Heritage Technical Baseline.

Land at Toton West, Toton, Nottinghamshire.

On behalf of Bloor Homes Ltd

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1. Introduction

1.1. Pegasus Group have been commissioned by Bloor Homes Ltd to prepare a Heritage Technical Baseline and Cultural Heritage Chapter (Chapter 8) within the Environmental Statement in support of an outline planning application for residential development of up to 420 residential dwellings and associated open space and infrastructure at Land at Toton West, Toton, Nottinghamshire (as shown on the Site Location Plan provided at Plate 1).

Plate 1: Site Location Plan.

1.2. The Application Site (hereafter referred to as the 'Site') is located to the north-west of Toton and south of Stapleford and extends to an area of approximately 18.95 hectares.

1.3. There are no designated heritage assets within or in the immediate vicinity of the Site boundary. A number of designated assets are located in the wider vicinity, including eleven Grade II Listed Buildings and one Conservation Area within a 1km radius.

1.4. This Baseline provides information with regards to the significance of the historic environment to fulfil the requirement given in paragraph 207 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".[1]

1.5. The information within this Baseline is used to inform the Cultural Heritage Chapter of the Environmental Statement. It provides an understanding of the baseline historic environment, in turn enabling establishment of the potential effects the Proposed Development may cause to the significance of the identified heritage resource.

[1] Ministry of Housing, Communities and Local Government (MHCLG), *National Planning Policy Framework (NPPF)* (London, December 2024), para. 207.

1.6. As required by paragraph 207 of the *NPPF*, the detail and assessment in this Report is considered to be "*proportionate to the assets' importance*".[2]

[2] MHCLG, *NPPF*, para. 207.

2. Methodology

2.1. The aims of this Heritage Technical Baseline are to assess the significance of the heritage resource within and surrounding the Site and to articulate any contribution that the Site makes towards the heritage significance of the identified heritage assets. In doing so, the assessment of the Proposed Development against this identified significance can be carried out within the Environmental Statement Chapter, with the resultant effects recorded and quantified.

2.2. This assessment considers both archaeological resource and built heritage.

Sources

2.3. The following key sources have been consulted as part of this assessment:

- The National Heritage List for England for information on designated heritage assets;
- The Nottinghamshire County Council Historic Environment Record (HER) for information on the recorded heritage resource and previous archaeological works;
- Historic maps and documentary sources held by the Nottinghamshire Archives;
- Aerial photographs available online via Historic England's Aerial Photo Explorer and Britain from Above;
- Planning history records held by Broxtowe Borough Council;
- A Screened Zone of Theoretical Visibility (SZTV) Model prepared by Pegasus Group (included at ***Appendix 7***); and
- Other online resources, including Ordnance Survey Open Source data; geological data available from the British Geological Survey and Cranfield University's Soilscapes Viewer; Google Earth satellite imagery; and LiDAR data from the Environment Agency.

2.4. For digital datasets, including designated and non-designated heritage assets, 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 at ***Appendix 1*** and maps illustrating the resource within the study area are included at ***Appendix 2***.

2.5. Historic cartographic sources and aerial photographs were reviewed for the Site, and beyond this where professional judgement deemed necessary.

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

Site Visit

2.7. A site visit was undertaken by a Heritage Consultant from Pegasus Group on 25th November 2024, during which the Site and its surrounds were assessed.

Photographs

2.8. 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.

Consultation

2.9. The methodology for the Cultural Heritage Chapter of the Environmental Statement, including this Baseline, is informed by a Scoping Opinion issued by Broxtowe Borough Council in October 2024 (application ref. 24/00617/EIA). Further details of consultation are included within the ES.

Assessment Methodology

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;*[3]
- *Historic Environment Good Practice Advice in Planning: 2 - Managing Significance in Decision-Taking in the Historic Environment (*hereafter *GPA:2);*[4]
- *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*);[5]
- *Historic England Advice Note 1 (Second Edition) - Conservation Area Appraisal, Designation and Management* (hereafter *HEAN:1*).[6]

[3] Chartered Institute for Archaeologists (ClfA), *Standard and Guidance for Historic Environment Desk-Based Assessment* (revised edition, October 2020).
[4] Historic England, *Historic Environment Good Practice Advice in Planning: 2 – Managing Significance in Decision-Taking in the Historic Environment (GPA:2)* (2nd edition, Swindon, July 2015).
[5] Historic England, *Historic Environment Good Practice Advice in Planning Note 3 - The Setting of Heritage Assets (GPA:3)* (2nd edition, Swindon, December 2017).
[6] Historic England, *Historic England Advice Note 1 - Conservation Area Appraisal, Designation and Management (HEAN:1)* (2nd edition, Swindon, February 2019).

- *Historic England Advice Note 12 – Statements of Heritage Significance: Analysing Significance in Heritage Assets* (hereafter *HEAN:12*);[7] and

- *Conservation Principles: Polices and Guidance for the Sustainable Management of the Historic Environment*.[8]

Consideration of Harm

2.10. 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 214 and 215 of the *NPPF*.[9] With regard to non-designated heritage assets, potential harm should be considered within the context of paragraph 216 of the *NPPF*.[10]

2.11. 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.[11]

2.12. 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.[12] 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." [13]

[7] Historic England, *Historic England Advice Note 12 – Statements of Heritage Significance: Analysing Significance in Heritage Assets (HEAN:12)* (Swindon, October 2019).
[8] English Heritage, *Conservation Principles: Policies and Guidance for the Sustainable Management of the Historic Environment* (London, April 2008).
[9] MHCLG, *NPPF*, paras. 214 and 215.
[10] MHCLG, *NPPF*, para. 216.
[11] MHCLG, *Planning Practice Guidance (PPG)*, Paragraph: 018 (ID: 18a-018-20190723 Revision date: 23.07.2019).
[12] MHCLG, *PPG*, Paragraph: 018 (ID: 18a-018-20190723 Revision date: 23.07.2019).
[13] EWHC 2847, R DCLG and Nuon UK Ltd v. Bedford Borough Council.

3. Site Description and Planning History

Site Description

3.1. The Site extends to an area of approximately 18.95 hectares and lies to the west of the B6003 (Stapleford Lane), which leads northwards and southwards towards the suburbs of Stapleford, and Toton, respectively. The Site comprises several parcels of arable agricultural land defined by mature hedgerows. The Site boundaries are also defined by mature hedgerows and hedgerow trees.

3.2. Further arable agricultural land extends beyond the northern site boundary. A parcel of mature trees and hedgerows abuts the north-eastern corner, beyond which lies an electricity transmission substation. The southern section of the eastern boundary is bound by Stapleford Lane, beyond which lies the Land at Toton East site for which a planning application is being prepared by the Applicant (in conjunction with Peveril Securities Ltd). An area of existing residential development associated with the suburb of Toton extends beyond the southern site boundary, with the south-western corner abutted by an area of grassland and woodland comprising the Toton Fields Local Nature Reserve. The western site boundary is similarly bound by woodland belt and grassland within the Toton Sidings Local Wildlife Site. The DB Toton Cargo Railway Terminus lies beyond.

3.3. Access to the Site is currently taken via an informal gated access from Stapleford Lane. A public right of way also extends roughly north - south through the western section of the Site, running alongside the eastern section of the northern site boundary and connecting to Stapleford Lane to the east.

3.4. Land within the Site slopes generally in an east to west direction, falling from around 65m Above Ordnance Datum (AOD) on its eastern boundary to c.40m AOD to the north-western corner. A small stream runs roughly east – west along the eastern section of the northern site boundary.

3.5. A photographic record of the Site is included at Plate 2 to Plate 7.

Plate 2: View looking south across Site from north-eastern corner of Site.

Plate 3: View looking south-west from eastern extent of northern site boundary.

Plate 4: View looking west along northern site boundary.

Plate 5: View looking north from southern site boundary.

Plate 6: View looking north-east from south-western corner of Site.

Plate 7: Existing access to the Site from Stapleford Lane.

Planning History

3.6. A review of Broxtowe Borough Council's planning register has identified the following recent relevant planning applications:

3.7. **17/00131/ROC** | Variation of Condition 20 of outline planning permission reference 12/00585/OUT (No occupation of buildings until works to M1 J25 and A52 Bardills junction have been implemented) to remove reference to the M1 J25 works and to alter the proposed trigger point for implementation of the A52 Bardills junction works to prior to occupation of the 200th dwelling. | Planning application approved 5th June 2017.

3.8. **12/00585/OUT** | Outline planning application with points of access to be determined for a mixed-use development incorporating a maximum of 500 dwellings, 380 sqm convenience store, two 95 sqm retail outlets, education floor space (maximum 2,300 sqm), day nursery (maximum 450 sqm), pub/restaurant, an 80 bed residential care facility, open space, plot for medical surgery (0.04 hectares), plot for community use (0.08 hectares), highways, drainage, removal of electricity pylons and overhead cables, erection of terminal pylon, demolition of 316 Toton Lane and associated infrastructure. | Planning application approved 1st July 2016.

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.[14]

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.[15]

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 2024. 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.[16] The *PPG* also contains the *National Design Guide*.[17]

4.5. Full details of the relevant national policy guidance are provided within ***Appendix 5***.

The Development Plan

4.6. Applications for Planning Permission in Broxtowe are currently considered against the policy and guidance set out within the Broxtowe Local Plan, comprising Part 1: Core Strategy (adopted September 2014) and Part 2 (adopted October 2019).

4.7. The Site also lies within the Chetwynd: The Toton and Chilwell Neighbourhood Plan Area, for which a Neighbourhood Plan was 'made' on 15th May 2024.

4.8. Details of the heritage policies relevant to the application proposals are provided within ***Appendix 6***.

[14] UK Public General Acts, Planning (Listed Buildings and Conservation Areas) Act 1990.
[15] UK Public General Acts, Planning and Compulsory Purchase Act 2004, Section 38(6).
[16] Ministry of Housing, Communities & Local Government (MHCLG), *Planning Practice Guidance: Historic Environment (PPG)* (revised edition, 14th February 2024), https://www.gov.uk/guidance/conserving-and-enhancing-the-historic-environment.
[17] Ministry of Housing, Communities & Local Government (MHCLG), *National Design Guide* (London, January 2021).

5. The Historic Environment

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

5.2. Designated heritage assets are referenced using their seven-digit NHLE number, Nottinghamshire HER 'event' numbers have the prefix 'ENT' and 'monument' numbers have the prefix 'MNT'. A gazetteer of relevant heritage data is included at ***Appendix 1***. Designated heritage assets and HER records are illustrated on Figures 1 - 3 in ***Appendix 2***.

Designated Heritage Assets

5.3. No designated heritage assets are recorded within the Site. There are a number of designated assets located within the 1km study area, comprising eleven Grade II Listed Buildings and one Conservation Area.

5.4. There are no Scheduled Monuments, Registered Park and Gardens, Registered Battlefields or World Heritage Sites within or immediately beyond a 1km radius of the Site.

Topography and Geology

5.5. The topography of the Site slopes generally in an east - west direction, falling from around 65m AOD on its eastern boundary to c.40m AOD to the north-western corner. A small stream runs roughly east – west along the eastern section of the northern site boundary.

5.6. The recorded geology of the Site predominantly comprises mudstone and siltstone of the Tarporley Siltstone Formation, sedimentary bedrock formed between 250 and 241.5 million years ago during the Triassic period. Bands of sandstone, again of the Tarporley Siltstone Formation, also run roughly east – west through the Site. Meanwhile a small area of mudstone of the Radcliffe Member, sedimentary bedrock formed between 247.1 and 241.5 million years ago during the Triassic period lies to the south-western corner of the Site.[18] Superficial deposits are not recorded for the Site.[19]

5.7. Soils across the Site are recorded as slightly acidic, loamy and clayey with impeded drainage.[20]

Previous Archaeological Works

<u>Geophysical Survey</u>

5.8. A Geophysical Survey undertaken in support of this outline planning application was completed by Magnitude Surveys in February 2025.

[18] British Geological Survey, Geology of Britain Viewer, https://www.bgs.ac.uk/map-viewers/bgs-geology-viewer/.

[19] *Ibid.*

[20] Cranfield University, *Soilscapes*, http://www.landis.org.uk/soilscapes/.

5.9. The survey identified a group of linear and curvilinear anomalies to the south-western extent of the Site (south of Study Area 2 and south-west of Study Area 3). The arrangement has been interpreted as a possible sub-rectilinear enclosure and double-ditched enclosure with boundaries extending to the west, north-west and north-east. The possible double ditched enclosure is of a rectilinear morphology with a width of c.7m and continues beyond the southern site boundary. It has thus been interpreted as a possible continuation of the double ditched feature recorded beyond the southern site boundary on historic aerial photographs (HER ref. MNT382). While not possible to confirm on the basis of existing evidence, the form and layout of the anomalies within the Site is indicative of a partially truncated Iron Age to Romano-British enclosure system.

5.10. Several linear anomalies detected across the wider Site have been interpreted as being agricultural in origin, comprising the alignment of former field boundaries recorded on historic Ordnance Survey mapping, alongside evidence of past and present ploughing regimes discernible on aerial imagery. Possible evidence of Medieval ridge and furrow cultivation was also detected in a number of fields, albeit having been truncated by later ploughing activities.

5.11. Other weak linear and curvilinear trends across the Site (Survey Areas 2, 3 and 4) are of uncertain origin and thus an archaeological origin cannot be ruled out.

5.12. The report of the Geophysical Survey is included at ***Appendix 8*** of this Technical Baseline.

Nottinghamshire HER

5.13. The Nottinghamshire HER holds no records of previous archaeological works within the Site.

5.14. A further seven records of previous archaeological works are recorded within the 1km study area, with the following events located within 500m of the Site:

- A Geophysical Survey undertaken in 2012 in connection with the construction of the Toton Lane Park and Ride (HER ref. ENT4154), c.80m to the north-east of the Site. The only potential archaeological feature comprised two sides of a possible faint enclosure to the western section of the survey area.

- A Strip, Map and Sample Excavation undertaken in 2012 in connection with the creation of a new tram line (HER ref. ENT4132), c.360m to the north-east of the Site. A series of 18 furrows and ditches of probably archaeological origin were identified.

- A Gradiometer Survey undertaken in 2012 in connection with the construction of Toton Lane Park and Ride (HER ref. ENT4144), c.420m to the north-east of the Site.

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

Archaeological Baseline

Prehistoric (pre-43 AD)

5.16. The HER records no features or findspots of Prehistoric date within the Site or surrounding study area.

5.17. Notwithstanding the above, the Geophysical Survey recorded a concentration of curvilinear and rectilinear anomalies to the southern site boundary that may relate to a partially truncated Iron Age to Romano-British enclosure system. No upstanding physical remains or cropmarks have been identified.

Romano-British (AD 43 – 410)

5.18. The HER records no features or findspots of Romano-British date within the Site, while the only evidence of activity during this time comprising the findspot of a coin of Valens found in the garden of 59 Highfield Road, Chilwell in 1970 (HER ref. MNT543), c.710m to the east of the Site. This is anticipated to represent a chance loss.

5.19. Again, notwithstanding the above, the Geophysical Survey recorded a concentration of curvilinear and rectilinear anomalies to the southern site boundary that may relate to a partially truncated Iron Age to Romano-British enclosure system. No upstanding physical remains or cropmarks have been identified.

Early Medieval (410 AD – 1066) and Medieval (1066 – 1539)

5.20. There is no artefactual evidence of Early Medieval activity either within the Site or wider study area, with all evidence from this period being documentary in nature.

5.21. As discussed further below, the majority of the Site lies within the parish of Toton, while the north-western parcel falls within Stapleford parish.

5.22. The name Toton is believed to have Anglo-Saxon origins, deriving from *tun* or *farm belonging to Tofi*, an Old Norse name. The settlement is therefore anticipated to have been established during the Anglo-Saxon period, albeit later dominated by Norse settlers. The first specific mention of a permanent settlement at Toton was within the 1086 Domesday Survey, which recorded a village named *'Tovetune'*, later spelt *'Toueton'* in 1230. Having been held by Healfdene prior to the conquest, the manor was given to William Peverel, lord of Nottingham Castle, and Warner (father of Robert) held under him. Toton was recorded as having a church and priest in 1086, providing further evidence that a pre-conquest settlement likely existed at this location.

5.23. A settlement at Stapleford is believed to have developed around a fording point of the river Erewash, linking the Danish boroughs of Nottingham and Derby. While evidence of this settlement is limited, an Anglo-Scandinavian cross shaft stands within the grounds of the Church of St Helen. While its exact date is unknown, it has been variously suggested to have been erected during the 7th and 20th centuries. The Domesday Survey of 1086, which again provides the earliest written reference to Stapleford, recorded the land as being held by Robert de Heriz under the authority of William Peveril, having previously comprised four manors held by Young Wulfsi, Staplewin, Goodwin and Gladwin. Stapleford was recorded as having a church and priest, again suggesting that a pre-conquest settlement likely existed at this location.

5.24. While there are no features or findspots recorded within the Site, and data within the wider study area is sparse, documentary evidence is illustrative of a Medieval landscape of dispersed settlement and agricultural cultivation that characterised the parishes of Toton and Stapleford. Land within the Site is anticipated to have

formed part of this agricultural landscape, with the results of the Geophysical Survey having recorded possible buried remains of ridge and furrow cultivation across several fields. The features have, however, been truncated by later field boundary reconfigurations and ploughing activities. No upstanding physical remains or cropmarks have been identified.

5.25. The agricultural character of the wider landscape is also supported by the discovery of a series of features, interpreted as Medieval plough furrows and possible field boundaries or drainage systems within the parish of Chilwell were identified during soil stripping of an attenuation pond (HER ref. MNT27019), c.370m north-east of the Site.

Post Medieval (1540 – 1750), Early Modern (1750 – 1901), Modern (1901 – present)

5.26. While there are no features or findspots of definite post-Medieval date within the Site, a group of five small, slightly raised features of c.5 – 10m in diameter are visible on historic aerial photographs within the western section of the Site (HER ref. MNT7121). These features have been identified as possible capped shaft-heads associated with historic mining activities, albeit the HER notes that they may also be of agricultural origin. Due to the presence of mature crops at the time of the site walkover, it was not possible to determine the presence of such remains, while the Geophysical Survey did not identify any possible below-ground remains associated with these features.

5.27. The only records of post-Medieval date within the wider study area again relate to historic mining activities, comprising the anticipated remains of former bell pits (HER refs. MNT7221 and MNT24941), c.650m to the north-east of the Site. Further possible bell pits have also been recorded c.700m to the north at Stapleford (HER refs. MNT7330 and MNT6966).

5.28. Alongside this early industrial activity, documentary sources confirm that the study area continued to comprise a landscape of dispersed settlement separated by large swathes of agricultural land during the post-Medieval period. Meanwhile the plough furrows and possible field boundaries or drainage systems identified during soil stripping c.370m north-east of the Site have been attributed to activity during both the Medieval and post-Medieval periods (HER ref. MNT27019).

5.29. By the Early Modern period, John Chapman's Map of 1774 confirms the Site's agricultural operation (Plate 9). Meanwhile the 1845 Tithe Map for Toton confirms that all land parcels within the site boundary were in arable use, albeit with two small spinneys to the south-western corner (Plate 10). The Late Sir John Borlase Warren Baronet was recorded as landowner, albeit the parcels were occupied separately.

5.30. The north-western section of the Site, which falls within Stapleford, was not recorded by the 1850 Tithe Survey for the parish, indicating that it may have comprised untithable land. It has not been possible to confirm the exact use at this time, albeit both Chapman's late 18th-century Map and the 1st Edition Ordnance Survey Map of 1885 record the Site as undeveloped agricultural land.

5.31. The surrounding agricultural landscape is also evidenced through both historic mapping and HER data, with a farmstead, Wheatgrass Farm (HER ref. MNT24941), recorded c.865m to the north-east of the Site.

5.32. From the 18th century onwards, Stapleford and the neighbouring village of Bramcote, to the north-east of the Site, became centres of the framework knitting and lace-making industry, with both settlements experiencing significant growth as a result of the economic prosperity this generated. Due to the land within the Site's hinterland location, this did not impact upon its agricultural use.

5.33. There is no documentary evidence of Toton becoming an important industrial centre, albeit historic mapping confirms that the settlement expanded considerably following development of the Toton Sidings, a major marshalling yard of the Midland Railway in which coal from the Nottinghamshire coal fields was sorted and distributed across the country, during the mid-19th century (HER ref. MNT401). The Sidings and associated railway ran parallel to the western site boundary and operate as an important locomotive maintenance depot. Numerous factories interspersed with pockets of terraced housing were also established immediately to the west of the railway line by the end of the 19th and into the early 20th centuries. This included a saw mill visible on historic maps from 1914 onwards (HER ref. MNT396 and MNT12739), c.530m to the north-west of the Site. Despite spatial proximity, historic mapping does not indicate that any operations associated with the railway extended into the Site, with the land remaining in agricultural use. The site of the former Stapleford and Sandiacre Station, opened in September 1847 as part of the Midland Railway (HER refs. MNT401 and MNT12739), lies c.530m to the north-west of the Site. The station closed in January 1967 and has since been demolished.

5.34. Within the wider study area, a single-span stone bridge constructed during the Victorian period to carry Station Road across the River Erewash (HER refs. MNT9691, MNT9692 and MNT25561), remains extant c.820m to the north-west of the Site. Meanwhile the site of a malthouse to the far western edge of Chilwell parish (HER refs. MNT646 and MNT12896), lies c.890m to the south-east.

5.35. There are again no Modern features or findspots recorded within the Site. Features from this period within the wider study area are associated with the First and Second World Wars and comprise two buildings (HER refs. 27607 and 27608) associated with the wider Chetwynd Barracks,[21] which continues to occupy an area c.820m to the south-east of the Site at its most proximate point. Initially named the Chilwell Depot and Barracks, the facility was built shortly after the First World War on the site of the former National Shell Filling Factory No.6 which had been devastated by an explosion on 1st July 1918 (HER ref. MNT27193). A Grade II Listed memorial commemorating workers killed in accidents at the factory, especially in the 1918 explosion, lies c.1.2km to the south-east of the Site. Construction of the National Shell Filling Factory also catalysed further expansion of Toton during the First World War.

5.36. In April 1935, the parish of Toton was abolished and merged into the Beeston and Stapleford urban district. The urban district was itself abolished in 1974 to become

[21] HER refs. MNT27193, MNT27607, MNT27608, MNT27609, MNT27610, MNT27664.

part of Broxtowe. Due to the degree of expansion during the 19th and 20th centuries, Toton's agricultural origins are now only appreciable via historic cartographic sources.

5.37. Plate 11 to Plate 15 show historic mapping of the area and Site from 1885 onwards, with those dating to the late 19th century showing the Site's rural location and ongoing agricultural use. The following maps show the gradual development of the wider surrounding area, primarily for residential uses as the settlements of Toton and Stapleford expanded. The growth of industrial uses to the west of the railway line by the end of the 19th century is also evidenced, while a sewage works had been established immediately to the north-west of the Site by this time and remains extant today.

5.38. Aerial photography captured in 2001 shows the extant configuration of land parcels within the Site, while a small agricultural building had been constructed within the north-eastern corner of the Site (Plate 16). Further residential expansion of Chilwell, Toton and Stapleford had taken place during the late 20th century. The Toton Lane Park and Ride and tramline are present immediately to the east of Stapleford Lane on photographs from 2013 onwards, while the modern agricultural building to the north-eastern corner of the Site appears to have been demolished between 2013 and 2015. An area of hardstanding remains at its former location (Plate 17).

Undated

5.39. Two undated records have been identified within the Site, comprising:

- A group of five small, slightly raised features of c.5 – 10m in diameter visible in historic aerial photographs within the western section of the Site (HER ref. MNT7121). These features have been identified as possible capped shaft-heads associated with historic mining activities, albeit the HER notes that they may also be of agricultural origin.

- A linear bank feature extending east – west across the centre of the Site (HER ref. MNT6029). The feature has been identified as a possible plough headland.

5.40. Two further undated records have been identified within the wider study area:

- A double ditched enclosure of unknown date visible on historic aerial photographs (HER ref. MNT382), c.45m to the south of the Site. The area is now occupied by residential development.

- Two sides of a possible enclosure recorded during a Geophysical Survey undertaken in 2012 (HER ref. MNT27024), c.80m to the north-east of the Site.

Plate 8: Extract from Speed's Map of Nottinghamshire (1610), with location of Bramcote and Stapleford circled in red.

Plate 9: Extract from Chapman's Map of 1774, with approximate site location circled in red.

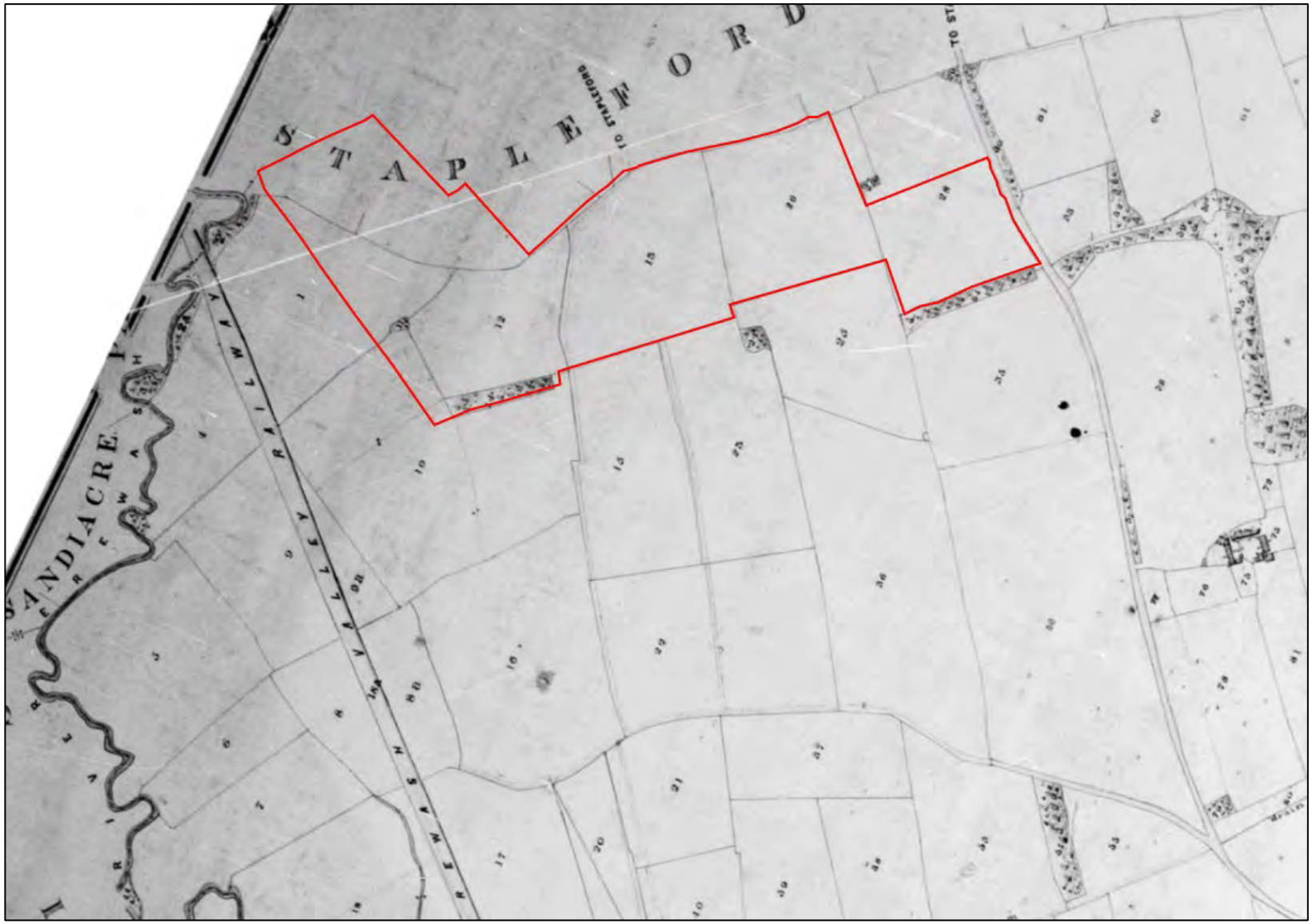

Plate 10: Extract from the 1845 Tithe Map for Toton, with approximate site boundary edged in red.

Plate 11: Extract from 1st Edition Ordnance Survey Map of 1885, with approximate site boundary edged in red.

Plate 12: Extract from 2nd Edition Ordnance Survey Map of 1901, with approximate site boundary edged in red.

Plate 13: Extract from Ordnance Survey Map of 1914, with approximate site boundary edged in red.

Plate 14: Extract from Ordnance Survey Map of 1942 - 45, with approximate site boundary edged in red.

Plate 15: Extract from Ordnance Survey Map of 1973, with approximate site boundary edged in red.

Plate 16: Extract from aerial photograph captured in 2001, with approximate site boundary edged in red.

Plate 17: Extract from aerial photograph captured in 2022, with approximate site boundary edged in red.

Statement of Archaeological Potential and Significance

Potential for Prehistoric Remains

5.41. While there are no records of Prehistoric date within the Site, the Geophysical Survey recorded a concentration of curvilinear and rectilinear anomalies adjacent to the southern boundary that may relate to a partially truncated Iron Age to Romano-British enclosure system. No upstanding physical remains or cropmarks have been identified.

5.42. The potential for identification of remains of Prehistoric date within this section of the Site is therefore considered to be moderate to high. Any such remains have the potential to be of regional significance via their contribution towards objectives identified by the East Midlands Research Framework.[22] It should, however, be noted that the precise origins of the anomalies cannot be confirmed on the basis of existing evidence and, in any event, below ground remains would be anticipated to have been at least partially truncated by agricultural activities from the Medieval period onwards.

5.43. On the basis of spatial proximity, the theoretical potential for undiscovered remains dating to the Prehistoric period within the wider Site is moderate to high. However, no further anomalies possibly dating to this period were recorded during the Geophysical Survey. Meanwhile, as is the case with the identified possible Prehistoric features, any additional pre-Medieval features would likely have been at least partially truncated by ploughing and other agricultural activities from the Medieval period onwards.

5.44. Taken together, the residual archaeological potential for undiscovered Prehistoric remains within the wider Site is considered to be low to moderate. In the event that Prehistoric features were identified within the wider Site, they would again have the potential to be of regional significance as they can contribute towards addressing research framework objectives.[23]

Potential for Romano-British Remains

5.45. While there are no records of Romano-British date within the Site, as outlined above, the Geophysical Survey recorded a concentration of curvilinear and rectilinear anomalies to the southern site boundary that may relate to a partially truncated Iron Age to Romano-British enclosure system. No upstanding physical remains or cropmarks have been identified.

5.46. The potential for identification of remains of Romano-British date within this section of the Site is therefore considered to be moderate to high. Any such remains have the potential to be of regional significance via their contribution towards objectives identified by the East Midlands Research Framework.[24] It should, however, be noted that the precise origins of the anomalies cannot be confirmed on the basis of existing evidence and, in any event, below ground remains would be anticipated to

[22] Late Bronze Age and Iron Age – East Midlands Historic Environment Research Framework (researchframeworks.org)
[23] *Ibid.*
[24] Romano-British – East Midlands Historic Environment Research Framework (researchframeworks.org)

have been at least partially truncated by agricultural activities from the Medieval period onwards.

5.47. On the basis of spatial proximity, the theoretical potential for undiscovered remains dating to the Romano-British period within the wider Site is moderate to high. However, no further anomalies possibly dating to this period were recorded during the Geophysical Survey. Meanwhile, as is the case with the identified possible Romano-British features, any additional pre-Medieval features would likely have been at least partially truncated by ploughing and other agricultural activities from the Medieval period onwards.

5.48. Taken together, the residual archaeological potential for undiscovered Romano-British remains within the wider Site is considered to be low to moderate. In the event that Romano-British features were identified within the wider Site, they would again have the potential to be of regional significance as they can contribute towards addressing research framework objectives.[25]

Potential for Early Medieval and Medieval Remains

5.49. On the basis of available evidence, the potential for remains of Early Medieval date is considered to be low.

5.50. The Site appears to have comprised part of the agricultural hinterland associated with the settlements of Toton and Stapleford from the Medieval period onwards and thus has some potential for artefacts and deposits associated with agricultural activities from the Medieval period.

5.51. While records are focused within the settlement centres, the surrounding landscape is characterised by various records of agricultural field systems, including ridge and furrow earthworks, former field boundaries and drainage systems. These take the form of earthworks and cropmarks visible on historic aerial photographs, alongside buried remains uncovered during excavations prior to development. While no such records are recorded within the Site, the Geophysical Survey identified possible buried remains of ridge and furrow cultivation across several fields. The features have, however, been truncated by later field boundary reconfigurations and ploughing activities. No upstanding physical remains or cropmarks have been identified.

5.52. The heritage significance of ridge and furrow earthworks is primarily derived from their fabric and historic interest, by way of their visible contribution towards the historic landscape character through their physical form. They have little intrinsic archaeological value as the earthwork ridges and infilled furrows will contain only unstratified finds within their matrices. Taken together, any buried remains associated with Medieval ridge and furrow would not be anticipated to represent heritage assets.

5.53. Any ditches of former field boundaries, drains and ponds would not be considered heritage assets.

5.54. Taken together, should remains of Medieval date be identified within the Site they would be anticipated to

[25] *Ibid.*

represent, at most, non-designated heritage assets of local significance.

Potential for Post-Medieval, Early Modern and Modern Remains

5.55. A group of five small, slightly raised features of c.5 – 10m in diameter are visible on historic aerial photographs within the western section of the Site. These features have been identified as possible capped shaft-heads associated with historic mining activities, albeit the HER notes that they may also be of agricultural origin. Due to the presence of mature crops at the time of the site walkover, it was not possible to determine the presence of such remains, while the Geophysical Survey did not identify any possible below-ground remains associated with these features. However, as the land has subsequently been used for arable agricultural cultivation, including the use of modern farming machinery, it is likely that any such remains would have been disturbed or truncated. Taken together, any buried remains associated with historic mining activities, if indeed present, would be anticipated to represent, at most, non-designated heritage assets of local significance.

5.56. The available evidence indicates that there is also potential for post-Medieval artefacts and deposits associated with agricultural activities within the Site. This may include buried remains of former field boundaries, as identified by the Geophysical Survey and recorded on historic mapping into the 19th and 20th centuries, albeit these would not be considered to represent heritage assets.

5.57. Any previously undiscovered field boundaries, buried furrows, drains and ponds would again not be considered heritage assets.

5.58. While there is evidence of other activities within the wider study area during the Early Modern and Modern periods, including both extant and lost residential properties, local services and structures associated with industrial activities, alongside those associated with the First and Second World Wars, these represent distinct features within the landscape. Historic mapping analysis reveals that the Site comprised agricultural land throughout these periods and, as such, the potential for buried remains associated with other activities is considered to be low.

5.59. Taken together, should any archaeological deposits of post-Medieval date onwards be identified within the Site they are likely to represent, at most, non-designated heritage assets of local significance.

6. The Built Historic Environment

6.1. The following Section identifies and articulates the significance of those elements of the built historic environment that may have the potential to be sensitive to the Proposed Development, by way of changes to their setting.

6.2. The assessment has been carried out using methodology set out in the Historic England guidance *GPA3: The Setting of Heritage Assets* (see *Methodology*; **Section 2**) which advocates a stepped approach:

- Step 1 - identify which heritage assets might be affected by a proposed development;
- Step 2 – Assess the degree to which these settings and views make contributions to the significance of the heritage asset(s) or allow significance to be appreciated;
- Step 3 – Assess the effects of the proposed development, whether beneficial or harmful, on the significance or on the ability to appreciate it;
- Step 4 – Explore ways to maximise enhancement and avoid or minimise harm;
- Step 5 – Make and document the decision and monitor outcomes.

6.3. 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.

6.4. Within this baseline, steps 1, 2 and 3 are carried out, with consideration of steps 4-5 carried out within the Cultural Heritage Chapter of the Environmental Statement. There is some level of assessment carried out within this baseline to allow the Cultural Heritage Chapter to be a succinct and focussed document which concentrates on only those assets which have either been specifically highlighted through consultation and those which have the potential to experience and effect, potentially a significant effect, from the Proposed Development.

6.5. Consideration was also made as to whether any of the heritage assets present within or beyond the 1km study area include the Site as part of their setting, and therefore may potentially be affected by the Proposed Development.

Step 1

6.6. The following number of assets have been identified within the 1km study area for this assessment:

- Eleven Grade II Listed Buildings; and
- One Conservation Area.

6.7. There are no Scheduled Monuments, Registered Park and Gardens, Registered Battlefields or World Heritage Sites within or immediately beyond the 1km study area.

6.8. The location of designated heritage assets within the 1km study area are shown in Figure 1 at ***Appendix 2***.

6.9. Consideration, based upon site analysis and professional judgment and the previous planning history, was therefore given as to which of the above assets may include the Site as part of their setting, which contributes to their overall heritage significance, and thus whether they may potentially be affected by the Proposed Development.

6.10. This also took into account the SZTV Model, which demonstrates the areas within the surrounding landscape from which the Proposed Development would be visible. A copy of the SZTV Model is included at ***Appendix 7***.

6.11. The SZTV has been produced using Digital Terrain Modelling (DTM) data. Existing built form (8m tall and above) and larger blocks of woodland (15m tall and above) have also been modelled to take account of the screening effect that these would provide, in addition to existing landforms.

6.12. The screening effect provided by smaller blocks of woodland, individual trees and hedgerows has, however, not been taken into account. Consequently, the actual extent of the area from which the Proposed Development would be visible is anticipated to be smaller than that shown. This is largely due to the presence of roadside and field boundary hedgerows and trees, garden trees, hedgerow and shrubs.

6.13. The SZTV indicates that intervisibility between the Proposed Development and all assets within the 1km study area would be wholly screened. This was supported by onsite analysis which confirmed that, by virtue of spatial and visual separation, including large-scale infrastructure associated with the intervening railway that has been present since the mid-19th century, alongside the height of the Proposed Development, any intervisibility would be wholly screened.

6.14. Taken alongside the lack of any known historic or functional relationship with the Site, beyond forming part of the wider agricultural landscape to the east, it is considered that the Proposed Development would not alter any aspect of the setting of any of the assets that contribute towards their overall significance. No harm would therefore be anticipated to result via a change in setting.

6.15. There are no other assets beyond the 1km study area that have been identified as potentially sensitive to the Proposed Development.

6.16. As part of the proportional assessment undertaken within this Report and Environmental Statement Chapter, all built heritage assets have therefore been excluded from further assessment as part of Step 1, and thus are not taken forward into Step 2.

7. Conclusions

7.1. This Heritage Technical Baseline has provided the background information and set out the significance and contribution made by setting of heritage assets in proximity to the Site. Initial assessment of the potential effects of the scheme has been made within this baseline to ensure that the Cultural Heritage Chapter of the Environmental Statement considers only those assets within the potential to experience significant effects, and those assets highlighted through consultation as requiring assessment.

7.2. The initial assessment has utilised professional judgement, desk-based assessment, site visits and tools such as the SZTV drawing produced for the Landscape and Visual Impact Assessment.

7.3. The results of this Baseline are used as the basis of the Environmental Statement Chapter.

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Appendix 1: Gazetteer

Nottinghamshire Historic Environment Record Data

Event Data within 1km of the Site

Ev UID	Name	Event Type
ENT2855	Casual find in Highfield Road, Attenborough	Survey
ENT4132	Investigations at Chilwell/Toton Park & Ride Attenuation Pond by TPA in 2012	Intervention
ENT4144	Gradiometer survey, Chilwell Park and Ride, by TPA	Survey
ENT4154	Geophysics at Toton Lane Park and Ride by APS	Survey
ENT4791	Watching Brief at Bramcote Lane Mains, Chilwell	Intervention
ENT4791	Watching Brief at Bramcote Lane Mains, Chilwell	Intervention
ENT935	Casual find at 59 Highfield Road, Chilwell	Survey

Monument Data within 1km of the Site

Mon UID	Name	Mon Type	Period
MNT12739	Saw mill, Stapleford	SAW MILL	Post Medieval to Modern

MNT12740	Stapleford and Sandiacre Station, Stapleford	RAILWAY STATION	Modern
MNT12896	Malthouse, Chilwell	MALT HOUSE	Modern
MNT24941	Wheatgrass Farm	FARMSTEAD	Modern
MNT24941	Wheatgrass Farm	FARMSTEAD	Modern
MNT24941	Wheatgrass Farm	FARMSTEAD	Modern
MNT24941	Wheatgrass Farm	FARMSTEAD	Modern
MNT25561	Bridge on Station Road, Stapleford	BRIDGE	Post Medieval
MNT27019	Linear furrows at Chilwell/Toton Park and Ride		Medieval to Post Medieval
MNT27024	Enclosure at Toton Lane park and ride		Unknown
MNT27193	Shell Store No 6 National Filling Factory		Modern
MNT27607	Building 130		Modern
MNT27607	Building 130		Modern
MNT27607	Building 130		Modern
MNT27608	Williams Barracks (Building 102) at Chetwynd Barracks		Modern

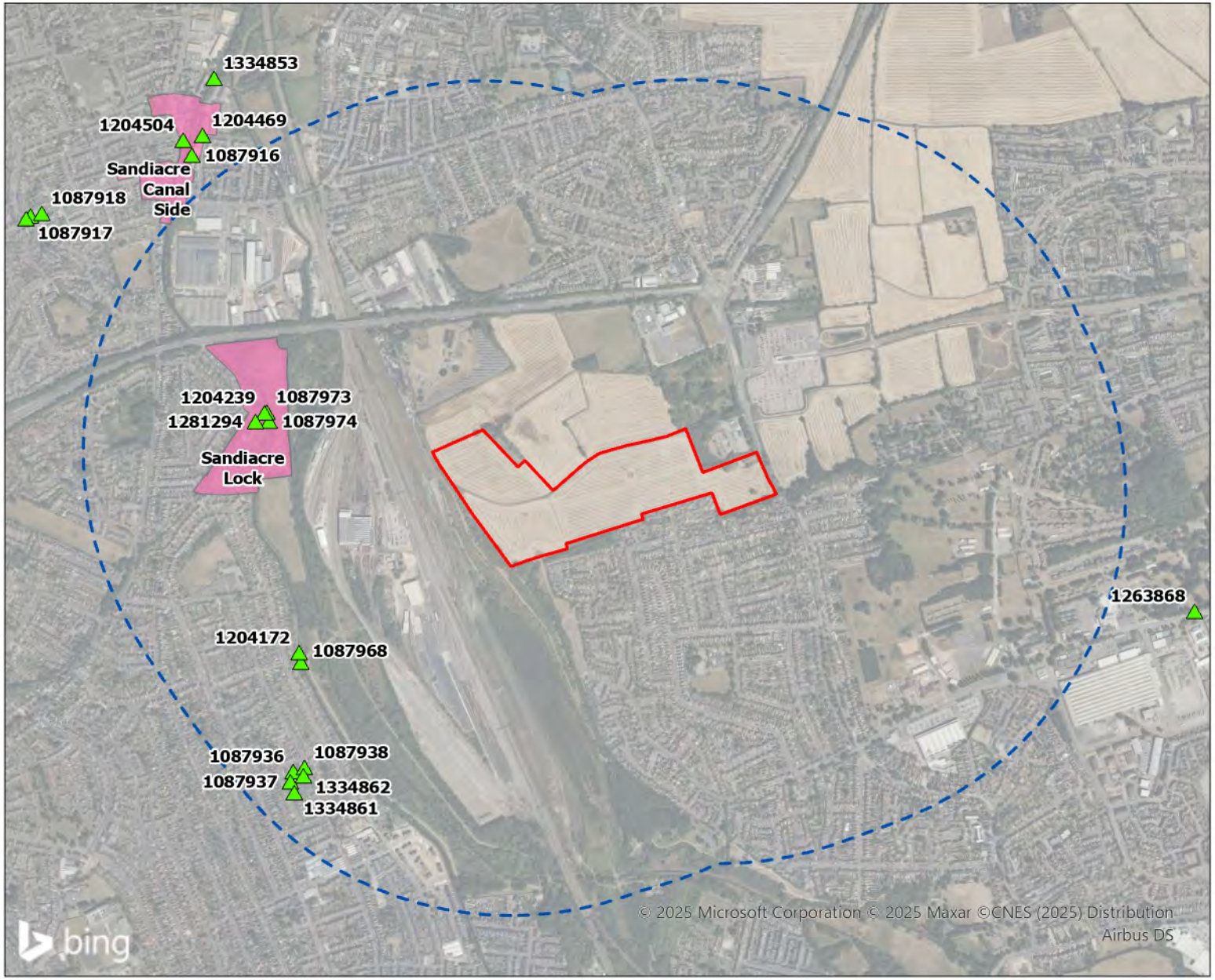
MNT382	Double ditched enclosure, Toton	ENCLOSURE	Unknown
MNT396	Saw mill, Stapleford	MAP DEPICTION	Post Medieval to Modern
MNT397	Stapleford and Sandiacre Station, Stapleford	MAP DEPICTION	Modern
MNT401	Toton Sidings, Attenborough	MAP DEPICTION	Modern
MNT543	Roman coin found at 59 Highfield Road, Chilwell	FINDSPOT	Roman
MNT6029	Bank, Toton	BANK (EARTHWORK)	Unknown
MNT6029	Bank, Toton	BANK (EARTHWORK)	Unknown
MNT646	Map Depiction of Malthouse, Chilwell	MAP DEPICTION	Modern
MNT6966	Bell pits, Stapleford	BELL PIT	Post Medieval to Modern
MNT7121	Possible mining remains, Toton	MINE SHAFT	Unknown
MNT7221	Possible mining remains, Chilwell	BELL PIT; MOUND	Post Medieval to Modern
MNT9691	Map depiction of Bridge on Station Road, Stapleford	MAP DEPICTION	Post Medieval
MNT9692	Structure of Bridge on Station Road, Stapleford	STRUCTURE	Modern

Historic England Data

Listed Buildings within 1km of the Site

List Entry	Name	Grade	Eastings	Northings
1087936	HIGHFIELD INFANTS SCHOOL	II	448287	334744
1087937	HALL TO NORTH OF HIGHFIELD JUNIOR SCHOOL	II	448279	334714
1087938	RAILINGS TO HIGHFIELD INFANT AND JUNIOR SCHOOLS	II	448319	334756
1087968	CANAL BRIDGE AT SK 484 351	II	448309	335056
1087973	SANDIACRE LOCK	II	448212	335773
1087974	BRIDGE AT SANDIACRE LOCK	II	448218	335747
1204172	LOCK AT SK 484 351	II	448304	335084
1204239	LOCK KEEPER'S COTTAGE AND ATTACHED OUTBUILDING AT SANDIACRE LOCK	II	448205	335771
1281294	BEECH HOUSE AT SANDIACRE LOCK	II	448179	335746
1334861	HIGHFIELD JUNIOR SCHOOL	II	448290	334683
1334862	HALL TO SOUTH EAST OF HIGHFIELD INFANT SCHOOL	II	448316	334731

Appendix 2: Figures



KEY

- Site
- 1km Buffer
- Grade I Listed Building
- Grade II* Listed Building
- Grade II Listed Building
- Conservation Area

Revisions:
First Issue- 06/03/2025

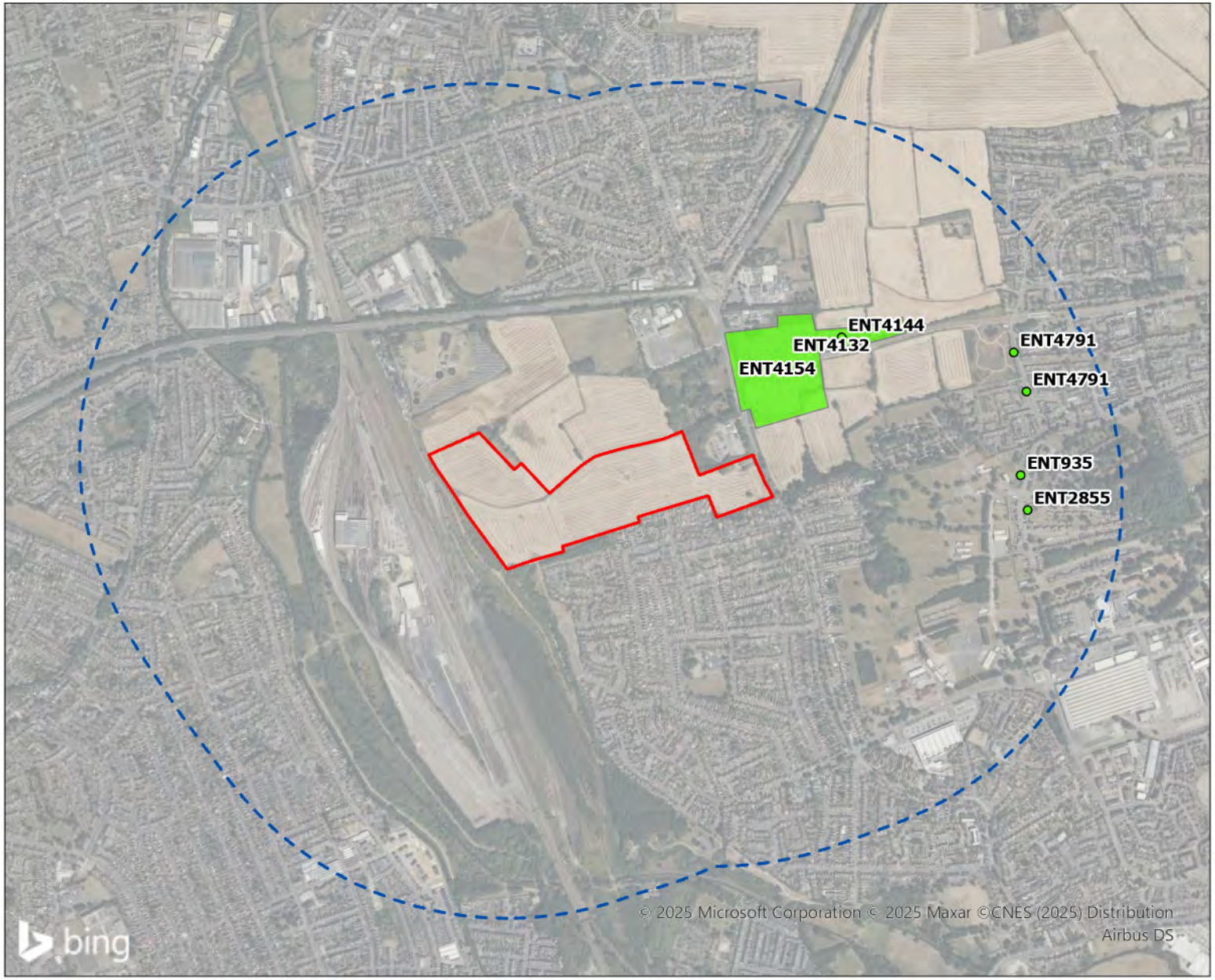
Figure 1: Designated Heritage Assets

Land at Toton West
Toton
Nottinghamshire

Client: Bloor Homes Ltd
DRWG No:**P23-2379_01** Sheet No: - REV: -
Drawn by: BH Approved by: GS
Date: 06/03/2025
Scale: 1:17,000 @ A4

PEGASUS GROUP

PLANNING | DESIGN | ENVIRONMENT | ECONOMICS | HERITAGE



0 0.75 km

N

KEY

- Site
- 1km Buffer
- HER 'Event' Point
- HER 'Event' Polgon

Revisions:
First Issue- 06/03/2025

Figure 2: HER 'Event' Data

Land at Toton West
Toton
Nottinghamshire

Client: Bloor Homes Ltd
DRWG No:**P23-2379_02** Sheet No: - REV: -
Drawn by: BH Approved by: GS
Date: 06/03/2025
Scale: 1:17,000 @ A4

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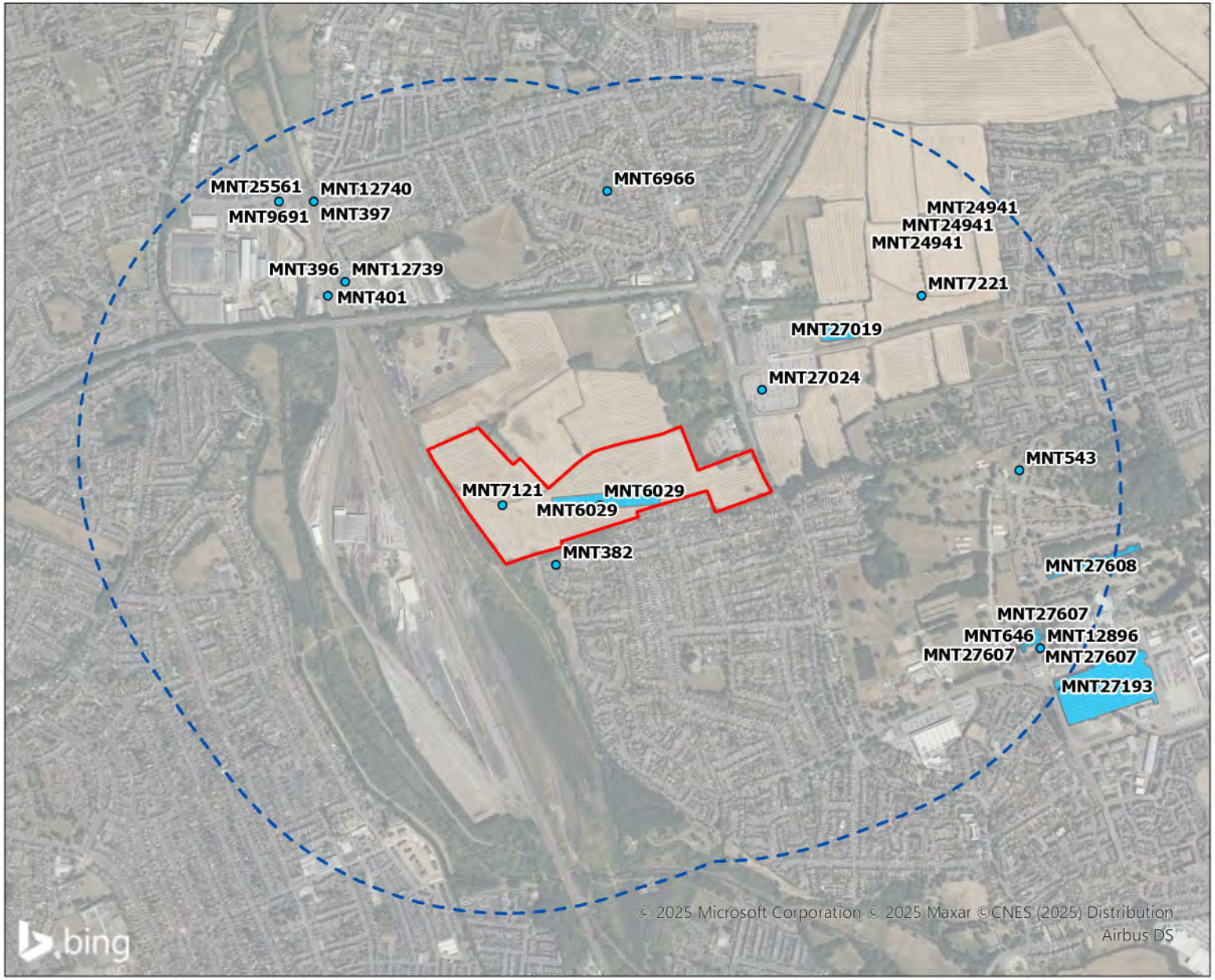

KEY

- Site
- 1km Buffer
- HER 'Monument' Point
- HER 'Monument' Polygon

Revisions:
First Issue- 06/03/2025

Figure 3: HER 'Monument' Data

Land at Toton West
Toton
Nottinghamshire

Client: Bloor Homes Ltd
DRWG No:**P23-2379_03** Sheet No: - REV: -
Drawn by: BH Approved by: GS
Date: 06/03/2025
Scale: 1:17,000 @ A4

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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."***[26]

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.[27]

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*.[28] These essentially cover the heritage 'interests' given in the glossaries of the *NPPF* and the *PPG* which are archaeological, architectural and artistic, and historic.[29]

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.[30]

[26] MHCLG, *NPPF*, Annex 2.
[27] Historic England, *GPA:2*.
[28] 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.
[29] MHCLG, *NPPF*, Annex 2; MHCLG, *PPG,* paragraph 006, reference ID: 18a-006-2019072.
[30] MHCLG, *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. [31]

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."*** [32]

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."*** [33]

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*". [34]

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

[31] Historic England, *Statements of Heritage Significance: Analysing Significance in Heritage Assets, Historic England Advice Note 12* (Swindon, October 2019).
[32] MHCLG, *NPPF*, Annex 2.
[33] MHCLG, *NPPF*, Annex 2.
[34] 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." [35]***

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 213 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 75 of the *NPPF*;[36]

- **Designated heritage assets of less than the highest significance,** as identified in paragraph 213 of the *NPPF*, comprising Grade II Listed Buildings and Grade II Registered Parks and Gardens (and also some Conservation Areas);[37] and

[35] Catesby Estates Ltd. V. Steer [2018] EWCA Civ 1697, paras. 25 and 26.
[36] MHCLG, *NPPF*, para. 213 and fn. 75.
[37] MHCLG, *NPPF,* para. 213.

- **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*".[38]

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

Grading significance

There is no definitive grading system for assessing or categorising significance outside of the categories of Designated Heritage Assets and Non-Designated Heritage Assets, specifically with regards to the relative significance of different parts of an asset.

ICOMOS guidance recognises that a degree of professional judgement is required when defining significance:

> ***"…the value of heritage attributes is assessed in relation to statutory designations, international or national, and priorities or recommendations set out in national research agendas, and ascribed values. Professional judgement is then used to determine the importance of the resource. Whilst this method should be used as objectively as possible, qualitative assessment using professional judgement is inevitably involved."***[39]

This assessment of significance adopts the following grading system:

- **Highest significance:** Parts or elements of a heritage asset, or its setting, that are of particular interest and are fundamental components of its archaeological, architectural, aesthetic or historic interest, and form a significant part of the reason for designation or its identification as a heritage asset. These are the areas or elements of the asset that are most likely to warrant retention, preservation or restoration.

- **Moderate significance:** Parts or elements of the heritage asset, or its setting, that are of some interest but make only a modest contribution to the archaeological, architectural, aesthetic or historic interest of the heritage asset. These are likely to be areas or elements of the asset that might warrant retention but are capable of greater adaption and alteration due to their lesser relative significance.

- **Low or no significance:** Parts or elements of the heritage asset, or its setting, that make an insignificant, or relatively insignificant contribution to the archaeological, architectural, aesthetic or historic interest of the heritage asset. These are likely to be areas or elements of the asset that can be removed, replaced or altered due to their minimal or lack of

[38] MHCLG, *PPG*, paragraph 039, reference ID: 18a-039-20190723.

[39] International Council on Monuments and Sites (ICOMOS), *Guidance on Heritage Impact Assessment for Cultural World Heritage Properties* (Paris, January 2011), paras. 4-10.

significance and are areas and elements that have potential for restoration or enhancement through new work.

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/weighing 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*";[40] 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."***[41]

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*".[42]

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*".[43] Thus, change is accepted in Historic England's guidance as part of the evolution of

[40] Bedford Borough Council v Secretary of State for Communities and Local Government [2013] EWHC 2847 (Admin), para. 25.
[41] MHCLG, *PPG*, paragraph 018, reference ID: 18a-018-20190723.
[42] R (Forge Field Society) v Sevenoaks District Council [2014] EWHC 1895 (Admin).
[43] Historic England, *GPA:2*, p. 9.

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*".[44] Of particular relevance is the checklist given on page 13 of *GPA:3*.[45]

It should be noted that this key document also states:

> ***"Setting is not itself a heritage asset, nor a heritage designation…"***[46]

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".***[47]

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.[48]

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 214 and 215) requires harm to a designated heritage asset to be weighed against the public benefits of the development proposals.[49]

Recent High Court Decisions have confirmed that enhancement to the historic environment should be considered as a public benefit under the provisions of Paragraphs 214 to 216.[50]

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). 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***

[44] Historic England, *GPA:3*, p. 8.
[45] Historic England, *GPA:3*, p. 13.
[46] Historic England, *GPA:3*, p. 4.
[47] Historic England, *GPA 3.*, p. 8.
[48] Palmer v Herefordshire Council & Anor [2016] EWCA Civ 1061.
[49] MHCLG, *NPPF,* paras. 214 and 215.
[50] 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.

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."***[51]

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.

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.[52]

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). 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.

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- ***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."***[53]

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.

[51] MHCLG, *PPG*, paragraph 020, reference ID: 18a-020-20190723.
[52] Including - Kay, R (on the application of) v Secretary of State for Housing Communities and Local Government & Anor [2020] EWHC 2292 (Admin); MHCLG, *NPPF,* paras. 207 and 209.
[53] MHCLG, *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.[54] 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."***[55]

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."***[56]

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 215 of the current, revised *NPPF*, see ***Appendix 5***), this is in keeping with the requirements of the 1990 Act.[57]

With regards to development within Conservation Areas, Section 72(1) of the *Planning (Listed Buildings and Conservation Areas) Act 1990* states:

> ***"In the exercise, with respect to any buildings or other land in a conservation area, of any powers under any of the provisions mentioned in subsection (2), special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area."***[58]

Unlike Section 66(1), Section 72(1) of the Act does not make reference to the setting of a Conservation Area. This makes it plain

[54] UK Public General Acts, Planning (Listed Buildings and Conservation Areas) Act 1990.
[55] UK Public General Acts, Planning (Listed Buildings and Conservation Areas) Act 1990, Section 66(1).
[56] Barnwell Manor Wind Energy Ltd v (1) East Northamptonshire DC & Others [2014] EWCA Civ 137. para. 24.
[57] Jones v Mordue [2015] EWCA Civ 1243.
[58] UK Public General Acts, Planning (Listed Buildings and Conservation Areas) Act 1990. Section 72(1).

that it is the character and appearance of the designated Conservation Area that is the focus of special attention.

In addition to the statutory obligations set out within the *Planning (Listed Buildings and Conservations 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.[59]

[59] UK Public General Acts, Planning and Compulsory Purchase Act 2004, Section 38(6).

Appendix 5: National Policy Guidance

The National Planning Policy Framework (December 2024)

National policy and guidance is set out in the Government's *National Planning Policy Framework* (*NPPF*) published in December 2024. This replaced and updated the previous *NPPF* (December 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 strong 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, having particular regard to key policies for directing development to sustainable locations, making effective use of land, securing well-designed places and providing affordable homes, individually or in combination."[60]

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 189) and/or designated as Sites of Special Scientific Interest; land designated as Green Belt, Local Green Space, a National Landscape, 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 75); and areas at risk of flooding or coastal change."***[61] (our emphasis)

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.

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***

[60] MHCLG, *NPPF*, para. 11.

[61] MHCLG, *NPPF*, para. 11, fn. 7.

assets and assets identified by the local planning authority (including local listing)."[62]

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."***[63]

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."***[64]

Section 16 of the *NPPF* relates to 'Conserving and enhancing the historic environment' and states at paragraph 208 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."***[65]

Paragraph 210 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."***[66]

With regard to the impact of proposals on the significance of a heritage asset, paragraphs 212 and 213 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***

[62] MHCLG, *NPPF*, Annex 2.
[63] MHCLG, *NPPF*, Annex 2.
[64] MHCLG, *NPPF*, Annex 2.
[65] MHCLG, *NPPF*, para. 208.
[66] MHCLG, *NPPF*, para. 210.

asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance."[67]

"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."[68]

Section b) of paragraph 213, which describes assets of the highest significance, also includes footnote 75 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 214 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."[69]

Paragraph 215 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."[70]

[67] MHCLG, *NPPF*, para. 212.
[68] MHCLG, *NPPF*, para. 213.
[69] MHCLG, *NPPF*, para. 214.
[70] MHCLG, *NPPF*, para. 215.

The *NPPF* also provides specific guidance in relation to development within Conservation Areas, stating at paragraph 219 that:

> ***"Local planning authorities should look for opportunities for new development within Conservation Areas and World Heritage Sites, and within the setting of heritage assets, to enhance or better reveal their significance. Proposals that preserve those elements of the setting that make a positive contribution to the asset (or which better reveal its significance) should be treated favourably."***[71]

Paragraph 220 goes on to recognise that "*not all elements of a World Heritage Site or Conservation Area will necessarily contribute to its significance*" and with regard to the potential harm from a proposed development states:

> ***"Loss of a building (or other element) which makes a positive contribution to the significance of the Conservation Area or World Heritage Site should be treated either as substantial harm under paragraph 214 or less than substantial harm under paragraph 215, as appropriate, taking into account the relative significance of the element affected and its contribution to the significance of the Conservation Area or World Heritage Site <u>as a whole</u>."***[72] (our emphasis)

With regards to non-designated heritage assets, paragraph 216 of *NPPF* states that:

> ***"The effect of an application on the significance of a non-designated heritage asset should be taken into 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."***[73]

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 Ministry of Housing, Communities & Local Government (MHCLG)) 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*.

[71] MHCLG, *NPPF*, para 219.
[72] MHCLG, *NPPF*, para. 220.
[73] MHCLG, *NPPF*, para. 216.

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."***[74]

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 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."***[75] (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."***[76]
>
> ***"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."***[77]

It goes on to state that:

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

[74] MHCLG, *PPG*, paragraph 007, reference ID: 18a-007-20190723.
[75] MHCLG, *PPG*, paragraph 018, reference ID: 18a-018-20190723.
[76] MHCLG, *NDG*, para. 46.
[77] MHCLG, *NDG*, para. 47.

- ***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 21st century."[78]

[78] MHCLG, *NDG*, paras. 48-49.

Appendix 6: Relevant Development Plan Policies

Applications for Planning Permission in Broxtowe are currently considered against the policy and guidance set out within the Broxtowe Local Plan, comprising the Part 1 Local Plan: Aligned Core Strategy (adopted September 2014) and Part 2 Local Plan (adopted October 2019).

Part 1 Local Plan: Aligned Core Strategy

The adopted Core Strategy sets out the vision, objectives, spatial strategy and strategic policies for the Borough up to 2028.

Policy 11 (The Historic Environment) provides guidance in relation to development proposals which would affect heritage assets and states that:

> ***"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 have to the delivery of wider social, cultural, economic and environmental objectives.***
>
> ***2. Elements of the 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 part 2 Local Plans. Elements of particular importance include:***
>
> ***a) the industrial and commercial heritage such as the textile and coalmining heritage and the various canals;***
>
> ***b) the literary heritage associated with DH Lawrence, Lord Byron and Alan Sillitoe;***
>
> ***c) Registered Parks and Gardens and important historic landscape features such as Sherwood Forest, ancient or mature woodland and ridge and furrow field patterns;***
>
> ***d) historic features within Nottingham City Centre such as the medieval street patterns, the networks of caves under the City Centre, the Park Estate and Lace Market; and***
>
> ***e) prominent Listed Buildings and Scheduled Monuments with a wider visual and economic benefit such as Nottingham Castle, Wollaton Hall, Newstead Abbey, Bennerley Viaduct and buildings D6 and D10 on the Boots campus.***
>
> ***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 positively 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;

f) where there is a loss in whole or in part to the significance of an identified historic asset then evidence should be recorded of its importance; and

g) 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.Draft Local Plan (2016 – 2036)."

The Part 2 Local Plan provides the detailed development management policies and site allocations in order to deliver the strategic objectives of the Aligned Core Strategy.

Policy 23 (Proposals affecting Designated and Non-Designated Heritage Assets) provides the detailed policy in relation to development proposals and states:

" 1. Proposals will be supported where heritage assets and their settings are conserved or enhanced in line with their significance.

2. 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. For designated heritage assets:

i) Where substantial harm is identified, there must be substantial public benefits that outweigh the harm.

ii) Where less than substantial harm is identified, the harm will be weighed against the public benefits of the proposal, including securing its optimum viable use.

3. Proposals affecting a heritage asset and/or its setting will be considered against the following criteria, where relevant:

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 and 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;

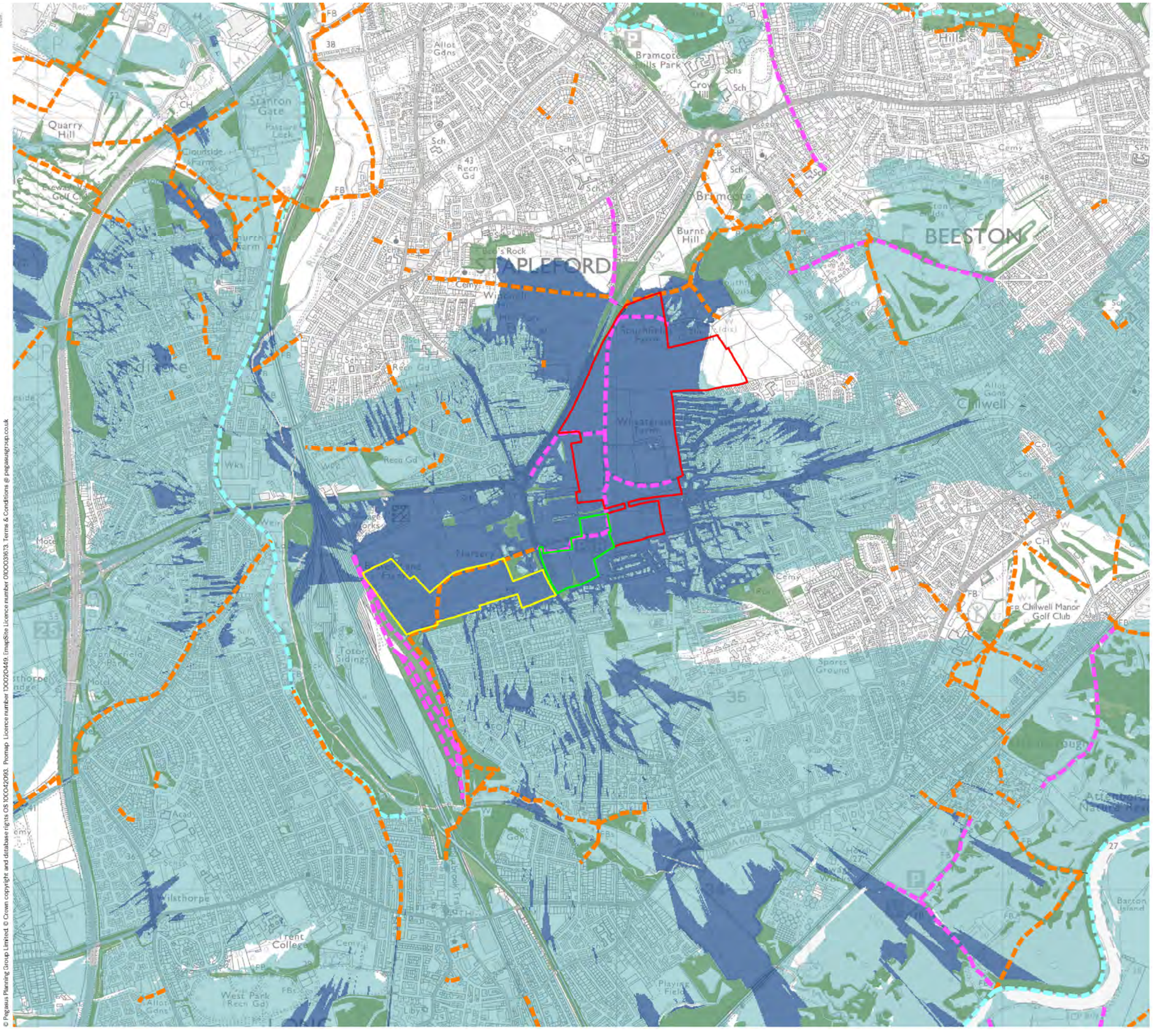
e) Whether the proposals would demonstrate high standards of design appropriate to the historic environment;

f) Whether the proposals would contribute to the long-term maintenance and management of the asset;

g) Whether the proposals would appropriately provide for 'in-situ' preservation, or investigation and recording, of archaeology; and

h) Whether the proposed use is compatible with the asset."

Appendix 7: Zone of Theoretical Visibility Model (Pegasus Group, 2025)



Key

- Site Boundary -Toton North
- Site Boundary - Toton East
- Site Boundary - Toton West
- Proposed Developable Area
- Bare Earth Zone of Theoretical Visibility
- Screened Zone of Theoretical Visibility
- OS Open Map Local Woodland - Maximum 15m
- Footpath
- Bridleway
- National Trail

Screened ZTV Production Information -
- DTM data used in calculations is OS Terrain 5 that has been combined with OS Open Map Local data for woodland and buildings to create a Digital Surface Model (DSM).

- Indicative woodland and building heights are modelled at 15m and 8m respectively.
- Viewer height set at 1.7m
(in accordance with para 6.11 of GLVIA Third Edition)
- Calculations include earth curvature and light refraction

N.B. This Zone of Theoretical Visibility (ZTV) image illustrates the theoretical extent of where the proposed development may be visible from, assuming 100% atmospheric visibility, and includes the screening effect from vegetation and buildings, based on the assumptions stated above.

DATE	NO	REVISION NOTE
29/11/2024	-	First Issue

DRAFT

Figure 6.7: Combined ZTV, Viewpoint Locations and PRoW

Land at Toton North, East and West, Broxtowe

CLIENT
Bloor Homes Ltd and Peveril Securities Ltd

N 0 250 500 m

DATE	SCALE	TEAM	APPRVD
29/11/2024	1:20000@A3	SK	SRE

DRAWING NUMBER

P23-2377_EN_0008_-_0001 ZTV

PEGASUS GROUP

Appendix 8: Geophysical Survey Report (Magnitude Surveys, 2025)

Geophysical Survey Report

Toton (West),

Nottinghamshire

For

Pegasus Planning Group

Magnitude Surveys Ref: MSSK1931C

February 2025

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Issue Date:

21 February 2025

Abstract

Magnitude Surveys was commissioned to assess the subsurface archaeological potential of c. 18ha of land at Toton, Nottinghamshire. A fluxgate gradiometer survey was successfully completed across the survey area. Possible archaeological activity has been identified, along with undetermined anomalies for which archaeological origins cannot be ruled out. Agricultural activity has been identified in the form of modern ploughing regimes and former mapped field boundaries. The impact of modern activity on the results is visible in the form of disturbances from extant fencing, services, pylons, overhead and power, and ferrous debris, which may obscure weaker anomalies if present.

Contents

List of Figures

1. Introduction

1.1. Magnitude Surveys Ltd (MS) was commissioned by Pegasus Planning Group to undertake a geophysical survey over a c. 18ha area of land at Toton, Nottinghamshire (SK 49618 35645).

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 MS (Curtis. 2025).

1.5. The survey commenced on 6th February 2025 and took two days to complete.

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. All MS managers, field and office staff have degree qualifications relevant to archaeology or geophysics and/or field experience.

3. Objectives

3.1. 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 was located c. 695m northwest of Toton (Figure 1). Gradiometer survey was undertaken across four fields under arable cultivation. The survey area was bordered to the north by farmland, to the east by woodland, an electrical substation and the B6003, to the south by residential housing, and to the west by woodland with railway tracks beyond (Figure 2).

4.2. Survey considerations:

Survey Area	Ground Conditions	Further Notes
1	Arable field steeply sloping towards the east.	The survey area was bordered by metal fencing to the east and west, with no physical boundaries to the north and a ditch to the south. Deep ruts were present in the southeast corner.
2	Arable field gently sloping towards the south.	The survey area was bordered by hedgerows to the west and south, a ditch to the north, and open boundary to the east. A pylon was present in the centre of the southern border, with overhead wires crossing the southeast corner. Telegraph poles were present in the centre, north and west, with overhead wires in a southwest to northeast direction.
3	Flat arable field.	The survey area was bordered by hedgerows on all sides. A pylon was present in the centre of the field, with overhead wires cutting across from west to east. Telegraph poles were present in south, with overhead running in a southwest to northeast direction. Deep ruts were present in the east and northwest of the field.
4	Flat arable field.	The survey area was bordered by hedgerows to the north, west and east, with no physical boundary in the north. The south was bordered by a concrete and wooden fence. A large tree was present in the southwest, with deep ruts close to the western boundary.

4.3. The underlying geology comprised mudstone, siltstone and sandstone from the Tarporley Siltstone Formation across the survey area, with mudstone and siltstone from the Radcliffe Member in the south and southwest of Area 2. No superficial deposits are recorded within the survey areas (British Geological Survey, 2025).

4.4. The soils consist of slightly acidic loamy and clayey soils with impeded drainage across the majority of the survey area, with a narrow band of unclassified soil in the south of Areas 3 and 4 (Soilscapes, 2025).

5. Archaeological Background

5.1. This section will be updated based on any future provision of a desk-based assessment (DBA).

5.2. A search of publicly available information has shown recorded archaeological activity within (Areas 2 and 3) and immediately south of the survey area, including earthworks (a 'bank') and a double ditched enclosure (Heritage Gateway, 2025).

5.3. Contemporary archaeological geophysical surveys to the east and northeast of the survey area have shown possible and probable archaeological activity, in the form of enclosures and field systems (Byrne, 2025).

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. Geophysical survey therefore comprised the magnetic method as described in the following section.

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 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 (Figures 3 and 6). The gradient of the sensors minimises external interferences and reduces the blown-out responses from ferrous and other high contrast material. 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 plot (Figures 5 & 8). 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 (2025) 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 results are presented in combination with satellite imagery and historical maps (Figure 9).

7.2.2. A fluxgate gradiometer survey was carried out at Toton (West), Nottinghamshire, and responded well to the environment, successfully surveying 18ha of arable land. The geophysical survey detected anomalies of possible archaeological and agricultural origins, along with anomalies of an undetermined classification. Modern interference in the data is visible as disturbance from extant fencing, services, pylons, overhead wires and ferrous debris. The northwest of the survey area in particular is subject to large areas of variable amplitude magnetic interference, presumably originating from green waste spread across the fields during agricultural processes.

7.2.3. Multiple linear and curvilinear anomalies of possible archaeological origin have been detected. The anomalies appear to form a sub-rectilinear shape with parallel, strongly enhanced linear anomalies along the southern boundary potentially representing a continuation of the double-ditch feature previously recorded in this area.

7.2.4. Several linear anomalies were detected across the survey area and determined to have an agricultural origin as they correspond with historic mapped field boundaries. Linear trends were also detected matching with past and present ploughing regimes noted on aerial imagery. Possible evidence of ridge and furrow cultivation has also been detected.

7.2.5. Anomalies of an undetermined classification have been detected across the survey area, for which 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. **Possible Archaeology (Strong & Weak)** – Located in the south of Area 2 and southwest of Area 3, several linear and curvilinear anomalies displaying both weak and strong magnetic enhancement have been detected. The anomalies potentially form a sub-rectilinear enclosure and a double ditched enclosure, with boundaries extending away to the west, northwest and northeast (Figures 3, 4, 6 & 7). The potential double ditched enclosure, which collocates with a recorded enclosure (See Section 5), is of a rectilinear morphology with a width of c. 7m and continues beyond the survey extent to the south.

7.3.2.2. **Agricultural (Weak)** – Located in the west of Area 2 and the north and southeast of Area 3, several short linear anomalies with weak magnetic enhancement

have been detected (Figures 3, 4, 6 & 7). These anomalies correspond to historic mapped field boundaries (Figure 9).

7.3.2.3. **Agricultural (Trend)** – Located across Areas 2, 3 and 4, linear trends displaying a weak magnetic enhancement have been detected (Figures 3, 4, 6 & 7). The anomalies are orientated in a roughly east to west direction in Areas 2 and 3, and in a roughly north to south direction in Area 4 and are indicative of a modern ploughing regime.

7.3.2.4. **Undetermined (Weak)** – Across Areas 2, 3 and 4, linear and curvilinear anomalies of weak magnetic enhancement have been detected. Without clear evidence of origin, these are classed as undetermined, however an archaeological provenance cannot be discounted.

8. Conclusions

8.1 A fluxgate gradiometer survey was carried out at Toton (West), Nottinghamshire, over an area of 18ha. The survey responded well to the environment of the survey area. Anomalies were detected of archaeological and agricultural origin, along with anomalies of an undetermined classification. Modern interference in the data is visible as disturbance from extant fencing, ferrous debris, services, pylons and overhead power lines.

8.2 Possible archaeological activity has been identified, as a series of anomalies forming a potential sub-rectilinear enclosure and double-ditched enclosure.

8.3 Anomalies of an agricultural origin have been identified as partial historical mapped field boundaries, and both modern ploughing regimes.

8.4 Anomalies of an undetermined classification have been detected, for which archaeological origins cannot be discounted.

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

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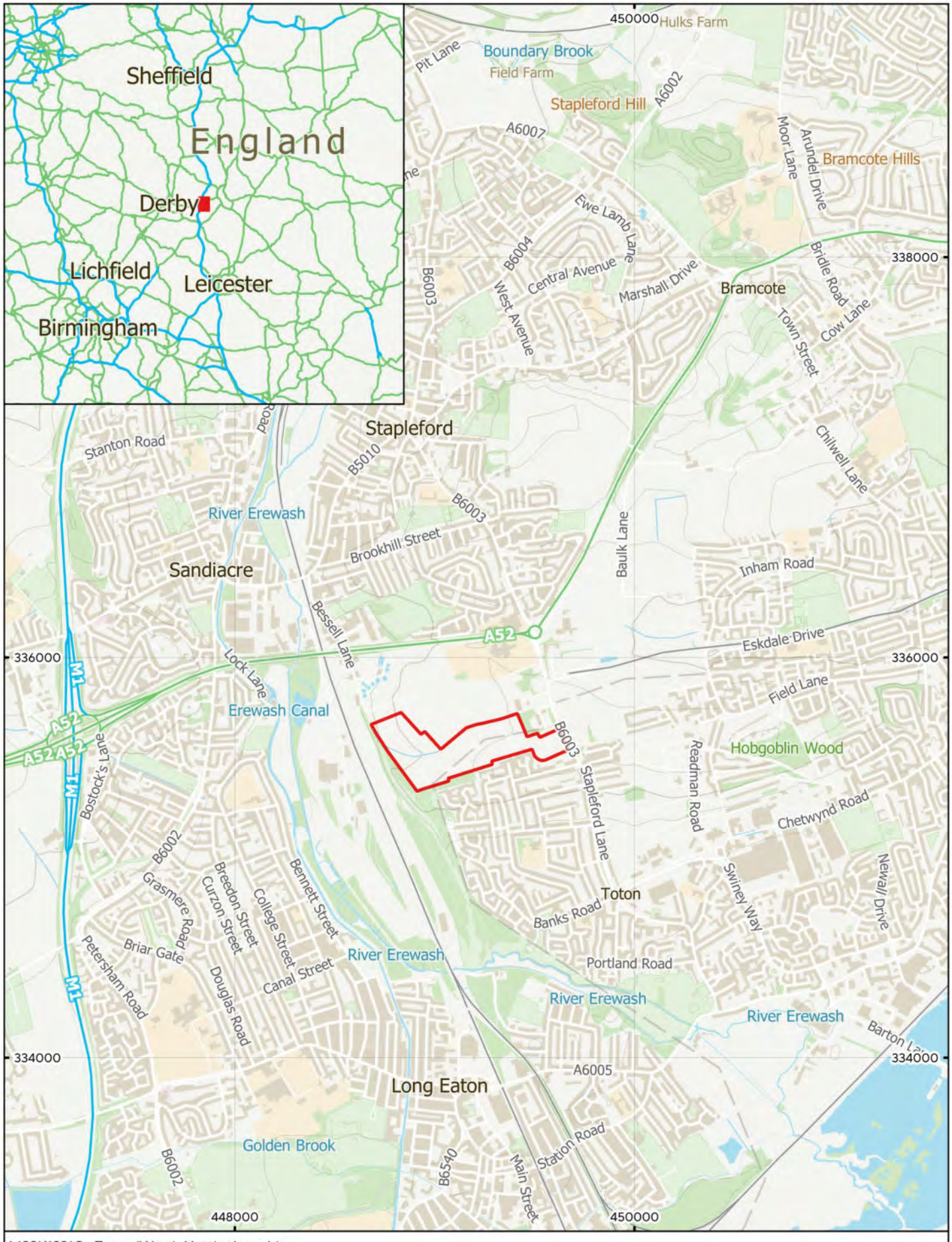
12. Project Metadata

MS Job Code	MSSK1931C
Project Name	Toton (West), Nottinghamshire
Client	Pegasus Planning Group
Grid Reference	SK 49618 35645
Survey Techniques	Magnetometry
Survey Size (ha)	18ha
Survey Dates	2025-02-06 to 2025-02-07
Project Lead	Daniel Byrne MGeophys
Project Officer	Daniel Byrne MGeophys
HER Event No	N/A
OASIS No	N/A
S42 Licence No	N/A
Report Version	0.3

13. Document History

Version	Comments	Author	Checked By	Date
0.1	Initial draft for Project Lead to Review	NO	DB/LAG	14 February 2025
0.2	Director initial Review	DB	FPC	19 February 2025
0.3	Director final Review	DB	FPC	21 February 2025



MSSK1931C - Toton (West), Nottinghamshire
Figure 1 - Geophysical Survey Location
1:25,000 @ A4

Geophysical Site

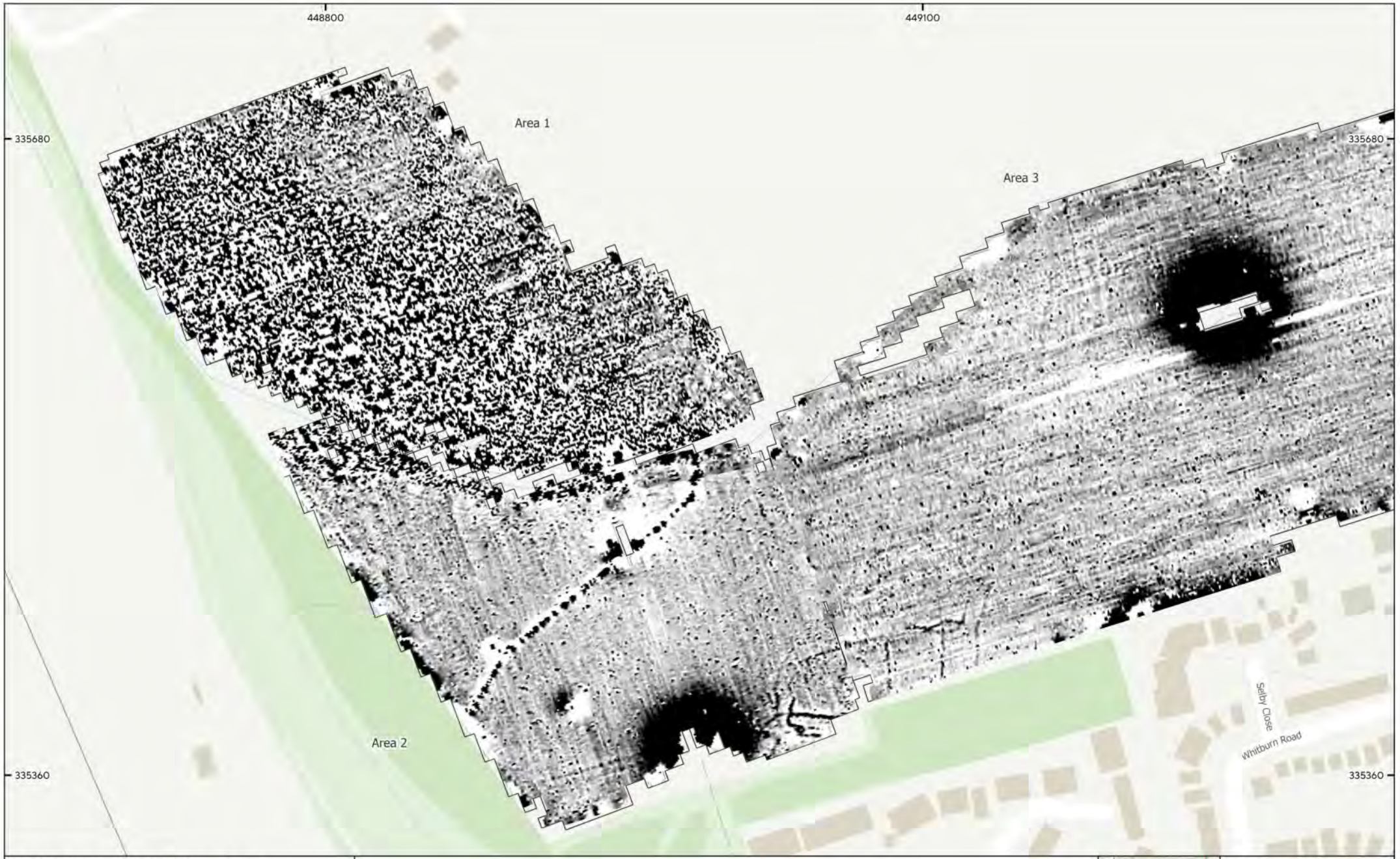
0 0.5 1 km

MSSK1931C - Toton (West), Nottinghamshire
Figure 2 - Geophysical Survey Areas
1:3,000 @ A3

Survey Extent

Magnitude Surveys

0 30 60 90 120 m



MSSK1931C - Toton (West), Nottinghamshire
Figure 3 - Magnetic Gradient (Areas 1 & 2)
1:1,750 @ A3

-1 nT 2

Magnitude Surveys

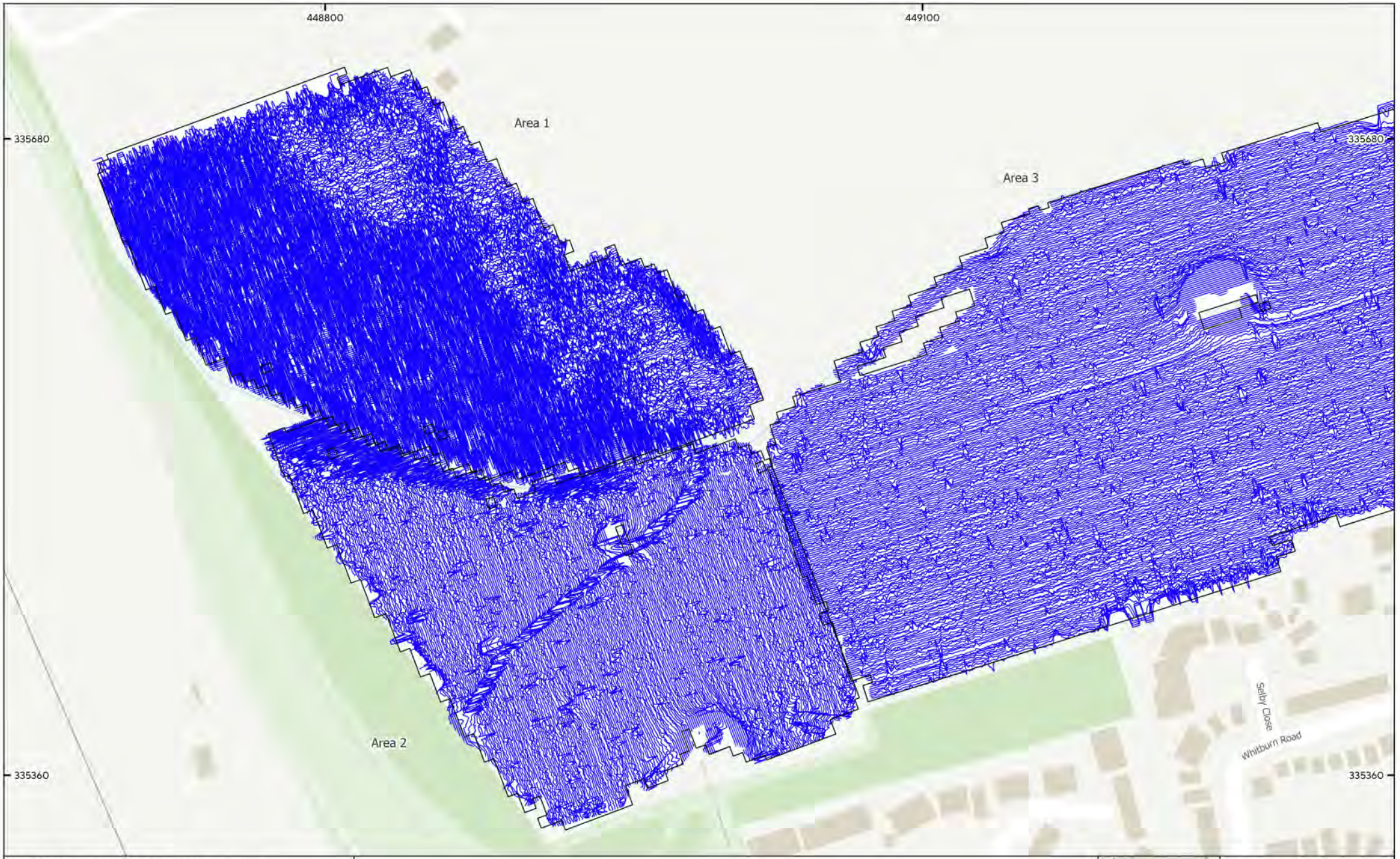
0 18 36 54 72 m

MSSK1931C - Toton (West), Nottinghamshire
Figure 4 - Magnetic Interpretation (Areas 1 & 2)
1:1,750 @ A3

Archaeology Possible (Strong)
Archaeology Possible (Weak)
Agricultural (Weak)
Undetermined (Weak)
Magnetic Disturbance
Ferrous/Debris (Spread)
Overhead Cables
Agricultural (Trend)
Data Artefact
Service
Ferrous (Spike)

Magnitude Surveys

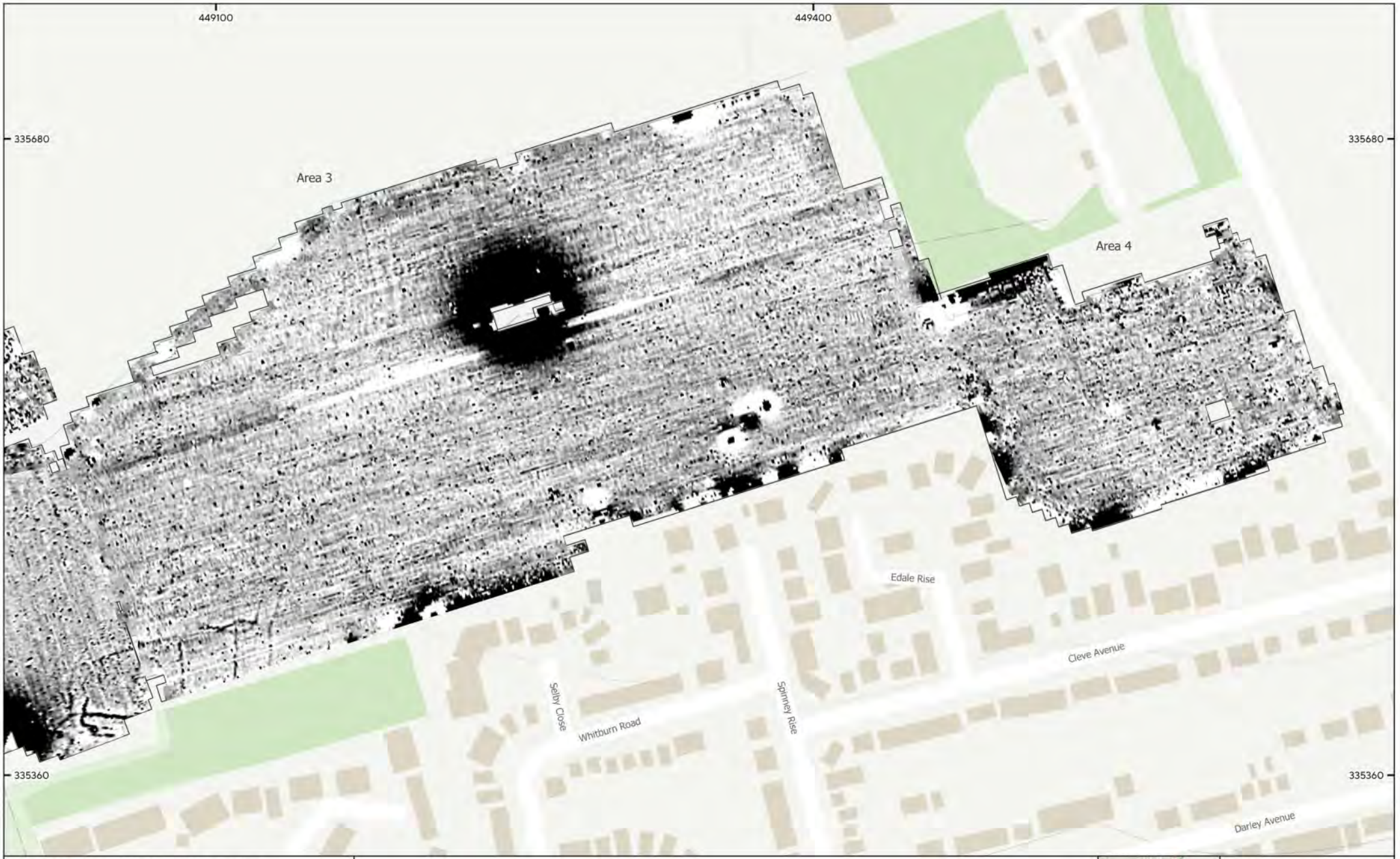
0 18 36 54 72 m



MSSK1931C - Toton (West), Nottinghamshire
Figure 5 - XY Trace Plot (Areas 1 & 2)
30nT/cm at 1:1,750 @ A3

Magnitude Surveys

0 18 36 54 72 m



MSSK1931C - Toton (West), Nottinghamshire
Figure 6 - Magnetic Gradient (Areas 3 & 4)
1:1,750 @ A3

-1 nT 2

Magnitude Surveys

0 18 36 54 72 m

MSSK1931C - Toton (West), Nottinghamshire
Figure 7 - Magnetic Interpretation (Areas 3 & 4)
1:1,750 @ A3

- Archaeology Possible (Strong)
- Archaeology Possible (Weak)
- Agricultural (Weak)
- Undetermined (Weak)
- Magnetic Disturbance
- Ferrous/Debris (Spread)
- Overhead Cables
- Agricultural (Trend)
- Data Artefact
- Ferrous (Spike)

Magnitude Surveys

0 18 36 54 72 m

MSSK1931C - Toton (West), Nottinghamshire
Figure 8 - XY Trace Plot (Areas 3 & 4)
30nT/cm at 1:1,750 @ A3

Magnitude Surveys

0 18 36 54 72 m

MSSK1931C - Toton (West), Nottinghamshire
Figure 9 - Magnetic Interpretation over Historical Mapping & Satellite Imagery
1:3,000 @ A3

- Archaeology Possible (Strong)
- Archaeology Possible (Weak)
- Agricultural (Weak)
- Undetermined (Weak)
- Magnetic Disturbance
- Ferrous/Debris (Spread)
- Overhead Cables
- Agricultural (Trend)
- Data Artefact
- Service
- Ferrous (Spike)

Magnitude Surveys

0 30 60 90 120 m

Planning (Listed Buildings and Conservation Areas) Act 1990
Town & Country Planning Act 1990 (as amended)
Planning and Compulsory Purchase Act 2004

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