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INTRODUCTION

- 10.1 This chapter of the Environmental Statement (ES) considers the potential impact of the development proposal on the Historic Environment. In particular, it considers the likely significant effects of the Proposed Development on designated and non-designated heritage assets.
- 10.2 This chapter describes the scope, relevant legislation, assessment methodology and the baseline conditions currently existing at the Site and its surroundings. It then considers any potential significant environmental impacts the Proposed Development would have on this baseline environment, the mitigation measures required to prevent, reduce, or offset any significant adverse impacts and the likely residual impacts after these measures have been employed.

METHODOLOGY

- 10.3 The relevant legislation, policy and guidance are listed below.

Legislation

- 10.4 The applicable legislative framework is summarized as follows:
- Ancient Monuments and Archaeological Areas Act, 1979; and
 - Planning (Listed Buildings and Conservation Areas Act), 1990.

Policy

- 10.5 Applicable national policy comprises the National Planning Policy Framework (2021), and specifically the following paragraphs:

Paragraph 194 states that:

“Local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets’ importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary”.

- 10.6 Paragraph 199 goes on to state that:

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

potential harm amounts to substantial harm, total loss or less than substantial harm to its significance”.

10.7 Paragraph 200 states:

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

- a) grade II Listed buildings, or grade II registered parks or gardens, should be exceptional;*
- b) assets of the highest significance, notably scheduled monuments, protected wreck Sites, registered battlefields, grade I and II* Listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites, should be wholly exceptional”.*

10.8 Paragraph 202

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

10.9 Paragraph 203

“The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset”.

10.10 Applicable local planning policy comprises the following:

- Wiltshire Core Strategy 2026 (Adopted 2015)

Core Policy 54-Cotswold Water Park

‘In the Cotswold Water Park, proposals for outdoor or water-based sports, leisure and recreation based development will be supported where they help transform the area to an informal recreation and leisure resource for Wiltshire residents and visitors in line with the key objectives of the Cotswold Water Park Vision and Implementation Plan. Proposals for any such development must meet the following criteria

- i. Increase or enhance public accessibility and enjoyment of the lakes and countryside.*
- ii. Contribute towards the local economy in the Cotswold Water Park.*
- iii. Strengthen the local landscape character and engender a sense of place.*
- iv. Contribute towards enhancement of biodiversity within the Cotswold Water Park.*

- v. Retain the character of individual settlements including the tranquillity of their settings.*
- vi. Protect the Cotswold Water Park's built heritage, and enhance accessibility and interpretation of such features where possible.*
- vii. Demonstrate high levels of sustainability, particularly including sustainable building design, accessibility by sustainable transport modes and sustainable drainage systems.*

Core Policy 58-Ensuring the Conservation of the Historic Environment

'Development should protect, conserve and where possible enhance the historic environment.

Designated heritage assets and their settings will be conserved, and where appropriate enhanced in a manner appropriate to their significance, including:

- i. nationally significant archaeological remains*
- ii. World Heritage Sites within and adjacent to Wiltshire*
- iii. buildings and structures of special architectural or historic interest*
- iv. the special character or appearance of conservation areas*
- v. historic parks and gardens*
- vi. important landscapes, including registered battlefields and townscapes.*

Distinctive elements of Wiltshire's historic environment, including non-designated heritage assets, which contribute to a sense of local character and identity will be conserved, and where possible enhanced. The potential contribution of these heritage assets towards wider social, cultural, economic and environmental benefits will also be utilised where this can be delivered in a sensitive and appropriate manner in accordance with Core Policy 57 (Ensuring High Quality Design and Place Shaping).

Heritage assets at risk will be monitored and development proposals that improve their condition will be encouraged. The advice of statutory and local consultees will be sought in consideration of such applications.'

Guidance

10.11 The applicable guidance is summarized as follows:

- National Planning Practice Guidance (DCLG 2014, as updated);
- Principles of Cultural Heritage Impact Assessment in the UK (IEMA, IHBC & CIfA 2021);
- Statements of Heritage Significance: Analysing Significance in Heritage Assets Historic England Advice Note 12; and

- The Setting of Heritage Assets: Historic Environment Good Practice Advice in Planning Note 3 (Historic England 2017).

Scoping

10.12 Scoping was initially undertaken in January 2023. In accordance with the Scoping Report, this Chapter assesses the potential for significant effects to buried archaeological remains and the potential for significant effects to the heritage assets through setting change.

Consultation

10.13 Table 10-1 provides a summary of the consultation activities undertaken in support of the preparation of this Chapter.

Table 10- 1 Consultations

Organisation	Individuals	Meeting/Form of Consultation	Summary Outcome
Wiltshire HER	SLR staff LPA HER Officer	Access to Heritage Records	Conclusions as outlined in this chapter
Gloucestershire HER	SLR staff LPA HER Officer	Access to Heritage records	Conclusions as outlined in this chapter

Assessment Methodology

Study Area

10.14 For the purposes of archaeological baseline data collection, a 1km study area was utilised for heritage assets of an archaeological nature to establish the archaeological potential within the Site. For the purposes of a settings assessment a search area of 1km was selected. For the purposes of setting the lagoon and pipeline have been excluded as they are to be buried underground and will not have the capacity to impact setting.

Sensitivity Criteria

10.15 Table 10-2 sets out the sensitivity criteria for the Historic Environment.

Table 10- 2 Sensitivity criteria¹

Sensitivity	Definition
Very High	Very high importance and rarity, international scale and very limited potential for substitution World Heritage Sites
High	High importance and rarity, national scale, and limited potential for substitution - Assets described as being of the 'highest significance' within the NPPF (paragraph 200) - Scheduled Monuments - Registered Battlefields - Grade I and II* Listed Buildings - Grade I and II* Registered Parks and Gardens - Conservation Areas including a high number of Grade I and II* Listed Buildings - Archaeological remains of demonstrable equivalence to a Scheduled Monument
Medium	Medium or high importance and rarity, regional scale, limited potential for substitution - Grade II Listed Buildings - Other Conservation Areas - Grade II Registered Parks and Gardens - Archaeological remains contributing to regional research frameworks
Low	Low or medium importance and rarity, local scale - Locally listed buildings - Other archaeological remains
Negligible	Very low importance and rarity, local scale

10.16 The criteria that have been used to assess the magnitude of the impacts are defined in Table 10-3.

**Table 10-3
Magnitude of Change (Impact) Criteria²**

Magnitude		Definition
Major	Adverse	Loss of resource and/or quality and integrity of resource; severe damage to key characteristics, features or elements
	Beneficial	Large scale or major improvement of resource quality; extensive restoration; major improvement of attribute quality
Moderate	Adverse	Loss of resource, but not adversely affecting the integrity; partial loss of/damage to key characteristics, features or elements.
	Beneficial	Benefit to, or addition of, key characteristics, features or elements; improvement of attribute quality

¹ Adapted from DMRB (2020) LA 104 Environmental Assessment and Monitoring

² DMRB (2020) LA 104 Environmental Assessment and Monitoring

Magnitude		Definition
Minor	Adverse	Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (maybe more) key characteristics, features or elements.
	Beneficial	Minor benefit to, or addition of, one (maybe more) key characteristics, features or elements; some beneficial impact on attribute or a reduced risk of negative impact occurring
Negligible	Adverse	Very minor loss or detrimental alteration to one or more characteristics, features or elements.
	Beneficial	Very minor benefit to or positive addition of one or more characteristics, features or elements
No change		No loss or alteration of characteristics, features or elements; no observable impact in either direction

Significance of Effect

10.17 The sensitivity of the receiving environment together with the magnitude of the impact defines the significance of the potential effect, as identified within Table 10-1.

Table 10-1
Level of Effect Matrix³

		Magnitude of Impact				
Sensitivity		No change	Negligible	Minor	Moderate	Major
	Very high	Neutral	Slight	Moderate or large	Large or very large	Very large
	High	Neutral	Slight	Slight or moderate	Moderate or large	Large or very large
	Medium	Neutral	Neutral or Slight	Slight	Moderate	Moderate or large
	Low	Neutral	Neutral or Slight	Neutral or slight	Slight	Slight or moderate
	Negligible	Neutral	Neutral	Neutral or slight	Neutral or slight	Slight

10.18 These terms are summarized below.

³ DMRB (2020) LA 104 Environmental Assessment and Monitoring

- Very Large Effect: effects at this level are material in the decision-making process – significant effects.
- Large Effect: effects at this level are likely to be material in the decision-making process – likely significant effects.
- Moderate Effect: Effects at this level can be considered to be material decision-making factors - – possible significant effects.
- Slight Effect: Effects at this level are not material in the decision-making process – insignificant effects.

10.19 In concluding the likelihood of a significant effect, professional judgement is considered. The effect on the cultural heritage resource is not significant when the impact does not substantially diminish the heritage interest of the cultural heritage resource (DMRB)⁴. The characteristics of the impacts are described in terms of adverse/beneficial, direct/indirect, temporary (reversible)/permanent (irreversible), together with timescales where appropriate (short, medium, long term).

Limitations and Assumptions

10.20 The prediction of direct impacts has been prepared with regard to a baseline including all standard desk-based resources. Whilst the lack of intrusive fieldwork could be regarded as a limitation, the baseline assessment is considered reasonably reflective of the archaeological potential of the footprint of the Proposed Development. The assessment of in-direct (setting) effects was also undertaken using all standard desk-based resources.

BASELINE CONDITIONS

10.21 An Historic Environment Desk Based Assessment (HEDBA) has been undertaken to assess the potential effect of the proposals on heritage assets. This is appended in full to this chapter, see Appendix 10.1 The pertinent points of the HEDBA are summarised below.

10.22 The overall archaeological potential for the Site is considered to be moderate, with the geophysical survey (Magnitude Surveys Ltd Oct. 2022) results indicating the presence of Medieval or Post-Medieval field boundaries and agricultural remains.

10.23 There is a low chance of an extension of features relating to the Iron Age/Romano-British Scheduled Monument (**1004691**) within the Site, nor have any continuing features from the Iron Age settlement excavated to the southeast (**SU09NW300**) been identified. However, prehistoric or Romano-British remains cannot be discounted due to the wider landscape context of the Site.

10.24 There is a low chance of Anglo-Saxon or Early Medieval features. While there is Anglo-Saxon settlement evidence from South Cerney (**29826, 29827**) and a post-structure was excavated as part of excavations prior to quarrying c.600m SW of the Site (**SU09NW400**), there is no evidence of

⁴ DMRB (2020) LA 106 Cultural Heritage:20

Anglo-Saxon occupation on Ashton Down. However, this cannot be considered nil, as it would have been a visible area of high ground during this period.

- 10.25 A high chance for Medieval features is identified, with Medieval field boundaries identified in the geophysical survey in addition to ridge and furrow remains.
- 10.26 The archaeological baseline has concluded there is the potential for the Proposed Development to impact on archaeological remains within the Site, though any such remains are expected to be limited in extent and significance.
- 10.27 The Heritage Baseline, in accordance with the Historic England Good Practice in Planning Advice Note 3 'The Setting of Heritage Assets' (2017) and Advice Note 12 'Statements of Heritage Significance' (2019), identified potential impact through settings change from the development on one asset: Ashtonfields Community Hall (**1182316**).

ASSESSMENT OF EFFECTS

- 10.28 The Proposed Development has the potential to result in both direct (onsite) and indirect (offsite) impacts upon heritage assets. The potential effects described below are those that have been identified within Appendix 10.1.

Receptors and Sensitivity

Onsite

- 10.29 The baseline presented within Appendix 10.1 identified the following potential archaeological buried remains within the boundary of the Proposed Development:
- Medieval fields boundaries, agricultural remains and possible small structural remains;
 - Potential assets relating to nearby Roman settlements and historic routeways;
 - Potential assets relating to prehistoric settlement in the area; and
 - Other remains, consisting of geophysical anomalies detected, that may or may not be archaeological in origin, but were not clearly identifiable as features.
- 10.30 If present, Medieval agricultural remains would be of **low** importance ('sensitivity').
- 10.31 Prehistoric or Romano-British remains may be of **high** importance due to having demonstrable equivalence or a relationship with the nearby Scheduled Monument. Were such remains not clearly related to the Scheduled Monument, they would be of **medium** importance due to their ability to answer specific research questions regarding the occupation of Ashton Down.

Offsite

- 10.32 The following sensitive potentially receptors are located within the vicinity of the Proposed Development and could be sensitive to setting change.

- Ashtonfields Community Hall (**1182316**). This asset is of medium importance ('sensitivity').

Operational Phase Effects

Onsite

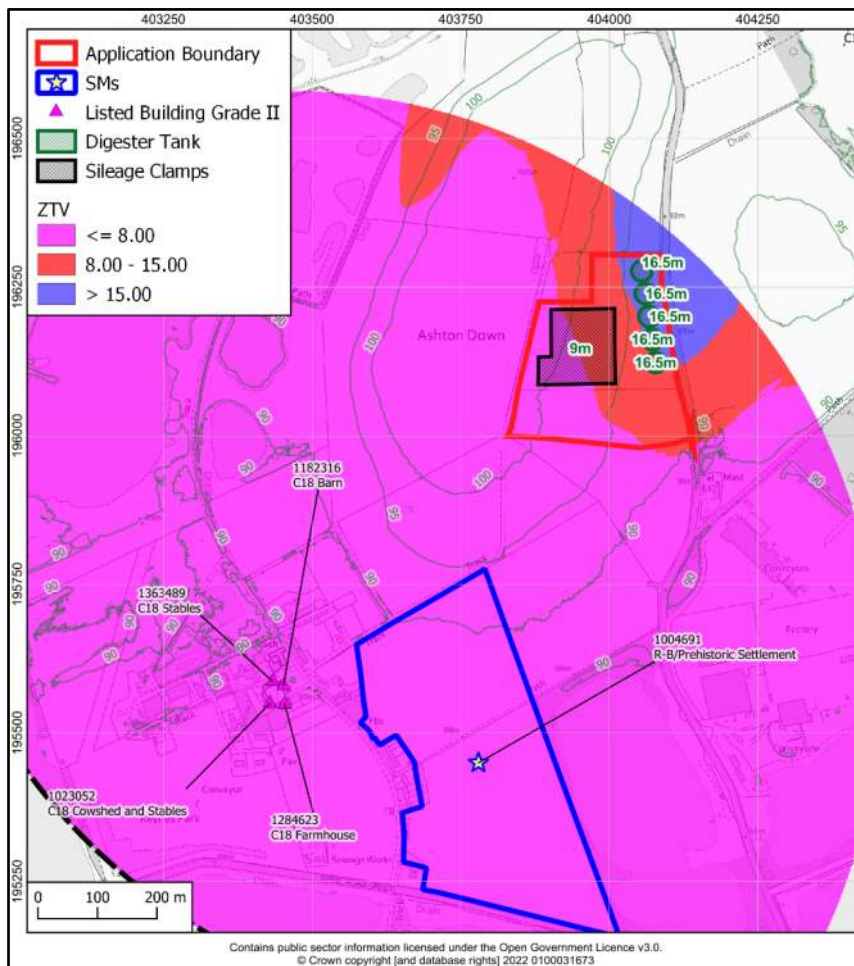
- 10.33 The proposals involve groundworks that would remove any potential buried remains within the footprint of the works. In the worst case the magnitude of impact on below ground archaeological remains may therefore be **major adverse**. However, the overall significance of effect to a would be no greater than **moderate adverse** based on the expected archaeological importance of such remains as set out in the baseline.

Offsite

Ashtonfields Community Hall (NHLE 1182316).

- 10.34 Ashtonfields Community Hall is a Grade II listed building and would be of medium importance/sensitivity for EIA purposes. Its sensitivity derives primarily from its historic and architectural interest, with contributing factors to its setting including the farmstead within which it is located and the establishment of the Bruderhof religious community in the 1930s.
- 10.35 It was identified within the HEDBA (Appendix 10.1) that the proposed development would result in a minor change to the wider landscape within which the asset is set, and possible minor changes to the peripheral views to the south from the asset. However, development would not affect the understanding and appreciation of the asset within the immediate setting of its farmstead, the understanding of important setting elements on approaches to the asset, or intervisibility between the asset and key elements landscape within which the asset is appreciated and understood. The location of the Site in comparison to the asset, as well as the screening caused by the topography and vegetation (existing and planned) means that there would be limited intervisibility between the asset, and development, and any important views to and from the asset would be unaffected. It was therefore identified that the asset would experience **no harm** as a result of changes to the wider setting, and therefore there would be no adverse effect on the asset.
- 10.36 The below figure presents a 'distance below horizon' model using the location of the building that shows only the very tops of the tanks and silage clamps may have some intervisibility with the asset. However, this utilises a terrain model which excludes trees and intervening buildings and therefore creates a 'worst case' where there is bare earth between the asset and Site and no intervening screening.

Figure 1
Distance Below Visual Horizon (m) from Asset to Site



MITIGATION

Archaeology

- 10.37 A geophysical survey undertaken by Magnitude Surveys Ltd on behalf of SLR Consulting in October 2022 did not indicate the presence of any archaeological remains that would merit mitigation. However, no intrusive fieldwork has yet taken place on the Site to confirm this.

Heritage

- 10.38 Vegetation screening has been included as part of the proposed development design, and will contribute to minimising any potential indirect effect on heritage assets. As no harm has been identified to any heritage assets as a result of the proposed development, no further mitigation is required.

RESIDUAL EFFECTS

Archaeology

- 10.39 Residual effects with regard to the buried archaeological resource would remain as stated above. However, they should be considered against the outcome of any archaeological recording. Archaeological reporting would be made available to the public and academic communities such that the removal of buried archaeological remains would release heritage capital through the provision of an otherwise hidden educational resource. This could be a potential public benefit.

Heritage

- 10.40 Residual impacts with regard to heritage would remain as stated above, with the visual effects of the changes Ashtonfields Community Hall resulting in **no harm**, with no adverse effect on the asset.

ASSESSMENT OF CUMULATIVE EFFECTS

- 10.41 When considering likely significant cumulative effects, this assessment has considered the following:
- Inter-cumulative effects (i.e. those that occur as a result of the Proposed Development in combination with other developments).
- 10.42 The 'other developments' includes any development that is known within the planning system and any development where construction has yet to commence. Where construction has commenced, the other development is considered to be part of the existing baseline conditions.

Inter-cumulative Effects

- 10.43 In terms of archaeological sites, cumulative impacts will principally arise where each development removes individual areas of preserved archaeological remains resulting in a gradual erosion and fragmentation of the total archaeological resource of the region. Much of the archaeological resource of the area has already been extracted as a result of excavations prior to gravel quarrying. Development would contribute to the cumulative physical loss of archaeological remains from development in general within the region. However, in all cases of development, including that at the Site, this would be offset by the contribution made to archaeological understanding of the area through evaluation/excavation and recording.
- 10.44 In terms of setting impacts the committed developments, there has been minimal recent development within the study area that has impacted designated assets.

SUMMARY OF EFFECTS

- 10.45 There are potential archaeological remains located within the Site. Of note are the potential Medieval-Post-Medieval agricultural remains identified by geophysical survey. The extent and condition of remains is presently unknown. Other remains within the Site may include Prehistoric-Romano-British features, which may have the capacity to inform us on settlement beyond the well-

researched and understood gravel terraces. The possibility for other unknown remains exists as well.

- 10.46 The effect to all known and potential buried archaeological remains due to the proposed development is considered to be to be **Not Significant** in terms of EIA. It is expected that any mitigation required for direct impacts could be undertaken as a condition post-consent, most likely further investigation of possible features, and the recording of any archaeological remains (should they be present).
- 10.47 Possible indirect impact was identified for one designated heritage asset, Ashtonfields Community Hall (1182316), a Grade II listed building.
- 10.48 It was assessed that only minor changes to the wider agricultural landscape would result from the proposed development, and that **no harm** would be caused to the asset or any of the key contributors to its setting. The effect to this asset is considered to be **Not Significant** in terms of EIA.
- 10.49 Screening has already been proposed as part of the design for the proposed development, and this will contribute to minimising any possible effect on heritage. No additional mitigation is proposed in consideration to indirect effects. No cumulative effects have been identified.

ASHTON KEYNES GREEN POWER

PROPOSED ANAEROBIC DIGESTION FACILITY NR. ASHTON KEYNES, WILTSHIRE

Heritage ES Appendix 10.1

Prepared for: Acorn Bioenergy Limited

Client Ref: 11923

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March 2023



BASIS OF REPORT

This document has been prepared by SLR with reasonable skill, care and diligence, and taking account of the timescales and resources devoted to it by agreement with Acorn Bioenergy Limited (the Client) as part or all of the services it has been appointed by the Client to carry out. It is subject to the terms and conditions of that appointment.

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Executive Summary

This Appendix to an Environmental Statement (ES) sets out the archaeological and heritage assessment component of an Environmental Impact Assessment (EIA) which has been undertaken to accompany a planning application submitted by Acorn Bioenergy Limited to Wiltshire County Council (WCC).

1.0 The application seeks planning permission for the construction and operation of an Anaerobic Digestion (AD) facility on the agricultural land to the northwest of the North End Farm Works, Ashton Keynes, SN6 6QT.

Heritage

There would be a change in the setting of the grade II listed building Ashtonfields Community Hall as a result of some screened intervisibility between the upper storey of the building and the top of the silage clamps. This is not considered to amount to harm to the listed building, as the elements of its setting which contribute to its significance would be wholly preserved.

No other designated or non-designated heritage assets would be subject to harm through a change in their setting.

Archaeology

The findings of this assessment and geophysical survey suggest that any remains dating from the Prehistoric to Medieval period are limited in extent, though if present they would have potential to inform us of ancient occupation of higher ground outcrops such as Ashton Down compared to lower lying gravel terraces. There is no evidence that would suggest that any remains on Site are of such significance that would merit preservation *in-situ*.

Introduction

In September 2022, SLR Consulting was commissioned by Acorn Bioenergy Limited ('the client') to prepare a Heritage Desk-Based Assessment in relation to a proposed Anaerobic Digester Facility (see Appendix 3 for a detailed layout and sections 5.2 and 8.1 for a description of the proposals) on 6.8ha of land in South Cerney, Wiltshire.

2.0 2.1 The Site

The Site, just west of Ashton Road, is centred on SU 04001 96185, 800m southwest of South Cerney and 1.5km north of Ashton Keynes. The nearest major conurbation is Swindon 11km to the southeast and the nearest main road is the A417/A419 dual carriageway 3.5km to the east. The boundary between Gloucestershire and Wiltshire lies 500m north of the Site.

2.2 Purpose of this report

2.2.1 Archaeology

In relation to archaeological remains, this report identifies known and potential archaeological remains within the Site and discusses their significance, in accordance with the NPPF (2021) paragraph 194. The possible effect of the proposals upon the significance of those remains *as a result of any physical change*, e.g. their truncation or removal during construction groundworks, is also discussed, as far as possible, with reference to the latest design iteration.

2.2.2 Heritage

This report also identifies any heritage assets within the Site which could be affected through physical impact and the presence of designated heritage assets within the wider Site environs with the potential to be affected by the proposals *as a result of change to their setting*; this includes both above-ground heritage assets, e.g. Listed Buildings, and buried heritage assets, e.g. Scheduled buried remains. The significance of those assets is described, including any contribution made by their inherent interests and their setting, in accordance with the NPPF (2021) paragraph 194. The possible effect of the proposals upon the significance of those assets, and the ability to appreciate their significance, is then discussed, as far as possible, with reference to the proposed development.

2.3 Report Structure

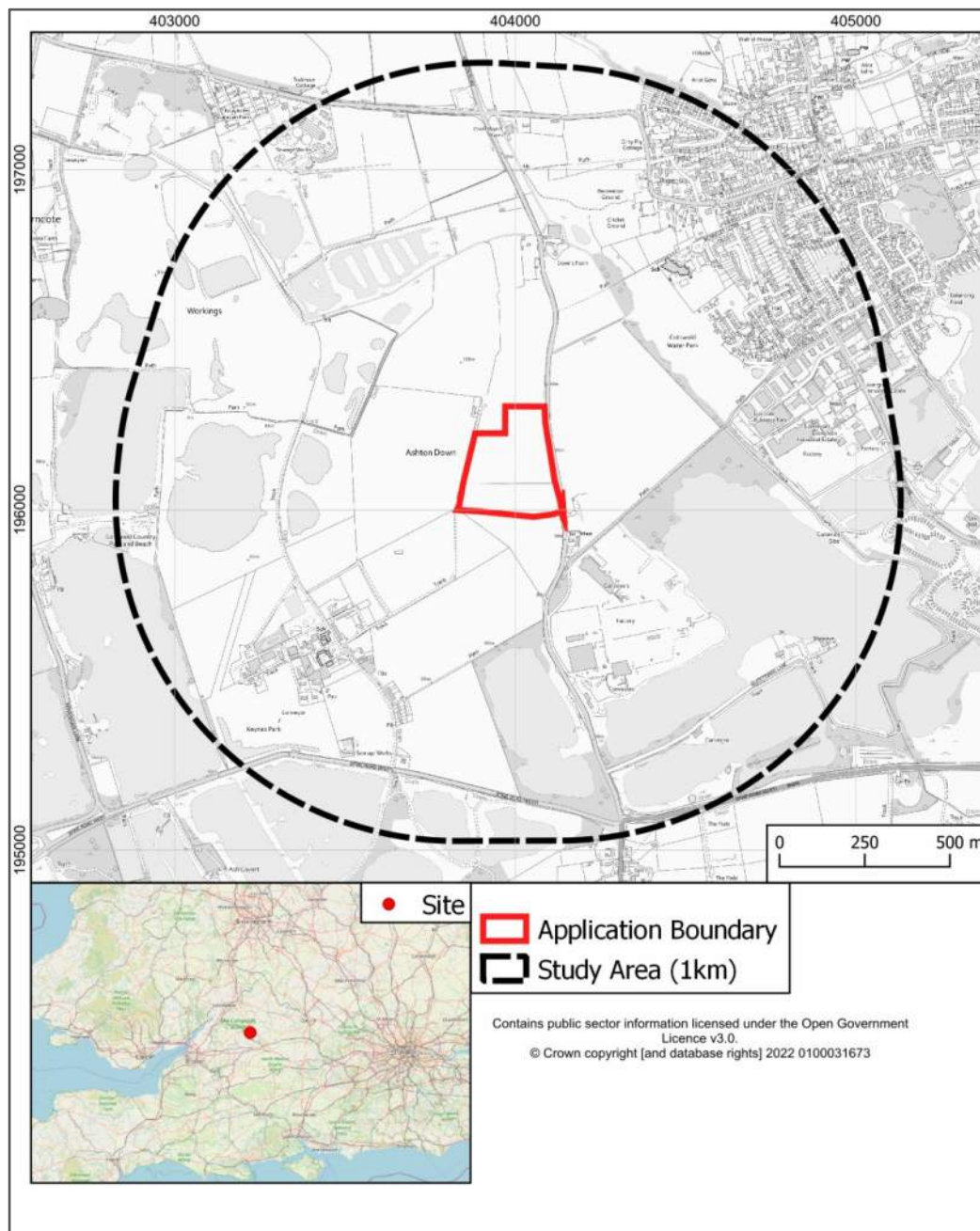
The report addresses potential Archaeology and Heritage receptors. The front end of this report references Policy and Legislation and a Methodology in respect to both Archaeology and Heritage receptors. Thereafter the Baseline, Significance Statements and anticipated Effects for Archaeology and Heritage are presented separately. Compliance with Legislation and Policy and Conclusions are drawn together at the back of the report.

2.4 Standards

The assessment has been undertaken in accordance with all relevant statute, policy and guidance, including the National Planning Policy Framework (NPPF)(2021), the Chartered Institute for Archaeology (CIfA) *Standard and Guidance for Historic Environment Desk-based Assessment* (2017), Historic England's *Good Practice Advice in Planning Note 3: The Setting of Heritage Assets* (2017), and Historic England's *Statements of Heritage Significance* (2019).

The assessment has been undertaken, and the report prepared, by Harry Towers ACIfA, Senior Archaeologist at SLR Consulting Ltd. SLR Consulting is a member of the Federation of Archaeological Managers and Employers (FAME).

Figure 1
Site Location



Legislation and Policy

Designated heritage assets protected by statutory legislation comprise Scheduled Monuments, Protected Wrecks, Listed Buildings and Conservation Areas.

Nationally significant archaeological sites, monuments and structures are protected under the **Ancient Monuments and Archaeological Areas Act (1979)**.

3.0 Listed Buildings and Conservation Areas are protected under the **Planning (Listed Building and Conservation Areas) Act (1990)**. In relation to development proposals, the legislation states that:

‘in considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the secretary of state shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses’ (section 66).

With regards to Conservation Areas, it states that:

‘special attention shall be paid to the desirability of preserving or enhancing the character of that area’ (section 72).

3.1 Planning Policy

3.1.1 National Planning Policy Framework (Revised 2021)

Applicable national policy comprises the National Planning Policy Framework (2021), and specifically the following paragraphs:

Paragraph 194, which states that:

‘In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets’ importance and no more than is sufficient to understand the potential impact of the proposal on their significance. As a minimum the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes, or has the potential to include, heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation.’

Paragraphs 199 and 200, which provide for designated heritage assets, and state respectively that:

‘When considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset’s conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance,’ and

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

a) grade II listed buildings, or grade II registered parks or gardens, should be exceptional;

b) assets of the highest significance, notably scheduled monuments, protected wreck sites, registered battlefields, grade I and II listed buildings, grade I and II* registered parks and gardens, and World Heritage Sites, should be wholly exceptional.’*

Paragraph 201, which relates to instances of ‘substantial harm’, and states that:

'Where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or total loss is necessary to achieve substantial public benefits that outweigh that harm or loss, or all of the following apply:

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

Paragraph 202, which relates to instances of 'less than substantial harm', and states that:

'Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use.'

Paragraph 203, which relates to non-designated heritage assets, and states that:

'The effect of an application on the significance of a non-designated heritage asset should be taken into account in determining the application. In weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.'

3.1.2 Local Planning Policy

Local planning policy is provided in the Wiltshire Core Strategy (Adopted 2015), namely core policies **54** and **58**.

Core Policy 54-Cotswold Water Park

'In the Cotswold Water Park, proposals for outdoor or water-based sports, leisure and recreation based development will be supported where they help transform the area to an informal recreation and leisure resource for Wiltshire residents and visitors in line with the key objectives of the Cotswold Water Park Vision and Implementation Plan. Proposals for any such development must meet the following criteria:

- i. Increase or enhance public accessibility and enjoyment of the lakes and countryside.*
- ii. Contribute towards the local economy in the Cotswold Water Park.*
- iii. Strengthen the local landscape character and engender a sense of place.*
- iv. Contribute towards enhancement of biodiversity within the Cotswold Water Park.*
- v. Retain the character of individual settlements including the tranquillity of their settings.*
- vi. Protect the Cotswold Water Park's built heritage, and enhance accessibility and interpretation of such features where possible.*
- vii. Demonstrate high levels of sustainability, particularly including sustainable building design, accessibility by sustainable transport modes and sustainable drainage systems.*

Core Policy 58-Ensuring the Conservation of the Historic Environment

'Development should protect, conserve and where possible enhance the historic environment.'

Designated heritage assets and their settings will be conserved, and where appropriate enhanced in a manner appropriate to their significance, including:

- i. nationally significant archaeological remains*
- ii. World Heritage Sites within and adjacent to Wiltshire*
- iii. buildings and structures of special architectural or historic interest*
- iv. the special character or appearance of conservation areas*
- v. historic parks and gardens*
- vi. important landscapes, including registered battlefields and townscapes.*

Distinctive elements of Wiltshire's historic environment, including non-designated heritage assets, which contribute to a sense of local character and identity will be conserved, and where possible enhanced. The potential contribution of these heritage assets towards wider social, cultural, economic and environmental benefits will also be utilised where this can be delivered in a sensitive and appropriate manner in accordance with Core Policy 57 (Ensuring High Quality Design and Place Shaping).

Heritage assets at risk will be monitored and development proposals that improve their condition will be encouraged. The advice of statutory and local consultees will be sought in consideration of such applications.'

Methodology

4.1 Baseline Data Collection

The purpose of this assessment is to understand the potential impact of the proposals on heritage assets. A staged approach is required to understand potential impact (significance of effect). In the first instance a baseline is gathered in order to understand the presence/absence of archaeology and heritage receptors.

4.0 The following sources were consulted where appropriate in respect to potential archaeological and heritage receptors:

- the National Heritage List for England (NHLE), for all records relating to designated heritage assets;
- Wiltshire and Gloucestershire's Historic Environment Records (HERs), for sites, events and Historic Landscape Characterisation (HLC) data;
- the Environment Agency's library of open access LiDAR data (DTM and point cloud);
- the Ordnance Survey open-source library, for topographic and cartographic data, including elevation point cloud, contour and hydrological data;
- historic cartographic sources, including large-scale county surveys, tithe mapping and early Ordnance Survey editions;
- other online resources, including: the British Geological Survey; the Cranfield University Soilscape viewer; and the National Library of Scotland's online mapping database;
- Wiltshire, Gloucestershire and Swindon Councils' online planning application portals, for relevant documentation submitted in relation to proximate applications; and
- grey literature relating to excavations within, and within proximity to, the Site.

4.1.1 NHLE/HER Datasets

4.1.2 Archaeology

For purposes of baseline data collection, a 1km search area was utilised for designated and non-designated heritage assets of an archaeological nature.

A proportionate level of HER data, sufficient to inform the assessment of archaeological potential, significance and potential impact presented in this report, was obtained. The HER data was reconciled and analysed within the context of the objectives of the present assessment.

While all of the HER data received have been reviewed and considered, not all HER records (sites and events) are discussed further within this report, only those that are of relevance to the determination of potential, significance and potential impact.

All data supplied by the HER are presented in **Appendix 1**.

4.1.3 Heritage

For purposes of baseline data collection, a maximum 1km search area was utilised for designated heritage assets. This was considered suitable in respect to the scale, massing and height of the proposals.

4.1.4 Site visit

As part of baseline collection, a Site inspection was also undertaken in October 2022 in order to assess the Site within its wider landscape context, identify any evidence for previous disturbance, and examine any known or

suspected archaeological features. Field observations in respect to potentially sensitive designated heritage assets within the search area were also collected at the time of the Site inspection, assets being assessed from within the Site and/or publicly accessible areas as appropriate towards achieving an understanding of their significance and the contribution of setting towards this.

4.1.5 Assessment of significance

With reference to the policy contained within the NPPF, the significance of heritage assets can be described in terms relating to their designated status. This essentially equates to assigning a descending level of importance as set out below.

1. Designated heritage assets of the highest significance (importance) are identified in paragraph 200 of the NPPF as comprising Grade I and II* Listed buildings, Grade I and II* Registered Parks and Gardens, Scheduled Monuments, Protected Wreck Sites, World Heritage Sites and Registered Battlefields and non-designated heritage assets of archaeological interest which are demonstrably of equivalent significance to Scheduled Monuments (as identified in footnote 63 of the NPPF).
2. Designated heritage assets of less than the highest significance (importance) are identified in paragraph 200 of the NPPF as comprising Grade II Listed buildings and Grade II Registered Parks and Gardens.
3. Non-designated heritage assets are defined within the PPG as “buildings, monuments, sites, places, areas or landscapes identified by plan-making bodies as having a degree of significance meriting consideration in planning decisions, but which do not meet the criteria for designated heritage assets”.¹

However, whilst acknowledging that assets have varying levels of designated status (as set out above), understanding the effect of proposals rests on achieving an understanding of where the ‘significance’ of an asset lies and the effect of the proposed development on this ‘significance’. The NPPF defines ‘significance’ as:

‘the value of a heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset’s physical presence, but also from its setting.’

The NPPF glossary and the Planning Practice Guidance (PPG) provides a definition for these interests as:

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

Historic England’s recently published guidance: *Statements of Heritage Significance: Analysing Significance in Heritage Assets*, *Historic England Advice Note 12* (2019),² concurs with the use of this terminology and methodology, both of which are thus adopted for the purposes of this report.

¹ MHCLG, PPG, paragraph 039, reference ID: 18a-039-20190723.

² Historic England, *Statements of Heritage Significance: Analysing Significance in Heritage Assets*, *Historic England Advice Note 12* (Swindon, October 2019).

With specific regard to the assessment of impacts to designated heritage assets, in particular, as stated within the NPPF 'significance derives not only from the physical fabric of a heritage asset but also from its setting' (MHCLG 2021, Annex 2 page:72).

In respect of identifying the importance of setting to the identified significance of a heritage asset, Historic England's good practice guidance presented in the Setting of Heritage Assets (Historic England GPA 3 2017) will be utilised; specifically, the five-step approach to assessment:

- Step 1 – Identify which heritage assets and their settings may be affected;
- Step 2 – Assess the degree to which settings make a contribution to the significance of the heritage asset(s) or allow significance to be appreciated;
- Step 3 – Assess if any change to the setting identified would affect the appreciation/ understanding of an asset's significance (there may be no change);
- Step 4 – Explore ways to maximise enhancement and avoid or minimise harm;
- Step 5 – Make and document the decision and monitor outcomes.

A non-exhaustive list provided within the document (2017:11) identifies themes such as:

- Physical Surroundings;
 - topography;
 - aspect;
 - functional relationships and communications;
 - history and degree of change over time; and
- sense of enclosure, seclusion, intimacy or privacy.
 - experience
 - views from, towards, through, across and including the asset;
 - intentional inter-visibility with other historic assets and natural features; and
 - sense of enclosure, seclusion, intimacy or privacy.

4.1.6 Assessment of Effects

An understanding of the presence/absence of receptors, their designated status and their significance provided by the above approach allows for a detailed and justifiable determination of how proposals would affect the archaeology and heritage resource. Once an understanding of significance has been achieved, the effect of proposals can be gauged on the basis of how the proposed development would affect the significance held by the asset (the designated status of an asset providing for some weighting in either how the impact is expressed or considered).

Potential development effects to **designated heritage assets** are discussed in terms of *harm to significance*. As clarified in the High Court, preservation does not mean no change; it specifically means no harm.³ This is echoed in GPA 2, which states that "*Change to heritage assets is inevitable but it is only harmful when significance is damaged*".⁴

Where harm is identified, the NPPF (2021), references the follows levels of harm with respect to **designated heritage assets**:

³ *R (Forge Field Society) v Sevenoaks District Council* [2014] EWHC 1895 (Admin).

⁴ Historic England, GPA 2, p. 9.

- **‘Substantial harm or total loss’**

*Being a level of harm that would “have such a serious impact on the significance of the asset that its significance was either vitiated altogether or very much reduced”;*⁵ and

- **‘Less than substantial harm’**

Being any lesser level of harm than that defined above; recent case law has confirmed that this includes any level of harm (not considered substantial) regardless of its quantification, e.g. the finding of a ‘negligible’ level of harm must still be treated as less than substantial harm and be weighed in the balance under paragraph 202.

With reference to the broad parameters referenced above, the PPG provides that the category of harm identified for any given asset be *‘explicitly identified’*, and that the extent of that harm be *‘clearly articulated’*.⁶ For purposes of this assessment, this can be done with reference to a ‘spectrum’, e.g. *at the lower/upper end of the spectrum of less than substantial*.

- **The NPPF does not provide that harm to non-designated heritage assets be categorised as ‘substantial’ or ‘less than substantial’, only that the scale of any harm or loss is articulated.**

The assessment of anticipated development effects can thus be seen to have been undertaken in accordance with a robust methodology, formulated within the context of current best practice, the relevant policy provisions, and key professional guidance.

⁵ *Bedford Borough Council v Secretary of State for Communities and Local Government* [2013] EWHC 2847 (Admin), para. 25.

⁶ MHCLG, PPG, paragraph 018, reference ID: 18a-018-20190723.

Archaeological Baseline

5.1 Designated assets

A single Scheduled Monument (**1004691**) is situated within 1km of the Site, a prehistoric/Romano-British settlement identified through aerial photography⁷.

5.0

Plate 1
1978 Aerial Photograph

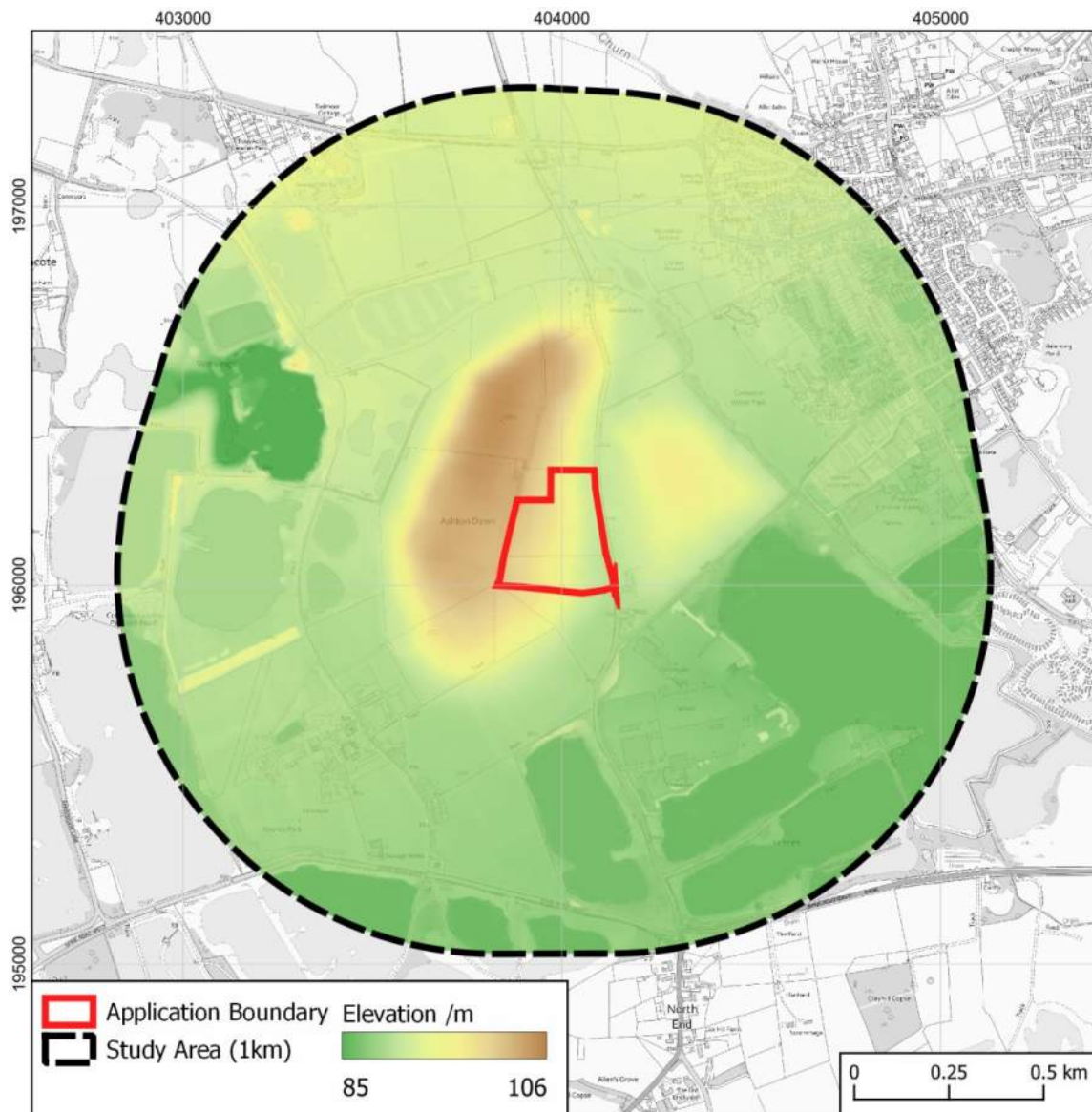


5.2 Geology and Topography

The Site is located on the eastern slope of Ashton Down, an outcrop of mudstone bedrock rising above the gravel terraces of the surrounding landscape. The outcrop rises from c.85m AOD to 105m AOD and occupies a relatively small area of just 30ha. The general topography, aside from Ashton Down, is of a gentle slope southwards from 92m AOD in the north to 86m in the south.

⁷ Plate sourced from Cambridge University Air Photo Catalogue

Figure 2
Digital Terrain Model



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 Base map from National Library of Scotland <http://www.nls.uk/>

The mudstone formation forming the Ashton Down and the remainder of the bedrock within the study area is the Kellaway Mudstone Formation, which consists of a more compacted matrix around the clasts and forms a significant part of the higher ground of the southwest. Gravel terraces overlie the bedrock across the majority of the study area.

5.3 Previous Surveys

No archaeological fieldwork has been previously undertaken within the boundary of the Site.

As a result of extensive gravel quarrying across the study area, numerous excavations have taken place within 1km of the Site. A series of mitigation excavations were conducted over a 12-year period across much of the

western half of the study area around north of the Cotswold Community School. Findings included multi-phase occupation from the Neolithic through to the Medieval period⁸ (see also **Fig. 3**).

In the 1970s, excavations were conducted southeast of the Site (**EWI18**) which revealed extensive Iron Age settlement.

The National Mapping Programme collates information on cropmarks and earthworks from aerial photography for accurate georeferencing. Numerous cropmarks have been identified through this programme, including within the site, though none of the cropmarks within the site have been corroborated by geophysical survey.

5.4 Chronological Background

Note: Wiltshire HER monument references are alphanumeric, Gloucestershire HER references are numeric.

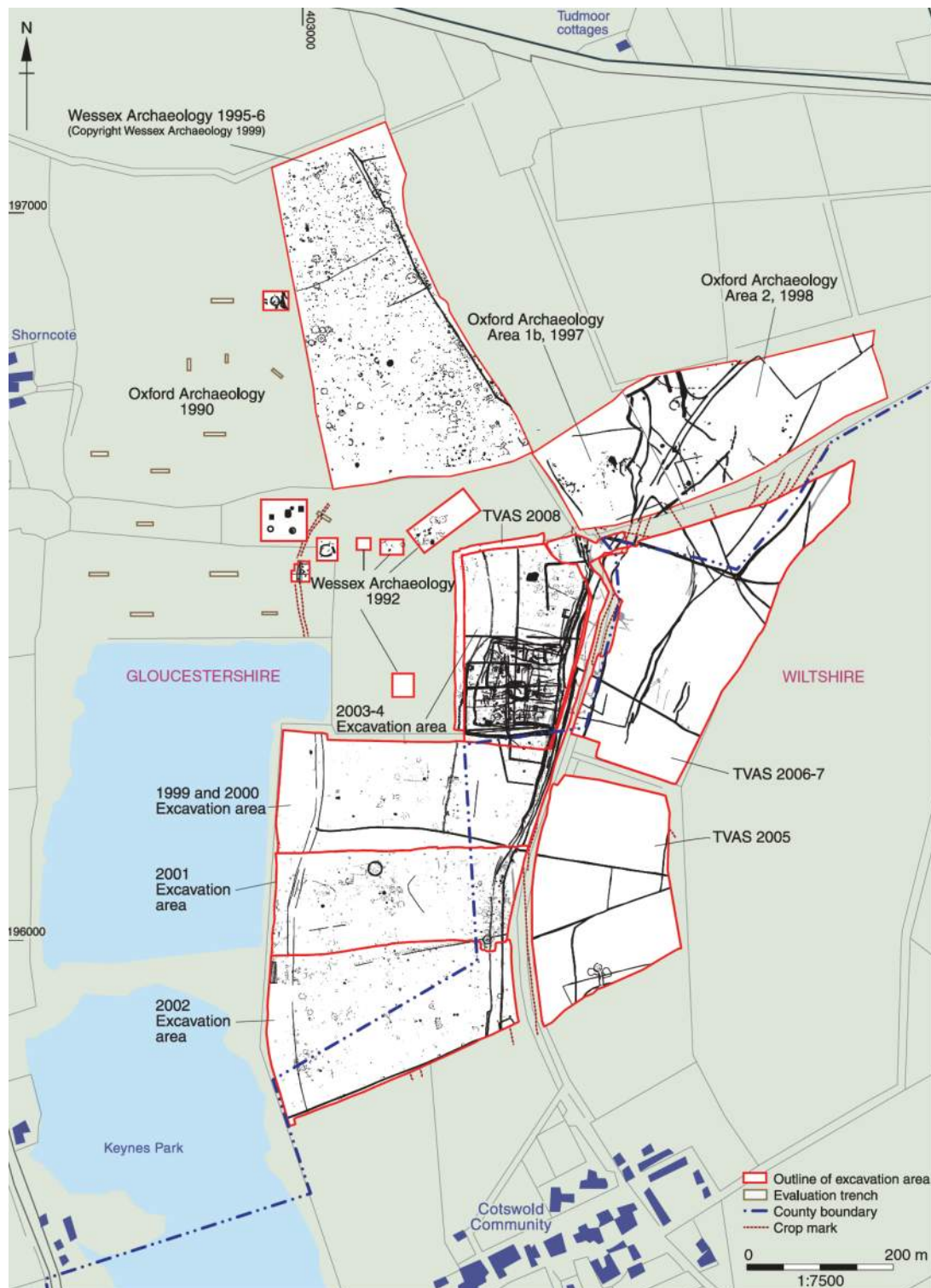
5.4.1 Prehistoric Context

Prehistoric heritage assets are shown in **Drawing 1**. This should be considered alongside the undated features, shown in **Drawing 05**.

Both the NMP and HER record a large number of prehistoric or potentially prehistoric assets within the study area. The earliest artefactual evidence consists of 21 Mesolithic flints (**20675**) recovered in South Cerney 1km NE of the Site.

⁸ OA/TVAS 1999-2008: *Evolution of a Farming Community in the Upper Thames Valley*

Figure 3
Multi-phase Settlement West of Site



The area to the west of the Site represents a wide spread of multi-phase prehistoric occupation. The earliest evidence of permanent occupation in the study area dates to the Middle Neolithic, described in the Oxford Archaeology report as 13 pits covering an area of c.6ha and containing a small assemblage of flints and Peterborough Ware pottery. (15477) 900m northwest of the Site.

A small hengiform ditch and five pits (**SU09NW100**), c.600m west of the site, were excavated in 2002 containing Peterborough and Grooved Ware pottery. This hengiform feature was the only ditch to be excavated dating to the Neolithic.

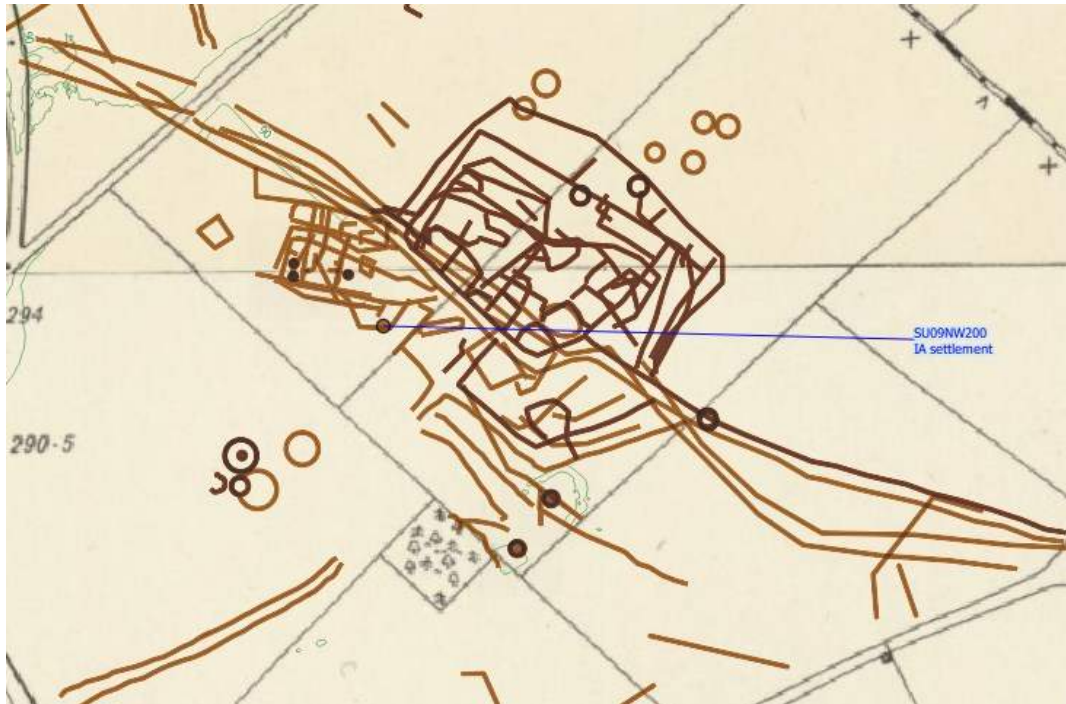
Bronze Age settlement in the study area was far more extensive. **SU09NW152** is a recorded BA settlement complex 6-700m southwest of the Site with pits and enclosure ditches, with further ring ditches 100m to the south (**SU09NW622**, **SU09NW623**). Continuity with the Neolithic hengiform occupying the same area is unclear, however, it would likely have remained a visible landscape feature during this period. 200m to the north, a north/south alignment of 164 Middle Bronze Age pits in a double row, 140m long, was excavated in 1999 (**SU09NW155**). This alignment was cut in places by Iron Age features along the same alignment, which follows the modern parish and county boundaries between Ashton Keynes/Wiltshire and Somerford Keynes/Gloucestershire. While the HER suggests this indicates a continuity of the boundary, other later features do not appear to respect it.

Further northeast of this pit alignment, **SU09NW153**, and **SU09NW154** represent concentrations of Bronze Age ditches and pits which extend along the edge of Ashton Down. There is also evidence of Bronze Age settlement elsewhere in the study area. **SU09NW156** (220m east of the Site), an enclosure 20m in diameter, was noted in aerial photography and was interpreted as a BA barrow. It was not excavated as it was removed by gravel quarrying in the mid-20th century, as was an abutting cropmark trackway also recorded by aerial photographs (**SU09NW626**). Two findspots along Ashton Road are recorded as dating to the Bronze Age: a palstave axehead (**2353**, 800m north of the Site) and a dagger (**SU09NW151**, 800m south of the Site). A further collection of BA artefacts were recovered (**20675**, 1km northeast of the Site) in South Cerney, consisting of a small, shaped fragment of bronze and 8 decorated sherds of Bronze Age pottery.

With the exception of **SU09NW201**, two scatters of pits and postholes 600m WSW of the Site, the bulk of Iron Age remains within the study area are linear features, particularly to the west. Between the two foci of **SU09NW201**, two late IA ditches (**SU09NW624**) cut across the Bronze Age pit alignment **SU09NW155** which runs counter to the suggestion in the HER that these pits represent a continuity of the current parish boundary.

Another substantial IA curvilinear ditch ran SW/NE 400m NW of the Site (**SU09NW621**), with several further linear features branching off. It is likely that the extensive IA ditches formed a boundary between the low-lying gravel terraces and the mudstone outcrop of Ashton Down.

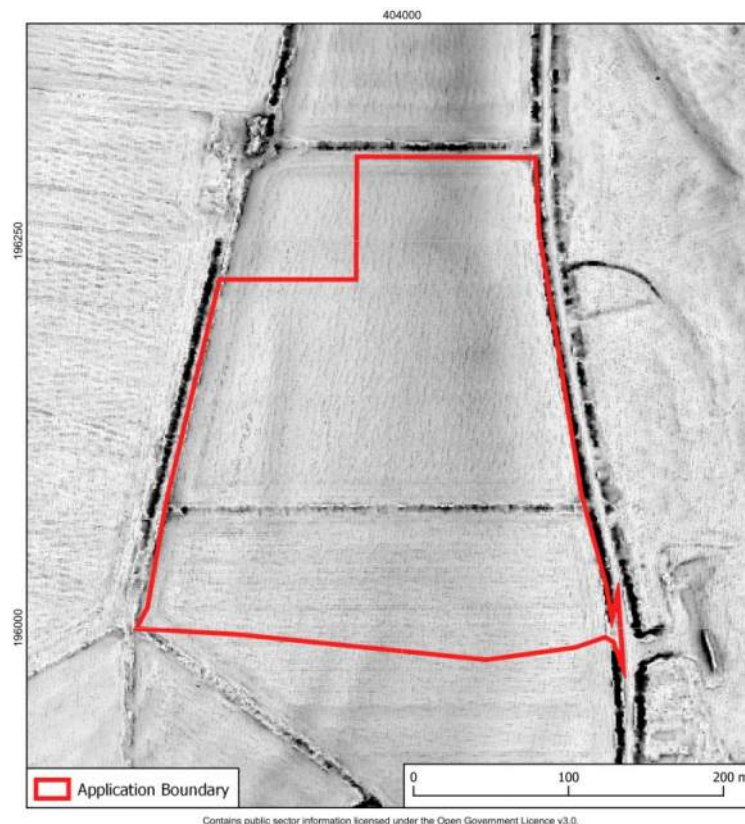
Figure 4
IA settlement southeast of Site



A substantial IA settlement was also present southeast of the Site, **SU09NW200**. Though the bulk of the features are recorded by the HER as being undated, the main ditches, excavated in 1978 by the Swindon Archaeological Society⁹, were dated to the Iron Age. A trackway ran along the southwestern portion of the settlement to the eastern side of Ashton Road immediately adjacent to the Site, though nothing relating to this was identified in the geophysical survey. Nor are there any evident features in LiDAR analysis.

⁹ Fieldwork: Swindon Archaeological Society; Phillips, Bernard. 1983. Fieldwork Swindon Archaeological Society 1978 - B Phillips.

Figure 5
SVF LiDAR



An undated cropmark or earthwork feature identified in the NMP, **SU09NW614**, runs across the central part of the Site. Though it does not have a date, it is similar in form to **SU09NW626**, which abuts the potential BA barrow.

Summary of prehistoric potential

While there is a clearly very high density of Prehistoric settlement within the study area, in particular to the west of Ashton Down and to the Site's immediate southeast in addition to the possible feature within the Site, it must be considered that the geophysical survey did not indicate the presence of any prehistoric remains.

The Site's position in the landscape must also be considered. The prehistoric boundaries appear to abut the edge of Ashton Down, and were any prehistoric remains to be present on the Down it is likely they would be situated on its highest point overlooking the Thames and the settlements to the west and southeast. The Site's location is therefore not consistent with the apparent settlement patterns in the area.

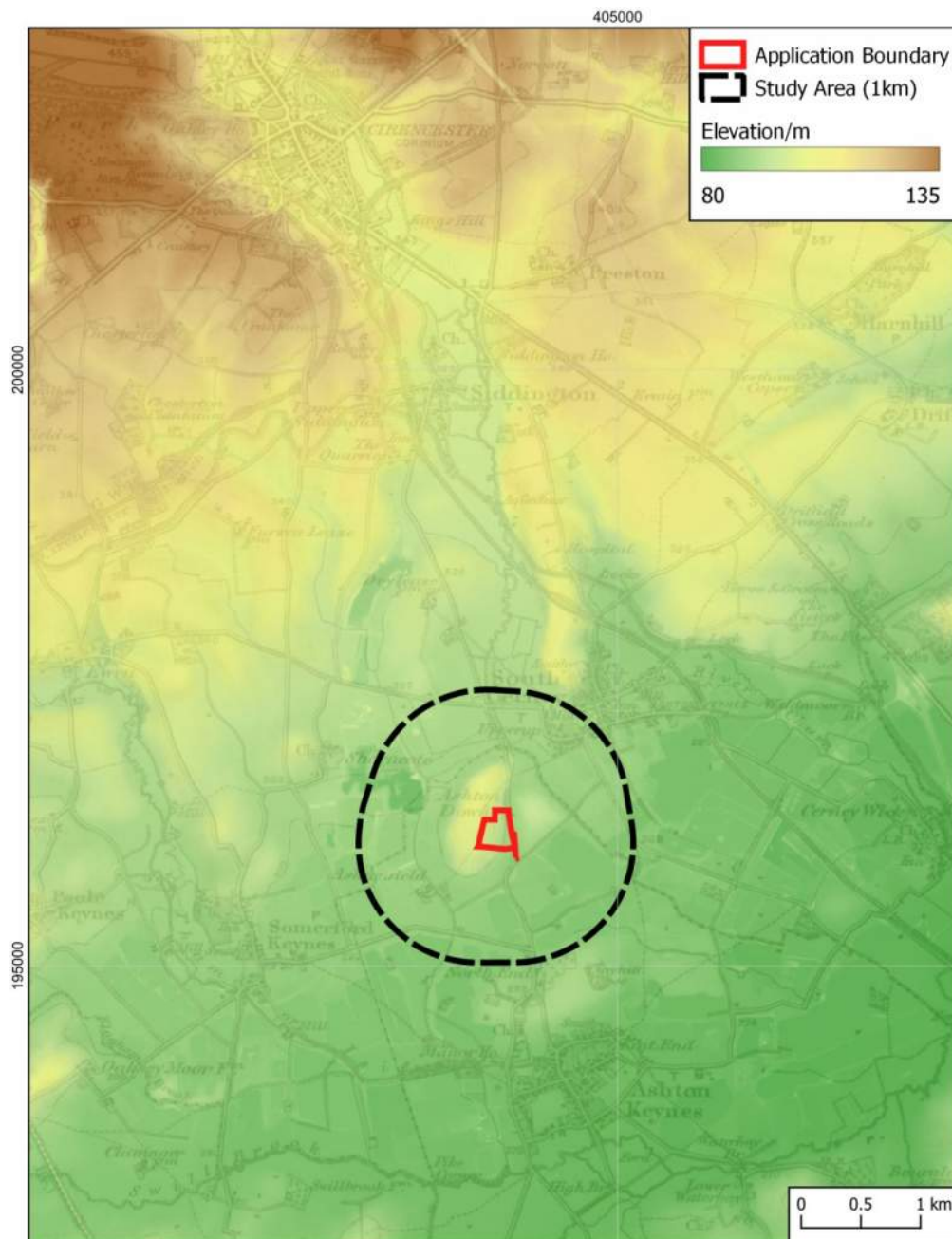
As such, while there is potential for prehistoric remains to be present within the Site, it is unlikely that they are of high significance or extent.

5.4.2 Romano-British context

The Romano-British historic environment is shown in **Drawing 02**. This should be considered alongside the undated features, shown in **Drawing 05**.

The study area is placed geographically at a crossing point between several main routeways through Roman Britain. Cirencester (the Roman town of Corinium, which served the junction between the Fosse Way and Ermin Way), lies 6km to the north, and the River Thames begins 2.5km to the south. Ashton Down would have been the first landscape feature seen by travellers between the Thames and Cirencester.

Figure 6
Terrain Relief including Corinium



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 Base map from National Library of Scotland <http://www.nls.uk/>

The pattern and dispersal of Romano-British settlement within the study area can be seen as having considerable continuity with the Iron Age. Though the ditches **SU09NW624** and **SU09NW621**, the LIA ditch group, are the sole features listed in the HER as both IA and Romano-British, there is more evidence of transitional period occupation elsewhere. The main settlement focus (**SU09NW301/3121**, 600m WNW of the Site) during the Roman period primarily dates to the 3rd and 4th centuries AD, though some earlier (1st and 2nd centuries) appeared to be present though badly truncated. The main feature was a substantial trackway running N/S across the excavation area, with a settlement of rectangular ditched enclosures truncating an earlier Iron Age enclosure. Post-built structures, a cobbled surface and a cremation were also recorded during the excavation as being of C3-C4 date.

SU09NW300 is the Roman phase of the settlement recorded to the southeast of the Site. The form of the features, though the HER lists many as undated (such as enclosure **SU09NW609**), is typical of LIA-early Roman sites with a rectilinear enclosure and ring ditches with associated sub-enclosures within. A lead coffin burial (**2386**) is recorded in the HER just east of the settlement which is provisionally dated as Roman, though this is not substantiated in the HER and no associated contexts or finds are mentioned.

400m southwest of the Site lies the scheduled monument **1004691** (HER **SU09NW613**). Though this is recorded in the HER as a Roman settlement, no excavation has taken place and it is solely identified through cropmarks. The feature forms within the monument indicate it is a multi-phase prehistoric and Roman settlement area, possibly forming part of the same complex as the excavated settlements to the west of the Site. The large trackway recorded in those excavations may align with a trackway within the monument itself. The northeastern ditches of the monument also, similarly to the IA ditches to the north, clearly abut the high ground of Ashton Down, indicating that the down was not a focal point of settlement in the period.

Evidence for Roman occupation in the northeast of the study area is more sparse. A bronze fibula (**2377**) and a ditch (**49955**) in South Cerney represent the body of evidence for the Roman period northeast of the Site.

Summary of Romano-British potential

The evidence for Romano-British settlement within the Site is limited. While there is substantial evidence for occupation across the study area, the settlement foci are located on the gravel terrace with boundary ditch orientation suggesting it appears likely that the predominant routeway was to the west and that Ashton Down itself was not part of the wider complex of settlements in the area. The geophysical survey results also suggest there are not substantial or significant Roman-British remains on the Site.

However, the volume of settlement activity in close proximity to the Site indicates a moderate level of potential.

5.4.3 Early Medieval and Medieval context

Early Medieval and Medieval monuments are shown in **Drawing 03**.

Though more limited in scale, an Anglo-Saxon phase was recorded in the excavations to the west of the Site. Only one of the features recorded is listed by the HER, a post-built ovoid structure (**SU09NW400**) 650m WSW of the Site. Another post-built structure is located 200m NW of this, and further north several ring-post structures and two Sunken Featured Buildings (SFBs) were recorded as well as two graves. The Saxon phase at the Costswold Community site was estimated to cover the 6th and 7th centuries.

A limited number of later Saxon features have been excavated in South Cerney, including a group of ditches (**29827**) and pits dating to the 10th-11th centuries (**29826**). Although South Cerney is not mentioned in the Domesday Book, it appears to have origins prior to the conquest as there is evidence of continuing settlement in the southwest of the village through the 10th-13th centuries (later Medieval pits **52156**, **29826**) and walls and earthworks (**52157** and **26835** respectively) have been identified close to the late Saxon activity.

There is little further evidence of permanent Medieval occupation in the study area. Ridge and furrow earthworks are present, recorded in the HER (**3121**, to the west of the Site in the Costswold Community excavation area, and **SU09NW613** to the south of the study area) and within the Site identified in the geophysical survey. The geophysical survey also identified potential Medieval field boundaries which have since been removed.

Field forms in general across the study area reflect Parliamentary Planned Enclosure, with little evidence of surviving Medieval field forms in historic mapping. The geophysical survey evidence suggests removed field boundaries are present within the Site, particularly to the south.

Summary of Medieval potential

The geophysical survey indicates the presence of Medieval agricultural remains on Site, namely field boundaries and ridge-and furrow remnants. However, while this confers high potential, it must be considered that such

remains are generally not considered to have high significance. There is no evidence of more extensive occupation of the Site, e.g pits or structures.

5.4.4 Post Medieval

While there is no tithe mapping available, field forms in the study area are reflective of Parliamentary Planned Enclosure.

The character of the study area remained agricultural into the 20th century with the majority of Post-Medieval assets recorded in the HER being C18-C19 farms, some of which have been lost in modern gravel quarrying (**MWI71559, MWI67090**) or are now demolished (**MWI67051**).

The turnpike road between Cirencester and Wootton Bassett (**48825**), completed in 1810, forms the eastern part of the Site boundary. Given the orientation of field boundaries around it and its positioning through a natural depression in the mudstone outcrop, this routeway likely pre-dates the turnpike road.

A small circular feature is noted on c.1900 OS mapping as being present within the Site boundary on the southern side, which is also reflected in the geophysical survey. It is possible that it is structural, though it may also be an infilled pond.

Summary of Post-Medieval potential

With the exception of the feature marked on historic mapping, there is low potential for Post-Medieval assets to be present on the Site. Any extant remains would most likely be agricultural in nature, e.g. remnant field boundary ditches.

5.5 Site walkover

A walkover survey was undertaken in February 2022.

Plate 2
East of South Field looking West



Plate 3
Southeast of North Field looking Northwest



Plate 4
Southeast of North Field looking North



Plate 5
West of North Field looking Northeast



Plate 6
Northwest of South Field looking Southeast



Plate 7
Southwest of Site looking towards Cotswold Community



Plate 8
Scheduled Monument (1004691)



Plate 9
South Cerney High Street towards assets in the east



Plate 10
Royal Oak (1154176)



Plate 11
C18 Langet Cottage (1341007)



Plate 12
Langet Cottage Towards Site



Plate 13
C18 Farmhouse (1303906)



Plate 14
Southwest of South Cerney looking towards Site



5.6 Geophysical Survey

A geophysical survey was undertaken in October 2022. The results of the survey are appended in full, see **Appendix 2**. In summary, the survey identified field boundaries and ridge and furrow earthworks, in addition to potential structural or infilling remains marked on c.1900 mapping.

5.7 Summary potential

Based on an understanding of the baseline provided above, any sequential events which may have affected potential from preceding periods and the results of a geophysical survey, the summary potential for remains to be extant within the boundary of the Site is as follows.

- **Prehistoric – Moderate.** While there is a clearly very high density of Prehistoric settlement within the study area, in particular to the west of Ashton Down and to the Site's immediate southeast in addition to the possible feature within the Site, it must be considered that the geophysical survey did not indicate the presence of any prehistoric remains.
- **Roman – Moderate.** The evidence for Romano-British settlement within the Site is limited. While there is substantial evidence for occupation across the study area, the settlement foci are located on the gravel terrace with boundary ditch orientation suggesting Ashton Down was not part of the wider complex of settlements in the area. The geophysical survey results also suggest there are not substantial or significant Roman-British remains on the Site.
- **Medieval (including Early Medieval) – high.** The geophysical survey indicates the presence of Medieval agricultural remains on Site, namely field boundaries and ridge-and furrow remnants. However, while this confers high potential, it must be considered that such remains are generally not considered to have high significance. There is low potential for Anglo-Saxon/Early Medieval remains to be present on the Site.

- Post-Medieval – high. A Post-Medieval field boundaries and either an infilled pond or removed structure of at least post medieval date have been identified through map regression and in the geophysical survey. However, it must be noted that such remains are not of high significance.

Archaeology: Statement of Significance & Effects

This assessment has identified that the following archaeological remains may be affected by the proposals:

- Medieval fields boundaries, agricultural remains and possible small structural remains;
 - Potential assets relating to nearby Roman settlements and historic routeways; and
- 6.0 • Potential assets relating to prehistoric settlement in the area.

6.1 Significance

Potential prehistoric features (Drawing 01)

Depending upon their nature, extent and level of survival, any prehistoric remains are expected to be of archaeological interest. Such remains would have the potential to inform us of ancient land use of the mudstone outcrop as opposed to the lower-lying gravel terraces, and of the organisation and socio-economic circumstances of resident communities. Unless such remains were particularly well-preserved, representative of their type and/or unique, or they retained a particular sense of stratigraphic coherence, they would be unlikely to be considered heritage assets of high importance and would be unlikely to require preservation *in situ*.

Potential Romano-British features (Drawing 02)

Depending on their nature, extent and preservation, these remains, if present, would be of archaeological interest. They would inform us of the extent of Roman settlement away from the gravel terrace, and whether the rectilinear field system excavated to the west extended past Ashton Down. However, there is no evidence to indicate the presence of remains of high importance which would require preservation *in-situ*.

Potential historic agricultural/structural remains (Drawing 03)

Historic agricultural remains would retain little, if any, archaeological interest. They would not be considered to comprise heritage assets of the highest significance, and they would not warrant preservation *in situ* or otherwise preclude development within the Site.

6.2 Development Effects

The proposed development shown in Appendix 3 would comprise the installation of anaerobic digester tanks, roadways, lagoons and associated utilities including electrical cables.

In the worst case the proposed development would cause direct harm to heritage assets through physical disturbance. Any harm should be weighed in the planning balance consistent with paragraph 203 of the NPPF, but it would not be anticipated to preclude development of the nature and on the scale proposed within the Site.

Heritage Baseline

The following Historic England baseline datasets have been reviewed:

7.0

- World Heritage Sites;
- Scheduled Monuments;
- Grade I Listed Buildings;
- Grade II* Listed Buildings;
- Grade II Listed Buildings;
- Registered Parks and Gardens;
- Conservation Areas; and
- Historic Battlefields.

Eleven Grade II listed buildings and a scheduled monument are present within 1km of the Site boundary. A 'step 1' screening process is outlined in the table below. Seven listed buildings are situated within the South Cerney Conservation Area.

Heritage asset	Description & Significance	Settings Assessment
Assets in the South Cerney Conservation Area	1424119 South Cerney War Memorial Grade II Great War memorial in the centre of South Cerney, erected 1919.	There is no inter-or-covisibility from the assets to any part of the Site, and nor would the proposals harm the significance of any of the assets through a loss of associated landscape or a change to their immediate setting.
	1090062 Pike House and Corner Cottage Grade II C18 adjoining cottages with C19 alterations. These are noted by the NHLE as being listed for their prominent position along the High Street.	Overall, the proposals would not alter the present setting of the Conservation Area or any designated assets within, i.e. no elements of setting which currently contribute towards an understanding of the significance of the house and associated assets would be effected by the proposals. Cultural significance would be sustained in all instances. There is no potential for harm and no further assessment is needed.
	1090061 Ivy Cottage and adjoining cottage Grade II Pair of C18 cottages with no later alterations apart from UPVC windows. These cottages are coursed in rubble stone with a slate roof and derive significance from their architecture.	
	1154176 Royal Oak and Cottage Grade II Inn that was probably originally several cottages. Constructed of rubble coursing, with a slate roof and a lean-to doorway and casement. The structure is listed for its architectural value.	
	1303906 Walnut Tree Farmhouse Grade II Late C17 former farmhouse with late C20 renovations. No associated assets are extant or listed, though its surrounding farmland is undeveloped.	
	1341007 Radnor Grade II C18 detached cottage. Primary setting is within the western part of the Conservation Area	
	1303938 Thrift Cottage Grade II	

Heritage asset	Description & Significance	Settings Assessment
	C19 cottage opposite village shop and war memorial. In central part of conservation area, so significance is largely from group value.	
Prehistoric/Romano-British Settlement SM (1004691)	Settlement identified through extensive cropmarks, potentially associated with the multi-phase occupation site excavated to the northwest and linked by a routeway.	As this is scheduled for its archaeological value, a change to its setting would not cause harm to its significance or our ability to appreciate the asset.
Assets in Cotswold Community	1023052 Ashtonfields Grade II Cowshed and stables, converted into staff rooms by Bruderhof Community. Dating to the late C18, listed for group value as part of farmstead. 1284623 Ashton Field Farmhouse (Cotswold Community) Grade II Farmhouse, now residential and in the process of being renovated. 1363489 Ashtonfields Reception Offices Grade II Stable and farm store dating to the late 18th century, listed as part of the farm complex.	These assets have no inter or covisibility with the Site and the proposals would not change any element of the setting from which the assets draw their significance. The immediate surroundings of the assets are within the farm and mature trees screen much of the wider view to and from the buildings.

The Ashtonfields Community Hall (1182316) will be taken forward for detailed assessment due to its closer proximity to the Site.

Heritage: Statements of Significance

This assessment has identified that the significance of the following assets may be susceptible to harm as a result of change to their setting under the proposals:

- Ashtonfields Community Hall (**1182316**) – Located c.0.6km to the southwest of the Site.

8.0 The heritage interests pertaining to this asset, and the contribution of those interests to the assets' significance, are described below.

8.1 Ashtonfields Community Hall (1182316)

8.1.1 Historic and Archaeological Interest

This building, the easternmost of the four listed buildings in the Cotswold Community cluster, is contemporary with the other three, dating to the late C18 and formed part of the same farm complex referred to as 'Ashtonfield' in c.1900 OS mapping. During the 1930s, a group of Hutterian ('Bruderhof') Anabaptist Christians began to use the site following their leaving Germany after the Nazi party came to power. They constructed the Cotswold School for Boys in the late 1930s and continued to operate the site as a school and religious community until 2011. The Community is currently being redeveloped for residential use and is not publicly accessible.

8.1.2 Setting

Plate 15
Community Hall from last accessible point



The setting of the barn is primarily related to the other assets in the cluster, as these have shared landownership and use from construction to the present day.

8.1.3 Contribution of Setting to Significance

The following aspects of the asset's setting are considered to make a key positive contribution to its significance and the ability to appreciate that significance:

- The association with the other buildings of the farm/community; and
- the retention of screening around the buildings which maintain a secluded character.

Potential harm to the significance of heritage assets as a result of change to setting under the proposals is discussed below.

9.0
9.1.1 **Change**

The below figure presents a 'distance below horizon' model using the location of the building that shows only the very tops of the tanks and silage clamps may have some intervisibility with the asset. However, this utilises a terrain model which excludes trees and intervening buildings and therefore creates a 'worst case' where there is bare earth between the asset and Site and no intervening screening.

The map displays the application boundary for the proposed development at Ashton Down. The boundary is defined by a red line. Key features include:

- Application Boundary:** Indicated by a red line.
- SMs (Statutory Monuments):** Indicated by a blue star with a white outline.
- Listed Building Grade II:** Indicated by a purple triangle.
- Digester Tank:** Indicated by a green rectangle.
- Silage Clamps:** Indicated by a grey rectangle.
- ZTV (Zone of Theoretical Visibility):** Shaded areas representing different visibility levels:
 - ≤ 8.00 (Pink)
 - 8.00 - 15.00 (Red)
 - > 15.00 (Blue)

Specific locations and distances are marked:

- 1162316 C18 Barn:** Located near the center of the map.
- 1363489 C18 Stables:** Located to the west of the barn.
- 1023052 C18 Cowshed and Stables:** Located to the southwest of the barn.
- 1284623 C18 Farmhouse:** Located to the south of the barn.
- 1004691 R-B/Prehistoric Settlement:** Located to the southeast of the barn.
- Distances:** Various distances are marked along the boundary and within the ZTV areas, including 9m, 16.5m, and 100m.

The map includes a scale bar (0 to 200 m) and a north arrow. The background shows a detailed aerial view of the site and surrounding areas.

Given that between the asset and Site is significant intervening screening, it is likely that any visual change will be minimal.

Plate 16
From Asset towards Site



It is noted, however that change does not equate to harm.

9.1.2 Effect

In the above context, this level of change may result in **no harm** to the significance of the asset. This is primarily due to the following factors:

- The Site itself is not considered to contribute fundamentally to the understanding of the asset; and
- The built height of the five digestion tanks and sileage clamps may have slight intervisibility with the asset under ideal conditions.

The potential limited intervisibility over the woodland and the co-visibility from intervening land are not key views which contribute to an understanding of the asset, and therefore the significance of the asset. Overall, the key aspects of the asset's setting which contribute to its significance would not be materially impacted. This would not be considered to amount to harm under the terms of the NPPF (2021), though any change would need to be weighed in the planning balance consistent with paragraph 202.

Compliance with Legislation and Policy

10.1 Legislation

10.1.1 Archaeology

10.0 The proposals would not cause direct impact to a Scheduled Monument. The proposals would not engage consideration of the Scheduled Monuments and Archaeological Areas Act 1979.

10.1.2 Heritage

In reaching the conclusions presented in this report, the need for the application to comply with Section 66 (1) and 72 (1) the Planning Act has been considered. It is considered that the proposals would be in compliance with these statutory conditions, there being no predicted adverse effect to any Listed Buildings or Conservation Areas.

10.2 National Policy

10.2.1 Archaeology

The assessment provided by this report has set out the significance of potential archaeological remains in full accordance with paragraph 194 of the NPPF. A geophysical survey has also provided for any 'necessary' evaluation. The application is in full accordance with national policy.

10.2.2 Heritage

This assessment has provided proportionate statements of significance for potentially sensitive heritage receptors in full accordance with paragraph 194 of the NPPF. No harm has been identified to any designated heritage asset. In the event that a consideration of public benefits is required in respect to paragraph 202 the, the benefits of the services which the AD plant would provide to the public should be weighed against the harm. Public benefits would be considered to reference renewable energy and carbon neutral schemes, the wider benefits of a reduction in carbon emissions being of public benefit.

10.3 Local Policy

10.3.1 Archaeology

This document has undertaken a comprehensive review of the archaeological potential of the Site and a suitable buffer area. As such, given its recommendations, this development will be fully compliant with the Wiltshire Core Strategy 2026.

10.3.2 Heritage

It is the finding of this document that the development is consistent with the core policies, aims and objectives of the Wiltshire Core Strategy 2026 (Adopted 2015).

Conclusions

This assessment, undertaken with due regard to the guidance published by Historic England and in full accordance with the National Planning Policy Framework, has identified those heritage assets located within the Site and its vicinity and has described their significance. Potential development effects have also been discussed, as far as possible, with reference to the latest design iteration.

11.0 Archaeology

This Heritage Desk-Based Assessment concludes that there is the potential for some harm to heritage assets as a result of the proposed development, namely the potential removal of *in-situ* prehistoric to Post-Medieval remains.

The findings of the geophysical survey suggests that these remains are limited in extent, though if present they would have potential to inform us of ancient occupation of higher ground outcrops such as Ashton Down compared to lower lying gravel terraces. There is no evidence that would suggest that any remains on Site are of such significance that would merit preservation *in-situ*.

The proposals are considered to be compliant with the legislative and planning policy provisions relevant to archaeology.

Heritage

There would be a change in the setting of the grade II listed building Ashtonfields Community Hall as a result of some screened intervisibility between the upper storey of the building and the top of the silage clamps. This is not considered to amount to harm to the listed building, as the elements of its setting which contribute to its significance would be wholly preserved.

The proposals are considered to be compliant with the legislative and planning policy provisions relevant to heritage.

APPENDIX 1

Historic Environment

Table 1
Monuments

PrefRef	Name
SU09NW612	Iron Age Roundhouses, Shorncote Quarry
SU09NW100	Possible Neolithic Henge, Ashton Keynes
SU09NW152	Bronze-Age Settlement, Cotswold School
SU09NW152	Bronze-Age Settlement, Cotswold School
SU09NW155	Bronze Age Pit Alignment, County Boundary, N of Cotswold School
SU09NW201	Iron Age Settlement, County Boundary, North of Cotswold School
SU09NW201	Iron Age Settlement, County Boundary, North of Cotswold School
SU09NW201	Iron Age Settlement, County Boundary, North of Cotswold School
SU09NW201	Iron Age Settlement, County Boundary, North of Cotswold School
SU09NW202	Iron Age Enclosure, Gloucestershire/Wiltshire Boundary
SU09NW301	Ditches, North of Cotswold School
SU09NW301	Ditches, North of Cotswold School
SU09NW301	Ditches, North of Cotswold School
SU09NW400	Saxon Building, Cotswold Community
SU09NW602	Ring Ditch, East of the Cotswold School
SU09NW604	Ring Ditches, East of Cotswold School
SU09NW606	Ring Ditch, South of the Cotswold School
SU09NW606	Ring Ditch, South of the Cotswold School
SU09NW607	Ring Ditch, East of Cotswold School
SU09NW608	Ring Ditch, North of Cotswold School
SU09NW608	Ring Ditch, North of Cotswold School
SU09NW609	Enclosure, East of Cotswold School
SU09NW609	Enclosure, East of Cotswold School
SU09NW610	Trackway, North of Cotswold School
SU09NW611	Enclosure, East of Cotswold School
SU09NW612	Undated Ditches, Shorncote Quarry
SU09NW613	Probable Romano-British Settlement, East of Cotswold School

SU09NW613	Probable Romano-British Settlement, East of Cotswold School
SU09NW613	Probable Romano-British Settlement, East of Cotswold School
SU09NW613	Probable Romano-British Settlement, East of Cotswold School
SU09NW614	Linears, Ashton Down
SU09NW614	Linears, Ashton Down
SU09NW615	Field System, East of Ashton Down
SU09NW615	Field System, East of Ashton Down
SU09NW615	Field System, East of Ashton Down
SU09NW615	Field System, East of Ashton Down
SU09NW615	Field System, East of Ashton Down
SU09NW615	Field System, East of Ashton Down
SU09NW615	Field System, East of Ashton Down
SU09NW615	Field System, East of Ashton Down
SU09NW615	Field System, East of Ashton Down
SU09NW615	Field System, East of Ashton Down
SU09NW615	Field System, East of Ashton Down
SU09NW616	Field Boundaries, North East of North End
SU09NW617	Earthworks, East of Cotswold School
SU09NW619	Enclosures, South East of Cotswold School
SU09NW620	Ring Ditch, East of Cotswold Community
SU09NW621	Late Iron Age/Romano-British Ditches, North of Cotswold School
SU09NW624	Iron Age/Romano-British Ditches, Shorncote Quarry
SU09NW625	Ditched Enclosure, Cotswold Community
SU09NW626	Undated Trackway
SU09NW627	Undated Ditch
SU09NW628	Undated Trackway
SU09SW300	Romano-British Settlement, Ash Covert
SU09SW300	Romano-British Settlement, Ash Covert
SU09SW611	Undated Enclosure, Field Barn
SU09NW622	Ring Ditch, North of the Cotswold School
SU09NW623	Ring Ditch, North of the Cotswold School
SU09NW606	Ring Ditch, South of the Cotswold School
SU09NW606	Ring Ditch, South of the Cotswold School
SU09NW606	Ring Ditch, South of the Cotswold School

SU09NW606	Ring Ditch, South of the Cotswold School
SU09NW620	Ring Ditch, East of Cotswold Community
SU09NW604	Ring Ditches, East of Cotswold School
SU09NW604	Ring Ditches, East of Cotswold School
SU09NW605	Ring Ditch, East of the Cotswold School
SU09NW607	Ring Ditch, East of Cotswold School
SU09NW607	Ring Ditch, East of Cotswold School
SU09NW600	Ring Ditches, East of Cotswold School
SU09NW601	Ring Ditch, East of the Cotswold School
SU09NW602	Ring Ditch, East of the Cotswold School
SU09NW602	Ring Ditch, East of the Cotswold School
SU09NW603	Ring Ditch, East of Cotswold School
SU09NW609	Enclosure, East of Cotswold School
SU09NW156	Possible Bronze Age Barrow
SU09SW613	Ridge and Furrow, Northend Farm
MWI67082	Manor Farm, Ashton Keynes
MWI67048	Site of Farmstead Northeast of Church Farm
MWI67049	Cotswold Community, Ashton Field Farm
MWI67050	Site of Outfarm, North-Northeast of Ashton Field Farm
MWI67051	Site of Outfarm, Northeast of Ashton Field Farm
MWI67086	Northend Farm
MWI67087	North End House
MWI67088	The Downs
MWI67089	Outfarm East of The Downs
MWI67090	Site of Farmstead Northeast of Northend Farm
MWI67091	Site of Farmstead Northeast of Northend Farm
MWI71559	Site of Outfarm, Whitefriars Lane
SU09NW150	Bronze Age Palstave, Spratts Gate
SU09NW151	Bronze Age Dagger, North End
SU09NW153	Bronze Age Pits and Ditches, Cotswold School
SU09NW154	Bronze Age Ditches, Cotswold School
SU09NW200	Iron Age Settlement, Bradleys Gravel Pit
SU09NW300	Romano-British Pottery, East of Cotswold School
SU09SW150	Bronze Age Finds, Ash Covert

MWI67048	Site of Farmstead Northeast of Church Farm
MWI67049	Cotswold Community, Ashton Field Farm
MWI67050	Site of Outfarm, North-Northeast of Ashton Field Farm
MWI67051	Site of Outfarm, Northeast of Ashton Field Farm
MWI67086	Northend Farm
MWI67087	North End House
MWI67088	The Downs
MWI67089	Outfarm East of The Downs
MWI67090	Site of Farmstead Northeast of Northend Farm
MWI67091	Site of Farmstead Northeast of Northend Farm
MWI71559	Site of Outfarm, Whitefriars Lane
SU09NW150	Bronze Age Palstave, Spratts Gate
SU09NW151	Bronze Age Dagger, North End
SU09NW153	Bronze Age Pits and Ditches, Cotswold School
SU09NW154	Bronze Age Ditches, Cotswold School
SU09NW200	Iron Age Settlement, Bradleys Gravel Pit
SU09NW300	Romano-British Pottery, East of Cotswold School
SU09SW150	Bronze Age Finds, Ash Covert
GLOUCESTERSHIRE	
2339	Pound, Shorncliffe.
15115	C19 Bridge carrying road over the MSWJ Railway, east of South Cerney.
3297	Somerford Mill Somerford Keynes
2361	Middle Iron Age settlement, Spratsgate Lane, Somerford Keynes.
2368	Enclosures south-east of Ewen, Somerford Keynes.
15477	Late Neolithic/ Early Bronze Age Hengiform ring ditch, Late Bronze Age unenclosed settlement, Bronze Age inhumations and Late Iron Age / Early Roman linear ditches at Shorncliffe Quarry.
3367	Oval enclosure west of Shorncliffe, Somerford Keynes parish.
3363	Elongated rectangular enclosure west of Somerford Keynes.
20676	Medieval pottery assemblage and section of medieval wall from The Brambles, Clarks Hay, South Cerney.
3040	Linear feature SE of Macks Farm
2405	Cropmark settlement site, Neigh Bridge, Somerford Keynes.
2406	Romano-British settlement south of Somerford Keynes.
2401	Ring ditch or enclosure, Somerford Keynes.

26833	Possible ditches of unknown date seen as cropmarks on aerial photographs, Somerford Keynes.
26834	A possible square gravel pit of unknown date, seen as cropmarks on aerial photographs, Somerford Keynes.
3121	Neolithic, Bronze Age, Iron Age, Romano-British, Saxon and medieval settlement activity at Cotswold Community School south east of Shorncote, Somerford Keynes.
20001	Post-medieval public house, The Royal Oak, High Street, South Cerney, site of early medieval burials.
42816	Series of undated features excavated by Archaeological Research Services between September and December 2011 in advance of gravel extraction at Shorncote Quarry, Spratsgate Lane, Shorncote, Somerford Keynes parish.
42813	Series of four- and six-post structures of Unknown date excavated by Archaeological Research Services between September and December 2011 at Shorncote Quarry, Spratsgate Lane, Shorncote, Somerford Keynes parish.
20673	Broken blade and fragment of handle (C16) reported from Albertine, Upper Up, South Cerney.
20675	C18 Coin, late Bronze Age pottery, fragment of shaped bronze and flints from The Cottage, High Street, South Cerney.
20677	Medieval and post-medieval remains from rear of 14 Station Road, South Cerney.
2362	Stone axe
2360	A scheduled Village cross at the junction of High Street and Station Road, South Cerney.
44462	A large flint cleaver found to the south west of South Cerney.
2386	Romano-British Burial from Gravel Pit
2353	Bronze Age palstave axe recovered from ploughing of a field situated between South Cerney and Ashton Keyes, South Cerney.
2377	Romano-British Bronze Fibula
42815	Early medieval evidence including an inhumation identified in 2011 excavation for Shorncote Quarry (phase 1 + 2), and sherds of Saxon pottery from the 2018 excavation (phases 3 + 4), Spratsgate Lane, Somerford Keynes.
48825	The route of the 1810 Cirencester and Wootton Bassett turnpike.
4944	Midland & South Western Junction Railway, C19 - C20, now disused, had own line from Andoversford Junction to Andover, later part of the GWR.
2370	Trackway and enclosure visible on aerial photographs, Siddington.
48927	Roman field system recorded during 2016 evaluation on land at Somerford Keynes.
49778	Post medieval ditches, gullies and ponds recorded during the 2018 evaluation at Cotswold Holiday Park, Broadway Lane, South Cerney.
26835	A possible medieval or later ditch and field boundaries, seen as earthworks on aerial photographs, South Cerney.

49955	Possible Roman ditch, recorded during excavation at land to the rear of the Royal Oak, High Street, South Cerney, Gloucestershire.
52524	South Cerney Primitive Methodist chapel, South Cerney.
29826	Medieval settlement evidence found during a modern watching brief on land adjacent to orchard House, Upper Up, South Cerney.
52609	A farmhouse dating to the late 16th century with alterations from the 17th century, South Cerney.
52603	Bronze Age round barrow, now destroyed by gravel extraction, seen as cropmarks on air photographs. The feature was excavated in advance of the gravel extraction, revealing Bronze Age pottery and fragments of burnt bone.
52157	Possible Medieval/Post Medieval walls recorded during a small evaluation at Ponderosa, Upper Up, South Cerney.
29827	Possible Saxon activity recorded during an evaluation on land adjacent to orchard House, Upper Up, South Cerney.
52156	Medieval pits recorded during an evaluation at Walnut Tree Farm House, Upper-Up, South Cerney.
24133	Mesolithic flint blades and blade cores were identified as residual finds in later features during 2018 excavation of Areas 3 and 4, Shorncote Quarry, Spratsgate Lane, Somerford Keynes.
24134	Two early to mid Neolithic pits identified during 2018 exavation of Areas 3 and 4 Shorncote Quarry, Spratsgate Lane, Somerford Keynes.
24134	Two early to mid Neolithic pits identified during 2018 exavation of Areas 3 and 4 Shorncote Quarry, Spratsgate Lane, Somerford Keynes.
24135	Two later Neolithic pits identified during 2018 exavation of Areas 3 and 4 Shorncote Quarry, Spratsgate Lane, Somerford Keynes.
24135	Two later Neolithic pits identified during 2018 exavation of Areas 3 and 4 Shorncote Quarry, Spratsgate Lane, Somerford Keynes.
24136	Late Neolithic to Early Bronze Age site including a causewayed barrow containing an inhumation; postholes and pits, identified during 2018 exavation of Areas 3 and 4 Shorncote Quarry, Spratsgate Lane, Somerford Keynes.
24136	Late Neolithic to Early Bronze Age site including a causewayed barrow containing an inhumation; postholes and pits, identified during 2018 exavation of Areas 3 and 4 Shorncote Quarry, Spratsgate Lane, Somerford Keynes.
32741	Late Bronze Age to Early Iron Age settlement evidence identified in 2018 excavation at Shorncote Quarry (Phase 3 + 4), Spratsgate Lane, Somerford Keynes.
42818	Middle to Late Iron Age settlement including segmented ditch alignments, ditches, pits and two roundhouses was identified in excavations in 2011 and 2018 in advance of gravel extraction at Shorncote Quarry (Phases 1, 2, 3 + 4), Spratsgate Lane, Shorncote
24137	Late Iron Age-early Roman occupation identified in 2018 excavation at Shorncote Quarry (Phases 3 + 4), Spratsgate Lane, Shorncote, Somerford Keyne.

32743	Romano-British settlement evidence at Spratsgate Lane, Shorncote. Identified during 2007 geophysical survey, 2008 evaluation and excavation in 2018.
24138	Medieval and post-medieval agricultural features were identified across the area covered by 2011 and 2018 excavations at Shorncote Quarry, Spratsgate Lane, Somerford Keynes.
42814	Series of boundary ditches of Unknown and one Medieval field boundary date partly excavated by Archaeological Research Services between September and December 2011 at Shorncote Quarry, Spratsgate Lane, Shorncote, Somerford Keynes parish
52292	Prehistoric features recorded during evaluation on land at Somerford Keynes.
52293	Three possible Iron Age ditches recorded during at watching brief at Cirencester Sewage Works, Siddington.

Table 2
Designated Assets

NHLE number	Name	Grade
1023052	Ashtonfields and attached Staff Rooms	II
1090061	Cottage Adjoining Ivy Cottage To East Ivy Cottage	II
1090062	Corner Cottage Pike House	II
1154176	Royal Oak Cottage Adjoining The Royal Oak To West The Royal Oak	II
1182316	Ashtonfields Community Hall and Chapel, Cotswolds Community	II
1284623	Ashton Field Farmhouse (Cotswold Community)	II
1303906	Walnut Tree Farm House	II
1303938	Thrift Cottage	II
1341007	Radnor	II
1363489	Ashtonfields Reception Offices Etcetera For Cotswold Community	II
1424119	South Cerney War Memorial	II
1004691	Settlement E of Ashtonfield (Cotswold Community)	SM

APPENDIX 2

Geophysical Survey



**magnitude
surveys**

**Geophysical Survey Report
Ashton Keynes,
Wiltshire**

**For
SLR Consulting**

Magnitude Surveys Ref: MSSU1377

August 2022



magnitude surveys

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Issue Date:

30 August 2022

Abstract

Magnitude Surveys was commissioned to assess the subsurface archaeological potential of a c. 16.6ha area of land at Ashton Keynes, Wiltshire. A fluxgate gradiometer survey was successfully completed across the survey area. Probable archaeological activity has been identified within the centre and south of the survey area, with anomalies of rectilinear and curvilinear morphologies indicative of former land divisions, , and a possible settlement boundary present. Further possible archaeological activity has been identified as a trackway, pits and ditches containing magnetically enhanced infill. The remnants of a former building depicted on historical maps has been identified within the centre of the survey area. Agricultural anomalies including ridge and furrow cultivation and modern ploughing regimes have been identified throughout the survey area. Anomalies classified as 'undetermined' were identified within the survey area and archaeological interpretations for these cannot be excluded, especially in light of the survey area's rich archaeological surroundings. The impact of modern activity on the site is generally limited to magnetic interference around the field perimeters and around extant telegraph poles within the south of the survey area.

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Figure 7:	XY Trace Plot (Northern Areas)	1:1,500 @ A3
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Figure 9:	Magnetic Interpretation (Southern Areas)	1:1,500 @ A3
Figure 10:	XY Trace Plot (Southern Areas)	1:1,500 @ A3

1. Introduction

- 1.1. Magnitude Surveys Ltd (MS) was commissioned by SLR Consulting to undertake a geophysical survey over a c. 16.6ha area of land at Ashton Keynes, Wiltshire (SU 04033 95961).
- 1.2. The geophysical survey comprised of a quad-towed GNSS-positioned fluxgate gradiometer survey. Magnetic survey is the standard primary geophysical method for archaeological applications in the UK due to its ability to detect a range of different features. The technique is particularly suited for detecting fired or magnetically enhanced features, such as ditches, pits, kilns, sunken featured buildings (SFBs) and industrial activity (David *et al.*, 2008).
- 1.3. The survey was conducted in line with the current best practice guidelines produced by Historic England (David *et al.*, 2008), the Chartered Institute for Archaeologists (CIfA, 2020) and the European Archaeological Council (Schmidt *et al.*, 2015).
- 1.4. It was conducted in line with a WSI produced by MS (Dyulgerski 2022).
- 1.5. The survey commenced on 11/08/2022 and took one day to complete.

2. Quality Assurance

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

3. Objectives

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

4. Geographic Background

4.1. The survey area was located c. 1.6km north of Ashton Keynes (Figure 1). The gradiometer survey was undertaken across three fields under arable cultivation. The survey area was bordered to the north and west by arable fields, to the east by Ashton Road and to the south by an industrial estate and a lake (Figure 2).

4.2. Survey considerations:

Survey Area	Ground Conditions	Further Notes
1	The area consisted of arable land containing crop stubble, sloping down from the southwest.	The area was surrounded on all sides by hedges.
2	The area consisted of arable land containing crop stubble sloping down from the west.	The area was surrounded on all sides by hedges.
3	The area consisted of flat arable land containing crop stubble.	The area was bordered to the north, east and south by hedges and continued beyond the extent of the survey area to the west. Telegraph poles and overhead powerline cables were identified running across the centre of the survey area in an east-west orientation.

4.3. The underlying geology comprises mudstone of the Kellaways Clay Membership. No superficial deposits have been recorded within the majority of the survey area. However, the south of Area 3 contains sand and gravel of the Northmoor Sand and Gravel Membership (British Geological Survey, 2022).

4.4. The soils within the survey area are currently not recorded (Soilscapes, 2022).

5. Archaeological Background

5.1. The following is a summary of a Heritage Gateway search produced by the Wiltshire and Swindon Historic Environment Record (2022), a compendium of archaeological excavation reports (Smith, Unknown Date) and Satellite Imagery (Bing Satellite 2022).

5.2. Through satellite imagery it is apparent that the survey area sits within close proximity to an area of dense archaeological activity c. 30m west of the survey area. This is evident through the visibility of crop marks which identifies a prehistoric settlement.

5.3. Multiple archaeological excavations have been conducted between c.300m and c. 1.1km northwest of the survey area. The archaeological material recorded from these excavations suggests multiple phases of activity from the Mesolithic to the Medieval period, with an emphasis on settlement activity between the Late Iron Age and Late Roman period.

5.4. A Bronze Age pit alignment was identified through an archaeological excavation c.600m west of the survey area (SU09NW155). The pit alignment, roughly 140m long, consisted of 164 pits in a double row. Some pits cut through earlier Middle Bronze Age pits dated by pottery while Middle Iron Age Pottery was found in the upper fill.

- 5.5. Post Medieval activity has been identified within the wider environment as a partially extant 18th century farmhouse c. 450m west (MW167049), a demolished 19th century out farm c. 750m southeast and a partially extant 19th century farmstead c. 1km south of the survey area (MW167082).

6. Methodology

6.1. Data Collection

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

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

6.1.3. Table of survey strategies:

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

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

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

6.1.4.2. Magnetic and GPS data were stored on an SD card within MS' bespoke datalogger. The datalogger was continuously synced, via an in-field Wi-Fi unit, to servers within MS' offices. This allowed for data collection, processing and visualisation to be monitored in real-time as fieldwork was ongoing.

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

6.2. Data Processing

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

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

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

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

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

6.3.Data Visualisation and Interpretation

- 6.3.1. This report presents the gradient of the sensors' total field data as greyscale images, as well as the total field data from the lower sensors. The gradient of the sensors minimises external interferences and reduces the blown-out responses from ferrous and other high contrast material. However, the contrast of weak or ephemeral anomalies can be reduced through the process of calculating the gradient. Consequently, some features can be clearer in the respective gradient or total field datasets. Multiple greyscale images of the gradient and total field at different plotting ranges have been used for data interpretation. Greyscale images should be viewed alongside the XY trace plot (Figures 7 and 10). XY trace plots visualise the magnitude and form of the geophysical response, aiding anomaly interpretation.
- 6.3.2. Geophysical results have been interpreted using greyscale images and XY traces in a layered environment, overlaid against open street maps, satellite imagery, historical maps, LiDAR data, and soil and geology maps. Google Earth (2022) was also consulted, to compare the results with recent land use.
- 6.3.3. Geodetic position of results – All vector and raster data have been projected into OSGB36 (ESPG27700) and can be provided upon request in ESRI Shapefile (.SHP) and Geotiff (.TIF) respectively. Figures are provided with raster and vector data projected against OS Open Data.

7. Results

7.1.Qualification

- 7.1.1. Geophysical results are not a map of the ground and are instead a direct measurement of subsurface properties. Detecting and mapping features requires that said features have properties that can be measured by the chosen technique(s) and that these properties have sufficient contrast with the background to be identifiable. The interpretation of any identified anomalies is inherently subjective. While the scrutiny of the results is undertaken by qualified, experienced individuals and rigorously checked for quality and consistency, it is often not possible to classify all anomaly sources. Where possible, an anomaly source will be identified along with the certainty of the

interpretation. The only way to improve the interpretation of results is through a process of comparing excavated results with the geophysical reports. MS actively seek feedback on their reports, as well as reports from further work, in order to constantly improve our knowledge and service.

7.2. Discussion

- 7.2.1. The geophysical results are presented in combination with satellite imagery and historical maps (Figure 4).
- 7.2.2. The fluxgate gradiometer survey has responded well to the environment of the survey area and has detected a wide variation of anomalies related to probable and possible archaeological activity, structural remnants, historical and modern agricultural activity. The impact of modern activity on the results is generally limited to magnetic interference around the borders of the survey area and telegraph poles within Area 3.
- 7.2.3. Probable archaeological activity has been identified within the centre of Area 2. This archaeological activity is defined by multiple mostly weakly enhanced linear anomalies forming probable land divisions predating historical OS maps (Figure 4). Further probable and possible archaeological activity has been identified within Area 3 as a series of parallel linear anomalies. The morphologies of these anomalies are possibly indicative of a ditched trackway. This orientation of this trackway appears to lead towards the prehistoric settlement to the southwest which may suggest a possible relationship between the anomaly and the settlement. However, due to the weak magnetic signal and the presence of historical agricultural anomalies it has been given a possible rather than probable interpretation. A curvilinear anomaly has also been identified within Area 3. The morphology of this anomaly is largely comparable to a boundary within the Prehistorical settlement to the southwest which may identify a possible further extent of the settlement.
- 7.2.4. Several discrete, strong and weak anomalies have been identified throughout the survey area, these anomalies are likely representative of pits containing magnetically enhanced infill. Although not visible within the survey area, multiple pits can be identified through satellite imagery as cropmarks to the southwest of the survey area around the prehistoric settlement. Although presently, the origins of the pit-like anomalies cannot be determined through the geophysical data alone thus can only be given a 'possible' classification. Three weakly positive linear/curvilinear anomalies have been identified within the east of Area 2 and northeast of Area 3. Although, these anomalies are likely representative of ditches, the lack of a distinctive morphology only permits a 'possible' archaeological interpretation.
- 7.2.5. Evidence of historical agricultural activity has been detected throughout most of the survey area in the form of ridge and furrow regimes and evidence of modern agricultural activity has been identified across the survey area as modern ploughing regimes.

7.2.6. The remnants of a former structure have been identified within the northwest of Area 2 as a strong, dipolar anomaly (Figure 9). The anomaly correlates with the former structure which is depicted on historical maps (Figure 4).

7.2.7. Throughout the survey area anomalies that have been classified as 'undetermined' have been identified. A sinuous, weakly enhanced band has been identified within the centre of Area 2 (Figure 9). The morphology and strength of this anomaly is typical of natural deposits shifted through geological processes. However, given the proximity of archaeological activity an archaeological origin cannot be ruled out. Several discrete anomalies have also been identified throughout the survey area. Although these anomalies are characteristic of burning activity, an origin of this activity cannot be determined through the geophysical data alone.

7.3. Interpretation

7.3.1. General Statements

- 7.3.1.1. Geophysical anomalies will be discussed broadly as classification types across the survey area. Only anomalies that are distinctive or unusual will be discussed individually.
- 7.3.1.2. **Ferrous (Spike)** – Discrete dipolar anomalies are likely to be the result of isolated pieces of modern ferrous debris on or near the ground surface.
- 7.3.1.3. **Ferrous/Debris (Spread)** – A ferrous/debris spread refers to a concentration of multiple discrete, dipolar anomalies usually resulting from highly magnetic material such as rubble containing ceramic building materials and ferrous rubbish.
- 7.3.1.4. **Magnetic Disturbance** – The strong anomalies produced by extant metallic structures, typically including fencing, pylons, vehicles and service pipes, have been classified as 'Magnetic Disturbance'. These magnetic 'haloes' will obscure weaker anomalies relating to nearby features, should they be present, often over a greater footprint than the structure causing them.
- 7.3.1.5. **Undetermined** – Anomalies are classified as Undetermined when the origin of the geophysical anomaly is ambiguous and there is no supporting contextual evidence to justify a more certain classification. These anomalies are likely to be the result of geological, pedological or agricultural processes, although an archaeological origin cannot be entirely ruled out. Undetermined anomalies are generally distinct from those caused by ferrous sources.

7.3.2. Magnetic Results - Specific Anomalies

- 7.3.2.1. **Probable Archaeology (Strong/Weak)** - Four linear, weakly positive anomalies have been identified within Area 2 [2a] (Figure 9). The morphology of these anomalies is indicative of former land divisions. However, these land divisions do not appear in historical OS mapping and satellite imagery (Figure 4), which is suggestive of an earlier origin. A curvilinear anomaly has been identified within the southeast of Area 3 [3b] (Figure 9). The morphology of this anomaly

is replicated within the cropmarks south of the prehistoric settlement which may suggest a further possible related boundary (Figure 4). However, this anomaly follows the topographical slope, which might suggest a possible geological origin as well.

- 7.3.2.2. **Possible Archaeology (Strong/Weak)** - Three roughly parallel, linear, weakly positive anomalies have been identified within the south of Area 3 with a maximum extend of c. 160m in length [3a] (Figure 9). The morphology of these possibly suggests a double ditched trackway. The orientation of these anomalies appears to be directed towards the Prehistoric settlement and may be associated with such activity (Figure 4). Furthermore, a double ditched trackway with a similar morphology is visible through crop marks to the south of the Prehistoric settlement which also lends credence to this interpretation. Three further linear anomalies have been identified within Areas 2 and 3 [2b] and [3c] (Figure 9). These anomalies are distinctive of ditch-like cut features containing magnetically enhanced infill. However, these anomalies lack distinct morphologies indicative of archaeological activity. Thus, only a possible archaeological classification has been given.
- 7.3.2.3. **Possible Archaeology (Strong/Weak)** - Strong and weak discrete anomalies have been identified within the southeast of Area 1, east of Area 2 and southeast of Area 3 (Figures 6 and 9). The strengths and morphology of these anomalies are indicative of pits-like anomalies containing magnetically enhanced infill, which are also visible through cropmarks within and around the prehistoric settlement to the southwest (Figure 4). Thus, a possible archaeological origin has been ascribed.
- 7.3.2.4. **Structural Remnants (Spread)** - A strongly dipolar, magnetically enhanced anomaly has been identified within the northwest of Area 2 [2c] (Figure 9). This anomaly correlates with a roughly c. 8m structure depicted on historical maps and likely reflects the structural remnants/debris of this former structure (Figure 4).
- 7.3.2.5. **Ridge and Furrow (Trends)** – Weakly enhanced, parallel, linear anomalies have been identified throughout the survey area in multiple differing orientations. These anomalies are spaced roughly between c. 8m – 12m and have an average width of c. 4.5m which is distinctive of ridge and furrow regimes. The vast majority of the ridge and furrow regimes do not respect the former land divisions which suggests that these anomalies depicted as archaeological in origin might predate these regimes.
- 7.3.2.6. **Agricultural (Trends)** – Weakly enhanced, parallel, linear anomalies have been identified throughout the survey area in multiple differing orientations. Unlike the linear anomalies categorised as ridge and furrow, these trends are more densely spaced (c. 4m) and have a tighter width at c. 1.5m which is more indicative of modern ploughing regimes. These anomalies also correlate with ploughing regimes visible on satellite imagery.

- 7.3.2.7. **Undetermined (Strong/Weak)** – A sinuous weakly enhanced c. 180m long anomaly has been identified within the east of Area 2. The weak enhancement and sinuous morphology of the anomaly is usually indicative of natural deposition caused by geological processes, the anomaly also follows the sloping terrain of the survey area which also aids this interpretation. However, given the close proximity of archaeological activity an archaeological origin cannot be ruled out. Several strong, discrete anomalies have been identified throughout the survey area. These anomalies are atypical when compared to standard ferrous type anomalies in that they display a negative centre surrounded by a strong positive magnetic halo (Figures 6 and 9). The morphology and the strong signal, most visible in the XY Trace Plot (Figures 7 and 10), might suggest high temperature activities. However, the origin of these activities is unclear.

8. Conclusions

- 8.1. A fluxgate gradiometer survey was successfully completed across the 16.6ha survey area. Magnetic disturbance was limited to haloes caused by fencing and around the extant telegraph poles within the south of the survey area.
- 8.2. Anomalies of probable archaeological origins have been detected within the centre and south of the survey area. These consist of mostly weak linear and curvilinear anomalies. These anomalies are suggestive of land boundaries, and a possible settlement boundary. Possible archaeological activity has also been identified as a trackway, pits and ditch-like anomalies.
- 8.3. The remnants of a former structure depicted on historical maps has been identified within the west of the survey area.
- 8.4. Historical and modern agricultural activity has been identified as ridge and furrow ploughing regimes and modern cultivation practices.
- 8.5. Several anomalies throughout the site have been classified as undetermined because it has not been possible to definitively determine whether these anomalies are the result of archaeological, agricultural or natural processes.

9. Archiving

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

10. Copyright

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

11. References

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12. Project Metadata

MS Job Code	MSSU1377
Project Name	Ashton Keynes, Wiltshire
Client	SLR Consulting
Grid Reference	(SU 04033 95961).
Survey Techniques	Magnetometry
Survey Size (ha)	16.6ha (Magnetometry)
Survey Dates	08-11-2022
Project Lead	Krasimir Dyulgerski BA MRes
Project Officer	Krasimir Dyulgerski BA MRes
HER Event No	TBA
OASIS No	N/A
S42 Licence No	N/A
Report Version	0.2

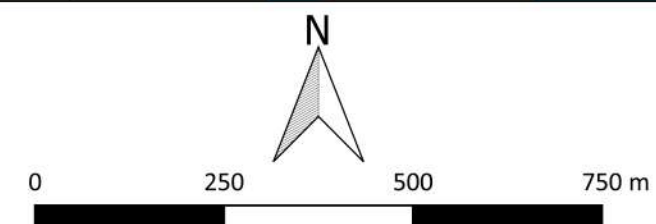
13. Document History

Version	Comments	Author	Checked By	Date
0.1	Initial draft for Project Lead to Review	DW	KD	30 August 2022
0.2	Report for director sign off	KD	FPC	30 August 2022



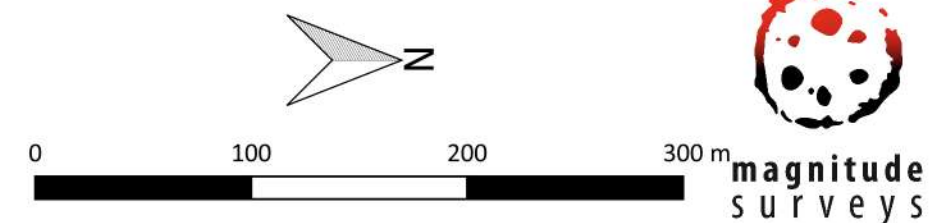
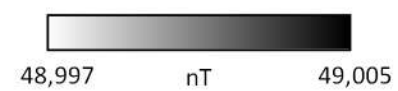
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 Figure 2 - Location of Survey Areas
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 Survey Extents





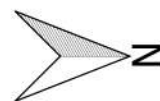
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 Figure 3 - Magnetic Total Field (Lower Sensor) (Overview) (Areas 1, 2 & 3)
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 Figure 4 - Magnetic Interpretation Over Satellite Imagery & Historical Maps (Overview) (Areas 1, 2 & 3)
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 Contains historical mapping © CLS Data 2022: Ordnance Survey, 6" 2nd edition c. 1882-1913
 Contains Satellite Imagery © 2022 Bing Satellite

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|-------------------------------|------------------------------|
| Archaeology Probable (Strong) | Magnetic Disturbance |
| Archaeology Probable (Weak) | Ferrous/Debris (Spread) |
| Archaeology Possible (Strong) | Structural Remnants (Spread) |
| Archaeology Possible (Weak) | Agricultural (Trend) |
| Undetermined (Strong) | Ridge and Furrow (Trend) |
| Undetermined (Weak) | Ferrous (Spike) |



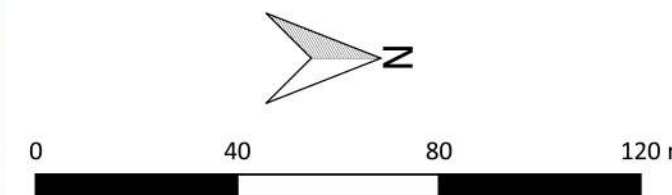
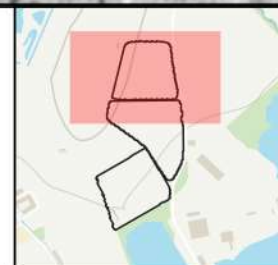
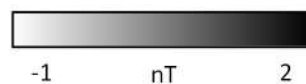


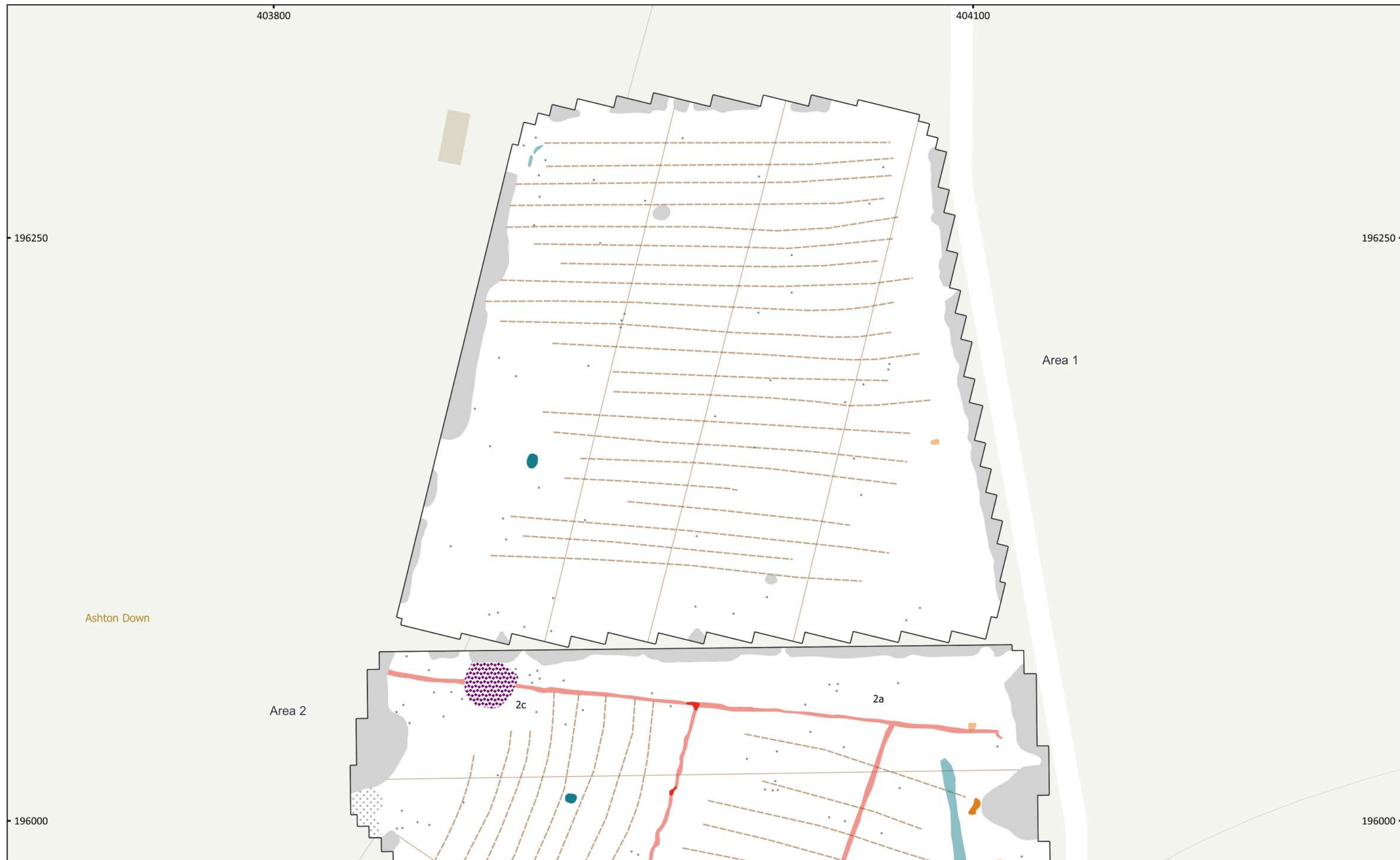


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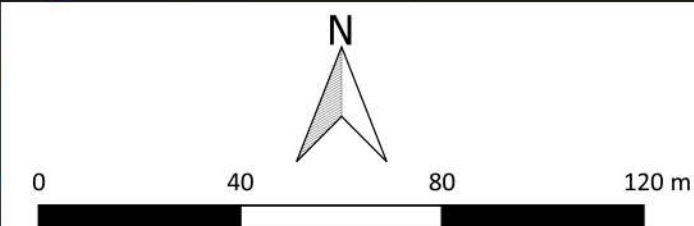
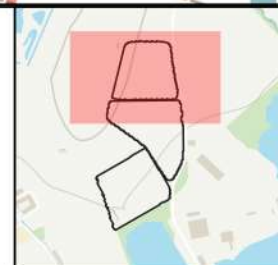
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Figure 5 - Magnetic Gradient (Northern Areas)
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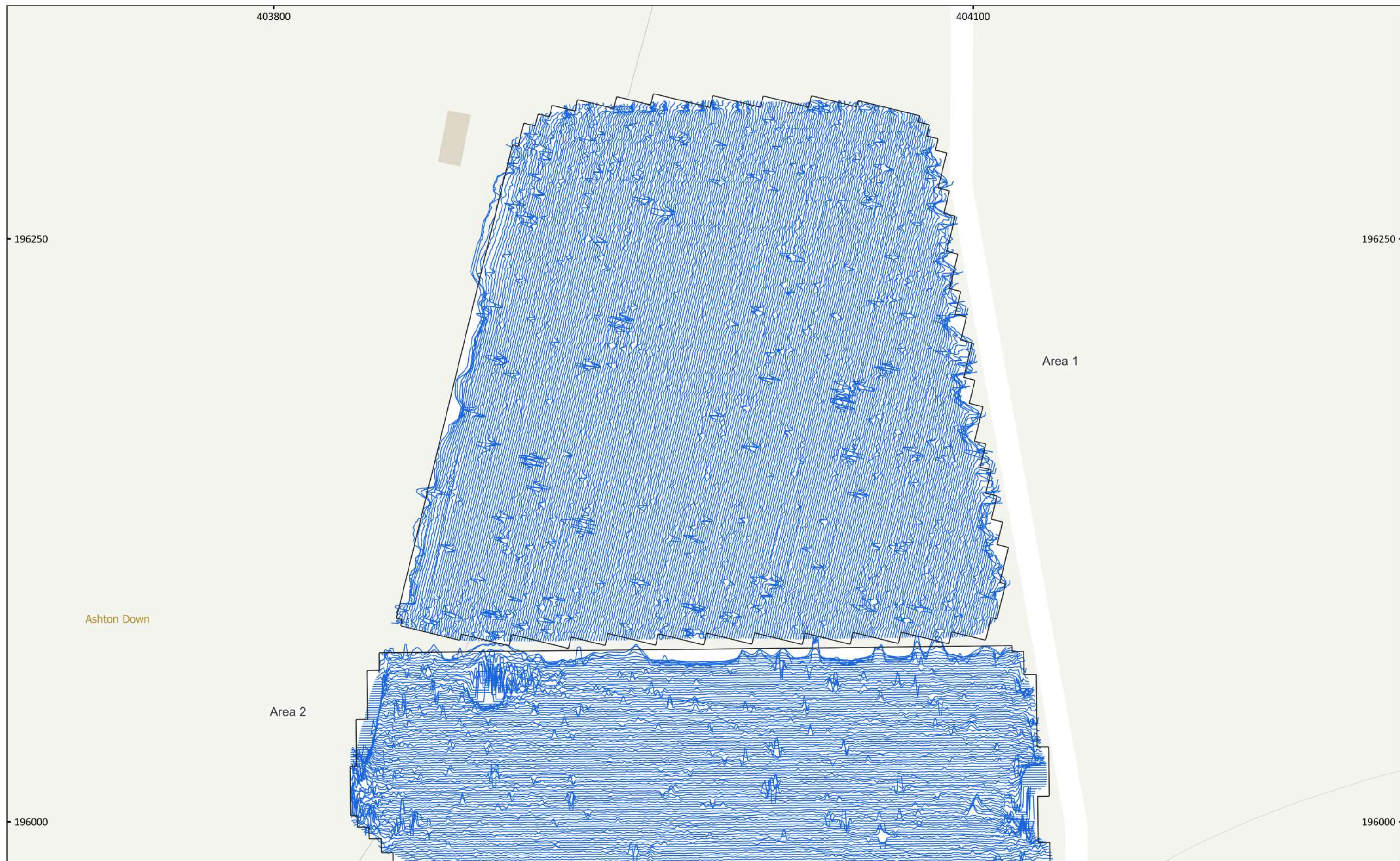




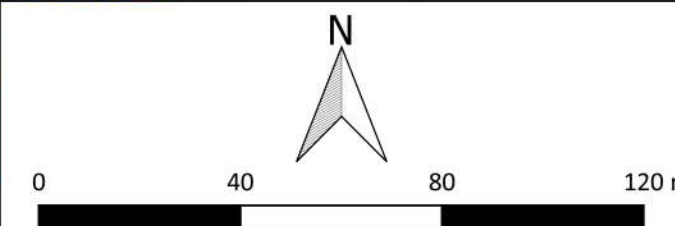
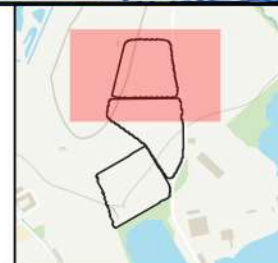
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 Figure 6 - Magnetic Interpretation (Northern Areas)
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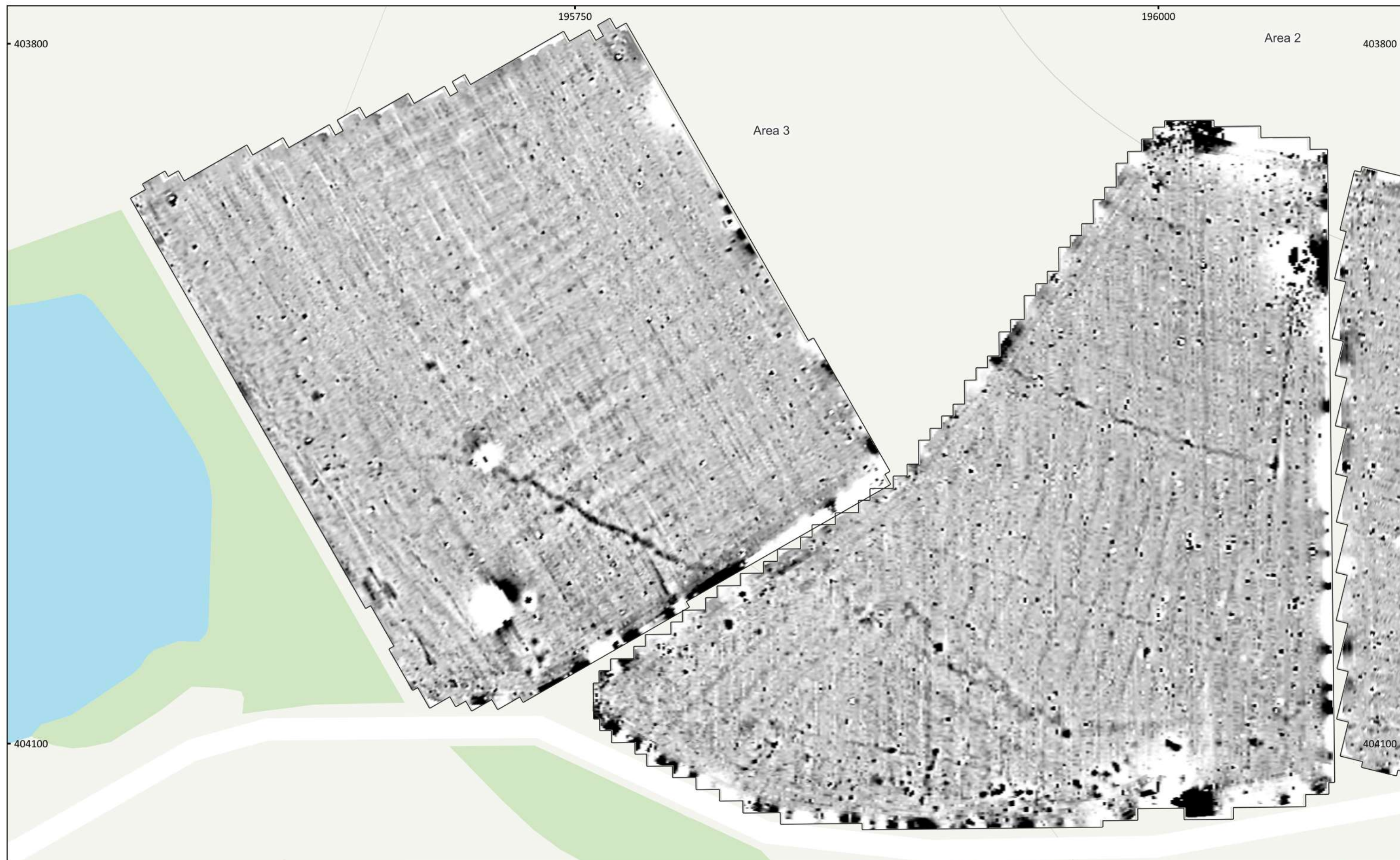
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| ■ Archaeology Probable (Weak) | ■ Ferrous/Debris (Spread) |
| ■ Archaeology Possible (Strong) | ■ Structural Remnants (Spread) |
| ■ Archaeology Possible (Weak) | ■ Agricultural (Trend) |
| ■ Undetermined (Strong) | ■ Ridge and Furrow (Trend) |
| ■ Undetermined (Weak) | ■ Ferrous (Spike) |



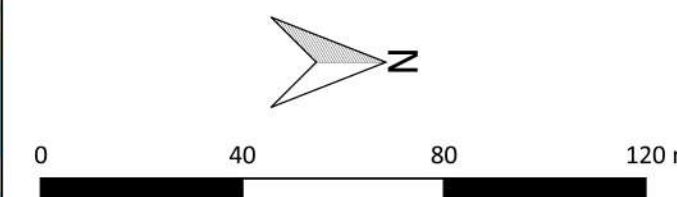
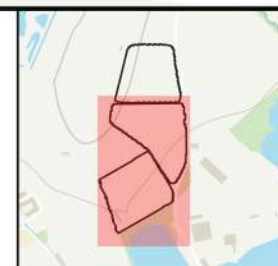
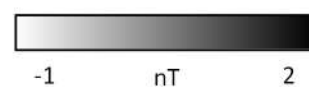


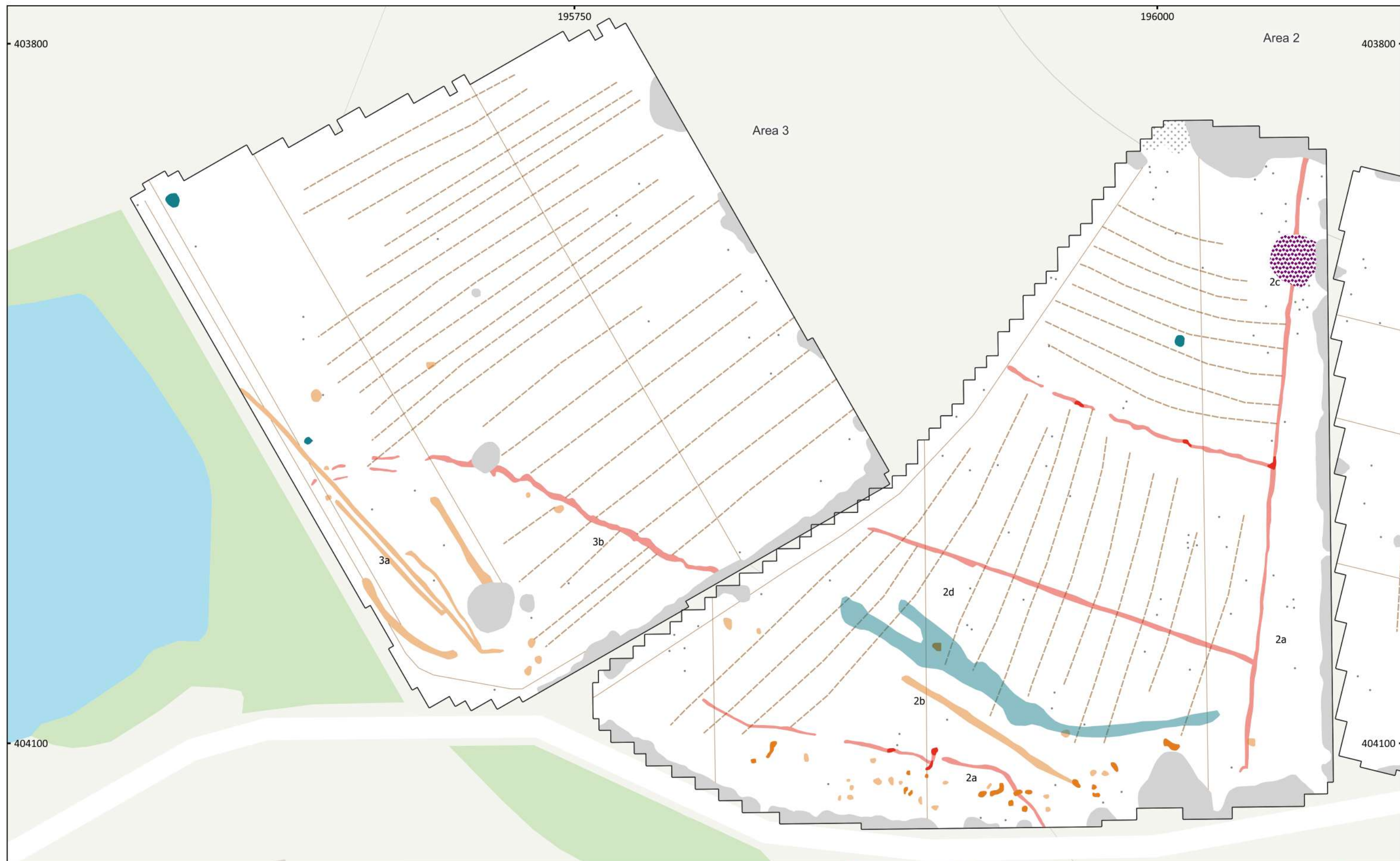
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Figure 7 - XY Trace Plot (Northern Areas)
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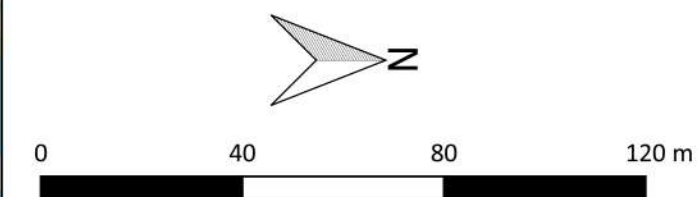
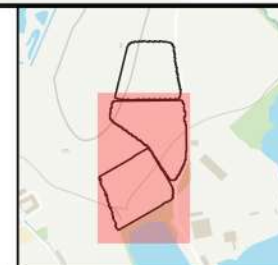
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 Figure 8 - Magnetic Gradient (Southern Areas)
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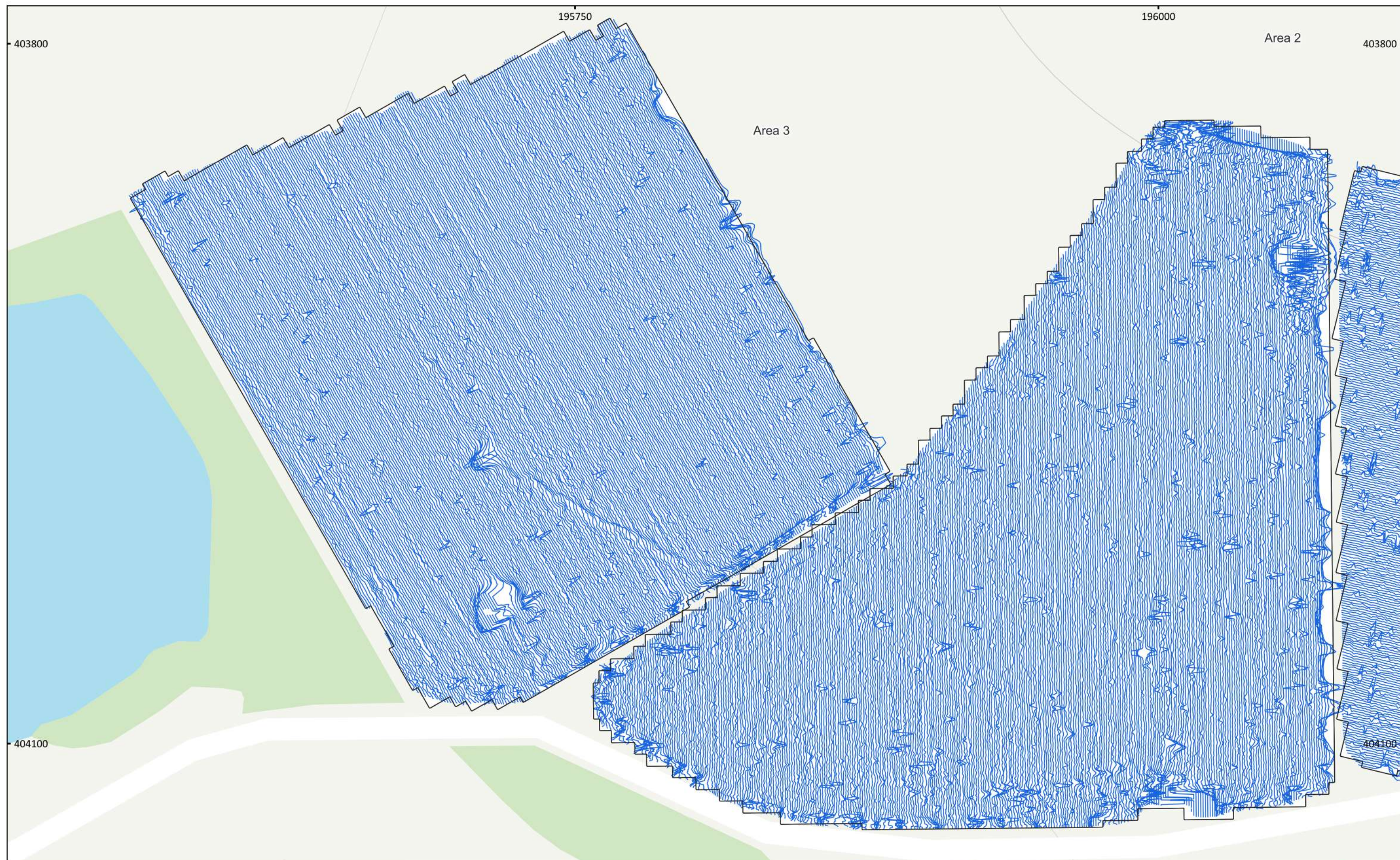




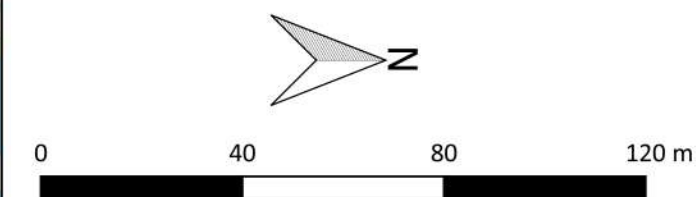
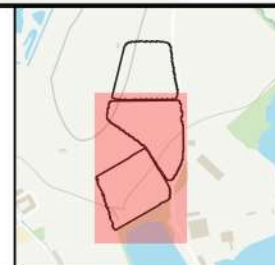
MSSU1377: Ashton Keynes, Wiltshire
 Figure 9 - Magnetic Interpretation (Southern Areas)
 1:1,500 @ A3
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- | | |
|--|--|
| ■ Archaeology Probable (Strong) | ■ Magnetic Disturbance |
| ■ Archaeology Probable (Weak) | ■ Ferrous/Debris (Spread) |
| ■ Archaeology Possible (Strong) | ■ Structural Remnants (Spread) |
| ■ Archaeology Possible (Weak) | — Agricultural (Trend) |
| ■ Undetermined (Strong) | - - - Ridge and Furrow (Trend) |
| ■ Undetermined (Weak) | • Ferrous (Spike) |



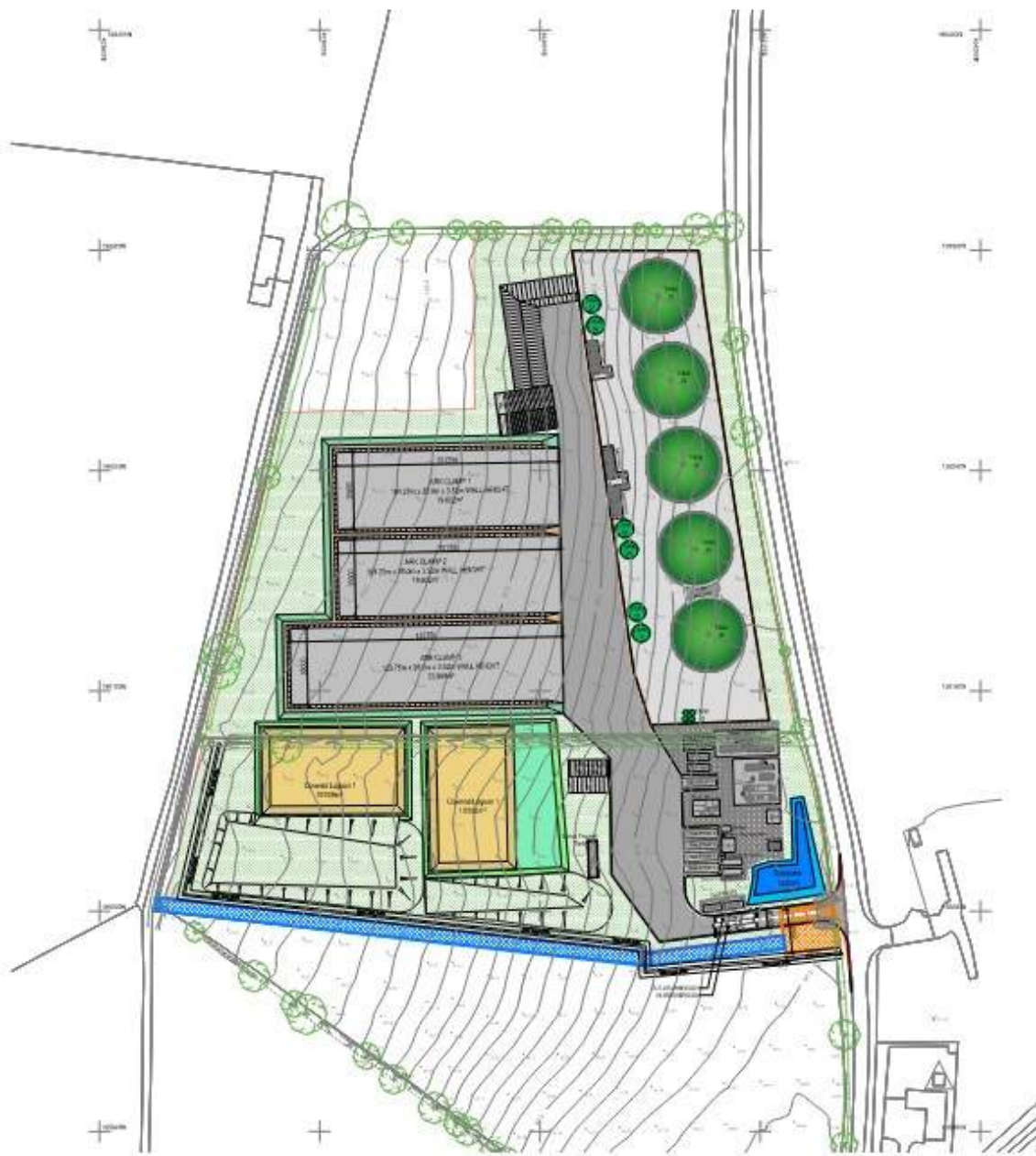


MSSU1377: Ashton Keynes, Wiltshire
Figure 10 - XY Trace Plot (Southern Areas)
30nT/cm at 1:1,500 @ A3
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APPENDIX 3

Proposed Layout



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