



**Land at Mounton Road,  
Chepstow**

**Archaeological  
Assessment**

Prepared by:  
**The Environmental Dimension  
Partnership Ltd**

On behalf of:  
**Barwood Development  
Securities Ltd**

October 2025

Report Reference  
**edp6238\_r007e**

## Document Control

### DOCUMENT INFORMATION

<b>Client</b>	Barwood Development Securities Ltd
<b>Report Title</b>	Archaeological Assessment
<b>Document Reference</b>	edp6238_r007e

### VERSION INFORMATION

	<b>Author</b>	<b>Formatted</b>	<b>Peer Review</b>	<b>Proofed by/Date</b>
007_ <b>DRAFT</b>	MBa	MWI	ACr	-
007a	MBa	-	-	GPa 300925
007b	MBa	-	-	GPa 011025
007c	MBa	-	-	GPa 081025
007d	MBa	-	-	MWI 231025
007e	MBa	-	-	FMi 311025

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## Section 1 Introduction

- 1.1 This Archaeological Assessment has been prepared by The Environmental Dimension Partnership Ltd (EDP), for Barwood Development Securities Ltd (hereafter referred to as 'the Client'), to accompany the preparation, submission and positive determination of an outline planning application for a residential-led development (hereafter referred to as the 'Proposed Development') on Land at Mounton Road, Chepstow (hereafter referred to as 'the Site').
- 1.2 The aim of this assessment is to consider the available historical and archaeological resources for the Site, and to establish, as far as possible, the nature and significance of any known or potential archaeological features, deposits or remains within the Site, as well as historic buildings. This is undertaken in accordance with Welsh Government guidance set out in Planning Policy Wales (PPW 12) (Welsh Government, 2025a), Technical Advice Note 24 (TAN 24) (Welsh Government, 2017) and relevant local planning policy for the conservation and management of the historic environment. Once established, the nature and magnitude of any impacts on them resulting from the implementation of the Proposed Development are determined.
- 1.3 The report employs Welsh Government guidance in PPW 12 and TAN 24, as well as best practice guidance from Cadw, which includes Cadw 2017's *Heritage Impact Assessment in Wales* (Cadw, 2017).
- 1.4 In accordance with best practice guidance, desktop sources have been augmented through a site walkover undertaken in July 2024 (**Appendix EDP 1**), as well as consultation of the results of a geophysical survey that was previously undertaken for the Site by Archaeological Services WYAS (ASWYAS) in April 2013 (Webb, 2013) (**Appendix EDP 2**).
- 1.5 A previous Archaeological Assessment was undertaken by EDP in 2013 for the land contained within the Site (**edp1518\_09b**), to support a previous planning application for the Site (Planning Application Reference: DC/2013/00571). This Archaeology Assessment supersedes the 2013 report, providing an updated baseline and assessment to accompany a new planning application for the Site.

### SITE DESCRIPTION

- 1.6 The Site comprises a sub-triangular area of land located on the western edge of the town of Chepstow, where it is centred on National Grid Reference (NGR) ST 524 932.
- 1.7 It is positioned immediately west of the A466 main road, which forms its eastern boundary from the A48 roundabout northwards. The Site's western boundary mainly follows the minor road called St. Lawrence Lane, aside from in the far north where it adopts a field boundary separating it from neighbouring residential dwellings. The southern boundary of the Site is closed by the A48 running east-west. This arrangement is illustrated on **Plan EDP 1**.



- 1.8 The northern boundary of the Site follows the east-west course of Mounon Road for a short length in the north-east, before adopting the property boundaries that separate the adjacent dwellings from the agricultural farmland that makes up the Site area.
- 1.9 The land within the Site comprises a series of agricultural fields grazed by sheep and sub-divided by a mixture of hedgerows and estate rail fences. The eastern boundary is open on to the western verge of the A466 and is separated from it by a timber fence for much of its length but with a stone wall towards the north-east corner.
- 1.10 The Site's western boundary follows the course of St. Lawrence Lane and for the majority of its length this is characterised by a relatively mature woodland plantation.

### **Topography**

- 1.11 The highest point within the Site is in the north-east corner, at the junction of Mounon Road and the A466, where it reaches a height of 96 metres above Ordnance Datum (aOD). The land falls relatively gently from there to both the west and the south; where it reaches lows of circa 88 metres and c.77 metres aOD in each case.
- 1.12 The land continues to fall steadily (and relatively gently) beyond the southern boundary and towards the Gwent Levels at Mathern, situated on the south side of the M48 motorway, where the parish church straddles the 15-metre contour.
- 1.13 In contrast, the land falls steeply to the west, beyond St. Lawrence Lane, across agricultural land and into a steep and well wooded valley running north-south at the isolated hamlet of Mounon. It is positioned at a height of c.20 metres aOD.
- 1.14 The land east of the Site (east of the A466) is level for a distance of circa 350-400 metres, but then falls steeply into the Wye Valley, occupied by the medieval settlement of Chepstow. The uppermost slopes of the valley are characterised by a mix of 19<sup>th</sup> century 'villa-style' properties and mid/late 20<sup>th</sup> century residential housing estates which clearly reflect and result from the outwards expansion of the historic market town.
- 1.15 The land continues to rise, albeit gently, to the north of the Site, and to the north of Mounon Road, where the ridge is occupied by an expanse of late 20<sup>th</sup> century residential dwellings that stretch west from the A466 to dominate the slopes overlooking the hamlet of Mounon. The modern red brick dwellings screen out views northwards away from the Site and towards the Chepstow Racecourse in particular.

### **Geology**

- 1.16 The British Geological Survey (BGS) records the Site's underlying solid geology as being formed of dolostone of the Black Rock Limestone Subgroup (BGS 2025). No superficial geology is recorded.

## **PROPOSED DEVELOPMENT**

- 1.17 Proposals for development of the land at the Site comprise the submission of the following to the Monmouthshire County Council (MCC):

*“Outline planning application, with all matters reserved except access for the development of up to 146 dwellings together with a hotel, residential care home, mobility hub, highway access, provision of green infrastructure, open space, on site play provision, drainage attenuation and infrastructure works.”*

## **CONSULTATION**

- 1.18 Consultation with Heneb was undertaken in June 2024 to determine the need for and scope of any pre- or post-determination archaeological fieldwork required for the Site in relation to the approval and implementation of the Proposed Development.
- 1.19 An email to Heneb (dated 03 June 2024) outlined the Site’s previously established baseline in EDP’s previous Archaeological Assessment from 2013 and the results of the April 2013 ASWYAS geophysical survey of the Site.
- 1.20 Heneb responded on 05 June 2024 and confirmed their position and recommendation as per the previous outline planning application for the Site; i.e. no pre-determination fieldwork is required and that any further archaeological work will be secured by an outline planning condition imposed on the grant of planning permission (see **Appendix EDP 3**).

## Section 2

### Legislation and Planning Guidance

- 2.1 This section sets out relevant legislation and planning policy, governing the conservation and management of the historic environment.

#### LEGISLATION AND CASE LAW

- 2.2 The *Historic Environment (Wales) Act 2023* came into force on 4 November 2024, along with the suite of regulations which are necessary to support it and now sets out the primary legislation for the historic environment across Wales.

#### Archaeology

- 2.3 The *Historic Environment (Wales) Act 2023* (Part 2) addresses the designation and management of ‘monuments of special historic interest’, stating that the Welsh Ministers must maintain a schedule of monuments (and archaeological remains) which are of national importance (Scheduled Monuments).
- 2.4 The designation of archaeological and historic sites as Scheduled Monuments applies only to those that are deemed to be of national importance and is generally adopted only if it represents the best means of protection.
- 2.5 The 2023 Act does not address the concept of ‘setting’, just their physical remains, and, therefore, for Scheduled Monuments the protection of ‘setting’ is a matter of policy in the same way it is for a conservation area.
- 2.6 In Wales, the written consent of the Welsh Minister is required for development that would impact upon a Scheduled Monument, and applications for Scheduled Monument Consent are submitted to Cadw, the Welsh Government’s Historic Environment Service.

#### PLANNING POLICY

##### National Planning Policy

- 2.7 The Welsh Government published *Future Wales: The National Plan 2040* on 24 February 2021 (WG, 2021), which highlights in the foreword from the Minister for Housing and Local Government that it forms a “*framework for planning the change and development our country will need over the next two decades*”.
- 2.8 In terms of the Welsh Government’s objectives, the sixth ‘Future Wales Outcomes’ on page 55 states that:

*“Development plans will have a forward thinking, positive attitude towards enabling economic development, investment and innovation. Increased prosperity and productivity will be pursued across all parts of Wales, building on current activity and promoting a culture of innovation, social partnership, entrepreneurialism and skills-development in*

*sustainable industries and sectors. The culture, heritage and environment of Wales will play a positive, modern role in the economy by attracting the interest and expenditure of tourists and providing a distinctive and trusted brand for Welsh businesses.”*

2.9 National planning guidance, concerning the treatment of the historic environment across Wales, is detailed in Section 6.1 of Chapter 6 Distinctive and Natural Places of Planning Policy Wales Edition 12, which was published on 07 February 2024 (PPW 12).

2.10 At paragraph 6.1.2, it identifies the historic environment as comprising individual historic features, such as archaeological sites, historic buildings and historic parks, gardens, townscapes and landscapes, collectively known as “*historic assets*”.

2.11 At paragraph 6.1.6, the Welsh Government’s specific objectives for the historic environment are outlined. Of these, the following are of relevance to the current assessment:

- Conserve archaeological remains, both for their own sake and for their role in education, leisure and the economy.

2.12 At paragraph 6.1.7, it is observed that:

*“It is important that the planning system looks to protect, conserve and enhance the significance of historic assets. This will include consideration of the setting of an historic asset which might extend beyond its curtilage. Any change that impacts on an historic asset or its setting should be managed in a sensitive and sustainable way.”*

2.13 As such, with regard to decision making, it is stated (at paragraph 6.1.9) that: “*Any decisions made through the planning system must fully consider the impact on the historic environment and on the significance and heritage values of individual historic assets and their contribution to the character of place*”.

### **Archaeological Remains**

2.14 Moving on to the treatment of archaeological remains through the planning process, PPW 12 states at paragraph 6.1.23 that: “*The conservation of archaeological remains and their settings is a material consideration in determining planning applications, whether those remains are a scheduled monument or not*”.

2.15 It then adds at paragraph 6.1.24 that:

*“Where nationally important archaeological remains are likely to be affected by proposed development, there should be a presumption in favour of their physical protection in situ. It will only be in exceptional circumstances that planning permission will be granted if development would result in a direct adverse impact on a scheduled monument (or an archaeological site shown to be of national importance).”*

2.16 At paragraph 6.1.25 PPW Edition 12 recommends that: “*In cases involving less significant archaeological remains, planning authorities will need to weigh the relative importance of the archaeological remains and their settings against other factors, including the need for the proposed development*”.

2.17 Paragraph 6.1.26 recommends that:

*“Where archaeological remains are known to exist or there is a potential for them to survive, an application should be accompanied by sufficient information, through desk-based assessment and/or field evaluation, to allow a full understanding of the impact of the proposal on the significance of the remains. The needs of archaeology and development may be reconciled, and potential conflict very much reduced, through early discussion and assessment.”*

2.18 In situations where planning approval would result in archaeological remains being destroyed by development, paragraph 6.1.27 of PPW 12 states the following regarding the relevant planning authority’s obligations:

*“If the planning authority is minded to approve an application and where archaeological remains are affected by proposals that alter or destroy them, the planning authority must be satisfied that the developer has secured appropriate and satisfactory provision for their recording and investigation, followed by the analysis and publication of the results and the deposition of the resulting archive in an approved repository. On occasions, unforeseen archaeological remains may still be discovered during the course of a development. A written scheme of investigation should consider how to react to such circumstances or it can be covered through an appropriate condition for a watching brief.*

*Where remains discovered are deemed to be of national importance, the Welsh Ministers have the power to schedule the site and in such circumstances scheduled monument consent must be required before works can continue.”*

### **Local Planning Policy**

2.19 MCC’s current and adopted planning policy is set out in the Local Development Plan (LDP) 2011-2021. It was adopted in February 2014.

2.20 The historic environment is discussed in pages 167 to 172 and features four development management policies, which are outlined below:

- Policy HE1: Development in Conservation Areas;
- Policy HE2: Alterations to Unlisted Buildings in Conservation Areas;
- Policy HE3: Design of Shop Fronts in Conservation Areas; and
- Policy HE4: Roman Town of Caerwent.

2.21 None of the specified local planning policies are of relevance to the Site and/or its Proposed Development and as such the identification and assessment of archaeological impacts will be undertaken in line with national guidance set out in PPW and TAN 24.

### **Replacement Local Development Plan 2018-2033**

2.22 MCC are currently in the process of preparing a Replacement Local Development Plan (RLDP) to cover the period between 2018-2033 (MCC, 2025). The *Monmouthshire*

*Replacement Local Development Plan 2018-2033 Deposit Plan* was published by MCC in October 2025 following a period of consultation.

- 2.23 Historic environment considerations are illustrated under 'Objective 16 - Culture, Heritage and Welsh Language', which states:

*"To protect and enhance the built environment, culture and heritage of Monmouthshire for the future while maximising benefits for the economy, tourism and social well-being, including supporting and safeguarding the Welsh Language."*

- 2.24 Historic Environment policies are also discussed in Section 8.5 of the Deposit Plan, which includes the following emerging policies:

- Policy HE1: Conservation Areas;
- Policy HE2: Design of Shop Fronts in Conservation Areas; and
- Policy HE3: Policy HE3 – Roman Town of Caerwent.

- 2.25 None of the specified emerging policies are of relevance to the Site and/or its Proposed Development.

- 2.26 More pertinently, the Site is a draft allocation for '*residential led mixed used development*' under Policy HA3 and with the illustrative masterplan included on page 129. The proposed policy wording set out on pages 127-128, detail a number of place-making principles specific to the Site and in addition to the general place-making principles which are set out in Policy S8 of the RLDP. There are no site-specific place-making principles in Policy HA3 (on pages 127-128) which bear reference to the Site's archaeology context.

- 2.27 The national and local policies highlighted above have all been appropriately considered in the compilation of the sections that follow.

## Section 3 Methodology

### ASSESSMENT METHODOLOGY

- 3.1 This assessment has been undertaken in accordance with the *Standard and Guidance for Historic Environment Desk-Based Assessment* issued by the Chartered Institute for Archaeologists (CIfA, 2020), and relevant Cadw guidance documents, where applicable. The guidelines provide a national standard for the completion of desk-based assessments.
- 3.2 The assessment principally involved consultation of readily available archaeological and historical information from documentary and cartographic sources. The major repositories of relevant information comprised:
- Cadw's national database for designated historic assets – for recorded designated historic assets within the Site and surrounding area;
  - Glamorgan Gwent Archaeology (Heneb) Historic Environment Record (HER) June 2024 commercial dataset (Enquiry Number: 9003) – for recorded non-designated historic assets as well as archaeological sites, monuments, findspots and previous archaeological events (investigation/mitigation) within the Site and surrounding area;
  - The National Monuments Record of Wales (NMRW) – for recorded non-designated historic assets as well as any other archaeological sites, monuments and/or findspots;
  - Historic maps and satellite imagery held by National Library of Scotland, EnviroCheck and Google Earth – for the establishment of land use history within the Site and surrounding area;
  - Maps and documents held by Gwent Archives – for the establishment of land use history within the Site and surrounding area;
  - Aerial photographs which are held by the Central Register of Aerial Photography for Wales (CRAPW) at Cardiff – for identification of previously unrecorded earthworks, cropmarks and/or archaeological features within the Site; and
  - LiDAR data held by Department for Environment, Food and Rural Affairs (DEFRA) – for identification of previously unrecorded earthworks or archaeological features within the Site.
- 3.3 The information gathered from the repositories and sources identified above was checked and augmented through the completion of a site walkover undertaken in July 2024. This walkover considered the nature and significance of known and/or potential archaeological assets within the Site, identified visible historic features and assessed possible factors that may affect the survival or condition of known or potential archaeological assets.
- 3.4 This report provides a synthesis of relevant information for the Site derived from a search area extending up to 1km from its boundary, hereafter known as the 'Study Area', to allow

for additional contextual information on its archaeological interest or potential to be gathered and then understood.

- 3.5 Throughout the report, designated historic assets are referenced by their Cadw reference number, while non-designated historic assets and previous archaeological events are referenced by their HER Preferred Reference Number.
- 3.6 The distribution of designated historic assets is presented in **Plan EDP 1**. The distribution of non-designated historic assets is presented in **Plan EDP 2**. The distribution of previous archaeological events is presented in **Plan EDP 3**.

### **Assessment of Significance**

- 3.7 The assessment of significance of known/recorded archaeological remains within the Site makes reference (where relevant) to the four 'heritage values' identified by Cadw within its *Conservation Principles* document (Cadw, 2011). These are:
- The asset's evidential value, which is defined as those elements of the historic asset that can provide evidence about past human activity, including its physical remains or historic fabric;
  - The asset's historical value, which is defined as those elements of an asset which might illustrate a particular aspect of past life or might be associated with a notable family, person, event or movement;
  - The asset's aesthetic value, which is defined as deriving from the way in which people draw sensory and intellectual stimulation from the historic asset; and
  - The asset's communal value, which is defined as deriving from the meanings that a historic asset has for the people who relate to it, or for whom it figures in their collective experience or memory.

### **LIDAR Data**

- 3.8 Airborne LiDAR data (light detection and ranging) was utilised as a source of primary data for the current assessment. LiDAR scanning records height data and has applications in the recording of archaeological earthworks.
- 3.9 A Digital Terrain Model (DTM) for the Site was acquired from the Welsh Government LiDAR 2020-2022 tile Index (Welsh Government, 2025b). Resolution of the data is at one data point for each 1m<sup>2</sup>, a high resolution which, for archaeological prospection, is appropriate for the identification of archaeological earthworks.
- 3.10 The DTM was processed using the Relief Visualisation Toolbox (ver. 2.2 1. ZRC SAZU, 2019). This software allows for a range of visualisation techniques to be applied to the data. Different techniques have varying degrees of successful application, depending on the nature of the environment where the data was collected. Multi-Direction Hill-Shade produced the best quality and most useful imagery for the Archaeological Assessment.



### **Multiple Direction Hill-Shade**

- 3.11 Relief shading or hill-shading is the most commonly used LiDAR visualisation technique. It illuminates the DTM from a specific angle, imitating the sun and as such produces the most 'natural' and intuitively readable imagery. However, it is limited in that areas facing directly towards or away from the illumination source are saturated (homogeneously bright or dark respectively) and little detail can be perceived plus, features that lie parallel to the light source can be imperceptible.
- 3.12 This effect can be overcome by combining hill-shades from different directions in three different colour bands into a single image. This technique was used to produce useful images for the assessment providing an additional source of data on the Site's archaeological potential (see **Plan EDP 4**), and which was used for guiding the site walkover.

## Section 4 Baseline Information

### INTRODUCTION

- 4.1 The section of the report identifies the ‘designated’ and ‘non-designated’ historic assets that it is considered may be affected by the Proposed Development.
- 4.2 The Site does not contain any designated historic assets and so therefore there would be no direct impacts in that respect.
- 4.3 The nature and magnitude of ‘indirect’ setting effects to surrounding designated historic assets from the Proposed Development is not addressed here and it is covered in a separate Heritage Assessment (see edp6238\_r009). The locations of surrounding designated historic assets are shown on **Plan EDP 1** however.
- 4.4 There are 76 HER records comprising archaeological and historical sites, artefact findspots and buildings of local interest recorded on the Heneb HER within a 1km radius of the Site (**Plan EDP 2**). In addition, there are records of 46 events in the form of desktop assessments, archaeological fieldwork investigations, mitigation events and observations within a 1km radius (**Plan EDP 3**). Only the records and events that are considered relevant to this assessment are discussed underneath and hence not all the returned HER records are included within the text or on the accompanying plans.

### NON-DESIGNATED ARCHAEOLOGICAL REMAINS

#### Prehistoric (c.500,000 BC – AD 43)

- 4.5 There are no prehistoric HER records located within the Site. Within the Study Area, there are ten archaeological findspots recorded on the HER. These comprise the following:
- A mid-palaeolithic Mousterian flint point (**GGAT03060g**), recovered c.975m south-east of the Site, close to the course of the River Wye;
  - A Neolithic flint handaxe (**GGAT01170g**), recovered c.930m east of the Site, close to the course of the River Wye;
  - Six Bronze Age findspots, which consist of a cluster of four flint flakes (**GGAT05607g**, **GGAT05608g**, **GGAT05609g**, **GGAT05610g**) c.230-340m north of the Site, as well as an unlooped bronze palstave (**GGAT04923g**) recovered c.990m north-east of the Site and a bronze socketed axe (**GGAT01167g**) recovered c.320m west of the Site; and
  - Two Iron Age findspots, consisting of a Dobunni tribe coin or stater (**GGAT01177g**) recovered c.1km north-east of the Site close to the River Wye and a bronze harness mount (**GGAT01169g**) recovered c.920m south-east of the Site close to the River Wye.
- 4.6 It is assessed that the Site exhibits a low potential for the presence of significant prehistoric archaeological remains, with the available evidence suggesting that evidence for activity in

this broad time period is primarily likely to comprise uncontextualized findspots or residual artefacts incorporated into later deposits. There is a potential that the magnetic anomalies towards the eastern side of the Site identified by the geophysical survey in 2013 could be represent archaeological features of prehistoric origin, but for the most part there is nothing to infer or suggest that the vast majority of the Site possesses anything more than a limited interest in this connection.

#### **Romano-British (AD 43 – 410)**

- 4.7 One HER record for a c.100m segment of the roughly east-west orientated Chepstow to Caerleon Roman road (**GGAT07048g**) is located within the southern end of the Site. The segment of Roman road has been confirmed by site walkover observations, aerial photographs and LiDAR imagery, to comprise a raised bank earthwork running through the Site.
- 4.8 The alignment of the Roman road was also detected during the 2013 ASWYAS geophysical survey of the Site (**GGATE006079**), via two linear anomalies representing potential roadside ditches (**Appendix EDP 2**). The earthwork has not been subject to intrusive archaeological investigation within the Site, to confirm the nature and quality of its preservation.
- 4.9 Additional lengths of Roman roads are recorded within the Study Area. These comprise the conjectural alignment of additional segments of the same Roman road (**GGAT07048g**) to the south-west and north-east of the Site, as well as the conjectural alignment of another Roman road, orientated roughly north-south along the alignment of the present-day A466 (**RR6d-3b**). The presence, preservation and condition of the Roman roads is unknown for these conjectural segments.
- 4.10 The 2013 ASWYAS geophysical survey of the Site (**GGATE006079**) did not detect the presence of the north-south orientated road along the east end of the Site nor confirm the presence of any associated roadside remains or activity within the Site (**Appendix EDP 2**).
- 4.11 Remaining HER records attributed to the Roman period within the Study Area comprise a pit and ditch feature (**GGAT03739g**) located c.970m east of the Site, as well as two archaeological findspots for an undated coin (**GGAT01191g**) located c.980m east and a collection of copper Constantine I (AD 306-337) coins (**GGAT01166g**) located c.320m west of the Site. Such remains suggest a general presence of Roman activity within the area, close to the Roman road and along the western bank and edges of the River Wye.
- 4.12 There is demonstrable potential for the survival of significant Roman archaeology within the boundary of the Site in the form of the Roman road orientated east-west inside the southern edge (defined by the modern A48).
- 4.13 It is possible that magnetic anomalies identified adjacent to the eastern boundary (in 2013) could also represent Roman activity and be associated with a second Roman road thought to be followed by the present course of the A466. This, however, has not been confirmed by intrusive investigation and it is unclear whether these features present buried archaeology and whether they are Roman or from another period if they are archaeological in origin and nature. In any event, there is no evidence to suggest or indicate that they are of more than low or local interest even if they are representing buried archaeological features.

- 4.14 Elsewhere, it is assessed that the Site has little or no potential to contain Roman features, deposits or remains of significance.

**Early Medieval (AD410 – 1066) and Medieval (AD 1066 – 1485)**

- 4.15 There are no early medieval HER records located within the Site. Two HER records within the Study Area are attributed to the early medieval period.
- 4.16 One record is for the approximate location of a religious early medieval settlement site, called '*Ecclesia Cynmarchi (St Kynemark's)*' (**GGAT08289g**), located c.715m north of the Site. Meanwhile, the other HER record is associated with the approximate location for a late 10<sup>th</sup> century origin chapel to Pwll-Meyric village (**GGAT01198g**), located c.640m south-west of the Site. According to the HER, the provenance of both the religious medieval settlement and chapel is speculative.
- 4.17 In terms of medieval HER records, none are located within the Site. However, a total of 21 HER records attributed to the medieval period are located within the Study Area defined around the Site's boundaries.
- 4.18 A HER record for the location of a former holy well/spring (**GGAT01162g**), recorded as part of Heneb's 'Early Medieval Ecclesiastical Sites Project' database, is located c.810m north of the Site at Crossway Green.
- 4.19 Three HER records for the site of St. Kynemark's Priory are located c.710m north of the Site. The HER contains a record for the priory itself (**GGAT01163g**) alongside a record for an associated chapel annex (**GGAT08316g**) and holy well (**GGAT01164g**). The location for the remains of the priory is marked on historic Ordnance Survey (OS) maps, however, the priory's location now encompasses a late 1970s – early 1980s residential housing estate at Crossway Green.
- 4.20 Six HER records are attributed to the site of St. Lawrence's Chapel (**GGAT01165g**), its associated cemetery (**GGAT11266g**) and a medieval range complex (**GGAT10973g**, **GGAT05613g**, **GGAT11267g**, **GGAT05614g**), located c.470m north of the Site. Both the chapel and the medieval range complex are recorded to be adjacent to either side of the A466. The HER records are predominantly derived from archaeological evidence, obtained from an excavation by Birmingham University Field Archaeology in 1999 prior to residential development at Bayfield during the 2000s (Leach, 1999) (**GGATE002637**).
- 4.21 One HER record is attributed to the medieval settlement of Chepstow (**GGAT04507g**), located c.990m north-east of the Site. The HER record details the medieval settlement of Newham to date to the late 11<sup>th</sup> century with the construction of the castle and St. Mary's Priory c.1070, town layout c.1075 and later medieval town walls c.1272-1278.
- 4.22 One Heneb HER record is associated with the find of a medieval cobbled floor surface within the grounds of 10 Bank Street (**GGAT11348g**) by an evaluation in 2013 (**GGATE005462**). The floor surface is reported to be located within the extent of the medieval town, located c.920m north-east of the Site.

- 4.23 The locations of two former medieval chapels are recorded within the Study Area. These are St. Thomas' Chapel which was the original parish church to Chepstow (**GGAT01189g**) and St. Tynnog's Chapel (**GGAT01187g**). The site of St. Thomas' Chapel is recorded to be c.610m north-east of the Site along Mounon Road, Chepstow. Meanwhile, the site of St. Tynnog's Chapel is recorded to be c.910m southeast of the Site, within the grounds of the former Hardwick Court, which now comprises a modern c.1980s residential estate.
- 4.24 One HER record for a possible grange or barton, the identification of which is limited to documentary evidence (**GGAT01166g**), is located c.320m south-west of the Site.
- 4.25 Three HER records for three former 14<sup>th</sup> century watermills within the village of Pwll-Meyric are located c.750m south-west of the Site (**GGAT01207g**, **GGAT01208g**, **GGAT01209g**). Their exact locations are unknown and the HER records are taken solely from documentary evidence. Such HER records provide evidence for local industrial practices within the village of Pwll-Meyric in this period, but do not point towards comparable activity at the Site.
- 4.26 One HER record is associated with the churchyard to the church of St. Andoenus Mounon, located c.920m west of the Site (**GGAT08230g**). The HER record itself is misprovenanced within a field to the south of the church and its churchyard.
- 4.27 Two archaeological findspots are recorded within the Study Area. These two consist of an unspecified medieval object recovered c.960m north-east of the Site (**GGAT02912g**) and a pilgrim badge recovered c.310m south of the Site (**GGAT04366g**).
- 4.28 Overall, the documented HER records attributed to the medieval period within the Study Area are predominantly associated with the documented locations of former religious sites, such as chapels, a priory, granges, and holy wells to the north, north-east, south-east, south-west of the Site.
- 4.29 Such sites are situated within the environs to the west and south of the town of Chepstow, located within the former Hardwick Court estate, Pwll-Meyric village, Mounon village and suburb of Crossway Green. Additionally, local industrial practices dating to the 14<sup>th</sup> century within the village of Pwll-Meyric located to the south-west of the Site, are also reflected by the three recorded water mills.

#### **Post-Medieval (AD 1485 – 1900)**

- 4.30 No HER records attributed to the post-medieval period are located within the Site. However, a total of 33 HER records attributed to the post-medieval period are present within the Study Area.
- 4.31 Ten HER records are associated with the findings of a desk-based assessment undertaken in 1995 by Clwyd-Powys Archaeological Trust (CPAT) prior to 2000s residential development across the Bayfield area (**GGATE008050**). The residential estate across Bayfield is located to the north of the Site. According to CPAT's report (Hankinson, 1995), these HER records are attributed to former landscape features and/or structures identified from consulted historic maps and field survey observations.

- 4.32 The available HER records derived from the 1995 CPAT assessment include: boundary stones (**GGAT07114g**, **GGAT05603g**) located c.570m and c.820m north of the Site; three former field boundaries (**GGAT16999g**) located c.570m north of the Site; a timber framed building (**GGAT05612g**) located c.490m north of the Site; a hollow/marl pit (**GGAT05611g**) c.400m north of the Site; Bayfield Cottage (**GGAT05605g**), a field barn (**GGAT05604g**) and an associated outbuilding (**GGAT05605g**) located between c.350-380m north of the Site; and two structures, which are assessed as most likely representing field barns or outfarm buildings (**GGAT05617g**, **GGAT05616g**), located c.80m and c.130m north of the Site. None of these features remain extant, having been identified to be removed at the time of the assessment or subsequently demolished as part of the construction of the modern residential development.
- 4.33 Two HER records for the approximate location of a 17<sup>th</sup> century windmill are located within fields c.580m north of the Site (**GGAT10871g**, **GGAT10872g**). A review of the two HER records indicates that they are most likely both associated with the same windmill, documented in the Chepstow Parish records and a 1698 manuscript.
- 4.34 One HER record comprises a pond (**GGAT05615g**), located c.650m north of the Site. The entry is derived from documentary evidence, having been solely identified on the 2<sup>nd</sup> Edition OS map for the area. The area now comprises modern residential development.
- 4.35 A cluster of 11 post-medieval HER records are located within or adjacent to the historic urban extent of the town of Chepstow, located to the north-east of the Site. Such records comprise the following:
- The possible site of a mid-17<sup>th</sup> century Civil War defensive 'Battery' (**GGAT04430g**), located c.680m north-east of the Site, to the south of Welsh Street;
  - The approximate location of a former early 18<sup>th</sup> century pool for public water supply in Chepstow (**GGAT01179g**), located c.700m north-east of the Site, along St. Kingsmark Avenue;
  - The site of a former 17<sup>th</sup> century bell foundry (**GGAT01178g**), located c.790m north-east of the Site, along Dell View Road;
  - A 17<sup>th</sup>-18<sup>th</sup> century wall and adjacent cobbled surface found at 10 Bank Street, Chepstow (**GGAT11349g**), located c.900m north-east of the Site. The wall and cobbled surface were recorded during an archaeological evaluation in 2012 (**GGATE005462**);
  - A late 18<sup>th</sup> to early 19<sup>th</sup> century cobbled surface (**GGAT16995g**) found in a watching brief at 2 & 4 Nelson Street, Chepstow, in 2018 (**GGATE008046**). The late post-medieval floor surface was located c.920m north-east of the Site;
  - Four HER records all relate to the locations of former historic buildings, located along High Street (**GGAT02368g**), Bank Street (**GGAT03671g**, **GGAT02262g**) and Steep Street (**GGAT03921g**). These four buildings comprised dwellings, originally located between c.590-990m to the north-east of the Site; and

- A former wayside stone cross (**GGAT01188g**) at the junction between Welsh Street, Steep Street and High Street recorded c.590m north-east of the Site. According to the HER, the cross was called 'Robin Hood's Cross' and was extant from 1687-c.1758.
- 4.36 The 11 post-medieval records located c.590-990m from the Site are situated within or adjacent to the historic urban extent of the town of Chepstow. Such records represent documented historic buildings and features of local interest, historic civic amenities associated with the town, and archaeological findings from recent previous events.
- 4.37 One HER record is associated with the former country house of Hardwick Court and its grounds (**GGAT01192g**), located c.700m south-east of the Site. According to the HER, the country house estate was founded during the 14<sup>th</sup> century. Consulted historic maps indicate that the house was demolished between the late 1950s and early 1960s. Meanwhile, the house's associated estate grounds were removed and replaced with modern residential development by the 1980s.
- 4.38 The HER contains one record for the site of the former 16<sup>th</sup> century origin Claypits Farm or Fairfield Lodge/Farm (**GGAT01194g**). The farm was located along the east side of Bulwark Road, c.860m south-east of the Site. Consulted historic maps indicate that the farm was demolished and replaced with the now demolished 'Severn Bridge Social Club' between the late 1950s – early 1960s.
- 4.39 Two miscellaneous HER records are attributed to the post-medieval period within the Study Area around the Site. According to the HER, these two records comprise an archaeological findspot of a non-described post-medieval object (**GGAT04375g**), located c.400m south of the Site, and an unidentified building identified from consultation of the 1<sup>st</sup> Edition OS map of the area (**GGAT09726g**) located c.920m south of the Site.
- 4.40 One HER record is associated with a former paper mill (**GGAT02217g**), which according to the HER operated between 1773-1859. The paper mill, titled 'Linnet Paper Mill' was located within the village of Mounton, c.860m west of the Site.
- 4.41 Finally, four HER records are attributed to historic farmsteads within the wider environs to the west of Chepstow. These were identified via the consultation of 1<sup>st</sup> and 2<sup>nd</sup> Edition OS maps, as part of the 'Glamorgan Gwent Archaeological Trust Historic Farmsteads Project'. Such HER records comprise the following farmsteads:
- High Beech (**GGAT16046g**), located c.60m south of the Site;
  - A possible farmstead indicated by a barn near St. Lawrence (**GGAT16045g**), located c.30m west of the Site;
  - Bishops Barnets/Barnetts Farm (**GGAT16044g**), located c.250m to the north-west of the Site; and
  - The Grange (**GGAT15108g**), located c.510m north-west of the Site.
- 4.42 Overall, there is nothing in the available HER data to identify or point towards the presence of significant archaeology from this period at the Site and (instead) it is anticipated that any

features and/or deposits that may exist will focus on and derive from its use as agricultural farmland in the earlier parts of the period and its management as mixed farmland/parkland in the latter parts. The archaeological features and deposits which may therefore be present within the boundary of the Site are (as such) unlikely to be of any intrinsic significance.

#### **Modern (AD 1900 – Present)**

- 4.43 There are no 'modern' HER records located within the Site, but five HER records attributed to the modern period are located within the Study Area.
- 4.44 Two HER records are associated with a hospital and residential estate built in 1917-1918 to accommodate the workers and service personnel of the former National Shipyard (No.1) at Chepstow, which operated between 1917-1925 (Coflein, 2025).
- 4.45 Mount Pleasant Hospital (**GGAT10743g**) was located to the north of Mounon Road and east of St. Lawrence Road, c.170m north-east of the Site. Consultation of historic maps shows that the hospital stayed in use after the closure of the National Shipyard, expanding during World War II to include a military hospital to the west of St. Lawrence Street and north of Mounon Road, beyond the Site boundary.
- 4.46 The earliest hospital buildings to the east of St. Lawrence Road were demolished and replaced with the present Chepstow Community Hospital between 1995-2000. Meanwhile, the hospital's 1940s onwards buildings to the west of St. Lawrence Road were demolished and replaced with the present housing estate across the Bayfield area during the 2000s.
- 4.47 No remains or features associated with the 20<sup>th</sup> century hospital are expected to be present within the Site, given that the southern limit of the hospital's grounds was defined by the east-west alignment of Mounon Road, north of the northern boundary.
- 4.48 Hardwick Village (**GGAT10620g**), the purpose-built residential estate to accommodate the shipyard works, was constructed to the south of the medieval town walls of Chepstow. The estate is located c.830m east of the Site. Consulted historic maps indicate that the estate comprises Portwall Road, Green Street, Caird Street, Hardwick Avenue, Severn Crescent, Hughes Crescent and Wye Crescent. The estate is now situated amongst other housing developments constructed over the course of the 20<sup>th</sup> century.
- 4.49 Two HER records are attributed to two possible pre-World War I military drill hall locations within the town of Chepstow. According to the HER, both drill halls are now demolished. The two drill halls were located within former bank buildings on Bank Street (**GGAT10069g**) c.940m north-east of the Site and a station building along Green Street (**GGAT10611g**) c.830m east of the Site.
- 4.50 The remaining HER record is associated with the World War I naval gun commemorative monument at Beaufort Square, Chepstow (**GGAT10012g**), located c.950m north-east of the Site.
- 4.51 Once again, none of the information in the HER identifies or points towards the presence of significant archaeological features, deposits or remains within the Site boundary during this period. The available data identifies that the land within the boundary of the Site has been



subject to a mixture of agricultural exploitation as farmland and management as parkland in the course of the 20<sup>th</sup> century and onwards to the 21<sup>st</sup> century.

#### **Previous Archaeological Events**

- 4.52 Four previous archaeological events are recorded on the HER within the Site boundary. They comprise three records associated with the 2013 Archaeological Assessment produced by EDP (**edp1518\_09b**) for land at the Site (**GGATE007998**, **GGATE006078**, **GGATE007999**), as well as the 2013 geophysical survey of the Site by ASWYAS (**GGATE006079**), the report for which is reproduced here as **Appendix EDP 2**.
- 4.53 Within the Study Area, a total of 42 previous archaeological events are recorded. They comprise the following: eight desk-based assessments, seven field surveys and/or visits, one historic building survey, one geophysical surveys, six archaeological evaluations, three archaeological excavations and 16 archaeological watching briefs. The results of these pieces of work are each included within the different period-based sections above and no further commentary is provided in this section.

#### **ASWYAS 2013 Geophysical Survey**

- 4.54 A magnetometry (geophysical) survey of the land contained within the Site was undertaken in 2013 by ASWYAS (**GGATE006079**) (**Appendix EDP 2**). According to the survey report, the Site was found to mostly contain linear anomalies interpreted as representing either post-medieval and later ploughing across the Site or former 18<sup>th</sup>-19<sup>th</sup> century field boundaries that are visible on the 1778 estate plan or 1847 St. Arvans Parish Tithe Map (**Plan EDP 5**). In addition, a number of modern field drains were detected and modern services in the west and north-eastern parts of the Site (Webb, 2013).
- 4.55 Although magnetic anomalies of definite archaeological origin were identified, but possible discrete archaeological anomalies were detected within the north-east corner of the Site, adjacent to the conjectural alignment of the north-south orientated Roman road along the A466 (**RR6d-3b**) (*ibid*). Meanwhile, possible roadside ditches to the Newnham to Caerleon Roman road (**GGAT07048g**) were also detected within the southern end of the Site (*ibid*). The report concluded that the Site's potential to contain archaeological remains is restricted to the two areas focused along and/or adjacent to the Roman road(s).
- 4.56 In summary, the 2013 geophysical survey identifies little or no potential for the presence of significant archaeological remains away from the southern and eastern fringes.

#### **CARTOGRAPHIC EVIDENCE**

- 4.57 Historic maps of the Site and its wider surroundings (from the late 18<sup>th</sup> century onwards) have been used to document its developmental chronology and inform our assessment of its archaeological interest or potential (**Plan EDP 5** and **6**).
- 4.58 The historic maps which highlight key changes to land use within the Site are outlined below and presented in **Plans EDP 5** and **6** and they should be reviewed alongside the paragraphs which follow below.

### **1778 Map of an Estate in the Parish of St. Lawrence**

- 4.59 This plan shows that the Site comprised five agricultural fields in the late 18<sup>th</sup> century. No other land use information is shown. St. Lawrence House (**2606**) is shown not to have been built at this time, with only two farm buildings shown adjacent to the north-eastern boundary of the Site alongside Mounton Road.

### **1847 St. Arvans Parish Tithe Map (The Genealogist.com)**

- 4.60 The 1847 St. Arvans Parish Tithe Map shows the Site to comprise six fields with curvilinear field boundaries. The fields are described in the associated Award as being an orchard (274) within the north-west corner of the Site and meadows (266-269 and Plot 273) across the remainder of the Site.

### **1887 OS Map (EnviroCheck)**

- 4.61 The 1<sup>st</sup> Edition 1887 OS map shows minimal change with regards to the Site's land use. The exception to this is the alteration of field boundaries along the eastern edge of the Site and within the southern end of the Site.
- 4.62 Such changes included the separation of Plot 268 (shown in the previous 1847 tithe map) into two separate fields, with an east-west orientated field boundary. The field boundaries between Plots 266 and 267 (on the 1847 tithe map) were also altered to increase the size of the southernmost field (266) within the Site, thus creating a total of seven fields.

### **1902 OS Map (EnviroCheck)**

- 4.63 The 2<sup>nd</sup> Edition 1902 OS map shows further change to the organisation of field boundaries within the Site. Former 18<sup>th</sup>-19<sup>th</sup> century curvilinear field boundaries at the Site are shown to have been removed and replaced with straightened boundaries to create four new fields. These fields appear more uniform in size. In addition, the orchard located within the north-west corner of the Site is now shown to have halved in size and feature a field across its southern half. The Site comprised seven fields at this time.

### **1985 OS Map (EnviroCheck)**

- 4.64 No noticeable change to the Site's land use is shown on consulted historic maps between the 1902 OS map and 1985 OS map. However, by 1985, a small 'Gas Governor' structure and associated compound is shown to be present within the south-west corner of the Site, along the east side of St. Lawrence Lane. In addition, the orchard within the north-west corner of the Site is now shown to comprise an amalgamated field. The Site comprised six enclosed fields.

### **2024 VectorMap Local (EnviroCheck)**

- 4.65 Minimal change in land use is shown between the 1985 OS map and the most recent 2024 VectorMap Local map. The notable exception to this is the creation of a thin woodland belt along the western edge of the Site, adjacent to St. Lawrence Lane.

- 4.66 The 'Gas Governor' structure is still shown within the Site, located within the present-day woodland belt. No further change to the Site's land use is shown on consulted maps. The Site now comprises six field enclosures.

### **Summary**

- 4.67 The available historic maps confirm that the Site has comprised undeveloped land without any buildings of interest or significance since at least the 1770s.
- 4.68 Land use change within the Site has been limited to the addition, removal and realignment of internal field boundaries, notably the replacement of curvilinear 18<sup>th</sup>-19<sup>th</sup> century field boundaries with rectilinear boundaries across the Site at the start of the 20<sup>th</sup> century, in order to create more uniform field pattern.
- 4.69 Other than the positions and alignments of former 18<sup>th</sup> and 19<sup>th</sup> century field boundaries, the available historic maps do not infer or suggest the presence of archaeological features or remains within the Site's footprint.

### **Aerial Photographs**

- 4.70 Available aerial photographs dated between 1946-2000 (held by CRAPW) and Google Earth satellite imagery between 1999-2023 were consulted to further inform the Site's history over the late 20<sup>th</sup> century and early 21<sup>st</sup> century and to elaborate, where possible, on the developmental sequence outlined above using historic maps.
- 4.71 The aerial photographs and satellite images corroborate the observations made from the historic map evidence. These aerial photographs and satellite images show the positions and alignments of former 18<sup>th</sup>-19<sup>th</sup> century field boundaries within the Site. These boundaries are situated within the Site's present rectilinear field arrangement, established c.1902. The former 18<sup>th</sup>-19<sup>th</sup> century field boundaries appear as slightly raised curvilinear embankments across the Site. In addition, tightly spaced cultivation earthworks, that follow the alignments of the former 18<sup>th</sup>-19<sup>th</sup> century field boundaries, are also visible within the central and north-eastern parts of the Site on aerial photographs.
- 4.72 The east-west aligned segment of the Newnham to Caerleon Roman road (**GGAT07048g**) is also shown at the southern end of the Site on the majority of consulted aerial photographs and satellite images. This reflects the presence and survival of this asset over the course of the late 20<sup>th</sup> and early 21<sup>st</sup> centuries.
- 4.73 No other features of archaeological interest or potential are visible within the Site boundary on any of the aerial photographs and satellite images consulted for this exercise and there is nothing in these sources to indicate anything other than a low archaeological interest.

### **LIDAR IMAGERY**

- 4.74 The analysis of available Welsh Government LiDAR 2020-2022 tile index data reflects the identified land use history from consulted cartographic sources. This includes the presence of former 18<sup>th</sup>-19<sup>th</sup> century field boundaries, post-medieval cultivation earthworks across parts of the central and north-east corner of the Site and the identified segment of the non-

designated Newnham to Caerleon Roman road (**GGAT07048g**) at the southern end of the Site (**Plan EDP 4**). No other earthworks of historic interest or significance are visible within the Site in the data available.

#### **SITE WALKOVER**

- 4.75 The Site was visited by an experienced surveyor, in suitable weather conditions, in July 2024 to define the presence, location(s) and extents of visible archaeological feature or deposits within its boundary and to assess their significance.
- 4.76 The position and alignment of the section of the Newnham to Caerleon Roman road within the Site boundary is clearly visible as a slight linear earthwork in Field 6 at the southern end closest to the A48 west of High Beech roundabout.
- 4.77 The form and appearance of this linear earthwork are illustrated in **Images EDP A1.1 to 1.2** and they should be reviewed in this regard.
- 4.78 Otherwise, the only visible archaeological features within the Site are the linear earthworks of former field boundaries in the middle of the Site and northern reaches. These earthworks are quite slight in places but clearly illustrate that the changing arrangement and separation of the agricultural fields within the Site over time.
- 4.79 Representative photographs showing the form and character of these linear earthworks are reproduced as **Images EDP A1.3 to A1.4**.
- 4.80 A number of these earthwork field boundaries are shown on the historic maps dating from the late 18<sup>th</sup> century and mid-19<sup>th</sup> century. In themselves, these earthwork field boundaries are considered to be of little interest or significance in view of the fact that they are typical and commonplace features from a relatively recent historic period and hold little value as a means to enhance our understanding of the period or the farming systems at the time.
- 4.81 The preparation of this assessment (including the analysis of the LiDAR data) is believed to provide an appropriate record of the farming earthworks surviving within the Site and hence no further mitigation is proposed or expected.
- 4.82 The site walkover did not identify any other features of archaeological interest or potential elsewhere within the Site beyond the structures and estate rail fences which are associated with the formation and subsequent management of the estate landscape to the south, east and west of St. Lawrence House in c.1900 (see **Images EDP A1.5 to 1.6**).

#### **SUMMARY OF THE SITE'S ARCHAEOLOGICAL INTEREST OR POTENTIAL**

- 4.83 The Site is assessed as possessing or exhibiting no more than a 'low' potential to contain significant archaeological features, deposits or remains beyond the length of the Newnham to Caerleon Roman road that runs through the southern field as an earthwork.
- 4.84 The 2013 geophysical survey suggests that there is some (albeit limited) potential for the presence of other archaeological features, deposits and/or remains of significance towards

the Site's eastern boundary, but there is no evidence or indication that the vast majority of the Site contains significant archaeological features, deposits and/or remains.

- 4.85 The most likely scenario is that any significant archaeological features, deposits or remains that are present within the Site will derive from the prehistoric or Roman periods and focus on roads running east-west and north-south in the latter period.
- 4.86 All the same, it is assessed that the Site has a low potential for the presence of significant prehistoric archaeological remains, with the available evidence suggesting that evidence for activity in this broad time period is primarily likely to comprise uncontextualized findspots or residual artefacts incorporated into later deposits. There is a potential that the magnetic anomalies towards the eastern side of the Site identified by the geophysical survey in 2013 could be represent archaeological features of prehistoric origin, but for the most part there is nothing to infer or suggest that the vast majority of the Site possesses anything more than a limited interest in this connection.
- 4.87 In this context, there is no clear indication from the geophysical survey for the presence of roadside activity within the Site's boundaries and instead the clear conclusion to be drawn is that (for the most part) the land comprised undeveloped farmland or waste away from areas of settlement or industry in the course of the Roman occupation.
- 4.88 As far as the Roman occupation is concerned, a c.100m length of the roughly east-west orientated Newnham to Caerleon Roman road (**GGAT07048g**) is known to be present at the southern end of the Site. The road comprises a raised linear embankment.
- 4.89 This Roman road has not been subject to any intrusive archaeological investigation within the Site to confirm its state of preservation and form of construction. As a result, its level of heritage interest remains unknown at this stage.
- 4.90 No lengths or segments this road (elsewhere) are recorded as designated historic assets on Cadw's Cof Cymru database. Therefore, depending on the nature of the road's preservation, the segment of Newnham to Caerleon Roman road within the Site would be of assessed as being of low-moderate or local-regional significance.
- 4.91 The available evidence supports the view that the land at the Site comprised undeveloped agricultural land or waste in the medieval and early post-medieval periods, with no evidence for either settlement or industrial exploitation. There is little or no potential for the presence of significant features, deposits or remains of this time period within the Site area.
- 4.92 The same is considered to be equally true of the later post-medieval and modern periods, with the available information indicating that the Site comprised a mixture of parkland and farmland from the 19<sup>th</sup> century onwards. As such, the expectation is that any archaeological features or remains from the later post-medieval period onwards will derive from the use of that landscape and comprise field boundaries and soil deposits that have little potential to enhance our knowledge and understanding of this time period. They are considered unlikely to be of any more than minimal archaeological interest.
- 4.93 An archaeological potential summary plan is provided in **Plan EDP 7**.

## **Section 5**

### **Impact Assessment**

- 5.1 This section of the report identifies and assesses the nature and the magnitude of impacts on archaeological remains.

#### **THE PROPOSED DEVELOPMENT**

- 5.2 Proposals for development of the Site focus on the preparation and submission of an outline planning application which is underpinned by these drawings and documents to inform and supports its positive determination.
- Land Use Concept Plan [Ref: BL-M-11 Rev G];
  - Parameter Plan Land Use and Access [Ref: BL-M-12];
  - Parameter Plan Scale [Ref: BL-M-13]; and
  - Parameter Plan Green Infrastructure [Ref: BL-M-15].
- 5.3 In return, the Proposed Development comprises the construction of up to 146 new homes in the south and centre of the Site (to be accessed from the east and the A466), with a hotel and a care home positioned in the north-eastern corner.
- 5.4 As well as the one vehicular access (from the A466), the proposals envisage the delivery of three further access points to cater solely for pedestrians/cyclists; with one located in the south, to the west of the High Beech roundabout.
- 5.5 The west and north-west of the Site is to be retained as Public Open Space (POS) and there are additional areas of POS running down the western side of the residential development, north-south through the centre of the scheme and at the southern tip close to the A48 main road and roundabout.
- 5.6 The existing (and mature) landscape planting along the western boundary and defining the edges of the High Beech roundabout would be retained and the north-western corner of the Site would similarly be subject to the provision of new landscaping in the areas of new POS. In addition, a new SuDS basin is expected to be situated on the south-west of the Site and intended to service this development.
- 5.7 In terms of height, the proposals envisage development of up to 9.5 metres across much of the southern and eastern fringes of the site, where it is stated that this would be equivalent to residential houses of up to two storeys in height.
- 5.8 An inverted 'L-shaped' area of development of up to 10.5 metres is proposed for the eastern side of the site facing out on to the A466 and defining the main access in from the east. This is stated to be equivalent to residential buildings of up to 2.5 storeys in height.

- 5.9 Buildings of up to 14.0 metres in height (up to three commercial storeys) are proposed for the far north-east corner to deliver the hotel and the care home. This development is zoned for an area north of the vehicular access and towards the junction of the A466 and Mounton Road running east-west.

## IMPACTS

- 5.10 The approval and implementation of the Proposed Development is expected to result in the loss of any below ground archaeological features, deposits and/or remains that are present within its footprint due to these aspects:
- Level reductions for accesses, roads, car parking etc;
  - Foundations for new residential dwellings;
  - Provision of services; and
  - Formation of SuDS basins and potentially some landscaping.
- 5.11 Whilst it is expected that any archaeological features or deposits within the development's built footprint will be lost as a result of groundworks for its construction, it is considered as being highly unlikely that, even if they are present, they will be of any more than low or local interest or significance and the impact upon the archaeological resources as a whole would be limited at the most.
- 5.12 With respect to the c.100m long segment of the roughly east-west orientated Newnham to Caerleon Roman road (**GGAT07048g**) located within the southern end of the Site, the built form of the Proposed Development avoids the road in its entirety. This is achieved through the inclusion of a c.15m wide buffer of undeveloped open space along the alignment of the earthwork Roman road to ensure there would be no direct impact.
- 5.13 It is therefore assessed that the approval and implementation of the Proposed Development would not lead to a direct, physical impact on the Roman road and therefore the earthwork would be conserved within the completed scheme.
- 5.14 Accordingly, there would be no direct loss of significance from the Roman road as a result of the implementation of the development.
- 5.15 Whilst the earthwork remains of the road would be physically conserved *in situ* and no direct loss of significance is anticipated in response, it is expected that there would still be some indirect loss of significance through changes within its setting and the contribution it makes in that respect.
- 5.16 The proposals are set back to the north of the road and therefore it would be retained in an area of open space and landscaping. However, on the other hand the earthwork road would be situated on the edge of a mainly residential development instead of an agricultural field and so therefore it is assessed that there would be a 'slight' and indirect loss of the Roman road's significance as a consequence of changes within its wider setting.

## **MITIGATION/COMPENSATION**

- 5.17 The 'limited' impact on archaeological remains within the built footprint of the development could be satisfactorily mitigated by a programme of investigation and recording completed ahead of or during the construction groundworks.
- 5.18 This would commence with an appropriate and proportionate trial trench evaluation to begin with, followed by the implementation of either excavation or a watching brief depending on the interest of any remains that are identified by the evaluation.
- 5.19 The implementation of this programme; which would be secured as a condition imposed on the outline planning permission and agreed in advance with the local authority's advisor in advance of commencement; is expected to be completed by the preparation of a report and the deposition of the archive in the local collecting museum.
- 5.20 This would therefore represent appropriate and appropriate mitigation for the impact of the Proposed Development on sub-surface archaeology and as a result there would be no long residual impact in this respect.
- 5.21 As far as the remains of the Roman road (**GGAT07048g**) are concerned, proposals focus on its retention within an area of open spaces beyond the southern edge of the built elements of the Proposed Development. Removal from agricultural activities would be beneficial in itself because it would eliminate the impacts of grazing by livestock (erosion, truncation etc etc).



## Section 6 Conclusions

- 6.1 This Archaeological Assessment for Barwood Development Securities Ltd was produced by EDP to identify the nature and magnitude of impacts on archaeological remains within the Site resulting from its proposed mixed-use development.
- 6.2 It concludes that there would be no direct impacts on nationally important archaeological sites, features or remains due to the Site's Proposed Development. As such, there would be no conflict with legislation or national and local policy for the conservation and management of archaeological remains through the planning process.
- 6.3 As far as archaeological remains 'of less than national importance' are concerned, there is a section of Roman road that is preserved as a linear earthwork in the south of the Site and so development proposals retain it *in situ* and would bring forward and deliver enhancement in terms of its management and presentation.
- 6.4 Whilst the Proposed Development would lead to a slight loss of its significance from changes to its setting, these proposed enhancements to its management and its presentation would offer appropriate compensation and so there would be no long-term, residual effect on the earthwork Roman road. Its significance would therefore be preserved and the approval and implementation of the Proposed Development would conform to the legislation and relevant national and local policies for the conservation and management of archaeological remains of 'less than national importance'.
- 6.5 Otherwise, aside from 'low' value earthworks representing field boundaries and cultivation of post-medieval and more recent origin, the Site is assessed as having no more than 'low' potential for the presence of significant archaeological features, deposits and/or remains, with the likelihood being that any present will focus on the Roman period due to the Site's relationships with two Roman roads. Even so, the possibility that prehistoric features and/or remains may be represented cannot be entirely discounted from the desk and field-based data available.
- 6.6 In any event that, whilst it is expected that any archaeological features or deposits within the development's built footprint will be lost as a result of groundworks for its construction, it is considered as being highly unlikely that, even if they are present, they will be of more than low or local interest or significance and the impact upon the archaeological resources as a whole would be limited at the most.
- 6.7 Hence, once again, the Site's Proposed Development would conform to the legislation and relevant national and local policies for the conservation and management of archaeological features, deposits or remains of 'less than national importance' set out in PPW and TAN 24. The imposition of a condition on the grant of outline planning permission could satisfactorily secure the mitigation of impacts on archaeological resources.
- 6.8 This conclusion has been confirmed through consultation with the Council's archaeological advisor and therefore it is concluded that the Site's Proposed Development could be taken forward and completed in line with relevant planning policies. There is therefore clearly no

reason why the planning application should not be treated favourably when it is submitted to MCC for determination (in respect of the impact on non-designated archaeology).

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## Appendix EDP 1 Images



**Image EDP A1.1:** South facing view of the Roman road from Newnham to Caerleon in the south of the Site.



**Image EDP A1.2:** South-west facing view of the Roman road from Newnham to Caerleon in the south of the Site, showing the earthwork.



**Image EDP A1.3:** North facing view of the Site's former field boundaries, looking towards the Site's northern boundary.





**Image EDP A1.4:** East facing view of one of the former field boundaries within the Site. View towards the eastern Site boundary and the A466 main road in the background.





**Image EDP A1.5:** North-west facing view of one of the estate rail fences within the centre of the Site. St. Lawrence house located in the background.



**Image EDP A1.6:** North-west facing view of the Site's north-west corner and the location of the former orchard and walled gardens associated with St. Lawrence House.

## **Appendix EDP 2**

### **Archaeological Services WYAS 2013 Geophysical Survey Report**



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WYAS

**Land at Mounton Road  
Chepstow  
Monmouthshire**

**Geophysical Survey**

Report no. 2459

April 2013

Client: Taylor Wimpey UK Ltd



# **Land at Mounon Road**

## **Chepstow**

## **Monmouthshire**

### **Geophysical Survey**

#### *Summary*

*A geophysical (magnetometer) survey, covering 12 hectares of land to the west of Chepstow, was carried out to inform the submission of a planning application. Although the site borders a Roman road to the east, and a second Roman road is thought to cross the southern tip of the site, no anomalies of definite archaeological origin have been identified. Two vague linear trends in the data may indicate flanking ditches either side of the Newnham to Caerleon Roman road in the south but no anomalies indicative of roadside activity have been located. Numerous linear anomalies caused by recent and post-medieval ploughing, field drains, 19th century field boundaries (now removed) and pipes have been located. On the basis of the geophysical survey, the archaeological potential of the site is considered to be low across the majority of the site and low to moderate along the eastern and southern site boundaries adjacent to the Roman roads.*



ARCHAEOLOGICAL  
SERVICES  
WYAS

## Report Information

Client: Taylor Wimpey UK Ltd  
Address:  
Report Type: Geophysical Survey  
Location: Chepstow  
County: Monmouthshire  
Grid Reference: ST 525 932  
Period(s) of activity represented: Roman?  
Report Number: 2459  
Project Number: 4041  
Site Code: CHE13  
Planning Application No.: Pre-application  
Museum Accession No.: n/a  
Date of fieldwork: April 2013  
Date of report: April 2013  
Project Management: Sam Harrison BSc MSc AIfA  
Fieldwork: Christopher Sykes BA MSc  
Kieran Power BSc  
Report: Alistair Webb BA MIfA  
Illustrations: Sam Harrison  
Photography: Site Staff  
Research: n/a

Authorisation for  
distribution: -----



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## **1 Introduction**

Archaeological Services WYAS (ASWYAS) were commissioned by Andrew Crutchley of the Environmental Dimension Partnership (EDP), on behalf of Taylor Wimpey UK Ltd, to undertake a geophysical (magnetometer) survey of land on the western edge of Chepstow, Monmouthshire (see Fig. 1) to inform the submission of a planning application for a proposed housing development.

### **Site location, topography and land-use**

The Proposed Development Area (PDA) comprises a roughly triangular block of agricultural land, centred at ST 525 193, that covers approximately 12 hectares. It is bounded to the east by the A446, which follows the line of a former Roman road (see below) and to the south by the A48, which is thought to possibly follow a second Roman road (see Fig. 2). Saint Lawrence Lane borders the site to the west, with a small stand of trees along the northern edge which borders onto Mounton Road. The survey area comprises six fields, situated at around 60m above Ordnance Datum (aOD), all of which are under permanent pasture (see Plates). The survey was carried out between April 8th and April 12th 2013.

### **Soils and geology**

The underlying bedrock geology comprises Black Rock Limestone Subgroup – Dolostone. There are no superficial deposits. The soils in this area are classified in the Eardiston 1 soil association, characterised as well-drained, reddish, coarse loams over sandstone (Soil Survey of England and Wales 1983).

## **2 Archaeological and Historical Background**

Whilst there is some evidence for prehistoric activity in the local area, especially to the north, the known archaeological potential of the site relates primarily to the Roman period, with the road from Monmouth to Chepstow (Margary Road no. 6d - now the A446) forming the eastern site boundary and the road from Newnham to Caerleon (Margary Road no. 60a) projected to cross the southern tip of the site (see Fig. 2). Given the possibility of roadside features contemporary with the roads, the PDA was considered to have a high potential for currently unknown archaeological features prior to the commencement of the fieldwork.

## **3 Aims, Methodology and Presentation**

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 5800 model). Bartington Grad601 magnetic gradiometers were used during the survey, taking readings at 0.25m intervals on zig-zag traverses 1m 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 is a large scale (1:2000) location plan displaying the processed magnetic data and field numbers. Figure 3 is an overall data interpretation plot at the same scale. Detailed data plots ('raw' and processed) and full interpretative figures are presented at a scale of 1:1000 in Figures 4 to 12 inclusive.

Further technical information on the equipment used, data processing and survey methodologies are given in Appendix 1 and Appendix 2. Appendix 3 describes the composition and location of the site archive.

The survey methodology, report and any recommendations comply with the Project Design (Harrison 2013), and guidelines outlined by English Heritage (David *et al* 2008) and by the Institute for Archaeologists (IfA 2010). 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 'raw' and 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** (see Figs 4 – 12 inclusive)

### **Ferrous Anomalies**

Individual iron ‘spike’ anomalies are ubiquitous across the whole of the site, as they are on most fields. These anomalies are caused by ferrous debris on the surface of the field or incorporated into the plough soil. Unless there is any other supporting evidence for an archaeological interpretation, or any obvious clustering that might imply an archaeological origin, they are not considered to be archaeologically significant.

A large dipolar linear anomaly, **A**, running along the boundaries between Fields 3, 4 and 5 locates a sub-surface pipe. Other linear bands of magnetic disturbance around the periphery of the site locate other services and/or the proximity of ferrous material in the boundary itself. A second linear anomaly, **B**, running broadly north/south through Field 2 and Field 3, and a third, **C**, crossing Field 6, also locate buried pipes.

### **Agricultural Anomalies**

Linear trend anomalies on a variety of differing alignments have been identified across most parts of the site. All are interpreted as being due to post-medieval agricultural activity.

The more closely spaced parallel anomalies, such as those in Field 2 and Field 3, which are aligned north-west/south-east, reflect the direction of cultivation. To the south of Field 2, more widely spaced and slightly sinuous anomalies, aligned south-west/north-east are considered more likely to be caused by the post-medieval agricultural practice of ridge and furrow ploughing. The characteristic striped appearance to the data is a result of the magnetic contrast between the now soil-filled furrows and the former ridges. The much straighter and more regularly (and widely) spaced linear trends, such as those in Field 1 (aligned south-east/north-west) and Field 4 (on the same alignment), are interpreted as field drains.

Linear and curvilinear anomalies **D**, **E** and **F**, locate former field boundaries which have been removed since the publication of the first edition Ordnance Survey map. These former boundaries and some of the ploughing trends described above are still clearly visible on current GoogleEarth images of the site.

### **Geological Anomalies**

Numerous discrete anomalies (areas of magnetic enhancement) have been identified throughout the site. These are particularly prominent at the northern end, particularly in Field 6 and to a lesser extent in Field 5. Field 6 is shown on the first edition mapping as an area of woodland or perhaps an orchard and Field 5 is also shown with partial tree cover. It is considered possible that these anomalies may be due to tree root action that has eroded depressions in the sedimentary bedrock, which, when the roots have rotted away, become filled with soil thus causing a discrete anomaly. Elsewhere across the site, similar anomalies may also be due to soil filling other cavities and depressions in the bedrock. There are

noticeably fewer of these anomalies in Field 1, where the magnetic background is much more uniform relative to the rest of the site.

### **Archaeological? Anomalies**

The remaining anomalies do not obviously fall into one of the above categories and have therefore been ascribed a possible archaeological origin.

At the southern end of the site, in Field 1, two vague linear trends, **G** and **H**, have been identified. These anomalies are on the same south-west/north-east alignment, and in the presumed location, as a Roman road (see Fig. 3); the anomalies are considered to be caused by the soil-filled roadside ditches, rather than the former road surface.

A cluster of short linear and discrete anomalies, **I**, have been noted very close to the eastern site boundary. Due to their proximity to the line of a former Roman road, these anomalies have been interpreted as being potentially archaeological. However, this interpretation is considered to be tentative and a more prosaic cause is considered equally plausible.

## **5 Discussion and Conclusions**

Anomalies of agricultural origin have been clearly identified across the whole of the survey area, suggesting that if there had been archaeological features present they too would most probably have been located. However, no anomalies of unambiguous archaeological origin have been identified by the geophysical survey. The possible line of a Roman road has tentatively been located, in the far south, but the anomalies are extremely weak. The magnetic background in this (southern) part of the site is comparatively uniform here (Field 1) and it is considered likely that any major archaeological activity adjacent to the Roman road, if present, would have been identified. However, as ever, there is always a chance that there may be small isolated features, such as pits, that may be too small to be identified.

Similarly, no anomalies of obvious archaeological potential are identified close to the eastern site boundary, where the modern road (A446) also follows the route of a Roman road. Even so a cluster of anomalies of unknown origin have been highlighted as being of possible interest. However, non-archaeological causes are considered equally likely.

Overall, on the basis of the geophysical survey, the archaeological potential of the site is assessed as being 'low' and 'low to moderate' adjacent to the lines of the former Roman roads.

***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 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 so that by measuring the magnetic susceptibility of the topsoil, areas where human occupation or settlement has occurred can be identified by virtue 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. An advantage of magnetic susceptibility over magnetometry is that a certain amount of occupational activity will cause the same proportional change in susceptibility, however weakly magnetic is the soil, and so does not depend on the magnetic contrast between the topsoil and deeper layers. Susceptibility survey is therefore able to detect areas of occupation even in the absence of cut features. On the other hand susceptibility survey is more vulnerable to the masking effects of layers of colluvium and alluvium as the technique, using the Bartington system, can generally only measure variation in the first 0.15m of ploughsoil.

### **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 (sometimes only visible on an XY trace plot) 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: Magnetic Susceptibility Survey**

There are two methods of measuring the magnetic susceptibility of a soil sample. The first involves the measurement of a given volume of soil, which will include any air and moisture that lies within the sample, and is termed volume specific susceptibility. This method results in a bulk value that is not necessarily fully representative of the constituent components of the sample. For field surveys a Bartington MS2 meter with MS2D field loop is used due to its speed and simplicity. The second technique overcomes this potential problem by taking into account both the volume and mass of a sample and is termed mass specific susceptibility. However, mass specific readings cannot be taken in the field where the bulk properties of a soil are usually unknown and so volume specific readings must be taken. Whilst these values are not fully representative they do allow general comparisons across a site and give a broad indication of susceptibility changes. This is usually enough to assess the susceptibility of a site and evaluate whether enhancement has occurred.

### **Methodology: Gradiometer Survey**

There are two main methods of using the fluxgate gradiometer for commercial evaluations. The first of these is referred to as *magnetic scanning* and requires the operator to visually identify anomalous responses on the instrument display panel whilst covering the site in widely spaced traverses, typically 10m apart. The instrument logger is not used and there is therefore no data collection. Once anomalous responses are identified they are marked in the field with bamboo canes and approximately located on a base plan. This method is usually employed as a means of selecting areas for detailed survey when only a percentage sample of the whole site is to be subject to detailed survey.

The disadvantages of magnetic scanning are that features that produce weak anomalies (less than 2nT) are unlikely to stand out from the magnetic background and so will be difficult to detect. The coarse sampling interval means that discrete features or linear features that are parallel or broadly oblique to the direction of traverse may not be detected. If linear features are suspected in a site then the traverse direction should be perpendicular (or as close as is possible within the physical constraints of the site) to the orientation of the suspected features. The possible drawbacks mentioned above mean that a 'negative' scanning result should be validated by sample detailed magnetic survey (see below).

The second method is referred to as *detailed survey* and employs the use of a sample trigger to automatically take readings at predetermined points, typically at 0.25m intervals, on zig-zag traverses 1m apart. These readings are stored in the memory of the instrument and are later dumped to computer for processing and interpretation. Detailed survey allows the visualisation of weaker anomalies that may not have been detected by magnetic scanning.

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 1m 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.

### **Data Processing and Presentation**

The detailed gradiometer data has been presented in this report in XY trace and greyscale formats. In the former format the data shown is 'raw' with no processing other than grid biasing having been done. The data in the greyscale images has 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.

An XY plot presents the data logged on each traverse as a single line with each successive traverse incremented on the Y-axis to produce a 'stacked' plot. A hidden line algorithm has been employed to block out lines behind major 'spikes' and the data has been clipped. The main advantage of this display option is that the full range of data can be viewed, dependent on the clip, so that the 'shape' of individual anomalies can be discerned and potentially archaeological anomalies differentiated from 'iron spikes'. Geoplot 3 software was used to create the XY trace plots.

Geoplot 3 software was used to interpolate the data so that 3600 readings were obtained for each 30m by 30m grid. The same program was used to produce the greyscale images. All greyscale plots are displayed using a linear incremental scale.

## **Appendix 2: Survey location information**

The site grid was laid out using a Trimble VRS differential Global Positioning System (Trimble 5800 model). The accuracy of this equipment is better than 0.01m. The locations of the survey grid and anomalies are available as a DXF file. The internal accuracy of these markers is better than 0.01m.

*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 CS2 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 Monmouthshire Historic Environment Record).

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Soil Survey of England and Wales, 1983. *Soil Survey of England and Wales: Soils of Eastern England*, Sheet 4

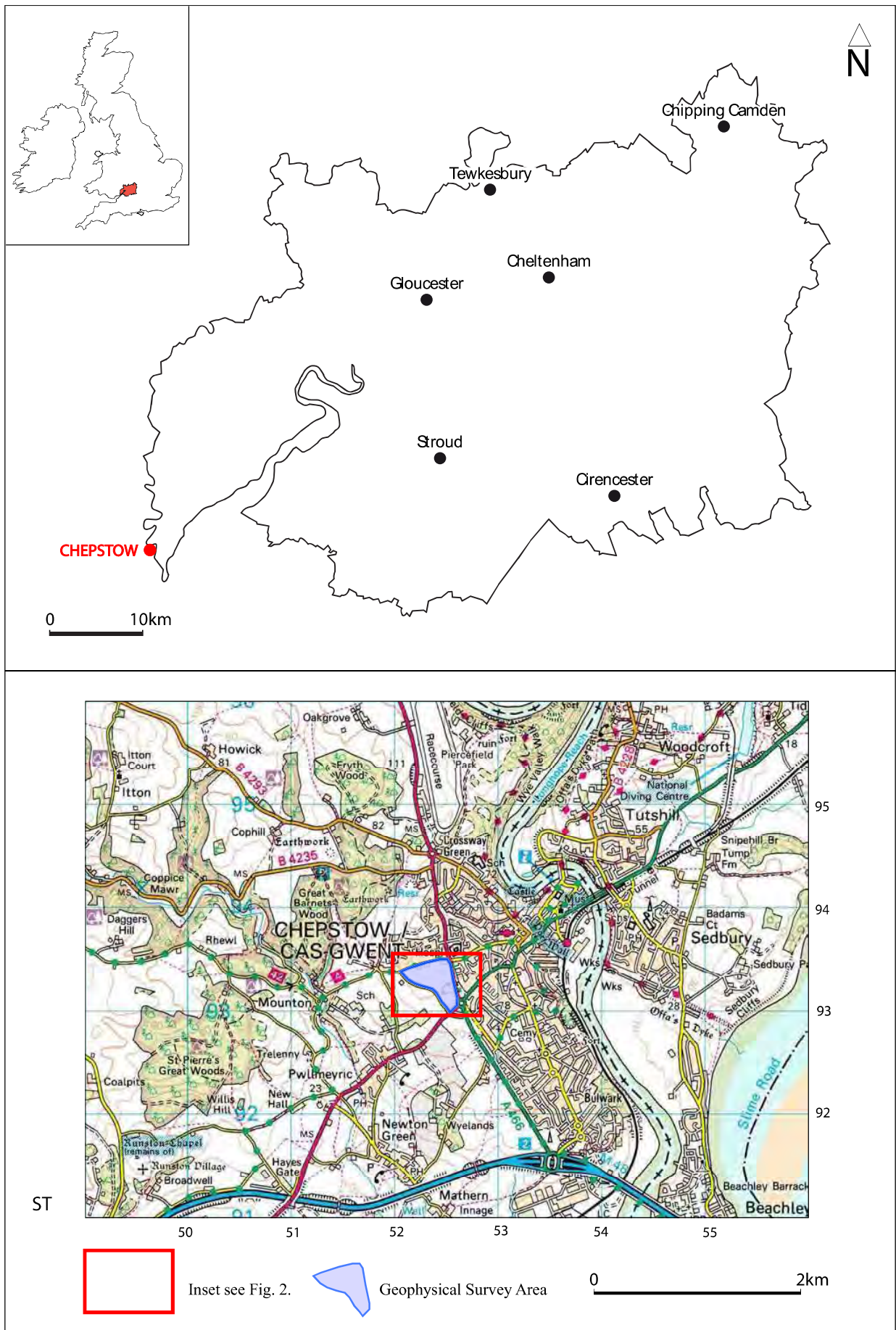


Fig. 1. Site location

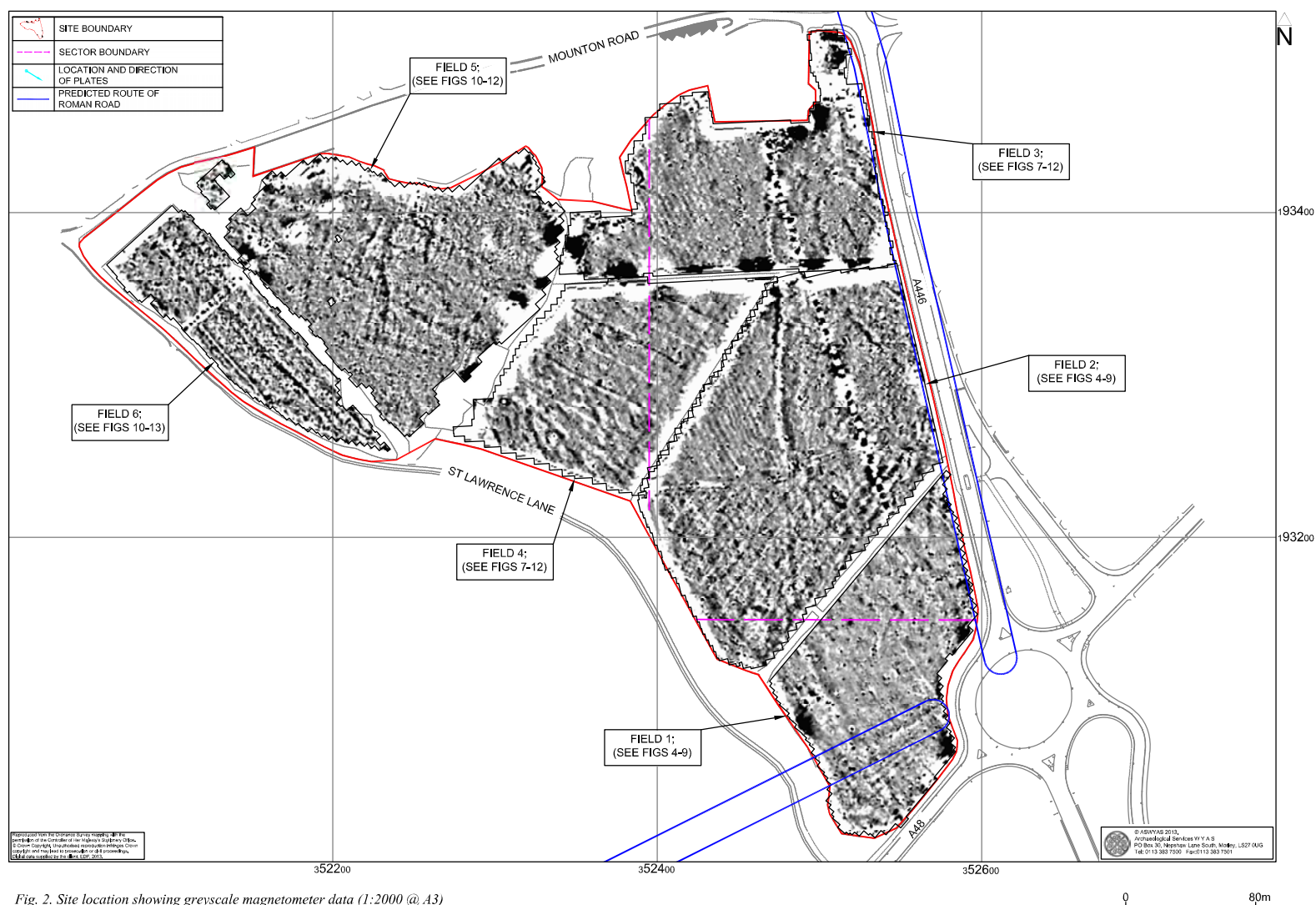


Fig. 2. Site location showing greyscale magnetometer data (1:2000 @ A3)

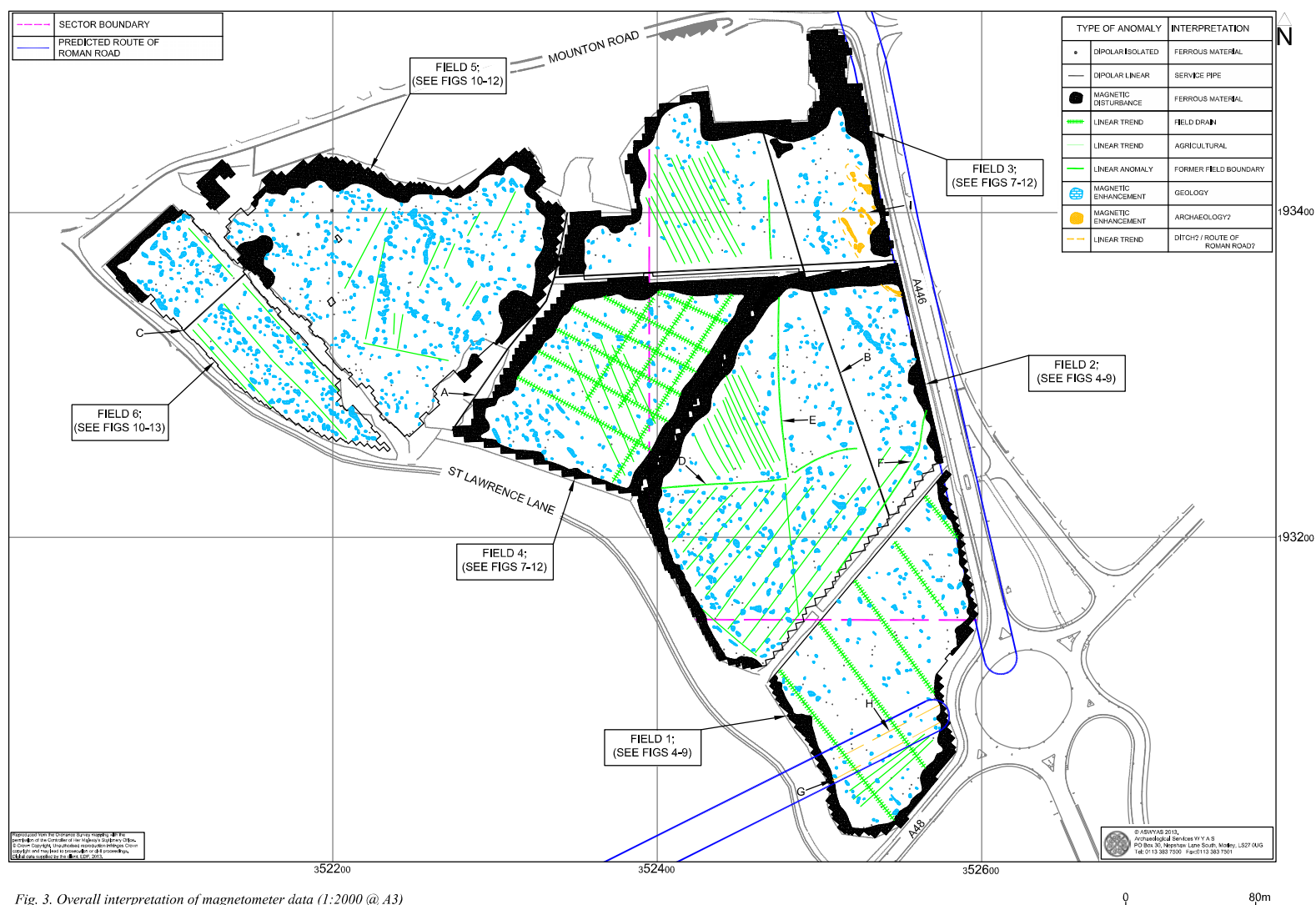


Fig. 3. Overall interpretation of magnetometer data (1:2000 @ A3)



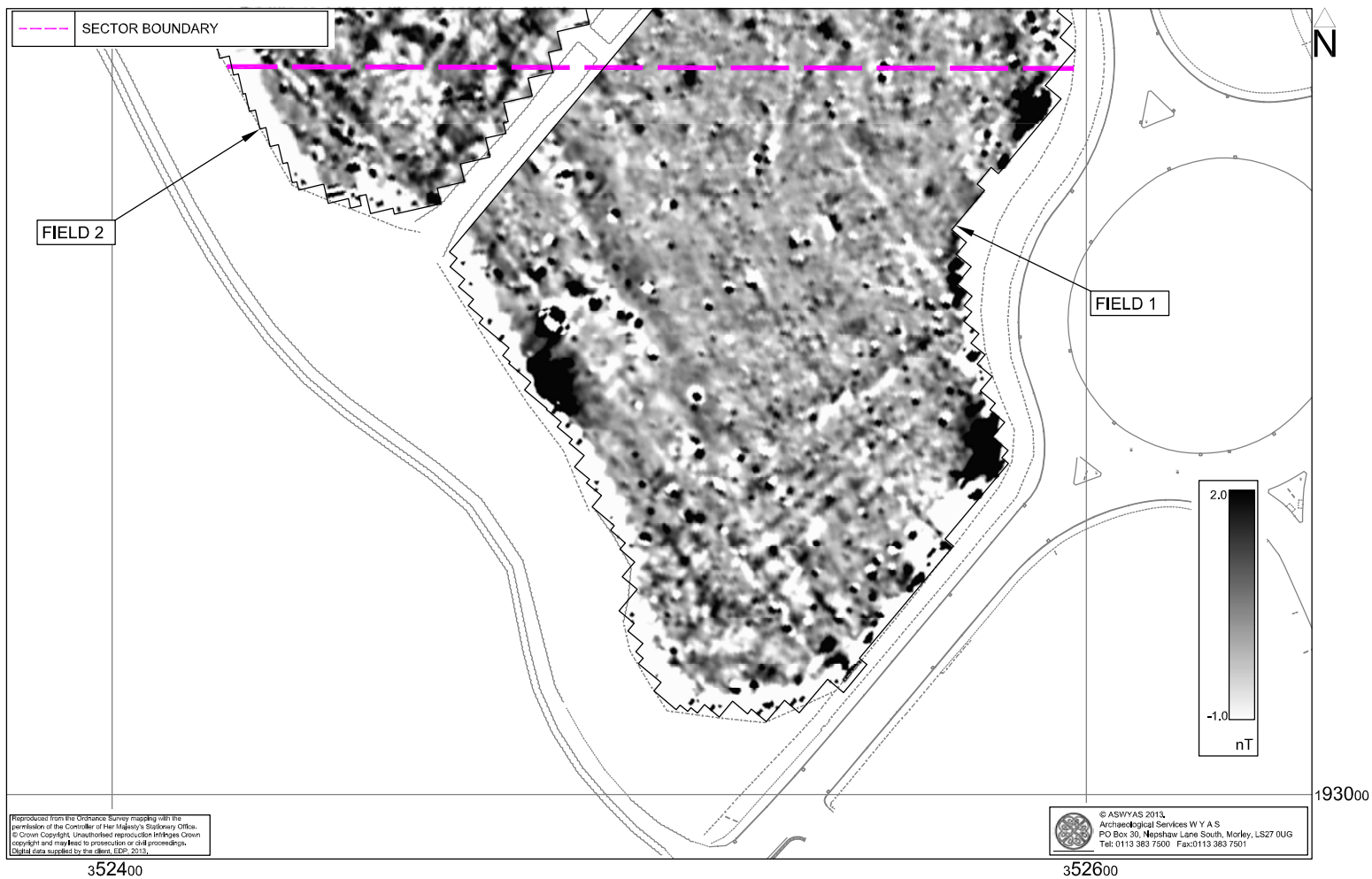


Fig. 4. Processed greyscale magnetometer data; Fields 1 and 2 (1:1000 @ A4)