

Azure Sun Bidco Management Ltd

Desford Solar Farm Extension **EIA Screening Report**

Final report

Prepared by LUC

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Chapter 1

Introduction

1.1 This Environmental Impact Assessment (EIA) Screening Report has been prepared by LUC (the 'Agent') on behalf of Azure Sun Bidco Management Ltd (the 'Applicant') for the Desford Solar Farm Extension (hereafter referred to as 'the Proposed Development'). The Proposed Development will consist of up to 5 megawatts (MW) of solar photovoltaic (PV) and ancillary development on land west of the Poultry Farm Desford Lane, Ratby in the council of Hinckley and Bosworth Borough Council (HBBC).

1.2 In accordance with Regulation 6 of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 (the 'EIA Regulations'), this EIA Screening Report forms part of the Applicant's formal request for a Screening Opinion from HBBC as to whether the Proposed Development is considered an EIA development.

1.3 In accordance with Regulation 6 (2) of the EIA Regulations, this EIA Screening Request provides the following information:

- Plan to identify the land;
- Description of the Proposed Development location and plan;
- Description of the aspects of the environment likely to be significantly affected by the development;
- Description of any likely effects of the Proposed Development on the environment resulting from waste and natural resources (to the extent information is available); and
- Information regarding features of the Proposed Development envisaged to avoid or prevent what might otherwise have been significant adverse effects on the environment.

1.4 It is considered that based on the content of this request and the assessment against the selection criteria, that the Proposed Development will not have a significant effect on the environment, and therefore, is not considered EIA development.

1.5 Once a Screening Opinion has been adopted, the response will inform the design of the Proposed Development. Environmental assessments, as set out in Chapter 4 of this report, will be undertaken and will also inform the design. The results of these will be presented in a Planning, Design and

Access Statement with several associated reports as set out in Chapter 5, which will accompany the planning application in due course.

The Applicant

1.6 Azure Sun Bidco Management Ltd is a Special Purpose Vehicle (SPV) managed by Pario Renewables in collaboration with Partnership for Renewables (PfR).

1.7 Pario Renewables is the UK's leading, independent SPV management company with over 20 years' experience with in-house specialist departments providing SPV management, project management, financial management, and construction management.

1.8 PfR is a well-established technical project development consultancy and asset management service provider to the renewables industry operating for over 20 years'. To date, over 200 MW of wind projects originated by PfR have received planning permission, with support provided on a wider portfolio at different stages in the development process.

1.9 The proposed Desford Solar Farm extension will form part of Pario Renewables' asset portfolio and assets to support the UK's climate target to reach net zero by 2050.

The Requirement for EIA Screening

1.10 Solar farms are considered 'generating stations' under Schedule 2 of the EIA Regulations. Therefore, pursuant to the regulations, HBBC must assess whether the Proposed Development is an EIA Development.

1.11 Schedule 2 developments may require an EIA, based on the likelihood of significant effects on the environment arising from development by virtue of its size, nature, or location. The Proposed Development is therefore 'screened' against criteria found under Schedule 3 of the EIA Regulations to determine whether significant effects on the environment are likely to arise. Schedule 3 concerns the characteristics of the Proposed Development, its location and the potential impacts it may have.

1.12 Under Regulation 6 (3), the request for a screening opinion should be accompanied by a description of features of the Proposed Development, or proposed measures, envisaged to avoid or prevent significant adverse effects on the environment. The responsible determining party, in this case the HBBC, must take this information into account when determining a screening opinion.

Chapter 2

The Site

Overview

2.1 The location of the Proposed Development is delineated by the red line boundary shown in **Figure 2.1** and will thereafter be referred to as 'the Site' and comprises approximately 47 acres (c. 19 hectares) of arable land (not including the existing solar farm).

2.2 The Site is located to the north-east of Desford and Newtown Unthank, along Desford Lane. The town of Desford is 1.5 miles to the west and Leicester 6.5 miles to the east.

2.3 The Site is within HBBC's administrative area, and within the boundary of Desford Parish Council. The Site's eastern boundary forms the boundary between Desford and Ratby Parish Council to the east.

2.4 The Site is not located within a "sensitive area" as defined in Schedule 2 of the EIA regulations.

2.5 The Site comprises Grade 3 arable land adjacent to the existing Desford Solar Farm. The entire Site is bound by mature hedgerow of varying heights and occasional mature trees along the field boundaries. The internal field boundaries are also bordered by hedgerow of varying heights.

2.6 The B5380 (Desford Lane) forms the southern boundary of the Site.

2.7 Mature woodland is situated to the north of the western-most arable field, partially to the north of the western solar field and to the west of the north-eastern arable field.

2.8 Running through the middle of the Site in a north-west to south-east direction are two overhead lines (OHL) running parallel to each other – 132 kV OHL pylon line and a 11 kV wood pole OHL.

2.9 The south-west corner of the Site abuts the curtilage of a residential dwelling. To the south of the Site, beyond the B5380 road extent there is an industrial park and some residential properties that are approximately 30 m south at their closest point. A small cluster of residential and agricultural buildings are situated approximately 80 m north-west to the Site's northern boundary, the outer curtilage of which appears to abut the Site to the north. Further residential and agricultural buildings are noted approximately 160 m to the east of the Site's south-eastern boundary, to the north and south of Desford Lane.

2.10 A Public Rights of Way (PRoW), a Byway Open to All Traffic (BOAT) and a bridleway are in close proximity to the Site. The PRoW passes immediately to the north of the Site, the BOAT immediately to the east of the Site and the bridleway is within the western extent of the Site boundary and serves nearby properties. These are shown on **Figure 2.2**.

Planning History

2.11 There is no relevant planning history on the Site from the last 5 years.

2.12 The renewable energy schemes detailed in **Table 2.1** and shown in **Figure 2.3** are located within 5 km of the Site and will be considered where relevant as part of the baseline or the cumulative development assessment.

Table 2.1 Renewable Energy Developments within 5 km

Name (Reference)	Development Description	Distance	Status
Desford Solar Farm (14/00654/FUL)	Erection of 5.3 MW solar farm and associated infrastructure (existing Desford Solar Farm)	Adjacent to the Site.	Application approved December 2014 and operational in 2016.
Desford Road Thurlaston Solar Farm (18/0242/FUL)	Erection of a 40 MWp/dc solar farm and associated infrastructure.	Approximately 4.10 km from red line boundary.	Application approved September 2018 and in pre-construction.
Lindridge Farm Solar Farm (14/01270/FUL)	Erection of 5 MW solar farm and associated infrastructure.	Approximately 2.7 km from red line boundary.	Application approved April 2015 and operational 2015.
Desford Brick Works, Bagworth - Solar Panels (22/00516/C)	Installation of roof mounted solar panels to buildings at the Desford Brick Factory.	Approximately 3.64 km from red line boundary.	Application approved July 2022 and operational April 2024.
Kirby Road Solar Panels (20/1111/PT1 4J)	Installation of 487kWp (up to 1,217 panels) and associated infrastructure.	Approximately 3.14 km from red line boundary.	Application approved December 2020.
Roman Avenue, Unit A - Solar PV System	Installation of roof mounted solar PV system.	Approximately 2.96 km from red line boundary.	Application approved November 2024.

Name (Reference)	Development Description	Distance	Status
(24/0128/PT1 4J)			
Saladworks, Kirby Muxloe - Solar Panels (25/0027/PT1 4J)	Installation of roof mounted solar PV panels.	Approximately 3.54 km from red line boundary.	Application approved June 2025.

Cumulative Impact

2.13 The cumulative impacts of the Proposed Development will be considered where relevant as part of the assessments which will be presented in the planning application in due course. The cumulative list of developments will be agreed with the council prior to submission.

Chapter 3

The Proposed Development

Overview

3.1 The Proposed Development will comprise up to 5 MW of solar PV and associated infrastructure, including:

- Solar modules and mounting system for the generation of up to 5MW;
- Inverters and transformers;
- Cabling works associated with connecting the Proposed Development to the existing Desford Solar Farm substation;
- Deer fencing around the proposed solar compound;
- Infra-red CCTV cameras;
- Access tracks for construction and maintenance; and
- Biodiversity enhancement measures.

Site Infrastructure

3.2 Solar panels will be mounted on steel frames and will be (base to tip) up to 2.5 m above the surface and will be south-facing. Panels will be arranged with 3-6 m spacing between rows of panels, depending on the tilt of the land.

3.3 Solar panels will be connected to inverters and transformers, which feed the energy into the point of connection.

3.4 Cabling will be laid along the southern edge of the Site. The width of cable trenches will vary and will be informed by the amount and type of circuits in the trench required, from approximately 0.5 m wide for single circuits to approximately 2 m for multiple circuits. Cables will connect the energy channelled through the inverters to the existing substation which is part of the existing Desford Solar Farm (ref. 14/00654/FUL).

3.5 Fencing will also be included as part of the Proposed Development. Two metre wooden post and metal wire fence will be erected around the perimeter fencing. There will also be infra-red CCTV cameras directed within the Site at all times.

Access

3.6 The Site will be accessed from the B5380 (Desford Lane) to the south which connects onto the M1 to the east. The main entrance to the Site will utilise the Site access for the existing Desford Solar Farm heading north through the Site. Small stretches of internal access tracks will be laid from crushed permeable stone at approximately three metres in width to ensure they are suitable for Heavy Goods Vehicles (HGVs) and construction traffic. The existing access will be assessed for its continued suitability for HGV through the provision of swept path analysis, and any upgrade works will form part of the Proposed Development consent. Minor hedgerow removal may be required if upgrades are deemed necessary.

3.7 Construction traffic will likely come from the M1 to the east, along Ratby Lane and onto the Site from Desford Lane. A Transport Statement with an accompanying Construction Traffic Management Plan will be set out to ensure minimal disruption and approximate improvements to the road network where necessary.

Grid Connection

3.8 The Proposed Development's grid connection will connect into the existing Desford Solar Farm substation and as such it is anticipated that the connection will be obtained via 11 kV underground cables, running from the point of connection to the point of supply.

Construction

3.9 Appropriate measures will be taken during the construction phase of the Proposed Development to minimise impacts on any identified environmental receptors. It is anticipated that the construction phase will last approximately three to six months.

3.10 Standard best practice measures to mitigate emissions associated with the construction phase of the Proposed Development, relating to construction vehicles, and dust/noise/light pollution etc, will be set out in the Outline Construction Environmental Management Plan (CEMP). Any traffic impacts will be set out in the Traffic Assessment, and mitigation will be set out in the Outline Traffic Management Plan (CTMP) as part of the proposed planning submission.

3.11 Therefore, it is not expected that construction will result in any significant environmental impacts.

Operation

3.12 Once operational, the Proposed Development is not expected to result in any significant environmental impacts. If there are any requirements for ongoing mitigation identified, these will be set out at the application stage.

3.13 The Proposed Development will not result in emissions to air, other than those associated with vehicles for periodic maintenance and inspection visits to the Site, which will be minimal and managed through the CEMP. The Proposed Development itself will offset such emissions given its potential to support the UK's push for renewable energy and assist in meeting the UK's ambitious target of achieving net zero by 2050¹.

3.14 Operational noise levels at the Site will be minor and associated with the cooling of the inverters. Compliance with appropriate noise levels will be assessed and secured during the design of the Proposed Development. Other noise arising from the Site will be associated with the occasional visits from maintenance and service vehicles as such is deemed negligible.

Decommissioning

3.15 Consent is sought for the Proposed Development to be operational for approximately 25 years. Following the expiry of the Proposed Development's lifespan, the associated infrastructure will be removed, and the Site restored to its prior condition. This will be suitably secured through a planning condition attached to any given consent.

3.16 Given the potential timescales involved and the likelihood for changes to the baseline situation during this period, decommissioning effects will not be assessed in the planning application. Decommissioning details can be provided at the time of decommissioning and secured through appropriately worded conditions.

Biodiversity Enhancements

3.17 Schedule 7A of the Town and Country Planning Act 1990 requires that for planning permission to be granted in England the biodiversity value attributable to the development must exceed the pre-development biodiversity of the onsite habitat by at least 10%. Following the Environment Act 2021² and as of the 12th of February 2024, BNG is now mandatory for developments and therefore is now a legal requirement for the associated planning application.

3.18 Accordingly, biodiversity will be addressed via project design and mitigation, and the Proposed Development will

¹ UK Parliament (2026) The UK's plans and progress to reach net zero by 2050. Available at: <https://commonslibrary.parliament.uk/research-briefings/cbp-9888/>

² <https://www.legislation.gov.uk/ukpga/2021/30/contents/enacted>

consider the ecological connectivity of the Site and surrounds and utilise sustainable development practices to minimise impact on biodiversity and look for opportunity to enhance where possible.

3.19 Biodiversity enhancements will be set out in an outline Habitat Management and Monitoring Plan (HMMP).

Chapter 4

Assessment of Likely Significant Effects

4.1 The existing environmental conditions on the Site and within the relevant study areas for each discipline are detailed below. Constraints have been included in **Figures 2.2-2.3** and **Figures 4.1-4.3**.

Landscape and Visual

Baseline Environment

4.2 The landform within the Site falls gradually from north to south, forming part of the shallow valley of the Rothley Brook. The Site is not located within a statutory landscape designation.

4.3 The Local Planning Authority's Landscape Character Assessment³ shows that the Site is located within the Landscape Character Area (LCA) B – 'Charnwood Fringe Settled Forest Hills', with the southern edge of the Site boundary is situated adjacent to the LCA D – 'Newbold and Desford Rolling Farmland'. These landscapes are characterised by gently undulating/rolling landforms; dispersed settlement patterns; a predominantly rural arable landscape influenced by industrial/urban features; contrasting areas of visual openness, depending on elevation and presence of woodland and vegetation; and a network of PRoW (See **Figure 2.2**).

Proposed Assessment and Methodology

4.4 A Landscape and Visual Appraisal will accompany the planning application and will examine the potential effects of the Proposed Development on landscape and visual resource within the Site and surrounding area.

4.5 A bare ground Zone of Theoretical Visibility (ZTV) is set out in **Figure 4.2** and assumes 2.5 m in height for solar panels across the full extent of the Site.

4.6 A 5 km radius Study Area is proposed for the LVA. At greater distances, effects on landscape character and visual amenity are unlikely to form a notable consideration for the type and scale of development proposed.

4.7 The appraisal will be supported by figures and visualisations as necessary. These will include Site location; landscape and landscape-related designations; landscape

³ Hinckley and Bosworth. (2017) Landscape Character Assessment. Available at: [https://www.hinckley-](https://www.hinckley-bosworth.gov.uk/downloads/download/308/landscape_character_assessment_-_2017)

[bosworth.gov.uk/downloads/download/308/landscape_character_assessment_-_2017](https://www.hinckley-bosworth.gov.uk/downloads/download/308/landscape_character_assessment_-_2017) Accessed 10/10/2025

character; and a ZTV and viewpoint plans. The ZTV will be used to inform the selection of representative viewpoints, which will be agreed through consultation with HBBC's landscape officer in advance of field work to capture photography.

4.8 Viewpoint visualisations can be illustrated with baseline photography, and, where appropriate, wirelines and photomontages prepared, in accordance with the Landscape Institute Visualisation Guidance⁴. Where relevant, the visualisations will illustrate any landscape mitigation measures once established (for example, potential screen planting such as hedgerows at year 1 and 15).

4.9 The appraisal will consider potential cumulative landscape and visual effects that may arise as a result of the addition of the Proposed Development.

Mitigation

4.10 Potential effects on landscape and visual receptors will be considered from the outset. Ongoing design considerations which will form part of the embedded mitigation of the Proposed Development including:

- Avoiding panels within the more sensitive parts of the Site, including in the vicinity of adjacent PRoW and the residential property to the south-west; and
- Introducing new, or enhancing existing, vegetated boundaries to provide visual screening and benefits to biodiversity (in collaboration with the ecology specialists).

4.11 The planning application will be accompanied by a Landscape Management Plan, which will provide outline details of the proposed additional landscape mitigation (to be detailed post-consent).

Assessment of likely effects

4.12 Key landscape and visual issues will likely relate to:

- Direct landscape effects and the features and character of the Site and host LCA;
- Indirect effects on the character of surrounding landscape character areas; and
- Effects on surrounding visual receptors, including users of public rights of way, local communities (residents) and people travelling along roads

4.13 With appropriate landscape mitigation, and once established, any residual effects are likely to be very localised in nature and not significant in EIA terms.

Ecology and Ornithology

Baseline Environment

4.14 The Site has no national or local ecological designations within its boundary. Within 2 km of the Site there is the Botcheston Bog Site of Special Scientific Interest (SSSI) approximately 760 m to the west of Site, Ratby Burroughs Ancient Woodland approximately 880 m to the north and Martinshaw Wood Ancient Woodland approximately 1.3 km north-east of Site. The Site also borders an approximately 20-hectare area of woodland to the north of the south-western field and west of the north-eastern most field.

4.15 The Site falls within the boundary of the HBBC's Core Strategy Policy 21: National Forest and Policy 22: Charnwood Forest⁶, which states that development will be supported provided the scale of the development is appropriate in relation to the forest; it respects the character and appearance of the wider countryside; and it does not adversely affect the existing landscape.

4.16 RBBC's Core Strategy outlines that the Site is near the defined biodiversity improvement area⁷.

Proposed Assessment and Methodology

4.17 A baseline UK Habitat System survey will be conducted to identify habitats and consider the suitability of the Proposed Development to support notable or protected flora or fauna. This survey will inform whether further protected species surveys are needed and will also inform Site design.

4.18 A preliminary ecological appraisal will be prepared as part of the planning application, informed by the findings of the initial survey work alongside a desk study of available biological records to identify sites designated for their nature conservation value, and existing records of protected or notable species of relevance to the Site. The appraisal will consider, in detail, the final design of the Proposed Development and its potential effects on ecological features during construction and operation.

⁴ Landscape Institute (LI) (2019) Technical Guidance Note (TGN) 06/19: Visual Representation of Development Proposals. Available online: https://www.landscapeinstitute.org/wp-content/uploads/2019/09/LI_TGN-06-19_Visual_Representation-1.pdf
⁵ Hinckley and Bosworth Council. (2009) Core Strategy. Available at: https://www.hinckley-bosworth.gov.uk/info/856/local_plan_2006_to_2026/400/core_strategy

[bosworth.gov.uk/info/856/local_plan_2006_to_2026/400/core_strategy](https://www.hinckley-bosworth.gov.uk/info/856/local_plan_2006_to_2026/400/core_strategy) Accessed 08/10/2025.

⁶ As drawn on page 25 of Hinckley and Bosworth Council's (2009) Core Strategy document.

⁷ As shown on page 29 of Hinckley and Bosworth Council's (2009) Core Strategy document.

4.19 The appraisal will also address potential additional mitigation where necessary which will be detailed in the CEMP.

4.20 A Biodiversity Net Gain (BNG) Report and outline Habitat Management and Monitoring Plan will accompany the application setting out the 10% BNG provision, in line with Schedule 7A of the Town and Country Planning Act 1990.

Mitigation

4.21 The final design of the proposed solar panels and associated infrastructure will be designed to avoid sensitive ecological receptors. The design will incorporate a 15 m root protection zone on all trees to prevent damage to them or their roots.

4.22 Adherence to these design principles mean that all infrastructure will be placed within arable and pasture land which are habitats of limited value to nature. The habitats of elevated value to nature, namely the trees, scrub and hedgerows, will be retained as far as practicable and offset from the Proposed Development. Should hedgerow and/or tree removal be required, this will be suitably compensated for in line with the requirements for Schedule 7A.

Assessment of likely effects

4.23 Effects on habitats and species will be limited by design and are unlikely to be significant in the context of EIA Regulations. Any potential impacts to protected species which may be present within the Site, such as skylark *Alauda arvensis* and badger *Meles meles*, will be suitably assessed through further survey work and either avoided, minimised or compensated for as part of the design. However, it is anticipated any potential impacts will be minimal and not significant in EIA terms.

Historic Environment

Baseline Environment

4.24 There are no designated heritage assets within the Site. There are several designated heritage assets in the surrounding area of the Site.

4.25 There are two scheduled monuments within 2 km of the Site. 'Ratby Camp' (NHLE Ref. 1005079)⁸ located approximately 250 m north of the Site, and 'Old Hays moated Site and associated manorial earthworks, Ratby' (NHLE Ref. 1017584), approximately 1.3 km north of the Site.

4.26 There are two listed buildings (Grade II) within 1 km of the Site: '1 and 2, Desford Lane' (NHLE Ref. 1074075) approximately 570 m and 'The Yews' (NHLE Ref. 1361379) c. 400 m both located to the south-west along Desford Lane.

4.27 The Ratby Conservation area lies 1.20 km to the east of the Site and contains one grade II* listed building and two grade II listed buildings. The Desford Conservation area is located 1.84 km to the west of Site and contains 15 listed buildings of which two are grade II*. A review of the Desk Based Archaeological Assessment (DBA)⁹ submitted as part of the existing Desford Solar Farm consent noted that the eastern field boundary of the existing Desford Solar Farm is an important historic field boundary as set out in the 1997 Hedgerow Regulations¹⁰ which should be retained through careful design.

4.28 There is a non-designated heritage asset (a cropmark enclosure) in the northern field (Leicestershire and Rutland HER Ref. MLE3101). Additionally, probable medieval ridge and furrow earthworks and undated cropmarks are noted within the Site.

4.29 Designated assets of the National Heritage List for England are shown in **Figure 4.1**.

Proposed Assessment and Methodology

4.30 No significant effects on either buried or built heritage assets are expected to derive from the Proposed Development. However, a Historic Environment Assessment (HEA) will be prepared in support of the planning application. The HEA will be required to identify positive and negative effects to the historic environment and, if necessary, to propose mitigation measures to reduce potential harm. The need for, and scope of, any archaeological investigation that may be required by HBBC will be confirmed through consultation. The following elements will be included within the HEA:

- The identification of heritage assets within the Site boundary and its immediate environment;
- Consideration of the potential for the presence of currently unknown buried archaeological remains;
- Assessment of the significance of the identified heritage assets, including the contribution made by their setting;
- Evaluation of the likely impacts arising from the Proposed Development, together with any requirements for further investigation; and

⁸ National Heritage List for England <https://historicengland.org.uk/listing/the-list/> Accessed 23/03/2026.

⁹ Wyvern Heritage and Landscape Consultancy (2014) Desford Lane, LE9 2BF Desk Based Archaeological Assessment.

¹⁰ DEFRA. The Hedgerow Regulations. (1997) Available at: https://assets.publishing.service.gov.uk/media/5a817aee40f0b6230269788e/hedgerow_guide_part_1.pdf Accessed 08/10/2025.

- Recommendations to avoid, reduce or, where appropriate, compensate for any identified levels of harm.

4.31 The HEA will include a desk-based assessment undertaken in line with ClfA guidance¹¹. A 1 km study area will be used to assess the Site's archaeological potential and the presence of any non-designated heritage assets that may experience setting change as a consequence of the Proposed Development. A wider study area will be used to identify designated heritage assets which may have particular sensitivity to the Proposed Development. Its extent will depend on the results of a ZTV model (**Figure 4.2**) which will be used to identify the heritage assets likely to be affected and understand the need for photomontage visualisations.

Mitigation

4.32 Because the Site environment have been assessed as retaining archaeological potential, it is likely that archaeological evaluations (e.g. targeted geophysical survey and, if necessary, trial trenching) may be required to establish any potential for archaeology.

4.33 The findings will be discussed with HBBC's archaeology officer to agree any post-consent conditions relating to any additional archaeological investigation that may be required on the Site prior to construction.

4.34 All works will be conducted by an appropriately qualified and experienced archaeological professionals, and the scope of works agreed in advance with HBBC, in a Written Scheme of Investigation (WSI). In addition, the iterative design process will seek to avoid ground disturbance in these areas where practicable.

4.35 Subject to the assessment of intervisibility between the Site and the scheduled monument to the north, additional mitigation measures in the form of, for example, a landscape mitigation plan will be incorporated to minimise any effects, if appropriate.

Assessment of likely effects

Potential physical effects

4.36 The potential for physical effects are limited to the construction and development footprint. In the event that development within the Site results in physical effects to previously recorded and unrecorded heritage assets, it is unlikely to result in significant effects in EIA terms.

Potential effects via setting change

4.37 Solar panels and fencing are expected to stand to a maximum height of 2.5 m and suitably screened by existing and proposed hedging and landscaping. Visibility will therefore likely be limited, and any effect is unlikely to be significant in EIA terms.

Hydrology and Flood Risk

Baseline Environment

4.38 The Site is located entirely in Flood Zone 1 according to the Flood Map for Planning and is therefore considered to be in the sequentially preferable location (**Figure 4.3**).

4.39 There are no known waterbodies or watercourses running through the Site.

Proposed Assessment and Methodology

4.40 The final design of the Proposed Development will seek to minimise the potential for future flood risk (1 in 200 climate change event) and will include a Drainage Strategy and Sustainable Drainage solution (SuDS) to mitigate the minor impact increase in impermeable area.

4.41 The footprint of solar panels will result in a limited impact on surface water runoff. Thus, with embedded mitigation, it is considered unlikely that the Proposed Development will have an impact on surface water runoff, hydrology and flood risk during construction or operation.

Mitigation

4.42 Good practice mitigation measures will be implemented during construction to prevent pollution and minimise the impact of construction on the receiving water environment and set out in the CEMP. The Environmental Agency's Pollution Prevention Guidelines (PPG) will be followed and embedded mitigation measures incorporated.

Assessment of likely effects

4.43 With embedded mitigation and the avoidance of watercourses/waterbodies, it is considered that with appropriate mitigation, there will not be significant impact on the environment as a result of the Proposed Development in terms of hydrology and flood risk.

¹¹ ClfA (2014, updated 2017 and 2020) Standard and Guidance for Historic Environment Desk-Based Assessment.

Traffic and Transport

Baseline Environment

4.44 The Site is located adjacent to a main road B5380 which connects Ratby and Kirby Muxloe to Newtown Unthank and Desford. The Site benefits from an existing access point to the Desford Solar Farm, with traffic coming from the east via Junction 21A of the M1, along Ratby Lane and onto Desford Lane, as previously deemed acceptable by HBBC.

Proposed Assessment and Methodology

4.45 A Transport Statement (TS) and outline CTMP will be submitted with the application which will assess the baseline conditions and demonstrate how access to the Site is to be achieved from the wider road network. The TS will provide detail of the access junction layout and visibility splays as well as swept path analysis for the access and egress movements and will be informed by traffic survey data if required.

Mitigation

4.46 An outline CTMP will be submitted as part of the application, to mitigate the effects of construction traffic. The CTMP will include measures under the following categories:

- Construction programme and phasing;
- Quantification of construction movements;
- Defined working hours;
- Measures to minimise construction traffic impacts (delivery control, sustainability, speed limits, designated haul routes, staff induction, workforce travel arrangements, signage etc); and
- Communication arrangements (with local community, highway authorities and other construction Sites).

Assessment of likely effects

4.47 Traffic numbers will not be significant and will be temporary during construction. Thereafter, the Site will only be accessed for monthly maintenance visits during the operational phase of the Proposed Development.

4.48 Therefore, it is not expected that there will be any significant environmental effects associated with increased traffic from the construction or operation of the Proposed Development and any mitigation will be set out in the CTMP.

Other Issues

Agricultural Land

4.49 The Site is comprised of Grade 3 agricultural land according to Natural England's Provisional Agricultural Land Classification (ALC) report. An Agricultural Land Grade assessment will be conducted to determine whether the land falls under 3a, 'good quality' (Best and Most Versatile (BMV), which is less favourable in policy terms), or 3b, 'moderate quality' and not BMV.

4.50 The Proposed Development is reversible with the condition of the land capable of being restored or improved following decommissioning. In addition, other forms of agricultural activity could take place throughout the operation of the Proposed Development if required. Therefore, impacts on agricultural land are not considered to be significant.

Noise and Amenity

4.51 The Site and surrounding area are predominantly in the open countryside, however, the presence of the B5380 and industrial estate beyond will contribute to the baseline noise levels, as well as the presence of the existing substation to the north and west of the Site.

4.52 There are a number of residential properties near the Site (within 100 m) at the south-west, south and north-west and PRoW to the north and east of Site and within the western extremity of the Site.

4.53 These residential amenities and properties will be carefully assessed as noise receptors and factored into the Site design through a desk-based noise assessment.

Operational noise

4.54 The operational noise sources of the Proposed Development are the solar PV inverters which will be located between solar panels but are not considered to generate an excessive amount of noise (unlike the coolers connected with larger substations or large-scale battery energy storage schemes). A desk-based assessment will be undertaken to ensure operational sound levels at nearby noise receptors will be acceptable.

Construction noise

4.55 The impact due to construction noise and vibration is limited to the duration of the construction phase and will be managed through the adoption of mitigation measures incorporated through the CEMP.

Cumulative noise

4.56 The onsite existing Desford Solar Farm will be considered in the desk-based noise assessment as part of the planning application.

4.57 HBBC's Environmental Health Officer (EHO) will be consulted if required regarding the operational noise assessment methodology.

4.58 Overall, it is concluded that there will be no likely significant effect of construction, operational or cumulative noise resulting from the Proposed Development.

Socio-Economics

4.59 The Site is located in a rural area within Desford Council Parish and adjacent to Ratby Council Parish. The closest village to the Site is Kirby Muxloe to the south-east with Desford to the south-west and Ratby to the north-east. The Proposed Development will provide opportunities for local employment for construction and maintenance contracts where possible, including supply chain spin-offs for local businesses and sub-contracted work relating to the transportation of construction workers and materials.

4.60 The Proposed Development may also result in increased spending associated with construction workers which will benefit the local economy. Other potential socio-economic effects as a result of the Proposed Development during operation include providing clean renewable electricity and educational resources to the wider community. Therefore, due to the small scale of this development it is concluded that socio-economic effects will not be significant.

Recreation

4.61 Impacts on adjacent recreational users of the PRoW will be minimised where practicable. Careful consideration will be given as part of the Proposed Development to manage construction traffic and minimise impacts on users of the PRoW during construction and operation, should they be impacted. Measures relating to the management of the PRoW during construction will be set out in the CEMP, including measures to ensure the safe crossing of pedestrians from constructed access tracks. Visual impacts on PRoW will be assessed in the Landscape and Visual Appraisal.

4.62 During construction and operation of the Proposed Development, the safe and continued use of the PRoW will be enabled, and diversions will not be required. As such, any

effects on recreation will not be significant as activities can be appropriately managed through a CEMP.

Glint and Glare

4.63 According to the Solar Trade Association¹², solar PV panels are designed to absorb as much light as possible to generate electricity, and not to reflect solar irradiation, therefore posing limited risk of glint or glare. Industry standard solar PV panels have been developed with anti-reflective coatings, and ultra-transparent glass to improve panel efficiency.

4.64 Additionally, the panels will be broadly south facing and will be well screened by the existing mature trees and hedgerow vegetation along the B5380 to the south of the Site. Where there are gaps, consideration will be made to planting additional trees and hedgerow to minimise fleeting views.

4.65 Therefore, glint and glare impacts from the Proposed Development are therefore considered to be negligible, and will not be assessed further as part of the planning application.

Human Health

4.66 The Proposed Development is not considered to pose a risk to human health. The Site is not located on contaminated land, and the Proposed Development does not involve the use of any hazardous substance during construction or operation. All construction activities will be managed under the Construction (Design and Management) Regulations 2015 and will not conflict with the Health and Safety at Work etc Act 1974.

4.67 The construction phase of the Proposed Development may result in minor disturbance to the amenity of users of the PRoW; these will be managed appropriately in the CEMP and CTMP, including management of traffic movements, dust and noise, and will not result in any adverse health and safety effects.

4.68 During the construction and operational phases, a fence will be erected around the perimeter of the solar panels to prevent people from accessing these areas. Therefore, human health impacts are not considered to be significant and will be addressed appropriately where relevant in the planning application.

¹² Solar Trade Association (2022), Everything Under The Sun – The Facts About Solar Energy. Available at: <https://solarenergyuk.org/wp-content/uploads/2022/03/Briefing-Fact-Checker-1.pdf>

Waste Management

4.69 The operational phase of the Proposed Development will not generate any waste. However, during the construction phase, waste will be created from the following:

- Packaging waste associated with the panels and infrastructure;
- Earthworks associated with excavation of cable trenches; and
- Soil stripping to accommodate new access tracks.

4.70 Under the Controlled Waste (England and Wales) Regulations 2012, there are requirements for waste reduction and waste separation and the separate collection of recyclable materials. In regard to the earthworks and soil stripping, the CEMP will include measures to avoid, minimise or mitigate effects on the environment. As such, waste management effects are not considered to be significant in relation to the Proposed Development.

Climate Change

4.71 The Proposed Development is considered to have a positive effect on climate change, as the solar panels will generate a source of clean, renewable energy which will contribute to achieving net zero carbon emissions, as a form of climate mitigation.

4.72 The Proposed Development will also implement hedgerow planting, which will contribute towards providing a biodiversity enhancement on the Site.

4.73 An appropriate drainage strategy will be developed for the Site, and panels are raised sufficiently off the ground to avoid direct impacts from flooding. Climate change effects are not considered to be significant and will therefore not be assessed as a separate report as part of the planning submission.

Chapter 5

Conclusion

5.1 The Proposed Development will comprise up to 5MW of solar photovoltaics and associated infrastructure on land west of the Poultry Farm, Desford Lane, Ratby in HBBC. The Site is not located within any statutory planning designation.

5.2 Based on the contents of this report and the proposed surveys and mitigation, the Proposed Development is not considered likely to result in significant environmental effects.

5.3 It is suggested that the forthcoming planning application will include the following accompanying reports:

- Site location plan, Site design and elevation drawings;
- Planning, Design and Access Statement;
- Landscape and Visual Appraisal including appropriate visualisations/photomontages (viewpoints to be agreed with HBBC's landscape officer);
- Landscape Management Plan;
- Preliminary Ecological Appraisal;
- Protected Species Surveys (if required);
- Biodiversity Net Gain Report and Metric with an accompanying outline HMMP;
- Historic Environment Assessment;
- Drainage Strategy and SuDS;
- Transport Statement;
 - Construction Traffic Management Plan;
- Outline Construction Environmental Management Plan;
- Desk-based Noise Assessment; and
- Agricultural Land Grade Assessment.

5.4 Based on the content of this report, it is kindly requested that a Screening Opinion is adopted by HBBC to confirm that EIA is not required and that the list above is agreeable.

Appendix A

Figures

Figure 2.1: Site Location

- Site boundary
- Desford Solar Farm planning boundary (ref. 14/00654/FUL)

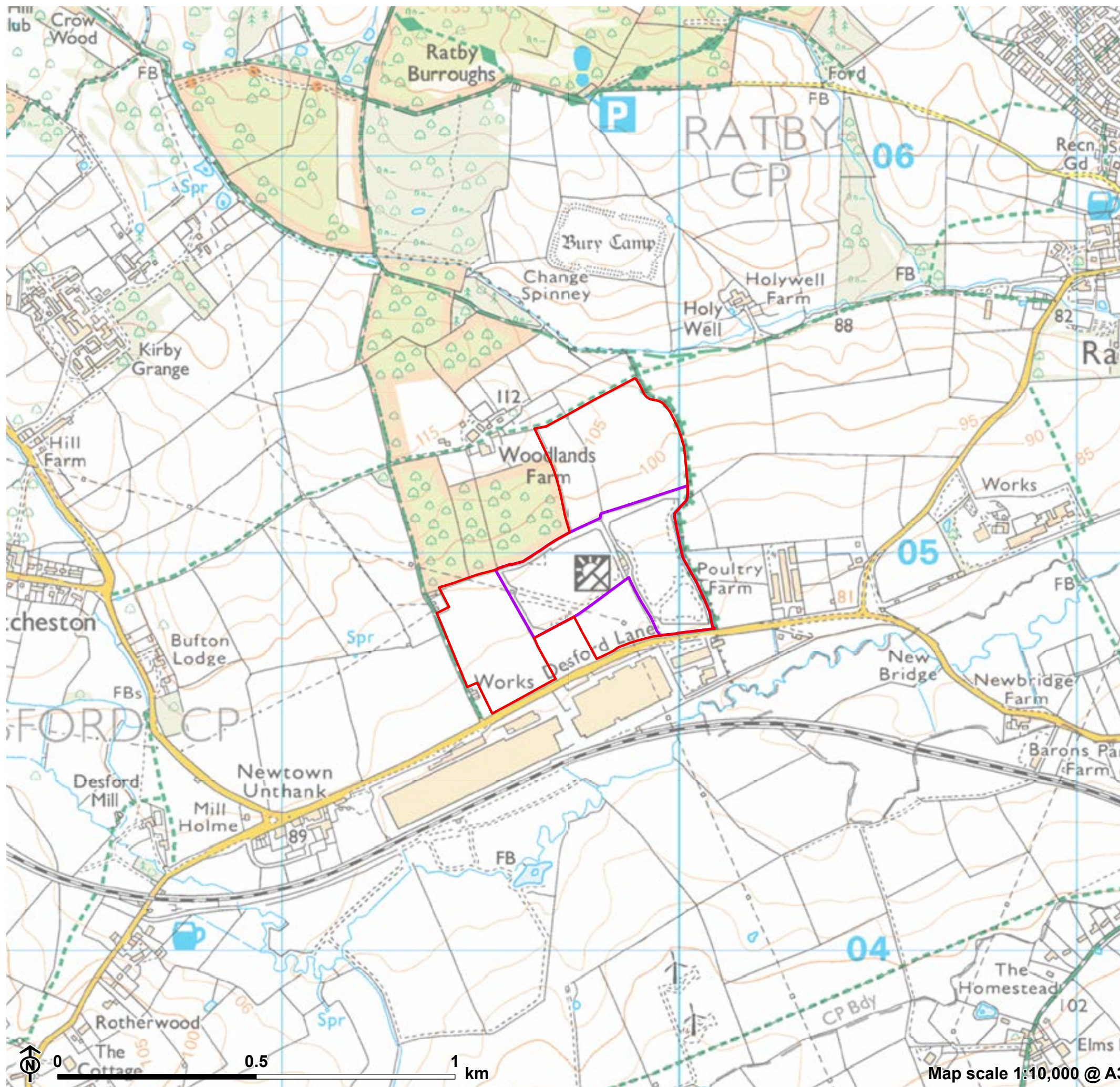
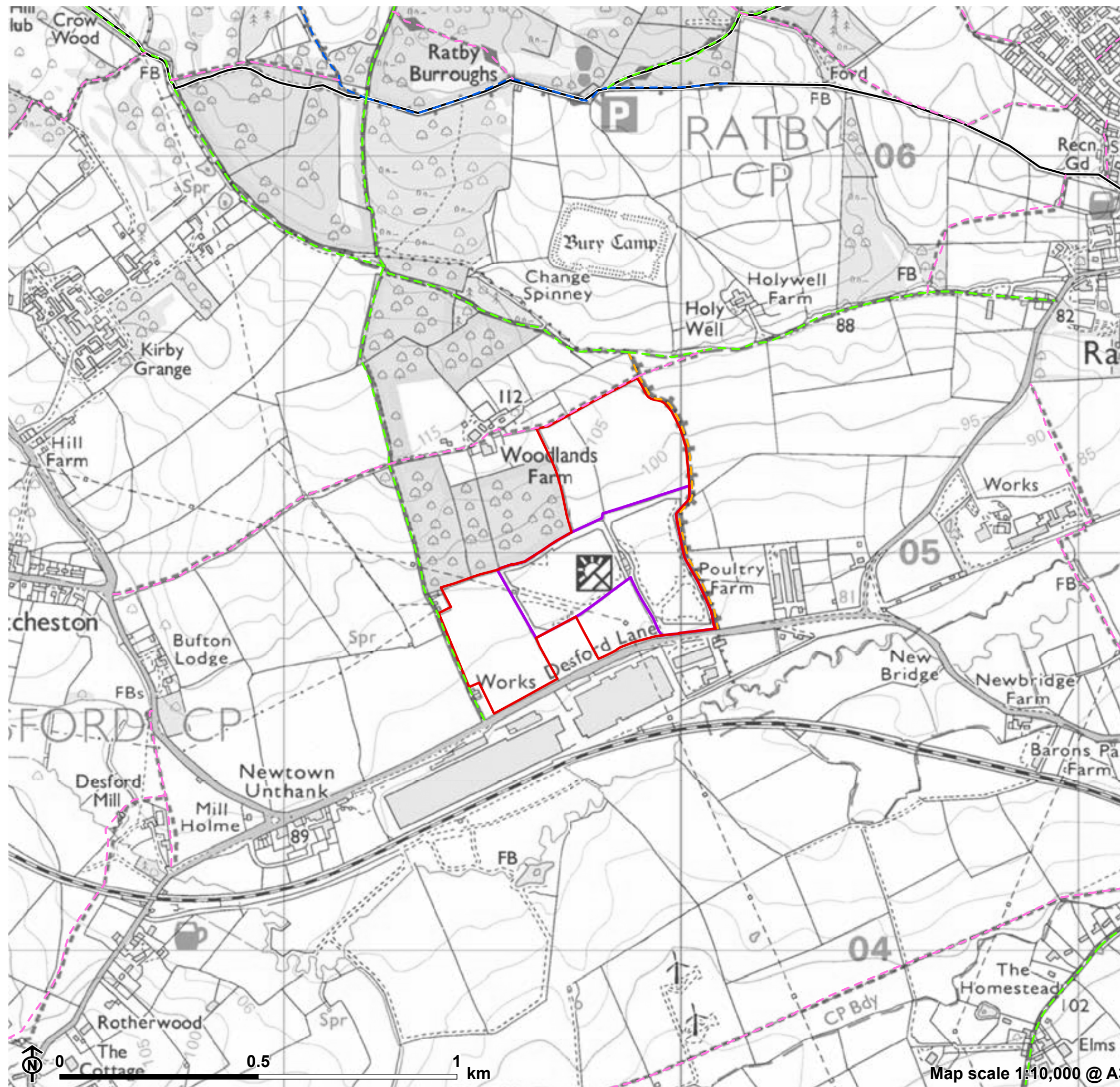


Figure 2.2: Public Rights of Way (PRoW)



-  Site boundary
-  Desford Solar Farm planning boundary
(ref. 14/00654/FUL)
-  5km from site boundary

Renewable Energy Planning Database (REPD)

-  Anaerobic Digestion
-  Battery
-  Landfill Gas
-  Solar Photovoltaics
-  Wind Onshore

LUC Wind Farm Database

-  Operational
-  Consented



Figure 4.1: Environmental Constraints

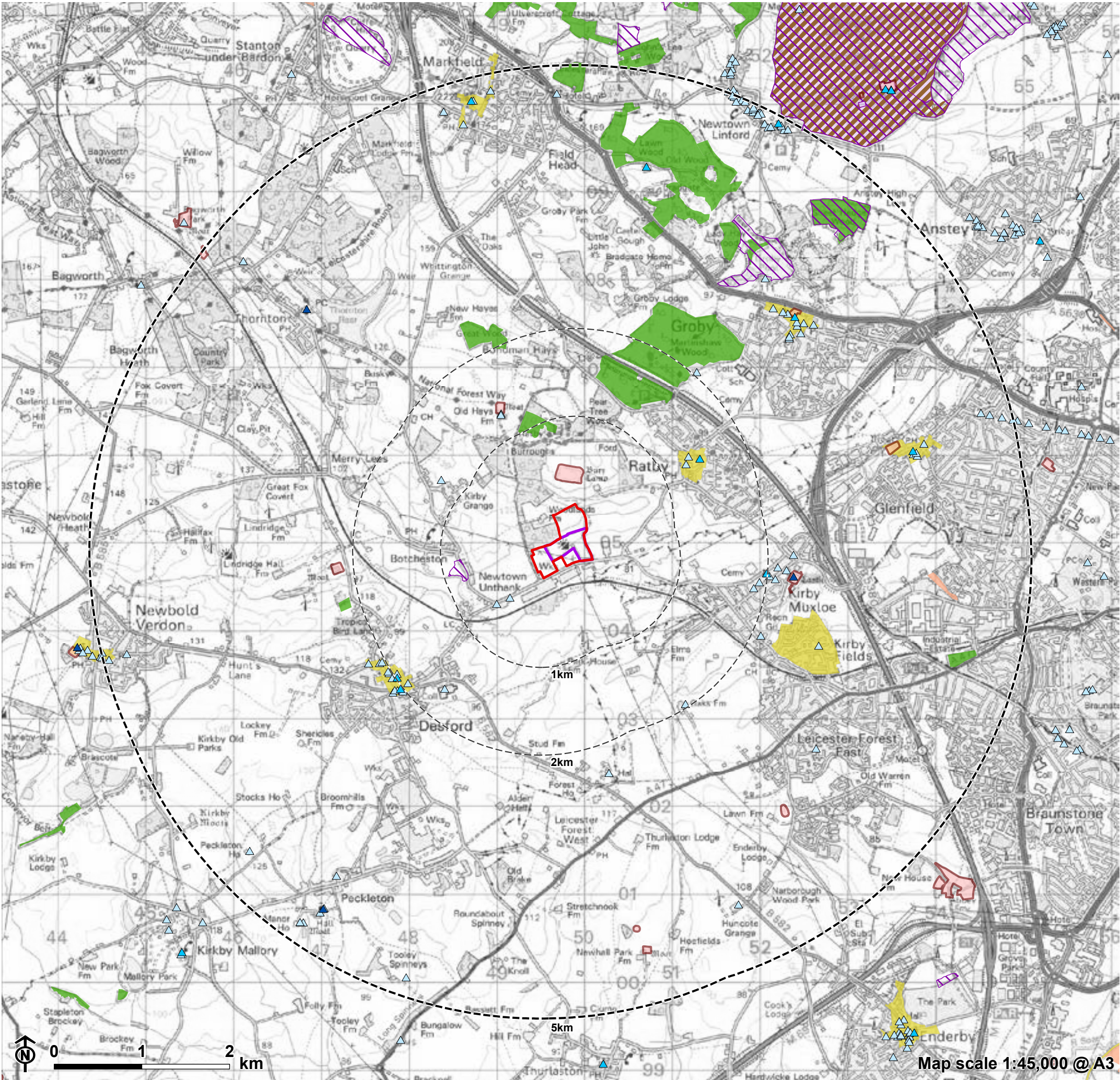
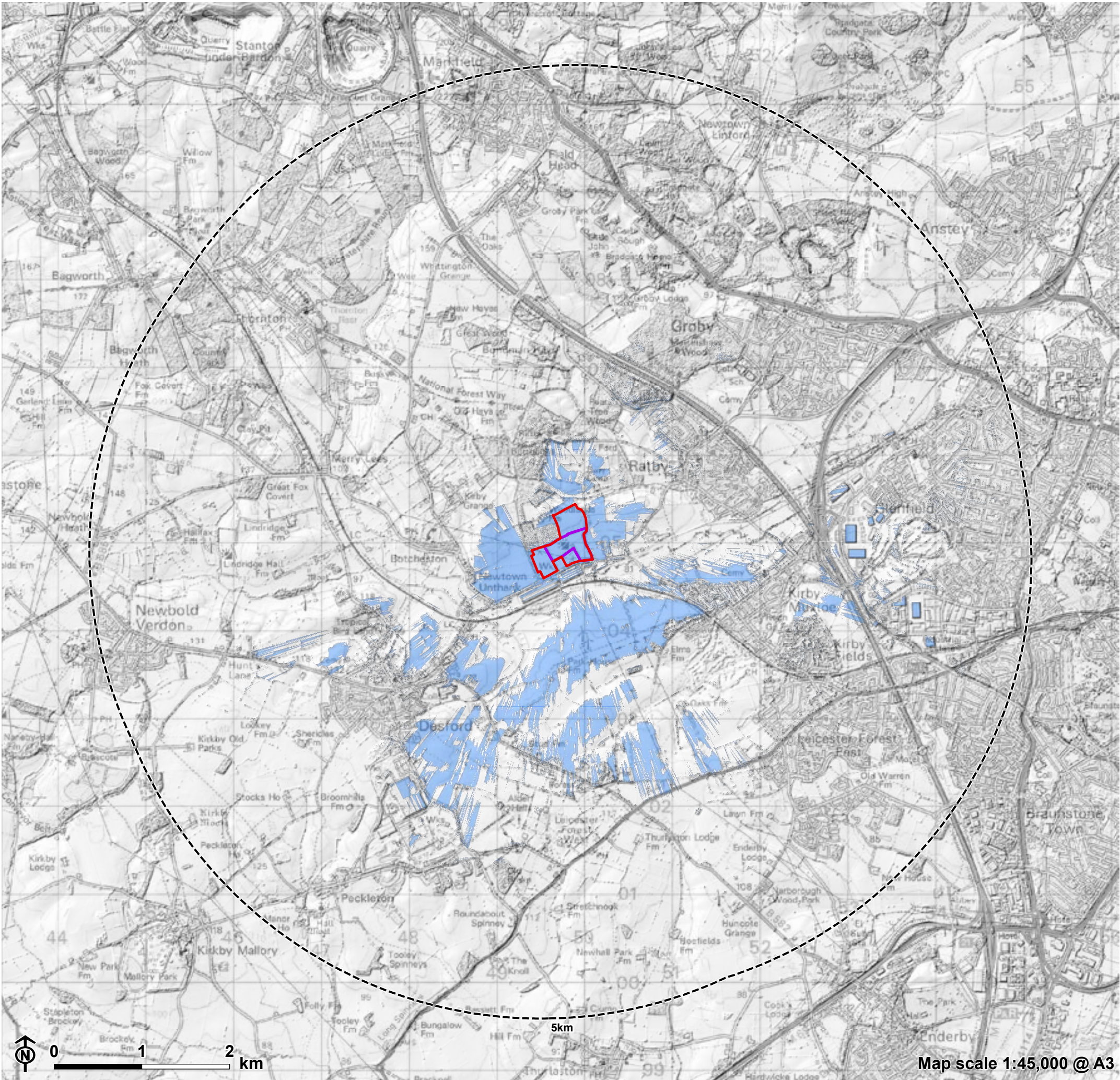


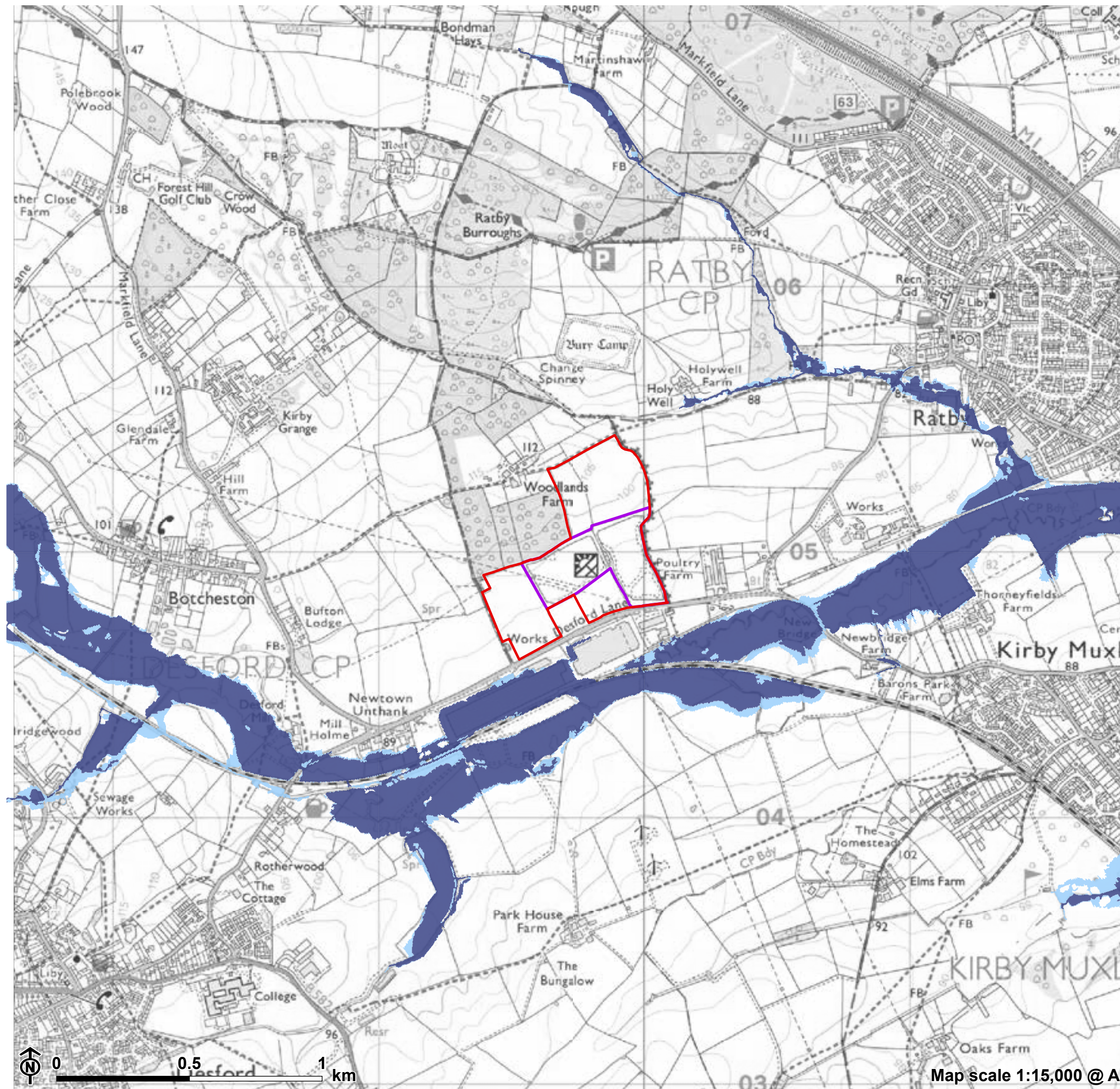
Figure 4.2: Screened Zone of Theoretical Visibility

- Site boundary
- Desford Solar Farm planning boundary (ref. 14/00654/FUL)
- 5km from site boundary
- Solar panels visible



This ZTV illustrates theoretical visibility within a 5km study area, highlighting where the proposed developments will be most visible. It uses a height of 2.5m for the solar photovoltaic panels. It also assumes an observer height of 2m above ground level. The terrain model used in the 1m First Return LiDAR DSM from the Environment Agency. The digital surface model includes screening of trees, hedges and buildings. Earth curvature and atmospheric refraction have been taken into account. The ZTV was calculated using ArcGIS Pro 3.6.1.

Figure 4.3: Flood Risk - Zones 2 and 3



- Site boundary
- Desford Solar Farm planning boundary (ref. 14/00654/FUL)
- Environmental Agency (EA) Flood Map for Planning - Flood Zones**
- Flood Zone 2
- Flood Zone 3