9 SUMMARY

9.1 INTRODUCTION

9.1.1 This Chapter forms the summary of the Environmental Statement ("ES") which addresses any potential significant environmental effects as a result of the Proposed Development at land within the Belvoir Estate, Grantham, NG32 1PE (the "Application Site" or "Site").

9.1.2 This ES has been prepared on behalf of JBM Solar Projects 10 Ltd (the "Applicant") in support of a planning application seeking planning permission for a new Solar Farm (the "Proposed Development").

9.1.3 The Application Site lies within the administrative area of Melton Borough Council (MBC).

9.1.4 The ES has been coordinated and managed by Pegasus Group.

Availability and Comments

9.1.5 Additional copies of the Non-Technical Summary (NTS) (no charge) and ES Volume 1 (£150) are available from Pegasus Group, Pegasus House, Querns Business Centre, Whitworth Road, Cirencester, Gloucestershire, GL7 1RT. Copies of all documents can be obtained on CD for £10. Comments on the planning application should be sent to FDDC Planning Department.

9.2 THE ENVIRONMENTAL STATEMENT – SCOPE AND METHODOLOGY

9.2.1 The EIA Regulations require that any proposed development falling within the categories set out within Schedule 2 of the EIA Regulations should be considered as 'EIA Development' where the development is considered likely to have significant effects on the environment by virtue of such factors as its nature, size or location (Regulation 2).

9.2.2 The Proposed Development falls within Schedule 2 development, which is development likely to have significant effects on the environment by virtue of factors such as its nature, size or location under the category of "Industrial installations for the production of electricity, steam and hot water" (Schedule 2, 3a) as described in the EIA Regulations.

9.2.3 In order to determine the scope of an EIA, the EIA Regulations make provision for, but do not statutorily require, an applicant to request that the local planning authority (LPA) provide a written opinion as to the information to be provided within the ES.

9.2.4 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.

9.2.5 Accordingly, this ES has addressed those environmental issues which are considered pertinent and that could potentially result in "likely significant effects" as required by the EIA Regulations.

9.2.6 Each technical chapter has identified 'likely significance effects' using a pre-determined assessment criteria which often, but not always, reflects the relationship between the magnitude or severity of an effect; and the sensitivity, importance or value of the resource or receptor.

9.2.7 Where necessary, mitigation measures have been proposed to ameliorate effects specific to an environmental theme, many of which are purposely incorporated into the design of the proposals and are highlighted as 'mitigation by design'. 'Additional mitigation' measures may also be proposed, which may be subject to appropriate planning conditions or obligations.

Cumulative and in combination effects

9.2.8 The ES responds to the requirement in the Regulations to assess the cumulative effects of the Proposed Development. Within EIA, cumulative effects are generally considered to arise from Inter-project Cumulative Effects (The combined effects of development schemes which may, on an individual basis be insignificant but, cumulatively, have significant effects); and Intra-project Cumulative Effects (the combined effect of individual effects on a single receptor where deemed potentially significant).

9.2.9 The effects of the Proposed Development in combination with the following developments have been considered within 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.

9.3 APPLICATION SITE AND CONTEXT

9.3.1 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. The Proposed Development will be accessed via the existing access point on Castle View Road.

9.3.2 The Site is not subject to any statutory designations and there are no designated heritage assets within the Site. The Site does not fall within any statutory landscape designations.

9.3.3 There are Public Rights of Way located within and in close proximity to the Site.

9.3.4 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.

9.3.5 No designated heritage assets are located within the Site boundary; however, a number of assets are located in close proximity to the proposed Site.

9.4 THE PROPOSED DEVELOPMENT AND ALTERNATIVES

9.4.1 This ES is available for public viewing during normal office hours at the MBC Planning Department. Comments on the planning application should be forwarded to:

Planning Department
Melton Borough Council
Parkside Station Approach,
Burton Street,
Melton Mowbray,
Leicestershire
LE13 1GH

9.5 ASSESSMENT METHODOLOGY

9.5.1 This chapter explains the methodology used to prepare each chapter of this ES and describes its structure and content. In particular, it sets out the process of identifying and assessing the likely significant environmental effects of the Proposed Development.

9.5.2 In accordance with the EIA Regulations, this ES comprises the following information:

- A description of the development proposed comprising information about the Site including the nature, size and scale of the development;
- The data necessary to identify and assess the main effects which the development is likely to have on the environment;
- A description of the likely significant effects of the Proposed Development covering, direct effects and any indirect, secondary, cumulative, short, medium and long term, permanent and temporary, positive and negative effects, explained by reference to the Proposed Development's possible effect on: human beings, flora, fauna, soil, water, air, climate, cultural and archaeological heritage, landscape and the interaction between any of the foregoing material assets (as appropriate);
- Where significant adverse effects are identified with respect to any of the foregoing, mitigation measures will be proposed in order to avoid, reduce or remedy those effects; and
- A summary in non-technical language of the information specified above.

9.6 THE PROPOSED DEVELOPMENT AND ALTERNATIVES

9.6.1 The Proposed Development is a solar farm which will generate up to 49.9MW of renewable energy, involving solar PV panels and associated infrastructure.

9.6.2 The proposed solar farm will involve the temporary change of use of the land but, due to the time restricted nature of the development, the agricultural use will be retained in the long term. The Site will also be capable of dual use farming during its operational period, with small livestock able to graze the land between and amongst the panels.

9.6.3 The layout of the scheme is shown on **Figure 1.4** and includes:

- 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
- Internal access tracks made of crushed aggregate.

Alternatives

9.6.4 The EIA Regulations (Schedule 4, Part I (2)) require for inclusion in an ES: "A description of the reasonable alternatives (for example in terms of development design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects".

9.6.5 The 'no development' alternative would result in the Application Site being maintained in its current state and the existing baseline conditions prevailing. It is considered that the no development alternative would result in the loss of an opportunity to provide a new renewable energy development and contribute to sustainable development in accordance with local and national policy.

9.6.6 The Site has been selected based on a number of factors to limit effects as far as possible. Furthermore, the application has taken into consideration various environmental constraints in the design of the proposal in order to avoid adverse effects.

9.7 LANDSCAPE AND VISUAL

Introduction

9.7.1 This chapter of the ES considers the landscape and visual effects of the Proposed Development. This chapter assesses the likely significant effects associated with the existing physical landscape and potential changes to its character and the visual amenity.

9.7.2 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

Landscape Character, Elements and Features Summary

9.7.3 The Application Site falls entirely within the Landscape Character Area (LCA) '1 Vale of Belvoir', which covers much of the immediate surrounding landscape, to the north of the village of Bottesford and to the south of the A52, covering parts of the southern and western part of the study area. Nearby Bottesford and village of Muston fall within the LCA 2 Bottesford. Belvoir Castle falls within LCA 9 Parkland.

9.7.4 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 nucleated villages of Bottesford and Muston, including their churches are prominent on the skyline of the surrounding landscape. Grantham Canal is present to the west and south.

9.7.5 The Application Site is presently in arable uses, consistent with much of the Vale of Belvoir, and it is therefore a common landscape feature representing typical land uses around Bottesford and Muston. Field boundaries are generally delineated by well-managed low hedgerows, forming a strong field pattern. The hedgerows are managed in a manner compatible with arable uses and are well-trimmed and low growing with some gaps or missing sections. The Application Site sits on gently undulating land with the central part of the Site rising.

9.7.6 In order to assist with understanding the potential visibility of the scheme from the surrounding landscape, a digital Screened Zone of Theoretical Visibility (SZTV) model has been created for the Site. For the purposes of this assessment, a series of representative publicly accessible views from the area surrounding the Site have been identified through desk-top and field studies and consultation. The representative photoviews demonstrate the relative visibility of the Application Site (and existing features or development on it) and its relationship with the surrounding landscape and built form.

9.7.7 The identified visual receptors (residents, road users, PRoW users and designated heritage asset receptors) include:

- PRoW within and around the edges of the Site.
- Views from the edge of Bottesford and Muston.
- Beacon Hill, local high point. High ground to the south at the edge of Belvoir registered park and gardens.

Likely Significant Effects

Landscape Character, Elements and Features Summary

9.7.8 The effect of the Proposed Development on the 'Vale of Belvoir' character area would be moderate adverse at year 1 due the intrusion of the proposed development into the 'gentle vale' landscape, disruption to arable field pattern, and loss of small sections of hedgerow, reducing to low at year 15 with the benefit of landscape proposals.

9.7.9 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.

9.7.10 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.

9.7.11 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.

Visual Amenity Summary

9.7.12 Views of construction works, and the Proposed Development (at year 1) experienced from PRoW footpath F80/3 (Viewpoint 1), footpath F82/3 (Viewpoint 2), byway F85b/4 (Viewpoint 3), byway F85b/2 (Viewpoint 4), byway F85b/1 (Viewpoint 5) and footpath F74/1 (Viewpoint 12) would cause adverse effects on these high sensitivity receptors. This is due to the extent of the Proposed Development visible and proximity to the Proposed Development particularly in the case of the PRoW which pass through or along the edges of the Site.

9.7.13 The landscape measures incorporated into the layout would at Year 15 improve potential effects on views. Proposed hedgerow enhancement and management would reduce the effect on views experienced by these footpath users; however, the character of these views would be changed from open views to more contained.

9.7.14 Whilst the Site is not within a designated landscape, there are views from elevated areas to the south around Belvoir Castle registered park and gardens. The Castle itself is surrounded by substantial mature vegetation limiting views out. There are several footpaths and bridleway routes including the Jubilee Way.

9.7.15 Given the high sensitivity of PRoW and Jubilee Way users and receptors close to the Castle and across the elevated ridge, the extent of the long-distance view and the complex landscape character, solar panels within the Site have the potential to appear as a noticeable feature. Potential mitigation of views from elevated areas north of this may be less effective during winter months when vegetation is out of leaf increasing visibility due to the topography of the Site and elevation of views resulting in a moderate effect on high sensitivity receptors, however over time with maturing intervening vegetation this effect may be reduced further. Photomontage Viewpoint 9 illustrates that on balance the Site would represent only a small part of the wider view from this distance.

9.7.16 Viewpoints from PRoWs within the Proposed Development layout boundary have not been included within the selection of views as it is assumed that there would be a major effect on this high sensitivity group of receptors with such a direct view. Despite any mitigation measures there would still be a high to medium magnitude of change at all stages which would result in major effects.

Mitigation and Enhancement

9.7.17 Proposals include infill of boundary hedgerows, which would reinforce and enhance landscape elements. Opportunities to enhance the local distinctiveness, character and biodiversity of the area have been introduced as part of the proposed mitigation measures and are outlined within the EES which accompanies the application. These will allow for the infill planting of hedgerow and trees with local native species and implementation and management of existing hedgerows and grassland beneath the panels.

Conclusion

9.7.18 It is concluded that the Proposed Development would have limited harm on the existing positive landscape elements associated with the Application Site. The existing landform of the Application Site would remain largely unchanged except possibly at a localised level during the construction and decommissioning period.

9.7.19 This assessment has demonstrated that the actual area that the Proposed Development would be visible from is considerably smaller than that identified by the SZTV. 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.

9.7.20 The assessment of viewpoints and associated receptors (including high and medium sensitivity receptors) concludes that the Proposed Development would cause limited long-term effects. Effects would be predominantly limited to less than 1km of the Application Site with the visual effects on completion being mostly limited to footpaths within and around the edges of the Site, with direct views of the Proposed Development.

9.7.21 This chapter has identified that if the mitigation and enhancement strategies are implemented there will be moderate residual significant adverse effects in respect of landscape and visual impacts that would arise from operation of the development.

9.7.22 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 harm to the landscape character, visual amenity, or existing landscape attributes of the area.

9.8 CULTURAL HERITAGE

Introduction

9.8.1 This chapter has considered potential effects upon the significance of cultural heritage receptors. Buried archaeological remains, earthworks, buildings / structures, and all other aspects of the historic environment have all been considered.

Baseline Conditions

9.8.2 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.

9.8.3 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.

9.8.4 Likely Significant Effects

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

9.8.6 The magnitude of impact on a Heritage Asset or its setting is defined by the NPPF as 'harm'. An impact (harm) may arise from a direct effect on the significance of a heritage asset through an alteration to its fabric of via a change in setting from a change in view of it, or how it is experienced.

9.8.7 It is also possible that development proposals will cause no harm, thereby preserve a Heritage Asset and / or its setting.

9.8.8 The NPPF articulates level of harm as follows:

- Substantial harm or total loss of significance.
- Less than substantial harm.

9.8.9 An assessment of impact or harm is a professional judgement but must have regard the definitions of the NPPF and it has been clarified in a High Court Judgement of 2013 that Substantial Harm would be harm that would *"have such a serious impact on the significance of the asset that its significance was either vitiated altogether or very much reduced"*[1]; Less than Substantial Harm is thereby a harm of a lesser level than that defined above.

9.8.10 Mitigation and Enhancement

9.8.11 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 include a Landscape Strategy that preserves and enhances existing field boundaries or introduces new planting to screen the Proposed Development in views of heritage assets. The panels have also been stepped back from footpath F82 to ensure that longer distance views northwards toward Bottesford and the Church of St Mary are retained.

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

9.8.13 The Proposed Development allows for interpretation of the historic environment to be provided at publicly accessible points.

9.8.14 Conclusion

9.8.15 This chapter has identified no significant residual effects in respect of cultural heritage that would arise from development of the nature and on the scale proposed within the Application Site.

9.8.16 The Proposed Development would be consistent with the provisions of the Planning (Listed Buildings and Conservation Areas) Act (1990) Sections 66(1) and 72(1), the NPPF (2021) paragraphs 200–203, and Policy EN13 of the Melton Local Plan (adopted 2018).

9.8.17 The Proposed Development would be acceptable in respect of cultural heritage and archaeology.

9.9 FLOOD RISK AND DRAINAGE

Introduction

9.9.1 This chapter presented an assessment of the potential hydrology and flood effects of the Proposed Development at Belvoir Solar Farm within the Application Site and in its immediate vicinity.

9.9.2 The chapter identified key flood risk and drainage sensitivities and addressed the effects of the Proposed Development on these. The assessment of effects was made in the context of both existing conditions (baseline conditions) during construction,

[1] Bedford Borough Council v Secretary of State for Communities and Local Government [2013] EWHC 2847 (Admin), para. 25.

operation and decommissioning and predicted conditions accounting for proposed mitigation measures.

Baseline Conditions

9.9.3 The 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.

9.9.4 The 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.

Likely Significant Effects

9.9.5 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.

9.9.6 The risk of silt runoff is high during construction, when the vegetation and soils can be damaged by traffic resulting in the potential for silt runoff. This is exacerbated if works are undertaken during wet weather.

Mitigation and Enhancements

9.9.7 The Contractor will be required to prepare a CEMP which will be reviewed and approved.

9.9.8 The CEMP must include measure 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.

9.9.9 Preparation, seeding and protection to encourage early vegetation will be included in the contract.

9.9.10 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

9.9.11 The consequence of the development, with the mitigation measures incorporated to reduce silt and debris mobilisation during the construction and until the vegetation has established, will be to deliver improved conditions in the receiving watercourses, and improved conditions for the designated sites.

9.9.12 The proposed swales and/or filter trenches adjacent to internal access roads on site will slow surface water flows and improve water quality on site.

9.9.13 The completed solar farm will become a haven for wildlife and enhance biodiversity in the area and downstream, as has been demonstrated on other solar farms delivering major beneficial improvements.

9.9.14 This chapter 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.

9.10 ECOLOGY

Introduction

9.10.1 The assessment compiles information from 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

9.10.2 The assessment establishes the likely presence of protected or notable species, identifies 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 effects on identified ecological features including designated sites and protected and notable species is assessed in line with current guidance, and appropriate mitigation and enhancement measures are described.

Baseline Conditions

9.10.3 Desk study and habitat and species surveys have been undertaken to establish the presence or potential presence of protected and notable species and inform the assessment.

9.10.4 Statutory and non-statutory designated sites were identified within a 5km radius of the Application Site using the (MAGIC) website, along with the JNCC and Natural England websites. Information was received from LERC of protected and notable species and non-statutory designated sites within 5km of the Application Site boundaries.

9.10.5 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.

9.10.6 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 the Application Site. Four ponds are present within the Application Site, three of which were try at the time of survey.

9.10.7 No target wintering bird species were observed during the surveys and therefore it is considered the Site is not important to wintering birds. The number of breeding bird territories within the Site was generally low and of common and widespread species typical of the farmland habitats in the locality.

9.10.8 Three trees within the Application Site were assessed as having potential to support roosting bats from ground level, however these will remain unaffected by works. Boundary habitats that are of value to foraging and commuting bats will also be retained throughout works.

9.10.9 The Winter Beck may provide suitable habitat for commuting otter and water vole however will be unaffected by works.

9.10.10 One pond on site was suitable for great crested newt but eDNA surveys returned a negative result for the species. Arable habitats within the Application Site are generally unsuitable for this species and are similarly unsuitable for common species of reptile.

9.10.11 The retention and enhancement of hedgerow habitat and the creation of grassland including meadow areas will benefit a range of species including birds, bats,

reptiles, amphibians, small mammals and invertebrates. Habitat connectivity will be maintained around the Application Site through the retention and protection of hedgerow boundary features.

Likely Significant Effects

9.10.12 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

9.10.13 Mitigation and enhancement measures will include the following:

- a minimum of seven bird boxes, including two owl 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.

9.10.14 The Biological Net Gain calculations that have been undertaken for the Proposed Site Layout Plan show that with these design mitigations the Proposed Development will offer a 173.38% increase in habitat units and 15.78% increase in hedgerow units.

Conclusion

9.10.15 With the proposed mitigation and enhancement measures in place, the Proposed Development is not considered to have any residual significant effects on any statutory or non-statutory site designated for nature conservation, nor on habitats or protected and notable species.

9.10.16 The BNG calculations are showing an 173.38% increase in habitat units and 15.78% in hedgerow units from the Proposed Development compared to the current use of the Site. This level of increase is a minor to moderate benefit and would be deemed a residual beneficial significant effect of the Proposed Development.

9.11 GLINT AND GLARE

Introduction

9.11.1 This Chapter describes the baseline conditions, assessment approach, and the potential glint and glare effects from the Proposed Development upon surrounding road users and dwellings.

Baseline Conditions

9.11.2 The assessed 1 kilometer area surrounding the Proposed Development is rural with some dwellings and roads. The following have been identified and modelled in detail:

- Residential dwellings;
- The A52 road; and

- Castle View Road

Likely Significant Effects

9.11.3 Significant effects under baseline conditions are predicted for a 550 metre stretch of the A52 road, two dwellings to the west and fifteen dwellings to the east of the Proposed Development.

9.11.4 The mitigation requirements identified within the technical assessment have been incorporated into the landscape plans.

9.11.5 Remaining significant impacts are not predicted following implementation of these mitigation measures (see Appendix 6.1).

Mitigation and Enhancements

9.11.6 Landscaping screening is proposed and has been designed to mitigate the potential impacts that are possible under baseline conditions.

Conclusion

9.11.7 The Proposed Development is predicted to have a 'Moderate Adverse' effect upon surrounding roads and dwellings under baseline conditions. The proposed mitigation measures are such that this will reduce to permanent residual 'Negligible' effect for roads and permanent residual 'Minor Adverse' for dwellings, which are not significant.

9.12 NOISE

Introduction

9.12.1 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.

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

Baseline Conditions

9.12.3 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.

Likely Significant Effects

9.12.4 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.

9.12.5 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.

Mitigation and Enhancements

9.12.6 No additional noise mitigation measures have been identified.

Conclusion

9.12.7 In summary, with appropriate control measures adopted during the construction, potential noise impacts and effects would be minimised and would ensure that no residual adverse noise impacts at the surrounding noise sensitive receptors during construction or operation.

9.13 AGRICULTURAL RESOURCES

Introduction

9.13.1 This section assesses the agricultural and soil 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

9.13.2 An Agricultural Land Classification report has been produced by Amet Property Ltd and is attached as Appendix 8.1.

9.13.3 The ALC report sets out that 7.3ha (7.05%) of the Site is grade 2 and 96.2ha (92.95%) of the Site is land Grade 3b.

Likely Significant Effects

9.13.4 During the construction phase the whole Site will be lost to agricultural use for a period of approximately 6-9 months. The temporary nature of this change results in a negligible impact to the agricultural resource and the soil resource.

9.13.5 Based on the nature of the development, during the operational phase 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. The perennial green cover leading to increased organic matter in the topsoil result in a temporary, reversible, moderate beneficial impact to the soil resource.

9.13.6 During the decommissioning phase the whole Site will be lost to agricultural use for a period of approximately 6-9 months. The temporary nature of this change results in a negligible impact to the agricultural resource and the soil resource.

Mitigation and Enhancements

9.13.7 There is no effective mitigation for the loss of best and most versatile agricultural land, and there is no actual loss of agricultural land resource.

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

Conclusion

9.13.9 The project results in a temporary, fully reversible, minor adverse impact to the agricultural resource and a temporary, fully reversible moderate beneficial impact to the soil resource.

9.14 CONCLUSION OF ES

9.14.1 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 (MBC) and will inform their decision-making process.

9.14.2 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.

9.14.3 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.

9.14.4 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.

9.14.5 It is therefore considered that there are no negative residual significant effects that are overriding which would preclude the Proposed Development. This development will offer a residual significant benefit to the soil structure of the agricultural land as it will not be intensively arable farmed over the lifetime of the Proposed Development.

9.14.6 The Proposed Development will offer a further beneficial residual significant effect. This effect is to the local biological value of the Site. The design mitigations that are proposed through new planting and alteration of the management of the land use on the Site offer a Biological Net Gain increase of 173.38% for habitat units and 15.78% for hedgerow units which offers a residual significant benefit of the Proposed Development.