

# Old Wood Energy Park

Land west of Wysall,  
Nottinghamshire

Heritage Statement

# Heritage Statement.

## Old Wood Energy Park.

On behalf of Exagen Development Ltd.

Date: 22/01/2024 | Pegasus Ref: P21-2533

Author: Rebecca Ward

---





## Document Management.

Version	Date	Author	Checked / Approved by:	Reason for revision
1	24.11.2023	RW	GS	-
2	28.11.2023	RW	GS	Client comments
3	22.01.2024	RW	GS	Geophysical survey and NPPF update

## Contents.

1. Introduction.....	5
2. Site Description and Planning History.....	6
3. Methodology.....	10
4. Policy Framework.....	13
5. The Historic Environment.....	15
6. Setting Assessment.....	28
7. Conclusions.....	39
Sources.....	42

## Appendices contents.

Appendix 1: Gazetteer.....	45
Appendix 2: Figures.....	56
Appendix 3: Assessment Methodology.....	57
Appendix 4: Legislative Framework.....	63
Appendix 5: National Policy Guidance.....	64
Appendix 6: Relevant Development Plan Policies.....	70
Appendix 7: Designation Descriptions.....	73
Appendix 8: Geophysical Survey Report.....	74



# Plates:

Plate 1: Site Location Plan.....	5
Plate 2: View west from the eastern extent of the northern site.....	6
Plate 3: View south-east from the north-western extent of the northern site.....	6
Plate 4: View north from the central, southern area of the northern site.....	7
Plate 5: View north from the southern extent of the southern site.....	7
Plate 6: View south from the northern extent of the southern site.....	8
Plate 7: View east from the central, western extent of the southern site.....	8
Plate 8: Anomalies recorded representative of a possible Roman settlement complex in the central southern area of the northern parcel (Area 7).....	17
Plate 9: Anomalies recorded to the east of the possible Roman settlement complex in the south-eastern area of the northern parcel (Area 8).....	17
Plate 10: Anomalies recorded which represent an enclosure, linear features and possible industrial activity (Area 2).....	18
Plate 11: Anomalies recorded in the central part of the southern parcel of the site (Area 11).....	19
Plate 12: Extract from the Plan of the district of Grange Leys and Highfields in the parish of Costock of 1843.....	20
Plate 13: Extract from the Ordnance Survey Map of 1884.....	21
Plate 14: Extract from the Ordnance Survey Map of 1900.....	22
Plate 15: Extract from the Ordnance Survey Map of 1921.....	23
Plate 16: Modern aerial photograph of the site.....	23
Plate 17: The Grade I Listed Church of the Holy Trinity.....	29
Plate 18: View west from within the churchyard in the direction of the site (no visibility).....	29
Plate 19: View south-east from within the northern site towards the church spire.....	30
Plate 20: View east from within the site southern site towards the church spire.....	30
Plate 21: Important vista towards the church from within the Wysall Conservation Area.....	31
Plate 22: 'Important vista' west from the south-western extent of the Conservation Area across agricultural land (including glimpsed views of the southern site).....	33



Plate 23: Standard photo of the 'panoramic (wide) view' north-west in the direction of the northern site (no visibility).....	33
Plate 24: View north from the northern extent of the Conservation Area towards the northern site.....	34
Plate 25: View south-east from within the northern site towards the Wysall Conservation Area.....	34
Plate 26: View west from the western extent of the northern site towards the asset.....	37
Plate 27: View north-west from within the southern site towards the asset.....	37

- 

Plate 1: Site Location Plan

- 1.2. The Development is located on two parcels of land to the west of Wysall, Nottinghamshire and includes a buried cable beneath the public highway linking the two parcels (the Site). The Site extends to approximately 100 ha in area.
- 1.3. This Assessment provides information with regards to the significance of the historic environment to fulfil the requirement given in paragraph 200 of the Government's *National Planning Policy Framework* (the *NPPF*) which requires:  
  
***"...an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting".<sup>1</sup>***
- 1.4. In order to inform an assessment of the acceptability of the scheme in relation to impacts on the historic environment and archaeological resource, following paragraphs 205 to 209 of the *NPPF*, any harm to the historic environment resulting from the proposed development is also described, including impacts on significance through changes to setting.
- 1.5. As required by paragraph 200 of the *NPPF*, the detail and assessment in this Report is considered to be *"proportionate to the assets' importance".<sup>2</sup>*

<sup>2</sup> DLUHC, *NPPF*, para. 200.

## 2. Site Description and Planning History

### Site Description

- 2.1. As stated above, the site is approximately 100 ha in area and comprises two separate land parcels located to the west of Wysall and connected by a cable route. The northern parcel is approximately 65 ha in area and comprises nine agricultural land parcels and buildings associated Lodge Farm (Plates 2–4). The northern parcel is crossed by three PRowWs. The northern site is bounded by woodland to the north and a mixture of agricultural land and woodland to the east, south and west.



*Plate 2: View west from the eastern extent of the northern site*



*Plate 3: View south-east from the north-western extent of the northern site*





*Plate 4: View north from the central, southern area of the northern site*



*Plate 5: View north from the southern extent of the southern site*

- 2.2. The southern parcel is approximately 33 ha in area and comprises part of six agricultural land parcels (Plates 5–7). The southern extent of the southern parcel is crossed by pylons. The site is bounded by a mixture of agricultural land and woodland.





*Plate 6: View south from the northern extent of the southern site*



*Plate 7: View east from the central, western extent of the southern site*

### Planning History

- 2.3. A review of the recent planning history records held online by Rushcliffe Borough Council has indicated the following application within the northern parcel which is relevant to the current proposals:  
  
**97/00439/FUL** – Lodge Farm, Bradmore Road, Wysall, Nottingham, NG12 5QR – Construct farm workers bungalow. **Application Permitted 27<sup>th</sup> June 1997.**
- 2.4. A Screening Opinion for the development of the site for renewable energy was also submitted to the Council (LPA ref. 23/01010/SCREIA). The proposals are not considered to be EIA development.

- 2.5. The following application relates to land located immediately to the west of the site:

**22/00303/FUL** – Land to north east of Highfields Farm, Bunny Hill, Costock – Construction of a solar farm and battery stations together with all associated works, equipment and necessary infrastructure, together with the formation of a new vehicular access onto Bunny Hill (A60). **Application Permitted (conditional) 16th February 2023.**

### 3. Methodology

- 3.1. The aims of this Report are to assess the significance of the heritage resource within the site/study area, to assess any contribution that the site makes to the heritage significance of the identified heritage assets, and to identify any harm or benefit to them which may result from the implementation of the development proposals, along with the level of any harm caused, if relevant.
- 3.2. This assessment considers the archaeological resource and built heritage.

#### Sources

- 3.3. The following key sources have been consulted as part of this assessment:
- The Nottinghamshire Historic Environment Record (HER) for information on the recorded heritage resource within the vicinity of the site;
  - The National Heritage List for England for information on designated heritage assets;
  - The Wysall Conservation Area Appraisal and Management Plan as prepared by Rushcliffe Borough Council; and
  - Historic maps available online;
  - Aerial photographs available online via Historic England's Aerial Photo Explorer and Britain from Above;

- Historic England's Aerial Archaeology Mapping Explorer;
- The Nottinghamshire Archives online catalogue; and
- Other online resources, including Ordnance Survey Open Source data; geological data available from the British Geological Survey and Cranfield University's Soilscales Viewer; Google Earth satellite imagery; and LiDAR data from the Environment Agency.

- 3.4. For digital datasets, information was sourced for a 1km study area measured from the boundaries of the site. Information gathered is discussed within the text where it is of relevance to the potential heritage resource of the site. A gazetteer of recorded sites and findspots is included as **Appendix 1** and maps illustrating the resource and study area are included as **Appendix 2**.

- 3.5. Historic cartographic sources and aerial photographs were reviewed for the site, and beyond this where professional judgement deemed necessary.

- 3.6. Heritage assets in the wider area were assessed as deemed appropriate (see Section 6).

#### Site Visit

- 3.7. A site visit was undertaken by a Heritage Consultant from Pegasus Group on Tuesday 1st February 2022, during which the site and its surrounds were assessed.

## Geophysical Survey

- 3.8. A geophysical survey was undertaken within the majority of the site in August and September 2023. A second mobilisation of the site was undertaken in December 2023 to cover the northern and western parts of the southern parcel of the site due to the late harvest of maize crop in two of the fields. Following this mobilisation, a small area of the site remains unsuitable for survey due to weather issues. The results of the survey are described in Section 5 below and a full copy of the Geophysical Survey report is included in **Appendix 8**.

## Photographs

- 3.9. Photographs included in the body text of this Report are for illustrative purposes only to assist in the discussions of heritage assets, their settings, and views, where relevant. Unless explicitly stated, they are not accurate visual representations of the site or development proposals nor do they conform to any standard or guidance i.e., the Landscape Institute Technical Guidance Note 06/19. However, the photographs included are intended to be an honest representation and are taken without the use of a zoom lens or edited, unless stated in the description or caption.

## Assessment Methodology

- 3.10. Full details of the assessment methodology used in the preparation of this Report are provided within **Appendix 3**. However, for clarity, this methodology has been informed by the following:

- ClfA's *Standard and Guidance for Historic Environment Desk-Based Assessment*;<sup>3</sup>
- *Historic Environment Good Practice Advice in Planning: 2 – Managing Significance in Decision-Taking in the Historic Environment* (hereafter GPA:2);<sup>4</sup>
- *Historic Environment Good Practice Advice in Planning Note 3 (Second Edition) – The Setting of Heritage Assets*, the key guidance of assessing setting (hereafter GPA:3);<sup>5</sup>
- *Historic England Advice Note 1 (Second Edition) – Conservation Area Appraisal, Designation and Management* (hereafter HEAN:1).<sup>6</sup>
- *Historic England Advice Note 12 – Statements of Heritage Significance: Analysing Significance in Heritage Assets* (hereafter HEAN:12);<sup>7</sup> and

<sup>3</sup> Chartered Institute for Archaeologists (ClfA), *Standard and Guidance for Historic Environment Desk-Based Assessment* (revised edition, October 2020).

<sup>4</sup> Historic England, *Historic Environment Good Practice Advice in Planning: 2 – Managing Significance in Decision-Taking in the Historic Environment* (GPA:2) (2<sup>nd</sup> edition, Swindon, July 2015).

<sup>5</sup> Historic England, *Historic Environment Good Practice Advice in Planning Note 3 – The Setting of Heritage Assets* (GPA:3) (2<sup>nd</sup> edition, Swindon, December 2017).

<sup>6</sup> Historic England, *Historic England Advice Note 1 – Conservation Area Appraisal, Designation and Management* (HEAN:1) (2<sup>nd</sup> edition, Swindon, February 2019).

<sup>7</sup> Historic England, *Historic England Advice Note 12 – Statements of Heritage Significance: Analysing Significance in Heritage Assets* (HEAN:12) (Swindon, October 2019).

- *Conservation Principles: Policies and Guidance for the Sustainable Management of the Historic Environment.*<sup>8</sup>

### Consideration of Harm

- 3.11. It is important to consider whether the proposals cause harm. If they do, then one must consider whether the harm represents "substantial harm" or "less than substantial harm" to the identified designated heritage assets, in the context of paragraphs 207 and 208 of the *NPPF*.<sup>9</sup> With regard to non-designated heritage assets, potential harm should be considered within the context of paragraph 209 of the *NPPF*.<sup>10</sup>
- 3.12. The *PPG* clarifies that within each category of harm ("less than substantial" or "substantial"), the extent of the harm may vary and should be clearly articulated.<sup>11</sup>

- 3.13. The guidance set out within the *PPG* also clarifies that "substantial harm" is a high test, and that it may not arise in many cases. It makes it clear that it is the degree of harm to the significance of the asset, rather than the scale of development which is to be assessed.<sup>12</sup> In addition, 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."***<sup>13</sup>

<sup>8</sup> English Heritage, *Conservation Principles: Policies and Guidance for the Sustainable Management of the Historic Environment* (London, April 2008).

<sup>9</sup> DLUHC, *NPPF*, paras. 207 and 208.

<sup>10</sup> DLUHC, *NPPF*, para. 209.

<sup>11</sup> DLUHC, *Planning Practice Guidance (PPG)*, Paragraph: 018 (ID: 18a-018-20190723 Revision date: 23.07.2019).

<sup>12</sup> DLUHC, *PPG*, Paragraph: 018 (ID: 18a-018-20190723 Revision date: 23.07.2019).

<sup>13</sup> EWHC 2847, R DCLG and Nuon UK Ltd v. Bedford Borough Council.



## 4. Policy Framework

### Legislation

- 4.1. Legislation relating to the built historic environment is primarily set out within the *Planning (Listed Buildings and Conservation Areas) Act 1990*, which provides statutory protection for Listed Buildings and their settings and Conservation Areas.<sup>14</sup>
- 4.2. In addition to the statutory obligations set out within the aforementioned Act, Section 38(6) of the *Planning and Compulsory Purchase Act 2004* requires that all planning applications, including those for Listed Building Consent, are determined in accordance with the Development Plan unless material considerations indicate otherwise.<sup>15</sup>
- 4.3. Full details of the relevant legislation are provided in **Appendix 4**.

### National Planning Policy Guidance

- 4.4. National Planning Policy guidance relating to the historic environment is provided within Section 16 of the Government's *National Planning Policy Framework* (NPPF), an updated version of which was published in December 2023. The NPPF is also supplemented by the national *Planning Policy Guidance* (PPG) which comprises a full and consolidated review of planning practice guidance

documents to be read alongside the NPPF and which contains a section related to the Historic Environment.<sup>16</sup> The PPG also contains the *National Design Guide*.<sup>17</sup>

- 4.5. Full details of the relevant national policy guidance is provided within **Appendix 4**.

### The Development Plan

- 4.6. Applications for Planning Permission are currently considered against the policy and guidance set out within the Rushcliffe Local Plan Part 1: Core strategy (adopted December 2014) and the Rushcliffe Local Plan Part 2: Land and Planning Policies (adopted October 2019).
- 4.7. Details of the policy specific relevant to the application proposals are provided within **Appendix 6**.
- 4.8. Broxtowe Borough, Gedling Borough, Nottingham City and Rushcliffe Borough Councils are currently preparing the Greater Nottingham Strategic Plan which will replace the Core Strategy. No draft policies were available at the time of writing this assessment.
- 4.9. Rushcliffe Borough Council have produced a document on Solar Farm Development Planning Guidance in November 2022, which includes a section on the Historic

<sup>14</sup> UK Public General Acts, Planning (Listed Buildings and Conservation Areas) Act 1990.

<sup>15</sup> UK Public General Acts, Planning and Compulsory Purchase Act 2004, Section 38(6).

<sup>16</sup> Department for Levelling Up, Housing and Communities (DLUHC), *Planning Practice Guidance: Historic Environment* (PPG) (revised edition, 23<sup>rd</sup> July 2019), <https://www.gov.uk/guidance/conserving-and-enhancing-the-historic-environment>.

<sup>17</sup> Department for Levelling Up, Housing and Communities (DLUHC), *National Design Guide* (London, January 2021).



Environment, which is in line with the policy and guidance within the current Local Plan.

## 5. The Historic Environment

5.1. This section provides a review of the recorded heritage resource within the site and its vicinity in order to identify any extant heritage assets within the site and to assess the potential for below-ground archaeological remains.

5.2. Designated heritage assets are referenced using their seven-digit NHLE number, HER 'event' numbers have the prefix ENT and HER 'monument' numbers have the prefix MNT or are referenced with their 'PrefRef' numbers.

5.3. A gazetteer of relevant heritage data is included as **Appendix 1**. Designated heritage assets and HER records are illustrated on Figures 1–2 in **Appendix 2**.

### Previous Archaeological Works

5.4. A geophysical survey was undertaken within the majority of the site in August and September 2023. A second mobilisation was undertaken in December 2023 in the northern and western parts of the southern site. Small areas of the site were unsuitable for survey. The survey identified three areas of archaeological activity, comprising a large probable Romano-British complex with an additional potentially associated area to the east, industrial activity, and an enclosure. Also recorded were anomalies relating to the historical agricultural use of the site. The results of the survey are included in the relevant period sections below and a full copy of the report is included in **Appendix 8**. The results of the geophysical survey were instrumental in design of the final layout of the scheme, with the areas of greatest sensitivity removed from the solar and landscaping design.

5.5. A geophysical survey was undertaken to the west of the site in January 2023 associated with the Highfield Solar Farm (LPA ref. 22/00303/FUL). The geophysical survey identified several anomalies suggestive of archaeological activity including ring ditches, enclosure systems and possible settlement activity, as well as agricultural features. A trench plan has been agreed with the County Archaeologist and a trial trench evaluation has been undertaken, the results of which are forthcoming.

5.6. Previous archaeological works in the wider surrounds of the site are shown on Figure 2 and comprise visual assessments, metal detecting and excavation.

5.7. The results of these works are discussed below, where relevant to the potential archaeological resource of the site.

### Topography and Geology

5.8. The topography of the northern site varies between approximately 75–90m aOD, falling away in the southern extent. The topography of the southern parcel rises from approximately 60m aOD in the southern extent to 70m aOD in the northern extent.

5.9. The solid geology of the northern site parcel is mapped as Barnstone Member comprising interbedded mudstone and limestone formed between 209.5 and 199.3 million years ago during the Triassic and Jurassic periods and Barnby Member comprising mudstone formed between 201.3 and 199.3 million years ago during the Jurassic period. No superficial geology is mapped within the

majority of the northern site, although an area of Glaciofluvial Deposits, Mid Pleistocene comprising sand and gravel formed between 860 and 116 thousand years ago during the Quaternary period was mapped in the eastern extent and a band of Head comprising clay, silt, sand and gravel formed between 2.588 million years ago and the present during the Quaternary period was mapped.<sup>18</sup>

- 5.10. The solid geology of the southern site is mapped as Barnstone Member comprising interbedded mudstone and limestone formed between 209.5 and 199.3 million years ago during the Triassic and Jurassic periods. No superficial geology is mapped within the majority of the site, although a band of Alluvium consisting of clay, silt, sand and gravel formed between 11.8 thousand years ago and the present during the Quaternary period is mapped along the southern site boundary.
- 5.11. The majority of the soils within both sites are characterised as slowly permeable, seasonally wet, slightly acidic but base-rich loamy and clayey soils.<sup>19</sup> The soils in the eastern extent of the northern site are characterised as slightly acidic loamy and clayey soils with impeded drainage.

## Archaeological Baseline

### Prehistoric (pre-43 AD) and Romano-British (AD 43 – 410)

#### *Within the site*

- 5.12. The geophysical survey within the northern parcel of the site identified a complex of linear and rectilinear anomalies, covering an area of approximately 175m by 190m, situated between two linear features running north to south, to the south of Lodge Farm (7a in Area 7 on Plate 8). The anomalies form rectilinear enclosures which vary in size and shape, and within them a number of subdivisions were recorded.
- 5.13. The linear nature of the anomalies is suggestive of a Romano-British date, although they are not morphologically distinctive enough that a late Iron Age or early medieval date could not be ruled out. Anomalies at 7b are aligned north-west to south-east and may represent another phase of activity.

<sup>18</sup> British Geological Survey, *Geology of Britain Viewer*, <https://www.bgs.ac.uk/map-viewers/geology-of-britain-viewer/>.

<sup>19</sup> Cranfield University, *Soilscapes*, <http://www.landis.org.uk/soilscapes/>.



*Plate 8: Anomalies recorded representative of a possible Roman settlement complex in the central southern area of the northern parcel (Area 7)*

- 5.14. To the east of this probable Roman settlement complex, and some of which is located outside of the site boundary, are a small number of rectilinear enclosures (8a in Area 8, Plate 9). These align with the archaeological anomalies at 7a and are suggestive of a continuation of the settlement or may be interpreted as enclosures and field systems located outside of the primary settlement. Anomalies 8c to the south of the enclosures are weaker than the other anomalies, but do not follow agricultural

trends in the area. Therefore, these may represent fragmentary remains of archaeological anomalies related to the settlement to the west.



*Plate 9: Anomalies recorded to the east of the possible Roman settlement complex in the south-eastern area of the northern parcel (Area 8)*



- 5.15. Within the northern extent of the northern parcel, and to the north of the anomalies identified at 7a, several linear and rectilinear features were identified. These included a large rectilinear enclosure and several linear anomalies extending to the north and south (2a and 2b in Area 2 on Plate 10). A number of strong anomalies were also identified, indicative of industrial activity (2c and 2d), and possibly associated with the settlement in Area 7, although may be representative or more modern industrial activity.



*Plate 10: Anomalies recorded which represent an enclosure, linear features and possible industrial activity (Area 2)*

- 5.16. In the central area of the southern site parcel, several weakly positive curvilinear anomalies were identified which form a small rectilinear enclosure with rounded corners (11a in Area 11, Plate 11). Although of uncertain date, the nature of these anomalies is indicative of features of possible prehistoric to Roman date.



*Plate 11: Anomalies recorded in the central part of the southern parcel of the site (Area 11)*

*The wider area*

- 5.17. Anomalies of likely archaeological origin were also identified to the west of the site, including ring ditches and a complex of enclosures including elements of possible settlement activity of likely prehistoric to Roman date. Anomalies were identified in the south-eastern

extent of the land to the west of the site, which may extend into the south-western extent of the site. This area was unsuitable for survey at the times of the mobilisations of the geophysical survey.

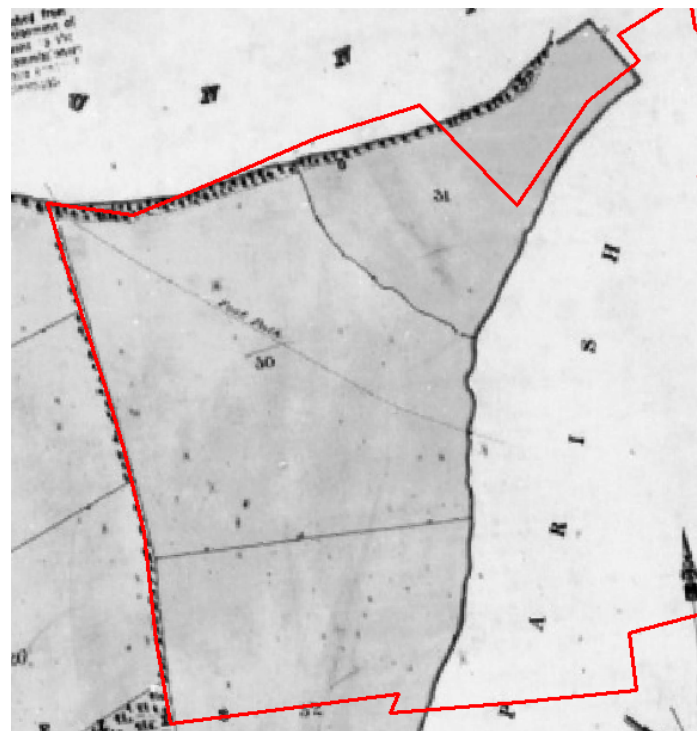
- 5.18. Prehistoric activity in the wider surrounds of the site is scarce; the only recorded find of this date comprises a Bronze Age spear tip recorded c. 100m east of the southern site (MNT5451, L5511, ENT2721).
- 5.19. A well of Roman date was identified during blasting clay in a brickyard c. 910m north-west of the northern site (MNT12432, M13, MNT13, L13, ENT281). The well was approximately 12m deep and 1m wide. Finds from the well included pottery of 3<sup>rd</sup>-century date, animal bones, shells and seeds. The excavation also identified a potential corn drying kiln and beam slot with associated finds c. 960m north of the northern site (MNT12433, M14, MNT14, L14).
- 5.20. A small quantity of coins of Romano-British date was recorded c. 535m south-east of the southern site (MNT5813, L5876, ENT3051) and the findspot of a Roman brooch was recorded c. 695m south-east of the southern site (MNT5819, L5882, ENT3057).
- 5.21. The findspots of 2<sup>nd</sup>- to 3<sup>rd</sup>-century pottery and a bronze spoon were recorded c. 860m north-west of the northern site during ground clearance prior to quarrying (MNT228, L228, ENT526).
- Early medieval (410 AD – 1066) and Medieval (1066 – 1539)
- 5.22. The southern site and the eastern half of the northern site were historically located in the parish of Wysall and most likely formed part of the agricultural hinterland to this

settlement during the medieval period (MNT12708, M349). The western extent of the northern site was historically located in the parish of Costock.

- 5.23. The geophysical survey within the site identified the below-ground remains of furrows associated with the ridge and furrow agricultural technique which occurred during the medieval to post-medieval periods. Any below-ground remains of furrows are not considered to be of sufficient interest to be heritage assets.
- 5.24. The Holy Trinity Church at Wysall originated during the medieval period and lies c. 510m east of the southern site (MNT12685, M321, MNT321, L321, MNT8964-66, L9056-58).
- 5.25. Linear banks and ditches defining enclosures and ridge and furrow earthworks were recorded on an aerial photograph c. 380m east of the northern site (MNT349, L349). Ridge and furrow has been identified in the wider study area and is listed in Appendix 1 and depicted on Figure 3.
- 5.26. Finds of early medieval date comprising a silver coin and two strap ends were recorded c. 600m south-east of the southern site (MNT5812, L5875, ENT3050). The findspot of a sceatta and a strap end were recorded c. 630m south-east of the southern site during metal detecting (MNT7294, L7362, ENT3200).
- 5.27. During the excavation of the brickyard c. 960m north-west of the northern site a single pottery sherd of medieval date and a pipe were identified (MNT7857, L7928).

Post-medieval (1540 – 1750), Early Modern (1750 – 1901), Modern (1901 – present)

- 5.28. The western extent of the northern site is shown on the Plan of the district of Grange Leys and Highfields in the parish of Costock of 1843 (Plate 12). At the time of the mapping, this land was under the ownership of The Right Honorable George Augustus Henry Anne Parkyns Baron Rancilffe and the occupancy of John Wilde and Thomas Wilde. They also owned and occupied the farmstead of Highfields, located to the west of the site.



*Plate 12: Extract from the Plan of the district of Grange Leys and Highfields in the parish of Costock of 1843*

- 5.29. The site is depicted on the Ordnance Survey Map of 1884 (Plate 13). The land within the northern site comprised part of 15 agricultural land parcels and included buildings associated with Lodge Farm. A PRoW was depicted crossing the western extent of the site in a broadly north-west to south-east alignment before continuing in a north to south orientation. Field boundaries within the site were depicted as tree-lined. The geophysical survey within the northern site identified former field boundaries which were shown on this mapping.
- 5.30. Due to the presence of plantations and the name 'Lodge' Farm, the land within the site may have been located within the wider estate lands of Bunny Hall, located to the north of the site.
- 5.31. The southern site comprised part of nine land parcels the majority of which were agricultural although a woodland plantation was shown in the northern extent of the site, known as *Stone Pit Plantation*. The name suggests that there may have been a quarry in this vicinity (MNT263, L263, MNT12652, M263). Two PRoWs were depicted as crossing the site in a broadly east to west alignment. A watercourse crossed the southern extent of the southern site.

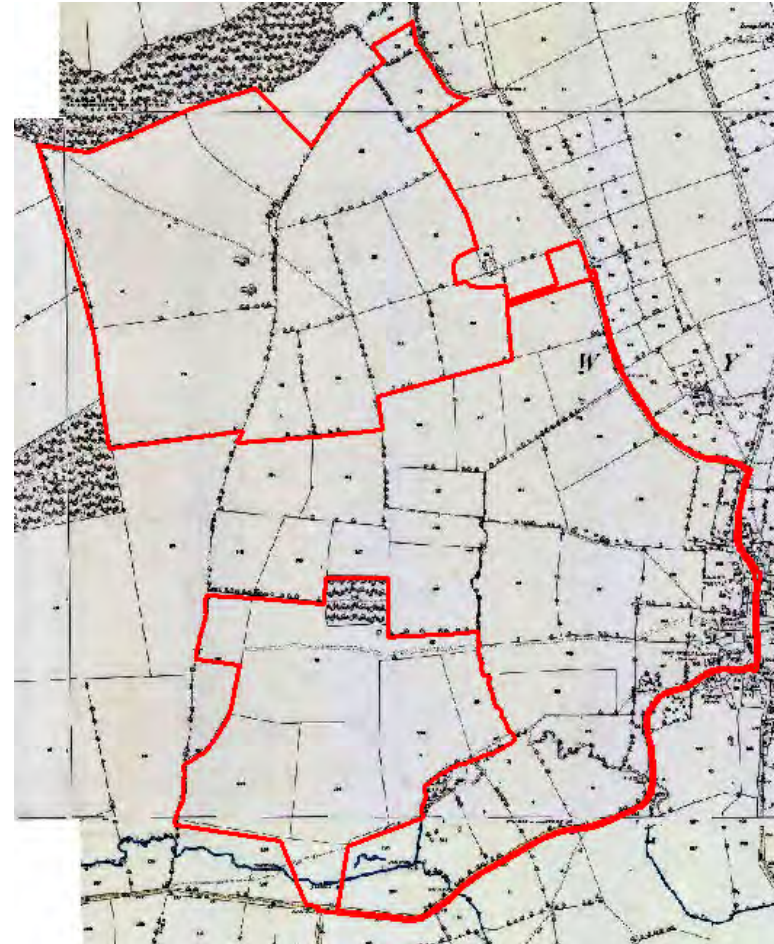


Plate 13: Extract from the Ordnance Survey Map of 1884



- 5.32. The site is depicted on the Ordnance Survey Map of 1900 (Plate 14). No major changes are depicted within the northern site with the exception of an additional building constructed at Lodge Farm. Within the southern site, woodland had been planted in the north-western extent and adjacent to the western site boundary. One of the PRowS appeared to have been shortened to no longer include the central part of the site.

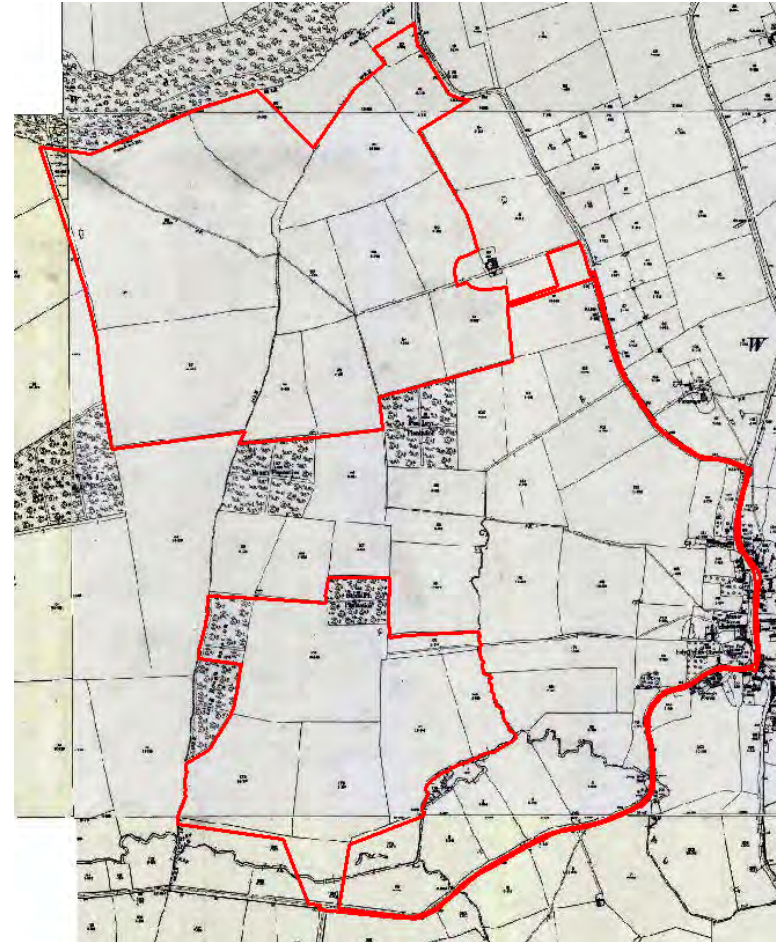
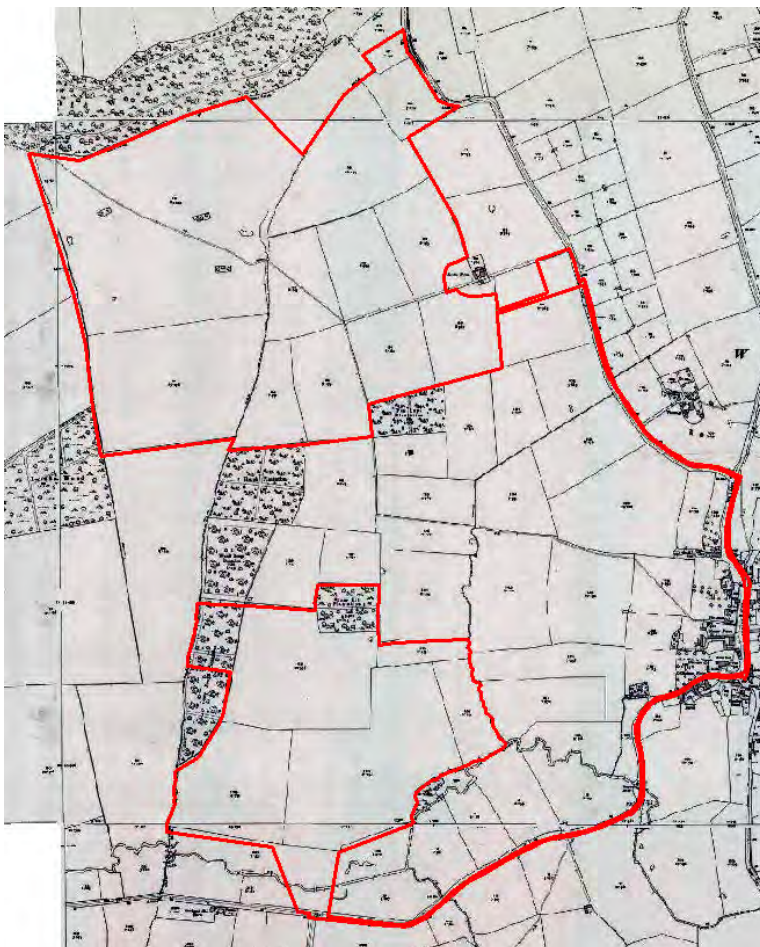


Plate 14: Extract from the Ordnance Survey Map of 1900



- 5.33. No major changes are depicted on the Ordnance Survey Map of 1921 (Plate 15).



*Plate 15: Extract from the Ordnance Survey Map of 1921*

- 5.34. During the latter half of the 20<sup>th</sup> century, a number of outbuildings were constructed at Lodge Farm, adjacent to the northern site. The woodland within the northern

and north-western extents of the southern site were removed.

- 5.35. The modern aerial image shows the current agricultural nature of the sites (Plate 16).



*Plate 16: Modern aerial photograph of the site*

- 5.36. Lodge Farm lies adjacent to the northern parcel of the site and was depicted on late 19<sup>th</sup>-century mapping of the area. A review of historic mapping and of the buildings during the site visit indicates that no historic fabric remains and that the outbuildings have been replaced by modern barns and a new farmhouse constructed in a different location. The buildings at Lodge Farm are not considered to be of a sufficient interest to be considered heritage assets.

*The wider area*

- 5.37. A number of buildings and structures, including farmhouses, quarries and windmills, were constructed in the wider study area during the post-medieval and modern periods, predominantly focussed at Wysall to the east and are listed in the table in Appendix 1 and depicted on Figure 3.

**Statement of Archaeological Potential and Significance**

*Prehistoric to Romano-British*

- 5.38. The geophysical survey within the northern parcel of the site identified a complex of linear and rectilinear anomalies, covering an area of approximately 175m by 190m, situated between two linear features running north to south. The anomalies form rectilinear enclosures which vary in size and shape, and within them a number of subdivisions were recorded. The nature of the anomalies is suggestive of a Romano-British date, although they are not considered to be morphologically distinctive enough

that a late Iron Age or early medieval date could be ruled out. Further rectilinear anomalies were identified to the east of the site, some of which were located within an area which has since been removed from the red line. These align with the aforementioned anomalies and are suggestive of a continuation of settlement, or enclosures and field systems outside of the primary development.

- 5.39. An area of potentially associated industrial activity was also recorded in Area 2 to the north of the main area of possible Roman settlement in Area 7.
- 5.40. Within the southern parcel of the site, several weakly positive curvilinear anomalies were identified which form a small rectilinear enclosure with rounded corners. Although of uncertain date, the nature of these anomalies is indicative of features of possible prehistoric to Roman date.
- 5.41. The potential for archaeological remains of prehistoric to Roman date in these areas of the site is considered to be high. The potential for significant archaeological remains of prehistoric to Roman date in the remainder of the site is considered to be low, with the exception of the area of the site still to be subjected to the geophysical survey.
- 5.42. With regards to Historic England's Scheduling Selection Guide *Settlement Sites to 1500*<sup>20</sup>, this covers Romano-British rural settlements and states the following:

***"Where they retain reasonable archaeological potential, Roman settlement sites will be deemed to***

<sup>20</sup> Historic England 2018 *Settlement Sites to 1500*: Scheduling Selection Guide. Swindon. Historic England.

***have national importance. However, in some areas, both upland and lowland, certain types of settlement are sufficiently common to require discrimination in terms of scheduling recommendations. Again, considerations such as condition, group value and potential will require evaluation."***

- 5.43. With regards to Historic England's Scheduling Selection Guide *Industrial Sites*<sup>21</sup>, this covers Romano-British industrial activity:
- "The expansion of settlements and towns under Roman control led to an increase in scale of domestic and agricultural industries such as corn milling and tanning, as well as a wide range of craft and small-scale manufacturing industries. These are typically identified as components of settlements, rather than as isolated sites and are thus normally considered for designation as components of larger sites."***
- 5.44. The activity identified within the site is suggestive of domestic settlement, although there is no evidence to suggest complex, unusual or high-status activity. The remains have been truncated through the ploughing of the area. The possible Roman settlement remains, industrial activity and enclosure are not considered to have a level of significance commensurate with a Scheduled Monument, but rather are likely to comprise non-designated heritage assets of local significance.
- 5.45. As part of the Development, no panels are proposed across the anomalies indicative of Roman settlement

activity in the northern parcel of the site, and this land will be retained as undeveloped with the exception of the cable route and access track extending across the northern extent of Area 7 and into Area 8.

- 5.46. The majority of these archaeological remains will be retained *in situ* with no further recording needed. The areas which the cable route and access track will pass through may disturb or remove below-ground remains of local value in these areas, which would result in minor harm to a non-designated heritage asset of local significance.
- 5.47. Panels are proposed across Area 2 where there is evidence for an enclosure and industrial activity. Some of these features will be retained *in situ*, although the construction of the panels and the cabling may disturb or remove below-ground remains of local significance in these areas, which would result in minor harm to a non-designated heritage asset of local significance.
- 5.48. Under paragraph 203 of the NPPF, any harm to non-designated heritage assets will need to be weighed with the public benefits of the scheme.

#### *Medieval*

- 5.49. The geophysical survey within the site identified the below-ground remains of furrows associated with the ridge and furrow agricultural technique which occurred during the medieval to post-medieval periods. Any

---

<sup>21</sup> Historic England 2018 *Industrial Sites: Scheduling Selection Guide*. Swindon. Historic England.

below-ground remains of furrows are not considered to be of sufficient interest to be heritage assets.

- 5.50. The anomalies identified which have been interpreted as of possible Romano-British date may be of medieval date. Historic England's Scheduling Selection Guide *Settlement Sites to 1500* covers medieval rural settlements and states that the following would be suitable for scheduling:

***"Surviving medieval settlement remains whose quality and potential gives them national importance are sufficiently common in many parts of the country that discrimination is needed when making scheduling assessments. Such will be influenced, especially in terms of assessing rarity and representativity, by the Atlas, but the other non-statutory criteria such as group value, documentation and especially potential will be at least equally important."***

- 5.51. The activity within the site is suggestive of an area of possible domestic settlement which is not very complex and has been truncated by ploughing. There is nothing to suggest that the remains present within the site are of a significance commensurate to a Scheduled Monument, rather they are considered to be of a significance commensurate to a non-designated heritage asset of local significance.
- 5.52. As per the prehistoric and Roman section above, as part of the development proposals, no panels are proposed across the anomalies indicative of Roman or possible medieval settlement activity in the northern parcel of the site, and this land will be retained as undeveloped with the exception of the cable route extending across the northern extent of Area 7 and into Area 8.

- 5.53. The majority of these archaeological remains will be retained in situ with no further recording needed. The areas which the cable route will pass through may disturb or remove below-ground remains of local value in these areas, which would result in minor harm to a non-designated heritage asset of local significance.

#### *Post-Medieval and Modern*

- 5.54. The land within the sites historically comprised agricultural land which has been ploughed over a long period of time. No anomalies indicative of post-medieval to modern activity were recorded within the site and the potential for significant archaeological remains of this date within the site is considered to be low.

#### *The cable route*

- 5.55. The cable route between the two site parcels follows the route of the road where there has been existing ground disturbance, and no archaeology has been identified which the cable route crosses. The potential for archaeological remains along the route of the cable is considered to be low.

#### **Designated Heritage Assets**

- 5.56. No designated heritage assets lie within the site.
- 5.57. The north-western extent of the Wysall Conservation Area lies c. 335m south-east of the northern site and the south-western extent lies c. 295m east of the southern site. The Conservation Area contains one Grade I Listed Building (the Church of Holy Trinity c. 510m east of the southern site (1259980)) and four Grade II Listed Buildings.

- 5.58. The Grade II Listed Highfields lies c. 435m west of the northern site and 670m west of the southern site (1260277).
- 5.59. Designated heritage assets in the vicinity of the site are considered in further detail in the Setting Assessment Section below.

#### **Locally Listed Buildings**

- 5.60. No buildings or structures located in the vicinity of the site have been identified as Locally Listed Buildings or non-designated heritage assets by the Nottinghamshire HER.



## 6. Setting Assessment

- 6.1. Step 1 of the methodology recommended by the Historic England guidance *GPA:3* (see 'Methodology') is to identify which heritage assets might be affected by a proposed development.<sup>22</sup>
- 6.2. Development proposals may adversely impact heritage assets where they remove a feature that contributes to the significance of a heritage asset or where they interfere with an element of a heritage asset's setting that contributes to its significance, such as interrupting a key relationship or a designed view.
- 6.3. Consideration was made as to whether any of the heritage assets present within or beyond the study area include the site as part of their setting, and therefore may potentially be affected by the proposed development.
- 6.4. Assets in the vicinity identified for further assessment on the basis of distance and intervisibility comprise:
  - The Wysall Conservation Area c. 335m south-east of the northern site and c. 295m east of the southern site;
  - The Grade II Listed Highfields c. 435m west of the northern site and c. 670m west of the southern site (1260277).
- The Grade I Listed Church of Holy Trinity c. 510m east of the southern site (1259980).
- 6.5. The Church of the Holy Trinity will be assessed first, followed by an assessment of the Wysall Conservation Area as a whole, with an assessment of Highfields following.
- 6.6. Designated heritage assets located in the wider study area have been excluded from further assessment on the basis of distance, and/or a lack of intervisibility and/or an absence of historic functional association. Due to the presence of intervening agricultural land and woodland, there is considered to be no impact on the heritage significance via a change to setting to designated heritage assets in the wider surrounds of the site.
- 6.7. No buildings or structures located in the vicinity of the site have been identified as Locally Listed Buildings or non-designated heritage assets by the Nottinghamshire HER.

---

<sup>22</sup> Historic England, *GPA:3*, p. 4.

### Church of Holy Trinity

- 6.8. Grade I Listed Church of Holy Trinity lies c. 510m east of the southern site (1259980). The asset was added to the National List on 13<sup>th</sup> October 1966, with the most recent amendment on 12<sup>th</sup> October 1987. A full copy of the List Entry is included in Appendix 2.
- 6.9. The parish church originated during the 12<sup>th</sup> century, with subsequent additions and alterations taking place in the 12<sup>th</sup> to 17<sup>th</sup> centuries prior to restoration during the 19<sup>th</sup> century. The church was constructed out of dressed coursed rubble and some ashlar with weatherboarding to the east nave and has a slate, plain tile and lead roof. The tower was constructed during the 13<sup>th</sup> century and is topped with a spire incorporating four lucarnes.



*Plate 17: The Grade I Listed Church of the Holy Trinity*

- 6.10. The church is located within an associated churchyard located in the southern extent of the settlement of Wysall, on a prominent bend along Costock Road where the church is slightly raised up above the settlement. The asset is bounded by residential development on all sides.
- 6.11. There is no known historical or functional association between the land within the sites and the asset.
- 6.12. There are no clear ground-level views from the churchyard in the direction of the sites due to the presence of intervening built form and vegetation (Plate 18).



*Plate 18: View west from within the churchyard in the direction of the site (no visibility)*

- 6.13. Due to the topography of the site and the wider landscape, there are a number of views from within the sites towards the spire of the Church of the Holy Trinity, where it is visible above the surrounding settlement and vegetation (Plates 19–20).



*Plate 19: View south-east from within the northern site towards the church spire*



*Plate 20: View east from within the site southern site towards the church spire*



- 6.14. The asset is best appreciated from within its associated churchyard and the Conservation Area Appraisal for Wysall has identified key views which include/terminate in the church (Plate 21). The Appraisal states that *'Wysall's most striking landmark and principal focal point is the 13<sup>th</sup> century church and churchyard of Holy Trinity in the south of the village.'*



*Plate 21: Important vista towards the church from within the Wysall Conservation Area*

- 6.15. As a Grade I Listed Building, the Church of the Holy Trinity is considered to be a designated heritage asset of the highest significance, as defined by the NPPF. The significance is cemented by the asset's inclusion within the Wysall Conservation Area.

- 6.16. The heritage significance of the Church of the Holy Trinity is primarily derived from its built form which has architectural and historic interest as an example of a medieval church with later alterations.

- 6.17. The setting of the asset also contributes to its significance, although to a lesser degree than that derived from its physical fabric. The principal elements of the setting which contribute to its heritage significance comprise:

- The location and position of the asset within a defined churchyard and the experience and appreciation of the asset from this location;
- The relationship between the asset and the wider settlement of Wysall, and the experience and appreciation of the asset from the wider settlement where possible; and
- The agricultural land in the immediate vicinity where the church can be appreciated from.

- 6.18. Views towards the asset from within the sites are considered to be incidental, and they are not considered to be key views. With specific regard to Historic England guidance on the consideration of Churches, *The Setting of Heritage Assets* states the following:

***“Being tall structures, church towers and spires are often widely visible across land- and townscapes but, where development does not impact on the significance of heritage assets visible in a wider setting or where not allowing significance to be appreciated, they are unlikely to be affected by smallscale developments, unless that development***

***competes within them, such as tower blocks and wind turbines may. Even then, such an impact is more likely to be on the landscape values of the tower or spire rather than the heritage values, unless the development impacts on its significance, for instance by impacting on a designed or associative view.***<sup>23</sup>

- 6.19. It is considered that the land within the sites is not considered to contribute to the heritage significance of the church.
- 6.20. The Development within both the northern and southern parcels of the site will comprise a solar farm and associated infrastructure which will alter the character of the agricultural land to solar and other electrical infrastructure. The views towards the spire of the church from within the site are considered to be incidental and are not considered to be views which allow the architectural and historic interest of the church to be understood. On this basis, the land within the site is not considered to contribute to the heritage significance of the church.
- 6.21. Therefore, the Development within the site will result in no harm to the heritage significance of the Grade I Listed Church of the Holy Trinity, via an alteration to setting.

#### Wysall Conservation Area

- 6.22. The Wysall Conservation Area lies c. 355m south-east of the northern site and c. 295m east of the southern site. The Conservation Area includes one Grade I Listed Building (the Church of the Holy Trinity, discussed above) and four Grade II Listed Buildings.
- 6.23. The Conservation Area was first designated in 1990 and a Conservation Area Appraisal and Management Plan was produced for Wysall by Rushcliffe Borough Council in September 2010. Conservation Areas are designated for their special architectural or historic interest.
- 6.24. As stated above, views within the Conservation Area are focussed on the Church of the Holy Trinity in the southern extent. Views are also possible out of the Conservation Area, as stated with the Conservation Area Appraisal, where *'views over surrounding countryside can be gained from many places on the edges of the built up area.'* The land within the sites is not the focus of any of the 'important vistas' identified within the Conservation Area Appraisal. However, an 'important vista' has been identified within the Appraisal west from the south-western extent of the Conservation Area across agricultural land includes glimpsed views towards the land within the southern site, seen in association with

---

<sup>23</sup> Historic England, *The Setting of Heritage Assets: Historic Environment Good*

*Practice Advice in Planning Note 3* (2nd edition, Swindon, December 2017), p.7



intervening vegetation and agricultural land located outside of the site boundary (Plate 22).



*Plate 22: 'Important vista' west from the south-western extent of the Conservation Area across agricultural land (including glimpsed views of the southern site)*

- 6.25. A 'panoramic (wide) view' to the medium/long distance as identified in the Conservation Area Appraisal is in the direction of the northern site from the western extent of the Conservation Area. This includes intervening agricultural land and vegetation and the northern site is not visible (Plate 23).



*Plate 23: Standard photo of the 'panoramic (wide) view' north-west in the direction of the northern site (no visibility)*

- 6.26. Although not an 'important vista' there are views from the northern extent of the Conservation Area towards the northern site and which including Lodge Farm (Plate 24), and views from within the northern site towards this extent of the Conservation Area (Plate 25).



*Plate 24: View north from the northern extent of the Conservation Area towards the northern site*



*Plate 25: View south-east from within the northern site towards the Wysall Conservation Area*

- 6.27. As a Conservation Area which contains one Grade I Listed Building and four Grade II Listed Buildings, the asset is considered to be a designated heritage asset of the highest significance, as defined by the NPPF.
- 6.28. Wysall Conservation Area principally derives its significance from the architectural, artistic and historic interest of its associated Listed Buildings and other historic (non-designated) buildings, and the spaces within it. The setting of the Conservation Area also contributes to its significance, although significance derived from the setting is less than that from the built form and spaces which it contains. Within this context, the Conservation Area is predominantly surrounded by

the wider agricultural land, with some woodland and development located outside of the asset's boundary.

- 6.29. Elements of the surrounds of the Conservation Area which are considered to contribute to its overall heritage significance comprise:
- The remaining rural context of the Conservation Area as provided by agricultural land immediately to the north, east and south which has clear intervisibility with the asset; and
  - The experience and appearance of this immediate rural context of the Conservation Area via routeways in and out of the asset.
- 6.30. With regards to the northern site, this lies on the approach to the northern extent of the Conservation Area via Bradmore Road, although is separated from the Conservation Area by agricultural land. There is intervisibility between the land within the northern parcel of the site and the Conservation Area, although these are not considered to be key views. The land within the northern parcel of the site is not considered to contribute to the overall heritage significance of the Conservation Area.
- 6.31. With regards to the southern site, an 'important vista' was identified out of the Conservation Area which includes glimpsed views of the southern site. Intervening agricultural land lies between the southern extent of the site and the Conservation Area which is predominantly visible in this view, although the land within the site does form the background to this view. On this basis, the land within the southern parcel of the site is considered to

make a very minor contribution to the heritage significance of the Wysall Conservation Area.

- 6.32. The Development is for a solar farm with associated infrastructure located c. 335m north-west and c. 295m west of the asset respectively, which would result in the character of agricultural land being changed to solar and other electrical infrastructure.
- 6.33. Within the northern extent of the site, the panels are set back from the eastern extent of the site to ensure that the approach to the Conservation Area will be retained as agricultural land and increase in the separation of the development. The vegetation along the eastern site boundary will be retained and enhanced. The views between the northern parcel of the site and the asset are incidental, and the land within the northern site is not considered to contribute to the heritage significance of the asset. On this basis, the development of the northern site parcel is considered to result in no harm to the heritage significance of the Wysall Conservation Area.
- 6.34. Panels are proposed across the southern site alongside the BESS and substation compound, and vegetation along the eastern boundary will be retained and enhanced. Intervening agricultural land between the site and the Conservation Area will be retained, and views west from the 'important vista' will largely remain unchanged in the foreground, with the introduction of panels in the backdrop of this view, and vegetation along the eastern site boundary is proposed to be retained and enhanced. The land within the site is considered to make a very minor contribution to the heritage significance of the Conservation Area, as agricultural land which is intervisible in an important vista. On this basis, the Development within the southern extent of the site will



result in less than substantial harm, at the lowermost end of the spectrum, to the overall heritage significance of the Wysall Conservation Area, via an alteration to setting.

#### Highfields

- 6.35. The Grade II Listed Highfields lies c. 435m west of the northern site and c. 670m west of the southern site (1260277). The asset was added to the National List on 2<sup>nd</sup> May 1986 with the following description:
- “Dower house, now house. 1729 with early C20 and c.1985 alterations. Designed by and built for Sir Thomas Parkyns of Bunny Hall. In the main red brick stretchers with blue brick headers, some yellow brick and rubble with ashlar dressings. Concrete pantile bell canted mansard C20 roof. 2 lateral and single ridge red brick stacks. Each corner of the house with clasping buttresses. Those to the front/south set on a rubble and chamfered ashlar plinth, of 2 stages with moulded ashlar band having chamfered ashlar quoins below the band and being panelled above, the panelling forming pilasters with moulded ashlar capitals. The buttresses to the rear lacking quoins. First floor band broken by the buttresses. 2 storey, 3 bay south front. Single C20 tripartite cross casement. To the left is a C20 2 bay lean-to with large C20 openings. Above are 2 similar casements with single central similar smaller casement, windows under segmental arches. Left/west front of 5 bays. 3 similar casements, to the right is a doorway and further right a single similar casement. Above are 5 similar smaller casements. All casements under segmental arches. The right/east front with round arched blocked or part blocked window openings with ashlar keystones, and now with C20 casements. Rear has on the first floor 2 round***

***arched part blocked openings with ashlar keystones and imposts and now with C20 casements. Under the eaves in blue brick is the inscription “Sir T. Parkyns A.D. 1729”. Highfields was the dower house to Bunny Hall.”***

- 6.36. A full copy of the List Entry is included in **Appendix 7**.
- 6.37. Highfields forms part of the Community of the Holy Cross, a convent of Sisters who live under the Benedictine Rule. The former dower house lies within over 10 ha of agricultural land.
- 6.38. To the building’s north-west is a separate farmhouse building set within its own garden which appears to have been built in the early 20th century. To the building’s immediate west are convent structures constructed to replace agricultural outbuildings in 2010. To the immediate north, east and south of the Listed Building are gardens and scrubland associated with the convent.
- 6.39. The land within the site may have been located within the wider estate associated with Bunny Hall, although any association with Highfields has since been severed.
- 6.40. Highfields is not readily appreciable from publicly accessible areas. The nearest PRow lies some distance to the north, and roads to the east and south of the asset do not have pavements and have 50mph and 60mph speed limits respectively, thus whilst travelling along these roads, the ability to appreciate the asset from these roads is limited.

- 6.41. Due to the topography of the wider landscape there are views from within the northern and southern sites in the direction of the asset, although these are not considered to be key views that allow the architectural and historic interest of the assets to be understood (Plates 26–27).



*Plate 26: View west from the western extent of the northern site towards the asset*



*Plate 27: View north-west from within the southern site towards the asset*

- 6.42. The asset is best appreciated from its immediate vicinity and the wider land associated with the convent.
- 6.43. As a Grade II Listed Building, the asset is considered to be a designated heritage asset of less than the highest significance, as defined by the NPPF.
- 6.44. The heritage significance of the asset is principally derived from its built form, which has historic, artistic and architectural interest as an early 18<sup>th</sup>-century building, originally constructed as a dower house to Bunny Hall.
- 6.45. Setting also contributes to the heritage significance of Highfields. The contribution made by setting to the



asset's overall heritage significance is considered to be less than the contribution made by its built form.

6.46. Bunny Hall, the seat of the Parkyns Baronetcy and Grade I Listed Building, was constructed in 1720 and lies approximately 2.1km north of Highfields. As Sir Thomas Parkyns was responsible for the construction of Highfields to act as a Dower House for Bunny Hall, Highfields and Bunny Hall have an associative historic connection. As Bunny Hall and Highfields are located on opposite sides of Bunny Hill and away from public rights of way, there is no visual connection between these assets. However, this historic connection is considered to contribute a minor amount towards the historic value of Highfields.

6.47. The elements of the asset's setting that makes the greatest contribution to its heritage significance comprise:

- Its associated grounds as part of the Community of the Holy Cross;
- Bunny Hall to the north which has a former historical association with the asset; and
- Agricultural land in the immediate surrounds which form part of the land with a functional association with the convent.

6.48. The land within the northern and southern parcels of the site lies a distance away from the asset, with agricultural land, which had planning permission for the construction of a solar farm, lying in between the two. Although there is limited intervisibility between the land within the site and the assets, these are not considered to be key views which contribute to its overall heritage significance. The land within the site is not considered to contribute to the heritage significance of the asset through setting.

6.49. The Development comprise the construction of a solar farm with associated infrastructure which would alter the character of the land within the site from agricultural to solar and other electrical infrastructure. The intervening land has consent for a solar farm and therefore the character of the land in closer vicinity to the asset will be altered by the development of the Highfield Solar Farm. The views between the site and the asset are incidental and not considered to be key views.

6.50. Therefore, the Development within the site will result in no harm to the heritage significance of the Grade II Listed Highfields.

## 7. Conclusions

### Archaeological resource

#### *Prehistoric to Romano-British*

- 7.1. The geophysical survey within the northern parcel of the site identified a complex of linear and rectilinear anomalies, covering an area of approximately 175m by 190m, situated between two linear features running north to south. The anomalies form rectilinear enclosures which vary in size and shape, and within them a number of subdivisions were recorded. The nature of the anomalies is suggestive of a Romano-British date, although they are not considered to be morphologically distinctive enough that a late Iron Age or early medieval date could be ruled out. Further rectilinear anomalies were identified to the east of the site, some of which were located within an area which has since been removed from the red line. These align with the aforementioned anomalies and are suggestive of a continuation of settlement, or enclosures and field systems outside of the primary development.
- 7.2. An area of potentially associated industrial activity was also recorded in Area 2 to the north of the main area of possible Roman settlement in Area 7.
- 7.3. Within the southern parcel of the site, several weakly positive curvilinear anomalies were identified which form a small rectilinear enclosure with rounded corners. Although of uncertain date, the nature of these anomalies is indicative of features of possible prehistoric to Roman date.
- 7.4. The potential for archaeological remains of prehistoric to Roman date in these areas of the site is considered to be high. The potential for significant archaeological remains of prehistoric to Roman date in the remainder of the site is considered to be low, with the exception of the area of the site still to be subjected to the geophysical survey.
- 7.5. With regards to Historic England's Scheduling Selection Guide *Settlement Sites to 1500*, this covers Romano-British rural settlements and states the following:  
  
***"Where they retain reasonable archaeological potential, Roman settlement sites will be deemed to have national importance. However, in some areas, both upland and lowland, certain types of settlement are sufficiently common to require discrimination in terms of scheduling recommendations. Again, considerations such as condition, group value and potential will require evaluation."***
- 7.6. With regards to Historic England's Scheduling Selection Guide *Industrial Sites*, this covers Romano-British industrial activity:  
  
***"The expansion of settlements and towns under Roman control led to an increase in scale of domestic and agricultural industries such as corn milling and tanning, as well as a wide range of craft and small-scale manufacturing industries. These are typically identified as components of settlements, rather than as isolated sites and are thus normally considered for designation as components of larger sites."***

- 7.7. The activity identified within the site is suggestive of domestic settlement, although there is no evidence to suggest complex, unusual or high-status activity. The remains have been truncated through the ploughing of the area. The possible Roman settlement remains, industrial activity and enclosure are not considered to have a level of significance commensurate with a Scheduled Monument, but rather are likely to comprise non-designated heritage assets of local significance.
- 7.8. The design of the Development was influenced by the results of the geophysical survey, with avoidance of areas of archaeological potential being the first option for mitigation.
- 7.9. As part of the Development, no panels are proposed across the anomalies indicative of Roman settlement activity in the northern parcel of the site, and this land will be retained as undeveloped with the exception of the cable route and access track extending across the northern extent of Area 7 and into Area 8.
- 7.10. The majority of these archaeological remains will be retained *in situ* with no further recording needed. The areas which the cable route and access track will pass through may disturb or remove below-ground remains of local value in these areas, which would result in minor harm to a non-designated heritage asset of local significance.
- 7.11. Panels are proposed across Area 2 where there is evidence for an enclosure and industrial activity. Some of these features will be retained *in situ*, although the construction of the panels and the cabling may disturb or remove below-ground remains of local significance in

these areas, which would result in minor harm to a non-designated heritage asset of local significance.

- 7.12. Under paragraph 203 of the NPPF, any harm to non-designated heritage assets will need to be weighed with the public benefits of the scheme.

#### *Medieval*

- 7.13. The geophysical survey within the site identified the below-ground remains of furrows associated with the ridge and furrow agricultural technique which occurred during the medieval to post-medieval periods. Any below-ground remains of furrows are not considered to be of sufficient interest to be heritage assets.
- 7.14. The anomalies identified which have been interpreted as of possible Romano-British date may be of medieval date. Historic England's Scheduling Selection Guide *Settlement Sites to 1500* covers medieval rural settlements and states that the following would be suitable for scheduling:
- “Surviving medieval settlement remains whose quality and potential gives them national importance are sufficiently common in many parts of the country that discrimination is needed when making scheduling assessments. Such will be influenced, especially in terms of assessing rarity and representativity, by the Atlas, but the other non-statutory criteria such as group value, documentation and especially potential will be at least equally important.”***
- 7.15. The activity within the site is suggestive of an area of possible domestic settlement which is not very complex and has been truncated by ploughing. There is nothing to

suggest that the remains present within the site are of a significance commensurate to a Scheduled Monument, rather they are considered to be of a significance commensurate to a non-designated heritage asset of local significance.

7.16. As per the prehistoric and Roman section above, as part of the Development, no panels are proposed across the anomalies indicative of Roman or possible medieval settlement activity in the northern parcel of the site, and this land will be retained as undeveloped with the exception of the cable route and access track extending across the northern extent of Area 7 and into Area 8.

7.17. The majority of these archaeological remains will be retained in situ with no further recording needed. The areas which the cable route and access track will pass through may disturb or remove below-ground remains of local value in these areas, which would result in minor harm to a non-designated heritage asset of local significance.

#### *Post-Medieval and Modern*

7.18. The land within the sites historically comprised agricultural land which has been ploughed over a long period of time. No anomalies indicative of post-medieval to modern activity were recorded within the site and the potential for significant archaeological remains of this date within the site is considered to be low.

#### *The cable route*

7.19. The cable route between the two site parcels follows the route of the road where there has been existing ground disturbance, and no archaeology has been identified

which the cable route crosses. The potential for archaeological remains along the route of the cable is considered to be low.

#### Setting

7.20. No designated heritage assets lie within the site.

7.21. Following a detailed assessment of designated heritage assets in the surrounds of the site, it is concluded that the Development within the southern parcel of the site will result in less than substantial harm at the lowermost end of the spectrum to the heritage significance of the Wysall Conservation Area, via an alteration to setting. The Development within the northern parcel of the site would result in no harm to the heritage significance of Wysall Conservation Area. Overall, the Development within the entire site would result in no harm to the heritage significance of the Grade I Listed Parish Church of All Saints and the Grade II Listed Highfields.

## Sources

Legislation
UK Public General Acts, Ancient Monuments and Archaeological Areas Act 1979.
UK Public General Acts, Planning (Listed Buildings and Conservation Areas) Act 1990.
UK Public General Acts, Planning and Compulsory Purchase Act 2004.
UK Public General Acts, Town and Country Planning Act 1990.

Policy and Guidance
Chartered Institute for Archaeologists (CIfA), <i>Standard and Guidance for Historic Environment Desk-Based Assessment</i> (revised edition, October 2020).
Department for Levelling Up, Housing and Communities (DLUHC), <i>National Planning Policy Framework (NPPF)</i> (London, July 2021).
Department for Levelling Up, Housing and Communities (DLUHC), <i>Planning Practice Guidance (PPG)</i> (revised July 2019).
English Heritage, <i>Conservation Principles: Policies and Guidance for the Sustainable Management of the Historic Environment</i> (London, April 2008).
Historic England, <i>Conservation Area Appraisal, Designation and Management, Historic England Advice Note 1</i> (2 <sup>nd</sup> edition, Swindon, February 2019).



Historic England, <i>Managing Significance in Decision-Taking in the Historic Environment: Historic Environment Good Practice Advice in Planning</i> : 2 (2 <sup>nd</sup> edition, Swindon, July 2015).
Historic England, <i>Statements of Heritage Significance: Analysing Significance in Heritage Assets</i> , Historic England Advice Note 12 (Swindon, October 2019).
Historic England, <i>The Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning Note 3</i> (2 <sup>nd</sup> edition, Swindon, December 2017).

Court and Appeal Decisions
Barnwell Manor Wind Energy Ltd v (1) East Northamptonshire DC & Others [2014] EWCA Civ 137.
Bedford Borough Council v Secretary of State for Communities and Local Government [2013] EWHC 2847 (Admin).
Catesby Estates Ltd. V. Steer [2018] EWCA Civ 1697.
Jones v Mordue [2015] EWCA Civ 1243.
Kay, R (on the application of) v Secretary of State for Housing Communities and Local Government & Anor [2020] EWHC 2292 (Admin).
Palmer v Herefordshire Council & Anor [2016] EWCA Civ 1061.
R (Forge Field Society) v Sevenoaks District Council [2014] EWHC 1895 (Admin).

Cartographic Sources	
1843	Plan of the district of Grange Leys and Highfields in the parish of Costock
1884	Ordnance Survey Map
1900	Ordnance Survey Map
1921	Ordnance Survey Map

# Appendix 1: Gazetteer

## Heritage Data

### HER Event Data

Ev UID	Record Type	Name
ENT2721	EVS	Casual find in Wysall parish 1989?
ENT281	EVT	Excavation at brickyard in Bunny 1967?
ENT3050	EVS	Casual Finds in Thorpe in the Glebe parish 1987
ENT3051	EVS	Casual finds from Thorpe in the Glebe parish pre 1990
ENT3057	EVS	Casual find at Thorpe in the Glebe parish pre 1990
ENT3200	EVS	Metal detecting, Thorpe in the Glebe 1991
ENT433	EVS	Field Observations at Top Cross, Linby by Seaman 1974
ENT459	EVS	Field observation: Listed Buildings Card for fountain, Newstead Abbey
ENT526	EVS	Casual finds from Bunny 1997
ENT703	EVP	Historical report: Hickling G, letter, --/08/1901

## HER Monument Data

Mon UID	Pref Ref	Record Type	Name	Mon Type	Period
MNT10043	L10143	ELE	Mounds and hollows at Thorpe in the Glebe	RIDGE AND FURROW; HOLLOW; MOUND; POND	Unknown
MNT10049	L10149	ELE	Ridge and furrow at Wysall	RIDGE AND FURROW; DITCH; HOLLOW; BANK (EARTHWORK)	Unknown
MNT10050	L10150	ELE	Ridge and furrow etc at Wysall	RIDGE AND FURROW; HOLLOW WAY; BOUNDARY; BUILDING PLATFORM; TERRACED GROUND; BANK (EARTHWORK)	Unknown
MNT12697	M337	MON	Quarry, Wysall	QUARRY?	Unknown
MNT12698	M338	MON	Quarry, Wysall	QUARRY?	Unknown
MNT12699	M339	MON	Windpump, Wysall	WIND PUMP	Modern
MNT337	L337	ELE	Quarry hollow, Wysall	HOLLOW	Unknown
MNT338	L338	ELE	Quarry hollow, Wysall	HOLLOW	Unknown
MNT339	L339	ELE	Windpump, Wysall	STRUCTURE	Modern
MNT5812	L5875	ELE	Early Medieval Finds, Thorpe in the Glebe	ARTEFACT SCATTER	Early Medieval

MNT353	L353	ELE	Water courses, Wysall	WATERCOURSE	Unknown
MNT10046	L10146	ELE	Terraced area and building platforms at Wysall	BUILDING PLATFORM; HOLLOW; TERRACED GROUND; BANK (EARTHWORK)	Unknown
MNT10047	L10147	ELE	Linear Banks at Wysall	RIDGE AND FURROW; HOLLOW; TERRACED GROUND; BANK (EARTHWORK)	Unknown
MNT10048	L10148	ELE	Boundary Bank at Wysall	BOUNDARY; BANK (EARTHWORK)	Unknown
MNT12562	M160	MON	Quarry, Costock parish	QUARRY?	Unknown
MNT12652	M263	MON	Stone Pit Plantation, Wysall	STONE QUARRY?	Unknown
MNT12684	M320	MON	Quarries, Thorpe in the Glebe	QUARRY	Unknown
MNT12706	M347	MON	Quarry, Wysall	QUARRY?	Unknown
MNT12708	M349	MON	Wysall Shrunk Village	SHRUNKEN VILLAGE?	Medieval to Post Medieval
MNT160	L160	ELE	Hachures, possible quarry, Costock	MAP DEPICTION	Unknown
MNT161	L161	ELE	Pit, Wysall	PIT	Unknown
MNT263	L263	ELE	Stone Pit Plantation, Wysall	PLACE NAME	Unknown



MNT320	L320	ELE	Quarries, Thorpe in the Glebe	HOLLOW	Unknown
MNT321	L321	ELE	Holy Trinity Church, Wysall – C15 phase	PULPIT; ARCADE; CLERESTORY; ROOF	Medieval
MNT347	L347	ELE	Quarry hollow, Wysall	HOLLOW	Unknown
MNT349	L349	ELE	Earthworks S of Grange Farm, Wysall	CROFT; RIDGE AND FURROW; TOFT; BUILDING PLATFORM; PLOUGH HEADLAND; BANK (EARTHWORK)	Medieval
MNT354	L354	ELE	Water courses, Wysall / Thorpe in the Glebe	WATERCOURSE	Unknown
MNT5451	L5511	ELE	BA Spear tip, Wysall	FINDSPOT	Bronze Age
MNT5813	L5876	ELE	Roman find scatter, Thorpe in the Glebe	ARTEFACT SCATTER	Roman
MNT5819	L5882	ELE	Roman fibula, Thorpe in the Glebe	FINDSPOT	Roman
MNT7294	L7362	ELE	E Med sceatta and strap end, Thorpe in the Glebe	ARTEFACT SCATTER	Early Medieval
MNT8964	L9056	ELE	Holy Trinity Church, Wysall – Norman phase	WALL; DOORWAY; WINDOW	Medieval
MNT8965	L9057	ELE	Holy Trinity Church, Wysall – C13 phase	CHURCH; SPIRE; TOWER	Medieval
MNT8966	L9058	ELE	Holy Trinity Church, Wysall – C14 phase	CHANCEL	Medieval

MNT10051	L10151	ELE	Ridge and Furrow, Building Plots at Wysall	RIDGE AND FURROW; BOUNDARY; BUILDING PLATFORM	Unknown
MNT122	L122	ELE	Pond at Wysall Road Farm, Bunny	PIT; POND	Unknown
MNT12526	M122	MON	Wysall Road Farm pond, Bunny	FISHPOND	Unknown
MNT12538	M135	MON	Silver Seal Mine gypsum works, Bunny	GYPSUM WORKS	Modern
MNT12539	M136	MON	Quarry in Bunny parish	QUARRY	Unknown
MNT12541	M138	MON	Pumping house in Costock	PUMP HOUSE	Modern
MNT12651	M262	MON	Windmill Hill, Bunny	WINDMILL?	Post Medieval to Modern
MNT12694	M333	MON	Quarry, Wysall	QUARRY	Unknown
MNT135	L135	ELE	Silver Seal Mine, Bunny - map depiction	MAP DEPICTION	Modern
MNT136	L136	ELE	Quarry, Bunny - map depiction	MAP DEPICTION	Unknown
MNT138	L138	ELE	Pumping house in Costock parish	MAP DEPICTION	Modern
MNT262	L262	ELE	Windmill Hill, Bunny	PLACE NAME	Post Medieval to Modern
MNT333	L333	ELE	Quarry hollow, Wysall	HOLLOW	Unknown

MNT12432	M13	MON	Roman well in Bunny parish	WELL	Roman
MNT12433	M14	MON	Roman corn drying kiln, near well, Bunny	CORN DRYING KILN?	Roman
MNT12536	M133	MON	Brickworks in Bunny parish	BRICKWORKS?	Modern
MNT12537	M134	MON	Clay pits, Bunny	CLAY PIT	Modern
MNT13	L13	ELE	Remains of a Roman well, Bunny	WELL; WALL; WELL SHAFT (NCC)	Roman
MNT133	L133	ELE	Works, Bunny	BUILDING	Modern
MNT134	L134	ELE	Old clay pits and associated buildings, Bunny - map depiction	MAP DEPICTION	Modern
MNT14	L14	ELE	Roman material from topsoil near well, Bunny	BEAM SLOT; ARTEFACT SCATTER	Roman
MNT17036	M7878	MON	Quarry, Hill Side Farm, Bunny	QUARRY	Unknown
MNT228	L228	ELE	Roman pottery and spoon, Bunny	ARTEFACT SCATTER	Roman
MNT7807	L7878	ELE	Earthworks at Hill Side Farm, Bunny	HOLLOW WAY; HOLLOW; BANK (EARTHWORK)	Unknown
MNT7857	L7928	ELE	Med-P Med finds from near Roman well, Bunny	ARTEFACT SCATTER	Medieval to Post Medieval
MNT10043	L10143	ELE	Mounds and hollows at Thorpe in the Glebe	RIDGE AND FURROW; HOLLOW; MOUND; POND	Unknown

MNT10048	L10148	ELE	Boundary Bank at Wysall	BOUNDARY; BANK (EARTHWORK)	Unknown
MNT10049	L10149	ELE	Ridge and furrow at Wysall	RIDGE AND FURROW; DITCH; HOLLOW; BANK (EARTHWORK)	Unknown
MNT10050	L10150	ELE	Ridge and furrow etc at Wysall	RIDGE AND FURROW; HOLLOW WAY; BOUNDARY; BUILDING PLATFORM; TERRACED GROUND; BANK (EARTHWORK)	Unknown
MNT23630	M15914	BLD	ROSE COTTAGE	HOUSE	Modern
MNT23597	M15881	BLD	RECTORY COTTAGE	HOUSE	Modern
MNT18674	M10501	BLD	THE NOOK	HOUSE	Post Medieval to Modern
MNT18673	M10500	BLD	RECTORY FARMHOUSE	FARMHOUSE	Post Medieval to Modern
MNT18672	M10499	BLD	MANOR HOUSE FARMHOUSE	FARMHOUSE	Post Medieval to Modern
MNT23592	M15876	BLD	GLEN ROY FARMHOUSE AND ADJOINING BARN	HOUSE	Modern
MNT24562	M16855	BLD	ROW OF THREE COTTAGES ADJACENT TO TYNELEA TO SOUTH	HOUSE	Modern
MNT23631	M15915	BLD	WHITEHOUSES	HOUSE	Modern

MNT12684	M320	MON	Quarries, Thorpe in the Glebe	QUARRY	Unknown
MNT12706	M347	MON	Quarry, Wysall	QUARRY?	Unknown
MNT12708	M349	MON	Wysall Shrunken Village	SHRUNKEN VILLAGE?	Medieval to Post Medieval
MNT10046	L10146	ELE	Terraced area and building platforms at Wysall	BUILDING PLATFORM; HOLLOW; TERRACED GROUND; BANK (EARTHWORK)	Unknown
MNT10047	L10147	ELE	Linear Banks at Wysall	RIDGE AND FURROW; HOLLOW; TERRACED GROUND; BANK (EARTHWORK)	Unknown
MNT10051	L10151	ELE	Ridge and Furrow, Building Plots at Wysall	RIDGE AND FURROW; BOUNDARY; BUILDING PLATFORM	Unknown
MNT23635	M15919	BLD	HILLCOTT AND MYRTLE COTTAGE	HOUSE	Modern
MNT18571	M10395	BLD	HIGHFIELDS	DOWER HOUSE	Post Medieval to Modern
MNT24644	M16937	BLD	THE PLOUGH INN	HOUSE	Modern
MNT23595	M15879	BLD	FIRST HOUSE NORTH EAST OF HOLY TRINITY CHURCH	HOUSE	Modern
MNT23633	M15917	BLD	HOUSE ADJOINING HOUSE NORTH EAST OF HOLY TRINITY CHURCH	HOUSE	Modern



MNT18671	M10498	BLD	MANOR FARMHOUSE	FARMHOUSE	Post Medieval to Modern
MNT12685	M321	BLD	Holy Trinity Church, Wysall	CHURCH	Medieval
MNT23596	M15880	BLD	WYN LODGE	HOUSE	Modern
MNT23593	M15877	BLD	GRANGE FARMHOUSE	HOUSE	Modern
MNT23759	M16045	BLD	FIRST HOUSE SOUTH OF THE HALL WITH ADJOINING GARAGE	HOUSE	Modern
MNT23632	M15916	BLD	HOUSE ADJOINING THE GARAGE ON WYMESWOLD ROAD	HOUSE	Modern
MNT23534	M15818	BLD	DISNEY HOUSE	HOUSE	Modern
MNT12694	M333	MON	Quarry, Wysall	QUARRY	Unknown
MNT23634	M15918	BLD	THE OLD VICARAGE	HOUSE	Modern
MNT23598	M15882	BLD	COACH HOUSE/OUTBUILDING TO THE OLD VICARAGE		Unknown
MNT18506	M10322	BLD	PAIR OF GATE PIERS/WALLS EXTENDING AROUND BUNNY PARK	GATE PIER; WALL	Post Medieval to Modern
MNT26789	MNT26789	PG	Park at Bunny Hall	LANDSCAPE PARK	Post Medieval to Modern



MNT17036	M7878	MON	Quarry, Hill Side Farm, Bunny	QUARRY	Unknown
----------	-------	-----	-------------------------------	--------	---------



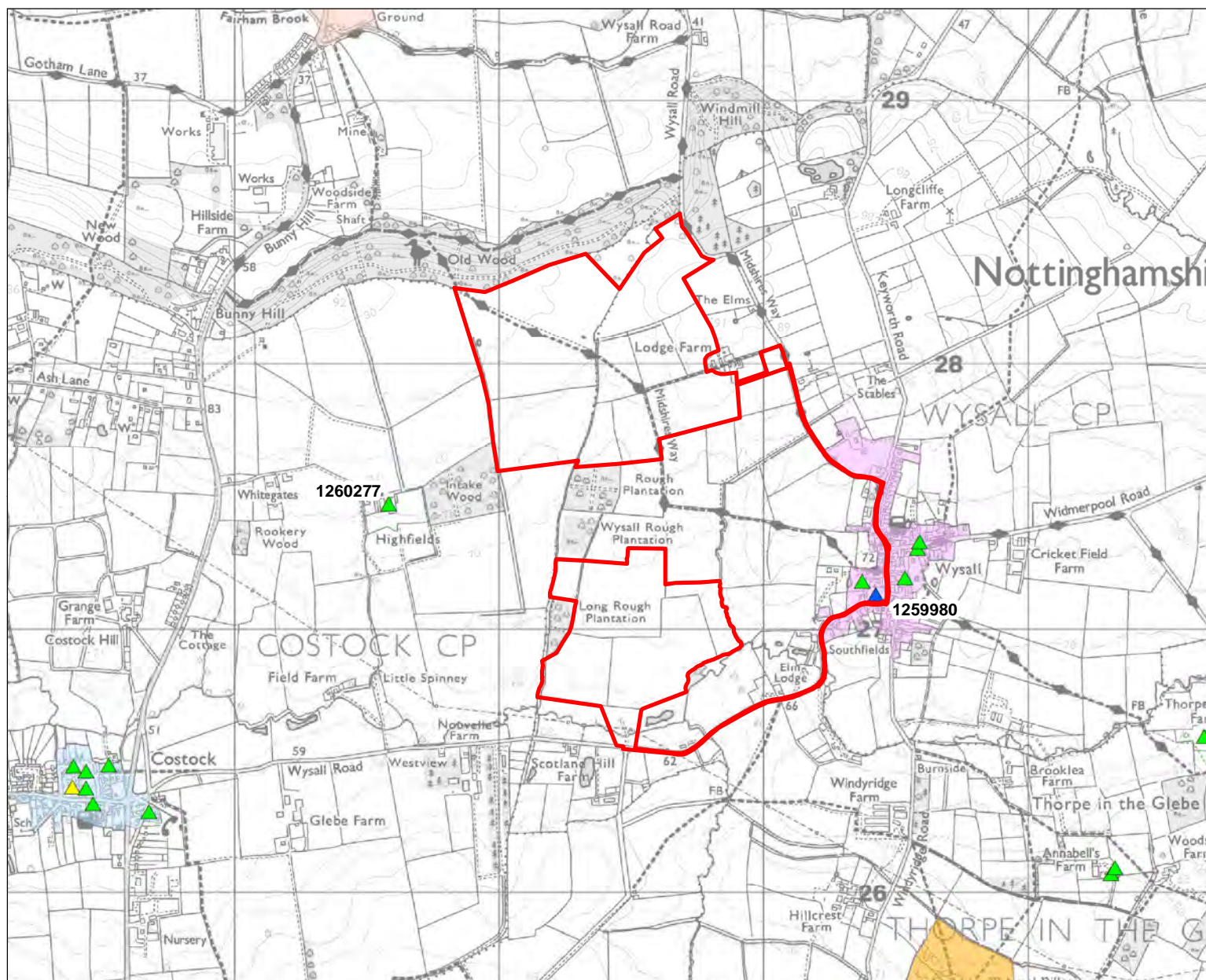
## Historic England Data

### Historic England Listed Buildings

List Entry	Name	Grade	Eastings	Northings
1242479	RECTORY FARMHOUSE	II	460582.1966	327306.8413
1242480	THE NOOK	II	460589.8047	327330.7463
1242535	MANOR HOUSE FARMHOUSE	II	460534.423	327194.1288
1259980	CHURCH OF HOLY TRINITY	I	460424.14	327131.0978
1259992	MANOR FARMHOUSE	II	460372	327181.3608
1260277	HIGHFIELDS	II	458582	327473.3608



## Appendix 2: Figures



## KEY

- Site
- ▲ Grade I Listed Building
- ▲ Grade II\* Listed Building
- ▲ Grade II Listed Building
- Scheduled Monument
- Bunny Conservation Area
- Costock Conservation Area
- Wysall Conservation Area

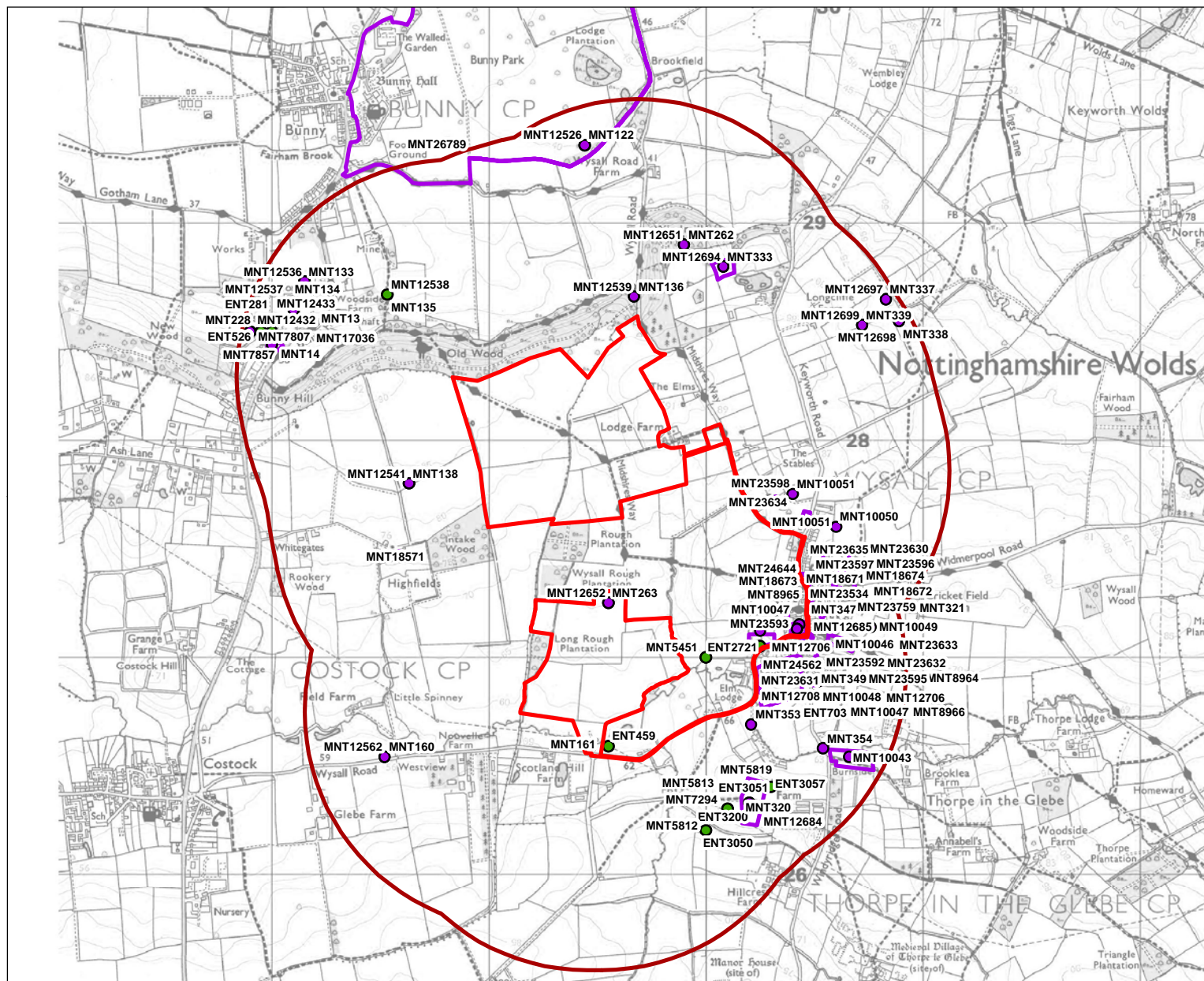
Revisions:  
 First Issue- 10/11/2023 RW  
 Second Issue- 28/11/2023 RW - amend to site name

## Figure 1: Designated Heritage Assets

### Old Wood Energy Park

Client: Exagen Development Ltd  
 DRWG No: P21-2533 Sheet No: - REV: -  
 Drawn by: RW Approved by: GST  
 Date: 28/11/2023  
 Scale: 1:22,500 @ A3





## KEY

- Site
- Study Area
- HER Event Point
- HER Monument Point
- HER Monument Polygon

Revisions:  
 First Issue- 10/11/2023 RW  
 Second Issue- 28/11/2023 RW - amend to site name

## Figure 2: Nottinghamshire HER Data

### Old Wood Energy Park

Client: Exagen Development Ltd  
 DRWG No: P21-2533 Sheet No: - REV: -  
 Drawn by: RW Approved by: GST  
 Date: 28/11/2023  
 Scale: 1:27,500 @ A3

## Appendix 3: Assessment Methodology

### Assessment of significance

In the *NPPF*, heritage significance is defined as:

*“The value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset’s physical presence, but also from its setting. For World Heritage Sites, the cultural value described within each site’s Statement of Outstanding Universal Value forms part of its significance.”<sup>24</sup>*

Historic England's *GPA:2* gives advice on the assessment of significance as part of the application process. It advises understanding the nature, extent, and level of significance of a heritage asset.<sup>25</sup>

In order to do this, *GPA 2* also advocates considering the four types of heritage value an asset may hold, as identified in English Heritage's *Conservation Principles*.<sup>26</sup> These essentially cover the heritage ‘interests’ given in the glossaries of the *NPPF* and the *PPG* which are archaeological, architectural and artistic, and historic.<sup>27</sup>

The *PPG* provides further information on the interests it identifies:

- **Archaeological interest:** As defined in the Glossary to the *National Planning Policy Framework*, there will be archaeological interest in a heritage asset if it holds, or potentially holds, evidence of past human activity worthy of expert investigation at some point.
- **Architectural and artistic interest:** These are interests in the design and general aesthetics of a place. They can arise from conscious design or fortuitously from the way the heritage asset has evolved. More specifically, architectural interest is an interest in the art or science of the design, construction, craftsmanship and decoration of buildings and structures of all types. Artistic interest is an interest in other human creative skills, like sculpture.
- **Historic interest:** An interest in past lives and events (including pre-historic). Heritage assets can illustrate or be associated with them. Heritage assets with historic interest not only provide a material record of our nation’s history, but can also provide meaning for communities derived from their collective experience of a place and can symbolise wider values such as faith and cultural identity.<sup>28</sup>

<sup>24</sup> DLUHC, *NPPF*, Annex 2.

<sup>25</sup> Historic England, *GPA:2*.

<sup>26</sup> Historic England, *Conservation Principles: Policies and Guidance for the Sustainable Management of the Historic Environment* (London, April 2008). These heritage values

are identified as being ‘aesthetic’, ‘communal’, ‘historical’ and ‘evidential’, see *idem* pp. 28–32.

<sup>27</sup> DLUHC, *NPPF*, Annex 2; DLUHC, *PPG*, paragraph 006, reference ID: 18a-006-2019072.

<sup>28</sup> DLUHC, *PPG*, paragraph 006, reference ID: 18a-006-20190723.

Significance results from a combination of any, some, or all of the interests described above.

Historic England guidance on assessing heritage significance, *HEAN:12*, advises using the terminology of the *NPPF* and *PPG*, and thus it is that terminology which is used in this Report.<sup>29</sup>

Listed Buildings and Conservation Areas are generally designated for their special architectural and historic interest. Scheduling is predominantly, although not exclusively, associated with archaeological interest.

### Setting and significance

As defined in the *NPPF*:

***“Significance derives not only from a heritage asset’s physical presence, but also from its setting.”<sup>30</sup>***

Setting is defined as:

***“The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral.”<sup>31</sup>***

Therefore, setting can contribute to, affect an appreciation of significance, or be neutral with regards to heritage values.

### Assessing change through alteration to setting

How setting might contribute to these values has been assessed within this Report with reference to *GPA:3*, particularly the checklist given on page 11. This advocates the clear articulation of “*what matters and why*”.<sup>32</sup>

In *GPA:3*, a stepped approach is recommended, of which Step 1 is to identify which heritage assets and their settings are affected. Step 2 is to assess whether, how and to what degree settings make a contribution to the significance of the heritage asset(s) or allow significance to be appreciated. The guidance includes a (non-exhaustive) checklist of elements of the physical surroundings of an asset that might be considered when undertaking the assessment including, among other things: topography, other heritage assets, green space, functional relationships and degree of change over time. It also lists aspects associated with the experience of the asset which might be considered, including: views, intentional intervisibility, tranquillity, sense of enclosure, accessibility, rarity and land use.

Step 3 is to assess the effect of the proposed development on the significance of the asset(s). Step 4 is to explore ways to maximise enhancement and minimise harm. Step 5 is to make and document the decision and monitor outcomes.

A Court of Appeal judgement has confirmed that whilst issues of visibility are important when assessing setting, visibility does not necessarily confer a contribution to significance and factors other than visibility should also be considered, with Lindblom LJ stating at

<sup>29</sup> Historic England, *Statements of Heritage Significance: Analysing Significance in Heritage Assets*, Historic England Advice Note 12 (Swindon, October 2019).

<sup>30</sup> DLUHC, *NPPF*, Annex 2.

<sup>31</sup> DLUHC, *NPPF*, Annex 2.

<sup>32</sup> Historic England, *GPA:3*, pp. 8, 11.

paragraphs 25 and 26 of the judgement (referring to an earlier Court of Appeal judgement):

***Paragraph 25 – “But – again in the particular context of visual effects – I said that if “a proposed development is to affect the setting of a listed building there must be a distinct visual relationship of some kind between the two – a visual relationship which is more than remote or ephemeral, and which in some way bears on one’s experience of the listed building in its surrounding landscape or townscape” (paragraph 56)”.***

***Paragraph 26 – “This does not mean, however, that factors other than the visual and physical must be ignored when a decision-maker is considering the extent of a listed building’s setting. Generally, of course, the decision-maker will be concentrating on visual and physical considerations, as in Williams (see also, for example, the first instance judgment in R. (on the application of Miller) v North Yorkshire County Council [2009] EWHC 2172 (Admin), at paragraph 89). But it is clear from the relevant national policy and guidance to which I have referred, in particular the guidance in paragraph 18a-013-20140306 of the PPG, that the Government recognizes the potential relevance of other considerations – economic, social and historical. These other considerations may include, for example, “the historic relationship between places”. Historic England’s advice in GPA3 was broadly to the same effect.”<sup>33</sup>***

## Levels of significance

Descriptions of significance will naturally anticipate the ways in which impacts will be considered. Hence descriptions of the significance of Conservation Areas will make reference to their special interest and character and appearance, and the significance of Listed Buildings will be discussed with reference to the building, its setting and any features of special architectural or historic interest which it possesses.

In accordance with the levels of significance articulated in the *NPPF* and the *PPG*, three levels of significance are identified:

- **Designated heritage assets of the highest significance**, as identified in paragraph 206 of the *NPPF*, comprising Grade I and II\* Listed Buildings, Grade I and II\* Registered Parks and Gardens, Scheduled Monuments, Protected Wreck Sites, World Heritage Sites and Registered Battlefields (and also including some Conservation Areas) and non-designated heritage assets of archaeological interest which are demonstrably of equivalent significance to Scheduled Monuments, as identified in footnote 72 of the *NPPF*;<sup>34</sup>
- **Designated heritage assets of less than the highest significance**, as identified in paragraph 206 of the *NPPF*, comprising Grade II Listed Buildings and Grade II Registered Parks and Gardens (and also some Conservation Areas);<sup>35</sup> and

<sup>33</sup> *Catesby Estates Ltd. V. Steer* [2018] EWCA Civ 1697, paras. 25 and 26.

<sup>34</sup> *DLUHC, NPPF*, para. 206 and fn. 72.

<sup>35</sup> *DLUHC, NPPF*, para. 206.



- **Non-designated heritage assets.** Non-designated heritage assets are defined within the PPG as *"buildings, monuments, sites, places, areas or landscapes identified by plan-making bodies as having a degree of significance meriting consideration in planning decisions, but which do not meet the criteria for designated heritage assets"*.<sup>36</sup>

Additionally, it is of course possible that sites, buildings or areas have no heritage significance.

### Assessment of harm

Assessment of any harm will be articulated in terms of the policy and law that the proposed development will be assessed against, such as whether a proposed development preserves or enhances the character or appearance of a Conservation Area, and articulating the scale of any harm in order to inform a balanced judgement/weighting exercise as required by the NPPF.

In accordance with key policy, the following levels of harm may potentially be identified for designated heritage assets:

- **Substantial harm or total loss.** It has been clarified in a High Court Judgement of 2013 that this 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"*,<sup>37</sup> and

- **Less than substantial harm.** Harm of a lesser level than that defined above.

With regards to these two categories, the PPG states:

***"Within each category of harm (which category applies should be explicitly identified), the extent of the harm may vary and should be clearly articulated."***<sup>38</sup>

Hence, for example, harm that is less than substantial would be further described with reference to where it lies on that spectrum or scale of harm, for example low end, middle, and upper end of the less than substantial harm spectrum/scale.

With regards to non-designated heritage assets, there is no basis in policy for describing harm to them as substantial or less than substantial, rather the NPPF requires that the scale of any harm or loss is articulated whilst having regard to the significance of the asset. Harm to such assets is therefore articulated as a level of harm to their overall significance, using descriptors such as minor, moderate and major harm.

It is also possible that development proposals will cause no harm or preserve the significance of heritage assets. Here, a High Court Judgement of 2014 is relevant. This concluded that with regard to preserving the setting of a Listed building or preserving the character and appearance of a Conservation Area, *"preserving"* means doing *"no harm"*.<sup>39</sup>

<sup>36</sup> DLUHC, PPG, paragraph 039, reference ID: 18a-039-20190723.

<sup>37</sup> Bedford Borough Council v Secretary of State for Communities and Local Government [2013] EWHC 2847 (Admin), para. 25.

<sup>38</sup> DLUHC, PPG, paragraph 018, reference ID: 18a-018-20190723.

<sup>39</sup> R (Forge Field Society) v Sevenoaks District Council [2014] EWHC 1895 (Admin).



Preservation does not mean no change, it specifically means no harm. GPA:2 states that *“Change to heritage assets is inevitable but it is only harmful when significance is damaged”*.<sup>40</sup> Thus, change is accepted in Historic England’s guidance as part of the evolution of the landscape and environment. It is whether such change is neutral, harmful or beneficial to the significance of an asset that matters.

As part of this, setting may be a key consideration. When evaluating any harm to significance through changes to setting, this Report follows the methodology given in GPA:3, described above. Fundamental to this methodology is a consideration of *“what matters and why”*.<sup>41</sup> Of particular relevance is the checklist given on page 13 of GPA:3.<sup>42</sup>

It should be noted that this key document also states:

***“Setting is not itself a heritage asset, nor a heritage designation...”***<sup>43</sup>

Hence any impacts are described in terms of how they affect the significance of a heritage asset, and heritage interests that contribute to this significance, through changes to setting.

With regards to changes in setting, GPA:3 states that:

***“Conserving or enhancing heritage assets by taking their settings into account need not prevent change”***.<sup>44</sup>

---

<sup>40</sup> Historic England, GPA:2, p. 9.

<sup>41</sup> Historic England, GPA:3, p. 8.

<sup>42</sup> Historic England, GPA:3, p. 13.

<sup>43</sup> Historic England, GPA:3, p. 4.

<sup>44</sup> Historic England, GPA 3, p. 8.

Additionally, whilst the statutory duty requires that special regard should be paid to the desirability of not harming the setting of a Listed Building, that cannot mean that any harm, however minor, would necessarily require Planning Permission to be refused. This point has been clarified in the Court of Appeal.<sup>45</sup>

## Benefits

Proposed development may also result in benefits to heritage assets, and these are articulated in terms of how they enhance the heritage interests, and hence the significance, of the assets concerned.

As detailed further in **Appendix 5**, the NPPF (at Paragraphs 207 and 208) requires harm to a designated heritage asset to be weighed against the public benefits of the development proposals.<sup>46</sup>

Recent High Court Decisions have confirmed that enhancement to the historic environment should be considered as a public benefit under the provisions of Paragraphs 207 to 209.<sup>47</sup>

The PPG provides further clarity on what is meant by the term ‘public benefit’, including how these may be derived from enhancement to the historic environment (‘heritage benefits’), as follows:

***“Public benefits may follow from many developments and could be anything that delivers economic, social or environmental objectives as described in the National Planning Policy Framework (paragraph 8).***

<sup>45</sup> Palmer v Herefordshire Council & Anor [2016] EWCA Civ 1061.

<sup>46</sup> DLUHC, NPPF, paras. 207 and 208.

<sup>47</sup> Including – Kay, R (on the application of) v Secretary of State for Housing Communities and Local Government & Anor [2020] EWHC 2292 (Admin); DLUHC, NPPF, paras. 207 and 209.

***Public benefits should flow from the proposed development. They should be of a nature or scale to be of benefit to the public at large and not just be a private benefit. However, benefits do not always have to be visible or accessible to the public in order to be genuine public benefits, for example, works to a listed private dwelling which secure its future as a designated heritage asset could be a public benefit.***

***Examples of heritage benefits may include:***

- ***sustaining or enhancing the significance of a heritage asset and the contribution of its setting***
- ***reducing or removing risks to a heritage asset***
- ***securing the optimum viable use of a heritage asset in support of its long term conservation.”<sup>48</sup>***

Any "heritage benefits" arising from the proposed development, in line with the narrative above, will be clearly articulated in order for them to be taken into account by the decision maker.

---

<sup>48</sup> DLUHC, PPG, paragraph 020, reference ID: 18a-020-20190723.

## Appendix 4: Legislative Framework

Legislation relating to the built historic environment is primarily set out within the *Planning (Listed Buildings and Conservation Areas) Act 1990*, which provides statutory protection for Listed Buildings and Conservation Areas.<sup>49</sup> It does not provide statutory protection for non-designated or Locally Listed heritage assets.

Section 66(1) of the Act states that:

***“In considering whether to grant planning permission [or permission in principle] for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State, shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.”<sup>50</sup>***

In the 2014 Court of Appeal judgement in relation to the Barnwell Manor case, Sullivan LJ held that:

***“Parliament in enacting section 66(1) did intend that the desirability of preserving the settings of listed buildings should not simply be given careful***

***consideration by the decision-maker for the purpose of deciding whether there would be some harm, but should be given “considerable importance and weight” when the decision-maker carries out the balancing exercise.”<sup>51</sup>***

A judgement in the Court of Appeal (‘Mordue’) has clarified that, with regards to the setting of Listed Buildings, where the principles of the NPPF are applied (in particular paragraph 134 of the 2012 version of the NPPF, the requirements of which are now given in paragraph 208 of the current, revised NPPF, see **Appendix 5**), this is in keeping with the requirements of the 1990 Act.<sup>52</sup>

In addition to the statutory obligations set out within the *Planning (Listed Buildings and Conservation Area) Act 1990*, Section 38(6) of the *Planning and Compulsory Purchase Act 2004* requires that all planning applications, including those for Listed Building Consent, are determined in accordance with the Development Plan unless material considerations indicate otherwise.<sup>53</sup>

<sup>49</sup> UK Public General Acts, Planning (Listed Buildings and Conservation Areas) Act 1990.

<sup>50</sup> UK Public General Acts, Planning (Listed Buildings and Conservation Areas) Act 1990, Section 66(1).

<sup>51</sup> Barnwell Manor Wind Energy Ltd v (1) East Northamptonshire DC & Others [2014] EWCA Civ 137. para. 24.

<sup>52</sup> Jones v Mordue [2015] EWCA Civ 1243.

<sup>53</sup> UK Public General Acts, Planning and Compulsory Purchase Act 2004, Section 38(6).

## Appendix 5: National Policy Guidance

### The National Planning Policy Framework (December 2023)

National policy and guidance is set out in the Government's *National Planning Policy Framework (NPPF)* published in December 2023. This replaced and updated the previous *NPPF* (September 2023). The *NPPF* needs to be read as a whole and is intended to promote the concept of delivering sustainable development.

The *NPPF* sets out the Government's economic, environmental and social planning policies for England. Taken together, these policies articulate the Government's vision of sustainable development, which should be interpreted and applied locally to meet local aspirations. The *NPPF* continues to recognise that the planning system is plan-led and that therefore Local Plans, incorporating Neighbourhood Plans, where relevant, are the starting point for the determination of any planning application, including those which relate to the historic environment.

The overarching policy change applicable to the proposed development is the presumption in favour of sustainable development. This presumption in favour of sustainable development (the 'presumption') sets out the tone of the Government's overall stance and operates with and through the other policies of the *NPPF*. Its purpose is to send a strong signal to all those involved in the planning process about the need to plan positively for appropriate new development; so that both plan-making and development management are proactive and driven by a search for opportunities to deliver sustainable development, rather than barriers. Conserving historic assets in a manner appropriate to their significance forms part of this drive towards sustainable development.

The purpose of the planning system is to contribute to the achievement of sustainable development and the *NPPF* sets out three 'objectives' to facilitate sustainable development: an economic objective, a social objective, and an environmental objective. The presumption is key to delivering these objectives, by creating a positive pro-development framework which is underpinned by the wider economic, environmental and social provisions of the *NPPF*. The presumption is set out in full at paragraph 11 of the *NPPF* and reads as follows:

***"Plans and decisions should apply a presumption in favour of sustainable development.***

***For plan-making this means that:***

- a. all plans should promote a sustainable pattern of development that seeks to: meet the development needs of their area; align growth and infrastructure; improve the environment; mitigate climate change (including by making effective use of land in urban areas) and adapt to its effects;***
- b. strategic policies should, as a minimum, provide for objectively assessed needs for housing and other uses, as well as any needs that cannot be met within neighbouring areas, unless:***
  - i. the application of policies in this Framework that protect areas or assets of particular importance provides a strong reason for restricting***

***the overall scale, type or distribution of development in the plan area; or***

- ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.***

***For decision-taking this means:***

- a. approving development proposals that accord with an up-to-date development plan without delay; or***
- b. where there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless:***
  - i. the application policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or***
  - ii. any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole.”<sup>54</sup>***

However, it is important to note that footnote 7 of the NPPF applies in relation to the final bullet of paragraph 11. This provides a context for paragraph 11 and reads as follows:

***“The policies referred to are those in this Framework (rather than those in development plans) relating to: habitats sites (and those sites listed in paragraph 187) and/or designated as Sites of Special Scientific Interest; land designated as Green Belt, Local Green Space, an Area of Outstanding Natural Beauty, a National Park (or within the Broads Authority) or defined as Heritage Coast; irreplaceable habitats; designated heritage assets (and other heritage assets of archaeological interest referred to in footnote 72); and areas at risk of flooding or coastal change.”<sup>55</sup> (our emphasis)***

The NPPF continues to recognise that the planning system is planned and that therefore, Local Plans, incorporating Neighbourhood Plans, where relevant, are the starting point for the determination of any planning application.

Heritage Assets are defined in the NPPF as:

***“A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. It includes designated heritage assets and assets identified by the local planning authority (including local listing).”<sup>56</sup>***

<sup>54</sup> DLUHC, NPPF, para. 11.

<sup>55</sup> DLUHC, NPPF, para. 11, fn. 7.

<sup>56</sup> DLUHC, NPPF, Annex 2.



The NPPF goes on to define a Designated Heritage Asset as a:

***“World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area designated under relevant legislation.”<sup>57</sup>***

As set out above, significance is also defined as:

***“The value of a heritage asset to this and future generations because of its heritage interest. The interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset’s physical presence, but also from its setting. For World Heritage Sites, the cultural value described within each site’s Statement of Outstanding Universal Value forms part of its significance.”<sup>58</sup>***

Section 16 of the NPPF relates to ‘Conserving and enhancing the historic environment’ and states at paragraph 201 that:

***“Local planning authorities should identify and assess the particular significance of any heritage asset that may be affected by a proposal (including by development affecting the setting of a heritage asset) taking account of the available evidence and any necessary expertise. They should take this into account when considering the impact of a proposal on a heritage asset, to avoid or minimise any conflict between the heritage asset’s conservation and any aspect of the proposal.”<sup>59</sup>***

Paragraph 203 goes on to state that:

***“In determining planning applications, local planning authorities should take account of:***

- a. the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;***
- b. the positive contribution that conservation of heritage assets can make to sustainable communities including their economic vitality; and***
- c. the desirability of new development making a positive contribution to local character and distinctiveness.”<sup>60</sup>***

With regard to the impact of proposals on the significance of a heritage asset, paragraphs 205 and 206 are relevant and read as follows:

***“When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset’s conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to***

<sup>57</sup> DLUHC, NPPF, Annex 2.

<sup>58</sup> DLUHC, NPPF, Annex 2.

<sup>59</sup> DLUHC, NPPF, para. 201.

<sup>60</sup> DLUHC, NPPF, para. 203.

**substantial harm, total loss or less than substantial harm to its significance.”<sup>61</sup>**

**“Any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification. Substantial harm to or loss of:**

- a. grade II listed buildings, or grade II registered parks or gardens, should be exceptional;**
- b. assets of the highest significance, notably scheduled monuments, protected wreck sites, registered battlefields, grade I and II\* listed buildings, grade I and II\* registered parks and gardens, and World Heritage Sites, should be wholly exceptional.”<sup>62</sup>**

Section b) of paragraph 206, which describes assets of the highest significance, also includes footnote 72 of the NPPF, which states that non-designated heritage assets of archaeological interest which are demonstrably of equivalent significance to Scheduled Monuments should be considered subject to the policies for designated heritage assets.

In the context of the above, it should be noted that paragraph 207 reads as follows:

**“Where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset, local planning authorities**

**should refuse consent, unless it can be demonstrated that the substantial harm or total loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:**

- a. the nature of the heritage asset prevents all reasonable uses of the site; and**
- b. no viable use of the heritage asset itself can be found in the medium term through appropriate marketing that will enable its conservation; and**
- c. conservation by grant-funding or some form of not for profit, charitable or public ownership is demonstrably not possible; and**
- d. the harm or loss is outweighed by the benefit of bringing the site back into use.”<sup>63</sup>**

Paragraph 208 goes on to state:

**“Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use.”<sup>64</sup>**

With regards to non-designated heritage assets, paragraph 209 of NPPF states that:

**“The effect of an application on the significance of a non-designated heritage asset should be taken into**

<sup>61</sup> DLUHC, NPPF, para. 205.

<sup>62</sup> DLUHC, NPPF, para. 206.

<sup>63</sup> DLUHC, NPPF, para. 207.

<sup>64</sup> DLUHC, NPPF, para. 208.

***account in determining the application. In weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.”<sup>65</sup>***

Overall, the NPPF confirms that the primary objective of development management is to foster the delivery of sustainable development, not to hinder or prevent it. Local Planning Authorities should approach development management decisions positively, looking for solutions rather than problems so that applications can be approved wherever it is practical to do so. Additionally, securing the optimum viable use of sites and achieving public benefits are also key material considerations for application proposals.

### **National Planning Practice Guidance**

The then Department for Communities and Local Government (now the Department for Levelling Up, Housing and Communities (DLUHC)) launched the planning practice guidance web-based resource in March 2014, accompanied by a ministerial statement which confirmed that a number of previous planning practice guidance documents were cancelled.

This also introduced the national Planning Practice Guidance (PPG) which comprised a full and consolidated review of planning practice guidance documents to be read alongside the NPPF.

The PPG has a discrete section on the subject of the Historic Environment, which confirms that the consideration of ‘significance’ in decision taking is important and states:

***“Heritage assets may be affected by direct physical change or by change in their setting. Being able to properly assess the nature, extent and importance of the significance of a heritage asset, and the contribution of its setting, is very important to understanding the potential impact and acceptability of development proposals.”<sup>66</sup>***

In terms of assessment of substantial harm, the PPG confirms that whether a proposal causes substantial harm will be a judgement for the individual decision taker having regard to the individual circumstances and the policy set out within the NPPF. It goes on to state:

***“In general terms, substantial harm is a high test, so it may not arise in many cases. For example, in determining whether works to a listed building constitute substantial harm, an important consideration would be whether the adverse impact seriously affects a key element of its special architectural or historic interest. It is the degree of harm to the asset’s significance rather than the scale of the development that is to be assessed. The harm may arise from works to the asset or from development within its setting.***

***While the impact of total destruction is obvious, partial destruction is likely to have a considerable impact but, depending on the circumstances, it may still be less than substantial harm or conceivably not harmful at all, for example, when removing later inappropriate additions to historic buildings which***

---

<sup>65</sup> DLUHC, NPPF, para. 209.

<sup>66</sup> DLUHC, PPG, paragraph 007, reference ID: 18a-007-20190723.

***harm their significance. Similarly, works that are moderate or minor in scale are likely to cause less than substantial harm or no harm at all. However, even minor works have the potential to cause substantial harm."***<sup>67</sup> (our emphasis)

#### **National Design Guide:**

Section C2 relates to valuing heritage, local history and culture and states:

***"When determining how a site may be developed, it is important to understand the history of how the place has evolved. The local sense of place and identity are shaped by local history, culture and heritage, and how these have influenced the built environment and wider landscape."***<sup>68</sup>

***"Sensitive re-use or adaptation adds to the richness and variety of a scheme and to its diversity of activities and users. It helps to integrate heritage into proposals in an environmentally sustainable way."***<sup>69</sup>

It goes on to state that:

***"Well-designed places and buildings are influenced positively by:***

- ***the history and heritage of the site, its surroundings and the wider area, including cultural influences;***
- ***the significance and setting of heritage assets and any other specific features that merit conserving and enhancing;***
- ***the local vernacular, including historical building typologies such as the terrace, town house, mews, villa or mansion block, the treatment of façades, characteristic materials and details – see Identity.***

***Today's new developments extend the history of the context. The best of them will become valued as tomorrow's heritage, representing the architecture and placemaking of the early 21<sup>st</sup> century."***<sup>70</sup>

---

<sup>67</sup> DLUHC, PPG, paragraph 018, reference ID: 18a-018-20190723.

<sup>68</sup> DLUHC, NDG, para. 46.

<sup>69</sup> DLUHC, NDG, para. 47.

<sup>70</sup> DLUHC, NDG, paras. 48–49.

## Appendix 6: Relevant Development Plan Policies

Applications for Planning Permission within Wysall are currently considered against the policy and guidance set out within the Rushcliffe Local Plan Part 1: Core strategy (adopted December 2014) and the Rushcliffe Local Plan Part 2: Land and Planning Policies (adopted October 2019).

The Local Plan Part 1 contains the following relevant policy:

### ***"Policy 11: Historic Environment***

***1. Proposals and initiatives will be supported where the historic environment and heritage assets and their settings are conserved and/or enhanced in line with their interest and significance. Planning decisions will have regard to the contribution heritage assets can make to the delivery of wider social, cultural, economic and environmental objectives.***

***2. The elements of Rushcliffe's historic environment which contribute towards the unique identity of areas and help create a sense of place will be conserved and, where possible, enhanced with further detail set out in later Local Development Documents. Elements of particular importance include:***

***a) industrial and commercial heritage such as the textile heritage and the Grantham Canal;***

***b) Registered Parks and Gardens including the grounds of Flintham Hall, Holme Pierrepont Hall, Kingston Hall and Stanford Hall; and***

***c) prominent listed buildings.***

***3. A variety of approaches will be used to assist in the protection and enjoyment of the historic environment including:***

***a) the use of appraisals and management plans of existing and potential conservation areas;***

***b) considering the use of Article 4 directions;***

***c) working with partners, owners and developers to identify ways to manage and make better use of historic assets;***

***d) considering improvements to the public realm and the setting of heritage assets within it;***

***e) ensuring that information about the significance of the historic environment is publicly available. Where there is to be a loss in whole or in part to the significance of an identified historic asset then evidence should first be recorded in order to fully understand its importance; and***

***f) considering the need for the preparation of local evidence or plans. 4. Particular attention will be given to heritage assets at risk of harm or loss of significance, or where a number of heritage assets have significance as a group or give context to a wider area."***



The Local Plan Part 2 contains the following relevant policies:

***"Policy 28: Conserving and enhancing heritage assets***

***1. Proposals that affect heritage assets will be required to demonstrate an understanding of the significance of the assets and their settings, identify the impact of the development upon them and provide a clear justification for the development in order that a decision can be made as to whether the merits of the proposals for the site bring public benefits which decisively outweigh any harm arising from the proposals.***

***2. Proposals affecting a heritage asset and/or its setting will be considered against the following criteria:***

***a) the significance of the asset;***

***b) whether the proposals would be sympathetic to the character and appearance of the asset and any feature of special historic, architectural, artistic or archaeological interest that it possesses;***

***c) whether the proposals would conserve or enhance the character and appearance of the heritage asset by virtue of siting, scale, building form, massing, height, materials and quality of detail;***

***d) whether the proposals would respect the asset's relationship with the historic street pattern, topography, urban spaces, landscape, views and landmarks;***

***e) whether the proposals would contribute to the long-term maintenance and management of the asset; and***

***f) whether the proposed use is compatible with the asset."***

***"Policy 29: Development affecting archaeological sites***

***1. Where development proposals affect sites of known or potential archaeological interest, an appropriate archaeological assessment and evaluation will be required to be submitted as part of the planning application. Planning permission will not be granted without adequate assessment of the nature, extent and significance of the remains present and the degree to which the proposed development is likely to affect them.***

***2. Where archaeological remains of significance are identified permission will only be granted where:***

***a) The archaeological remains will be preserved in situ through careful design, layout and siting of the proposed development; or***

***b) When in-situ preservation is not justified or feasible, appropriate provision is made by the developer for excavation, recording and for the post-excavation analysis, publication, and archive deposition of any findings (to be undertaken by a suitably qualified party), provided that it can be clearly demonstrated that there are wider public benefits of the development proposal which outweigh***



*harm to heritage assets of archaeological interest in line with NPPF requirements.”*



## Appendix 7: Designation Descriptions

# CHURCH OF HOLY TRINITY HOLY TRINITY CHURCH

Listed on the National Heritage List for England.

[Search over 400,000 listed places](https://historicengland.org.uk/listing/the-list/) (<https://historicengland.org.uk/listing/the-list/>)

## Official list entry

Heritage Category: **Listed Building**

Grade: I

List Entry Number: **1259980**

Date first listed: **13-Oct-1966**

Date of most recent amendment: **12-Oct-1987**

Statutory Address 1: **CHURCH OF HOLY TRINITY, MAIN STREET**

Statutory Address 2: **HOLY TRINITY CHURCH, MAIN STREET**

**This List entry helps identify the building designated at this address for its special architectural or historic interest.**

Unless the List entry states otherwise, it includes both the structure itself and any object or structure fixed to it (whether inside or outside) as well as any object or structure within the curtilage of the building.

For these purposes, to be included within the curtilage of the building, the object or structure must have formed part of the land since before 1st July 1948.

[Understanding list entries](https://historicengland.org.uk/listing/the-list/understanding-list-entries/) (<https://historicengland.org.uk/listing/the-list/understanding-list-entries/>)

[Corrections and minor amendments](https://historicengland.org.uk/listing/the-list/minor-amendments/) (<https://historicengland.org.uk/listing/the-list/minor-amendments/>)

## Location

Statutory Address: **CHURCH OF HOLY TRINITY, MAIN STREET**

Statutory Address: **HOLY TRINITY CHURCH, MAIN STREET**

The building or site itself may lie within the boundary of more than one authority.

County: **Nottinghamshire**

District: **Rushcliffe (District Authority)**

Parish: **Wysall**

National Grid Reference: **SK 60424 27131**

## Details

WYSALL MAIN STREET SK 62 NW (west side) 6/150 Church of Holy Trinity (formerly 13.10.66 listed as Holy Trinity Church) G.V. I Parish church. C12, C13, C14, C15, C17, C19, restored 1874. Dressed coursed rubble, some ashlar, weatherboarding to east nave. Slate, plain tile and lead roofs. Coped gables with single ridge crosses to the east chancel and porch. Tower, nave, south aisle, south porch and chancel. Diagonal buttressed single stage embattled C13 tower topped with spire with 4 lucarnes. Remains of 2 gargoyles to the west, north and south sides. West side has a single arched C14 window with single transom with 2 cinquefoil arched lights above and below, cusped tracery, hood mould and worn label stops. In the south wall is a single C13 lancet. The east side has evidence of former nave roof. The 4 C14 arched 2 light bell chamber openings have cusped tracery, over that on the east side is a single clock face. The north wall with C12 masonry has a C12 arched doorway with hood mould and remains of single right human head label stop. To the left and set high into the wall is a single small C12 arched light. Further left are 2 C14 arched windows each with 2 trefoil arched lights. In the C15 clerestory are 2 restored windows each with 2 trefoil arched lights under a flat arch. The north and east chancel walls are set on plinths the north chancel with no openings, the east chancel has a single C17 3 light ashlar mullion window under a flat arch with segmental arched hood mould. The rebuilt south chancel has a single C14 3 light window with cusped tracery under a flat arch, remains of 2 human head label stops. To the left is a round chamfered arched doorway and on the far left a single C14 2 light window with cusped tracery, under a flat arch. The east end of the south aisle has a single C14 window with cusped tracery. The buttressed south wall has a single C14 arched window with 2 trefoil arched lights. The C19 gabled porch with double chamfered arched entrance, hood mould and label stops has an inner chamfered arched doorway with imposts, hood mould and worn human head label stops. To the left is a single similar 2 light window. The clerestory corresponds to the north, however there are 3 windows. Interior. 3 bay C15 nave arcade, the east pier consisting of single central jamb flanked by single engaged octagonal columns, west octagonal column and octagonal responds. The west respond and the west side of the east pier with capitals decorated with upright nobly leaves. The remainder with moulded capitals. Double chamfered arches, the west pier with stops to the outer order forming carved heads. Tall C13 double chamfered tower arch, the inner order supported on foliate decorated corbels. Fine C15 chancel screen with open panel tracery, the east side with 4 misericords. In the south chancel is a single trefoil arched piscina, to the right is a single C14 stoup with carved human head. Reredos with 7 bay blind arcading. To the left of the north east nave window is a small rectangular niche. C15 nave roof with bosses carved in the shape of heads. C15 chancel roof with arched wind braces. C17 altar table with turned legs. C15 pulpit with blind traceried panels. C13 bulbous circular font. 3 C17 benches. Medieval ladder to bell chamber. C18 candelabra in the chancel. Benefactions board on north wall of the nave. Heraldic painted wooden memorial to George Widmerpool, 1689. In the chancel is an alabaster memorial to Hugh Armstrong of Thorpe, 1572 and his wife, Mary. The sides of the tomb are decorated with 7 figures and shields. The recumbant figures are in contemporary dress, he as a knight with feet resting on a lion and head on a visor, she with head on a pillow.

Listing NGR: SK6042227130

## Legacy

The contents of this record have been generated from a legacy data system.

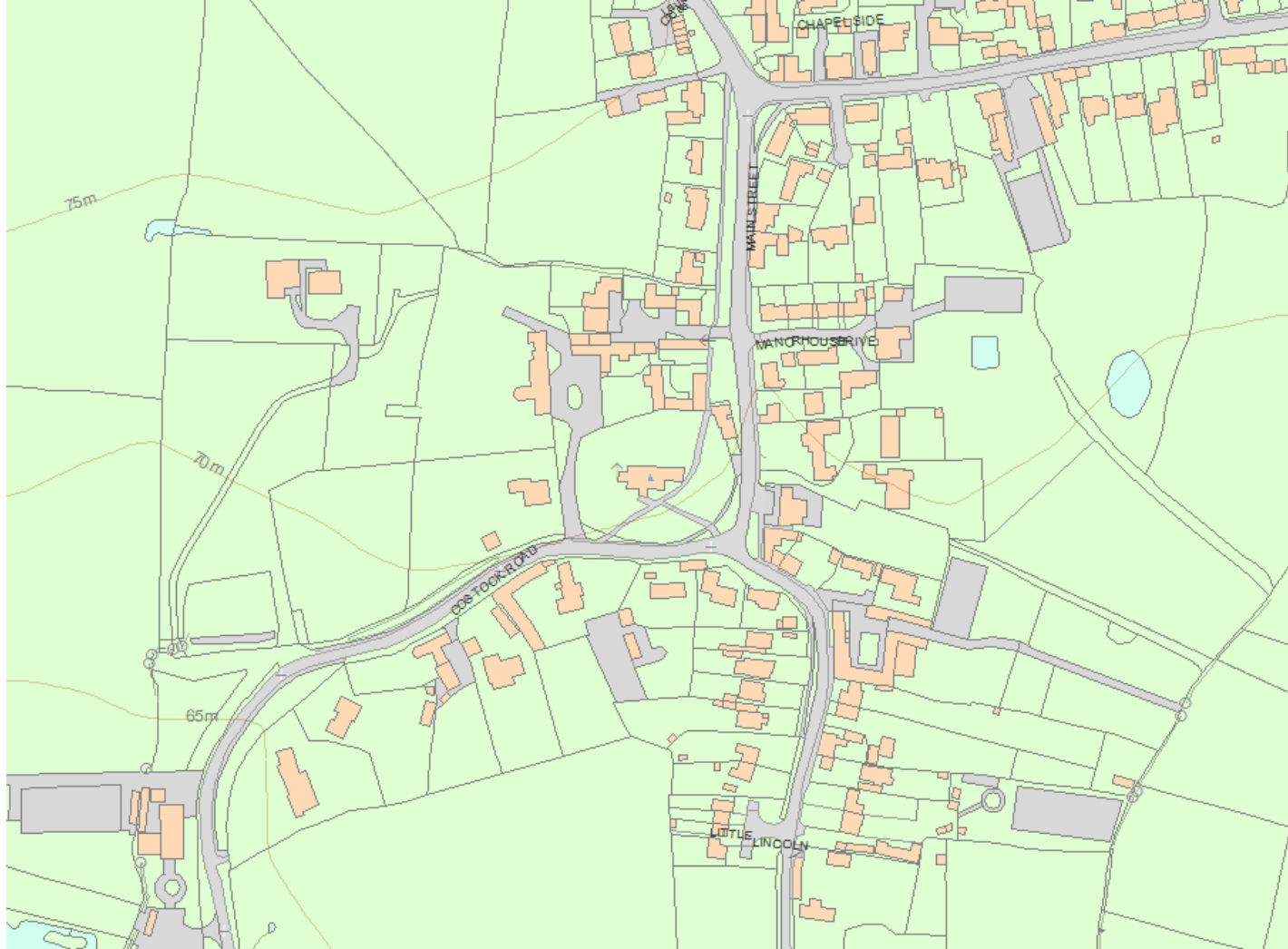
Legacy System number: **441885**

Legacy System: **LBS**

## Legal

This building is listed under the Planning (Listed Buildings and Conservation Areas) Act 1990 as amended for its special architectural or historic interest.





## Map

This map is for quick reference purposes only and may not be to scale. This copy shows the entry on 23-Feb-2022 at 11:33:22.

© Crown Copyright and database right 2022. All rights reserved. Ordnance Survey Licence number 100024900. © British Crown and SeaZone Solutions Limited 2022. All rights reserved. Licence number 102006.006.

Use of this data is subject to **Terms and Conditions**

(<https://historicengland.org.uk/terms/website-terms-conditions/>).

End of official list entry

---

← [Previous - Overview](#)

---

→ [Next - Comments and Photos](#)

# HIGHFIELDS

Listed on the National Heritage List for England.

[Search over 400,000 listed places](https://historicengland.org.uk/listing/the-list/) (<https://historicengland.org.uk/listing/the-list/>)

## Official list entry

Heritage Category: **Listed Building**

Grade: **II**

List Entry Number: **1260277**

Date first listed: **02-May-1986**

Statutory Address 1: **HIGHFIELDS, NOTTINGHAM ROAD**

**This List entry helps identify the building designated at this address for its special architectural or historic interest.**

Unless the List entry states otherwise, it includes both the structure itself and any object or structure fixed to it (whether inside or outside) as well as any object or structure within the curtilage of the building.

For these purposes, to be included within the curtilage of the building, the object or structure must have formed part of the land since before 1st July 1948.

[\*\*Understanding list entries\*\*](https://historicengland.org.uk/listing/the-list/understanding-list-entries/) ([\*https://historicengland.org.uk/listing/the-list/understanding-list-entries/\*](https://historicengland.org.uk/listing/the-list/understanding-list-entries/))

[\*\*Corrections and minor amendments\*\*](https://historicengland.org.uk/listing/the-list/minor-amendments/) ([\*https://historicengland.org.uk/listing/the-list/minor-amendments/\*](https://historicengland.org.uk/listing/the-list/minor-amendments/))

## Location

Statutory Address: **HIGHFIELDS, NOTTINGHAM ROAD**

**The building or site itself may lie within the boundary of more than one authority.**

County: **Nottinghamshire**

District: **Rushcliffe (District Authority)**

Parish: **Costock**

National Grid Reference: **SK 58582 27473**

# Details

COSTOCK NOTTINGHAM ROAD SK 52 NE (east side) 5/7 Highfields 2.5.86 II Dower house, now house. 1729 with early C20 and c.1985 alterations. Designed by and built for Sir Thomas Parkyns of Bunny Hall. In the main red brick stretchers with blue brick headers, some yellow brick and rubble with ashlar dressings. Concrete pantile bell canted mansard C20 roof. 2 lateral and single ridge red brick stacks. Each corner of the house with clasping buttresses. Those to the front/south set on a rubble and chamfered ashlar plinth, of 2 stages with moulded ashlar band having chamfered ashlar quoins below the band and being panelled above, the panelling forming pilasters with moulded ashlar capitals. The buttresses to the rear lacking quoins. First floor band broken by the buttresses. 2 storey, 3 bay south front. Single C20 tripartite cross casement. To the left is a C20 2 bay lean-to with large C20 openings. Above are 2 similar casements with single central similar smaller casement, windows under segmental arches. Left/west front of 5 bays. 3 similar casements, to the right is a doorway and further right a single similar casement. Above are 5 similar smaller casements. All casements under segmental arches. The right/east front withn round arched blocked or part blocked window openings with ashlar keystones, and now with C20 casements. Rear has on the first floor 2 round arched part blocked openings with ashlar keystones and imposts and now with C20 casements. Under the eaves in blue brick is the inscription "Sir T. Parkyns A.D. 1729". Highfields was the dower house to Bunny Hall.

Listing NGR: SK5858227473

## Legacy

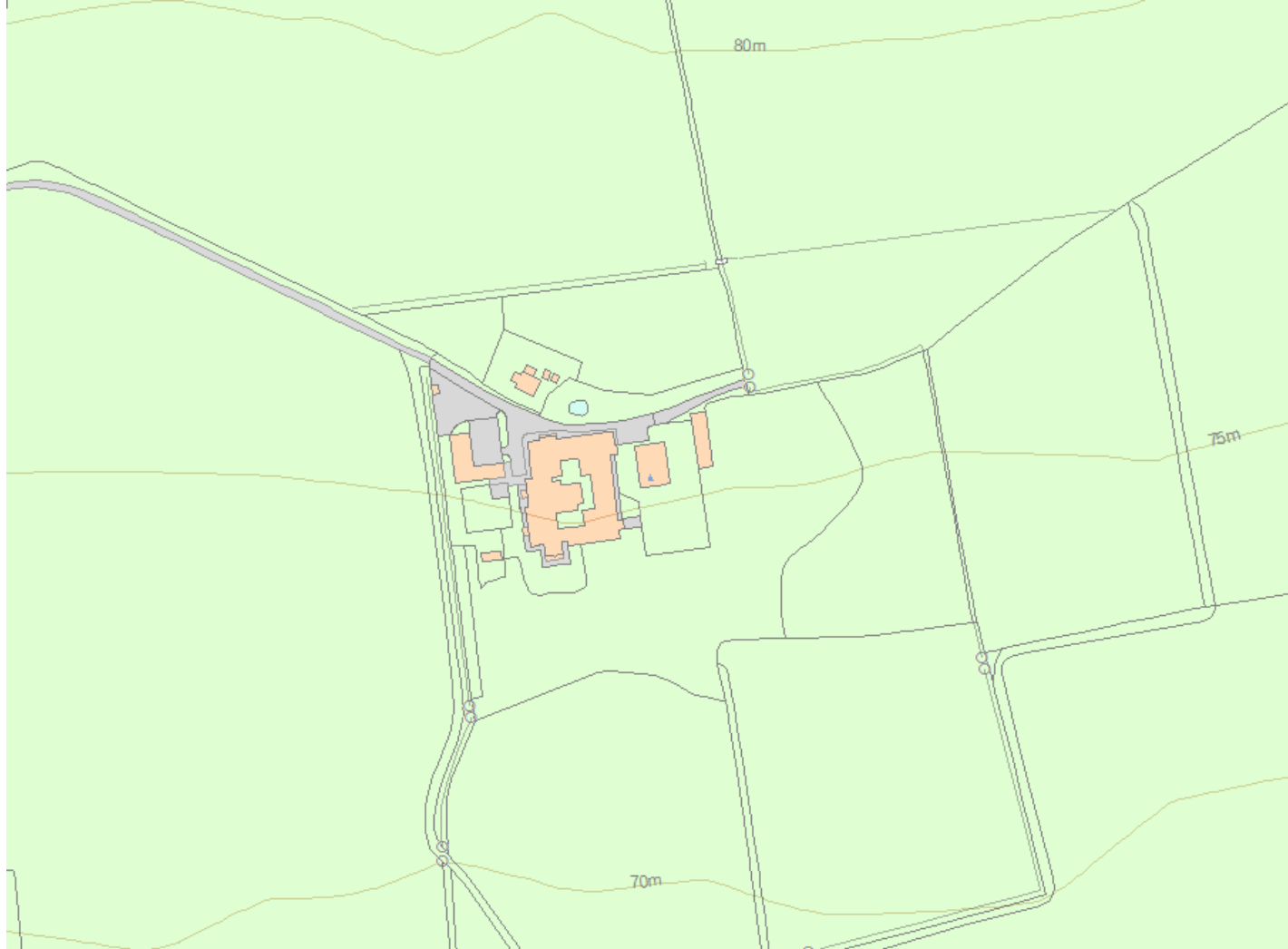
The contents of this record have been generated from a legacy data system.

Legacy System number: **441251**

Legacy System: **LBS**

## Legal

This building is listed under the Planning (Listed Buildings and Conservation Areas) Act 1990 as amended for its special architectural or historic interest.



## Map

This map is for quick reference purposes only and may not be to scale. This copy shows the entry on 23-Feb-2022 at 11:33:25.

© Crown Copyright and database right 2022. All rights reserved. Ordnance Survey Licence number 100024900. © British Crown and SeaZone Solutions Limited 2022. All rights reserved. Licence number 102006.006.

Use of this data is subject to **Terms and Conditions**  
(<https://historicengland.org.uk/terms/website-terms-conditions/>).

End of official list entry

---

← [Previous](#) - **Overview**

---

→ [Next](#) - **Comments and Photos**



## Appendix 8: Geophysical Survey Report





**Geophysical Survey Report  
Old Wood Energy Park,  
Willoughby, Nottinghamshire**

**For  
Pegasus Planning Group Ltd**

**On Behalf Of  
Exagen Development Limited**

**Magnitude Surveys Ref: MSSK1600**

**January 2024**



**3 Captain Street**

**Bradford**

**BD1 4HA**

**01274 926020**

**info@magnitudesurveys.co.uk**

**Report By:**

David Taylor BA(Hons) MSc, Henry Russell BA MA & Jake Dolan BSc FGS

**Report Approved By:**

Dr Paul S. Johnson FSA MCIfA & Finnegan Pope-Carter BSc (Hons) MSc FGS

**Issue Date:**

22 January 2024

## **Abstract**

Magnitude Surveys was commissioned to assess the subsurface potential of two land parcels, covering a c. 105.8ha area of land west of Wysall, Nottinghamshire. A magnetic gradiometer survey was successfully undertaken across all of the northern parcel, and the majority of the southern parcel of the survey area; the remainder of the southern parcel will be surveyed in a third deployment later in the year. The survey has identified three areas of focused archaeological activity, comprising a large probable Romano-British complex with internal features, and further associated enclosures outside of the main complex. An additional area of possible archaeological activity has been identified in the northern half of the survey area, comprising linear and rectilinear features and several strong dipolar features that might represent industrial activity. A further archaeological enclosure was identified within the southern parcel. Anomalies relating to the historical agricultural use of the landscape have also been identified across the survey area and indicate multiple ridge and furrow regimes and former mapped and unmapped field boundaries. Several undetermined anomalies have been identified across the survey area. These anomalies lack sufficient context for confident interpretation, and likely represent anomalies relating to the natural, agricultural or modern use of the survey area. However, an archaeological origin should not be ruled out for these anomalies. Magnetic interference from modern sources such as service lines, electric pylons and extant fencing is limited, but locally significant.

## Contents

Abstract.....	23
List of Figures .....	4
1. Introduction .....	6
2. Quality Assurance .....	6
3. Objectives.....	6
4. Geographic Background.....	7
5. Archaeological Background.....	8
6. Methodology.....	9
6.1. Data Collection .....	9
6.2. Data Processing .....	10
6.3. Data Visualisation and Interpretation .....	10
7. Results.....	11
7.1. Qualification .....	11
7.2. Discussion .....	11
7.3. Interpretation .....	12
7.3.1. General Statements .....	12
7.3.2. Magnetic Results - Specific Anomalies.....	12
8. Conclusions .....	14
9. Archiving .....	16
10. Copyright.....	16
11. References .....	16
12. Project Metadata .....	17
13. Document History .....	17

## List of Figures

Figure 1:	Site Location	1:25,000 @ A4
Figure 2:	Location of Survey Areas	1:10,000 @ A4
Figure 3:	Magnetic Total Field (Lowers Sensor) Northern Areas (West) (Overview)	1:3,000 @ A3
Figure 4:	Magnetic Interpretation over Satellite Imagery and Historical Maps Northern Areas (West) (Overview)	1:3,000 @ A3
Figure 5:	Magnetic Total Field (Lowers Sensor) Northern Areas (East) (Overview)	1:3,000 @ A3
Figure 6:	Magnetic Interpretation over Satellite Imagery and Historical Maps Northern Areas (East) (Overview)	1:3,000 @ A3
Figure 7:	Magnetic Total Field (Lower Sensor) Southern Areas (Overview)	1:3,000 @ A3
Figure 8:	Magnetic Interpretation over Satellite Imagery and Historical Maps Southern Areas (Overview)	1:3,000 @ A3
Figure 9:	Magnetic Total Field (Lower Sensor) Southern Areas (Overview)	1:3,000 @ A3
Figure 10:	Magnetic Interpretation over Satellite Imagery and Historical Maps Southern Areas (Overview)	1:3,000 @ A3
Figure 11:	Magnetic Gradient (Areas 2 & 5)	1:1,500 @ A3
Figure 12:	Magnetic Interpretation (Areas 2 & 5)	1:1,500 @ A3
Figure 13:	XY Trace Plot (Areas 2 & 5)	1:1,500 @ A3
Figure 14:	Magnetic Gradient (Area 2)	1:1,500 @ A3
Figure 15:	Magnetic Interpretation (Area 2)	1:1,500 @ A3
Figure 16:	Magnetic Interpretation (Area)	1:1,500 @ A3
Figure 17:	Magnetic Gradient (Areas 2, 3 & 5)	1:1,500 @ A3
Figure 18:	Magnetic Interpretation (Areas 2, 3 & 5)	1:1,500 @ A3
Figure 19:	XY Trace Plot (Areas 2, 3 & 5)	1:1,500 @ A3
Figure 20:	Magnetic Gradient (Areas 1, 2, 3, 5, 6, 7 & 9)	1:1,500 @ A3
Figure 21:	Magnetic Interpretation (Areas 1, 2, 3, 5, 6, 7 & 9)	1:1,500 @ A3

Figure 22:	XY Trace Plot (Areas 2, 3, 4 & 5)	1:1,500 @ A3
Figure 23:	Magnetic Gradient (Areas 2, 3, 4 & 5)	1:1,500 @ A3
Figure 24:	Magnetic Interpretation (Areas 2, 3, 4 & 5)	1:1,500 @ A3
Figure 25:	XY Trace Plot (Areas 2, 3, 4 & 5)	1:1,500 @ A3
Figure 26:	Magnetic Gradient (Areas 2, 3, 4 & 5)	1:1,500 @ A3
Figure 27:	Magnetic Interpretation (Areas 2, 3, 4 & 5)	1:1,500 @ A3
Figure 28:	XY Trace Plot (Areas 2, 3, 4 & 5)	1:1,500 @ A3
Figure 29:	Magnetic Gradient (Areas 1, 7, 8 & 9)	1:1,500 @ A3
Figure 30:	Magnetic Interpretation (Areas 1, 7, 8 & 9)	1:1,500 @ A3
Figure 31:	XY Trace Plot (Areas 1, 7, 8 & 9)	1:1,500 @ A3
Figure 32:	Magnetic Gradient (Areas 10, 11, 12 & 15)	1:1,500 @ A3
Figure 33:	Magnetic Interpretation (Areas 10, 11, 12 & 15)	1:1,500 @ A3
Figure 34:	XY Trace Plot (Areas 10, 11, 12 & 15)	1:1,500 @ A3
Figure 35:	Magnetic Gradient (Areas 10, 11 & 15)	1:1,500 @ A3
Figure 36:	Magnetic Interpretation (Areas 10, 11 & 15)	1:1,500 @ A3
Figure 37:	XY Trace Plot (Areas 10, 11 & 15)	1:1,500 @ A3
Figure 38:	Magnetic Gradient (Areas 11, 13 & 14)	1:1,500 @ A3
Figure 39:	Magnetic Interpretation (Areas 11, 13 & 14)	1:1,500 @ A3
Figure 40:	XY Trace Plot (Areas 11, 13 & 14)	1:1,500 @ A3
Figure 41:	Magnetic Gradient (Areas 11, 13, 14 & 17)	1:1,500 @ A3
Figure 42:	Magnetic Interpretation (Areas 11, 13, 14 & 17)	1:1,500 @ A3
Figure 43:	XY Trace Plot (Areas 11, 13, 14 & 17)	1:1,500 @ A3



## 1. Introduction

- 1.1. Magnitude Surveys Ltd (MS) was commissioned by Pegasus Planning Group Ltd on behalf of Exagen Development Limited to undertake a geophysical survey over a c. 105.8ha area of land, which included two land parcels, west of Wysall, Nottinghamshire (SK 59675 27627).
- 1.2. The geophysical survey comprised quad-towed, cart-mounted GNSS-positioned fluxgate gradiometer survey. Magnetic survey is the standard primary geophysical method for archaeological applications in the UK due to its ability to detect a range of different features. The technique is particularly suited for detecting fired or magnetically enhanced features, such as ditches, pits, kilns, sunken featured buildings (SFBs) and industrial activity (David *et al.*, 2008).
- 1.3. The survey was conducted in line with the current best practice guidelines produced by Historic England (David *et al.*, 2008), the Chartered Institute for Archaeologists (CIfA, 2020) and the European Archaeological Council (Schmidt *et al.*, 2015).
- 1.4. It was conducted in line with a WSI produced by Magnitude Surveys (Chandrasekaran, 2023).
- 1.5. The survey commenced on 14<sup>th</sup> August 2023 and took 5 days to complete the first phase of works in the northern parcel of the survey area. A second deployment surveyed c. 16.8ha of available land within the southern parcel over 3 days between the 14<sup>th</sup> to the 16<sup>th</sup> September 2023. A third deployment took place over 2 days between the 30<sup>th</sup> of November and the 1<sup>st</sup> of December 2023, which is when the majority of Area 16 and a portion of Area 17 were surveyed. The remainders of Area 16 and 17 are yet to be surveyed.

## 2. Quality Assurance

- 2.1. Magnitude Surveys is a Registered Organisation of the Chartered Institute for Archaeologists (CIfA), the chartered UK body for archaeologists, and a corporate member of ISAP (International Society for Archaeological Prospection).
- 2.2. The directors of MS are involved in cutting edge research and the development of guidance/policy. Specifically, Dr Chrys Harris has a PhD in archaeological geophysics from the University of Bradford, is a Member of CIfA and has served as the Vice-Chair of the International Society for Archaeological Prospection (ISAP); Finnegan Pope-Carter has an MSc in archaeological geophysics and is a Fellow of the London Geological Society, as well as a member of GeoSIG (CIfA Geophysics Special Interest Group); Dr Paul Johnson has a PhD in archaeology from the University of Southampton, is a Fellow of the Society of Antiquaries of London and a Member of CIfA, has been a member of the ISAP Management Committee since 2015, and is currently the Chair of the Archaeological Prospection Community of the European Archaeological Association.
- 2.3. All MS managers, field and office staff have degree qualifications relevant to archaeology or geophysics and/or field experience.

## 3. Objectives

The objective of this geophysical survey was to assess the subsurface archaeological potential of the survey area.

## 4. Geographic Background

4.1. The survey area is located c. 1km west of Wysall and was divided into two distinct parcels (Figure 1). The c. 72ha northern parcel was located c. 1.3km to the northwest of Wysall, Nottinghamshire. It lies directly south of Old Wood and is to the west of Bradmore Road (Figure 2). The c. 33.8 southern parcel lies c. 1km west-southwest of Wysall and between Kingstone Brook to the south and Rough Plantation to the north (Figure 2). About 25.6ha of this southern parcel have been surveyed while a remaining c.8.2ha will be surveyed at a later date.

4.2. Survey considerations:

Survey Area	Ground Conditions	Further Notes
1	The survey area consisted of a flat arable field.	The survey area was surrounded on all sides by hedgerows, except the southern boundary which was formed by a large ditch in the west and a mound of agricultural waste in the east.
2	The survey area consisted of an arable field sloping down from the east to the centre, the remaining being flat.	The survey area was bordered on all sides by hedgerows containing metal wire fencing. Overhead cables crossed the survey area west to east.
3	The survey area consisted of a flat arable field rising slightly along the centre southern edge.	The survey area was bordered on all sides by hedgerows.
4	The survey area consisted of a flat arable field.	The survey area was bordered on all sides by hedgerows. The southern part of the survey area was heavily overgrown and deeply rutted, and could not be surveyed.
5	The survey area consisted of an arable field sloping gently down from the east.	The survey area was bordered on all sides by hedgerows. Overhead cables crossed the northern part of the survey area.
6	The survey area consisted of an arable field sloping gently down from the east.	The survey was bordered on all sides by hedgerows. Overhead cables crossed the northern part of the survey area.
7	The survey area consisted of an arable field sloping down from the east to the centre the rest being flat.	The survey area was bordered on all sides by hedgerows.
8	The survey area consisted of an arable field sloping gently east to west.	The survey area was bordered on all sides by hedgerows.
9	The survey area consisted of flat pasture.	The survey was bordered by hedgerows to the east and west. Wooden fencing was present along the northern boundary and the southern boundary consisted of an access road.
10	The survey area consisted of a stubble field that sloped down gently to the southeast.	The survey area was bordered by hedgerows to the east, west and south with no physical boundary to the north.
11	The survey area consisted of a stubble field.	The survey was bordered by trees to the south and hedgerows on all other sides.

12	The survey area consisted of a pasture field that sloped down gently to the southeast.	The survey was bordered by hedgerows to the east and trees on all other sides.
13	The survey area consisted of a fallow field that sloped down gently to the southeast.	The survey area was bordered by a wooden fence to the east, wire fencing to the west and wire fencing and hedgerow to the north. A stream comprised the southern boundary. An overhead pylon ran across the centre of the field in a west-east orientation.
14	The survey area consisted of a fallow field that sloped down gently to the southeast.	The survey area was bordered by a wooden fence to the east, wire fencing to the west and wire fencing and hedgerow to the south. A stream comprised the northern boundary.
15	The survey area consisted of a flat, stubble field.	The survey area was bordered by hedges and trees to the north, east, west and southwest with no physical boundary to the southeast.
16	The survey area consisted of a stubble field that sloped down gently from north to south.	The area was bordered by hedges on all sides. Areas of deep ruts and frozen water paddles occupied the western and southern sides of the field.
17	The survey area consisted of a flat, stubble field.	The field was bordered by hedges on all sides. The borders of the field contained deep ruts and field was waterlogged in places. The survey was only commenced in this field and is due to be completed at a later date.

- 4.3. The underlying geology across the majority of the survey area comprises Jurassic and Triassic interbedded mudstones and limestones of the Barnstone Member. The eastern areas of the northern parcel were underlain by Jurassic mudstones of the Barnby Member. Superficial deposits are limited to the area around Field View Farm and consist of glaciofluvial deposits, mid Pleistocene – sand and gravel, and an outer ring of head clay, silt, sand and gravel. In the southernmost section of the southern parcel, superficial deposits comprise alluvium, clay, silt sand and gravel (British Geological Survey, 2024).
- 4.4. The soils consist of slowly permeable seasonally wet and slightly acid but base-rich loamy and clayey soils across the majority of the site. Areas 8 and 9 and the east of Areas 1 and 7 consisted of slightly acid, loamy and clayey soils with impeded drainage (Soilscapes, 2024).

## 5. Archaeological Background

- 5.1. The following is a summary of a Pre-Application Heritage Statement produced and provided by Pegasus Group on behalf of Exagen Developments Limited (Ward, 2023).
- 5.2. No previous archaeological works have been recorded within the survey area. In the wider surroundings, investigations have been limited to visual assessments, metal detecting and limited excavations.
- 5.3. There is no recorded prehistoric activity within the survey area and evidence of any activity within the wider area is limited to the discovery of a Bronze Age spear tip c. 110m east of the southern area (L5511).

- 5.4. No Romano-British finds or features are recorded within the survey area. Within the wider environment, a well of Roman date (M13) was discovered and excavated c. 910m northwest of the northern area yielding environmental evidence and pottery dating to c. 3<sup>rd</sup> century A.D. Discrete finds of Roman material, including coins, a brooch and a bronze spoon have been recorded c. 700m southeast of the southern area (L5876, L5882).
- 5.5. The area and its hinterland remained largely agricultural during the Early Medieval and Late Medieval periods. The Holy Trinity Church in Wysall is Medieval in date and lies c. 500m east of the southern area. Linear banks and ditches defining enclosures as well as ridge and furrow earthworks have been identified in the wider area through aerial photography.
- 5.6. The survey area and the wider environment remained agricultural during the Post-Medieval and Modern periods and is depicted on historical maps (OS 1884) with tree-lined field boundaries. A small woodland known as Stone Pit Plantation may indicate quarrying activities in the vicinity.
- 5.7. With the exception of the addition of small outbuildings at Lodge Farm in the northern area, and woodland planting in the southern area, no significant changes are depicted during the 20<sup>th</sup> and early 21<sup>st</sup> centuries.

## 6. Methodology

### 6.1. Data Collection

6.1.1. Magnetometer surveys are generally the most cost effective and suitable geophysical technique for the detection of archaeology in England. Therefore, a magnetometer survey should be the preferred geophysical technique unless its use is precluded by any specific survey objectives or the site environment. For this site, no factors precluded the recommendation of a standard magnetometer survey.

6.1.2. Geophysical prospection comprised the magnetic method as described in the following table.

6.1.3. Table of survey strategies:

Method	Instrument	Traverse Interval	Sample Interval
Magnetic	Bartington Instruments Grad-13 Digital Three-Axis Gradiometer	1m	200Hz reprojected to 0.125m

6.1.4. The magnetic data were collected using MS' bespoke quad-towed GNSS-positioned cart system.

6.1.4.1. MS' cart system was comprised of Bartington Instruments Grad 13 Digital Three-Axis Gradiometers. Positional referencing was through a multi-channel, multi-constellation GNSS Smart Antenna RTK GPS outputting in NMEA mode to ensure high positional accuracy of collected measurements. The RTK GPS is accurate to 0.008m + 1ppm in the horizontal and 0.015m + 1ppm in the vertical.

6.1.4.2. Magnetic and GPS data were stored on an SD card within MS' bespoke datalogger. The datalogger was continuously synced, via an in-field Wi-Fi unit,

to servers within MS' offices. This allowed for data collection, processing, and visualisation to be monitored in real-time as fieldwork was ongoing.

6.1.4.3. A navigation system was integrated with the RTK GPS, which was used to guide the surveyor. Data were collected by traversing the survey area along the longest possible lines, ensuring efficient collection and processing.

## 6.2. Data Processing

6.2.1. Magnetic data were processed in bespoke in-house software produced by MS. Processing steps conform to the EAC and Historic England guidelines for 'minimally enhanced data' (see Section 3.8 in Schmidt *et al.*, 2015: 33 and Section IV.2 in David *et al.*, 2008: 11).

Sensor Calibration – The sensors were calibrated using a bespoke in-house algorithm, which conforms to Olsen *et al.* (2003).

Zero Median Traverse – The median of each sensor traverse is calculated within a specified range and subtracted from the collected data. This removes striping effects caused by small variations in sensor electronics.

Projection to a Regular Grid – Data collected using RTK GPS positioning requires a uniform grid projection to visualise data. Data are rotated to best fit an orthogonal grid projection and are resampled onto the grid using an inverse distance-weighting algorithm.

Interpolation to Square Pixels – Data are interpolated using a bicubic algorithm to increase the pixel density between sensor traverses. This produces images with square pixels for ease of visualisation.

## 6.3. Data Visualisation and Interpretation

6.3.1. This report presents the gradient of the sensors' total field data as greyscale images, as well as the total field data from the lower sensors. The gradient of the sensors minimises external interferences and reduces the blown-out responses from ferrous and other high contrast material. However, the contrast of weak or ephemeral anomalies can be reduced through the process of calculating the gradient. Consequently, some features can be clearer in the respective gradient or total field datasets. Multiple greyscale images of the gradient and total field at different plotting ranges have been used for data interpretation. Greyscale images should be viewed alongside the XY trace plots (Figures 9, 12, 15, 18, 21, 24 and 27). XY trace plots visualise the magnitude and form of the geophysical response, aiding anomaly interpretation.

6.3.2. Geophysical results have been interpreted using greyscale images and XY traces in a layered environment, overlaid against open street maps, satellite imagery, historical maps, LiDAR data, and soil and geology maps. Google Earth (2024) was also consulted, to compare the results with recent land use.

6.3.3. Geodetic position of results – All vector and raster data have been projected into OSGB36 (ESPG27700) and can be provided upon request in ESRI Shapefile (.SHP) and Geotiff (.TIF) respectively. Figures are provided with raster and vector data projected against OS Open Data.

## 7. Results

### 7.1. Qualification

7.1.1. Geophysical results are not a map of the ground and are instead a direct measurement of subsurface properties. Detecting and mapping features requires that said features have properties that can be measured by the chosen technique(s) and that these properties have sufficient contrast with the background to be identifiable. The interpretation of any identified anomalies is inherently subjective. While the scrutiny of the results is undertaken by qualified, experienced individuals and rigorously checked for quality and consistency, it is often not possible to classify all anomaly sources. Where possible, an anomaly source will be identified along with the certainty of the interpretation. The only way to improve the interpretation of results is through a process of comparing excavated results with the geophysical reports. MS actively seek feedback on their reports, as well as reports from further work, in order to constantly improve our knowledge and service.

### 7.2. Discussion

7.2.1. The geophysical survey was successfully conducted over the c. 72ha northern parcel of the survey area and c. 24.6ha of the southern parcel. Approximately 8.2ha of the southern parcel contained deep ruts and were muddy and/or waterlogged at the time of the survey. These will be surveyed in another deployment. The results are presented in combination with satellite imagery and historical maps (Figures 3-10). Modern disturbance within the survey area was limited to buried services, overhead pylons, and fencing on the edges of fields.

7.2.2. Three distinct archaeological foci have been identified. The first, and most significant, is a large, probably Romano-British complex situated close to the extant Field View Farm. This complex covers an area of around c. 175m by c. 190m, and has clear internal features and identifiable subdivisions. While, on the basis of their morphology and the dates of known findspots in the vicinity, a Romano-British date is perhaps most likely for these features, late-Iron Age or early-Medieval activity is also possible. Further archaeological anomalies and enclosures are located in close proximity to this larger complex. The second of these foci is located in the northern half of the northern parcel, where several linear and rectilinear features have been identified. In close proximity to these areas are numerous discrete, strongly dipolar anomalies that may represent industrial activity. The third comprises a smaller rectilinear enclosure within the southern parcel.

7.2.3. Several anomalies relating to the historical agricultural use of the area have been identified. Regimes of ridge and furrow cultivation have been identified, often respecting mapped and unmapped field boundaries, some of which are visible on historical OS mapping. Several drainage regimes have also been identified within the survey area.

7.2.4. Multiple anomalies have been identified and classified as 'Undetermined'. These anomalies lack sufficient contextual evidence to confidently classify them, and although they are likely to have modern, agricultural, or natural origins, an archaeological origin cannot be ruled out.



## 7.3. Interpretation

### 7.3.1. General Statements

- 7.3.1.1. Geophysical anomalies will be discussed broadly as classification types across the survey area. Only anomalies that are distinctive or unusual will be discussed individually.
- 7.3.1.2. **Data Artefact** – Data artefacts usually occur in conjunction with anomalies with strong magnetic signals due to the way in which the sensors respond to very strong point sources. They are usually visible as minor ‘streaking’ following the line of data collection. While these artefacts can be reduced in post-processing through data filtering, this would risk removing ‘real’ anomalies. These artefacts are therefore indicated as necessary in order to preserve the data as ‘minimally processed’.
- 7.3.1.3. **Ferrous (Spike)** – Discrete dipolar anomalies are likely to be the result of isolated pieces of modern ferrous debris on or near the ground surface.
- 7.3.1.4. **Ferrous/Debris (Spread)** – A ferrous/debris spread refers to a concentration of multiple discrete, dipolar anomalies usually resulting from highly magnetic material such as rubble containing ceramic building materials and ferrous rubbish.
- 7.3.1.5. **Magnetic Disturbance** – The strong anomalies produced by extant metallic structures, typically including fencing, pylons, vehicles and service pipes, have been classified as ‘Magnetic Disturbance’. These magnetic ‘haloes’ will obscure weaker anomalies relating to nearby features, should they be present, often over a greater footprint than the structure causing them.
- 7.3.1.6. **Undetermined** – Anomalies are classified as Undetermined when the origin of the geophysical anomaly is ambiguous and there is no supporting contextual evidence to justify a more certain classification. These anomalies are likely to be the result of geological, pedological or agricultural processes, although an archaeological origin cannot be entirely ruled out. Undetermined anomalies are generally distinct from those caused by ferrous sources.

### 7.3.2. Magnetic Results - Specific Anomalies

- 7.3.2.1. **Archaeology Probable (Strong and Weak) (possible Romano-British Settlement Complex)** – In the eastern section of Area 7, near Field View Farm, a complex of linear and rectilinear anomalies has been identified **[7a]** (Figures 26-28). These anomalies exhibit a strong magnetic signal within an area of c. 175m by c. 190m, which is situated between linear features running north to south. These anomalies form rectilinear enclosures that vary in size and shape, and within these enclosures, multiple, ephemeral, linear and curvilinear anomalies have been identified which may form a series of internal subdivisions. The generally linear nature of anomalies that comprise the complex suggest a Romano-British date, but these are not morphologically distinct enough that, combined with the scarcity of archaeological finds in the nearby area, a late-Iron Age or early-Medieval date can be ruled out. Several anomalies align southeast to northwest **[7b]**, which present

a similar morphology to the possible archaeological anomalies in Area 8 (Figures 29-31) and could be suggestive of multiple phases of activity in this area.

**7.3.2.2. Archaeology Probable (Strong and Weak)** – To the east of the possible Romano-British settlement in Area 7, several rectilinear anomalies were identified **[8a]** in Area 8 (Figures 29-31). These align with the probable archaeology in Area 7, and are morphologically suggestive of a continuation of the settlement, or enclosures and field systems outside the primary settlement. Due to the presence of other agricultural linear anomalies within the area, the anomaly is best viewed in Total Field data (Figure 5).

**7.3.2.3. Archaeology Probable (Weak)** – In the southern parcel of the survey area, within Area 11, several weakly positive curvilinear anomalies were identified **[11a]** (Figures 35-37). These anomalies form a small rectilinear enclosure with rounded corners, representing further archaeological activity across the survey area.

**7.3.2.4. Archaeology Possible (Strong and Weak)** – Within Area 2, several linear and rectilinear features have been identified (Figures 11-19). A large, positive rectilinear enclosure **[2a]** is located in the centre of the area, in close proximity to several large, strong dipolar anomalies. Several linear anomalies **[2b]** extend outwards from this rectilinear enclosure to both the north and the south. These anomalies don't correlate with any known mapped field boundaries on historical mapping and represent a possible archaeological enclosure and related linear features.

**7.3.2.5. Archaeology Possible (Strong)** – In the north of the survey area, within Area 2, several strong discrete anomalies were detected **[2c]** **[2d]** (Figures 11-19). These may be indicative of industrial activity, possibly related to the possible settlement in Area 7. All of these anomalies are located in close proximity to a large rectilinear enclosure **[2a]**, and no anomalies with similar characteristics appear in other parts of the survey area. These dipolar anomalies may relate to more modern industrial activity, but their proximity to other archaeological anomalies should be considered.

**7.3.2.6. Archaeology Possible (Weak)** – Linear and sinuous anomalies were identified in the southeast of the survey area in Area 8 (Figures 29-31). These anomalies **[8c]** exhibit a largely weak magnetic enhancement in comparison to other identified archaeological anomalies however they do not follow the orientations of agricultural trends. Thus, these linear anomalies, as well as adjacent outlying anomalies **[8a]** may identify fragmentary remains of archaeological anomalies related to the settlement anomaly to the west.

**7.3.2.7. Ridge and Furrow** - Parallel, strong and weak positive linear and curvilinear anomalies have been identified as ridge and furrow cultivation throughout much of the survey area **[1a]** **[2e]** **[3b]** **[9b]** (Figures 11-31). The anomalies are aligned to various orientations, possibly indicating different historical land divisions. These anomalies respect some of the archaeological anomalies, suggesting that some of

these agricultural practices may have been contemporaneous with the archaeological anomalies, or that they post-date them.

7.3.2.8. **Agricultural (Weak)** – Across the survey area anomalies were detected of a linear and sinuous nature, with predominantly weak magnetic signals (Figures 32-43). The anomalies designated as Ridge and Furrow agriculture respect these linear anomalies, suggesting they likely represent former field boundaries. Several of these anomalies [2f] [4a] [7d] correlate with known former field boundaries present on historical OS maps. The southern area also contains three linear anomalies that fit the profile of former field boundaries. One, located in Area 16, corresponds to a mapped field boundary, visible on 2<sup>nd</sup> edition OS maps (Figure 10). The others do not however align with any visible on historical mapping.

7.3.2.9. **Natural (Spread)** – Areas of magnetic enhancement have been identified within the southwest of Area 8 and in Area 16 (Figures 29-31 & 32-34). This enhancement has been interpreted as resulting from natural variations caused by the difference between the bedrock geology and the upper soil horizons (see Section 4).

7.3.2.1. **Undetermined (Strong and Weak)** – Across the survey area, several linear curvilinear and amorphous anomalies have been identified which are lacking sufficient contextual evidence to enable a more confident interpretation of their origin (Figures 17-43). A pair of parallel linear anomalies in Area 6 [6b] has similar morphology to anomalies present in Area 7 [7a]. However, the lack of adjacent rectilinear anomalies means it cannot be defined as archaeological and may have an agricultural origin not associated with the probable archaeology present in the survey area. Several linear anomalies [11b, 11c, 12a] have been identified in the southern parcel of the survey area that are likely agricultural in origin, but do not correspond with any known features on historical mapping. A pair of curvilinear anomalies were identified in Area 9 [9a], which may have an archaeological origin, but due to the lack of similar morphology within Areas 7 and 8, and the lack of iron age finds in the surrounding landscape (see section 5.3 & 5.4), have been identified as undetermined. These anomalies may be of agricultural, natural or modern origin, however an archaeological origin should not be excluded.

## 8. Conclusions

8.1. A fluxgate gradiometer survey was successfully undertaken across the survey area. The survey technique has responded well to the environment of the survey area. Magnetic disturbance is limited to buried service lines, pylons, and field boundaries which may have masked weaker more ephemeral anomalies. Nevertheless, the survey has identified numerous anomalies of archaeological, agricultural, natural, and undetermined origin. Many anomalies of a likely archaeological origin were clearly defined, as is evidence of historical agriculture across the landscape.

8.2. Three foci of archaeological activity are present within the survey area. These anomalies have been interpreted as: a multiphase settlement, rectilinear enclosures and possible industrial

activity. The morphology of several anomalies suggests a multiphase landscape usage of possible Romano-British origin, with associated discrete anomalies and smaller divisions possibly indicating further settlement.

- 8.3. Historical agricultural activity has been identified throughout the survey area as ridge and furrow trends, as well as former mapped and unmapped field boundaries.
- 8.4. Some natural variations in the near surface geology have also been detected. These anomalies likely relate to changes in the bedrock and superficial geology as well as the soil properties of the survey area.
- 8.5. Anomalies of undetermined origin have also been detected. It has not been possible to definitively determine whether these anomalies are the result of archaeological, agricultural or modern practices.



## 9. Archiving

- 9.1. MS maintains an in-house digital archive, which is based on Schmidt and Ernenwein (2013). This stores the collected measurements, minimally processed data, georeferenced and un-georeferenced images, XY traces and a copy of the final report.
- 9.2. MS contributes reports to the ADS Grey Literature Library upon permission from the client, subject to any dictated time embargoes.

## 10. Copyright

- 10.1. Copyright and intellectual property pertaining to all reports, figures and datasets produced by Magnitude Services Ltd is retained by MS. The client is given full licence to use such material for their own purposes. Permission must be sought by any third party wishing to use or reproduce any IP owned by MS.

## 11. References

- British Geological Survey, 2024. Geology of Britain. Wysall, Nottinghamshire.  
[<http://mapapps.bgs.ac.uk/geologyofbritain/home.html/>]. Accessed 22/08/2024.
- Chandrasekaran, M. 2023. Written Scheme of Investigation for a Geophysical Survey of Old Wood Energy Park, Willoughby, Nottinghamshire.
- Chartered Institute for Archaeologists, 2020. Standards and guidance for archaeological geophysical survey. ClfA.
- David, A., Linford, N., Linford, P. and Martin, L., 2008. Geophysical survey in archaeological field evaluation: research and professional services guidelines (2<sup>nd</sup> edition). Historic England.
- Google Earth, 2024. Google Earth Pro V 7.1.7.2606.
- Olsen, N., Toffner-Clausen, L., Sabaka, T.J., Brauer, P., Merayo, J.M.G., Jorgensen, J.L., Leger, J.M., Nielsen, O.V., Primdahl, F., and Risbo, T., 2003. Calibration of the Orsted vector magnetometer. Earth Planets Space 55: 11-18.
- Schmidt, A. and Ernenwein, E., 2013. Guide to good practice: geophysical data in archaeology (2<sup>nd</sup> edition). Oxbow Books: Oxford.
- Schmidt, A., Linford, P., Linford, N., David, A., Gaffney, C., Sarris, A. and Fassbinder, J., 2015. Guidelines for the use of geophysics in archaeology: questions to ask and points to consider. EAC Guidelines 2. European Archaeological Council: Belgium.
- Soilscapes, 2024. Wysall, Nottinghamshire. Cranfield University, National Soil Resources Institute.  
[<http://landis.org.uk>]. Accessed 22/08/2024.
- Ward, R. 2023. Pre-Application Heritage Statement, Willoughby 2, on behalf of Exagen Developments Limited.

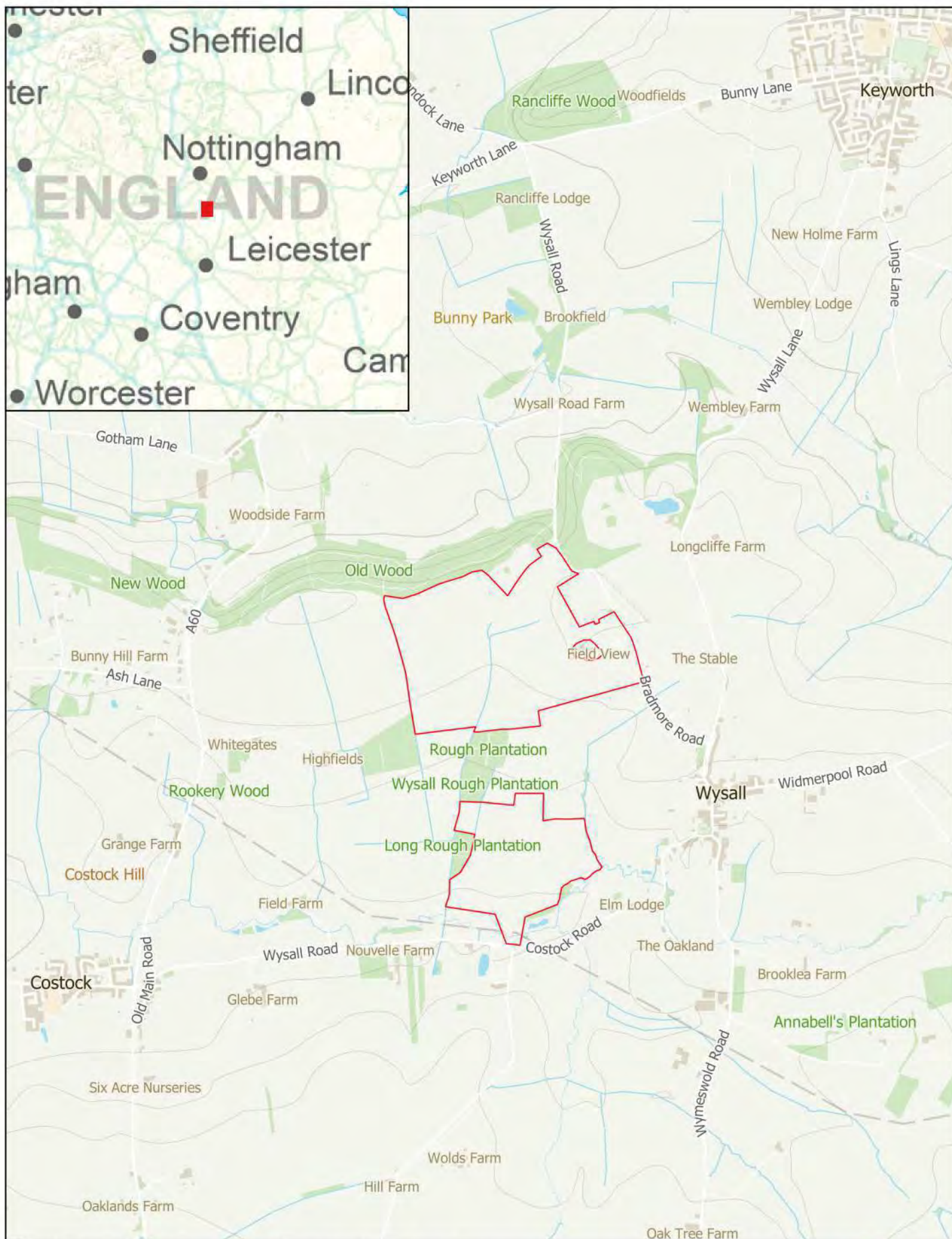
## 12. Project Metadata

MS Job Code	MSSK1600
Project Name	Old Wood Energy Park, Willoughby, Nottinghamshire
Client	Pegasus Planning Group Ltd.
Grid Reference	SK 59675 27627
Survey Techniques	Magnetometry
Survey Size (ha)	105.8Ha
Survey Dates	2021-10-05 to 2021-10-15
Project Lead	Jake Dolan BSc FGS, Isabella Carli BA MA PCIfA
Project Officer	Jake Dolan BSc FGS, Isabella Carli BA MA PCIfA
HER Event No	N/A
OASIS No	N/A
S42 Licence No	N/A
Report Version	0.9

## 13. Document History

Version	Comments	Author	Checked By	Date
0.1	Initial draft for Project Lead to Review	DPT	JD	25 August 2023
0.2	Corrections following Project Lead Review	HR	JD	04 September 2023
0.3	Amendments following Project Lead Review	JD	PJS	8 September 2023
0.4	Further amendments following Director Review	JD	PJS	12 September 2023
0.5	Amendments following client review	HR	JD	15 September 2023
0.6	Additions following 2 <sup>nd</sup> Deployment	JD	IC, PJS	29 September 2023
0.7	Corrections from Client	CL	IC	5 October 2023
0.8	Addition of new areas	IC	FPC	21 December 2023
0.9	Comments from the Client	IC	IC	22 January 2023





MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire

Figure 1 - Site Location

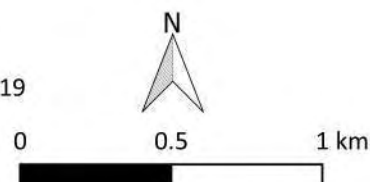
1:25,000 @ A4

Copyright Magnitude Surveys Ltd 2019

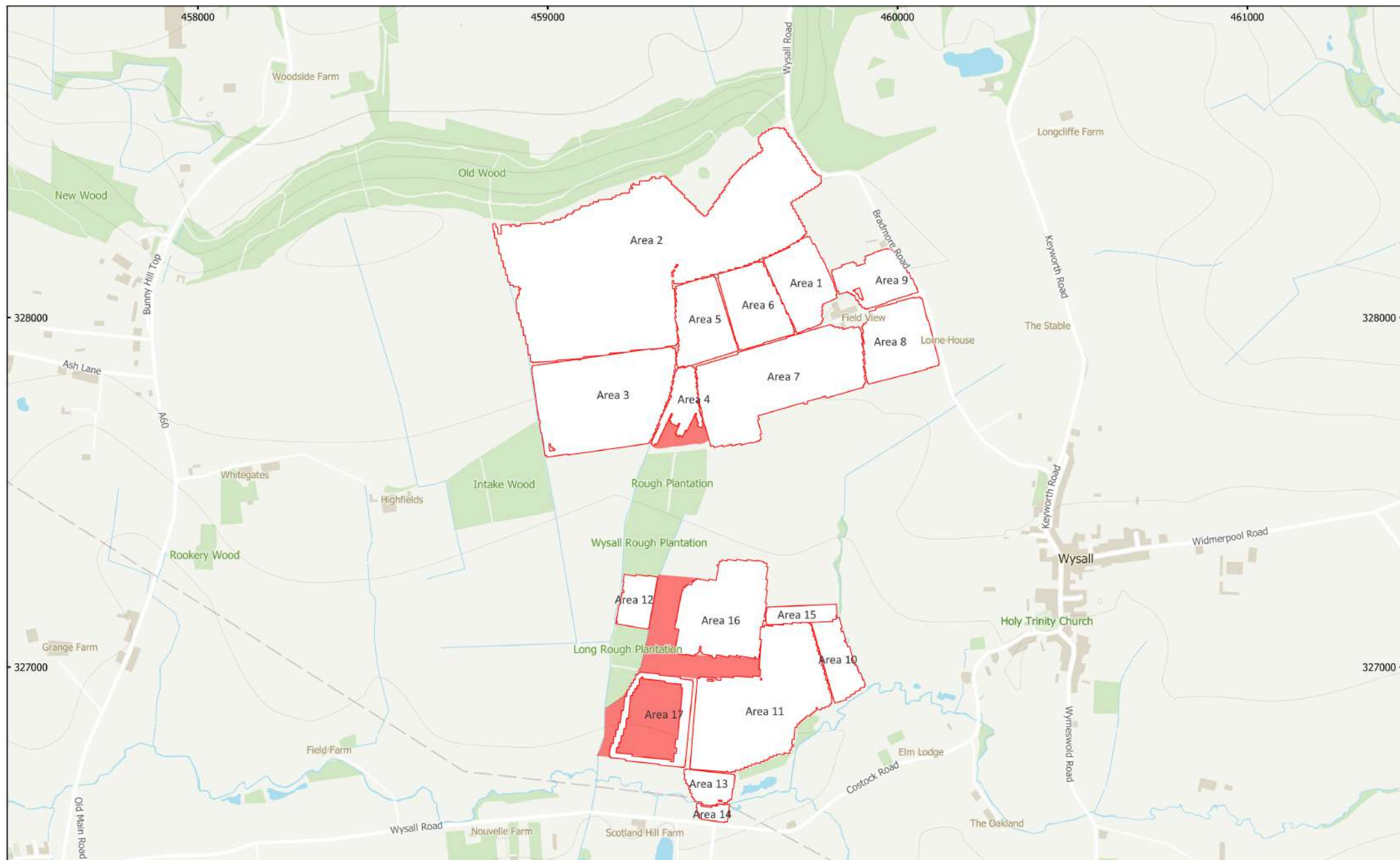
Contains Ordnance Survey data © Crown Copyright and database right 2019

OS (100056946)

 Site Boundary

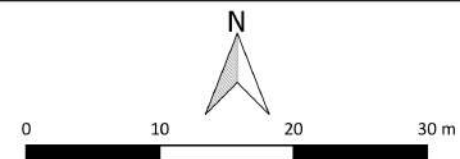


**magnitude**  
surveys

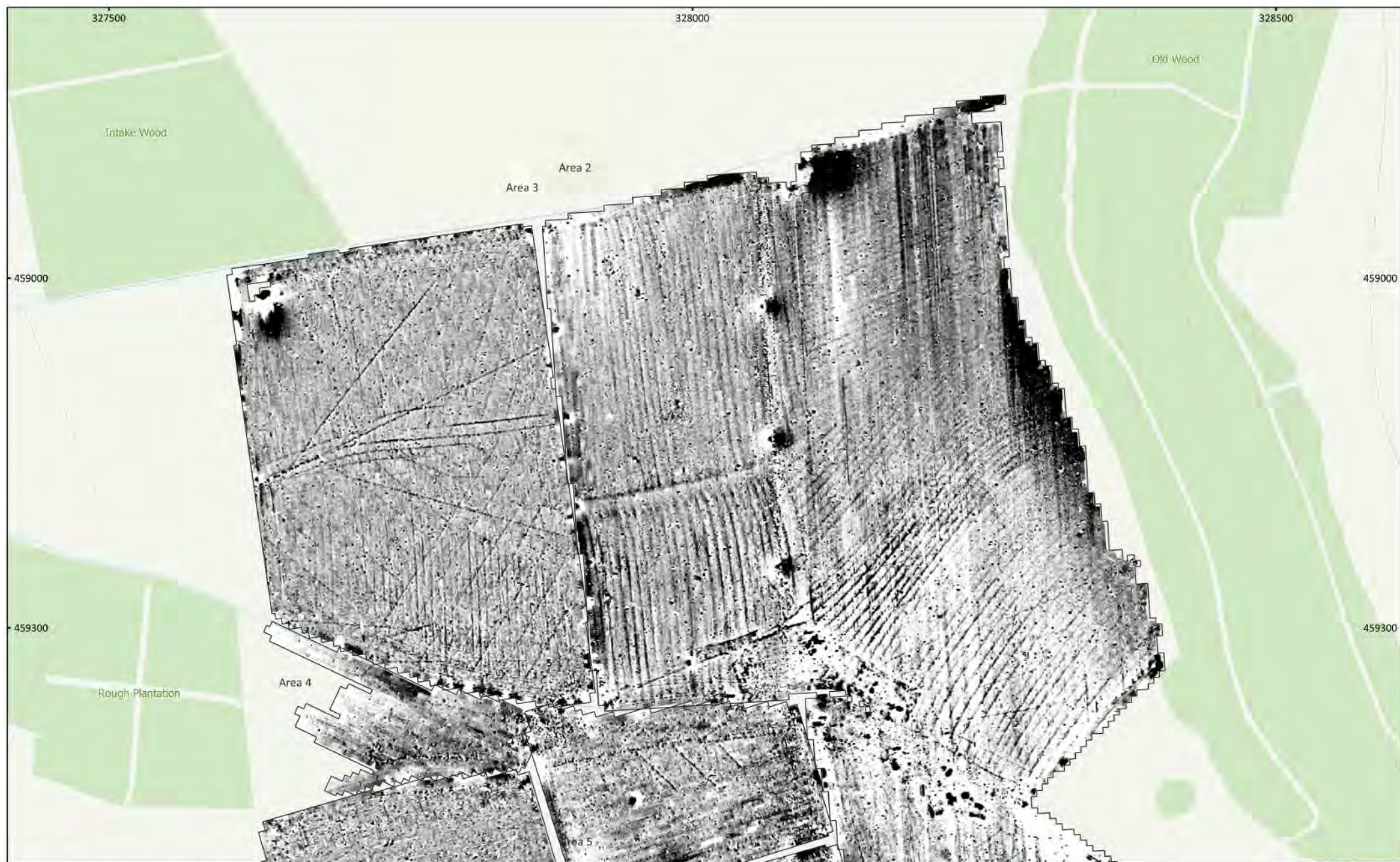


MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
 Figure 2 - Location of Survey Area  
 1:10,000 @ A3  
 Copyright Magnitude Surveys Ltd 2019  
 Contains Ordnance Survey data © Crown Copyright and database right 2019  
 OS (100056946)

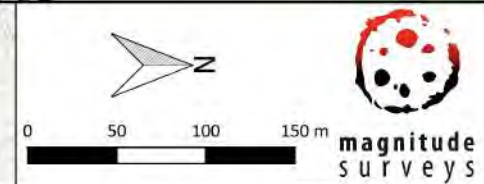
- Survey Extent
- Unsurveyable







MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
 Figure 3 - Magnetic Total Field (Lower Sensor) (Overview) (Northern Areas - West)  
 1:3,000 @ A3  
 Copyright Magnitude Surveys Ltd 2023  
 Contains Ordnance Survey data © Crown Copyright and database right 2023



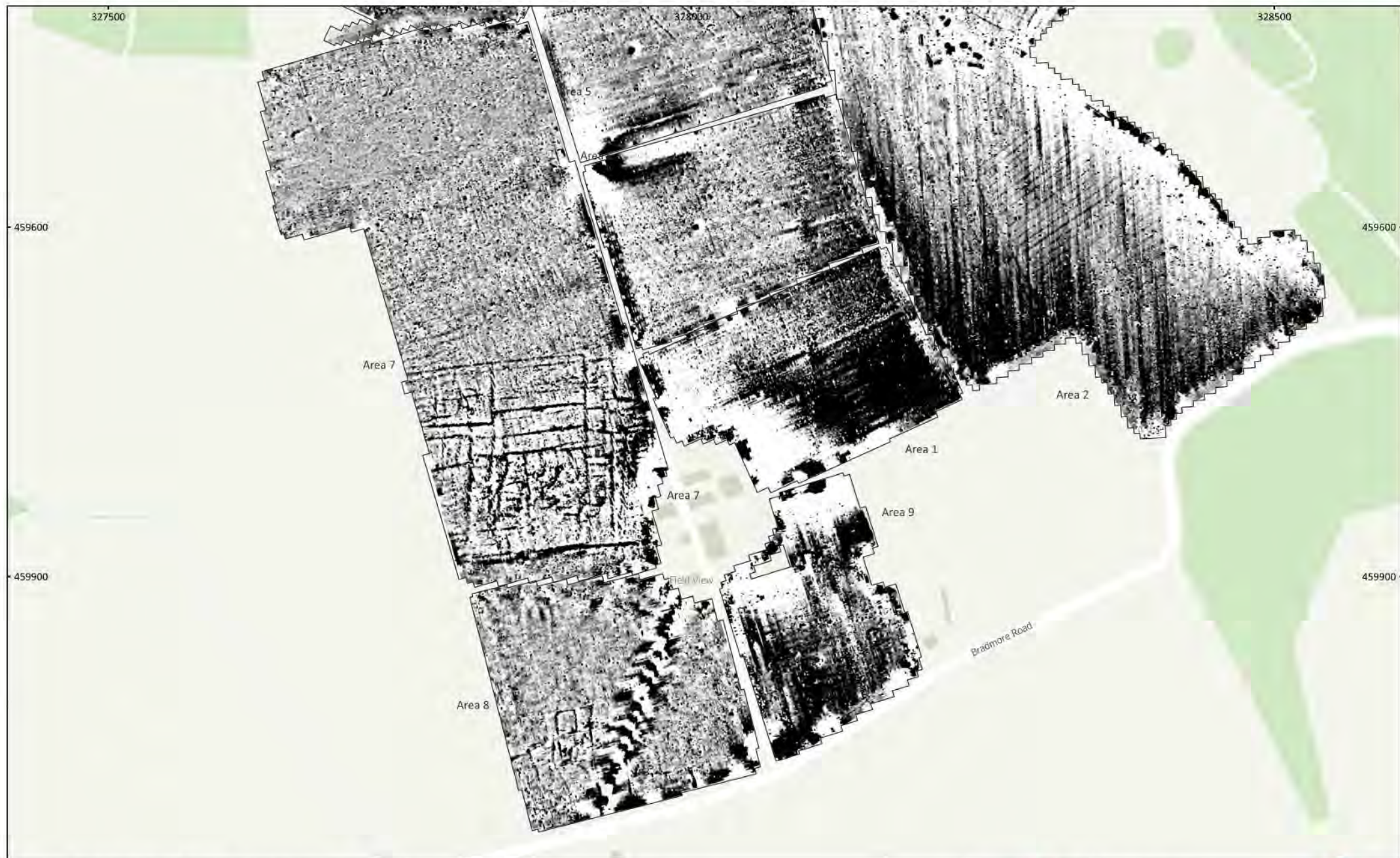




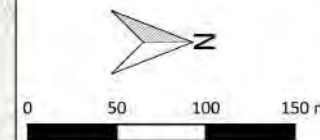
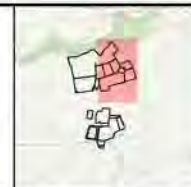
MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
 Figure 4 - Magnetic Interpretation Over Historical Maps (Overview) (Northern Areas - West)  
 1:3,000 @ A3  
 Copyright Magnitude Surveys Ltd 2023  
 Contains historical mapping © CLS Data 2023: Ordnance Survey, 6" 2nd edition c. 1882-1913







MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
 Figure 5 - Magnetic Total Field (Lower Sensor) (Overview) (Northern Areas - East)  
 1:3,000 @ A3  
 Copyright Magnitude Surveys Ltd 2023  
 Contains Ordnance Survey data © Crown Copyright and database right 2023







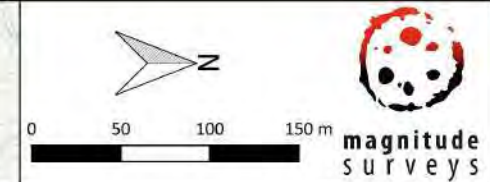
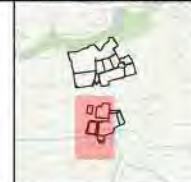
MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
 Figure 6 - Magnetic Interpretation Over Historical Maps (Overview) (Northern Areas - East)  
 1:3,000 @ A3  
 Copyright Magnitude Surveys Ltd 2023  
 Contains historical mapping © CLS Data 2023: Ordnance Survey, 6" 2nd edition c. 1882-1913







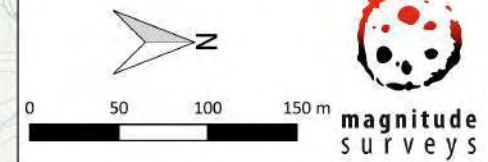
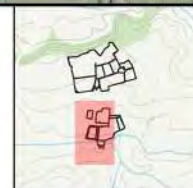
MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
 Figure 7 - Magnetic Total Field (Lower Sensor) (Overview) (Southern Areas)  
 1:3,000 @ A3  
 Copyright Magnitude Surveys Ltd 2023  
 Contains Ordnance Survey data © Crown Copyright and database right 2023







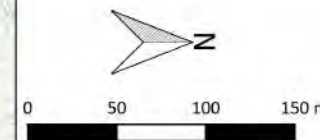
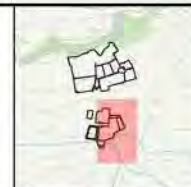
MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
 Figure 8 - Magnetic Interpretation Over Historical Maps (Overview) (Southern Areas)  
 1:3,000 @ A3  
 Copyright Magnitude Surveys Ltd 2023  
 Contains historical mapping © CLS Data 2023: Ordnance Survey, 6" 2nd edition c. 1882-1913







MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
 Figure 9 - Magnetic Total Field (Lower Sensor) (Overview) (Southern Areas - East)  
 1:3,000 @ A3  
 Copyright Magnitude Surveys Ltd 2023  
 Contains Ordnance Survey data © Crown Copyright and database right 2023



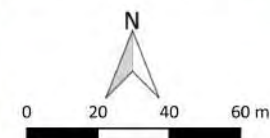
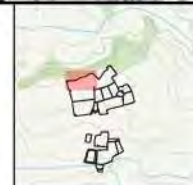




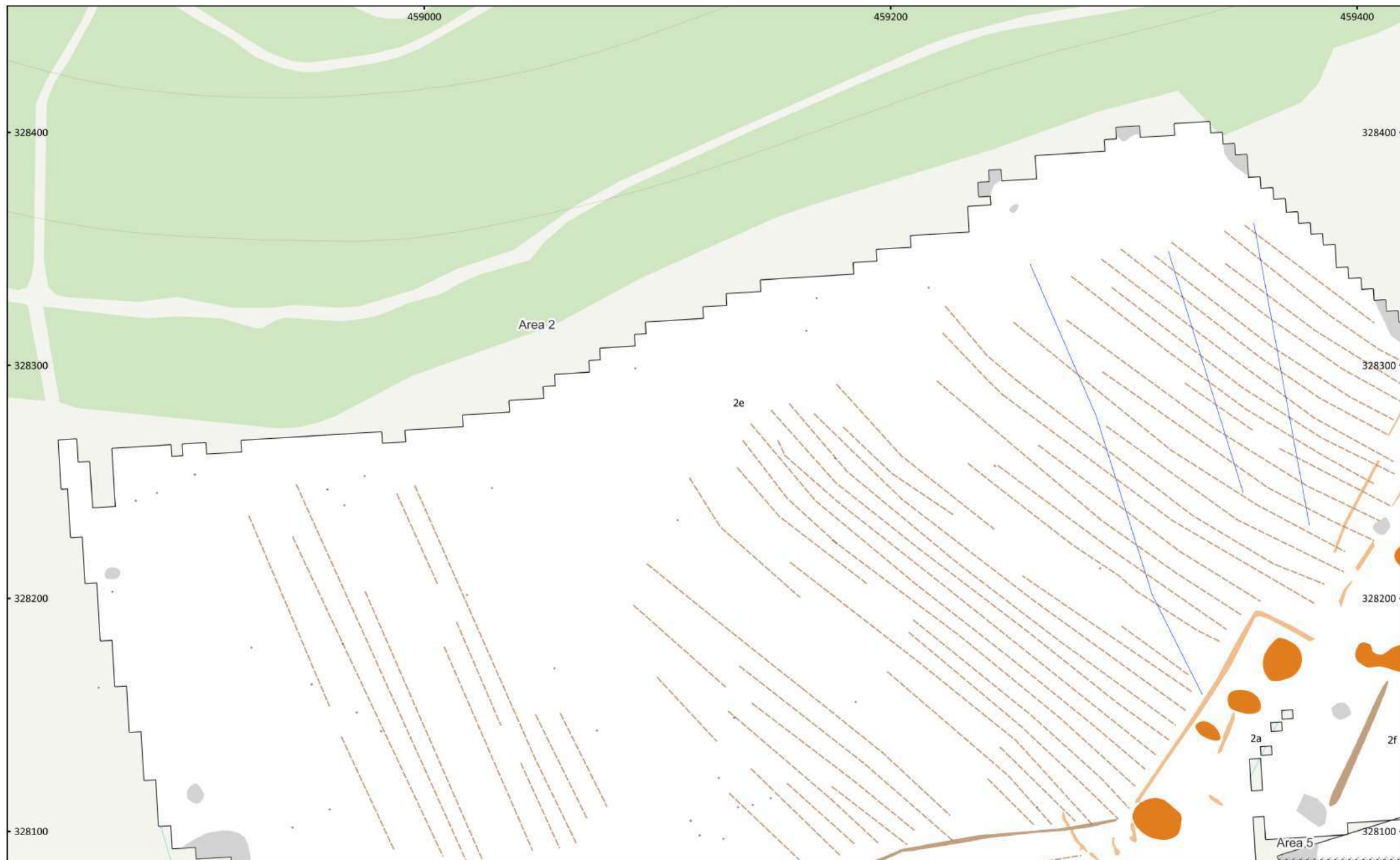




MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
 Figure 11 - Magnetic Gradient (Areas 2 & 5)  
 1:1,500 @ A3  
 Copyright Magnitude Surveys Ltd 2023  
 Contains Ordnance Survey data © Crown Copyright and database right 2023



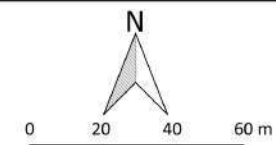
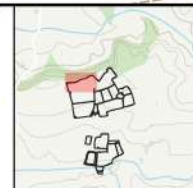




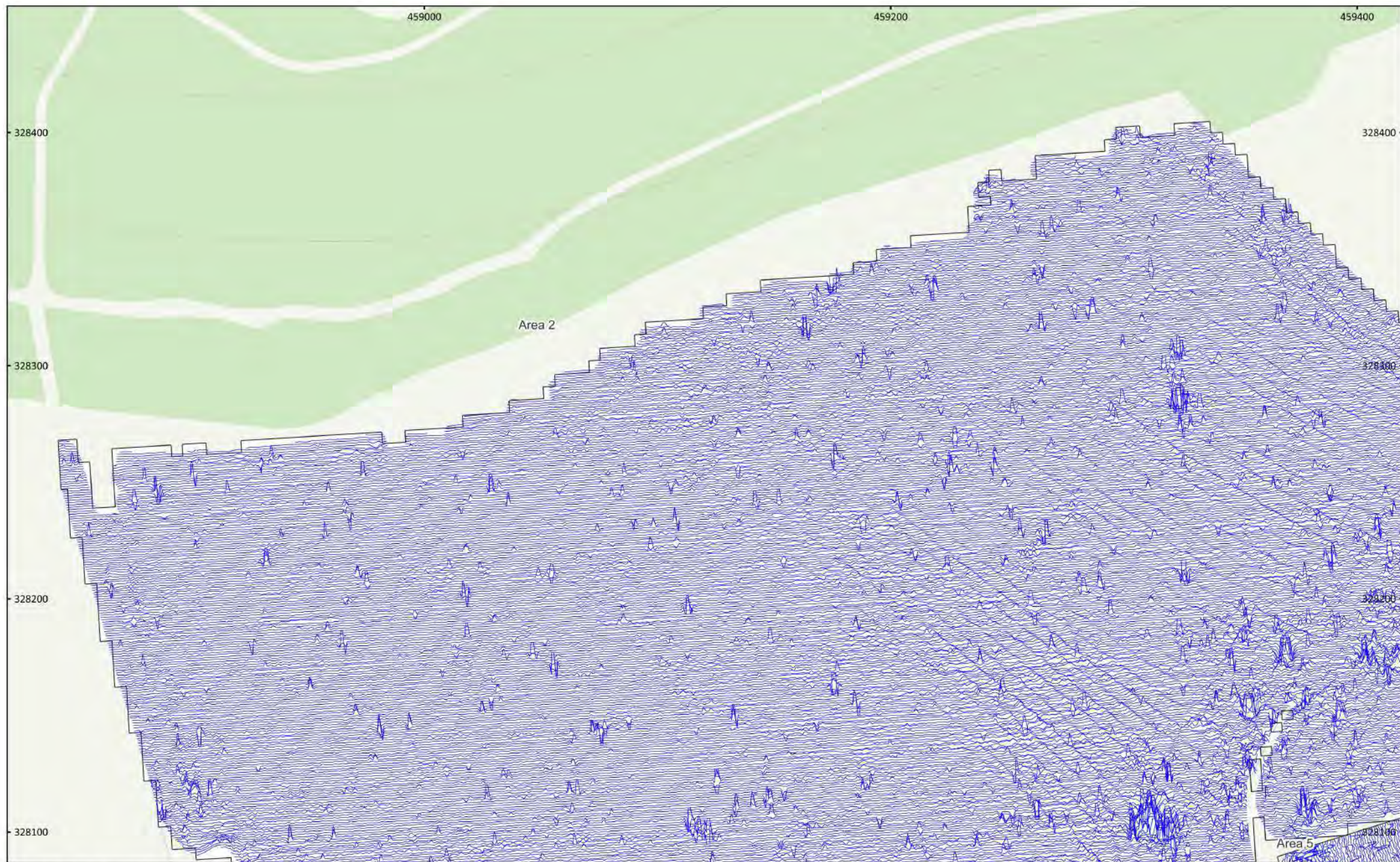
MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
 Figure 12 - Magnetic Interpretation (Areas 2 & 5)  
 1:1,500 @ A3  
 Copyright Magnitude Surveys Ltd 2023  
 Contains Ordnance Survey data © Crown Copyright and database right 2023

- |                               |                          |
|-------------------------------|--------------------------|
| Archaeology Possible (Strong) | Overhead Cables          |
| Archaeology Possible (Weak)   | Magnetic Disturbance     |
| Agricultural (Weak)           | Ridge and Furrow (Trend) |

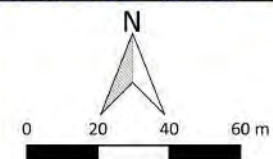
- |                  |
|------------------|
| Drainage Feature |
| Ferrous (Spike)  |







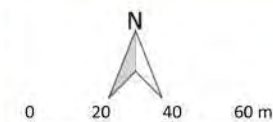
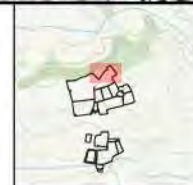
MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
Figure 13 - XY Trace Plot (Areas 2 & 5)  
30nT/cm at 1:1,500 @ A3  
Copyright Magnitude Surveys Ltd 2023  
Contains Ordnance Survey data © Crown Copyright and database right 2023

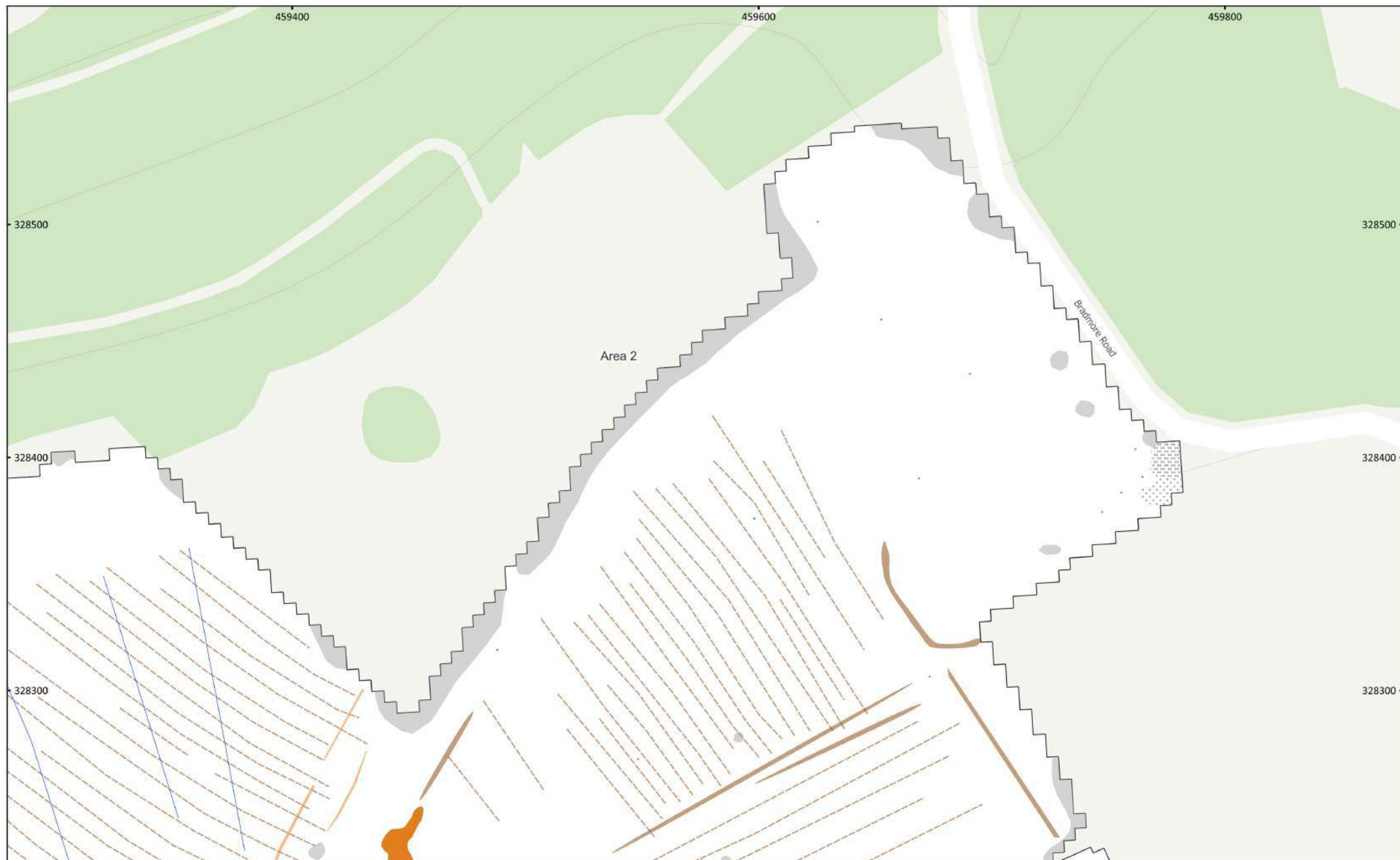






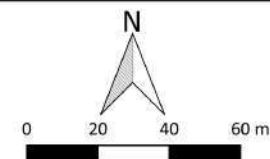
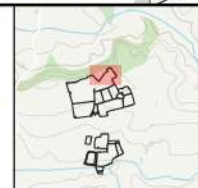
MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
Figure 14 - Magnetic Gradient (Area 2)  
1:1,500 @ A3  
Copyright Magnitude Surveys Ltd 2023  
Contains Ordnance Survey data © Crown Copyright and database right 2023



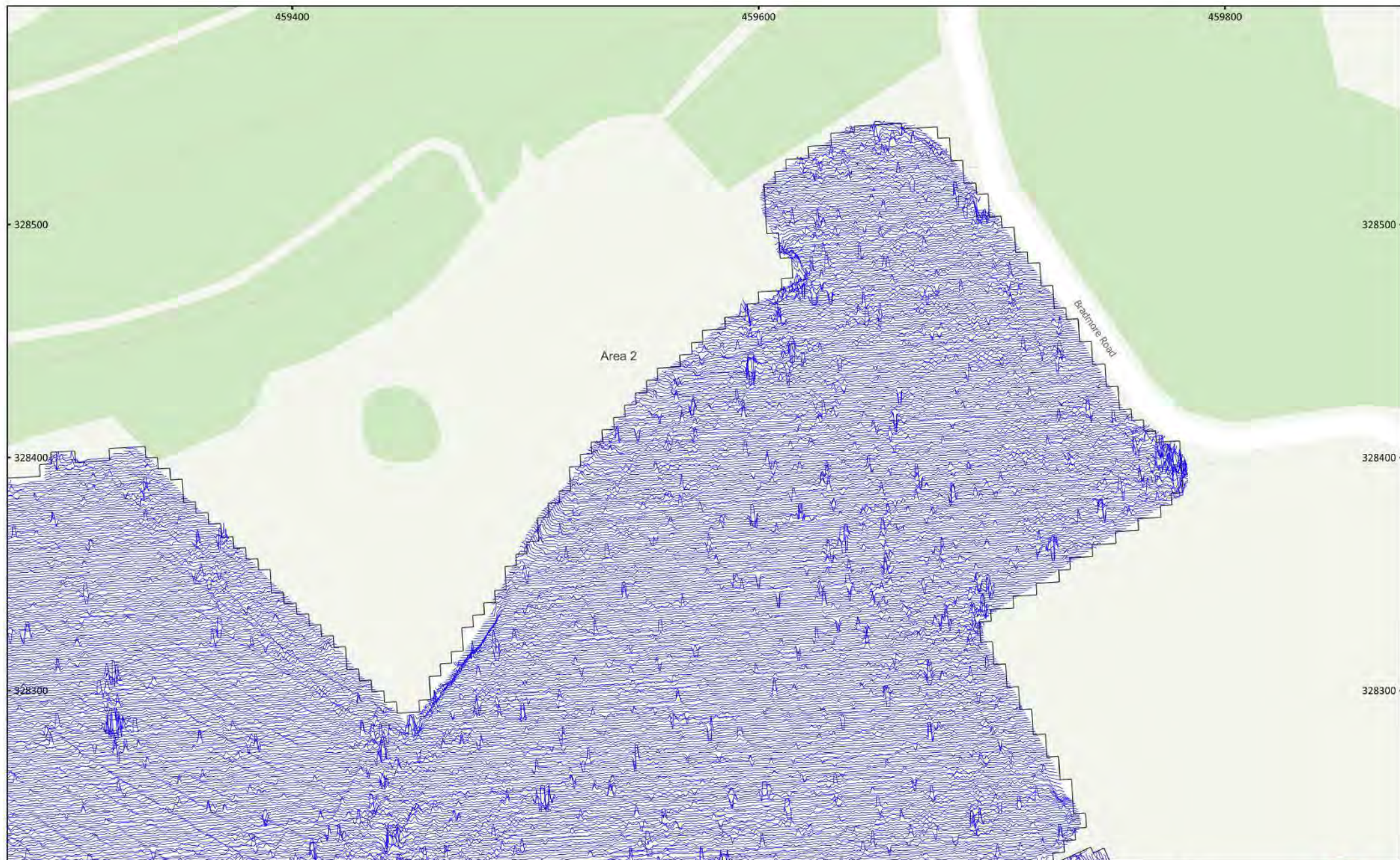


MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
 Figure 15 - Magnetic Interpretation (Area 2)  
 1:1,500 @ A3  
 Copyright Magnitude Surveys Ltd 2023  
 Contains Ordnance Survey data © Crown Copyright and database right 2023

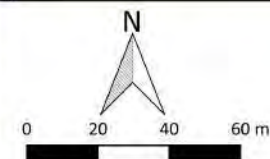
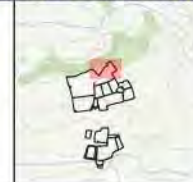
- |                               |                          |                  |
|-------------------------------|--------------------------|------------------|
| Archaeology Possible (Strong) | Ferrous/Debris (Spread)  | Drainage Feature |
| Archaeology Possible (Weak)   | Magnetic Disturbance     | Ferrous (Spike)  |
| Agricultural (Weak)           | Ridge and Furrow (Trend) |                  |



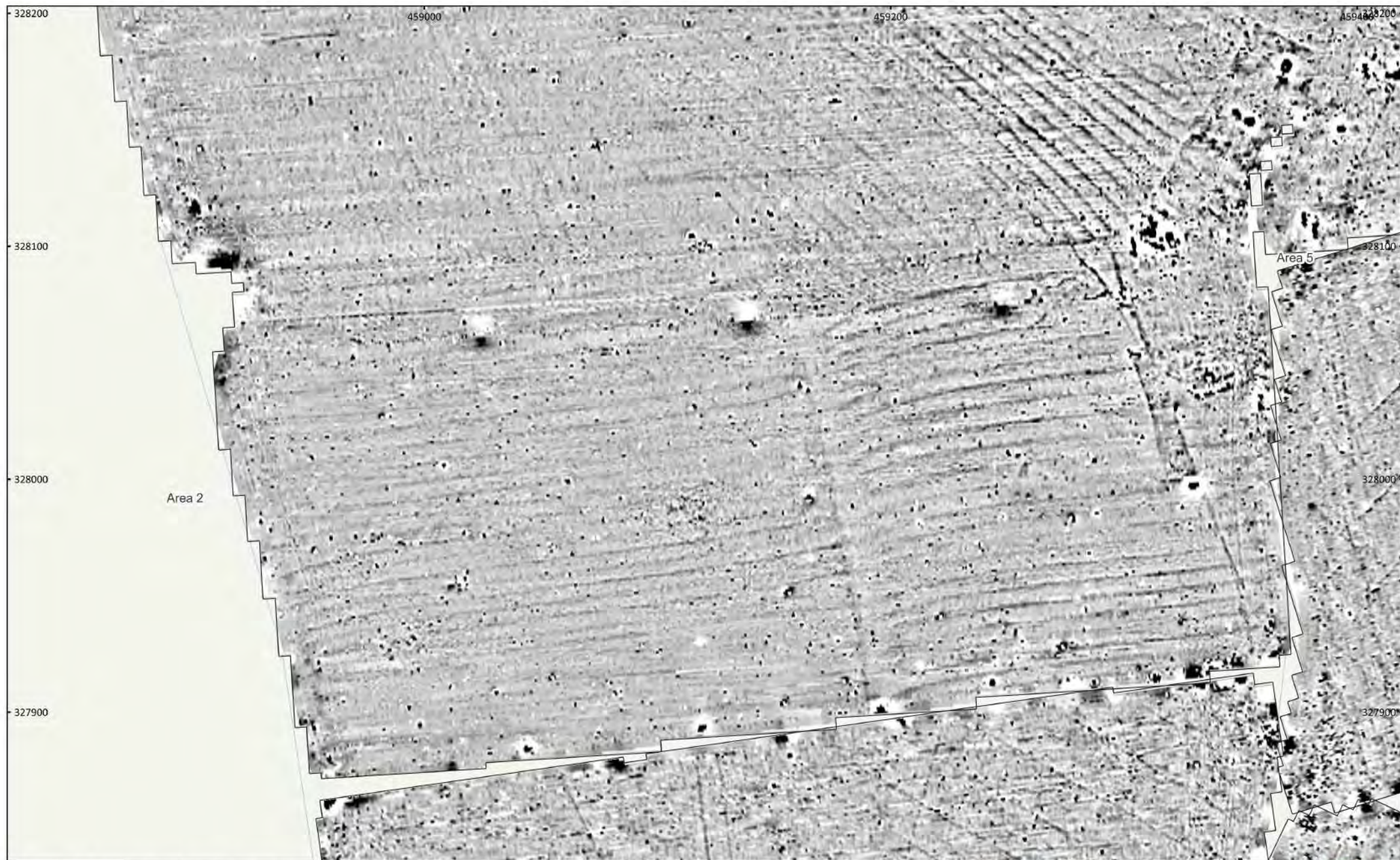




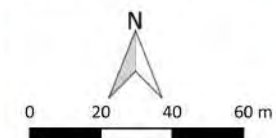
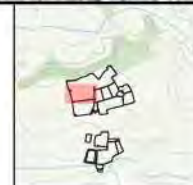
MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
Figure 16 - XY Trace Plot (Area 2)  
30nT/cm at 1:1,500 @ A3  
Copyright Magnitude Surveys Ltd 2023  
Contains Ordnance Survey data © Crown Copyright and database right 2023



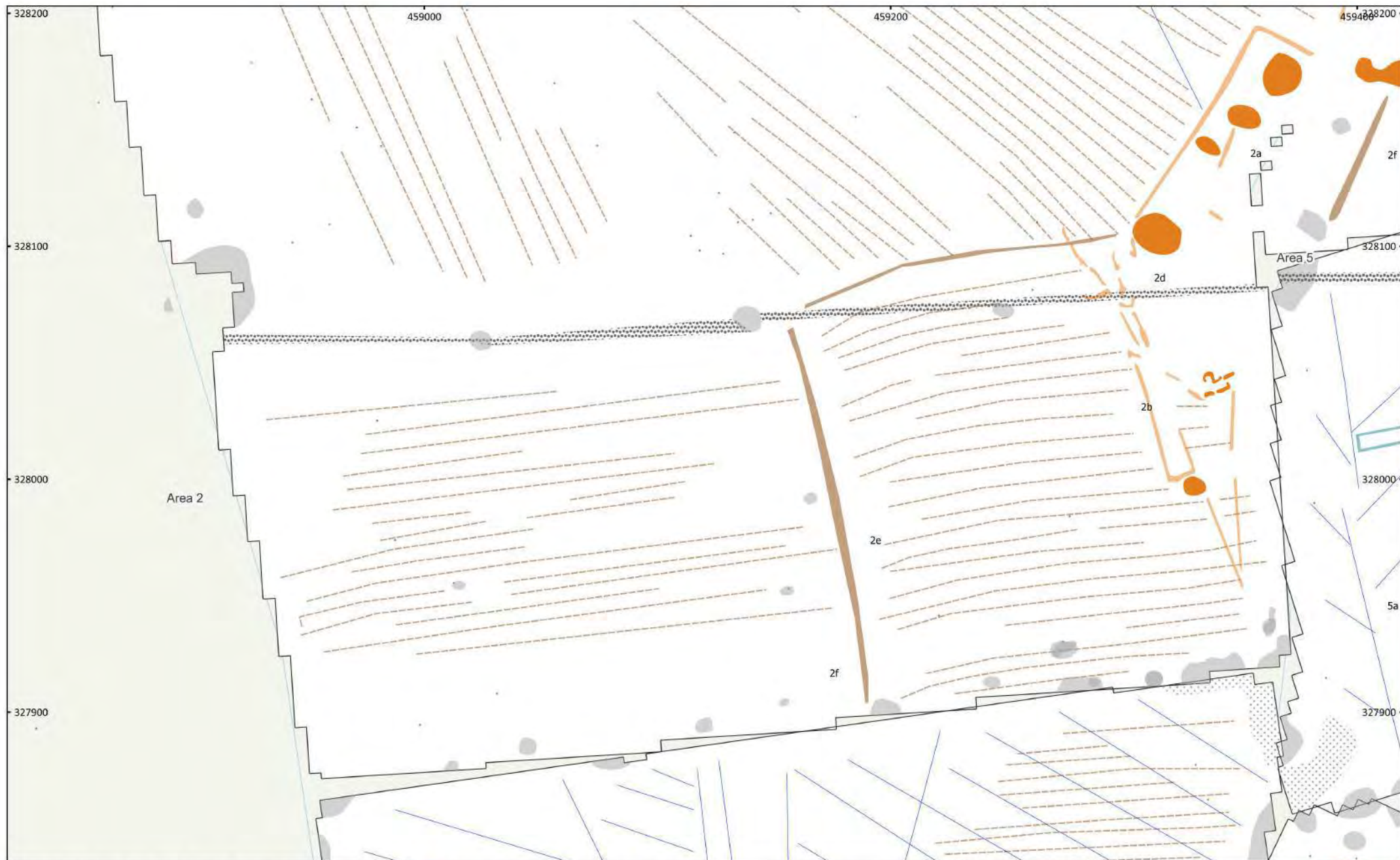




MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
Figure 17 - Magnetic Gradient (Areas 2, 3 & 5)  
1:1,500 @ A3  
Copyright Magnitude Surveys Ltd 2023  
Contains Ordnance Survey data © Crown Copyright and database right 2023

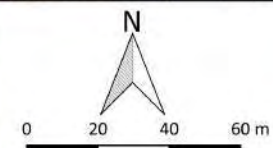
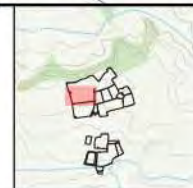




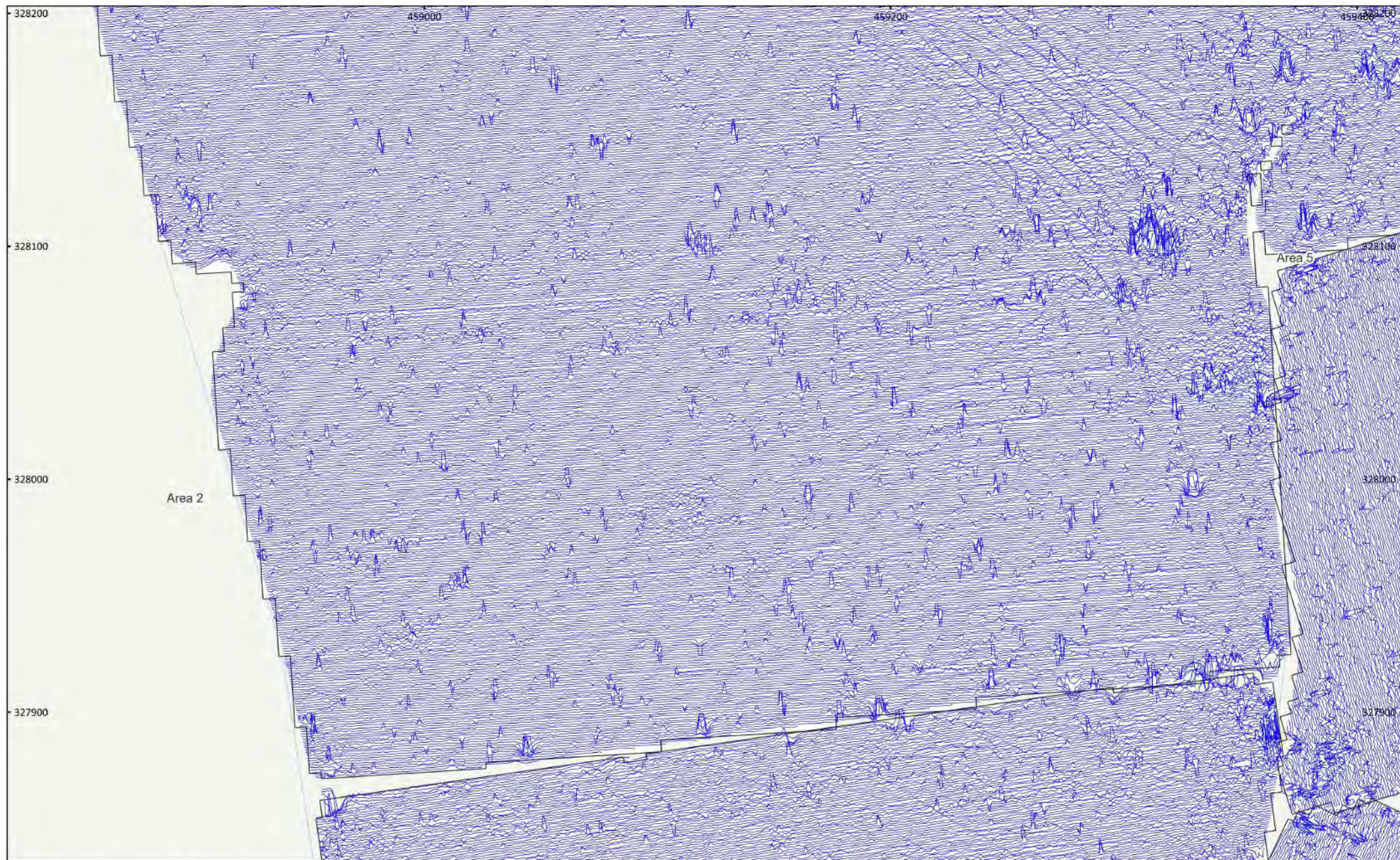


MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
 Figure 18 - Magnetic Interpretation (Areas 2, 3 & 5)  
 1:1,500 @ A3  
 Copyright Magnitude Surveys Ltd 2023  
 Contains Ordnance Survey data © Crown Copyright and database right 2023

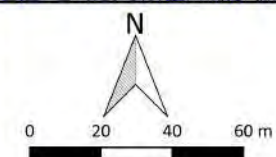
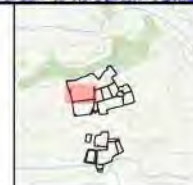
- |                               |                          |                  |
|-------------------------------|--------------------------|------------------|
| Archaeology Possible (Strong) | Overhead Cables          | Drainage Feature |
| Archaeology Possible (Weak)   | Ferrous/Debris (Spread)  | Ferrous (Spike)  |
| Agricultural (Weak)           | Magnetic Disturbance     |                  |
| Undetermined (Weak)           | Ridge and Furrow (Trend) |                  |







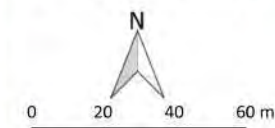
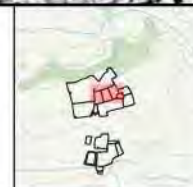
MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
Figure 19 - XY Trace Plot (Areas 2, 3 & 5)  
30nT/cm at 1:1,500 @ A3  
Copyright Magnitude Surveys Ltd 2023  
Contains Ordnance Survey data © Crown Copyright and database right 2023







MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
 Figure 20 - Magnetic Gradient (Areas 1, 2, 3, 5, 6, 7 & 9)  
 1:1,500 @ A3  
 Copyright Magnitude Surveys Ltd 2023  
 Contains Ordnance Survey data © Crown Copyright and database right 2023



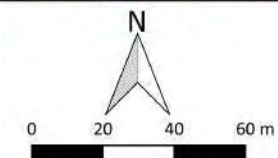
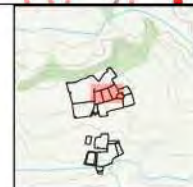




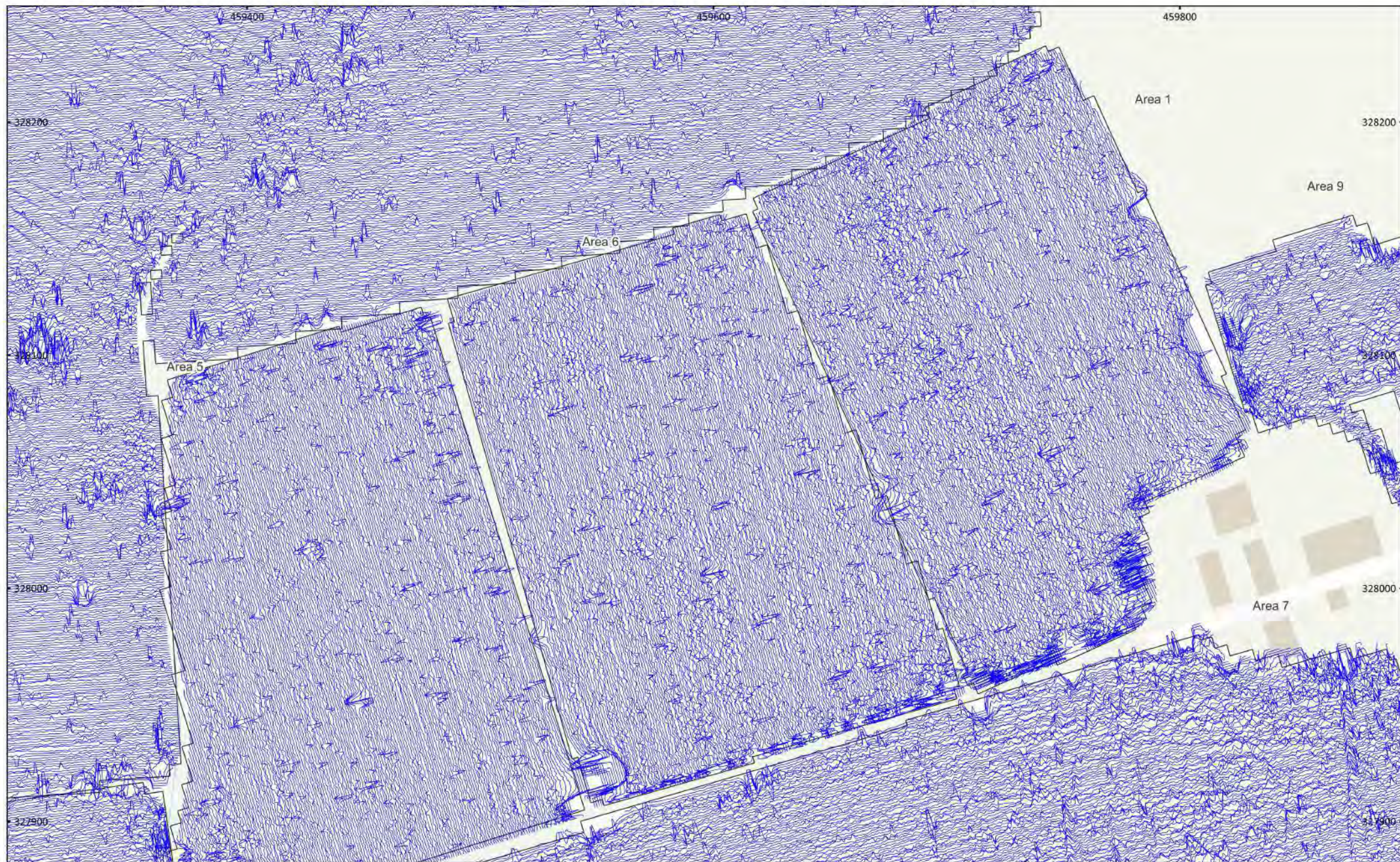
MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
 Figure 21 - Magnetic Interpretation (Areas 1, 2, 3, 5, 6, 7 & 9)  
 1:1,500 @ A3  
 Copyright Magnitude Surveys Ltd 2023  
 Contains Ordnance Survey data © Crown Copyright and database right 2023

- |  |  |
|--|--|
| <span style="color: red;">■</span> Archaeology Probable (Strong)       | <span style="color: brown;">■</span> Agricultural (Weak)         |
| <span style="color: pink;">■</span> Archaeology Probable (Weak)        | <span style="color: lightblue;">■</span> Undetermined (Weak)     |
| <span style="color: orange;">■</span> Archaeology Possible (Strong)    | <span style="color: grey;">■</span> Overhead Cables              |
| <span style="color: lightorange;">■</span> Archaeology Possible (Weak) | <span style="color: lightgrey;">■</span> Ferrous/Debris (Spread) |
|  | <span style="color: grey;">■</span> Magnetic Disturbance         |

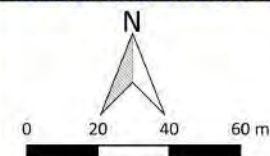
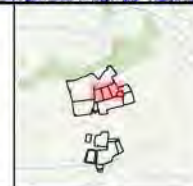
- |   |
|---|
| <span style="color: brown;">—</span> Ridge and Furrow (Trend) |
| <span style="color: blue;">—</span> Drainage Feature          |
| <span style="color: black;">•</span> Ferrous (Spike)          |



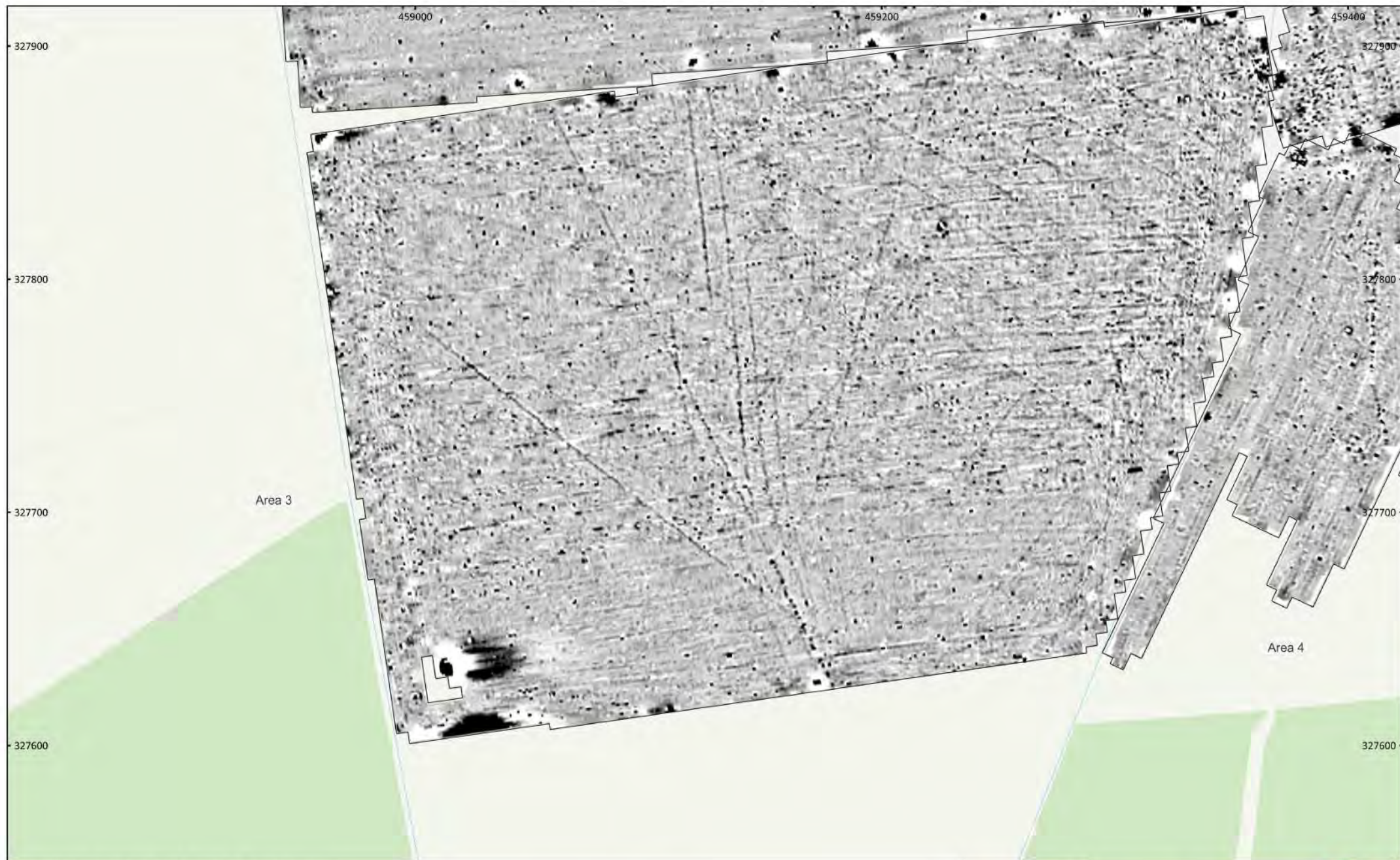




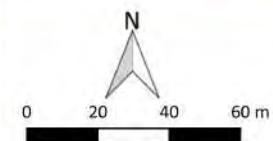
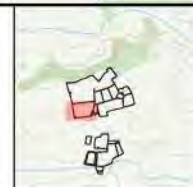
MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
 Figure 22 - XY Trace Plot (Areas 1, 2, 3, 5, 6, 7 & 9)  
 30nT/cm at 1:1,500 @ A3  
 Copyright Magnitude Surveys Ltd 2023  
 Contains Ordnance Survey data © Crown Copyright and database right 2023







MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
 Figure 23 - Magnetic Gradient (Areas 2, 3, 4 & 5)  
 1:1,500 @ A3  
 Copyright Magnitude Surveys Ltd 2023  
 Contains Ordnance Survey data © Crown Copyright and database right 2023

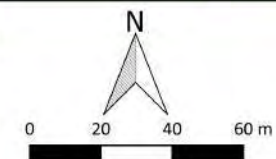
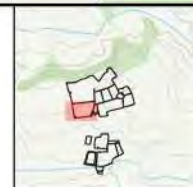




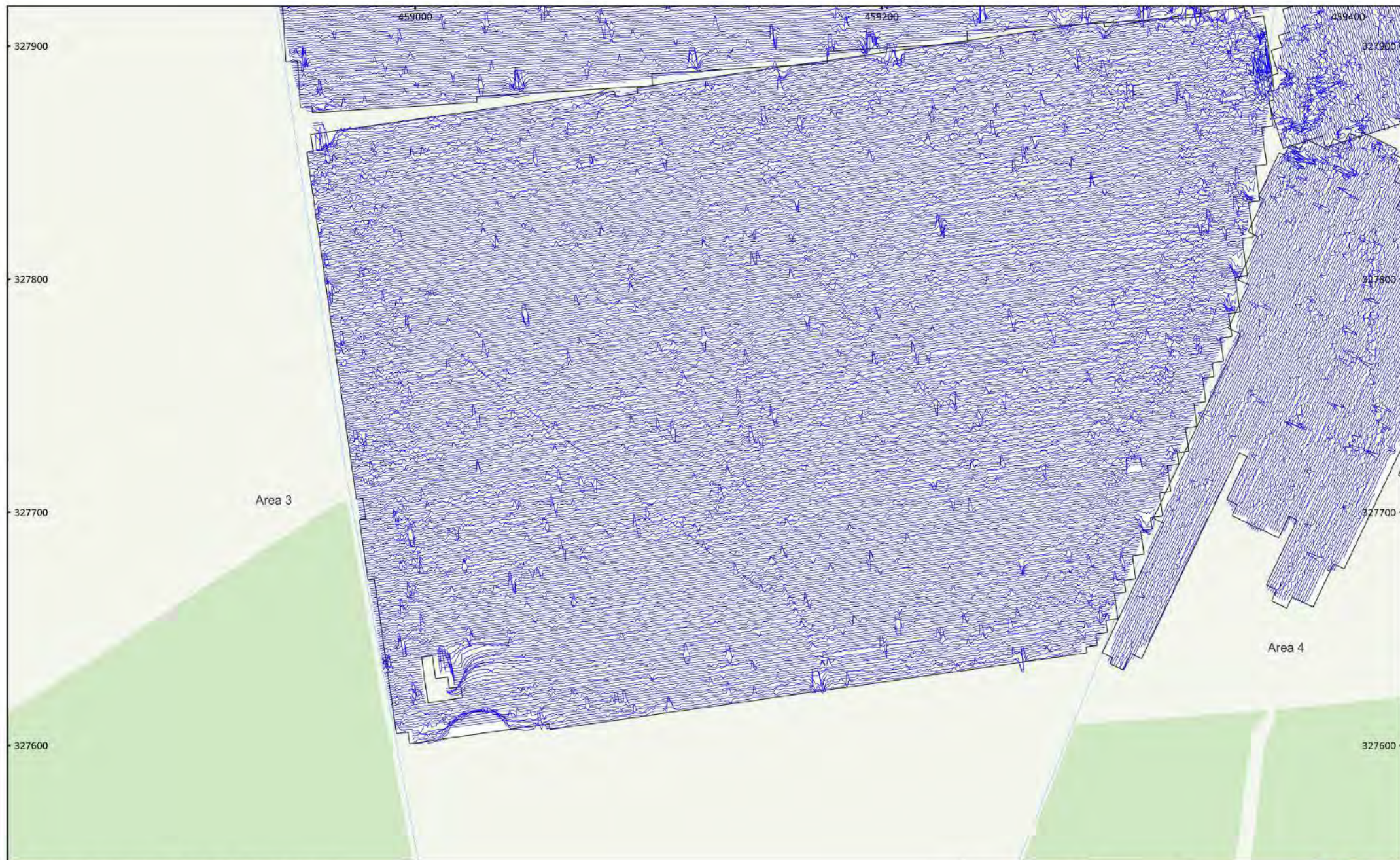


MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
 Figure 24 - Magnetic Interpretation (Areas 2, 3, 4 & 5)  
 1:1,500 @ A3  
 Copyright Magnitude Surveys Ltd 2023  
 Contains Ordnance Survey data © Crown Copyright and database right 2023

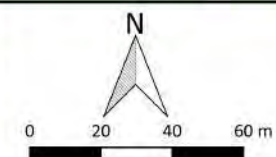
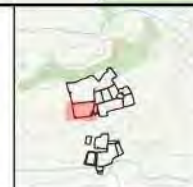
- |                       |                          |                  |
|-----------------------|--------------------------|------------------|
| Agricultural (Weak)   | Ferrous/Debris (Spread)  | Drainage Feature |
| Undetermined (Strong) | Magnetic Disturbance     | Ferrous (Spike)  |
| Undetermined (Weak)   | Ridge and Furrow (Trend) |                  |







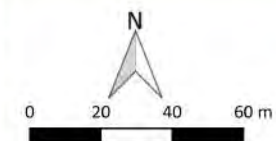
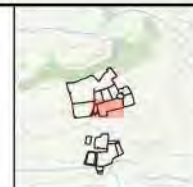
MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
 Figure 25 - XY Trace Plot (Areas 2, 3, 4 & 5)  
 30nT/cm at 1:1,500 @ A3  
 Copyright Magnitude Surveys Ltd 2023  
 Contains Ordnance Survey data © Crown Copyright and database right 2023







MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
 Figure 26 - Magnetic Gradient (Areas 3, 4, 5, 6 & 7)  
 1:1,500 @ A3  
 Copyright Magnitude Surveys Ltd 2023  
 Contains Ordnance Survey data © Crown Copyright and database right 2023

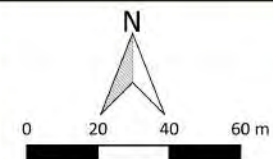
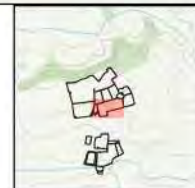




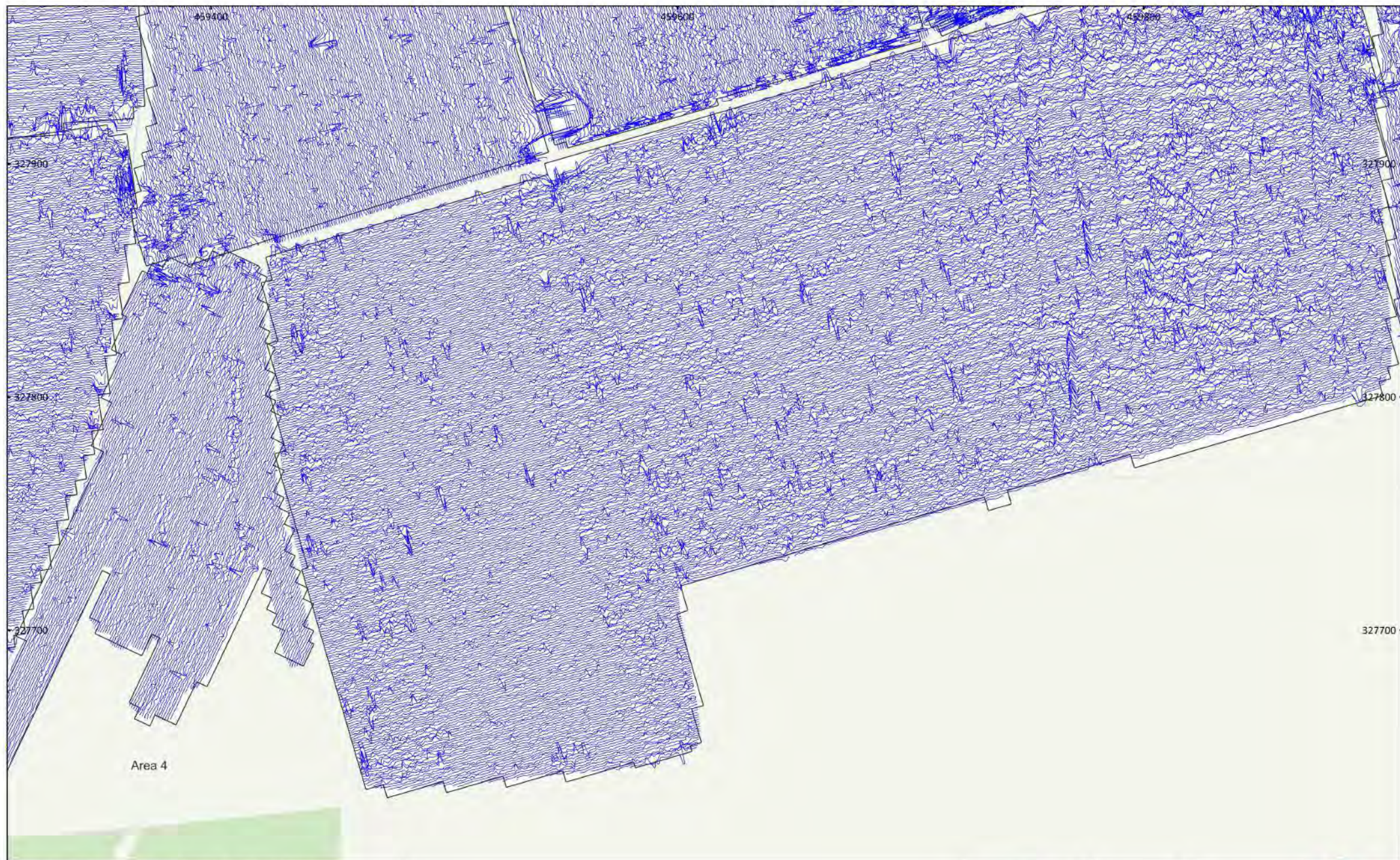


MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
 Figure 27 - Magnetic Interpretation (Areas 3, 4, 5, 6 & 7)  
 1:1,500 @ A3  
 Copyright Magnitude Surveys Ltd 2023  
 Contains Ordnance Survey data © Crown Copyright and database right 2023

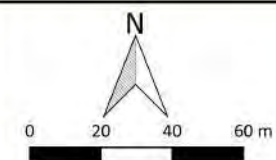
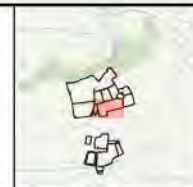
Archaeology Probable (Strong)	Undetermined (Weak)	Drainage Feature
Archaeology Probable (Weak)	Ferrous/Debris (Spread)	Ferrous (Spike)
Archaeology Possible (Weak)	Magnetic Disturbance	
Agricultural (Weak)	Ridge and Furrow (Trend)	







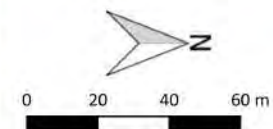
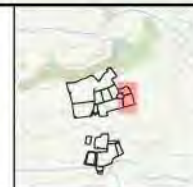
MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
 Figure 28 - XY Trace Plot (Areas 3, 4, 5, 6 & 7)  
 30nT/cm at 1:1,500 @ A3  
 Copyright Magnitude Surveys Ltd 2023  
 Contains Ordnance Survey data © Crown Copyright and database right 2023







MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
 Figure 29 - Magnetic Gradient (Areas 1, 7, 8 & 9)  
 1:1,500 @ A3  
 Copyright Magnitude Surveys Ltd 2023  
 Contains Ordnance Survey data © Crown Copyright and database right 2023



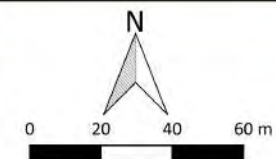
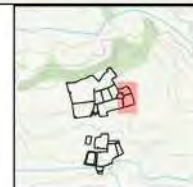


MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
 Figure 30 - Magnetic Interpretation (Areas 1, 7, 8 & 9)  
 1:1,500 @ A3  
 Copyright Magnitude Surveys Ltd 2023  
 Contains Ordnance Survey data © Crown Copyright and database right 2023

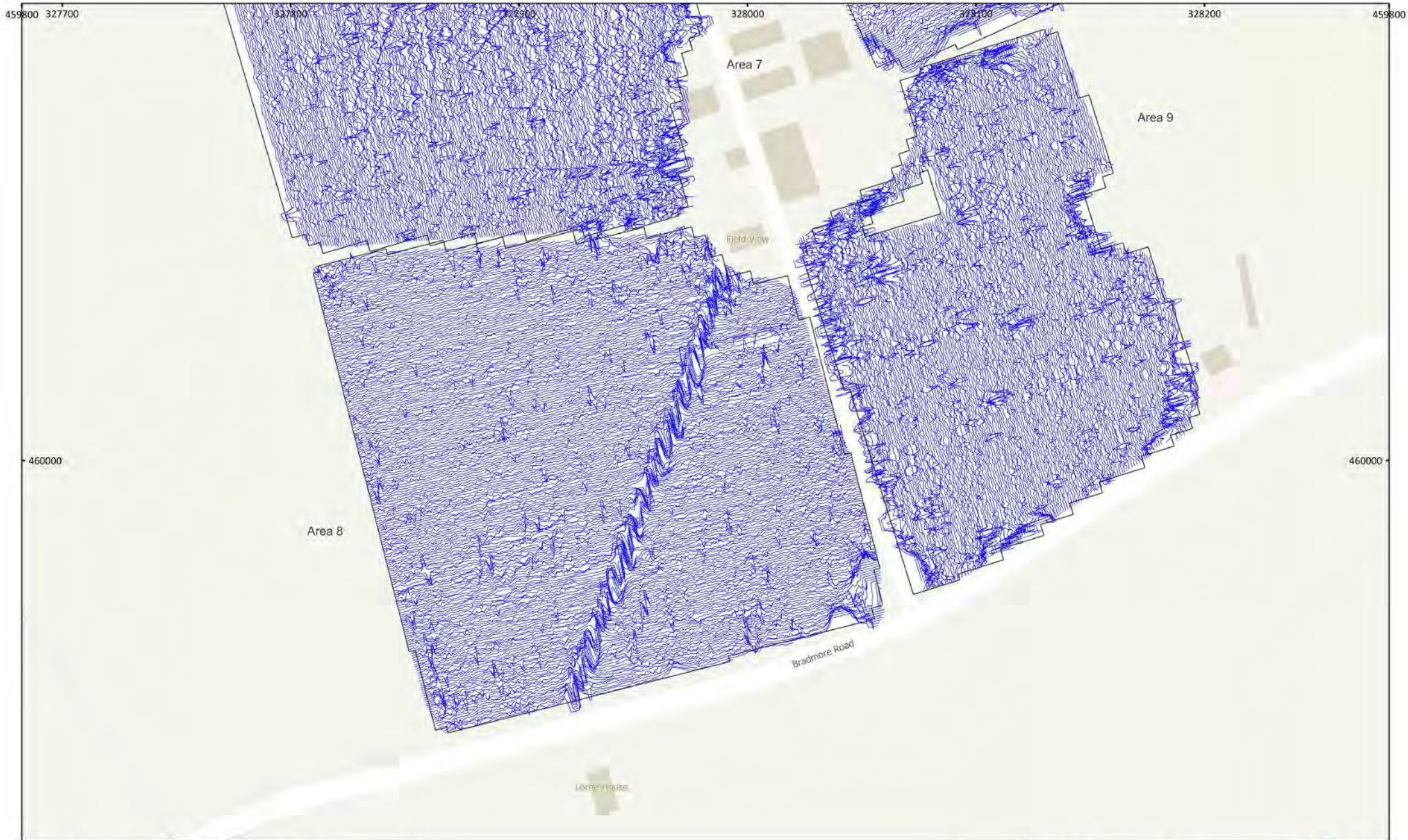
Archaeology Probable (Strong)  
 Archaeology Probable (Weak)  
 Archaeology Possible (Weak)  
 Undetermined (Weak)

Overhead Cables  
 Magnetic Disturbance  
 Natural (Spread)  
 Service

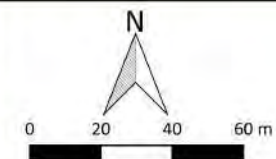
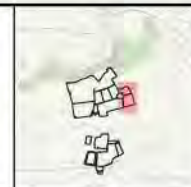
Ridge and Furrow (Trend)  
 Ferrous (Spike)







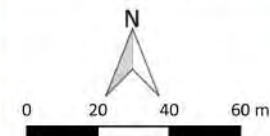
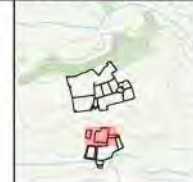
MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
Figure 31 - XY Trace Plot (Areas 1, 7, 8 & 9)  
30nT/cm at 1:1,500 @ A3  
Copyright Magnitude Surveys Ltd 2023  
Contains Ordnance Survey data © Crown Copyright and database right 2023







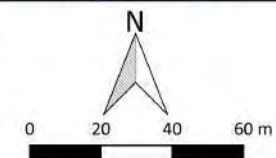
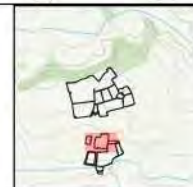
MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
 Figure 32 - Magnetic Gradient (Areas 10, 11, 12 & 15)  
 1:1,500 @ A3  
 Copyright Magnitude Surveys Ltd 2023  
 Contains Ordnance Survey data © Crown Copyright and database right 2023



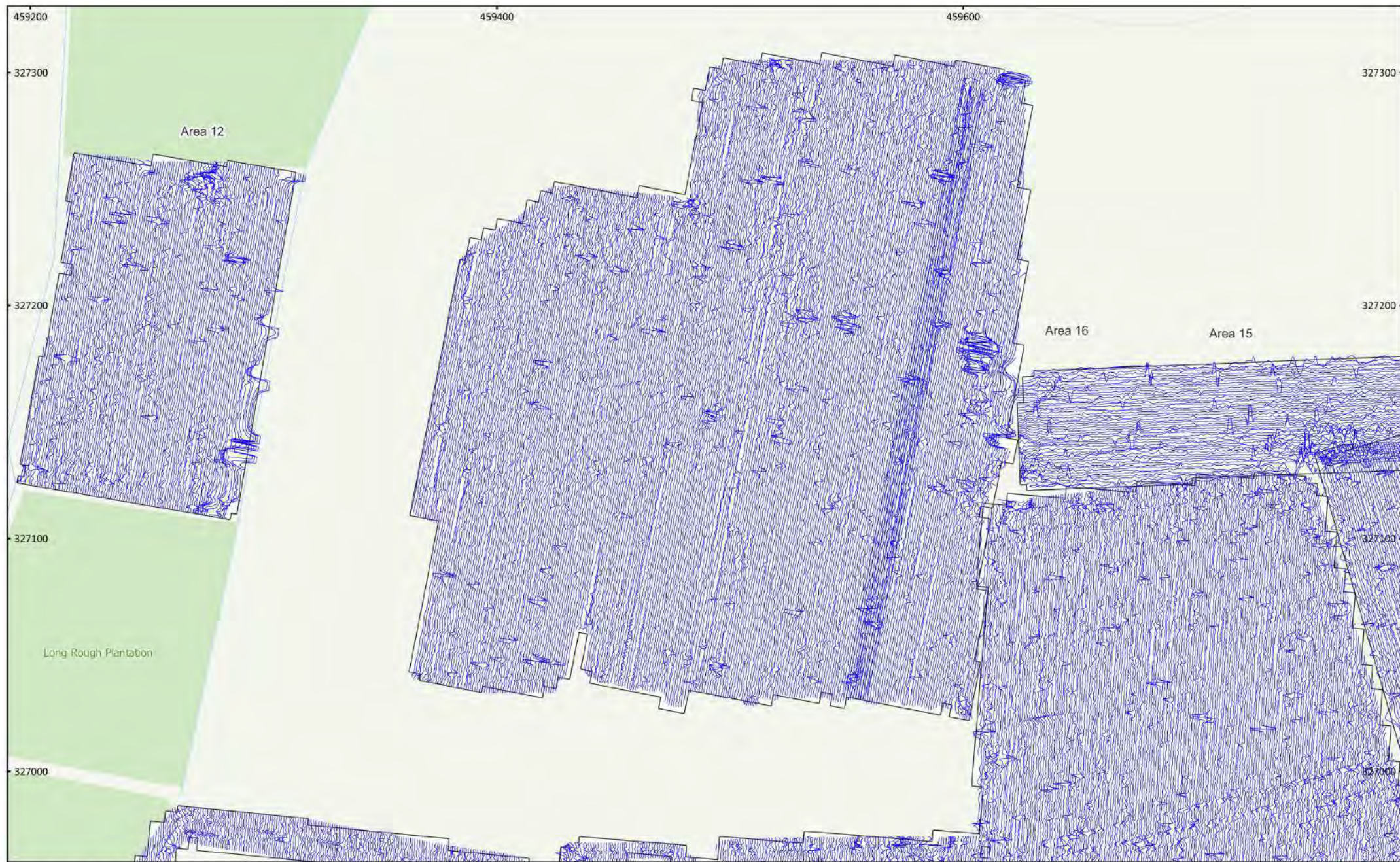




MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
 Figure 33 - Magnetic Interpretation (Areas 10, 11, 12 & 15)  
 1:1,500 @ A3  
 Copyright Magnitude Surveys Ltd 2023  
 Contains Ordnance Survey data © Crown Copyright and database right 2023







MSSK1600 - Old Wood Energy Park, Willoughby, Nottinghamshire  
 Figure 34 - XY Trace Plot (Areas 10, 11, 12 & 15)  
 30nT/cm at 1:1,500 @ A3  
 Copyright Magnitude Surveys Ltd 2023  
 Contains Ordnance Survey data © Crown Copyright and database right 2023

