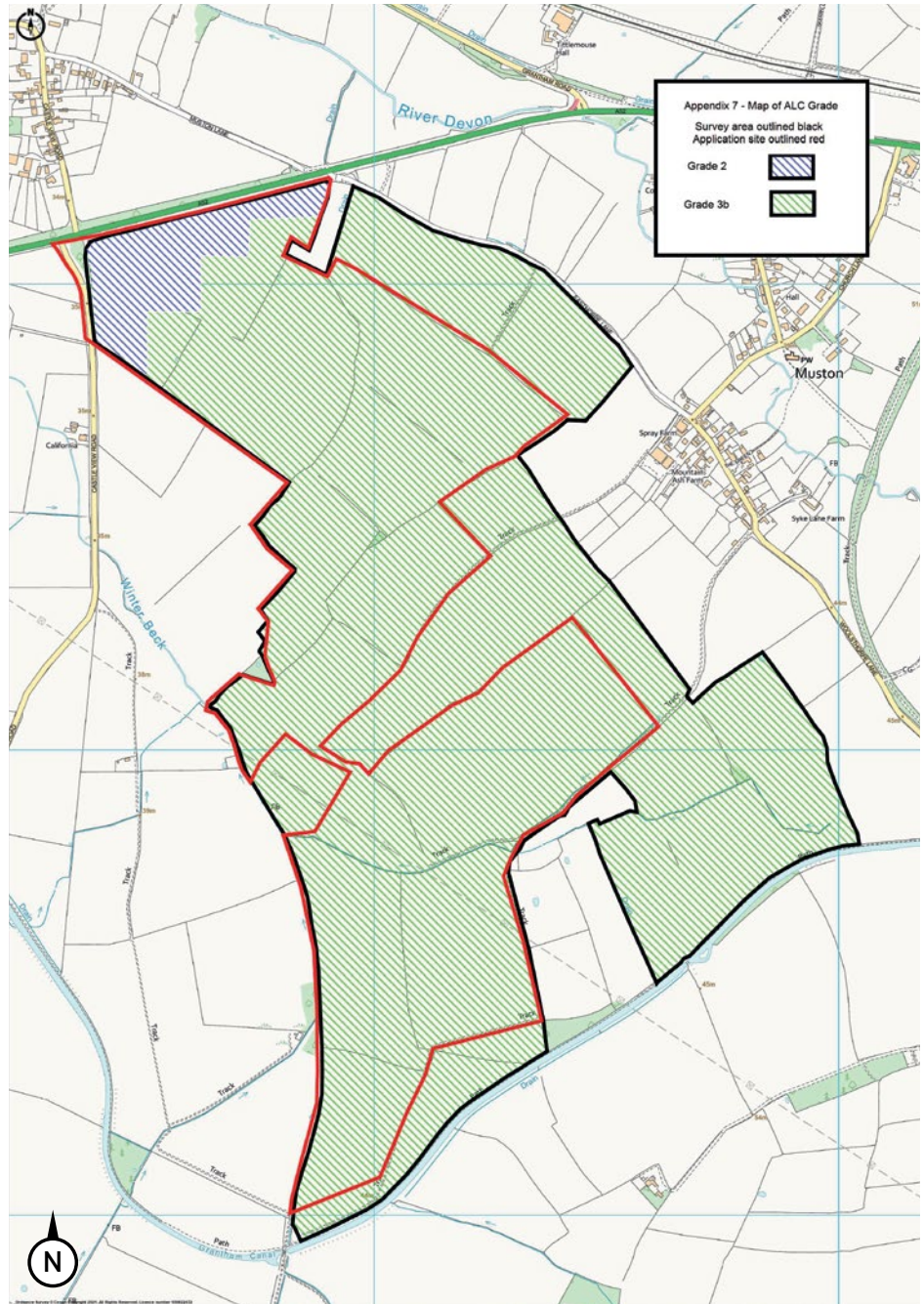


FIGURE 11: MAP OF ALC GRADE

# 11. AGRICULTURE

Agricultural land in England is graded between 1 and 5, depending on the extent to which physical or chemical characteristics impose long-term limitations on agricultural use.

The principal physical factors influencing agricultural production are climate, site and soil and the interactions between them which together form the basis for classifying land into one of 5 grades; grade 1 being of excellent quality and grade 5 being very poor. Grade 3 land, which constitutes approximately half of all agricultural land in the UK is divided into 2 subgrades – 3a and 3b.

Land which is classified as Grade 1, 2 and 3a in the Agricultural Land Classification (ALC) system is defined as Best and Most Versatile (BMV) agricultural land. This section assesses the agricultural resources that may be impacted by the proposed development, specifically the quality of the agricultural land and the impacts on the use of the land.

## Baseline Conditions

An assessment of the Site has determined that that 7.3ha (7.05% of the site) is Grade 2 land and 96.2ha (92.95% of the site) is Subgrade 3b. See **Figure 11** highlighting ALC grade of the Application site.

## Assessment of potential for likely significant effects

The effects of the development on the agricultural land holding are mainly during the construction phase. During the construction phase the whole Site will be lost to agricultural use for a period of approximately 6-9 months. Based on the nature of the development less than 5% of the land (4.31ha) will be temporarily unavailable to agriculture resulting in a temporary, fully reversible

change and a minor adverse impact to the agricultural resource. Once the Site is operational it is the intention to allow sheep grazing, of which over 95% of the Site area is available for sheep grazing use, and so an agricultural use will be retained throughout the operation of the Site.

## Mitigation and enhancements

There is no actual loss of agricultural land resource as the development is temporary for a period of 40 years, and able to revert to agriculture following decommissioning of the solar farm. During the Proposed Development's lifetime, the area on which the solar panels are being placed can still be grazed by sheep.

By following an appropriate soil management plan the effect of site preparation and construction on the soil resource will remain short term, reversible, local and of negligible adverse significance.

## Cumulative and in-combination effects

The cumulative and in combination effects of the project with the four existing or proposed solar farms in the 5km study area increase the temporary land loss from agriculture to 10.43ha. Due to the local, temporary, fully reversible nature of the developments, there is negligible adverse significance.

## Conclusions

The majority of the Site is not BMV land with only 7.05% of the land surveyed being Grade 2. Agricultural practices can continue to take place on the land once the solar panels are operational, which is a further diversification for the farm holding. The project results in a temporary, fully reversible, moderate beneficial impact to the soil resource which due to the nature of the development can be fully reversed by the removal of the panels.

## 12. GLINT AND GLARE

An assessment has been undertaken to describe the baseline conditions, assessment approach, and the potential glint and glare effects from the Proposed Development upon surrounding road users and dwellings.

### Baseline Conditions

The assessed 1km area surrounding the Proposed Development is rural with some dwellings and roads. The following have been identified:

- Residential dwellings;
- The A52 Road; and
- Castle View Road.

### Assessment of potential for likely significant effects

Effects upon road users are forecasted upon a 550m section of the A52, two dwellings to the west and fifteen dwellings to the east of the Proposed Development due to the proximity to the reflecting solar panels.

Effects under baseline conditions are noted as 'low' to 'medium' upon road users of Castle View Road and 550m stretch of the A52. The magnitude of effect upon two dwellings to the west of the Proposed Development and fifteen dwellings to the east of the Proposed Development is classified as 'Medium' under baseline conditions.

### Mitigation and enhancements

To eliminate the effects towards the road and dwelling receptors, mitigation has been included within the landscaping proposals and will be implemented to obscure the reflecting solar panels from view. The landscaping proposals will obstruct views of the reflecting solar panels, the permanent magnitude of effect is reduced to 'Negligible' to 'Minor Adverse' for both roads and dwellings, which are not significant.

### Conclusions

In summary, with appropriate mitigation and control measures adopted during the construction and within the design of the Proposed Development, potential glint and glare impacts and effects would be minimised and would ensure that effects are 'Negligible' to 'Minor Adverse' upon nearby dwellings and surrounding roads, which are not significant.



## 13. SUMMARY

The aim of this ES has been to assess the 'likely significant effects' of the Proposed Development in accordance with the Town and Country Planning EIA Regulations (2017). Detailed assessments with respect to pertinent environmental topics have therefore been undertaken in accordance with definitive standards and legislation where available. The ES forms part of the planning application documentation submitted to Melton Borough Council and will inform their decision-making process.

The design process, including siting of the solar panels, has been informed by the detailed environmental assessments so to limit any adverse effects. As a result of this process, with mitigation in place, no significant adverse effects have been identified.

The Proposed Development is also considered to provide beneficial effects, in particular the generation of renewable energy for distribution onto the National Grid through the utilisation of energy. This aims to address the local and national renewable energy targets and ultimately reduce the reliance on fossil fuel-based sources as a form of energy production.

In conclusion, the ES demonstrates that the design of the Proposed Development and its construction has taken into account the potential environmental effects and where necessary mitigation measures form an integral part of the scheme so to ensure that the environment is suitably protected and any impacts from the Proposed Development are minimised.

It is therefore considered that there are no overriding environmental constraints which would preclude the Proposed Development.

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DESIGN



ENVIRONMENT



PLANNING



ECONOMICS



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