



Land South of Northampton Road Bromham, Bedfordshire

Heritage Assessment





CA Project: 661012

CA Report: 12345

January 2018



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1. INTRODUCTION

- 1.1. In February 2017, Cotswold Archaeology (CA) was commissioned by Rainier Developments to carry out a Heritage Assessment of land south of Northampton Road, Bromham, Bedfordshire (hereafter referred to as 'the Site'). The Site is located south of Northampton Road, on the western edge of the Parish of Bromham c.4.5km from the centre of Bedford (NGR:SP 99695 50955; Fig. 1). It currently comprises agricultural land.
- 1.2. The assessment has been informed by the following key elements of work:
 - Historic environment 'desk-based' assessment
 - Detailed geophysical survey (magnetometer survey)
 - The assessment of the 'setting' of heritage assets



Fig. 1 Site location plan

1.3. The proposed scheme will comprise residential development, with associated access roads, car park and amenities.

Objectives and professional standards

1.4. Cotswold Archaeology is a Registered Organisation with the Chartered Institute for Archaeologists (ClfA). The project was managed by Richard Morton, Principal Heritage Consultant, and a Member of the Chartered Institute. This report has been prepared in accordance with the 'Standard and Guidance for Historic Environment Desk-Based Assessment' and 'Standard and Guidance for Archaeological Geophysical Survey' published by the Chartered Institute (2014).

Statute, policy and guidance context

1.5. This assessment has been undertaken within the key statute, policy and guidance context presented within the table overleaf (Table 1.1). The applicable provisions contained within these statute, policy and guidance documents are referred to, and discussed, as relevant, throughout the text. Fuller detail is provided in Appendix 1.

Consultation

1.6. This assessment has been undertaken in accordance with Written Schemes of Investigation (WSIs) for Heritage Assessment and Geophysical Survey, formalising the adopted scope and methodology (CA 2017). The WSIs were submitted to the Archaeological Officer, Bedford Borough Council (BBC), for review, comment and approval prior to the works being undertaken.

Statute	Description
Ancient Monuments and Archaeological Areas Act (1979)	Act of Parliament providing for the maintenance of a schedule of archaeological remains of the highest significance, affording them statutory protection.
Planning (Listed Buildings and Conservation Areas) Act (1990)	Act of Parliament placing a duty upon the Local Planning Authority (or, as the case may be, the Secretary of State) to afford due consideration to the preservation of Listed buildings and their settings (under Section 66(1)), and Conservation Areas (under Section 72(2)), in determining planning applications.
National Heritage Act 1983 (amended 2002)	One of four Acts of Parliament providing for the protection and management of the historic environment, including the establishment of the Historic Monuments & Buildings Commission, now Historic England.
Conservation Principles (Historic England 2008)	Guidance for assessing heritage significance, with reference to contributing heritage values, in particular: evidential (archaeological), historical (illustrative and associative), aesthetic, and communal.
National Planning Policy Framework (2012)	Provides the English government's national planning policies and describes how these are expected to be applied within the planning system. Heritage is subject of Chapter 12 (page 30).

Statute	Description
Good Practice Advice in Planning: Note 2 (GPA2): Managing Significance in Decision-Taking in the Historic Environment (Historic England, 2015a)	Provides useful information on assessing the significance of heritage assets, using appropriate expertise, historic environment records, recording and furthering understanding, neglect and unauthorised works, marketing and design and distinctiveness.
Good Practice Advice in Planning: Note 3 (GPA3): The Setting of Heritage Assets (Historic England, 2015b)	Provides guidance on managing change within the settings of heritage assets, including archaeological remains and historic buildings, sites, areas, and landscapes.
Bedford Borough Development Plan (2035)	Comprises the local development plan (local plan), as required to be compiled, published and maintained by the local authority, consistent with the requirements of the NPPF (2012). Intended to be the primary planning policy document against which planning proposals within that local authority jurisdiction are assessed. Where the development plan is found to be inadequate, primacy reverts to the NPPF (2012).
Hedgerow Regulations (1997)	Provides protection for 'important' hedgerows within the countryside, controlling their alteration and removal by means of a system of statutory notification.

Table 1.1Key statute, policy and guidance

2. METHODOLOGY

Heritage Assessment

- 2.1. The assessment has been informed by a proportionate level of information sufficient to understand the archaeological potential of the Site, the significance of identified heritage assets, and any potential development effects. This approach is in accordance with the provisions of the NPPF paragraph 128 and the guidance issued by CIfA (2014). The data has been collected from a wide variety of sources, summarised in the table overleaf (Table 2.1).
- 2.2. Prior to obtaining data from these sources, an initial analysis was undertaken in order to identify a relevant and proportionate study area. This analysis utilised industry-standard GIS software, and primarily entailed the generation of a digital terrain model (DTM) incorporating available topographic, elevation and historic landscape data.
- 2.3. On this basis a 1km study area, centred on the Site, was considered sufficient to capture the relevant data, and provide the necessary context for understanding archaeological potential and heritage significance in respect of the Site. All of the spatial data held by the HER the primary historic data repository for the land within the study area, was requested. All of the records returned have been considered and, for completeness, numbered, mapped onto a single 'Data Capture' Master-Figure and listed in a cross-referenced gazetteer, provided at the end of this report (Appendices 2 and 3). The records were analysed and further refined in order to narrow the research focus onto those of relevance to the present assessment. Not all HER records are therefore referred to, discussed or illustrated further within the body of this report, only those that are relevant.
- 2.4. A site visit was also undertaken as part of this assessment. The primary objectives of the site visit were to assess the Site's historic landscape context, including its association with any known or potential heritage assets, and to identify any evidence for previous truncation of the on-site stratigraphy. The site visit also allowed for the identification of any previously unknown heritage assets within the Site, and assessment of their nature, condition, significance and potential susceptibility to impact. The wider landscape was examined, as relevant, from accessible public rights of way.

Source	Data
National Heritage List (NHL)	Current information relating to designated heritage assets, and heritage assets considered to be 'at risk'.
Bedford Borough Council Historic Environment Record (HER)	Heritage sites and events records, Historic Landscape Characterisation (HLC) data, and other spatial data supplied in digital format (shapefiles) and hardcopy.
Historic England Archives (EHA)	Additional sites and events records, supplied in digital and hardcopy formats.
Bedford Archives	Historic mapping, historic documentation, and relevant published and grey literature.
Historic England's Aerial Photograph Research Unit	Vertical and oblique aerial photography ranging in date from the 1940s to present.
Bedford Local Studies Library	Additional publications, grey literature and other materials specific to the locality.
Environment Agency (EA) website	LiDAR imagery and point cloud data, available from the Environment Agency website.
Old-Maps, National Library of Scotland & other cartographic websites	Historic (Ordnance Survey and Tithe) mapping in digital format.
British Geological Survey (BGS) website	UK geological mapping (bedrock & superficial deposits) & borehole data.
Cranfield University's LandIS Soil Portal	UK soil mapping.

Table 2.1 Key data sources

Geophysical survey

- 2.5. The geophysical survey was carried out by WYAS Archaeological Services in November 2017. The survey comprised detailed magnetometer survey (fluxgate gradiometer) over the whole application site. The report and fieldwork were conducted in accordance with the latest guidance issued by Historic England (EH 2008) and CIfA (CIfA 2014).
- 2.6. The site grid was laid out using a Trimble VRS differential Global Positioning System (Trimble R6 model). The survey was undertaken using Bartington Grad601 magnetic gradiometers. These were employed taking readings at 0.25m intervals on zig-zag traverses 1.0m apart within 30m by 30m grids, so that 3600 readings were recorded in each grid. These readings were stored in the memory of the

instrument and later downloaded to computer for processing and interpretation. Geoplot 3 (Geoscan Research) software was used to process and present the data.

Assessment of heritage significance

2.7. The significance of known and potential heritage assets within the Site, and any beyond the Site which may be affected by the proposed development, has been assessed and described, in accordance with paragraph 128 of the NPPF (2012), the guidance issued by ClfA (2014) and 'Historic Environment Good Practice Advice in Planning Note 2' (Historic England 2014). Determination of significance has been undertaken according to the industry-standard guidance on assessing heritage value provided within 'Conservation Principles' (Historic England 2008). This approach considers heritage significance to derive from a combination of discrete heritage values, principal amongst which are: i) evidential (archaeological) value, ii) historic (illustrative and associative) value, iii) aesthetic value, iv) communal value, amongst others. Further detail of this approach, including the detailed definition of those aforementioned values, as set out, and advocated, by Historic England, is provided in Appendix 1 of this report.

Assessment of potential development effects (benefit and harm)

- 2.8. The present report sets out, in detail, the ways in which identified susceptible heritage assets might be affected by the proposals, as well as the anticipated extent of any such effects. Both physical effects, i.e. resulting from the direct truncation of archaeological remains, and non-physical effects, i.e. resulting from changes to the setting of heritage assets, have been assessed. In regards to non-physical effects or 'settings assessment', the five-step assessment methodology advocated by Historic England, and set out in GPA3 (Historic England, 2015b), has been adhered to (presented in greater detail in Appendix 1).
- 2.9. Identified effects upon **designated** heritage assets have been defined within broad 'level of effect' categories (Table 2.2 below). These are consistent with key national heritage policy and guidance terminology, particularly that of the NPPF (2012).

Level of effect	Description	Applicable statute & policy
Heritage benefit	The proposals would better enhance or reveal the heritage significance of the designated heritage asset.	Enhancing or better revealing the significance of a designated heritage asset is a desirable development outcome in respect of heritage. It is consistent with key policy and guidance, including the NPPF (2012) paragraphs 126 and 137.
No harm	The proposals would preserve the significance of the designated heritage asset.	Preserving a Listed building and its setting is consistent with s66 of the Planning (Listed Buildings and Conservation Areas) Act (1990). Preserving or enhancing the character or appearance of a Conservation Area is consistent with s72 of the Act. Sustaining the significance of a designated heritage asset is consistent with paragraph 126 of the NPPF, and should be at the core of any material local planning policies in respect of heritage.
Less than substantial harm (lower end)	The proposals would be anticipated to result in a restricted level of harm to the significance of the designated heritage asset, such that the asset's contributing heritage values would be largely preserved.	In determining an application, this level of harm should be weighed against the public benefits of the proposals, as per paragraph 134 of the NPPF (2012). Proposals involving change to a Listed building or its setting, or any features of special architectural or historic interest which it
Less than substantial harm (upper end)	The proposals would lead to a notable level of harm to the significance of the designated heritage asset. A reduced, but appreciable, degree of its heritage significance would remain.	possesses, or change to the character or appearance of Conservation Areas, must also be considered within the context of Sections 7, 66(1) and 72(2) of the 1990 Act. The provisions of the Act do not apply to the setting of Conservation Areas. Proposals with the potential to physically affect a Scheduled Monument (including the ground beneath that monument) will be subject to the provisions of the Ancient Monuments and Archaeological Areas Act (1979); these provisions do not apply to proposals involving changes to the setting of Scheduled Monuments.
Substantial harm	The proposals would very much reduce the designated heritage asset's significance or vitiate that significance altogether.	Paragraphs 132 and 133 of the NPPF (2012) would apply. Sections 7, 66(1) and 72(2) of the Planning Act (1990), and the Ancient Monuments and Archaeological Areas Act (1979), may also apply.

Table 2.2 Summary of level of effect categories (benefit and harm) referred to in this report in relation to designated heritage assets, and the applicable statute and policy.

2.10. It should be noted that the overall effect of development proposals upon the designated heritage asset are judged, bearing in mind both any specific harms or

benefits (an approach consistent with the Court of Appeal judgement *Palmer v. Herefordshire Council & ANR* Neutral Citation Number [2016] EWCA Civ 1061).

2.11. In relation to non-designated heritage assets, the key applicable policy is paragraph 135 of the NPPF (2012), which 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 affect directly or indirectly non-designated heritage assets, a balanced judgment will be required having regard to the scale of any harm or loss and the significance of the heritage asset' [our emphasis].

2.12. Thus with regard to non-designated heritage assets, this report seeks to identify the significance of the heritage asset(s) which may be affected, and the scale of any harm or loss to that significance.

3. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Landscape context

- 3.1. The Site is approximately 17h in size, and currently comprises two agricultural fields separated by a hedged boundary. The larger field is under arable, and the smaller one pasture.
- 3.2. It is located immediately to the south of Northampton Road, in the historical parish of Bromham. The majority of the land slopes down from west to the east, rising slightly towards Northampton Road. The Site is enclosed by mature trees and hedgerows that surround the totality of the area.
- 3.3. The Site lies within the Bedfordshire and Cambridgeshire Claylands National Character Area (NCA88) which summarises its key landscape characteristics of gently undulating plateaus divided by shallow river valleys with variable and scattered woodland, predominantly open, arable landscape of planned and regular fields and scattered small towns and hamlets.

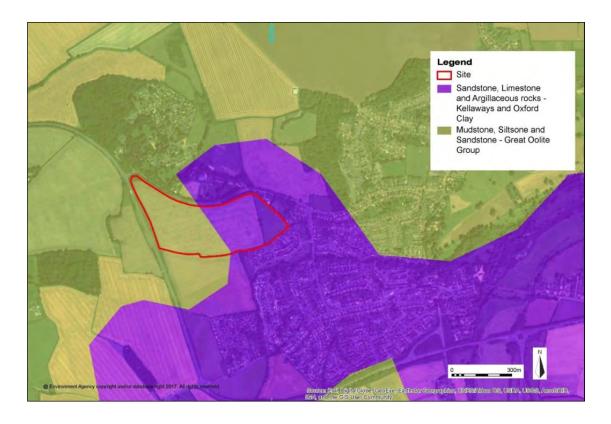


Fig. 2 Site location and geology

3.4. The Site has an irregular slope. Its highest point is c. 67m. in the south-west, and the lowest c. 33m in the south. The underlying geology of the Site comprises mudstone to

the west, and sandstone/limestone to the east (Figure 2, below), and the soils are a mix of clays and loams with gravels typical from river terraces (Soilscapes, 2017). A tributary of the River Ouse runs immediately to the east and south of the Site. Deposits of alluvium occur along its course, but are not mapped by the British Geological Survey inside the Site itself.

Prehistoric

- 3.5. Evidence for prehistoric occupation in the Bromham area is largely from findspots, cropmarks and earthworks.
- 3.6. Findspots come largely from the Portable Antiquities Scheme (PAS), which records finds made by metal detectorists. Many of these finds are coins, as depicted on Figure 3 (3, 4 and 12). On Figure 3, letter references refer to sites where numerous coins have been recorded from a single location (fig.3, A-E). An Iron Age copper alloy toggle was found c.0.3km to the west of the Site (fig.3, 7). A handaxe from the lower Palaeolithic and a Neolithic barbed and tanged arrowhead were found (at the same location as numerous Roman finds) nearby (fig.3, **D**).
- 3.7. The potential line of a prehistoric ridgeway from Cranfield to Bromham (fig.3, **1**) runs to the south of the Site; it remains 'fossilised' in the landscape as a footpath and parish boundary.
- 3.8. A prehistoric feature was also identified during archaeological works undertaken due to the laying of a water pipeline from Turvey to the Bromham Hospital (ASC, 2000). A single enclosure ditch, probably of Middle Iron Age date was revealed near the farm track to London Barn Farm north-west of the Site (fig.3, 5) as well as pottery and associated finds.
- 3.9. An extensive group of cropmarks has been identified on several aerial photographs, indicating several large irregular enclosures thought to be prehistoric are located on a ridge between the headwaters of former watercourses *c*.0.9km to the north west of the Site (fig.3, **16**). Another group of similar features was also identified to the west of the Bromham Bypass *c*.0.39km to the south west of the Site (fig.3, **15**).



Fig. 3 Site location plan and prehistoric and Romano-British archaeological features

3.10. The Bedford HER records the presence of several worked flints of both Neolithic and Palaeolithic dates found within the gravel deposits in the nearby area. The general location point is marked in the Site, but it refers to a collection of finds from river gravels in the wider region (fig.3, 30). No superficial deposits, including alluvium or Quaternary river gravels, lie within the Site itself, and thus no such finds would be anticipated.

Romano-British

- 3.11. Evidence of Romano-British occupation in Bromham is more abundant, although again largely from surface finds. Large quantities of coins ranging from Constatine to Valentinian have been found in the study area, some of them recorded as a group or hoard. Such hordes of coins have been found to the west (fig.3, A) and south west (fig.3, B) of the Site. Other groups of Roman metal finds have been recorded at locations C-E.
- 3.12. The Roman road *Viatores* no. 170a (Margary, 1967), running from Irchester to Kempston, runs around 130m to the east of the Site at its closest point (fig.3, **2**). Evidence for the road surface has been found to the south-east of the Site (fig.3, **57** and **13**).
- 3.13. A substantial Romano-British building, interpreted as a villa, was investigated in 1937 c.0.64km to the south east of the Site (fig.3, **6**). In association with this villa contemporary field systems were identified from aerial photographs in 1996.
- 3.14. The HER notes the presence of circular enclosures and ditches in a field around 300m to the north-east of the Site (fig.3, 17), recorded from aerial photographs. Review of the photographs referenced in the entry (1945-1955 RAF Aerial Photos. UK/1562: 3051-3052) did not clearly identify these features.

Anglo Saxon and medieval – the manor and settlement

3.15. There is little evidence of the Anglo-Saxon occupation of Bromham, although it was certainly settled by this date. At the time of the Domesday Survey in 1086, Bromham belonged to Hugh de Beauchamp as part of the Bromham Manor. The mention on the Domesday Book refers to Bromham as Bruneham and at a later date as Brimeham. Bromham is probably the enclosed meadow on which the broom or the dyers' weed grew (Mills, 2012).

3.16. The Site lay some distance outside of the medieval settlement of Bromham, although it lay between two roads of possible early origin. The land within the Site is in fact likely to have formed a part of the large medieval arable open-fields on the western side of the parish. A very small area of extant ridge and furrow earthworks lies within the Site in its extreme north-eastern part. This is observable following hill shade modelling of LiDAR data (1m data resolution), as illustrated in Fig. 4. This open-field location is also suggested by the geophysical survey, which identified several areas of below-ground furrows within the Site (Appendix 1).

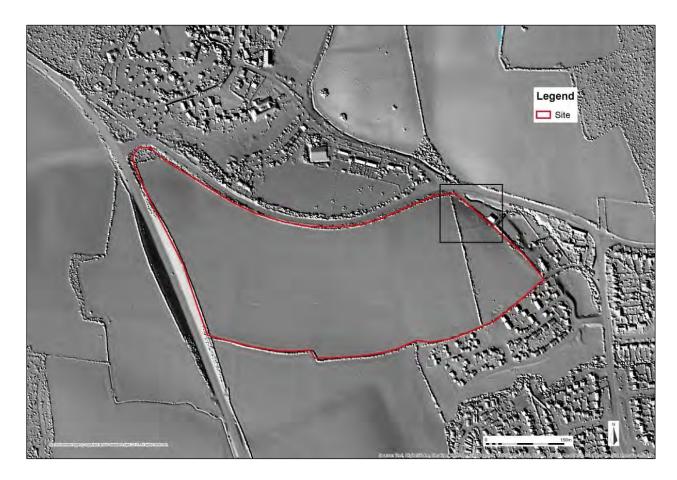


Fig. 4 LiDAR imagery with site location and the remnants of ridge and furrow

- 3.17. The small area of remnant ridge and furrow earthworks is very eroded, and is in fact difficult to distinguish with the naked eye. Given its poor preservation and very limited coverage, it is not considered of sufficient heritage significance to comprise a heritage asset. Below-ground remnants of furrows, as identified in the geophysical survey, are likewise of insufficient heritage significance to comprise heritage assets.
- 3.18. Bromham Grange was formerly situated to the east of the Site, outside of the redline area: it has subsequently been demolished and replaced by the modern housing

development, known as 'The Grange'. The post-medieval history of the building is discussed below, and it is illustrated on maps from the 19th century onwards (see the Tithe map comprising Fig. 7).

- 3.19. Properties called 'Grange' may have originally comprised parts of monastic estates (it was also a popular Victorian name for houses and 'villas'), and it is known that Wakes Manor was bequeathed to Caldwell Priory in Bedford in medieval times. It is thus possible that The Grange had medieval origins, and farmed the attached lands including the Site. The documentary evidence also suggests this, and there are references to Bromham Grange and Bromham Church being given to Eton College at the time of the dissolution of the monasteries (VCH, 1912). These transfers of ownership doubtless included the associated lands. The properties were acquired by the Dyve family shortly after the 16th century.
- 3.20. As noted, the buildings recorded at The Grange in the 19th century have subsequently been demolished, and the land built over in the post-war period. Prior to the redevelopment of the land, substantial earthworks (fig.4, **50**) were recorded immediately to the north of the farmhouse, within the same plot of land east of the Site. They appear likely to have comprised a dam of the stream which runs on the east side of that plot, and a fishpond. The descriptions of the earthworks only refer to the area of land east of the Site and now built over: they do not suggest the earthworks went into the Site. This is confirmed by the LiDAR imagery, which shows no such earthworks in the Site. The stream and the later buildings of The Grange are illustrated on the Tithe map of 1844 in Fig. 7. It is clear that these features were outside of the present Site area.
- 3.21. The same stream appears likely to have been utilised for a watermill, possibly from as early as the medieval period (fig.4, **46**). This may have been broadly in the location of the buildings just east of The Grange on the 1844 Tithe map (fig.4). Again, this location is well outside of the present Site.
- 3.22. The trackway forming the southern boundary of the Site (fig.4, **39**) may potentially have originated in the medieval period. If so, it must have run along the edge of the open-field furlong divides, which is quite possible. A medieval coin has been found in metal-detecting near the lodge for Bromham House, north of the Site (fig.4, **24**).

The wider environs

- 3.23. Early occupation features (including a boundary ditch and possible metal working evidence) were investigated by trial trench evaluation and open area investigation (AA, 2014) c.1km to the east of the Site (fig.5, **54**) in the historic core of the settlement. A significant quantity of earlier residual Saxon pottery was also recovered.
- 3.24. No evidence from this period is recorded within the Site.
- 3.25. The Site is located in an area that belonged to Wakes Manor, which stayed in the Wakes family until the 16th century (VCH, 1912). In the 16th century Sir Lewis Dyve consolidated the four manors of Bromham, Wakes, Brayes and Bowels into one estate. The medieval core of Bromham lay around 1km to the east of the Site (fig.5, 42 and 48). Medieval settlement is also known at Bridge End (0.5km south-east of the Site; fig.5, 51) and Bury End (0.3km to the west of the Site; fig.5, 41).
- 3.26. Most of the medieval features recorded within the study area relate to elements of the surrounding medieval landscape, such as ancient areas of woodland, trackways and earthworks. Two areas of ancient woodland, survive in the landscape surrounding the Site: Bowells Wood c.0.29km to the north east (fig.5, 43) and Molliver's Wood c.0.74 km to the north east of the Site (fig.5, 53). Several earthworks are also recorded such as: the moat at Bowels Manor c.0.62km to the north east (fig.5, 45), and the sites of several quarries and kilns c.0.64km to the south (fig.5, 55), c.0.53km to the south east (fig.5, 33) of the Site.
- 3.27. The remainder of the evidence of the medieval period relates to findspots and chance finds (fig.5, **18, 19, 20-23, 36**).



Fig. 5 Site location plan and medieval and post-medieval features

Post-medieval and modern – the surrounds

- 3.28. Bromham had a number of watermills over time and the current mill, located at the end of the bridge, has a date stone set into the wall of 1695 and only ceased its activity in 1970. Another mill, east of the Site, has been noted above. In 1838 the Bromham estate passed to Elianore Mary Rice-Trevor (1838 to 1897) who became a very prominent figure in the parish, being responsible for building the village school amongst other amenities (VCH, 1912).
- 3.29. Through most of the post-medieval period the character of Bromham was maintained as mainly agricultural with only a few related local industries, such as the mills and the quarries that had remained in activity since the medieval time. Some of these sites remain visible in the landscape as earthworks such as the watermill *c*.0.20km to the east (fig.5, **46**), Bromham Mill *c*.0.8km to the east (fig.5, **52**) and the quarry *c*.0.6km to the south (fig.5, **55**) of the Site. Another surviving feature is the former turnpike road *c*.0.5km to the south (fig.5, **38**) of the Site.
- 3.30. The remainder of the recorded evidence comes from findspots and chance finds and comprises a clothing tag found c.0.46km to the south (fig.5, **26**) and a buckle found c.0.9km to the south west (fig.5, **28**) of the Site.

Documented history of the Site

- 3.31. By 1708 the whole consolidated estate had been sold to Sir Thomas Trevor and stayed in that family until the dissolution of the estate in the 1920s.
- 3.32. The Site is illustrated in some detail on the 1798 Bromham Estate Map (fig.6). In this map, although the apportionment is not available, some indications to the land use are given. The Site is located across several field enclosures that are identified under the same field name, *Dead Woman*. This field name has two potential meanings; it could be related to an ancient burial ground site whose reference persisted through time as a field name; or, it can be a reference to ownership, meaning that this specific field belonged once to a woman (Field, 2013).
- 3.33. If the 1798 map is reasonably accurate, and it does generally appear to be so, then the organisation of the field enclosures was rather different in the 18th century, and altered a good deal prior to the Tithe awards of 1844 (see below). The 1798 map illustrates five separate fields within the Site, and a trackway ran down from the Northampton Road to provide access. A small coppice lay in the corner between two fields towards

the eastern side of the Site. No outbuildings or other structures are illustrated in the Site.

3.34. As noted above, the buildings outside of the Site to its east, which have subsequently been demolished and replaced by the modern housing development, were known as 'The Grange'. The Grange may have had medieval origins, and farmed the attached lands including the Site.



Fig. 6 1798 Bromham Estate Map

- 3.35. The Site is next illustrated in detail on the 1844 Bromham Parish Tithe Map (fig.7). As noted, the fields appear to have been reorganised in the intervening period. The Site formed a part of three different plots: 54, 55 and 65. The apportionment records clarify that the three plots were in shared ownership with Bromham Grange. The owner was the Lady of the Manor, Elianore Mary Rice-Trevor, daughter of George Rice-Trevor the 4th Baron Dynevor. The Grange and fields were tenanted by James Alexander Henman. Plots 54 and 55 are recorded as arable land, and the field name is slightly embellished as *Dead Woman's Willow Close*. Plot 65 is recorded as an Orchard.
- 3.36. Bromham House is illustrated to the north of the Site, and is discussed in more detail below.

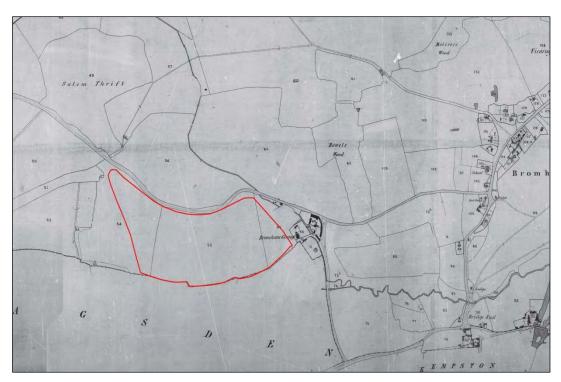


Fig. 7 1844 Bromham Parish Tithe Map

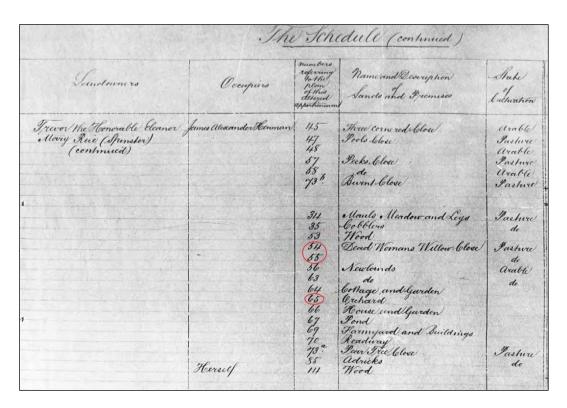


Fig. 8 1844 Bromham Parish Apportionment

3.37. The next map available is the First Edition Ordnance Survey Map of 1888 (fig.9). On this map there isn't much change to the Site's location, the land use is maintained as

well as the boundaries, headlands and pathways across the Site. Bromham Grange is clearly illustrated immediately to the east of the Site.

- 3.38. The map illustrates Bromham House to the north of the Site. The house was built by William Henry Allen in 1897, in around seventy acres of partially wooded land in the area known as known as Salem Thrift (see Figure 10 for a photograph of the house taken shortly after completion, in 1903). Allen was the owner of W. H. Allen Limited, a heavy engineering company in Queen's Park, Bedford (Bedfordshire and Luton Archives and Records Service has what remains of the company's archives). The house was built in a neo-gothic style, with castellated bays and porchway.
- 3.39. The front of the house faced south-east, looking out over front lawns and then, essentially, parkland. A walled kitchen garden and hothouses lay to the rear, and formal gardens and then the woodland of Salem Thrift. The house had two lodges, both on the Northampton Road. One lay to its west, and one, known as 'South Lodge', lay to its south immediately north of the Site. From the South Lodge, the guest travelled a tree-lined avenue (quite typical in its design of the period) through pasture and specimen trees to arrive at the house.

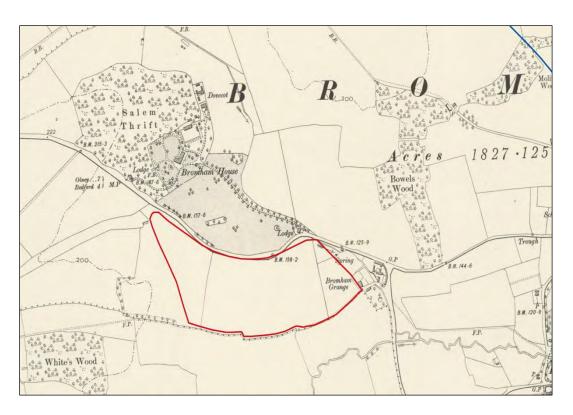


Fig. 9 Crop of 1888 Ordnance Survey Map



Fig. 10 Bromham House in 1903 (Beds Archives and Records Service)

- 3.40. W. H. Allen died in 1926 and the family sold the house to the Bedfordshire and Northamptonshire Joint Board for Mental Deficiency. The house and its grounds were established as the Bromham Colony, later known as Bromham Hospital. The hospital was closed in 1997, and the last remaining part of this period of its history, the Rainbow Special School, closed in 2006. Following the closure of the hospital the former grounds of Bromham House were extensively redeveloped. The former driveway is now known as Chestnut Avenue, and is lined with houses and the Elisabeth Curtis Centre (riding centre) on its southern side. The former parkland and gardens have been developed with Tulip Tree Close, Stone Pine Road, Parkland, Blue Spruce Close, Red Cedar Road, etc. The road names were presumably chosen for the specimen trees put in by Allen.
- 3.41. The landscape within the Site didn't alter significantly in the 20th century. When Bromham Estate was sold in the 1920s, one of the auction lots included Bromham Grange. In addition to the house this lot included 130 acres of land and out-buildings of which the Site was a part. Bromham Grange was demolished and re-developed as a residential estate called Bromham Court.
- 3.42. The growth of the wider settlement in and around Bromham is summarised below (fig.11). This summarises surviving elements of the medieval landscape, such as ridge and furrow earthworks and ancient woodland; and other medieval and post medieval features. The extensive 20th-century development around Bromham House and also on the western side of Bromham may be noted.



Fig. 11 Pre-1900 settlement (orange) and 20th-century housing (purple)

The geophysical survey results

- 3.43. The geophysical survey report is provided as Appendix 1.
- 3.44. The overall conclusion of the survey was that the survey area is largely sterile of magnetic anomalies, and those that have been detected are very faint and ephemeral'.
- 3.45. No clearly identifiable archaeological features were recorded, although a number of features were considered to represent 'possible' archaeological remains.
- 3.46. Potential features A and B were identified in the western part of the Site. Feature A was the strongest magnetic response identified and very much has the appearance of the ditch of a former field boundary. Just to its south-east, feature B appears to be related to it and may also be a former boundary and/or trackway. Features C may represent a continuation of the possible trackway/boundary at B. These features do not closely match up to documented field boundaries, including those on the 1798 map

- (Fig. 6). it is possible that they represent the former enclosure field in the central-northern part of the Site, but if so they are on quite a different layout than mapped.
- 3.47. Feature D does very likely represent the former field boundary in this location illustrated on the 1798 map.
- 3.48. In the east of the Site, a number of possible pits at E were identified, although they may either be of archaeological or geological origin. This field was known as 'Spring Close' on the 1798 map, and it is possible that the anomalies are the result of associated sub-surface disturbance.
- 3.49. No anomalies of potential archaeological origin were identified in the area of land adjacent to the former Bromham Grange.
- 3.50. Other features noted included a mapped former field boundary to the east of the Site, and geological anomalies. Two discrete areas of furrows were also recorded, which appear to add credence to the placement of the Site in the Bromham arable openfields in the medieval period. These remains are not likely to be of sufficient heritage significance to comprise 'heritage assets'.

4. THE SETTING OF HERITAGE ASSETS

4.1. This section considers potential non-physical effects upon the significance of heritage assets within the Site environs.



Fig. 12 The most proximate listed buildings

- 4.2. No listed buildings are situated in the close vicinity of the Site. Bromham is not designated as a Conservation Area.
- 4.3. The most proximate listed buildings to the Site are illustrated on Fig. 12, above. All of the listed buildings to the south and east of the Site (110 Stagsden Road; 1 Thistley Lane; Berry Farmhouse; and buildings along Village Road) are all within a strongly urban setting, with considerable post-war residential development between them and the Site. The Site does not form a part of their setting that contributes to their significance.
- 4.4. Burdleys Manor and Wick End Farmhouse both lie to the west of the Site. There is likewise little inter-visibility between these houses and the Site; the rising slope to the east of the lane on which they lie and the small copses greatly limited views in this

direction. The Site does not form a part of their setting that contributes to their significance.



Fig. 13 Photographic views

- 4.5. A summary of the development and significance of Bromham House and its former park has been provided in Chapter 3 above. As noted in that chapter, the former park has been significantly altered and redeveloped in the post-war period. New residential housing lies to the south and east of the Victorian house (which is not listed). Likewise, new housing has been built along the driveway served by the lodge, and the former pasture on this side (Fig. 13 above). The layout and content of the former park has been so altered that little historical integrity or significance remains. Extensive tree belts have evolved on the southern side of the former park, which greatly restricts any views out.
- 4.6. The Site does not contribute to the significance of Bromham House or its former park, and development within the Site would not harm their remaining heritage values.
- 4.7. The former (Victorian gothic) lodge to Bromham House (not listed) is set back from what is now named Chestnut Avenue (Fig. 13, above and Viewpoint 3, below). Due to the mature trees on the southern side of its garden, and the tree belt on the northern

boundary of the Site, it has little inter-visibility with that land. The wider setting which does contribute to its heritage significance includes the eponymous avenue of trees (leading to the main house), and the remnant park. The Site does not contribute to its heritage significance.



Viewpoint 1



Viewpoint 2



Viewpoint 3

5. CONCLUSIONS

Archaeological remains

- 5.1. Both LiDAR and the geophysical survey indicate that the Site formed a part of the arable open-field of Bromham. The geophysics recorded the alignment of a number of furrows, and it is likely that the subsequent field enclosure boundaries (as marked from 1798 and through the 19th century) were based on the former strip and furlong arrangement.
- 5.2. The geophysical survey identified several fragmentary linear responses, which may represent former field boundaries, a possible trackway and pits. Thus they are features which are of agricultural function; no evidence for former settlement was identified. The linear features A – C (on the western side of the Site) may possibly relate to a former field enclosure marked on the 1798 Bromham map, but, if so, the form is guite markedly different to that mapped. A key question is the relationship of these linear features with the likely medieval furlong pattern. The features seem to broadly correspond to the furlong arrangement occupying the land between early routeways to both north (Northampton Road) and south (the likely medieval trackway/road). This suggests field enclosures/trackway dating to the late medieval or earlier post-medieval period after the piece-meal informal enclosure of the open fields. If so, the archaeological interest and value of these features is limited. Given the fragmentary nature of the responses, however, an origin pre-dating the enclosure process cannot be discounted. If that were the case, their significance would be somewhat higher although this would still be limited by their likely agricultural nature. For example, prehistoric and Roman field systems are well-understood, and professional guidance notes that they are likely to contribute less to archaeological research objectives.
- 5.3. Feature D is very likely a field boundary mapped on the 1798 map. Several anomalies
 (E) on the eastern side of the Site may be a small area of pits, or perhaps geological disturbance.
- 5.4. It is concluded that the desk-based research and geophysical survey have not identified evidence for likely significant archaeological remains within the Site. There is no evidence for remains which may be of a level of significance which would require preservation in situ, or otherwise restrict or influence design plans.

The setting of heritage assets

- 5.5. The Site does not form a part of the setting of any designated heritage assets that contributes to their significance. Similarly, it does not contribute to the limited significance of the former Bromham parkland which lies to its north (this is not included on the Historic England Register, and has been greatly altered and developed in the 20th century).
- 5.6. The development proposals would not harm the significance of any designated heritage assets through the alteration of their setting.

Conclusion

- 5.7. There is some evidence for former agricultural enclosures in the Site, of some limited heritage significance. This evidence does not indicate that the associated remains would form a constraint to the development proposals, subject to appropriate archaeological mitigation measures. Development would lead to the loss of archaeological remains of limited heritage significance (with regard to paragraph 135 of the NPPF which concerns non-designated heritage assets).
- 5.8. The development proposals would not lead to any harm to the significance of any designated heritage assets, either physically or through alteration to their setting. Thus the proposals are consistent with the duties of the Planning (Conservation Areas and Listed Buildings) Act 1990 (section 66) regarding the preservation of listed buildings and their settings, as well as the 'great weight' required by paragraph 132 of the NPPF to be put on the conservation of designated heritage assets.
- 5.9. Development within the Site would not be contrary to the content of Policy CP23 of the Core Strategy. It would not lead to harm to the character of important elements of the historic environment such as listed buildings, Conservation Areas or Registered Parks, nor would it lead to harm to what are likely to be important historic or archaeological features.

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1798	Bromham Estate Map
1844	Bromham Parish Tithe Map and Apportionment
1888	Ordnance Survey Map
1901	Ordnance Survey Map
1902	Ordnance Survey Map
1926	Ordnance Survey Map
1927	Ordnance Survey Map
1950	Ordnance Survey Map
1960	Ordnance Survey Map
1989	Ordnance Survey Map

Aerial photographs

1946	3051 106G/UK1562
1946	3052 106G/UK/1562
1955	F21.58/RAF/1674/0066
1955	F21.58/RAF/1674/0065
1955	F21.58/RAF/1674/0067
1955	F22.58/RAF/1674/0066
1955	F21.58/RAF/1674/0065
1955	F21.58/RAF/1674/0067
1964	OS/64/195
1967	67 262
1973	008 73443
1978	19 78 050
1979	08 79 243
1992	WILD13095

APPENDIX 1: GEOPHYSICAL SURVEY REPORT



Land South of Northampton

Road

Bromham

Bedfordshire

Geophysical Survey

Report no. 3052 December 2017

Client: Cotswold Archaeology





Land South of Northampton Road, Bromham, Bedfordshire

Geophysical Survey

Summary

A geophysical (magnetometer) survey, covering approximately 17 hectares, was undertaken on land to the south of Northampton Road, Bromham approximately 6.5km northwest of Bedford city centre, Bedfordshire. This was part of a programme of archaeological works in advance of a proposed development. The magnetic survey has detected anomalies of possible archaeological origin, in the form of double-ditched trackways, possible pits or post-holes and linear trends. Agricultural, geological and ferrous responses have been recorded throughout the site and are not thought to be of archaeological interest. Overall the archaeological potential of the site is moderate.



Report Information

Client: Cotswold Archaeology

Address: Building 11, Kemble Enterprise Park, Circucester,

Gloucestershire, GL7 6BQ

Report Type: Geophysical Survey

Location: Bromham,
County: Bedfordshire
Grid Reference: SP 9963 5091

Period(s) of activity: Prehistoric?/ Roman/ Modern

Report Number: 3052
Project Number: 6911
Site Code: BOM17

OASIS ID: Archaeol11-304104
Date of fieldwork: November 2017
Date of report: December 2017

Project Management: Emma Brunning BSc MCIfA

Fieldwork: Christopher Sykes BA MSc MCIfA

Alastair Trace BSc MSc

Jake Freeman BA

Report: Christopher Sykes Illustrations: Christopher Sykes Photography: Christopher Sykes Research: Christopher Sykes

Authorisation for

distribution: ------



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- 4 General overview of survey area, facing northeast

1 Introduction

Archaeological Services WYAS (ASWYAS) were commissioned by Cotswold Archaeology to undertake a geophysical (magnetometer) survey on agricultural land to the south of Northampton Road, Bromham, Bedfordshire. This is in advance of a proposed development. Guidance contained within the National Planning Policy Framework (DCLG 2012) was followed, in line with current best practice (CIfA 2014; David *et al.* 2008). The survey was carried out between 20th – 24th November 2017.

Site location, topography and land-use

The survey area is approximately centred on National Grid Reference SP 996 509 and located to the west of Bromham, approximately 5km to the northwest of Bedford. It lies between 55m to 40m above Ordnance Datum (aOD), sloping down from the west to the east. The proposed area is approximately 17 hectares consisting of two fields. The survey area is bounded to the west by the A428 Bedworth Road, to the north by Northampton Road, and to the east by residential housing and fields to the north (Figs. 1 and 2).

Soils and geology

The underlying bedrock geology comprises of Kellaways Sand Member to the west, thin bands of Kellaways Clay Member, Cornbrash Formation, Blisworth Clay Formation and Blisworth Limestone Formation to the east. Superficial deposits for this survey area consist of Oadby Member to the west with none recorded to the east (BGS 2017). The overlying soils belong to the Moreton association (511b) described as well-drained calcareous clayey and fine loams (SSEW 1983).

2 Archaeological Background

An examination of Pastscape (www.pastscape.org.uk) has identified a number of features and findspots within a 1km radius of the survey area.

Within the vicinity, a collection of Palaeolithic and Neolithic flint implements have been found within the gravels (MI360563). A Roman era bronze steelyard weight has also been found to the east of the survey area (360561).

Post-medieval ridge and furrow has been identified from historic aerial photographs. Areas of ridge and furrow have been revealed to the north of the site, as have Iron Age fortifications and enclosures (to the south of Stagsden Road, south of the survey area). The location of Second World War tank defences within Bromham are noted (MI 1608858, 1608859, 1422802, 1605944 and 1608865).

3 Aims, Methodology and Presentation

The main aim of the geophysical survey was to provide additional information on the known archaeology within the area. To achieve this, a magnetometer survey covering all available parts of the PDA was undertaken (see Fig. 2).

The general objectives of the geophysical survey were:

- to provide information about the nature and possible interpretation of any magnetic anomalies identified;
- to therefore determine the presence/absence and extent of any buried archaeological features; and
- to prepare a report summarising the results of the survey.

Magnetometer survey

The site grid was laid out using a Trimble VRS differential Global Positioning System (Trimble R6 model). The survey was undertaken using Bartington Grad601 magnetic gradiometers. These were employed taking readings at 0.25m intervals on zig-zag traverses 1.0m apart within 30m by 30m grids, so that 3600 readings were recorded in each grid. These readings were stored in the memory of the instrument and later downloaded to computer for processing and interpretation. Geoplot 3 (Geoscan Research) software was used to process and present the data. Further details are given in Appendix 1.

Reporting

A general site location plan, incorporating the 1:50000 Ordnance Survey (OS) mapping, is shown in Figure 1. Figure 2 shows a more detailed site location plan at a scale of 1:3000. Figure 3 is an overall interpretation at the same scale. The processed and minimally processed data, together with an interpretation of the survey results are presented in Figures 4 to 15 inclusive at a scale of 1:1000.

Technical information on the equipment used, data processing and survey methodologies are given in Appendix 1. Technical information on locating the survey area is provided in Appendix 2. Appendix 3 describes the composition and location of the archive. A copy of the completed OASIS form is included in Appendix 4.

The survey methodology, report and any recommendations comply with guidelines outlined by English Heritage (David *et al.* 2008) and by the Chartered Institute for Archaeologists (CIfA 2014). All figures reproduced from Ordnance Survey mapping are with the permission of the controller of Her Majesty's Stationery Office (© Crown copyright).

The figures in this report have been produced following analysis of the data in processed formats and over a range of different display levels. All figures are presented to most

suitably display and interpret the data from this site based on the experience and knowledge of Archaeological Services staff.

4 Results and Discussion (see Figs 4 to 15)

Possible archaeological anomalies

Possible archaeological anomalies have been identified throughout the survey area in the form of fragmented ditches and faint linear trends. These responses have been interpreted as possible archaeology as they do not form any clearly identifiable archaeological features.

Situated on the highest point in the survey area, **A** is a relatively strong linear anomaly orientated along a southwest-northeast alignment. It delineates the western boundary of a collection of anomalies which may have archaeological origins. Given their scattered nature, however, no clear archaeological origin can be determined.

Two thin and ephemeral magnetic responses have been identified (**B**) which may form trackway ditches. It is possible that they are related to those identified as (**C**) which may project outside of the survey area.

To the east of the large field, two discrete anomalies have been revealed (\mathbf{D}) which are likely to be a former field boundary given that the orientation is similar to that of the identified field boundary to the west. Alternatively, it may be another double-ditched trackway similar to those recorded as \mathbf{B} and potentially \mathbf{C} .

To the east of the large field, there are a number of small pit-like responses (**E**) which are regularly spaced. They are very discrete and may be geological in origin given their location, but their slightly different magnetic response and spacing, suggests that a possible archaeological origin is proposed.

Geological anomalies

Throughout the survey area, there are scatters of geological anomalies. They are more prominent in areas where former field boundaries have been removed and the underlying material has been brought to the surface. The anomalies are thought to be caused by variations in soil depth.

An area of prominent geological anomalies is located in the northeast corner of the large field which corresponds to the topography in that area.

Agricultural anomalies

Faint cultivation anomalies, indicative of ridge and furrow have been detected across the survey area.

A former field boundary has been identified to the west of the large field. It is recorded on first edition OS mapping of the area (www.nls.ac.uk) and was removed after the 1948 mapping was surveyed.

Ferrous anomalies

Ferrous anomalies, as individual 'spikes', or as large discrete areas are typically caused by ferrous (magnetic) material, either on the ground surface or in the plough-soil. Little importance is normally given to such anomalies, unless there is any supporting evidence for an archaeological interpretation, as modern ferrous debris or material is common on rural sites, often being present as a consequence of manuring or tipping/infilling. There is no obvious pattern or clustering to their distribution in this survey to suggest anything other than a random background scatter of ferrous debris in the plough-soil.

There are areas of magnetic responses which are associated with the upstanding telegraph poles within the survey area. The small field to the east not only had a prominent response from such a feature, but also from the disturbed ground caused by resident horses and likely ferrous contamination.

5 Conclusions

The survey area is largely sterile of magnetic anomalies, and those which have been detected, are very faint and ephemeral. A former field boundary has been identified as have areas of ridge and furrow. Geological responses occur where the soil depth is thin, usually at a change in the topography of the survey area. Ferrous anomalies have been detected across the survey area, most prominently in the smaller field to the east which contained significant areas of magnetic contamination. Some thin linear trends and a collection of anomalies to the west, on the highest part of the survey area, have been given a possible archaeological interpretation. A small number of pits have been recorded in the east of the large field.

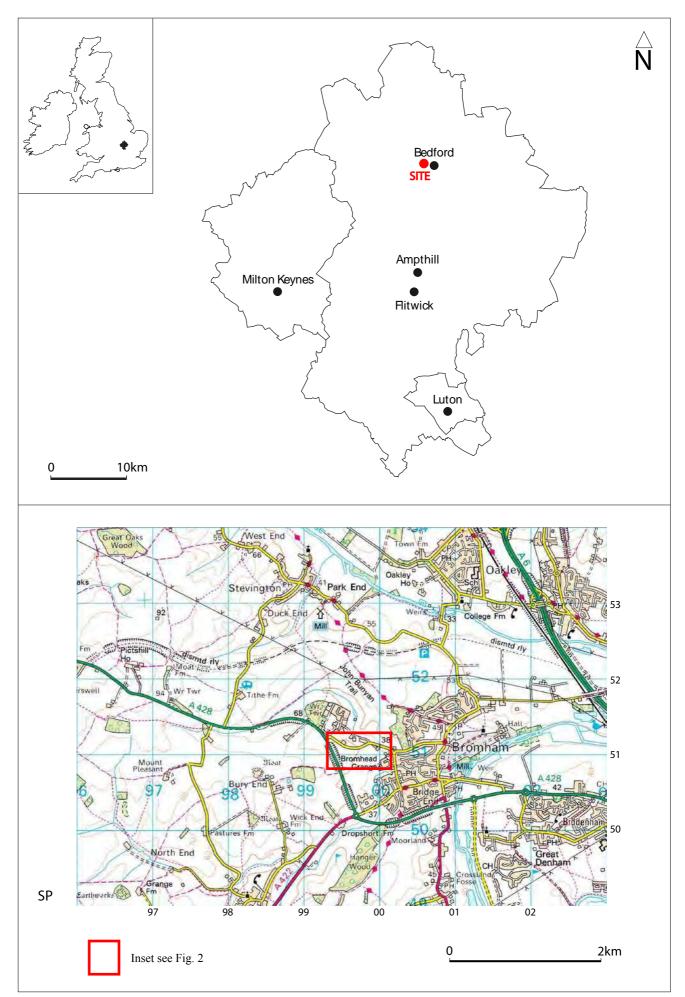


Fig. 1. Site location



Fig. 2. Survey location showing greyscale magnetometer data (1:3000 @ A3)

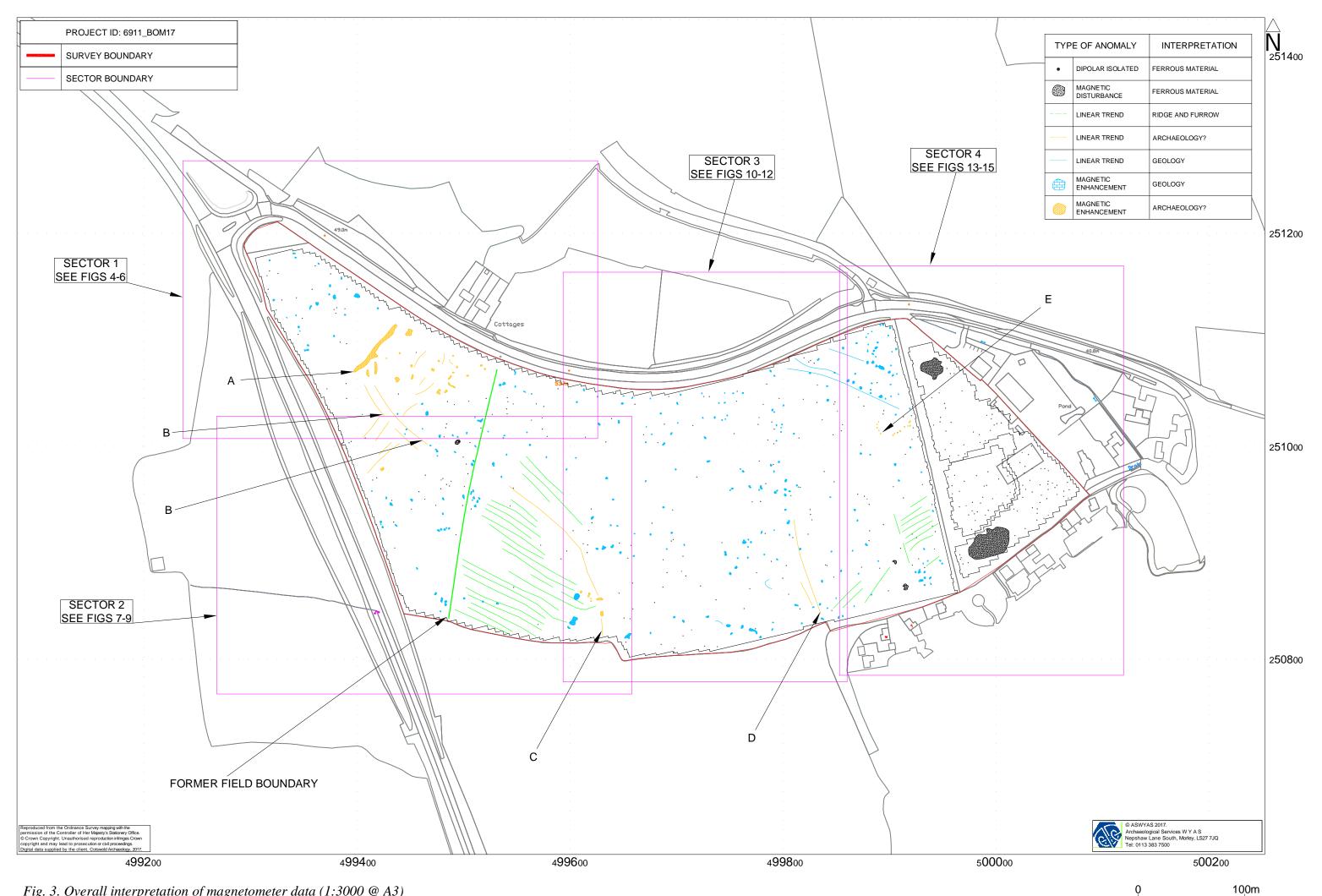
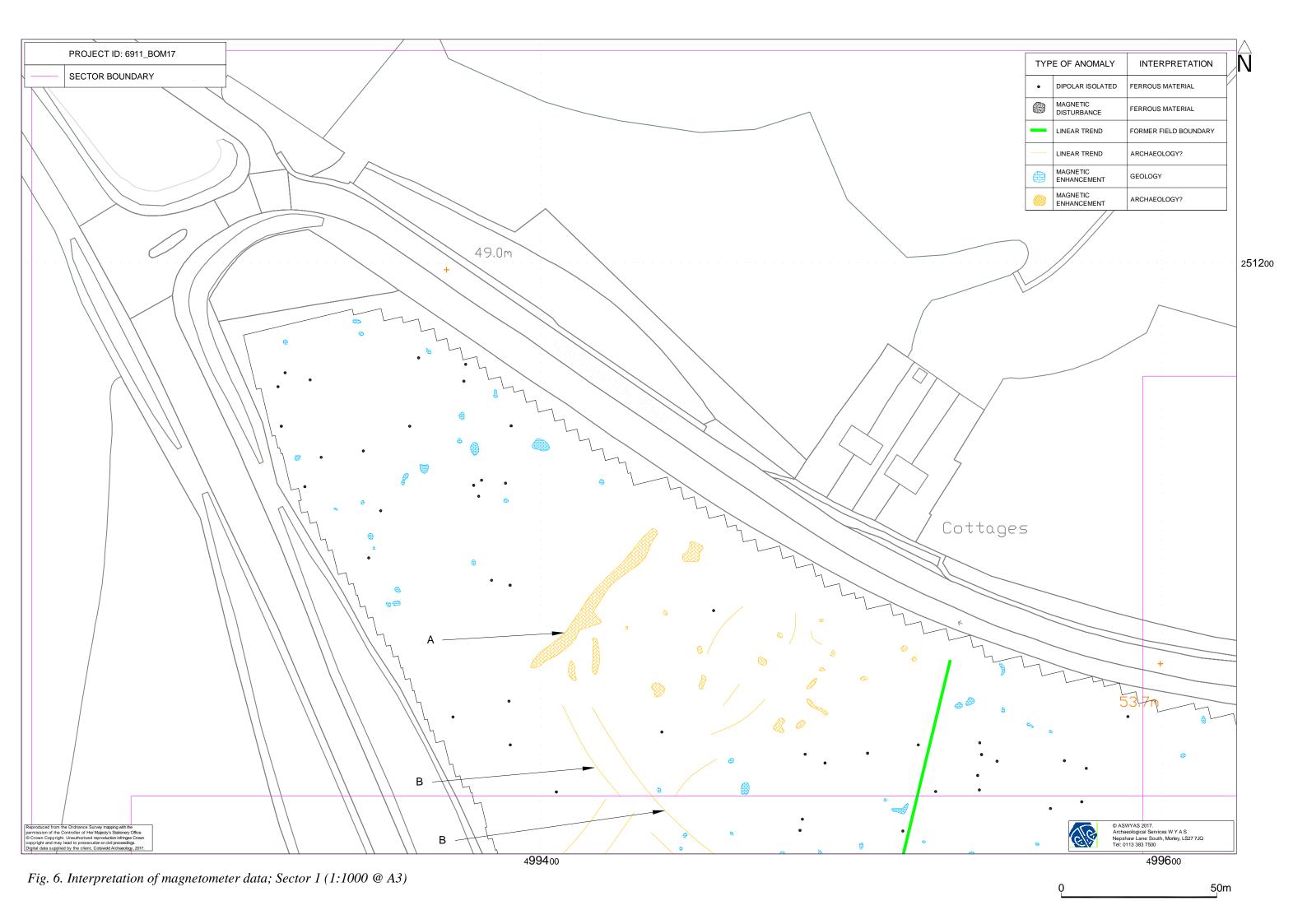


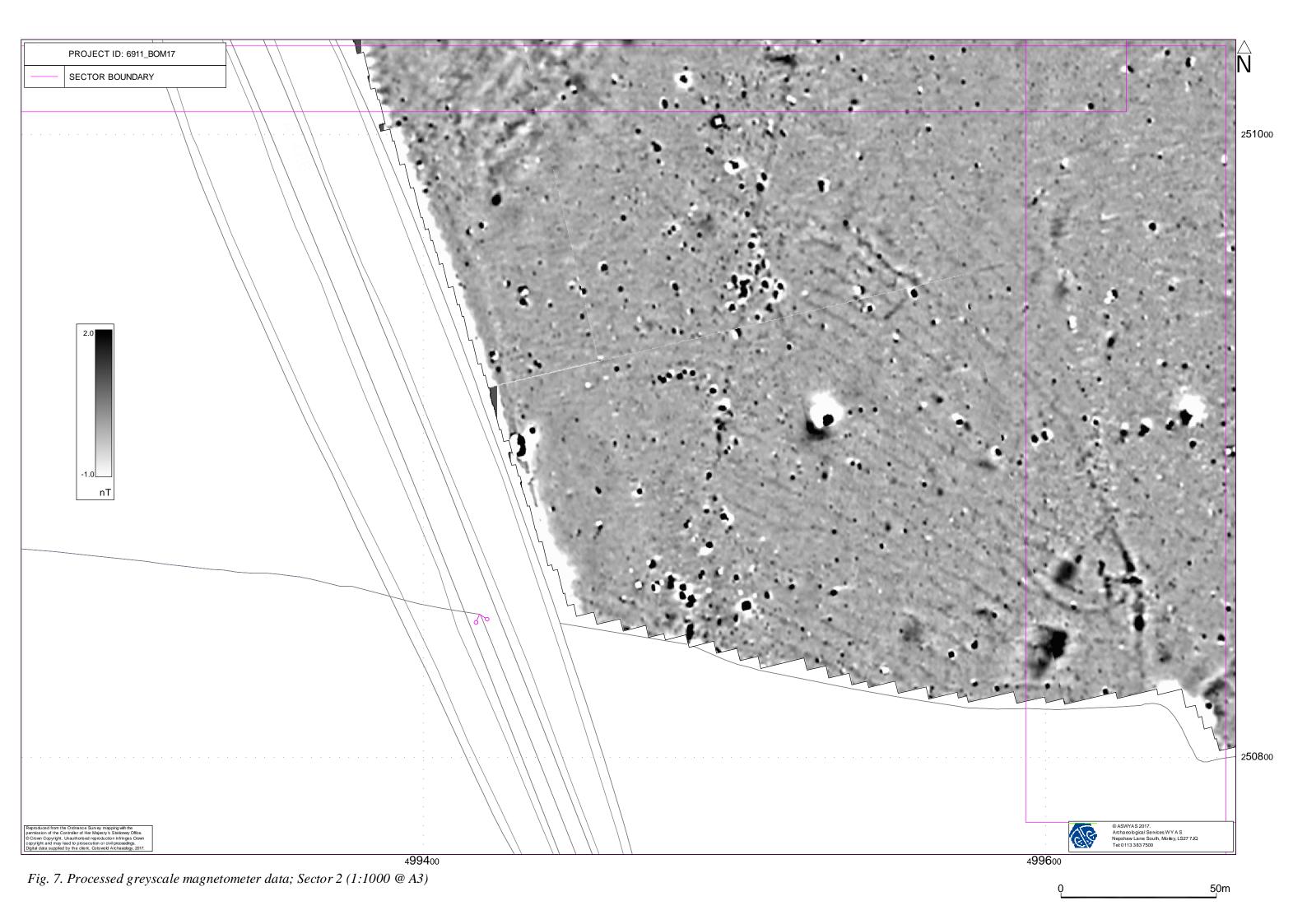
Fig. 3. Overall interpretation of magnetometer data (1:3000 @ A3)

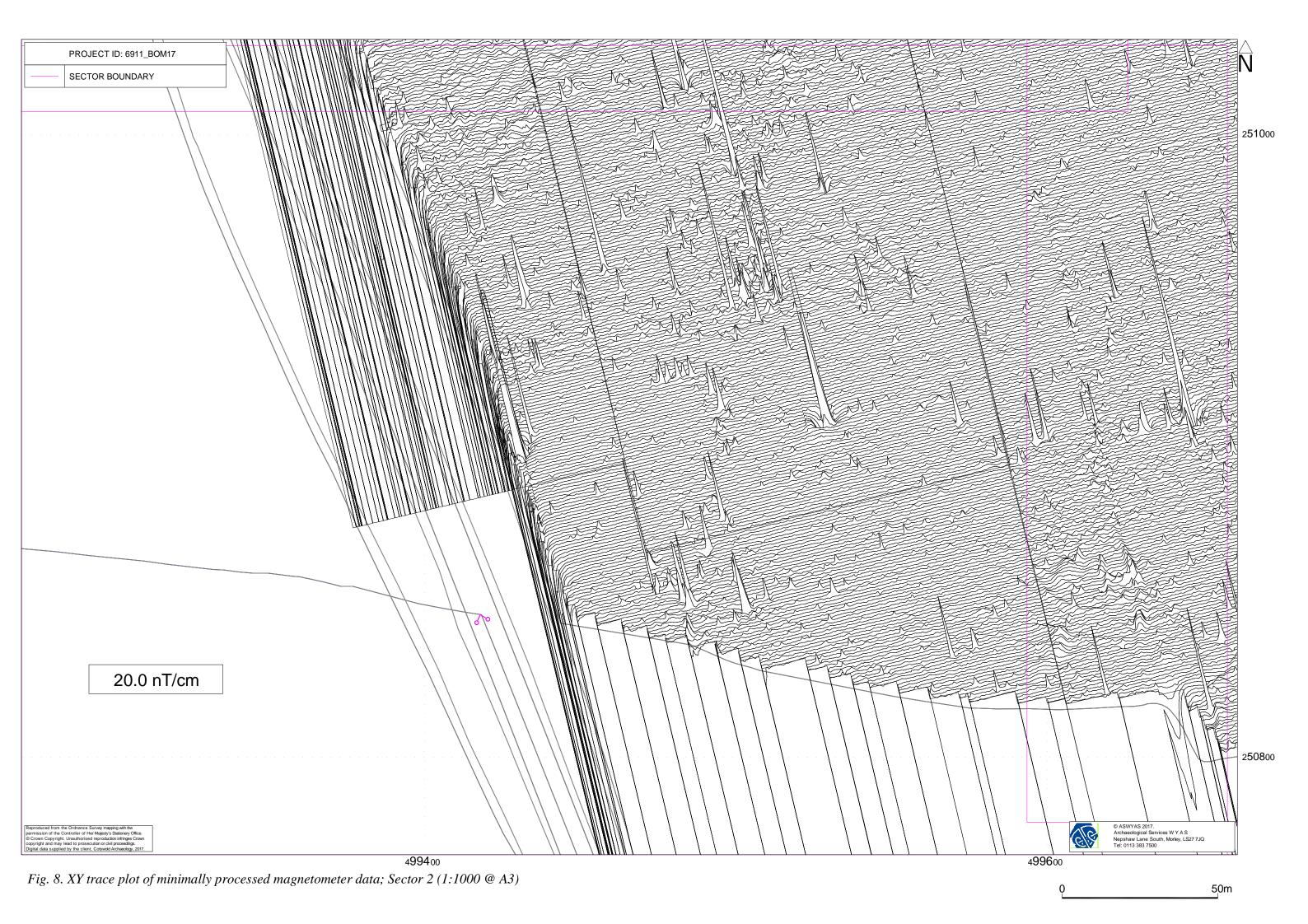


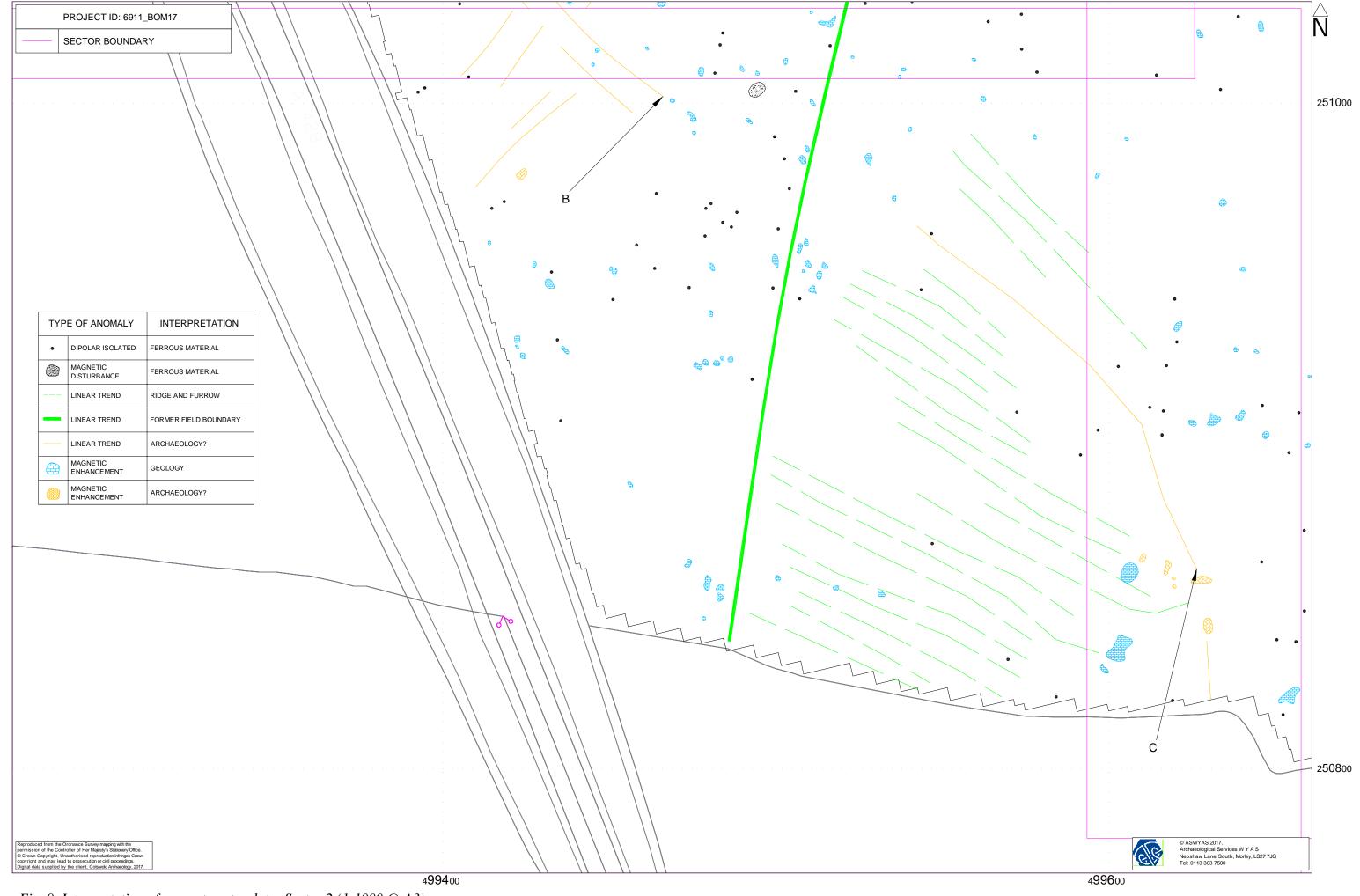


Fig. 5. XY trace plot of minimally processed magnetometer data; Sector 1 (1:1000 @ A3)

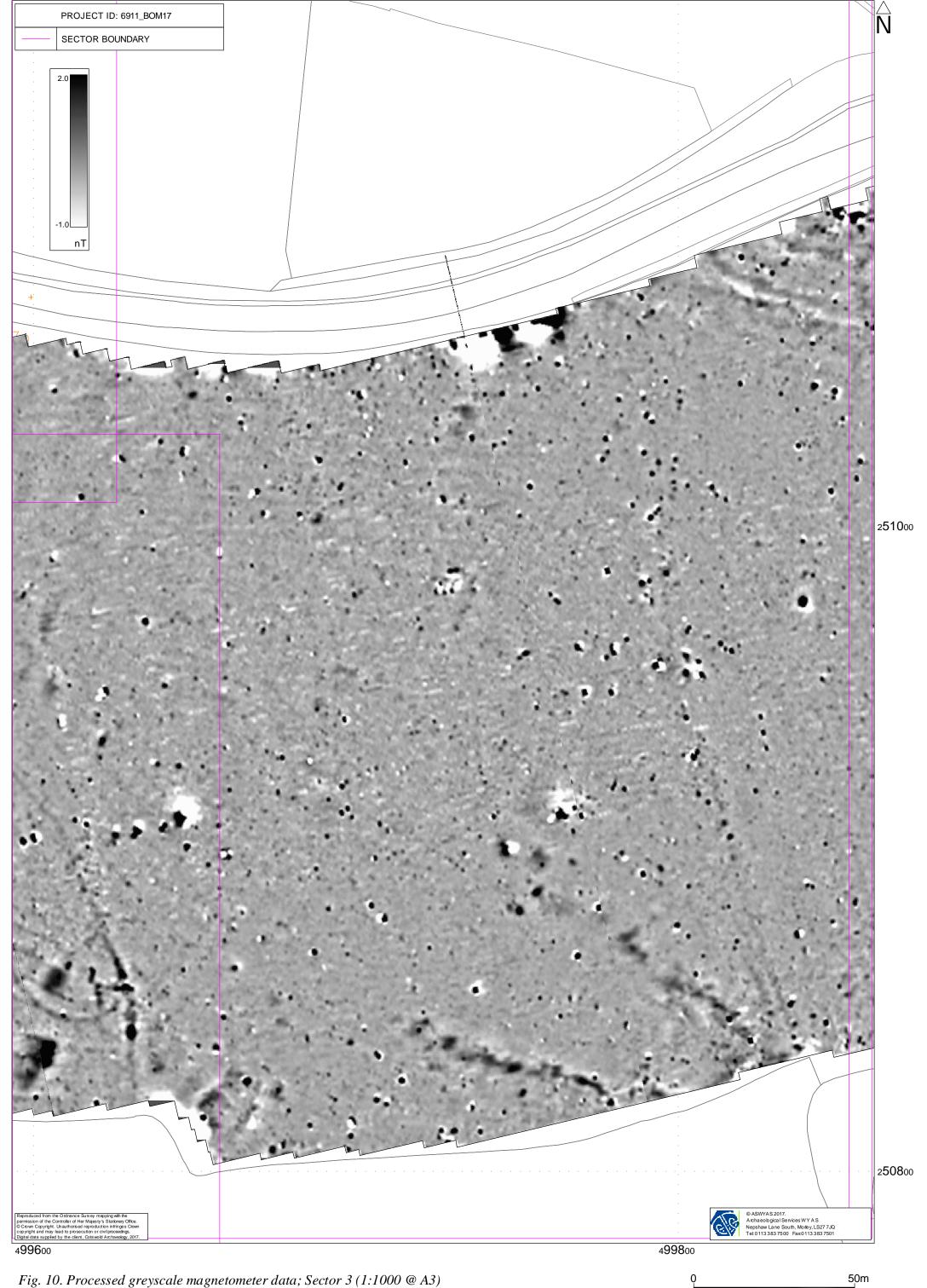


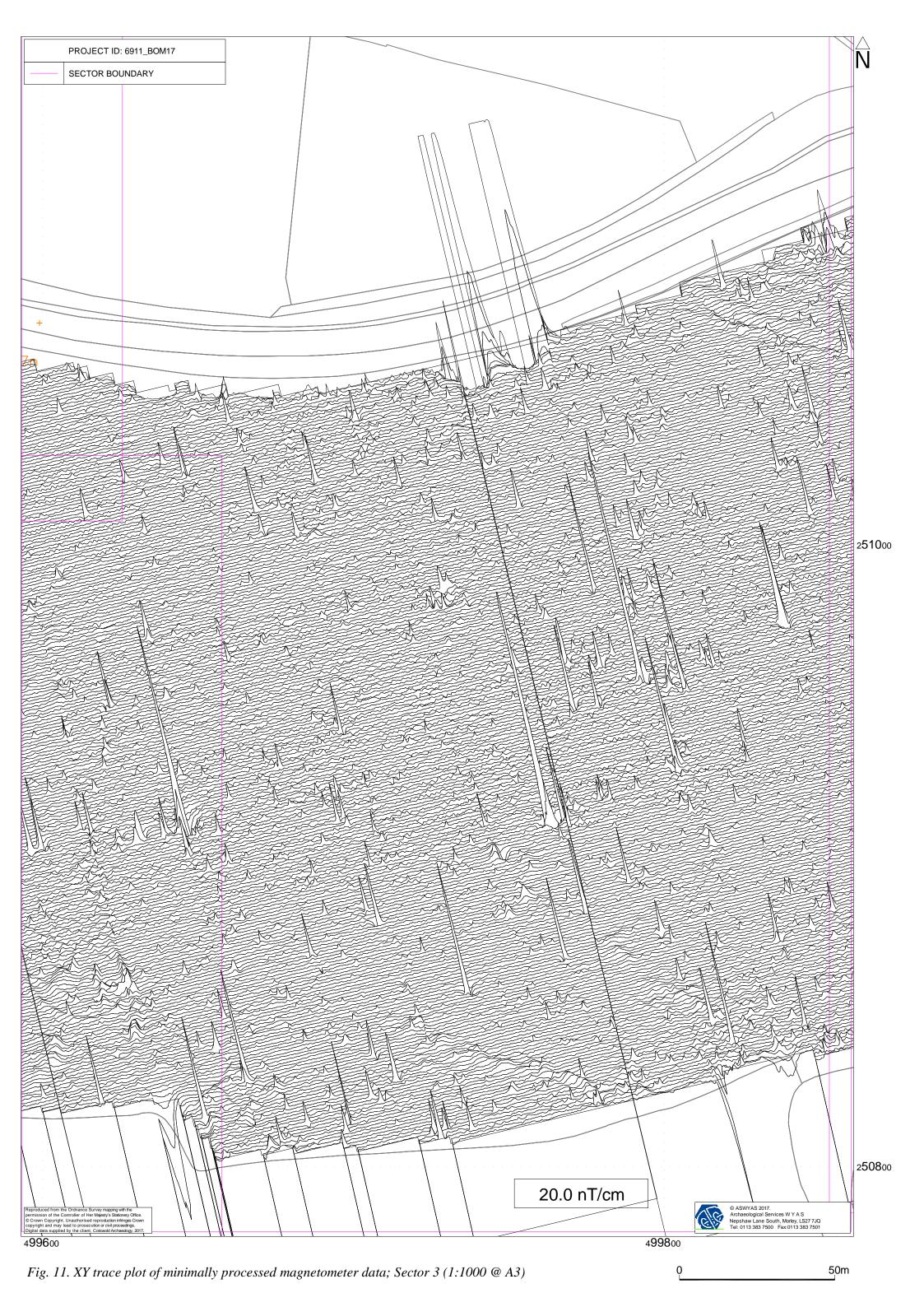


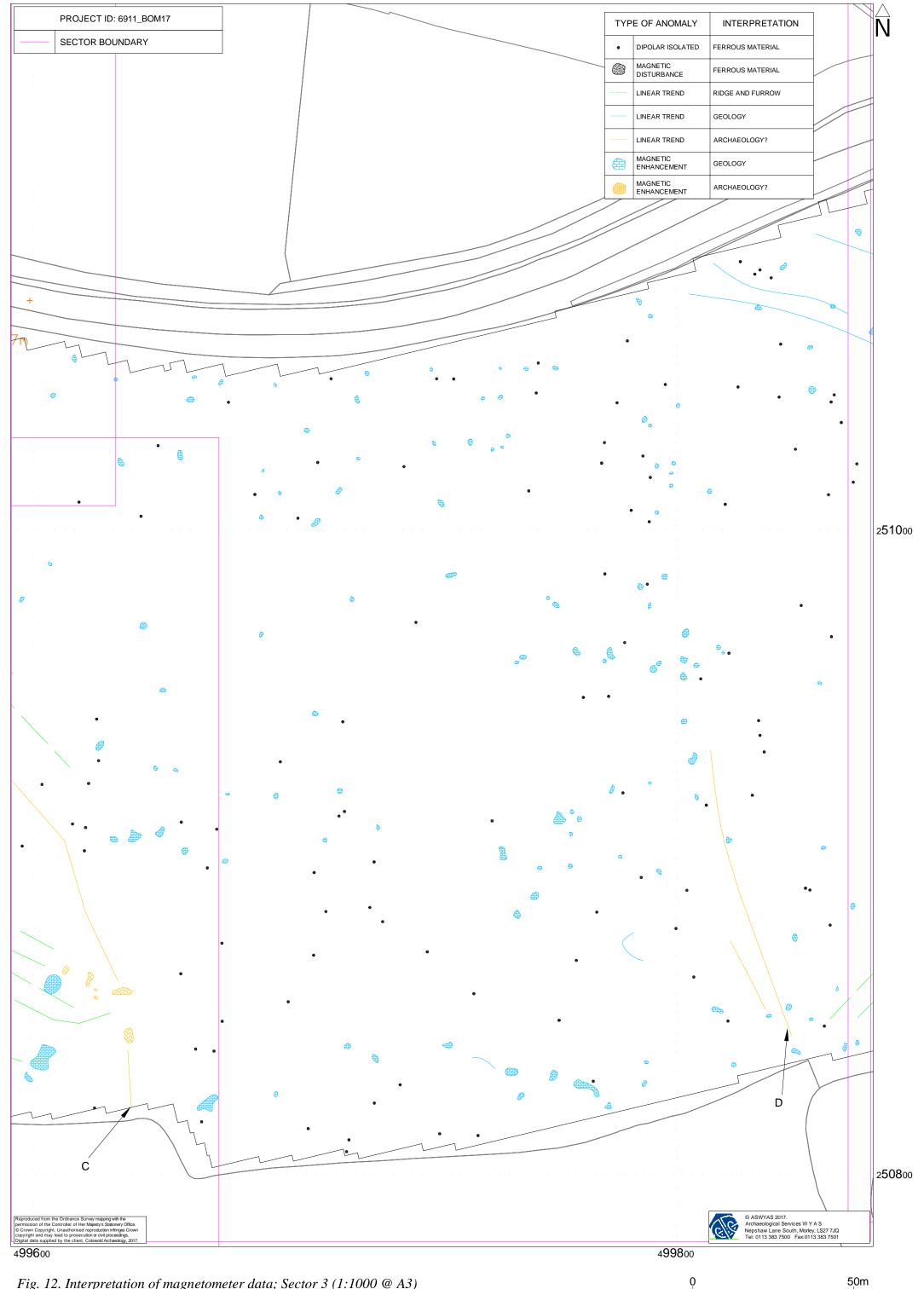




50m







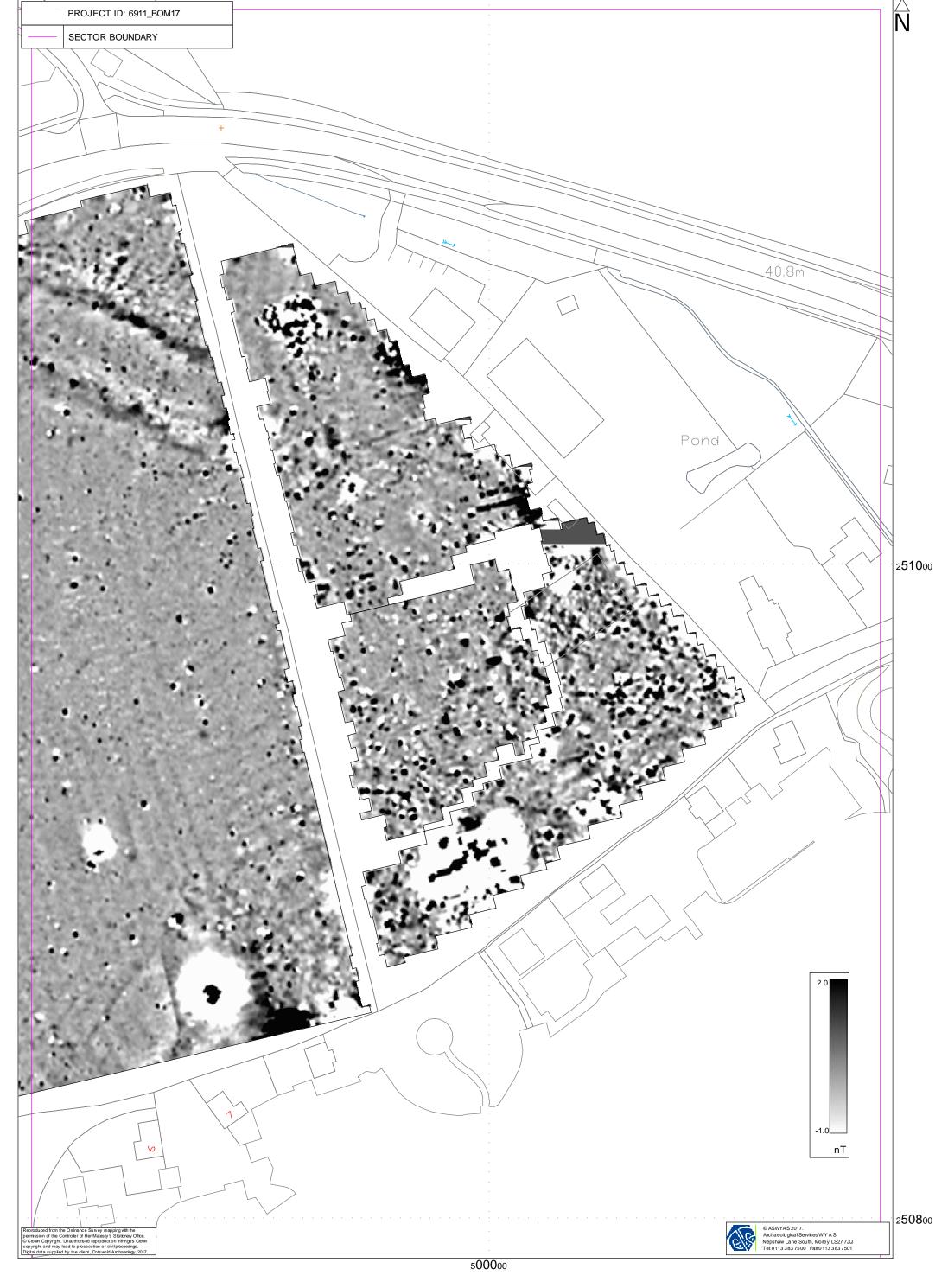


Fig. 13. Processed greyscale magnetometer data; Sector 4 (1:1000 @ A3)

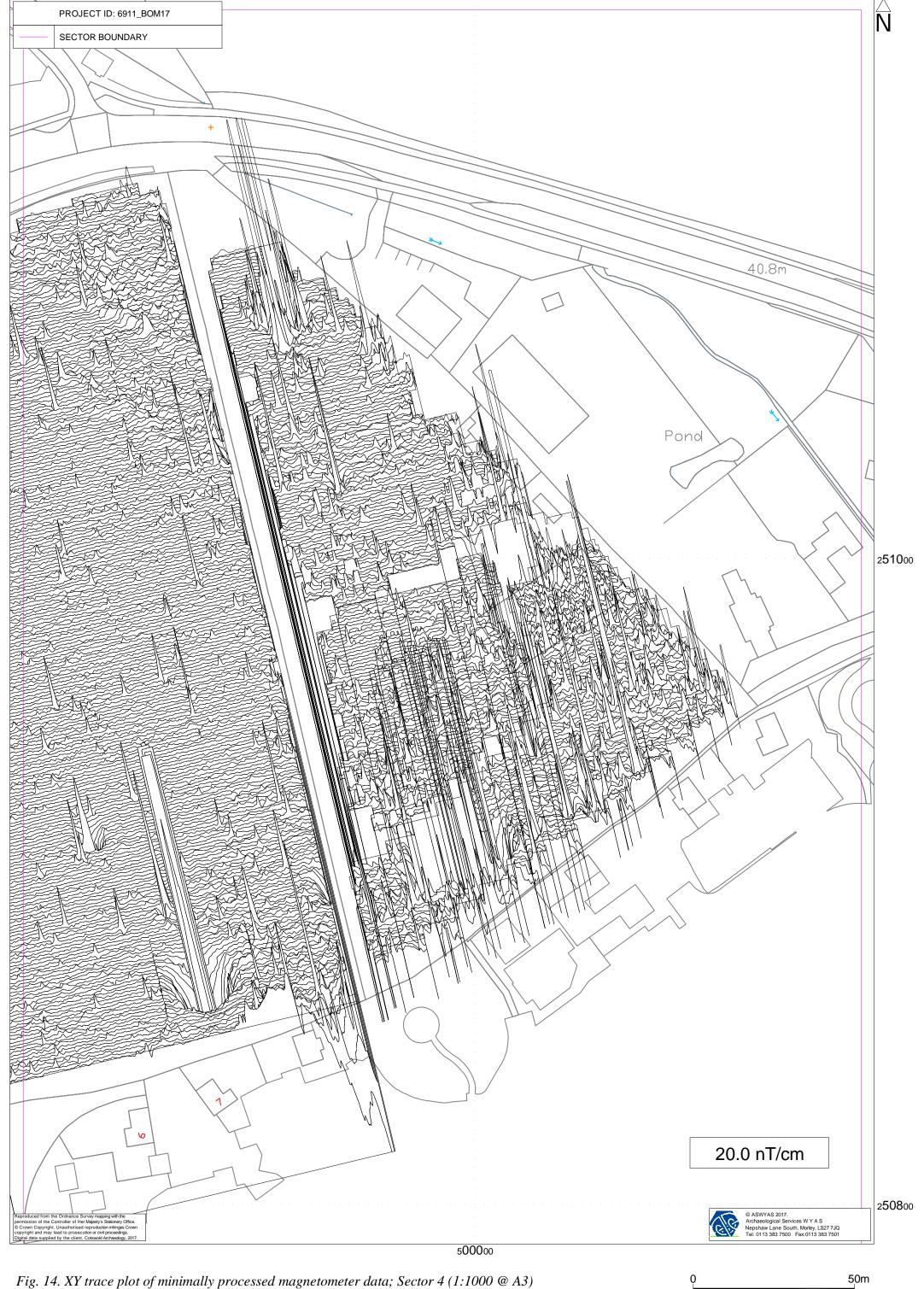


Fig. 14. XY trace plot of minimally processed magnetometer data; Sector 4 (1:1000 @ A3)

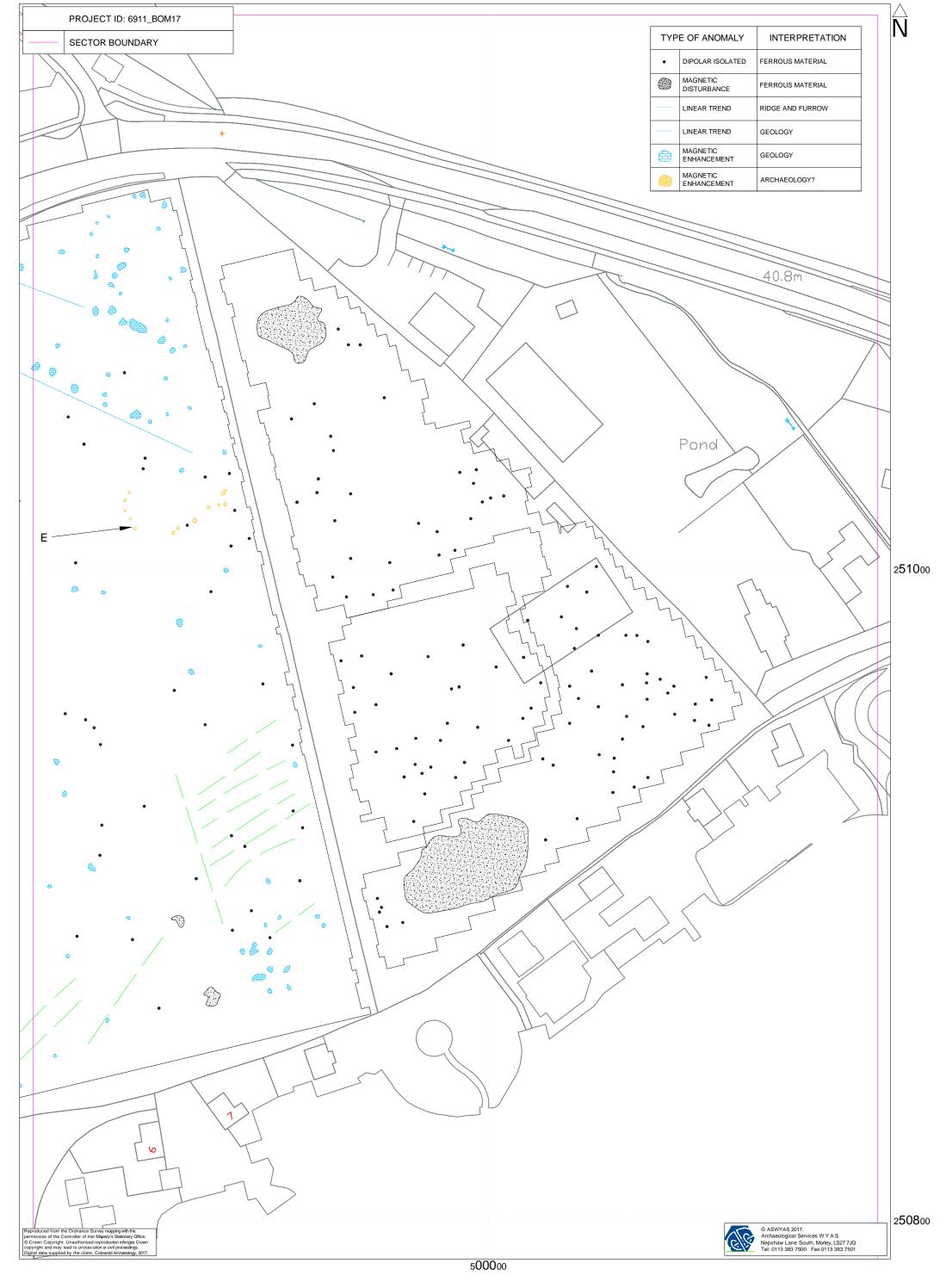




Plate 1. General overview of survey area, facing east.



Plate 3. General overview of survey area, facing northwest.



Plate 2. General overview of survey area, facing east.



Plate 4. General overview of survey area, facing northeast.

Appendix 1: Magnetic survey - technical information

Magnetic Susceptibility and Soil Magnetism

Iron makes up about 6% of the Earth's crust and is mostly present in soils and rocks as minerals such as maghaemite and haemetite. These minerals have a weak, measurable magnetic property termed magnetic susceptibility. Human activities can redistribute these minerals and change (enhance) others into more magnetic forms. Areas of human occupation or settlement can then be identified by measuring the magnetic susceptibility of the topsoil because of the attendant increase (enhancement) in magnetic susceptibility. If the enhanced material subsequently comes to fill features, such as ditches or pits, localised isolated and linear magnetic anomalies can result whose presence can be detected by a magnetometer (fluxgate gradiometer).

In general, it is the contrast between the magnetic susceptibility of deposits filling cut features, such as ditches or pits, and the magnetic susceptibility of topsoils, subsoils and rocks into which these features have been cut, which causes the most recognisable responses. This is primarily because there is a tendency for magnetic ferrous compounds to become concentrated in the topsoil, thereby making it more magnetic than the subsoil or the bedrock. Linear features cut into the subsoil or geology, such as ditches, that have been silted up or have been backfilled with topsoil will therefore usually produce a positive magnetic response relative to the background soil levels. Discrete feature, such as pits, can also be detected. The magnetic susceptibility of a soil can also be enhanced by the application of heat and the fermentation and bacterial effects associated with rubbish decomposition. The area of enhancement is usually quite large, mainly due to the tendency of discard areas to extend beyond the limit of the occupation site itself, and spreading by the plough.

Types of Magnetic Anomaly

In the majority of instances anomalies are termed 'positive'. This means that they have a positive magnetic value relative to the magnetic background on any given site. However some features can manifest themselves as 'negative' anomalies that, conversely, means that the response is negative relative to the mean magnetic background.

Where it is not possible to give a probable cause of an observed anomaly a '?' is appended.

It should be noted that anomalies interpreted as modern in origin might be caused by features that are present in the topsoil or upper layers of the subsoil. Removal of soil to an archaeological or natural layer can therefore remove the feature causing the anomaly.

The types of response mentioned above can be divided into five main categories that are used in the graphical interpretation of the magnetic data:

Isolated dipolar anomalies (iron spikes)

These responses are typically caused by ferrous material either on the surface or in the topsoil. They cause a rapid variation in the magnetic response giving a characteristic 'spiky' trace. Although ferrous archaeological artefacts could produce this type of response, unless there is supporting evidence for an archaeological interpretation, little emphasis is normally given to such anomalies, as modern ferrous objects are common on rural sites, often being present as a consequence of manuring.

Areas of magnetic disturbance

These responses can have several causes often being associated with burnt material, such as slag waste or brick rubble or other strongly magnetised/fired material. Ferrous structures such as pylons, mesh or barbed wire fencing and buried pipes can also cause the same disturbed response. A modern origin is usually assumed unless there is other supporting information.

Linear trend

This is usually a weak or broad linear anomaly of unknown cause or date. These anomalies are often caused by agricultural activity, either ploughing or land drains being a common cause.

Areas of magnetic enhancement/positive isolated anomalies

Areas of enhanced response are characterised by a general increase in the magnetic background over a localised area whilst discrete anomalies are manifest by an increased response on two or three successive traverses. In neither instance is there the intense dipolar response characteristic exhibited by an area of magnetic disturbance or of an 'iron spike' anomaly (see above). These anomalies can be caused by infilled discrete archaeological features such as pits or post-holes or by kilns. They can also be caused by pedological variations or by natural infilled features on certain geologies. Ferrous material in the subsoil can also give a similar response. It can often therefore be very difficult to establish an anthropogenic origin without intrusive investigation or other supporting information.

Linear and curvilinear anomalies

Such anomalies have a variety of origins. They may be caused by agricultural practice (recent ploughing trends, earlier ridge and furrow regimes or land drains), natural geomorphological features such as palaeochannels or by infilled archaeological ditches.

Methodology: Gradiometer Survey

The main method of using the fluxgate gradiometer for commercial evaluations is referred to as *detailed survey* and requires the surveyor to walk at an even pace carrying the instrument within a grid system. A sample trigger automatically takes readings at predetermined points, typically at 0.25m intervals, on traverses 1m apart. These readings are stored in the memory of the instrument and are later dumped to computer for processing and interpretation.

During this survey a Bartington Grad601 magnetic gradiometer was used taking readings on the 0.1nT range, at 0.25m intervals on zig-zag traverses 0.5m apart within 30m by 30m square grids. The instrument was checked for electronic and mechanical drift at a common point and calibrated as necessary. The drift from zero was not logged.

The gradiometer data have been presented in this report in processed greyscale format. The data in the greyscale images have been interpolated and selectively filtered to remove the effects of drift in instrument calibration and other artificial data constructs and to maximise the clarity and interpretability of the archaeological anomalies.

The results and subsequent interpretation of data from geophysical surveys should not be treated as an absolute representation of the underlying archaeological and non-archaeological remains. Confirmation of the presence or absence of archaeological remains can only be achieved by direct investigation of sub-surface deposits.

Appendix 2: Survey location information

An initial survey station was established using a Trimble VRS differential Global Positioning System (Trimble R6 model). The data was geo-referenced using the geo-referenced survey station with a Trimble RTK differential Global Positioning System (Trimble R6 model). The accuracy of this equipment is better than 0.01m. The survey grids were then super-imposed onto a base map provided by the client to produce the displayed block locations. However, it should be noted that Ordnance Survey positional accuracy for digital map data has an error of 0.5m for urban and floodplain areas, 1.0m for rural areas and 2.5m for mountain and moorland areas. This potential error must be considered if co-ordinates are measured off hard copies of the mapping rather than using the digital co-ordinates.

Archaeological Services WYAS cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party.

Appendix 3: Geophysical archive

The geophysical archive comprises:-

- an archive disk containing compressed (WinZip 8) files of the raw data, report text (Microsoft Word 2000), and graphics files (Adobe Illustrator CS6 and AutoCAD 2008) files; and
- a full copy of the report.

At present the archive is held by Archaeological Services WYAS although it is anticipated that it may eventually be lodged with the Archaeology Data Service (ADS). Brief details may also be forwarded for inclusion on the English Heritage Geophysical Survey Database after the contents of the report are deemed to be in the public domain (i.e. available for consultation in the Bedfordshire Historic Environment Record).

Appendix 4: Oasis form

OASIS DATA COLLECTION FORM: England

List of Projects | Manage Projects | Search Projects | New project | Change your details | HER coverage | Change country | Log out

Printable version

OASIS ID: archaeol11-304104

Project details

Project name Land South of Northampton Road, Bromham

Short description of the project

A geophysical (magnetometer) survey, covering approximately 17 hectares, was undertaken on land to the south of Northampton Road, Bromham approximately 6.5km northwest of Bedford city centre, Bedfordshire. This was part of a programme of archaeological works in advance of a proposed development. The magnetic survey has detected anomalies of possible archaeological origin, in the form of double-ditched trackways, possible pits or post-holes and linear trends. Agricultural, geological and ferrous responses have been recorded throughout the site and are not thought to be of archaeological interest. Overall the archaeological potential of the site is

moderate.

Project dates Start: 20-11-2017 End: 24-11-2017

Previous/future

work

No / Not known

Any associated project reference

codes

6911 - Sitecode

Type of project Field evaluation

Monument type NONE None

Significant Finds TRACKWAY Uncertain

Methods & "Geophysical Survey"

techniques

Development type Housing estate

Prompt National Planning Policy Framework - NPPF

Position in the planning process

Not known / Not recorded

Solid geology (other)

Kellawyas sand and clay

Drift geology (other)

clay and loam

Techniques Magnetometry

Project location

Country England

Site location BEDFORDSHIRE BEDFORD BROMHAM Land South of Northampton Road,

Bromham

Study area 17 Hectares

Site coordinates SP 996 509 52.146981539665 -0.54422300515 52 08 49 N 000 32 39 W Point

Height OD / Depth Min: 40m Max: 55m

Project creators

Name of Organisation

Archaeological Services WYAS

Project brief originator

Cotswold Archaeology

Project design

Cotswold Archaeology

originator Project

director/manager

E Brunning

Project supervisor C. Sykes

Project archives

Physical Archive

No

Exists?

Digital Archive

Cotswold Archaeology

recipient

Digital Contents "

"Survey"

Digital Media available

"Images raster / digital photography", "Text", "Geophysics"

Paper Archive

Exists?

No

Project bibliography 1

Grey literature (unpublished document/manuscript)

Publication type

Title Land South of Northampton Road, Bromham

 $Author(s)/Editor(s) \quad Sykes, \ C.$

Date 2017

Issuer or publisher ASWYAS

Place of issue or

Leeds

publication

Description A4 report with A3 figures

Entered by Emma Brunning (emma.brunning@aswyas.com)

Entered on 15 December 2017

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APPENDIX 2: HERITAGE STATUTE POLICY & GUIDANCE

Heritage Statute: Listed buildings

Listed buildings are buildings of 'special architectural or historic interest' and are subject to the provisions of the Planning (Listed Buildings and Conservation Areas) Act 1990 ('the Act'). Under Section 7 of the Act 'no person shall execute or cause to be executed any works for the demolition of a listed building or for its alteration or extension in any manner which would affect its character as a building of special architectural or historic interest, unless the works are authorised.' Such works are authorised under Listed Building Consent. Under Section 66 of the Act 'In considering whether to grant planning permission 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 feature of special architectural or historic interest which it possesses'.

Note on the extent of a Listed building

Under Section 1(5) of the Act, a structure may be deemed part of a Listed building if it is:

- (a) fixed to the building, or
- (b) within the curtilage of the building, which, although not fixed to the building, forms part of the land and has done so since before 1st July 1948

The inclusion of a structure deemed to be within the 'curtilage' of a building thus means that it is subject to the same statutory controls as the principal Listed building. Inclusion within this duty is not, however, an automatic indicator of 'heritage significance' both as defined within the NPPF (2012) and within Conservation Principles (see Section 3 above). In such cases, the establishment of the significance of the structure needs to be assessed both in its own right and in the contribution it makes to the significance and character of the principal Listed building. The practical effect of the inclusion in the listing of ancillary structures is limited by the requirement that Listed Building Consent is only needed for works to the 'Listed building' (to include the building in the list and all the ancillary items) where they affect the special character of the Listed building as a whole.

Guidance is provided by Historic England on '<u>Listed Buildings and Curtilage: A Historic England Advice Note</u>' (Historic England 2016).

Heritage Statute: Scheduled Monuments

Scheduled Monuments are subject to the provisions of the <u>Ancient Monuments and Archaeological Areas Act 1979</u>. The Act sets out the controls of works affecting Scheduled Monuments and other related matters. Contrary to the requirements of the Planning Act 1990 regarding Listed buildings, the 1979 Act does not include provision for the 'setting' of Scheduled Monuments.

National heritage policy: the National Planning Policy Framework

Heritage assets and heritage significance

Heritage assets comprise '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' (the NPPF (2012), Annex 2). Designated heritage assets include Scheduled Monuments and Listed buildings. The NPPF (2012), Annex 2, states that the significance of a heritage asset may be archaeological, architectural, artistic or historic. Historic England's 'Conservation Principles' looks at significance as a series of 'values' which include 'evidential'. 'historical', 'aesthetic' and 'communal'.

The setting of heritage assets

The 'setting' of a heritage asset comprises '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.' Thus it is important to note that 'setting' is not a heritage asset: it may contribute to the value of a heritage asset.

Guidance on assessing the effects of change upon the setting and significance of heritage assets is provided in 'Historic Environment Good Practice Advice in Planning Note 3: The Setting of Heritage Assets', which has been utilised for the present assessment (see below).

Levels of information to support planning applications

<u>Paragraph 128</u> of the <u>National Planning Policy Framework</u> ('the NPPF (2012)) identifies that 'In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance.'

Designated heritage assets

<u>Paragraph 126</u> of the NPPF (2012) notes that local planning authorities 'should recognise that heritage assets are an irreplaceable resource and conserve them in a manner appropriate to their significance.' <u>Paragraph 132</u> notes that '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. The more important the asset, the greater the weight should be.' It goes on to note that 'substantial harm to or loss of a grade II listed building...should be exceptional. Substantial harm to or loss of designated heritage assets of the highest significance, notably scheduled monuments.....should be wholly exceptional.'

<u>Paragraph 134</u> clarifies that '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 securing its optimum viable use.'

Development Plan

POLICY CP23 – HERITAGE. Development will be required to protect and where appropriate enhance: i) the character of conservation areas, scheduled ancient monuments, historic parks and gardens, listed buildings and other important historic or archaeological features; and, ii) the borough's cultural assets, including its landscape, in order to underpin sense of place, cultural identity and promote quality of life.

Good Practice Advice 1-3

Historic England has issued three Good Practice Advice notes ('GPA1-3') which support the NPPF. The GPAs note that they do not constitute a statement of Government policy, nor do they seek to prescribe a single methodology: their purpose is to assist local authorities, planners, heritage consultants, and other stakeholders in the implementation of policy set out in the NPPF. This report has been produced in the context of this advice, particularly 'GPA2 – Managing Significance in Decision-Taking in the Historic Environment' and 'GPA3 – The Setting of Heritage Assets'.

GPA2 - Managing Significance in Decision-Taking in the Historic Environment

GPA2 sets out the requirement for assessing 'heritage significance' as past of the application process. Paragraph 8 notes 'understanding the nature of the significance is important to understanding the need for and best means of conservation.' This includes assessing the extent and level of significance, including the contribution made by its 'setting' (see GPA3 below). GPA2 notes that 'a desk-based assessment will determine, as far as is reasonably possible from existing records, the nature, extent and significance of the historic

environment within a specified area, and the impact of the proposed development on the significance of the historic environment, or will identify the need for further evaluation to do so' (Page 3).

GPA3 – The Setting of Heritage Assets

Step 1 requires heritage assets which may be affected by development to be identified. Historic England notes that for the purposes of Step 1 this will comprise heritage assets where 'the development is capable of affecting the contribution of a heritage asset's setting to its significance or the appreciation of its significance'.

Step 2 of the settings process requires 'assessing whether, how and to what degree these settings make a contribution to the significance of the heritage asset(s)', with regard to its physical surrounds; relationship with other heritage assets; the way it is appreciated; and its associations and patterns of use. Step 3 requires 'assessing the effect of the proposed development on the significance of the asset(s)', with regard to the location and siting of the development; its form and appearance; additional effects; and its permanence.

Step 4 of GPA3 provides commentary on 'maximising enhancement and minimising harm'. It notes (Paragraph 26) that 'Maximum advantage can be secured if any effects on the significance of a heritage asset arising from development liable to affect its setting are considered from the project's inception.' It goes on to note (Paragraph 28) that 'good design may reduce or remove the harm, or provide enhancement'.

Heritage significance

Discussion of heritage significance within this assessment report makes reference to several key documents. With regard to Listed buildings and Conservation Areas it primarily discusses 'architectural and historic interest', which comprises the special interest for which they are designated.

The NPPF provides a definition of 'significance' for heritage policy (Annex 2). This states that heritage significance comprises 'The value of a heritage asset to this and future generations because of its heritage interest. That interest may be <u>archaeological</u>, <u>architectural</u>, <u>artistic</u> or <u>historic'</u>.

Regarding 'levels' of significance the NPPF (2012) provides a distinction between: designated heritage assets of the highest significance; designated heritage assets not of the highest significance; and non-designated heritage assets.

Historic England's 'Conservation Principles' expresses 'heritage significance' as comprising a combination of one or more of: evidential value; historical value; aesthetic value; and communal value.

Effects upon heritage assets

Heritage benefit

The NPPF clarifies that change in the setting of heritage assets may lead to heritage benefit. Paragraph 137 of the NPPF (2012) notes 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 or better reveal the significance of the asset should be treated favourably'.

GPA3 notes that 'good design may reduce or remove the harm, or provide enhancement' (Paragraph 28). Historic England's 'Conservation Principles' states that 'Change to a significant place is inevitable, if only as a result of the passage of time, but can be neutral or beneficial in its effects on heritage values. It is only harmful if (and to the extent that) significance is reduced' (Paragraph 84).

Specific heritage benefits may be presented through activities such as repair or restoration, as set out in Conservation Principles.

Heritage harm to designated heritage assets

The NPPF (2012) does not define what constitutes 'substantial harm'. The High Court of Justice does provide a definition of this level of harm, as set out by Mr Justice Jay in *Bedford Borough Council v SoS for CLG and Nuon UK Ltd*. Paragraph 25 clarifies that, with regard to 'substantial harm': 'Plainly in the context of physical harm, this would apply in the case of demolition or destruction, being a case of total loss. It would also apply to a case of serious damage to the structure of the building. In the context of non-physical or indirect harm, the yardstick was effectively the same. One was looking for an impact which would have such a serious impact on the significance of the asset that its significance was either vitiated altogether or very much reduced'.

Effects upon non-designated heritage assets

The NPPF (2012) paragraph 135 guides 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 affect directly or indirectly non designated heritage

assets, a balanced judgment will be required having regard to the scale of any harm or loss and the significance of the heritage asset'.

APPENDIX 3: DATA CAPTURE GAZETTEER

Figure Ref. No.	Orig. Ref.	Description	Period
Α	MBB20098	Two illegible nummi of an uncertain Emperor.	Romano-British
Α	MBB20099	A nummus of the House of Constantine. Rev: Two soldiers and two standards GLORIA EXERCITVS	Romano-British
Α	MBB20101	A nummus of Gratian, 367-83, Mint of Arles, GLORIA NOVI SAECVLI, 367-75. RIC IX, no. 15	Romano-British
Α	MBB20100	A nummus possibly of Gratian. Rev: Victory facing left SECVRITAS REIPUBLICAE	Romano-British
В	MBB19740	An Iron Age silver unit issued by Tasciovanus. Rev: A winged sphinx TASCIO	Prehistoric
В	MBB19736	A plain Roman finger ring with a widened bezel containing an oval setting for a stone, which is missing.	Romano-British
В	MBB19739	A contemporary copy of a nummus of an uncertain Emperor. Rev: Possibly a standing figure	Romano-British
В	MBB19741	A radiate of an uncertain Emperor. Rev: A standing figure	Romano-British
С	MBB20195	An illegible Roman nummus or radiate copy.	Romano-British
С	MBB20196	A nummus of the House of Valentinian Rev: Victory SECVRITAS REIPVBLICAE	Romano-British
С	MBB20197	A nummus, probably of Gratian. Rev: Victory SECVRITAS REIPVBLICAE	Romano-British
С	MBB20199	A very worn nummus of the House of Constantine Rev: Victory on prow CONSTANTINOPOLIS	Romano-British
С	MBB20200	A very worn nummus of the House of Valentinian Rev: Victory SECVRITAS REIPVBLICAE	Romano-British
С	MBB20201	A nummus of the House of Valentinian Rev: Victory SECVRITAS REIPVBLICAE	Romano-British
С	MBB20202	A nummus of Constantine I	Romano-British
С	MBB20206	Trinovantes / Addedomaros Gold quarter stater 60-20 BC	Romano-British
D	MBB20872	A bifacially knapped fragmentary handaxe of a yellow-brown flint. It is very coarsely knapped, with large and angular removals covering both faces. the flint itself is somewhat freckled and mottled with darker brown spots, in addition to some quite significant iron staining on the ventral face, where cracks and scarring are also clearly visible. It is suggested to be of Lower Palaeolithic date.	Prehistoric
D	MBB20873	A late Neolithic barbed and tanged arrowhead, of a rather irregular shape, and with the ends of both barbs being broken off. It has not been knapped flat due to the natural shape of the flint, and thus appears somewhat lumpy, without the natural elegance of many examples of this kind of artefact. It is of a grey flint, although there are lines of a darker grey, almost black colour in addition to some patinisation markedly on the tang.	Prehistoric
D	MBB21174	A CU Alloy Romano-British Nail Cleaner, discovered by metal detecting	Romano-British
D	MBB21170	A CU Alloy 4th century coin, discovered by metal detecting.	Romano-British

Figure Ref. No.	Orig. Ref.	Description	Period
D	MBB21171	A Silver 3rd century coin, discovered by metal detecting.	Romano-British
1	MBD7303	Line of a possible prehistoric Ridgeway from Cranfield to Bromham.Line of an E-W trackway from Bromham to Cranfield, possibly prehistoric in origin, still in use. A site visit in May 1979 states that the SW part of this route runs along the metalled road to Bourne End, continuing as an overgrown hollow-way between SP 9638 4482 and SP 9652 4500 when it becomes a footpath contiguous with the Parish boundary in places.	Prehistoric
2	MBD58	A Roman road, traced running from Irchester to Kempston (Viatores no 170a). The conjectural line of a Roman road from Irchester to Kempston was identified in 1964AD and traced from the evidence of exposed metalling and roadside aggers, combined with modern road lines and field and parish boundaries (Viatores road no. 170a). Doubt has since been cast on the identification as some of the boundaries were found to be post-medieval in origin, and there is no indication of the road on air photos of Kempston parish.	Romano-British
3	MBB19341	An extremely worn and corroded possible copper-alloy coin: possibly a late 1st-century BC Iron Age unit of uncertain ruler, possibly Trinovantian (c. 30 BC - c. 10 AD; cf. Hobbs 1728ff)	Prehistoric
4	MBB19628	Bronze age (Taunton phase?) copper alloy chisel fragment, 23mm long, 19mm wide and 6mm thick. The object is in fair condition and weighs 10.86 grams. The object consists of the tip of the chisel and is rectangular in form and triangular in section. The tip is quite worn and un-even and the interior has a sub circular void.	Prehistoric
5	MBD18699	Iron Age occupation was seen on the route of a pipeline in the form of an enclosure ditch. In 2000 archaeological investigation were carried out on the route of a water pipeline. Very few archaeological deposits were uncovered and the main activity was limited to an enclosure ditch which had been identified by aerial photography. A number of finds were recovered and the ditch has therefore been dated to the middle Iron Age.	Prehistoric
6	MBD245	A substantial Roman building was first investigated in 1937AD, lying towards the northern end of a ridge of high ground, S of Thistley Green. Field-walking finds have been identified over a wide area, and the cropmarks of rectilinear enclosures were photographed in 1996AD. The site of a Roman building partly examined by the Bedford Modern School Field Club in 1937. The building was found to have stone foundations, with wattle and daub infilling between timber uprights. Roof and floor tiles were found, along with tesserae, indicating the presence of a mosaic or tessellated pavement. Pottery and coins dated from the 3rd to 4th centuries AD, and the pottery included some fine imported wares as well as local coarse wares. It is interpreted as a villa. Roman pottery was also found on the field surface in 1952-1953. Fieldwalking in the area in 1982 revealed a concentration of tile and pot of Romano-British date to the south of the probable villa, but much less to the north, although a small amount of 6th century pottery and a bronze brooch dating to the 1st century AD were found. Air photos taken in 1996 showed rectilinear enclosures in the vicinity of the building, which may be contemporary field systems.	Romano-British
7	MBB21172	A CU Alloy Iron Age Toggle, discovered by metal detecting.	Prehistoric
8	MBB21173	A CU Alloy Romano-British Brooch, 2nd - 3rd century, discovered by metal detecting	Romano-British
9	MBD1500	A scatter of stones observed on the line of a Roman road (HER58).	Romano-British

Figure Ref. No.	Orig. Ref.	Description	Period
10	MBB19338	The upper half of a cast copper-alloy Roman Colchester derivative brooch (possibly Dolphin type) dating to the 1st century AD.The pierced semicircular lug is situated below the wings with a possible second lug above which has abraded through. Nothing of the axis bar or spring mechanism survives. The wings curve shallowly downwards. They are seemingly plain, though corroded and abraded at one of the wing tips. The broken bow has a tall central ridge flanked by less pronounced ridges on either side. It is broadly semicircular in cross-section, having a flat lower surface. It tapers towards the point at which it has been broken. It initially forms an angle of just over ninety degrees to the head before starting to curve round in a shallow arc. The brooch has corroded to a variable mid-green colour. What survives of the bow has been bent to one side as a result of old damage.	Romano-British
11	MBB19494	A nummus of the House of Constantine. Rev: Possibly a soldier leading a child from a hut FEL TEMP REPARATIO	Romano-British
12	MBB19639	Roman silver finger ring fragment, 20mm long and 7mm wide. The object weighs 0.86grams and is in fair condition. The ring consists of a circular raised bezel which is flanked by two sub triangular shoulders which have an incised border running up to the circle. The shape roughly fits Henig type VIII. There is a small circular depression in the centre of the bezel which is surrounded by linear scratches which appear to be damage	Romano-British
13	MBD5156	Suggested route of former agger.	Romano-British
14	MBD16506	Two rectilinear enclosures adjacent to linear feature of ancient parish boundary or trackway.2 rectilinear enclosures adjacent to a linear cropmark of an ancient parish boundary or trackway were identified by an aerial photography survey of the area, before the construction of the Stagsden Golf Course.	Romano-British
15	MBD16507	Possible cropmarks of group of enclosures. W of the Bromham Bypass are the possible cropmarks of a group of enclosures, the cropmarks however are very indistinct.	Prehistoric
16	MBD3120	Extensive area of large irregular enclosures, located on ridge between headwaters of former watercourses. An extensive group of cropmarks, indicating several large irregular enclosures thought to be prehistoric. The enclosures are located on a ridge between the headwaters of former watercourses.	Prehistoric
17	MBD3125	Circular enclosure with linear features nearby. Roman pottery found in area during field drainage. Cropmarks indicating a ring ditch with probable entrance, and two linear features running up to it but not joining it. Roman pottery, apparently dating from the 1st-2nd century AD, has been found nearby. Thought to be a late Iron Age or early Roman site.	Romano-British
18	MBB19493	A penny probably of Henry IV, York mint.	Medieval
19	MBB19504	A broken fragment of a medieval cast copper alloy composite buckle frame with a forked spacer.	Medieval
20	MBB20207	Medieval (AD 1200-1400) cast copper alloy single loop D shaped buckle with narrowed and offset strap bar.	Medieval

Figure Ref. No.	Orig. Ref.	Description	Period
21	MBB20350	A Medieval pendant of rectangular shape with an open centre. The suspension loop is twisted and broken, but remains in place. The frame of the pendant is inscribed with the words DIEU PLERRA QANT MEUIZ SERRA The meaning of this French inscription is not entirely clear. However it resembles an inscription found on a ring in the British Museum Collection (Dalton 981), which reads QUANT DIEU PLERA UNEY NOUS SERA (When God pleases we will be one) This suggests that the pendant's inscription may also carry an amatory meaning. The romantic significance of the phrase seems to be supported by the tendrils of ivy that are engraved between the letters. Ivy had symbolic associations with steadfastness and love in the Medieval period. The pendant was originally enamelled, though no enamel appears to survive. The hollow centre does not seem to have been made to accommodate a stone or other setting. The pendant is gold and dates from the fifteenth century. Consequently, in terms of age and as the object contains a minimum of 10% precious metal it qualifies as Treasure under the stipulations of the Treasure Act 1996. J P Robinson Curator of Medieval Collections 15th December 2009 DIEU PLERRA QANT MEUIZ SERRA / QUANT DIEU PLERA UNEY NOUS SERA	Medieval
22	MBB21532	Edward I silver farthing.	Medieval
23	MBB20885	Medieval copper alloy oval buckle frame	Medieval
24	MBB21268	A hammered silver coin of medieval date. Voided long cross penny of Henry III, Class 5b. Minted by Nicole at Canterbury between 1250 and circa 1256 AD. The coin is slightly corroded and bent. It measures approximately 13mm diameter. Thickness and weight were not recorded.	Medieval
25	MBB21531	A Copper Alloy Strap Fitting discovered by metal detecting	Medieval
26	MBB20882	A complete cast copper-alloy hooked tag dating to the post-medieval period. The item is flat backed and essentially has three sections to it - a sub-rectangular loop adjoining an openwork decorative roundel which in turn adjoins a narrow tapering hook which is broken. The rectangular lug is plain, the central roundel has an openwork design around it that resembles a stylised flower. The hook has two moulded bands around its widest section. Such clothing or dress hooks probably had a variety of uses and suggestions have ranged from their use in pairs, with a chain between, to secure a cloak or collar, to use as single items in order to attach bodice garments to belts. Ref: G. Egan, 'Material Culture in London in an Age of Transition', p.42ff.	Post-Medieval
27	MBB19503	A nummus of the House of Constantine. Rev: Possibly Fallen horseman.	Romano-British
28	MBB19506	A cast copper-alloy double-looped buckle of post-medieval date, incomplete in so far as it is missing its pin. It is formed of a pair of oval loops with pointed outer edges. They are have a flat uppermost surface, then are externally bevelled steeply. This bevelling is echoed on the lower surface, whose base is flat. The pin bar is narrowed and of a circular cross-section; at both ends is a small lobed protrusion. There is no evidence of a incised pin rest on either of the outer edges. Small traces of orange corrosion product around the pin bar suggest that the pin would have been made of iron, as with similar buckles recorded on this database. The metal has a dark-grey/green colour with areas of lighter corrosion product. One of the buckle's loops has been bent upwards at an angle of around thirty degrees, either as a result of damage or use.	Post-Medieval
29	MBB20096	A post medieval decorative triangular strap mount with a rounded projection and two bent spikes.	Post-Medieval

Figure Ref. No.	Orig. Ref.	Description	Period
30	MBD324	Worked flints of both Neolithic and Palaeolithic date have been found in the gravels at Bromham. A number of flints of Palaeolithic and Neolithic date have been found at Bromham, in areas of gravel extraction. The sites have not been precisely identified. The objects include several handaxes, retouched flakes and an item resembling a crude pestle, which has been interpreted as a pick. Exact findspots unknown.	Prehistoric
31	MBD14654	A bronze brooch found when field-walking on the line of the Bromham Bypass. A 1st century bronze brooch found when field-walking on the line of the Bromham Bypass. The brooch is a bow type with the bow in the form of a rod of approximately oval section, tapering towards the catch plate, which would originally have been a triangular shape. The edges of 2 square or rectangular perforations can be seen in the catch-plate. It is decorated on both sides.	Prehistoric
32	MBD1365	The site of a village pump, still there in 1899 but demolished by 1976.	Post-Medieval
33	MBD1355	A gravel quarry visible on aerial photographs in the 1940s, now the site of a housing estate. The site of a gravel quarry, visible as an earthwork on aerial photographs. Now under a housing estate. The area is on clay but the gravel may have come from a brook just south of the site.	Medieval
34	MBD18217	Reported site of a gravel pit. The area is now under housing.	Medieval
35	MBD7305	Site of former post-medieval Sheepyard shown on map of 1828AD	Medieval
36	MBB21852	Medieval silver mount/ring. Bromham, Bedfordshire. Silver band (possibly flattened ring with moulded lettering: R (flowerhead) ICAPAR (flowerhead). 27.5m long, 6.6mm wide and 0.9mm thick. 1.13g weight. No accurate location given.	Medieval
37	MBD11519	Earthwork remains of Post Medieval road, located in Medieval Woodland. Earthwork visible just inside Hanger Wood: Wide central ditch with banks on each side - apparently a roadway, followed (roughly) by modern footpath though overgrown. Hanger wood itself = ancient woodland former coppicing, dogs mercury, bluebells, now v. neglected (used for shooting). At South West end of wood, double bank + ditch gives way to clear roadway, c.5m wide between ditches (see HER 7303 for Ridgeway; HER 11520 for pre-enclosure road from Box End, Kempston to Stagsden)	Post-Medieval
38	MBD11516	Former turnpike road of 19th century date.	Post-Medieval
39	MBD7304	Trackway shown on map of 1960 starting at Bromham Grange to Olney. Possibly medieval in origin. Trackway shown on map of 1960AD starting at Bromham Grange to Olney. A site visit in 1976 indicated modification W. of Up End, ploughed away between Bury End and Bury End Green. Possibly medieval in origin.	Medieval
40	MBD3537	Fishpond N of Wick End. A fishpond created by damming a stream. A fishpond, slightly above the course of a stream, created with a small bank acting as a dam.	Medieval
41	MBD3553	Bury End Medieval settlement site, associated with a moated site. The settlement earthworks and areas of ridge and furrow are grouped around Bury End Farmhouse (HER4998), the former site of Burdelys Manor, known to have been in existence by 1346 when the tenant was John le White, whose name was applied to White's Wood, on the eastern edge of the settlement area. As well as ridge and furrow, earthwork remains of a hollow way and a group of fishponds have been recorded. Traces of building remains have been found to the west of the settlement.Bury End	Medieval
42	MBD17018	The core of the medieval settlement of Bromham.	Medieval

Figure Ref. No.	Orig. Ref.	Description	Period
43	MBD13202	Bowels Wood is an ancient woodland of unknown date. It also contains the substantial earthworks of a holloway and possibly a woodbank.	Medieval
44	MBD1777	Several areas of ridge and furrow recorded from aerial photographs, now mostly ploughed out.	Medieval
45	MBD3385	Moat at Buelles or Bowels Manor is listed in the Domesday Survey, and has been identified with a moated area recorded in a field known as Bowles Close, recorded in 1924. The moat has since been completely levelled., Bowells Manor. The site of a moated enclosure identified with Buelles or Bowels Manor, listed in the Domesday Survey.	medieval
46	MBD2621	An earthwork site interpreted as the remains of a mill. VCH suggests that Bromham had two mills in 1700, of which this could be one (the other being HER1029). The recorded earthworks appear to be the remains of a mill pond, but no definite buildings are identifiable.	Post-Medieval
47	MBD2782	A crescent-shaped cropmark indicating a possile medieval or post-medieval quarrying site; the Kempston Enclosure map gives the name of this field as Stone Hill Close.	Medieval to Post- medieval
48	MBD7265	Isolated location of Bromham Church & Bromham Hall raises strong possibility of Medieval settlement in area. (1998 evaluation immediately West of churchyard was negative)	Medieval
49	MBD7266	Hanger Wood. Area of ancient and modified woodland. "The strip of land in the north-east of Stagsden parish, and south-east of the A422, has a history which is typical of this part of Bedfordshire. It has been strongly influenced by the geology and topography of the area, particularly by the southwest/ north-east boulder clay ridge along which the parish boundary runs. The original natural vegetation was woodland, but this was extensively cleared during Iron Age and Roman times. Forexample, a Roman farmstead has been identified in Kempston parish to the east, on the hilltop above Moor End. After theRoman period, with the arrival of the Anglo-Saxons 1500 years ago, there was a serious population decline and therefore acontraction of the land under cultivation, and much woodland regenereated. This land was organised on the common fieldsystem, which survived into the 19th century. As the population increased again, and demand for land grew, woodland wascleared further and further up the ridge, leaving a pattern of small fields, several of which still preserved belts of woodlandaround their boundaries. Hanger Wood ('hanger' means a wood on a hill) provided timber and underwood for the village during the Middle Ages. Its antiquity can be seen in the sinuous boundaries, especially at the south-western end, and in the rich composition of species. Its south-east boundary is of particular historical interest, as it lies along the ridge-top and parish boundary, along the line ofan ancient, possibly even pre-historic ridgeway. The banks and ditches of this boundary and trackway still survive. Clearance of the woodland continued into quite recent times. On a map of 1838, a group of small fields is shown in what isnow the north-eastern end of the wood. These retain the Hanger" name, and had probably not long been cleared. It isappropriate that they are now under woodland again. Since the parish was enclosed in 1838, widespread re-organisation of the field pattern has taken place. However, some field boundaries still survive	Post-Medieval
50	MBD3384	Medieval earthworks at Bromham Grange. Earthworks associated with stream, probably derived from medieval water management and milling. Substantial earthworks observed on the north side of the present farmhouse. The earthworks are thought to represent the damming of the adjoining stream to create a fishpond and represent the location of a medieval water mill.	Medieval

Figure Ref. No.	Orig. Ref.	Description	Period
51	MBD17019	The medieval settlement of Bridge End is located next to Bromham Bridge and to the south of Bromham Village. Excavations at Bromham Mill have uncovered evidence of the centre of the medieval settlement of Bridge End. The deposits uncovered included a wall footing and associated tumble, the possible corner of a brick wall and an underlying limestone surface, along with other occupation layers.	Medieval
52	MBD2773	A group of earthworks recorded to the north of Bromham Mill, thought to be mainly post medieval in date. A group of earthworks recorded to the north of Bromham Mill, and thought to relate to the mill site. The earliest of the earthworks is a sunken path, leading north towards the former site of a footbridge which is shown on the Ordnance Survey First Edition. The path is thought to post-date the enclosure of the park in 1733. The other remaining earthworks are thought to relate to 20th century redevelopment on the site.	Post-Medieval
53	MBD13201	Molliver's Wood is an ancient woodland of unknown date in the parish of Bromham.	Medieval
54	MBB21743	Occupation features including enclosure ditches possible representing domestic plot boundaries, a larger boundary ditch, possible droveways, pits, and a possible metal working furnace of early medieval date were investigated by trial trench evaluation and open area investigation. A significant quantity of earlier residual Saxo-Norman pottery was also recovered. The results of the investigations have made a modest contribution to understanding of the evolution of a small part of Bromham in the late Saxon to early medieval periods. A number of boundaries and land divisions have been identified; however, their primary function within the development of the settlement remains uncertain. The recovered artefacts have shed light on the types of ceramics used in the village; have indicated that iron was processed within the community; and have demonstrated that Bromham was integrated in a wider trading network. The small size of the investigation area, in particular, has hampered interpretation of the remains. For example, it has not been possible to demonstrate conclusively that the remains are associated with domestic plot boundaries or agricultural field boundaries. However, the work has clearly indicated that this part of the village has considerable potential to preserve significant archaeological remains that could potentially contribute to understanding of its origins and development. Albion Archaeology: Assessment of Potential and Updated Project Design (Unpublished document). SBB11667.	Saxon to Medieval
55	MBD3071	The site of a quarry and lime kiln shown on the 1880s and 1901 Ordnance Surveys, and on early 19th century maps. Nowmostly under housing. The site of a lime kiln and extensive quarrying. Quarrying is indicated on a map of 1813AD, and implied by a field name of Stone Hill Close on the Kempston Enclosure Map of 1804. The lime kiln is shown on the Ordnance Survey First and Second Editions. Much of the area is now under housing, but quarrying was still visible to the south west of the area in 1976. Thequarrying may have destroyed the kiln site.	Medieval to Post- Medieval
56	MBB20210	Silver Roman coin. The coin is a clipped siliqua of the emperor Julian (355 - 363 AD).	Romano-British
57	MBD808	An area of metalling said to have been found during road widening. An area of metalling said to have been found during road widening, and possibly related to HER58, the line of a Roman road between Irchester and Kempston.	Romano-British

Figure Ref. No.	Orig. Ref.	Description	Period
Α	MBD716	Grade II Listed toll house built in the early 19th century on the Bedford to Sherington turnpike.	Post-Medieval
В	MBD10168	Grade II Listed 1 Thistley Lane, thatched cottage.	Post-Medieval
С	MBD1559	Grade II Listed Berry Farmhouse. Late 17th or early 18th century farmhouse.	Post-Medieval
D	MBD4998	Grade II Listed Burdelys, Manor, Bury End. 17th century grade II listed farmhouse building, possibly on the site of a former Manor House.	Medieval to Post- Medieval
Е	MBD1556	Grade II Listed 8 Stagsden Road, The Old Smithy, 17th or 18th century thatched cottage with former blacksmith's workshop attached.	Post-Medieval
F	MBD10156	Grade II Listed Barn at bromham Mill. 17th century storage barn.	Post-Medieval
G	MBD1555	Grade II Listed 36-40 Village Road. 17th or 18th century house, thatched.	Post-Medieval
Н	MBD1554	Grade II Listed Blyth Cottage & Lattice & thatch 45, 47 7 49 Village Road. Cottages and attached barn, 16th or 17th century with 19th century extensions.	Post-Medieval
I	MBD1553	Grade II Listed West Lodge to Bomham Park, 46 Village Road, now Greenways. Early 19th century cottage built as gate lodge to Bromham Hall.	Post-Medieval
J	MBD7168	Grade II Listed Bromham County Primary School. School and school house dated 1861.	Post-Medieval
K	MBD10161	Grade II Listed 62, 64 & 66 Village Road. 17th century cottages.	Post-Medieval
L	MBD10164	Grade II Listed Kerry House, 15 the Green. 19th century estate style house.	Post-Medieval
М	MBD1552	Grade II Listed Greenwood Cottage, 14 the Green. 17th century thatched cottage, with alterations.	Post-Medieval



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