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Technical Appendix 7.1: Heritage Baseline

Department: ERM
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1 EXECUTIVE SUMMARY

1.1.1.1 This baseline was compiled using a variety of secondary data sources as well as primary survey, inclusive of site walkover and geophysical survey. The report has identified 90 known assets recorded in HES and ELC HER data within the 1 km Study Area, consisting of 30 designated assets and 60 non-designated assets. A further five, previously unknown assets were identified in the results of the geophysical survey.

1.1.1.2 Three HES and HER assets are within the Site boundary, inclusive of SM5891, Oldhamstocks Mains, enclosure, CA288 Oldhamstocks Conservation Area and MEL1894 Oldhamstocks Mains. The geophysical survey identified a further five assets within the Site.

1.1.1.3 There are no Early Prehistoric assets recorded within the Site boundary, with only a single HER record within the 1 km Study Area. MEL1871, records a pair of stone axe heads recovered from near Cocklaw, south-west of the Site. Mesolithic records from the wider historic landscape are limited to a coastal settlement site at Dunbar. However, evidence for possible dunes and raised beach terraces with associated Mesolithic flints finds, have been reported within the vicinity of the Site. Neolithic records are more numerous, with the NSA recording a former stone circle north of the Site, with additional settlement and ritual sites located within 10 km. Based on the above, a moderate potential for further Early Prehistoric finds within the Site is predicted, with assets, should they be present, likely to take the form of flints tools or scatters of worked flint. This potential exists across the Site but is perhaps more focused around the northern half of the scheme, in closer proximity to the coast.

1.1.1.4 There are two Late Prehistoric assets recorded within the Site boundary, both relating to settlement. Within the 1 km Study Area there are a further 26 assets assigned to this period, largely made up of settlement and funerary sites. Based on the above, there is considered to be a high potential for further Late Prehistoric remains to exist on the Site, with such assets likely to take the form of settlement, with associated field systems, enclosures and finds. This potential exists across the Site but is heightened in areas adjacent to water courses. Whilst not firmly attributable to this period, it would seem likely, given the volume of prehistoric settlement in the local and wider historic landscape that some, at least of these anomalies may date to this period.

1.1.1.5 There are no Roman assets recorded within the 1 km Study Area, with only limited recovery of Roman material from the wider historic landscape. Based on the above, there is considered to be a low potential for further unknown Roman assets to be found within the Site. Should such assets remain, they would likely take the form of isolated findspots of ceramic or metal.

1.1.1.6 There are four assets dated to the Medieval period within the 1 km Study Area, one of which is located within the Site. The Site boundary overlaps with the Conservation Area for Oldhamstocks village, which has a Medieval foundation, 13th century church and associated castle. Immediately east of the Site is the Dunglass Estate, which again has a Medieval foundation, with a castle and Collegiate Church. The remaining record for Medieval activity relates to rig and furrow within the wider 1 km Study Area. The wider historic landscape records several castle sites and associate estates, the nearest of which are around Innerwick and the Thornton Burn. Settlement at this period, outside of the major settlements such as at Dunbar, is likely to have been in the form of low-density rural townships, hamlets and farmsteads with the local population working the estates of their

lords and the nearby coastline. Based on the above there is considered to be a moderate potential for further Medieval assets to exist within the Site, with these assets likely to take the form of rural settlement, associated field systems and isolated finds of metal and stone. This potential exists across the Site.

1.1.1.7 There are 54 assets ascribed to the Post-Medieval period within the 1 km Study Area. None of these are within the Site boundary. Outside of the nearby Dunglass Estate and the village of Oldhamstocks, these assets are largely associated with farmsteads and the rural economy. Based on the above there is considered to be a high potential for further Post-Medieval below ground remains to exist within the Site boundary, but these are likely to take the form of agricultural remains and associated former field boundaries and trackways.

1.1.1.8 Modern assets within the 1 km Study Area are limited to World War defences, monuments and modern road infrastructure. There are no assets within the Site boundary. Based on the above, there is considered to be a low potential for additional modern assets to exist on Site, with modern activity more likely to take the form of ground disturbance and the truncation of archaeological remains.

1.1.1.9 Of the assets located within the Site boundary, the designated scheduled monument and conservation area have been assigned a high value. All other non-designated assets have been awarded a low value based on available evidence and professional judgement. However, the value of below ground assets is difficult to gauge without intrusive evaluation and/or excavation works to ground truth the results of a heritage baseline. The known non-designated assets within the Site boundary, as well as currently unknown assets retain the potential to be of regional importance, and any value assigned to them prior to physical excavation is subject to change in the light of further evidence. The known heritage assets and the potential identified for further remains within the Site boundary are unlikely to yield high value below ground remains or remains considered to be of a national importance.

1.1.1.10 An Environmental Impact Assessment Report (EIAR) will utilise the baseline within this document to fully assess any potential Direct/Indirect (Physical) Impact to the known or potential heritage resource. Impacts and the significance of effects are discussed within **Volume 1, Chapter 7 (Archaeology and Cultural Heritage)** of the Environmental Impact Assessment Report (EIAR) along with appropriate mitigation strategies

2 INTRODUCTION

2.1 Purpose and Relationship to EIA

2.1.1.1 This historic and archaeological baseline has been undertaken by Environmental Resources Management (ERM) on behalf of Voltalia UK Ltd (the Applicant) for the proposed Springfield Solar and BESS (the Proposed Development).

2.1.1.2 The purpose of this document is to establish the baseline heritage resource within a 1 km Study Area, taking in the Proposed Development Planning Red Line Boundary (RLB, hereafter referred to as 'The Site') and land within 1 km of the Site. The baseline will be used to inform the known heritage resource and the potential for unknown (typically) below ground heritage assets within the Site. This baseline will also identify known assets and their location in relation to key project infrastructure.

2.1.1.3 An Environmental Impact Assessment Report (EIAR) will utilise the baseline within this document to fully assess any potential Direct/Indirect (Physical) Impact to the known or potential heritage resource. Impacts and the significance of effects are discussed within **Volume 1, Chapter 7 (Archaeology and Cultural Heritage)** of the Environmental Impact Assessment Report (EIAR) along with appropriate mitigation strategies.

2.2 The Site

2.2.1.1 The Proposed Development will be located in farmland, 0.5 km north of the village of Oldhamstocks, 2.2 km south-east of the village of Innerwick and 6.4 km south-east of the town of Dunbar, within the county of East Lothian. The Proposed Development is centred on NGR 374554, 671620 (**Figure 7.1.1**).

2.2.1.2 The Site measures c. 184 ha and extends from the Dunglass Estate to the east, and the Oldhamstocks Conservation Area to the south.

2.2.1.3 The Applicant has divided the Site into 20 distinct Land Parcels, each with its own identification reference. Land Parcel ID's will be used throughout this baseline where helpful to do so.

2.2.1.4 The Site contains a mixture of agricultural farmland, copse woodland and farmsteads. Agricultural fields are divided by hedgerows, farm tracks and country roads. Watercourses within the Site are limited field drainage ditches and minor tributaries of the Bilsdean and Ogle Burns. The Site rises from its lowest elevation (c. 95 m above Ordnance Datum (AOD), at its north-east limit, to its highest elevation (c. 185 m AOD) at its south-west limit. Additional farmland land is located to the north and west.

2.2.1.5 Settlement within and immediately adjacent to the Site is restricted to farmsteads, individual cottages and small hamlets/villages. The nearest nucleated settlement is the historic village of Oldhamstocks, located partially within the Site boundary, at the base of a steep incline, containing the historic core of the Oldhamstocks Conservation Area and the Oldhamstocks Burn (c. 125 m AOD). The Garden and Designed Landscape of Dunglass is located at the eastern limit of the Proposed Development within a curtain of woodland. The nearest market town is Dunbar.

2.2.1.6 The British Geological Survey1 (BGS) identifies two bedrock geologies within the Site, with the Ballagan Formation of sandstone, siltstone and dolomitic limestone, located in the northern half of the scheme and the Stratheden Group and Inverclyde Group (undifferentiated) of sandstone and [subequal/subordinate] argillaceous rocks, located to the south around Oldhamstocks. Superficial deposits recorded by the British Geological Survey (BGS) are limited to Glacial gravel, sands and silts, with Devensian Till and bands of alluvial silts, gravels and clays around watercourses.

2.3 Scottish Landscape Character Types

2.3.1.1 The 1 km Study Area takes in the following Landscape Character Types[2] :

- Landscape Character Type 269: Upland Fringes, Lothians
- Landscape Character Type 277: Coastal Margins, Lothians

2.3.1.2 Of these Landscape Character Types, the Proposed Development is more characteristic of the Coastal Margins, Lothians and is defined by medium to large-scale arable fields, interspersed with stretches of improved grassland along the steeper valley sides. Stream courses are marked by scrub and broadleaf woodland of oak, ash, hawthorn and sycamore. Woodland is restricted to the tree clumps associated with farmsteads. Fields are divided by clipped, occasionally intermittent thorn hedgerows and post and-wire fences. Isolated hedgerow trees include oak, ash and hawthorn. Low pink or grey stone walls edge the roadsides and form occasional field boundaries in the uplands.

2.3.1.3 The A1 trunk road and the rail line run across the open plain beside the coast with associated embankments, bridges and structures often visible features. Several concentrations of industrial development are located along the coast, with the most extensive being the unscreened cement works at Oxwell Mains, the energy from waste plant, landfill site, and massive structure of Torness Power Station. The coastline is a popular recreational resource and is fringed by a number of sites for picnics, caravans and camping. The John Muir Way walking route also follows the coastline for the entire length of this area.

2.3.1.4 In relation to the settlements, numerous small roads twist from the hillsides down to the sea to serve a scattering of farms, many houses and steadings dating from the 18th and 19th Centuries. Although Dunglass House is now gone, its church, stables and heavy series of bridges are prominent features from its designed landscape along the wooded line of Dunglass Burn. The settlement of Innerwick sits on the hillside above Torness at the boundary of the Lammermuir Hill range.

2.3.1.5 In relation to the historic environment, earlier human activity is characterised by large later prehistoric settlements spread along the plain. Some of these, such as the now destroyed fort at Broxmouth, had a long period of occupation spanning centuries. The Site of the Battle

[1] British Geological Survey GeoIndex Onshore Viewer. Available at GeoIndex - British Geological Survey (bgs.ac.uk). [Accessed on 02/05/2024]
[2] Scottish Landscape Character Types on line viewer. Available at Scottish Landscape Character Types Map and Descriptions | NatureScot [Accessed 02/02/2025]

of Dunbar (1650AD) and the fort overlooking Dunglass attest to the disputed nature of this coast in earlier times.

2.4 Special Landscape Areas

2.4.1.1 A review of the East Lothian catalogue of Special Landscape Areas[3] (SLA) confirms that the Site falls within the Monynut to Blackcastle SLA.

2.4.1.2 This SLA is located at the north-eastern extremity of the Southern Uplands and eastern end of the Lammermuir Hills from the border with the Scottish Borders to the south-west, through the Lammermuir Plateau and across the Eastern Lammermuir Fringe. It is a highly scenic area of contrasting landscape forming two raised areas of land with the moorland plateau of the striking Monynut Edge with its incised cleughs to the south separated from the imposing rolling agricultural Blackcastle Hill to the north by the picturesque valley of the Oldhamstocks Burn containing the scenic village of Oldhamstocks and the steep sided, enclosing, wooded hill slopes of the glaciated Aikengall valley.

2.4.1.3 In relation to the historic environment the SLA contains the village of Oldhamstocks with its attractive A-listed white-rendered parish church, village green and market cross and single street of cottages of traditional vernacular, sitting at the head of the Oldhamstocks Burn valley surrounded by improved pastureland and enclosed by woodlands. The village is largely unchanged since it was a bustling market town during the 18th century.

2.4.1.4 The area has a well-preserved landscape of Post-Medieval and possibly earlier agricultural settlement visible as earthworks showing remains of small fields, buildings and track ways.

2.4.1.5 In relation to archaeology and cultural heritage the SLA the LPA makes the following recommendations for development:

- Any Proposed Development must not harm views of Oldhamstocks from Cocklaw and core path route 16, and core path route 13 to Woollands; and
- Any Proposed Development must not harm the existing character of the village of Oldhamstocks and the surrounding countryside. Large, modern development, out of scale with the existing buildings and landscape character would adversely impact the landscape character of the area obtrusive courses.

[3] East Lothian Council Special Landscape Areas. Available at Special Landscape Areas | Natural Environment and Planning | East Lothian Council [Accessed 02/05/2024]

3 METHODOLOGY, AIMS AND OBJECTIVES

3.1 Methodology

3.1.1.1 The historic and archaeological baseline comprises a written description of the known heritage resource, within a 1 km Study Area, provides a description of the area's historic character and details the archaeological potential of the Site. This information will be used to identify known assets in close proximity to key project infrastructure and to identify the potential of the Site to contain unknown below ground assets.

3.1.1.2 This document is supported by a series of plates embedded within the main text and the following figures found within **Volume 2: Figures** of the EIAR:

- Figure 7.1.1: Site Location
- Figure 7.1.2: 1 km Study Area
- Figure 7.1.3: Designated Assets within 1 km Study Area
- Figure 7.1.4: Non-Designated Assets within the Site
- Figure 7.1.5: Non- Designated Assets within the 1 km Study Area

3.1.1.3 This baseline, in conjunction with **Volume 1, Chapter 7: Archaeology and Cultural Heritage** of the EIAR will conform to the Chartered Institute for Archaeologists' (CIfA) Standard and Guidance for historic environment desk-based assessment[4].

3.1.1.4 Chapter Specific methodology for delivery of **Volume 1, Chapter 7: Archaeology and Cultural Heritage** can be found within **Volume 3, Technical Appendix 7.4: Chapter Specific Methodology**.

3.1.2 Study Areas

3.1.2.1 The 1 km study takes in the Site boundary and land within 1 km of the Site. Heritage assets within the 1 km Study Area are assigned to locations within the Site boundary or within the wider 1 km Study Area.

3.1.3 Baseline data collection

3.1.3.1 A list of secondary data sets used to deliver this heritage baseline and the associated Archaeology and Cultural Heritage Chapter are presented within Volume 1, Chapter 7.

3.1.3.2 In addition to the secondary data sources identified within Volume 1, Chapter 7, primary survey was undertaken to support this heritage baseline and the and the associated Archaeology and Cultural Heritage Chapter.

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[4] CIfA Guidance for DBA. Available at CIfAS&GDBA_4.pdf (archaeologists.net). [Accessed 02/02/2025]

3.1.3.3 Geophysical survey was commissioned by ERM across the Site. Magnitude Survey undertook a detailed gradiometer survey within all accessible land parcels across multiple visits between September 2024 and March 2025. The results of the geophysical survey are detailed within **Section 5** and discussed within the baseline by period, where relevant.

3.1.3.4 A site walkover across the Site was conducted on the 6th June 2024. The walkover was undertaken in fair weather with good visibility, with the entirety of the Proposed Development Area walked. The aims of the walkover were to:

- Validate the baseline dataset within the Development Area and to identify any other unrecorded archaeological remains that may exist within the Site; and
- Identify unforeseen factors which may result in impacts to the historic environment as a result of the Proposed Development.

3.1.3.5 The results of the walkover survey are detailed in **Section 5.5**.

3.1.4 Assessment of value and archaeological potential

3.1.4.1 Criteria for determining the heritage value of an asset, as well as the wider potential of the Site to contain previously unidentified below ground archaeological remains are presented within **Volume 1, Chapter 7.**

3.2 Aims and Objectives

3.2.1 Aims

3.2.1.1 The aims of this document are as follows:

- Establish a baseline for the historic environment within the 1 km Study Area, alongside a summary of the wider historic landscape;
- Establish the archaeological potential for unknown buried archaeology to survive within the Site; and
- To assign an importance/value to known heritage assets within the 1 km Study Area.

3.2.2 Objectives

3.2.2.1 The objectives of this assessment are:

- To set out the statutory, planning and policy context relating to the historic environment;
- To provide an overview of the heritage resources within the Study Area and surrounding historic landscape, based on existing archaeological records and secondary sources; and
- To provide sufficient information on the baseline heritage resource to allow for informed decisions to be made in relation to Direct/Indirect (Physical) Impacts, as well as Setting Impacts within the EIAR.

3.3 Assumptions and Limitations

3.3.1.1 A detailed list of assumptions and limitations applicable to this document and the wider Archaeology and Cultural Heritage Chapter can be found within **Volume 1, Chapter 7: Archaeology and Cultural Heritage**.

4 LEGISLATIVE FRAMEWORK AND GUIDANCE

4.1 Legislation

4.1.1.1 In relation to the Proposed Development, the assessment of impacts to the historic environment falls under the Electricity Works (Environmental Impact Assessment) Regulations 2017[5] as amended (the EIA Regulations) and this report forms the baseline against which the assessment will occur. This report is a technical appendix to **Volume 1, Chapter 7: Archaeology and Cultural Heritage** of the EIAR and will accompany the application for consent.

4.1.1.2 Statutory protection for archaeology is principally outlined in the Ancient Monuments and Archaeological Areas Act[6] (1979), as amended by the National Heritage Act (1983)[7], and nationally important sites are listed in a Schedule of Monuments. The 1979 Act makes no reference to the settings of Scheduled Monuments.

4.1.1.3 Listed Buildings and Conservation Areas receive protection under the Planning (Listed Buildings and Conservation Areas) (Scotland) Act 1997[8] as amended by the Enterprise and Regulatory Reform Act (2013)[9]. The 1997 Act places a duty on the local planning authority with respect to Listed Buildings and Conservation Areas, and their settings. Section 59 of the 1997 Act states (in part):

> *"In considering whether to grant planning permission for development which affects a listed building or its setting, a planning authority or 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."*

4.1.1.4 Section 64 states:

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

4.1.1.5 The Historic Environment Scotland Act 2014[10] defines the role of Historic Environment Scotland (HES) and the processes for the designation of heritage assets, consents and rights of appeal.

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[5] Electricity Works EIA Regulations 2017. Available at https://www.legislation.gov.uk/uksi/2017/580/contents/made [Accessed 02/02/2025]
[6] UK Government (1979) Ancient Monuments and Archaeological Areas Act. Available at https://www.legislation.gov.uk/ukpga/1979/46/2022-02-01 [Accessed 02/02/2025]
[7] UK Government (1983) National Heritage Act. Available at https://www.legislation.gov.uk/ukpga/1983/47/2021-02-11 [Accessed 02/02/2025]
[8] UK Government (1997) (Listed Buildings and Conservation Areas) (Scotland) Act 1997. Available at http://www.legislation.gov.uk/ukpga/1979/46/pdfs/ukpga_19790046_en.pdf [Accessed 02/02/2025]
[9] UK Government (2013) Enterprise and Regulatory Reform Act 2013. Available at https://www.legislation.gov.uk/ukpga/2013/24/schedule/17/enacted [Accessed 02/05/2024]
[10] Historic Environment Scotland Act 2014. Available at https://www.legislation.gov.uk/asp/2014/19/contents [Accessed 02/02/2025]

4.2 Policy

4.2.1.1 National Planning Framework 4 (NPF4)[11] is the national spatial strategy for Scotland. It sets out the Scottish Government's spatial principles, regional priorities, national developments, and national planning policy.

Policy 7 intends to "protect and enhance historic environment assets and places, and to enable positive change as a catalyst for the regeneration of places."

4.2.1.2 Policy outcomes:

"The historic environment is valued, protected, and enhanced, supporting the transition to net zero and ensuring assets are resilient to current and future impacts of climate change."
"Redundant or neglected historic buildings are brought back into sustainable and productive uses"; and
"Recognise the social, environmental and economic value of the historic environment, to our economy and cultural identity."

4.2.1.3 Regarding designated heritage assets, NPF4 states:

"Development proposals with a potentially significant impact on historic assets or places will be accompanied by an assessment which is based on an understanding of the cultural significance of the historic asset and/or place. The assessment should identify the likely visual or physical impact of any proposals for change, including cumulative effects and provide a sound basis for managing the impacts of change. Proposals should also be informed by national policy and guidance on managing change in the historic environment, and information held within Historic Environment Records."
"Development proposals for the demolition of listed buildings will not be supported unless it has been demonstrated that there are exceptional circumstances and that all reasonable efforts have been made to retain, reuse and/or adapt the listed building."
"Development proposals for the reuse, alteration or extension of a listed building will only be supported where they will preserve its character, special architectural or historic interest and setting. Development proposals affecting the setting of a listed building should preserve its character, and its special architectural or historic interest."
"Development proposals in or affecting conservation areas will only be supported where the character and appearance of the conservation area and its setting is preserved or enhanced."
"Development proposals in conservation areas will ensure that existing natural and built features which contribute to the character of the conservation area and its setting, including structures, boundary walls, railings, trees and hedges, are retained."
"Demolition of buildings in a conservation area which make a positive contribution to its character will only be supported where it has been demonstrated that:
i. reasonable efforts have been made to retain, repair and reuse the building;
ii. the building is of little townscape value;

[11] Scottish Government (2022) Scottish Planning Policy. Available at https://www.gov.scot/publications/national-planning-framework-4-revised-draft/pages/3/ [Accessed 02/02/2025]

iii. the structural condition of the building prevents its retention at a reasonable cost; or
iv. the form or location of the building makes its reuse extremely difficult."
"Where demolition within a conservation area is to be followed by redevelopment, consent to demolish will only be supported when an acceptable design, layout and materials are being used for the replacement development."
"Development proposals affecting scheduled monuments will only be supported where:
i. direct impacts on the scheduled monument are avoided;
ii. significant adverse impacts on the integrity of the setting of a scheduled monument are avoided; or
iii. exceptional circumstances have been demonstrated to justify the impact on a scheduled monument and its setting and impacts on the monument or its setting have been minimised."
"Development proposals affecting nationally important Gardens and Designed Landscapes will be supported where they protect, preserve or enhance their cultural significance, character and integrity and where proposals will not significantly impact on important views to, from and within the Site, or its setting."
"Development proposals affecting nationally important Historic Battlefields will only be supported where they protect and, where appropriate, enhance their cultural significance, key landscape characteristics, physical remains and special qualities."
"Development proposals at the coast edge or that extend offshore will only be supported where proposals do not significantly hinder the preservation objectives of Historic Marine Protected Areas."
"Development proposals affecting a World Heritage Site or its setting will only be supported where their Outstanding Universal Value is protected and preserved."
"Development proposals which sensitively repair, enhance and bring historic buildings, as identified as being at risk locally or on the national Buildings at Risk Register, back into beneficial use will be supported."
"Enabling development for historic environment assets or places that would otherwise be unacceptable in planning terms, will only be supported when it has been demonstrated that the enabling development proposed is:
i. essential to secure the future of an historic environment asset or place which is at risk of serious deterioration or loss; and
ii. the minimum necessary to secure the restoration, adaptation and long-term future of the historic environment asset or place."

4.2.1.4 NPF4 also states that:

"Non-designated historic environment assets, places and their setting should be protected and preserved in situ wherever feasible. Where there is potential for non-designated buried archaeological remains to exist below a site, developers will provide an evaluation of the archaeological resource at an early stage so that planning authorities can assess impacts. Historic buildings may also have archaeological significance which is not understood and may require assessment. Where impacts cannot be avoided, they should be minimised. Where it has been demonstrated that avoidance or retention is not possible, excavation, recording, analysis, archiving, publication and activities to provide public benefit may be required through the use of conditions or legal/planning obligations.
When new archaeological discoveries are made during the course of development works, they must be reported to the planning authority to enable agreement on appropriate inspection, recording and mitigation measures."

'Our Past, Our Future: The Strategy for Scotland's Historic Environemnt'12 presents the Scottish Government's strategy for the protection and promotion of the historic environment. The Historic Environment Policy for Scotland[13] (HEPS) and the Historic Environment Scotland Circular complement the NPF4 and provide further policy direction. In particular, HEPS provides more detailed policy on historic environment designations and consents.

4.3 Local policy

4.3.1.1 Regarding regional and local policy, the East Lothian Local Development Plan (LDP) adopted 2018[14], contains the following heritage policy relevant to the application:

4.3.2 Special Landscape Areas

4.3.2.1 In relation to archaeology and cultural heritage the SLA the LPA makes the following recommendations for development:

- Any Proposed Development must not harm views of Oldhamstocks from Cocklaw and core path route 16, and core path route 13 to Woollands; and
- Any Proposed Development must not harm the existing character of the village of Oldhamstocks and the surrounding countryside. Large, modern development, out of scale with the existing buildings and landscape character would adversely impact the landscape character of the area obtrusive courses.

4.3.3 Policy CH1: Listed Buildings

4.3.3.1 Internal or external alterations or extensions to listed buildings will only be permitted where they do not harm the architectural or historic character of the building.

4.3.3.2 The demolition of a listed building will not be permitted unless the building is no longer of special interest, is incapable of repair or there are overriding environmental or economic reasons, and it must be satisfactorily demonstrated that every effort has been made to continue the present use or to find a suitable new use.

4.3.3.3 New development that harms the setting of a listed building will not be permitted. The setting of a listed building can be affected by new development proposed within its curtilage, adjacent to it or visible from it. Development proposals should not interrupt key views of, from or to a listed building and should ensure that the presence of new development does not dominate or detract from the listed building in a way that affects understanding and appreciation of it.

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[12] Historic Environment Scotland (2014) Our Place in Time. Available at Our Place in Time | Public Body for Scotland's Historic Environment. [Accessed 02/02/2025]
[13] Historic Environment Scotland Historic Environment Policy for Scotland. Available at Historic Environment Policy for Scotland | Historic Environment Scotland [Accessed 02/02/2025]
[14] East Lothian Local Development Plan 2018. Available at Local Development Plan 2018 | Local Development Plan | East Lothian Council [Accessed 07/05/2024]

4.3.4 Policy CH2: Developments affecting Conservation Areas

4.3.4.1 All development proposals within or affecting a Conservation Area or its setting must be located and designed to preserve or enhance the special architectural or historic character or appearance of the Conservation Area. Proposals for new development should accord with the size, proportions, orientation, alignment, density, materials, and boundary treatment of nearby buildings and public and private spaces. Parking requirements of new developments must accord with the Council's adopted parking standards unless it can be demonstrated that a reduced level of parking (which in exceptional circumstances could be no parking provision) will achieve positive townscape benefits without compromising road safety.

4.3.4.2 Supplementary planning guidance will contain the Conservation Area Character Statements for 29 Conservation Areas. The guidance will be a material consideration in planning decisions.

4.3.4.3 Design Statements can be used to describe and illustrate the design principles and design concepts of development proposals, including how these have been informed by relevant Conservation Area character statements or appraisals, and how the proposal would preserve or enhance the character or appearance of the Conservation Area. The circumstances where such statements will be required are set out in the Design chapter of this plan. Brief statements would be useful even for minor developments.

4.3.5 Policy CH4: Scheduled Monuments and archaeological sites

4.3.5.1 Where a Proposed Development might affect any Scheduled Monument or archaeological site (of known or suspected archaeological interest), the developer must undertake and make available to the planning authority a professional archaeological assessment and, if necessary, a field evaluation.

4.3.5.2 Developments that adversely impacts on a scheduled monument, or its setting, will not be permitted.

4.3.5.3 Development that would harm a site of regional or local archaeological interest, or its setting, will only be permitted in exceptional circumstances, where the Council accepts that archaeological advice that the significance of the remains is not sufficient to justify their physical preservation in situ when weighed against other material considerations (including the benefits of the Proposed Development). In such situations, the developer must make proper provision for the excavation, recording and analysis of the archaeological remains in advance of the commencement of development, the results of which must be reported and any subsequent post-excavation work undertaken should also be reported and, if warranted, published. Appropriate conditions may be applied to any planning permission to achieve this.

4.3.5.4 Where it is feasible within a Proposed Development to accommodate, preserve or enhance a Scheduled Monument or archaeological remains, interpretation and integration of these features and where appropriate, public access, will be expected.

4.3.6 Policy CH6: Gardens and Designed Landscapes

4.3.6.1 Development that would significantly harm the elements justifying designation of sites of national importance listed in the Inventory of Gardens and Designed Landscapes, or sites of local or regional importance included in historic gardens and designed landscape records, will not be permitted.

4.3.6.2 Scottish Planning Policy requires that gardens and designed landscapes of national, regional or local importance are protected and, where appropriate, enhanced. They can have different qualities and are assessed under the following value-based criteria, although do not have to be of value under all of them:

- Value as an individual work of art
- Historic value
- Horticultural, arboricultural, silvicultural value
- Architectural value
- Scenic value
- Nature conservation value
- Archaeological value

4.3.6.3 The Energy Consents Unit (ECU) will consult with HES in regard to developments where Impacts to Nationally Important Designated Assets are anticipated. HES holds statutory responsibility within the planning system for Scheduled Monuments, Category A Listed Buildings, Gardens and Designed Landscapes, Inventory Battlefield Sites, Protected Wrecks and World Heritage Sites.

4.3.6.4 HES does not hold statutory responsibility in relation to Category B and C Listed Buildings, Conservation Areas or non-designated assets. These Regional and Local Value assets are the statutory responsibility of the Local Planning Authority (LPA).

4.4 Guidance

4.4.1.1 Planning Advice Note 2/2011[15]: Planning and Archaeology provides advice on dealing with archaeological remains. Whilst it covers a range of issues, of particular relevance is the planning balance associated with the preservation of archaeological remains and the benefits of development; the circumstances under which developers may be required to

[15] The Scottish Government (2011) Planning Advice Note 2/2011. Available at https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2011/07/pan-2-2011-planning-archaeology/documents/pan2_2011-planning-archaeology-pdf/pan2_2011-planning-archaeology-pdf/govscot%3Adocument/PAN2_2011%2BPlanning%2Band%2Barchaeology.pdf [Accessed 02/02/2025]

provide further information or field evaluation to inform decisions; and measures that can be taken to mitigate adverse effects.

4.4.1.2 Designation Policy and Selection Guidance (DPSG, 2019) accompanies HEPS and details the policy and selection guidance used by Historic Environment Scotland when designating heritage assets of national importance.

4.4.1.3 Guidance on how to apply the policies set out in the SPP is set out in Historic Environment Scotland's 'Managing Change in the Historic Environment Series', of which their guidance on 'Setting' is particularly relevant.

5 HISTORIC BASELINE

5.1 Overview

5.1.1.1 The following section presents a summary of the known historical and archaeological baseline, with designated and non-designated assets identified by either their Historic Environment Scotland (HES/Canmore ID) ID or ELC (HER) ID. A full summary of these assets, and associated HER ID and CANMORE IDs, descriptions, and period are presented in Appendix A, the gazetteer of heritage assets within the 1 km Study Area. Where possible, assets have been assigned to time periods as defined by the Scottish Archaeological Research Framework (ScARF) National Framework Panel Reports Chronology and Downloads[16] (**Table 5.1**).

TABLE 5.1 PERIOD DEFINITIONS

PERIOD NAME		DATE RANGE
Early Prehistory	Palaeolithic to Mesolithic	12,700 BC – 4,100 BC
	Neolithic	4,100 BC – 2,500 BC
Later Prehistory	Chalcolithic and Bronze Age	2,500 BC – 800 BC
	Iron Age	800 BC – AD 400
Medieval	Early Medieval	AD 400 – 843
	Later Medieval	AD 843-1500
Post-Medieval to Modern		AD 1500 – 1900
Modern		1900 – present AD

5.2 Designated Assets

5.2.1.1 There are 30 designated assets are located within the 1 km Study Area and is detailed within **Table 5.2** below. Of these, two are located wholly or partially within the Site: SM5891 Oldhamstocks Mains, enclosure, and CA288 Oldhamstocks Conservation Area.

5.2.1.2 The eight scheduled monuments record Late Prehistoric settlement within the fertile agricultural belt between the Lammermuir Hills to the south and the coast to the north, in which the Site is located. The settlement sites are a mixture of enclosed and unenclosed settlement, with one monument representing a promontory fort.

[16] ScARF) National Framework Panel Reports Chronology and Downloads https://scarf.scot/national/panel-report-chronology-and-downloads/ [Accessed 02/02/2025]

5.2.1.3 Both Dunglass GDL and Oldhamstocks CA have Medieval origins, with Dunglass being a noted Medieval Estate within East Lothian and Oldhamstocks containing a Medieval church and a parish church. Both the GDL and Conservation Area evolved throughout the Medieval period and into the Post-Medieval period, with their associated Listed Buildings dating to this period, with fabric from the Medieval period re used and retained in some cases.

TABLE 5.2 DESIGNATED ASSETS WITHIN 1 KM STUDY AREA (ASSETS HIGHLIGHTED IN BLUE ARE LOCATED WITHIN THE SITE)

DESIGNATION	ASSET REFERENCES		NAME	DESCRIPTION
	REFERENCE	LB CATEGORY		
Scheduled Monument	SM5891		Oldhamstocks Mains, enclosure 300m NNW of	The monument comprises the remains of an enclosed settlement of prehistoric date represented by cropmarks visible on oblique aerial photographs.
Scheduled Monument	SM5850		Black Castle, enclosure	The monument comprises the remains of an enclosed settlement of prehistoric date represented by cropmarks visible on oblique aerial photographs.
Scheduled Monument	SM5876		Black Castle Cottage, promontory fort 300m SW of	The monument comprises the remains of a promontory fort of later prehistoric date represented by cropmarks visible on oblique aerial photographs. It is possible that, rather than a ditch, it represents the remains of dense occupation deposits associated with an external, rectilinear structure. The interior summit of the fort measures approximately 100m E-W by 40m and has no unambiguous traces of internal features.
Scheduled Monument	SM5890		Branxton Cottage, enclosure 300m E of	The monument comprises the remains of an enclosed settlement of prehistoric date represented by cropmarks visible on oblique aerial photographs.
Scheduled Monument	SM5892		Springfield, enclosure 300m NNE of	The monument comprises the remains of an enclosed settlement of later prehistoric date represented by cropmarks visible on oblique aerial photographs.
Scheduled Monument	SM5893		Springfield, palisaded enclosure and ring ditch 200m E of	The monument comprises the remains of a palisaded enclosure and ring ditch of prehistoric date represented by cropmarks visible on oblique aerial photographs.

DESIGNATION	ASSET REFERENCES		NAME	DESCRIPTION
	REFERENCE	LB CATEGORY		
Scheduled Monument	SM5894		Springfield, enclosure 400m SSE of	The monument comprises the remains of an enclosed settlement of prehistoric date represented by cropmarks visible on oblique aerial photographs.
Scheduled Monument	SM5958		Branxton, enclosure 350m NNW of	The monument comprises the remains of an enclosed settlement of prehistoric date represented by cropmarks visible on oblique aerial photographs.
Garden and Designed Landscape	GDL00154		Dunglass	The Picturesque designed landscape of Dunglass was laid out between 1776 and 1832. It incorporated an earlier landscape associated with the existing house, church and French Camp. The design structure has remained relatively consistent although the composition of individual components has altered over the years. The original Dunglass Castle was built in the 14th century by Sir Thomas Home who had acquired the estate through his marriage to its heiress. In 1403 The Collegiate Church was built by their descendant, Sir Alexander Home
Conservation Area	CA288		Oldhamstocks	The village of Oldhamstocks is recorded in the Medieval period, The village with the earliest physical remains in the village dating to the 14th century, with documentary sources pushing its origins back to the 12th century. with its church consecrated in the 13th century. The oldest building is the church that dates from the 16th Century but is built on foundations of a 14th century church
Listed Building	LB14698	B	Bilsdean Bridge	Within Dunglass GDL. Probably George Burn, circa 1800. 2 segmental spans, each circa 20' wide.
Listed Building	LB14702	B	Dunglass, Farm dairy	Within Dunglass GDL. Circa 1930. Single storey, symmetrical model dairy building.

DESIGNATION	ASSET REFERENCES		NAME	DESCRIPTION
	REFERENCE	LB CATEGORY		
Listed Building	LB14703	C	Dunglass, Farm lodge	Within Dunglass GDL. Early 19th century, made L-plan late in century.
Listed Building	LB14704	C	Dunglass, gardener's house with retaining walls and gate piers	Within Dunglass GDL. Possibly Richard Crichton, early 19th century. 2-storey L-plan house with single storey additions. Walled Garden to south-west is listed separately.
Listed Building	LB14708	C	Oldhamstocks, October Cottage with retaining wall	Within Oldhamstocks CA. Earlier 19th century. Single storey L-plan cottage, formed of 2 adjoined 3-bay cottages.
Listed Building	LB14709	B	Oldhamstocks, The Old Manse with walled garden and boundary walls	Within Oldhamstocks CA. Earlier 19th century. 2-storey, L-plan, 3-bay, symmetrical manse.
Listed Building	LB14710	A	Oldhamstocks Parish Church (church of scotland) with graveyard walls and watch house	Within Oldhamstocks CA. 16th century aisle adjoined to church built in 1701, built on part foundations of circa 14th century church.
Listed Building	LB14711	B	Oldhamstocks, market cross	Within Oldhamstocks CA. 18th century. Ashlar market cross set on village green.
Listed Building	LB14712	B	Oldhamstocks, wellhead	Within Oldhamstocks CA. 18th century.
Listed Building	LB14713	B	Oldhamstocks, The Wight House with retaining walls	Within Oldhamstocks CA. Late 18th century. 2-storey house with single storey block adjoining and additional outbuilding.
Listed Building	LB14724	C	Dunglass, gate piers at west lodge	Within Dunglass GDL. Early 19th century. Square section classical ashlar gate piers.

DESIGNATION	ASSET REFERENCES		NAME	DESCRIPTION
	REFERENCE	LB CATEGORY		
Listed Building	LB14725	A	Dunglass, gazebo	Within Dunglass GDL. Dated 1712 (?). Heptagonal, classical summer house, of outstanding quality, set on high ground to west of former house and south-west of lake.
Listed Building	LB14728	C	Dunglass, Old Gardener's House	Within Dunglass GDL. Earlier 19th century. 2-storey, 3-bay house.
Listed Building	LB14732	B	Dunglass, walled garden and service buildings and hot-houses	Within Dunglass GDL. Early 19th century. Rectangular plan walled garden with lean-to service buildings to N and circa 1925 traditional hot-houses against interior of north wall.
Listed Building	LB14733	B	Oldhamstocks, Braeview with retaining walls	Within Oldhamstocks CA. Late 18th century. 2-storey house with single storey wing to east, each of 2 bays.
Listed Building	LB14734	B	Oldhamstocks, bridge	Within Oldhamstocks CA.18th century or possibly earlier. Single span, bridge with semi-circular arch.
Listed Building	LB14735	C	Oldhamstocks, Greenend Cottage	Within Oldhamstocks CA. Dunglass Old Bridge to north-east, listed separately was of a 17th century date, and as the Oldhamstocks Bridge is similarly formed, it may also share an early date."
Listed Building	LB14736	C	Oldhamstocks, Hillcrest with retaining walls	Within Oldhamstocks CA. Late 18th century. Single storey 3-bay cottage, with modern extension at rear.
Listed Building	LB18958	C	Oldhamstocks, Mill Cottage	Within Oldhamstocks CA. Later 19th century. 2-storey gabled house with 1st floor breaking eaves and with single storey rear extensions.

5.3 Non-Designated Assets

5.3.1.1 There are 60 non-designated assets identified within the ELC HER data or Canmore data within the 1 km Study Area. Of these, one is within the Site boundary. These assets are discussed by period within **Section 6**. A complete list of all assets identified during the production of this historic baseline is provided within Appendix A: Gazetteer of heritage assets within the 1 km Study Area, located at the back of this document.

5.3.1.2 The single non-designated asset within the Site boundary, MEL1894 Oldhamstocks Mains, records a likely Late Prehistoric settlement site.

5.3.1.3 Of the 59 assets within the wider 1 km Study Area, 21 certainly or most likely date to the Prehistoric period, and are inclusive of settlement, funerary remains and isolated findspots. A further 36 assets date to the Post-Medieval period and relate to rural settlement, agricultural assets, business premises, estate buildings, industrial processing, transport infrastructure or wreck sites. Of the Post-Medieval assets two; MEL1845 Black Castle and MEL13155 Harp Law are likely to date to the Medieval period, with continued use into the Post-Medieval period. There are three assets dated to the Modern period, relating to transport infrastructure and Second World War defences

5.4 Previous Archaeological Investigations

5.4.1.1 At the time of producing this historic baseline, the East Lothian Council HER could not provide specific information on previous archaeological investigations within the planning authority.

5.5 Walkover Survey

5.5.1.1 The walkover survey was carried out on 6th June 2024 in clear conditions with excellent visibility. All fields were visited and walked, with all fields used as pasture or under low crop. Land Parcels 13 and 14, were at the time of survey under sheeting used to protect crop.

5.5.1.2 The survey identified known assets on the ground but did not identify any additional, previously unknown heritage assets.

PLATE 1 VIEW WEST FROM SM5892, TAKING IN LAND PARCEL 5 AND ONWARDS TO SM5891

PLATE 2 GENERAL SHOT OF PASTURE, CHARACTERISTIC OF LAND PARCELS 1-5, WITHIN NORTHERN SECTION OF SCHEME. VIEW FROM LAND PARCEL 4, FACING NORTH

PLATE 3 VIEW SOUTH FROM SM5892 TOWARDS SM5893 AND SM5894, ON EASTERN EDGE OF SCHEME

PLATE 4 VIEW SOUTH TOWARDS OLDHAMSTOCKS CONSERVATION AREA FROM LAND PARCEL 12

PLATE 5 VIEW FROM LAND PARCEL 14, SHOWING CROP SHEETS AND VIEW TOWARDS COASTLINE TO NORTH, NOTING TORNESS POWER STATION, IN DISTANCE.

5.6 Geophysical Survey

5.6.1.1 The complete report pertaining to the Geophysical Survey of the Site can be found within Appendix B of this document. A summary is provided below, with anomalies discussed by period where pertinent.

5.6.1.2 The geophysical survey has identified anomalies possibly relating to archaeology in LP3, 5, 8, 12 and 16.

5.6.1.3 Anomaly MS3.1 is located in the north-east corner of LP3. MS3.1 records a cluster of anomalies suggestive of enclosures and associated field systems. The form of this group is not suggestive of any particular period and cannot be adequately dated without further site investigation.

5.6.1.4 Anomaly MS5.1 is located close to the northern limit of LP5. MS5.1 records a spread of anomalies against the northern field boundary, suggestive of enclosures and associated field systems. The form of this group is not suggestive of any particular period and cannot be adequately dated without further site investigation.

5.6.1.5 Anomaly MS8.1 is located within the northern half LP8. MS8.1 records a scatter of anomalies possibly representative of enclosure and an associated trackway. The form of this group is not suggestive of any particular period and cannot be adequately dated without further site investigation.

5.6.1.6 Anomaly MS12.1 is located within the northern half of LP12. MS12.1 records a concentration of possible enclosures, field system and trackways, which may be indicative

of settlement. The form of this group is not suggestive of any particular period and cannot be adequately dated without further site investigation.

5.6.1.7 Anomaly MS16.1 is located within the southern half of LP16, and west of MS8.1. MS16.1 records a cluster of anomalies suggestive of enclosures and associated field systems. The form of this group is not suggestive of any particular period and cannot be adequately dated without further site investigation.

5.6.1.8 None of the above anomalies correlate with known HER or Canmore points and may be representative of previously unknown settlement and/or agricultural enclosures, trackways, ditches and gullies dating from the Late Prehistoric period onwards.

5.6.1.9 In addition, to the anomalies highlighted as possibly relating to archaeology, the geophysical survey also identified anomalies pertaining to Post-Medieval agriculture and former field boundaries.

5.7 LiDAR

5.7.1.1 A review of the 50cm – 1m LiDAR Digital Terrain Model (DTM), as available for England, Scotland and Wales, has failed to identify any additional heritage assets beyond modern drainage and agricultural remains and those assets already known within the SBC HER data and the geophysical survey.

6 HISTORIC BASELINE BY PERIOD

6.1 Prehistoric

6.1.1 Early Prehistoric

6.1.1.1 The Mesolithic Period in Scotland spans from the end of the last ice age around 10,000 years ago to the introduction of farming c. 4,200 BC; it is characterised by cave and rock shelter sites, middens, and scatters of lithic material. Mesolithic communities of Scotland would have relied on hunting and gathering subsistence methods and would likely have followed seasonal migration patterns to take advantage of the best available resources year-round. The landscape of Scotland, during the early Mesolithic is characterised by rising temperatures, rising sea levels and the changes to fauna, flora and migration patterns for many of the species the Mesolithic hunter gatherers relied upon to feed themselves. This changing landscape is most dramatically seen in the flooding of the land mass connecting Britain to mainland Europe and Britain becoming an island.

6.1.1.2 Perhaps as a result of these changes, marine and river habitats appear to have been a particular focus for exploitation for these communities. These rich ecosystems, calculated as being up to three times more productive than inland areas, could have attracted a greater number of people. Archaeological evidence identifies a pattern of possible settlements concentrated near the coasts of Scotland. The Mesolithic coastal site pattern has provided researchers with the most direct evidence to date on subsistence in the period, pointing to the importance of coastal resources. However, this source of information may be due to the advanced preservability of coastal cave sites, and research from further afield in Europe suggests a well-established mixture of inland and coastal resources. This may also be the case for Mesolithic communities in Scotland, where investigations on island sites revealed middens with a variation of fishing technologies and waste products alongside the remains of mammals that would not have been present in the area at the time, suggesting a link with resource gathering from the Scottish mainland[17].

6.1.1.3 The Proposed Site is within 1.2 km of the current coastline and some 100 m AOD. The Site is north of the Lammermuir Hills, sited between the hills and the coast.

6.1.1.4 At the end of the last ice age, the Lammermuir Hills emerged from the ice sheet as it retreated into the plain, resulting in vast amounts of glacial water being released to escape to the coast. This water eroded along the edge of the ice sheet and created new water channels at lower levels as seen around Garvald. One such new channel may have been the Dunglass Burn which runs adjacent to the Proposed Development. Reconstructing the Mesolithic coastline and likely positions for seasonal or more permanent settlement is hindered by the lack of granularity around the degree of uplift on land surfaces formerly covered by glacial ice and the real and relative changes in sea level when measured against any uplift. The rise in global sea level was not a smooth, steady process. Generally, rates were fastest during the initial period of rapid ice sheet melt, decaying to slower rates after c 8000 BC, but the rise was interrupted by several jumps caused by meltwater pulses (MWPs), sudden steps in sea level caused by the collapse of melting ice sheets in the

[17] Information from ScARF National Framework: *6.1 Mesolithic Lifestyles*

northern and southern hemispheres. The first widely recognised jump, MWP1A, saw a rise in sea level of 16–24m between 12,600 and 11,500 BC. The second (MWP1B) involved a rise of up to 28m, this time dated to the Younger Dryas, c 10,900–9700 BC. A third, smaller, jump of c 1–3m was probably caused by the final drainage of the glacial meltwater lakes that surrounded the former Laurentide Ice Sheet in North America at c 6200 BC. By the end of the Mesolithic, the coast of East Lothian and Berwickshire may have seen sea level some 8 m higher than at present, forming raised beaches made of shelly sand, shingle or mud. Wind transporting this material may have created additional sand or dune environments on nearby raised beach terraces adjacent to the coast, as seen around Gullane and Aberlady Bay to the north of Dunbar[18]

6.1.1.5 The East Lothians and Scottish Borders have a well recorded and demonstrable prehistoric landscape, however the evidence to date for Mesolithic and Neolithic sites is not as prevalent as for Bronze Age and Iron Age sites. There are no known Mesolithic assets within available HER or Canmore Data of the 1 km Study Area. However, evidence for possible dunes and raised beach terraces with associated Mesolithic flints finds, have been reported within the vicinity of the Site (A. Robertson, ELC, pers. Comm). The exact location of this material is not well mapped such material is present in the surrounding historic landscape.

6.1.1.6 A review of the Canmore online Catalogue returned three records for Mesolithic assets within 20 km of the Site, Canmore ID 239984, a midden and pit at South Belton, west of Dunbar, Canmore ID 212799, a settlement site at East Barns near Dunar, and Canmore ID 341328 a findspot neat Middleshots, south-west of Duns.

6.1.1.7 The Neolithic Period in Scotland spans from the Mesolithic-Neolithic transition c. 4300-3800 BC to the appearance of Beaker culture c. 2500-2200 BC. The main defining characteristics of the Neolithic are farming and the domestication of animals for subsistence. Evidence from funerary monuments and grave goods suggests that Neolithic society at the time was hierarchical and theocratic.

6.1.1.8 There is a single record possibly relating to the Neolithic period within the HER data from ELC. MEL1871 records the recovery of two stone axes, likely to be Neolithic in date, outwith the Site and located within the wider 1 km Study Area around Cocklaw. South-west of the Proposed Development.

TABLE 6.1 EARLY PREHISTORIC ASSETS WITHIN THE SITE BOUNDARY

MAIN REFERENCE	CANMORE ID	NAME	DESCRIPTION	PERIOD
MEL1871	N/A	Cocklaw	Two stone axes, one of indurated sandstone and the other of claystone, both found at Cocklaw (NT 732 711) are in Berwick Museum.	Early Prehistoric

[18] NatureScot. *East Lothian and the Borders. A landscape fashioned by Geology.*

6.1.1.9 Neolithic assets can be found within the wider historic landscape. A possible collection of Neolithic standing stones is noted c. 1.5 km north of the Site (MEL1850). The asset is recorded within the New Statistical Accounts for Scotland New Statistical Accounts (NSA **Section 6.4**). These stones were removed in the 19th century and their date of origin is not certain. Excavations within the stones identified a likely Bronze Age Urn and cremation.

6.1.1.10 A review of the Canmore online Catalogue returned thirteen records for Neolithic assets within 10 km of the Site, inclusive of settlement and ritual sites. The closest of these assets are Canmore ID 212799 recording settlement at Dunbar, East Barns, 186210 recording settlement at Cockburnspath, 58806 a timber circle at Skateraw, 346123 a possible cursus at Thurston Mains and 57668 the major settlement site at Doon Hill.

6.1.2 Late Prehistoric

6.1.2.1 Chalcolithic and Bronze Age Scotland, c. 2,500-800BC, is traditionally defined by the introduction and use of copper and copper alloys for the manufacture of tools, ornaments and weapons. Bronze Age technology was reliant on supplies of copper and tin from a range of wider sources across Britain and Europe, meaning that the Bronze Age in Scotland saw the development of an international trade network. With the emergence of bronze as a technology, the complexity and ostentatiousness of material cultural and funerary/ritual monumentality increased, with selected ceramics, jewellery and funerary traditions from Ireland and northern England becoming visible within the archaeological record.

6.1.2.2 The Iron Age in Scotland lasted from c. 800 BC-400AD, with significant overlap with the Roman-British period (c 70-211 AD), which will be discussed in the following section. While the Neolithic and Bronze age assets in the area surrounding the Site are characterised by an established ritual and funerary landscape, the transition to the Iron Age is marked by an increase in evidence for static settlements and defences.

6.1.2.3 There are 28 assets dated to the Late Prehistoric period, that is dated to the Bronze Age or Iron Age, within the 1 km Study Area. Of these, two are within the Site boundary. Both assets record Late Prehistoric settlement.

TABLE 6.2 LATE PREHISTORIC ASSETS WITHIN THE SITE BOUNDARY

MAIN REFERENCE	CANMORE ID	NAME	DESCRIPTION	PERIOD
SM5891	58975	Oldhamstocks Mains, enclosure 300m NNW of	The monument comprises the remains of an enclosed settlement of prehistoric date represented by cropmarks visible on oblique aerial photographs.	Late Prehistoric
MEL1894	n/a	Oldhamstocks Mains	Cropmark of possible enclosure	Late Prehistoric

6.1.2.4 **Table 6.2** lists the prehistoric assets within the Site boundary. Both of these assets are located in the northern half of the scheme, just south of the BIlsdean Burn at c. 125 m AOD. Note that **Table 4** does not list any of the geophysical anomalies identified within **Section 5.6**. These assets cannot be accurately dated at this time, but it is entirely plausible, given the known Late Prehistoric settlement of the area, that some or all of these anomalies date to the Late Prehistoric period.

6.1.2.5 There are numerous records of Late Prehistoric settlement within the relatively rich agricultural land between the Lammermuir Hills and the coast. Within the wider 1 km Study Area, there is a wider pattern of settlement close to watercourses, with 26 HER or Canmore assets related to settlement or associated field systems. The bulk of these settlement sites are located close to the Ogle Burn, Dunglass Burn and Oldhamstocks Burn. Within the 1 km Study Area there are two additional records, which relate to likely Late Prehistoric funerary activity. MEL1816 records a cist cemetery located to the south of Springfield Farm and just east of the Proposed Development. This asset has been assigned to the Late Prehistoric period but cist burials such as these may well fall within the later Medieval period. MEL11325 records a barrow located to the north of Springfield Farm and just east of the Proposed Development.

6.1.2.6 Regarding the broader prehistoric landscape, within 5km of the Site, the Canmore online Catalogue records eight assets ascribed to the Bronze Age, with these consisting of settlement sites, funerary monuments, and findspots. Five records ascribed to the Iron Age are located within the same 5km radius, taking in enclosed settlement and cists.

6.2 Romano-British

6.2.1.1 Roman legions first arrived in the territory of modern Scotland in the 1st century AD, establishing a series of forts and camps along a border first along the Gask Ridge, and later to the south along what became the Antonine Wall. Roman archaeology in Scotland is generally characterised by these military encampments and fortifications, usually sited within a single day's march from each other, and typically located along communication routes and at river crossings. These forts and camps were occupied, abandoned and rebuilt over several phases of military activity from the 1st to early 4th centuries. Roman military activity in Scotland coincides with the latter half of the Iron Age, as mentioned in the previous section.

6.2.1.2 In Scotland, the Roman occupation is largely organised into three periods, the Flavian: which saw Agricola defeat the Caledonians in 84 AD; the Antonine: with Romans establishing more permanent settlements from 138-163 AD; and the Severan, in which there was a brief attempt to conquer the remaining areas of Scotland from 208-211 AD.

6.2.1.3 During the late 1st Century campaigns Roman forts were typically established further inland, west of the Lammemuir Hills, roughly along the line of the current A68 between Corbridge in the north of England and Edinburgh, with the nearest east coast fort located at Learchild, west of Alnwick, some 70 km south of the Site.

6.2.1.4 During the Antonine period, the Roman fort at Inveresk, east of Edinburgh on the Firth of Forth, 46 km north-west of the Site, was established, along with an associated settlement and harbour. The Iron Age peoples of the Lothians and southeastern Scotland at this time, the 'Votadini', are theorised to have traded with the Romans but did not seem to adapt to the ways of Roman life, and there is no evidence the 'Votadini' took on the 'benefits' of the

Roman occupation, such as advanced farming methods, aqueducts, or methods of settlement planning and house construction . Elsewhere in Scotland, the 1st millennia BC saw a shift in bronze to iron technologies, and a decrease in the visibility of funerary/ritual traditions within the landscape, but with a perceptible increase in defensive and communal centres, including Duns, Forts and Crannogs. With there is a record of Iron Age forts in the landscape surrounding the Proposed Development, evidence of Roman influence in the southeast seems to be centred on material culture. The Scottish Borders contain a great number of Roman sites, indicating their efforts to subdue local Iron Age communities. With Trimontium central to these campaigns, the area of the Scottish Borders and the East Lothians would have felt a considerable Roman presence during the first few centuries AD.

6.2.1.5 The New Statistical Accounts (NSA **Section 6.4**) mentions an additional possible Roman camp at the top of Ernsheuch, just west of St. Abb's Head, some 14 km east of the Site.

6.2.1.6 There are no known Roman assets within the 1 km Study Area. However, the Canmore online Catalogue records four Roman assets within 5km of the Site, including a hoard containing approximately seventy Roman and native iron and bronze, including a Roman patera, found at Blackburn Mill. The broader landscape includes many findspots for brooches, coins, lamps, beads, and glass.

6.3 Medieval

6.3.1.1 Between the 6th and 9th centuries AD, the territories of the Picts stretched along the East Coast from the Firth of Forth as far north as Shetland. Their contemporaries on the east coast, south of the Forth, were the Gododdin and the Angles of Bernicia. As the Picts emerged from the Iron Age tribes north of the Clyde/Forth Isthmus, the Gododdin emerged from the Iron Age peoples of the 'Votadini', whose culture was increasingly influenced by settlement, as well as the exchange of goods and ideas, from the Continent, Northern England and the expansion of various strands of Christianity from England Ireland and Rome. The Kingdom of 'Bernicia', an Anglo-Saxon kingdom established by Germanic settlers in the 6th Century, was established in south-east Scotland and northern England. In the early 7th century, Bernicia merged with its southern neighbour, Deira, to form the kingdom of Northumbria, and its borders subsequently expanded considerably.

6.3.1.2 This Anglo-Saxon influence was supplanted by a growing Frankish influence following the Norman Conquest in the 11th century. By the late 11th century Anglo-Norman political and cultural influence was on the rise, as demonstrated by the familial links between King Malcolm III (reigning between 1058 – 1093 AD) and the courts of England and France, King Henry I of England and Eustace III of Bologna both being sons in Laws. From the 12th century a series of Scots-Norman Monarchs took power between the reigns of David I (1124-1153AD) and Alexander III (1249-1286AD). During this period the shire became the basic unit of landholding across lowland Scotland and likely as far north as Fife. The Shire itself containing a hall and settlement with central church, with outlying muirs, farmsteads and typically a mill. The shire itself governed by a Tòiseach or Thane appointed by the 'King' collected taxes, with the church collecting its Tithe from the local populous. The introduction of a feudal system of governance with the creation of new titles in the form of Lords, Earls and Sherriffs, also saw religious changes associated with a move towards Rome and Catholicism.

6.3.1.3 These cultural and political changes are seen throughout East Lothian and the Scottish Borders in the foundation of new religious, settlement and defensive sites. Dunbar was first settled by the 'Votadini', before the Site was occupied by the Angles of the Kingdom of Bernicia. Lothian was ceded to Malcolm II in 1018AD and granted to Earl Gospatrick of Northumbria along with significant land holdings across East Lothian and Berwickshire. Earl Gospatrick commissioned the first stone castle at Dunbar and founded the family name 'Dunbar'. The Dunbar family owned these lands until the 15th century. 'Dunglas Castle'/'Douglas House', is located 1.3 km north-east of the Site, overlooking the coastline and the main road between Dunbar and Berwick. The original castle was built in the 14th century by Sir Thomas Home who had acquired the estate through his marriage to its heiress Nicola Pepdie. The Castle sits just north of the Medieval settlements of Cockburnspath and Oldhamstocks. The village of Oldhamstocks is recorded in the Medieval period, with documentary sources pushing its origins back to the 12th century. The earliest physical remains in the village date to the 14th century, with its church consecrated in the 13th century. Black Castle at Oldhamstocks is also dated to the Medieval Period and sits c. 0.4 km south-west of the Site. Innerwick Castle (SM773) is located 1.3 km north of the Site above the Thornton Burn. Relating to Innerwick, Walter Stewart is recorded as receiving the Manor of Innerwick from David I and confirmed by Malcolm IV in 1157AD. The Stewarts remained as Lords of the Manor until the death of Charles II in 1685AD. The castle was constructed in the early 15th century. The castle is known to have been razed in 1402 or 1406 and rebuilt, and fired in 1547AD. Adjacent to Innerwick Castle is Thornton Castle, (MEL1875) an early 16th century fortified house. Below Thornton Law, fording the Thornton Burn is a ruined bridge that could take back to the Bernician Kingdom.

6.3.1.4 Local place names with a Saxon origin include Innerwick and Oldhamstocks with Cockburnspath referencing a Medieval folk story and likely to indicate an English origin.

6.3.1.5 East Lothian was an important location for early Christianity in Scotland, and was associated with saints such as Kentigern/Mungo and Baldred. Pilgrims are recorded as staying at Aberlady, Haddington and North Berwick. Records suggest that pilgrims would travel from Aberlady via Bothans (Yester) over the Lammermuirs and across to Holy Island. From the 12th century, a ferry carried pilgrims from North Berwick to Earlsferry in Fife on the route to visit the holiest of shrines, the tomb of St. Andrew.

6.3.1.6 The key local religious sites of the period are the Carmelite monastery in Dunbar, founded in 1263AD, by Patrick, seventh earl of Dunbar. In 1403 the Collegiate Church at Dunglass was constructed. The current Parish Church at Innerwick is Post-Medieval in date and it is not known if an earlier church was located around Innerwick. Whilst not clearly Medieval in date, a series of cist burials are recorded suggesting a burial ground and likely church. Around the settlement of Skateraw, a series of cist burials have been recovered. Chapel Point is the recorded site of St Dennis's Chapel, now washed away along with the associated graveyard. The church at Oldhamstocks is dated to the mid-14th century. The OSA mentions St. Abb's Chapel or Church (SM385), having been built for and by the Lady Ebba, daughter of a Northumbrian King and appointed Abbess of the convent. The OSA mentions the 'legend' of the Danish invasion at St. Abb's head, in which Lady Ebba and her convent were successfully spared from a horrific 'licentious' assault but were ultimately trapped within the Church with it was burnt down. The NSA also mentions this event but gives more historical context: St. Abb's Church was indeed at the mercy of the Danes in 837, and was burnt down, eventually rebuilt by King Edgar of Scotland in 1098.

6.3.1.7 There are four assets dated to the Medieval period within the 1 km Study Area with only one asset located within the Site boundary.

TABLE 6.3 MEDIEVAL ASSETS WITHIN THE SITE BOUNDARY

MAIN REFERENCE	CANMORE ID	NAME	DESCRIPTION	PERIOD
CA288	N/A	Oldhamstocks Conservation Area	The village of Oldhamstocks is recorded in the Medieval period, The village with the earliest physical remains in the village dating to the 14th century, with documentary sources pushing its origins back to the 12th century.	Medieval

6.3.1.8 The remaining three assets consist of MEL1845 Black Castle at Oldhamstocks, GDL00154 Dunglass and the Medieval elements of the estate and MEL13155 Harp Law Rig and Furrow. This final asset is not definitively dated to the Medieval period but is assigned to this section based on the likelihood that the rig and furrow is associated with the Medieval land holdings around Innerwick Castle.

6.3.1.9 There are 89 Medieval heritage assets recorded by the Canmore online Catalogue within 5km of the Site. The majority of these are associated with settlement, farming, religious and burial sites in or on the rural periphery of Innerwick, Dunglass, Cockburnspath and Skateraw with the remaining assets recording farmsteads, townships and villages with associated field systems, characteristic of a low density dispersed rural population outwith the major estates, villages and towns of the area.

6.4 Post-Medieval

6.4.1.1 The Post-Medieval period saw rapid changes to the political, religious and national socio-economic climate. From AD1603 Scotland and England ruled by a single monarch following the ascension of the Stewart monarch James VI/James I to both thrones. Following the English Civil War (AD1642 -AD1651), the rise of Protestantism and the associated armed conflicts in England, Scotland and Ireland referred to as 'The War of the Three Kingdoms', the monarchy was temporarily removed before the Restoration of Charles II. The eventual replacement of the Stuart House occurred through Mary II and her husband William of Orange in the Glorious Revolution of AD1688, in which a Protestant Dutch army was invited to invade England to remove the Stuart Monarch James VII (whose daughter being Mary II) from the throne and force him into exile.

6.4.1.2 Political ties between Scotland and England culminated in the Act of Union in AD1707. However, political and religious turmoil continued throughout England and Scotland. Political changes were mirrored by religious changes, with a growing shift to Protestantism from the late 16th century and the Scottish Reformation led by John Knox and other leading protestant reformists. Catholic mass was outlawed from AD1560 with persecution at its height in the mid-17th century.

6.4.1.3 The 18th and 19th centuries witnessed extensive economic and physical change across the Scottish countryside and urban centres, characterised by a shift from dispersed rural townships, to larger villages and towns, as a direct result of the changes to land ownership, and a move from small scale subsistence farming to homogenised agricultural practices, with single ownership of large landholdings used for growing crop and rearing sheep and cattle.

6.4.1.4 Clearance for new larger farms took place in both lowland and highland contexts. However, the lowlands of central and southern Scotland offered opportunities for displaced rural families to take up alternative work in the growing towns and associated industrial centres of the 18th and 19th centuries.

6.4.1.5 As a result of the complex political, religious and economic changes taking place throughout the late 17th and early 18th centuries, growing tensions led to a series of armed uprisings in the region.

6.4.1.6 The first Jacobite uprising took place in 1715AD, an attempt by the now exiled Catholic king James VII to retake the throne of England, Scotland and Ireland for the Stuart dynasty. The Earl of Mar raised the Jacobite standard in October 1715AD at Braemar in Aberdeenshire supported by troops made up primarily, although not exclusively of Highland Clans. As with the English Civil War, Jacobite and Hanoverian support was not split along neat family/regional lines, with disparate groups of the same Clans often having opposing political views and financial interests leading to the support of different factions. The Jacobite forces took control of much of Scotland north of the Forth, with the exception of Stirling Castle, which was defended by the Hanoverian supporting Duke of Argyll. By early 1716AD the rebellion has petered out and the Jacobite armies returned home. The aftermath of the rebellion saw key leaders hanged, some lands confiscated, whilst the bulk of the Jacobites were pardoned. Further Jacobite armies were mustered in 1719AD and 1745AD, leading to decisive Battle of Culloden in 1746AD, followed by a more stringent punishments from the government on Jacobite supporting families in the Highlands.

6.4.1.7 These economic and social changes are evidenced in the evolution of major settlements surrounding the Site during the 19th century.

6.4.2 Statistical Accounts for Scotland

6.4.2.1 The Proposed Development area falls across the historic parishes of Innerwick and Oldhamstocks.

6.4.2.2 The Old Statistical Accounts[19] (OSA) of 1795AD include records for the Parish of Innerwick within the county of Haddington. The Parish is listed as measuring 12 miles in length and up to six miles wide, hugging the East Lothian coastline. The Parish is bounded to the west by the Parish's of Spott and Dunbar, to the south by Cranshaws and Longformacus, in the east by Oldhamstocks and to the north by the sea.

[19] Old Statistical Accounts. Available at Statistical Accounts of Scotland (edina.ac.uk). [Accessed 02/02/2025]

6.4.2.3 Regarding the Parish population, the Old Statistical Accounts record 960 souls in 1790 with a note that this figure represents a decrease in population linked to late 18th to early 19th century changes to landownership and farming practice. The Parish is largely made up of agricultural land. With 3000 acres listed as being used for the growing of corn, wheat barely, grasses and turnips and it is noted that the Parish produces a surplus of these commodities. It is noted that farms are increasing in size, presumably by amalgamating smaller land parcels into larger open areas.

6.4.2.4 In terms of coastal resources, two fishing boats dedicated to catching lobster are listed although fish are also caught. No harbour is listed and numerous wrecks are noted. In terms of mineral extraction, two stone quarries are recorded but no coal mining is noted. Small seems of coal and lime are recorded on the coast.

6.4.2.5 The key historical and archaeological references relate to a small chapel on the coast (likely to relate to St Dennis's Chapel, Skateraw), a former encampment on Blackcastle Hill. Two tumuli are listed but the exact locations are not noted.

6.4.2.6 The OSA also contains records for the parish of Oldhamstocks within the county of Haddington. The OSA lists the parish as being six miles ling from north-west to south-east extending from the sea south into the Lammermuir and its uplands.

6.4.2.7 The parish is recorded as having a population of 498 in 1791AD. This is a decrease from a population of the 622 souls recorded in 1755AD. The OSA records eight heritors or key land owners, with only one of these persons, Sir Jamew Hall of Dunglas, Bart., residing within the parish.

6.4.2.8 The parish church is noted within the village of Oldhamstocks, with the current church recorded as being built in 1701AD, and the manse built in 1677AD. A single public school is noted within the parish, being attended by 40 children yearly.

6.4.2.9 The local economy the OSA makes reference to farming, fishing and mineral extraction. The OSA notes improvements to husbandry and agriculture in the 30 years since 1761AD, especially in the fallowing of land, regular rotation of crops and clearance of stoney land. In the lower agricultural lands crops of turnips and grass are noted. In the uplands it is noted that hardy species of sheep are being bred and winter feeding have hay and turnips has reduced the number if livestock deaths. In the lowlands the breeding of pigs is noted. A move to industrialisation is noted with the purchase of threshing machines in the parish. In regards to fishing it is noted that herring makes a significant contribution to the local economy, with catches sent to Dunbar and on to London. Other exploited species include turbot, cod, skate, haddock, whiting, flounders, lobster and crab. With regard to minerals, limestone, free-stone, iron-stone and coal are listed as being present in the lowlands. No large-scale extraction is noted.

6.4.2.10 Of employment, the OSA notes that the most of the population are employed in farming as either farmers, farmhands or day labourers. A significant proportion of the population are employed as household servants or fishermen. Other trades noted include wrights, smiths, weavers, millers, shoemakers and taylors.

6.4.2.11 With regard to antiquities and historic events, the OSA makes note of the now destroyed Castle of ‘Dunglas’, formerly home to the Earl of Home’s ancestors, the Lords of Dunglas.

The castle is noted as being destroyed in c. 1640AD. The 14th century chapel at Dunglas is also noted as being built by Sir Thomas Hume.

6.4.2.12 The New Statistical Accounts[20] (NSA) for the parish of Innerwick lists the population at 987 souls in 1831 and note that the current population is now less than this number.

6.4.2.13 The majority of farmland is noted as being on lowland areas towards the coast and total c. 4000 acres. This farmland is chiefly employed for corn, wheat, turnips, pasture and wood. There are 15 farms listed in the parish. Of livestock, c. 5000 sheep are listed as being kept on the hills of the parish. As per the Old Statistical Accounts, two fishing boats are recorded within the parish.

6.4.2.14 The chief market towns at which these goods are sold are Dunbar, Haddington and Dunse.

6.4.2.15 Relating to mineral extraction, there are no coal mines recorded. Lime quarries and kilns are recorded at Skateraw.

6.4.2.16 Of antiquities located within the parish, the Castle at Innerwick is listed as belonging to the Stewart family, later becoming a baronial stronghold of the Hamiltons of Innerwick. Led by the Earl of Dunbar, a Northumbrian force took the castle in 1403AD. Thornton Castle is listed as being a house of Lord Home and standing opposite Innerwick Castle. The NSA report a field outside of Innerwick as being the Site of a skirmish between Earl Gospatrick and William Wallace. An old encampment is listed on the summit of Blackcastle Hill. Below Thornton Law beside the Thornton Burn a ruined structure called 'Edinkens Bridge'. It is purported that this bridge may be named after the 6th to 7th Century Edwin King of Northumbria. Neat to this bridge a cist burial is recorded from which an urn and jaw bones was recovered. Two tumuli are listed but their locations not given. A number of cist burials are recorded, with one burial recorded at Skateraw. A former chapel is also recorded at Skateraw shore, dedicated to St. Dennys. A burial ground is reported to have existed at this chapel.

6.4.2.17 The NSA also contains records for the parish of Oldhamstocks within the county of Haddington. By 1831AD the NSA records a population of 720 souls with over half of the families within the parish employed in agriculture and one fifth reemployed in trade, manufacture or handicraft.

6.4.2.18 The chief landowners within the parish are listed as Sir James Hall of Dunglas, Bart.; James Hunter Esq. of Thurston; Thomas Dods Esq. of Statencleugh and James Balfour Esq. of Whittinghame.

6.4.2.19 The key villages are recorded as Oldhamstocks and Bilsdean, with the parish's church and school located within Oldhamstocks.

6.4.2.20 The NSA makes scant reference to the local economy so we must assume a broad continuation from the OSA accounts of the parish, with farming and fishing being the chief

[20] New Statistical Accounts. Available at Statistical Accounts of Scotland (edina.ac.uk). [Accessed 02/02/2025]

forms of employment with a limited number of tradesman limited manufacture. The NSA does note that mineral extraction within the parish is very limited in scale.

6.4.2.21 In relation to antiquities and the history of the parish, the NSA limits itself to a description of the history of Oldhamstocks and the estate at Dunglas. The NSA notes the ancient church at Oldhamstocks and suggests that the parish church belonged to the Lord of the Manor rather than being associated with any monastery or abbey. The NSA notes that Oldhamstocks is not listed amongst the manors baronies of Haddington within the tax role of 1613AD, and from this infers that it had been absorbed within the barony of Dunglas by this date. The NSA notes that the church at Oldhamstocks was invested in the persons of Hunter of Thurston and records that in 1296AD Thomas de Huntingour, the parson of Oldhamstocks swore fealty to Edward I at Bewrick

6.4.3 National Records of Scotland

6.4.3.1 A search of the National Records of Scotland[21] online catalogue for the closest villages and place names to the Proposed Development was undertaken for records to support the historic baseline. This search included the settlements of '*Thorntonloch*', '*Innerwick*', '*Oldhamstocks*' '*Dunbar*' and '*Dunglas*'.

6.4.3.2 A search using the term 'Thorntonloch' returned no records.

6.4.3.3 A search using the term 'Innerwick' returned 14 records. These are made up of records from the church, secular legal documents, estate and land ownership records and family histories relating to the 'Hamiltons of Innerwick'.

6.4.3.4 A search using the term 'Oldhamstocks' returned two records consisting of legal documents relating to the 'Douglas-Home' family, Earls of Home and financial documents relating to the 'Innes-Ker' family, Dukes of Roxburghe.

6.4.3.5 A search using the term 'Dunbar' returned 986 records. These consist of legal documents and land holding records for prominent landowners such as the 'Dunbar' family, dating between the 15th and 19th Centuries, personal correspondence of the same family, personal and legal correspondence linked to the surname 'Dunbar' church records, estate plans, court records as well as 19th century military and militia records.

6.4.3.6 A search using the term 'Dunglas' returned 67 records. These consist of Estate records, legal records and court records dating from between the 15th and 20th centuries. Of most relevance are records relating to the Home/Hume, Hall families of Dunglas, the Ruthven family holding the barony of Thornton

6.4.4 Cartographic Sources

6.4.4.1 A review of available on-line historic mapping including Ponts Maps of Scotland (1583-1614AD), Blaue Atlas of Scotland (1654AD), Roys Lowland Map 1752-1755 and Ordnance

[21] National Records of Scotland catalogue. Available at NAS Catalogue - welcome (nrscotland.gov.uk) [Accessed 02/02/2025]

Survey (OS) mapping up to and inclusive of the 20th century OS Maps within the National Library of Scotland.

6.4.4.2 Pont's Maps of Scotland, ca. 1583-1614 does not show the Site.

6.4.4.3 Blaue's Atlas of Scotland and Pont's Map does not show the Proposed Development in detail but does depict the key settlements around the Site, inclusive of 'Dunglass; 'Old Hamstocks' and 'Cocklaw' along the Oldhamstocks Burn. To the north, around the Thornton Burn, the settlements of 'Thornton' and 'Innerwick' are named. Between Innerwick and Oldhamstocks a small settlement at 'Caddlelaw' is recorded. North of Innerwick the settlements of *'Crosshouse'*, *'Pinkertown'* and *'Spott'* are recorded.

PLATE 6 EXTRACT OF BLAEU'S ATLAS OF SCOTLAND, 1654

6.4.4.4 Roy's Lowland Map 1752-1755 AD shows the development area in more topographical detail, with the Site being employed as agricultural farmland with plough marks depicted. North of the Site, the coastal road leading between Dunbar and Dunglas is drawn. North of this road, on the coast, settlements are recorded at '*Linkshead*' and '*Thorntonloch*'. On the coast, north of Thornton Loch '*Old Saltpans'* a recorded. Inland, immediately north of the Site, a winding east –west aligned burn (Thornton Burn) is recorded extending from Thornton Loch to the northern slopes of '*Blackcastle Hill'*. '*Innerwick*' and *'Thorntonloch'* are drawn north of the burn along with the small township of '*Gateside*' and a pair of other small townships/farmsteads. South of this burn and north of the Site a cluster of buildings are recorded at '*Innerwick Place'* as well a small township along a minor tributary. To the west of the Site, immediately south of the burn is the small settlement of 'Broadwood' beyond which are the uplands of Blackcastle Hill. Within the Site and bordering it are a series of townships/farmsteads, inclusive of *'E. Lowfields'*, 'Saltpanhill', *'Bran?toun'*. and *'??? Mains'*. South-east of the Site is, '*Dunglass*' and what appear to be a designed landscape associated

with a cluster of buildings at '*Burnyknow*' , '*Brandytown*' and *'Palmorton'*. The settlement at '*Oldhamstocks*' is recorded with a small cluster of buildings located just north at '*Cock Law'*.

PLATE 7 EXTRACT FROM ROY'S MAP OF THE LOWLANDS, 1752-1755

6.4.4.5 The First edition OS map of the Site (1856-1858) shows the Site in greater detail still, with the farmsteads and field boundaries in a similar layout to that seen today. 'Springfield' farm is depicted with an associated sluice and mill dam. The farmstead at '*Oldhamstocks Mains'* is also draw along with an associated sluice and mill dam.

PLATE 8 EXTRACT FROM FIRST EDITION OS, SIX INCH.

6.4.4.6 To the north of the Site, farmsteads are recorded at 'Branxton' and 'Treepland Hill'. Further north, around the Thornton Burn' a farmstead is recorded at 'Thornton' and 'Crowhill' with a mill drawn on the watercourse. The ruins of two castles, '*Thornton Castle*' and '*Innerwick Castle'* are named. In fields north-east of the Site farmsteads are recorded at 'Lowfield' and 'Westfield' beyond which are the railway and Great North Road (current A1). Along the coast, from east to west, the small settlement of 'Bilsdean' is recorded north of Dunglass and the Dunglass Burn, along with a hamlet at 'Linkshead' and settlement at 'Thorntonloch'.

6.4.4.7 To the north-east and east of the Site, the Dunglass Estate is recorded along with associated farmsteads at 'Palmerton' and 'Birnieknowes'. Dunglass Estate is recorded in largely the same configuration as found today with the key surviving architectural features relate to the 15th century Dunglass Collegiate Church, the 19th century gate piers, at the West and East Lodges, Mains and stables as well as the walled gardens, formal gardens and kennels. The Gazebo which stands on the Site of the scheduled 16th century 'French Camp' dates from the 18th century. It is hexagonal on plan, has highly ornamental stonework, and is statutorily listed. This summerhouse and the earthworks of the camp are depicted. Around the Collegiate Church, at the eastern edge of the policy a 17th century sundial is recorded and the ruins of 'Dunglass Castle' are drawn. There are three bridges; the Old Bridge, which dates from the 17th century, the new bridge, which dates from the 19th century. The Dunglass Viaduct was built in the mid-19th century to carry the railway over the Dunglass Burn. The southern half of the estate is draw as woodland and parkland, with the Dunglass Burn meandering through the policy.

6.4.4.8 To the south and south-west of the Site, the village of '*Oldhamstocks*' is drawn, with largely the same extent and configuration as seen today. The ruins of '*Black Castle'* are named north of the parish church. To the north-east of the Oldhamstocks Burn farmsteads are draw at '*Cocklaw*' and '*Dirtside*'.

6.4.4.9 The First Edition OS depicts the design and character of the surrounding rural landscape very similar to that seen today, with a more formalised and enclosure of fields and the improvement of roads and transport networks, as seen on Roys Map of the Lowlands. Several of the smaller townships/farmsteads appear to have been abandoned, with a smaller number of larger land holdings evident.

6.4.4.10 There are 54 assets ascribed to the Post-Medieval period within the 1 km Study Area. None of these assets are within the Site boundary. Assets within the 1 km Study Area are largely ascribed to farmsteads, settlements and estates, as described within the review of historic mapping above. Assets associated with Dunglass Estate, the village of Oldhamstocks dominate this list of assets. Of particular note are the Post-Medieval improvements to transport and infrastructure listed, including road and railway bridges, as well as a toll house at Bilsdean, north-east of the Site. Of industry the 1 km Study Area records a saltworks at Bilsdean.

6.4.4.11 Of note is geophysical anomalies MS8.1 and MS16.1, which are located in and around the hamlet/township of 'Bra*n?toun'*. The anomalies identified in the geophysical survey cannot definitively be attributed to this named hamlet but may be associated.

6.5 Modern

6.5.1.1 Within the 1 km Study Area and its environs, changes recorded to the above baseline in the modern period are largely restricted to improvements to road, rail and energy infrastructure, inclusive of changes to the Main East Coast Railway Lane and the A1. Within the wider landscape there has been an increase in large scale electrical infrastructure in the form of Torness Power Station (constructed between 1979 and 1984) and Branxton substation. Within the uplands a series of wind turbines have been erected across the Lammermuir Hills to the west and south.

6.5.1.2 In addition, along the coastline, a series of military defences were installed during WWII and laterly the Cold War. Changes to land use and settlement away from the coast is very limited. Field parcels remain largely unchanged from the Post-Medieval period. The only minor change to the settlement, is the marginal growth of Innerwick, Cockburnspath and Oldhamstocks through the 20th century. The nearest major urban expansion is around Dunbar.

6.5.1.3 There are three modern assets located within the 1 km Study Area, with all assets outside the Site boundary. Of these assets, two relate to World War memorials and defences, the third relates to modern road bridge.

7 ARCHAEOLOGICAL AND HISTORICAL POTENTIAL

7.1 Introduction

7.1.1.1 A full list of known heritage assets within the 1 km Study Area is provided within Appendix A of this report: Gazetteer of Heritage Assets within the 1 km Study Area. In addition to the known ELC HER and HES assets, primary survey, in the form of a detailed gradiometer survey has identified additional sub surface assets within the Site.

7.1.1.2 Using this baseline, this section of the report will extrapolate the potential for further, currently unidentified archaeologic remains to be present within the Site, and where possible predict the location and character of these remains.

7.2 Potential for Additional Unknown Assets

7.2.1.1 There are 90 known designated and known designated assets recorded in HES and ELC HER data within the 1 km Study Area. Of these, only three assets are located within the Site boundary. A further five non-designated assets were identified through geophysical survey of the Site. A full list of known assets recorded within the Site boundary is listed below with **Table 7.1** below.

TABLE 7.1 ALL ASSETS WITHIN THE SITE BOUNDARY

DESIGNATION	ASSET REFERENCES		NAME	DESCRIPTION
	REFERENCE	LB CATEGORY		
Scheduled Monument	SM5891		Oldhamstocks Mains, enclosure 300m NNW of	The monument comprises the remains of an enclosed settlement of prehistoric date represented by cropmarks visible on oblique aerial photographs.
Conservation Area	CA288		Oldhamstocks	The village of Oldhamstocks is recorded in the Medieval period, The village with the earliest physical remains in the village dating to the 14th century, with documentary sources pushing its origins back to the 12th century. with its church consecrated in the 13th century. The oldest building is the church that dates from the 16th Century but is built on foundations of a 14th century church.
Non-designated	MEL1894		Oldhamstocks Mains	Cropmark of possible enclosure
Non-designated	MS3.1		MS3.1	Geophysical anomalies possibly relating to archaeology. Within Land Parcel 3.
Non-designated	MS5.1		MS5.1	Geophysical anomalies possibly relating to archaeology. Within Land Parcel 5.
Non-designated	MS8.1		MS8.1	Geophysical anomalies possibly relating to archaeology. Within Land Parcel 8.
Non-designated	MS12.1		MS12.1	Geophysical anomalies possibly relating to archaeology. Within Land Parcel 12.
Non-designated	MS16.1		MS16.1	Geophysical anomalies possibly relating to archaeology. Within Land Parcel 16.

7.2.1.2 The potential for additional, as yet unknown assets to exist within the Site boundary, is discussed below by period.

7.2.1.3 There are no Early Prehistoric assets recorded within the Site boundary, with only a single HER record within the 1 km Study Area. MEL1871, records a pair of stone axe heads recovered from near Cocklaw, south-west of the Site. Mesolithic records from the wider historic landscape are limited to a coastal settlement site at Dunbar. However, evidence for possible dunes and raised beach terraces with associated Mesolithic flints finds, have been reported within the vicinity of the Site. Neolithic records are more numerous, with the NSA recording a former stone circle north of the Site, with additional settlement and ritual sites located within 10 km. Based on the above, a moderate potential for further Early Prehistoric finds within the Site is predicted, with assets, should they be present, likely to take the form of flints tools or scatters of worked flint. This potential exists across the Site, but is perhaps more focused around the northern half of the scheme, in closer proximity to the coast.

7.2.1.4 There are two Late Prehistoric assets recorded within the Site boundary, both relating to settlement. Within the 1 km Study Area there are a further 26 assets assigned to this period, largely made up of settlement and funerary sites. Based on the above, there is considered to be a high potential for further Late Prehistoric remains to exist on the Site, with such assets likely to take the form of settlement, with associated field systems, enclosures and finds. This potential exists across the Site, but is heightened in areas adjacent to water courses. Whilst not firmly attributable to this period, it would seem likely, given the volume of prehistoric settlement in the local and wider historic landscape that some, at least of these anomalies may date to this period.

7.2.1.5 There are no Roman assets recorded within the 1 km Study Area, with only limited recovery of Roman material from the wider historic landscape. Based on the above, there is considered to be a low potential for further unknown Roman assets to be found within the Site. Should such assets remain they would likely take the form of isolated findspots of ceramic or metal.

7.2.1.6 There are four assets dated to the Medieval period within the 1 km Study Area, one of which is located within the Site. The Site boundary overlaps with the Conservation Area for Oldhamstocks village, which has a Medieval foundation, 13th century church and associated castle. Immediately east of the Site is the Dunglass Estate, which again has a Medieval foundation, with a castle and Collegiate Church. The remaining record for Medieval activity relates to rig and furrow within the wider 1 km Study Area. The wider historic landscape records several castle sites and associate estates, the nearest of which are around Innerwick and the Thornton Burn. Settlement at this period, outside of the major settlements such as at Dunbar, is likely to have been in the form of low-density rural townships, hamlets and farmsteads with the local population working the estates of their lords and the nearby coastline. Based on the above there is considered to be a moderate potential for further Medieval assets to exist within the Site, with these assets likely to take the form of rural settlement, associated field systems and isolated finds of metal and stone. This potential exists across the Site.

7.2.1.7 There are 54 assets ascribed to the Post-Medieval period within the 1 km Study Area. None of these are within the Site boundary. Outisde of the nearby Dunglass Estate and the village of Oldhamstocks, these assets are largely associated with farmsteads and the rural economy. Based on the above there is considered to be a high potential for further Post-

Medieval below ground remains to exist within the Site boundary, but these are likely to take the form of agricultural remains and associated former field boundaries and trackways.

7.2.1.8 Modern assets within the 1 km Study Area are limited to World War defences, monuments and modern road infrastructure. There are no assets within the Site boundary. Based on the above, there is considered to be a low potential for additional modern assets to exist on Site, with modern activity more likely to take the form of ground disturbance and the truncation of archaeological remains.

7.2.1.9 A summary of archaeological potential broken down by period is presented within **Table 7.2** below.

TABLE 7.2 A SUMMARY OF POTENTIAL

PERIOD NAME		POTENTIAL
Early Prehistory	Palaeolithic	Negligible
	Mesolithic	Moderate
	Neolithic	Moderate
Later Prehistory	Bronze Age	High
	Iron Age	High
Romano-British	Roman	Low
Medieval	Early Medieval	Low
	Later Medieval	Moderate
Post-Medieval		High
Modern		Low

8 CONCLUSION

8.1.1.1 The report has identified 90 known assets recorded in HES and ELC HER data within the 1 km Study Area, consisting of 30 designated assets and 60 non-designated assets. A further five, previously unknown assets were identified in the results of the geophysical survey.

8.1.1.2 Three HES and HER assets are within the Site boundary, inclusive of SM5891, Oldhamstocks Mains, enclosure, CA288 Oldhamstocks Conservation Area and MEL1894 Oldhamstocks Mains. The geophysical survey identified a further five assets within the Site.

8.1.1.3 There are no Early Prehistoric assets recorded within the Site boundary, with only a single HER record within the 1 km Study Area. MEL1871, records a pair of stone axe heads recovered from near Cocklaw, south-west of the Site. However, evidence for possible dunes and raised beach terraces with associated Mesolithic flints finds, have been reported within the vicinity of the Site.

8.1.1.4 There are two Late Prehistoric assets recorded within the Site boundary, both relating to settlement. Within the 1 km Study Area there are a further 26 assets assigned to this period, largely made up of settlement and funerary sites.

8.1.1.5 There are no Roman assets recorded within the 1 km Study Area, with only limited recovery of Roman material from the wider historic landscape.

8.1.1.6 There are four assets dated to the Medieval period within the 1 km Study Area, one of which is located within the Site. The Site boundary overlaps with the Conservation Area for Oldhamstocks village, which has a Medieval foundation, 13th century church and associated castle. Immediately east of the Site is the Dunglass Estate, which again has a Medieval foundation, with a castle and Collegiate Church. The remaining record for Medieval activity relates to rig and furrow within the wider 1 km Study Area. The wider historic landscape records several castle sites and associate estates, the nearest of which are around Innerwick and the Thornton Burn. Settlement at this period, outside of the major settlements such as at Dunbar, is likely to have been in the form of low-density rural townships, hamlets and farmsteads with the local population working the estates of their lords and the nearby coastline.

8.1.1.7 There are 54 assets ascribed to the Post-Medieval period within the 1 km Study Area. None of these are within the Site boundary. Outside of the nearby Dunglass Estate and the village of Oldhamstocks, these assets are largely associated with farmsteads and the rural economy.

8.1.1.8 Modern assets within the 1 km Study Area are limited to World War defences, monuments and modern road infrastructure. There are no assets within the Site boundary.

8.1.1.9 From the above baseline, there is considered to be a high potential for further Late Prehistoric assets and Post-Medieval assets to be present within the Site boundary. There is considered to be a moderate potential for Early Prehistoric and Medieval assets. The potential for all other periods is considered low or negligible.

8.1.1.10 Of the assets located within the Site boundary, the designated scheduled monument and conservation area have been assigned a high value. All other non-designated assets have been awarded a low value based on available evidence and professional judgement.

However, the value of below ground assets is difficult to gauge without intrusive evaluation and/or excavation works to ground truth the results of a heritage baseline. The known non-designated assets within the Site boundary, as well as currently unknown assets retain the potential to be of regional importance, and any value assigned to them prior to physical excavation is subject to change in the light of further evidence. The known heritage assets and the potential identified for further remains within the Site boundary are unlikely to yield high value below ground remains or remains considered to be of a national importance.

8.1.1.11 An Environmental Impact Assessment Report (EIAR) will utilise the baseline within this document to fully assess any potential Direct/Indirect (Physical) Impact to the known or potential heritage resource. Impacts and the significance of effects are discussed within **Volume 1, Chapter 7 (Archaeology and Cultural Heritage)** of the Environmental Impact Assessment Report (EIAR) along with appropriate mitigation strategies.

APPENDIX A: GAZETTEER OF HERITAGE ASSETS WITHIN THE 1 KM STUDY AREA

DESIGNATION	MAIN REFERENCE	HER / CANMORE ID	NAME	DESCRIPTION	PERIOD	EASTING	NORTHING	DISTANCE FROM SITE BOUNDARY (M)	VALUE
Non-designated	MEL1871	MEL1871	COCKLAW	Two stone axes, one of indurated sandstone and the other of claystone, both found at Cocklaw (NT 732 711) are in Berwick Museum.	Early Prehistoric	373199	671099	1 km Study Area	Low
Scheduled Monument	SM5891	Canmore ID 58975	Oldhamstocks Mains, enclosure 300m NNW of	The monument comprises the remains of an enclosed settlement of prehistoric date represented by cropmarks visible on oblique aerial photographs. The monument is of national importance because of its potential to add to our understanding of prehistoric domestic organisation and economy. The relationship of the enclosure to the associated ditch is likely to be of significance in assessing prehistoric farming practices, while material from the ditches themselves might contribute to our knowledge of the contemporary environment and site economy	Late Prehistoric	374134	671962	Within Site	High
Non-designated	MEL1894	MEL1894	Oldhamstocks Mains	Cropmark of possible enclosure	Late Prehistoric	374738	671842	Within Site	Low
Scheduled Monument	SM5850	Canmore ID 58958	Black Castle, enclosure	The monument comprises the remains of an enclosed settlement of prehistoric date represented by cropmarks visible on oblique aerial photographs. The monument is most likely to represent the remains of an enclosed settlement dating to the Iron Age with preserved traces of internal activity potentially including domestic structures. The monument is of national importance because of its potential to add to our understanding of prehistoric domestic organisation, particularly in view of the evidence for surviving internal occupation deposits. These deposits may also be expected to contain valuable evidence for the contemporary environment and economy of the Site.	Late Prehistoric	373530	672613	1 km Study Area	High
Scheduled Monument	SM5876	Canmore ID 58942	Black Castle Cottage, promontory fort 300m SW of	The monument comprises the remains of a promontory fort of later prehistoric date represented by cropmarks visible on oblique aerial photographs. It is possible that, rather than a ditch, it represents the remains of dense occupation deposits associated with an external, rectilinear structure. The interior summit of the fort measures approximately 100m E-W by 40m and has no unambiguous traces of internal features. The monument is of national importance because of its potential to add to our understanding of high-status defended settlement of the later prehistoric period. The ditches may be expected to contain material relating to rampart construction as well as to the environment and economy of the Site. There is a strong probability that internal deposits will provide detailed information on domestic organisation within the fort.	Late Prehistoric	373372	672346	1 km Study Area	High
Scheduled Monument	SM5890	Canmore ID 58955	Branxton Cottage,	The monument comprises the remains of an enclosed settlement of prehistoric date represented by cropmarks visible on oblique aerial photographs. The monument is of national importance because of its potential to add to our	Late Prehistoric	374074	672512	1 km Study Area	High

DESIGNATION	MAIN REFERENCE	HER / CANMORE ID	NAME	DESCRIPTION	PERIOD	EASTING	NORTHING	DISTANCE FROM SITE BOUNDARY (M)	VALUE
			enclosure 300m E of	understanding of prehistoric domestic organisation and economy. The likely survival of internal deposits will provide detailed information on the layout and use of the settlement.					
Scheduled Monument	SM5892	Canmore ID 58874	Springfield, enclosure 300m NNE of	The monument comprises the remains of an enclosed settlement of later prehistoric date represented by cropmarks visible on oblique aerial photographs. The monument is of national importance because of its potential to add to our understanding of native domestic organisation and economic practice in the period of Roman influence in southern Scotland. The likely survival of occupation deposits greatly enhances the Site's importance.	Late Prehistoric	375158	671598	1 km Study Area	High
Scheduled Monument	SM5893	Canmore ID 58879	Springfield, palisaded enclosure and ring ditch 200m E of	The monument comprises the remains of a palisaded enclosure and ring ditch of prehistoric date represented by cropmarks visible on oblique aerial photographs. The monument is of national importance because of its potential to add to our understanding of prehistoric domestic organisation and economy. The functional and chronological relationships between the palisaded enclosure and ring ditch will be of particular importance for the analysis of the nature and development of the settlement.	Late Prehistoric	375352	671066	1 km Study Area	High
Scheduled Monument	SM5894	Canmore ID 58900	Springfield, enclosure 400m SSE of	The monument comprises the remains of an enclosed settlement of prehistoric date represented by cropmarks visible on oblique aerial photographs. The monument is of national importance because of its potential to add to our understanding of prehistoric domestic organisation and economy. The particular importance of the monument is enhanced greatly by its association with a series of potentially contemporary enclosed settlements in the vicinity.	Late Prehistoric	375259	670716	1 km Study Area	High
Scheduled Monument	SM5958	Canmore ID 58941	Branxton, enclosure 350m NNW of	The monument comprises the remains of an enclosed settlement of prehistoric date represented by cropmarks visible on oblique aerial photographs. The monument is of national importance because of its potential to add to our understanding of prehistoric settlement organisation and economy in the period of Roman influence in southern Scotland. The survival of internal deposits suggests that detailed evidence survives for internal occupation which would enable a reconstruction of the nature, development and function of the enclosure.	Late Prehistoric	374224	672885	1 km Study Area	High
Non-designated	MEL10319	MEL10319	Harp Law	Cropmark of two ring ditches	Late Prehistoric	374889	673122	1 km Study Area	Low
Non-designated	MEL10445	MEL10445	Harp Law	Cropmarks of multivallate fort	Late Prehistoric	374871	673354	1 km Study Area	Low
Non-designated	MEL11325	MEL11325	Springfield	Cropmark of barrow	Late Prehistoric	375223	671366	1 km Study Area	Low
Non-designated	MEL11414	MEL11414	Lawfield	Cropmarks of ring ditch house and pits	Late Prehistoric	375223	673170	1 km Study Area	Low
Non-designated	MEL13144	MEL13144	Harp Law	Ditches and bank	Late Prehistoric	374835	673424	1 km Study Area	Low

DESIGNATION	MAIN REFERENCE	HER / CANMORE ID	NAME	DESCRIPTION	PERIOD	EASTING	NORTHING	DISTANCE FROM SITE BOUNDARY (M)	VALUE
Non-designated	MEL13146	MEL13146	Harp Law	Possible small enclosure or round house	Late Prehistoric	374885	673424	1 km Study Area	Low
Non-designated	MEL13147	MEL13147	Harp Law	Pits and possible ditch	Late Prehistoric	374934	673420	1 km Study Area	Low
Non-designated	MEL13329	MEL13329	Oldhamstocks Mains	Possible enclosure	Late Prehistoric	373821	671936	1 km Study Area	Low
Non-designated	MEL1816	MEL1816	Dunglass	Long cist cemetery	Late Prehistoric	375000	670999	1 km Study Area	Low
Non-designated	MEL1822	MEL1822	Springfield	Cropmark of palisaded enclosure	Late Prehistoric	375370	671181	1 km Study Area	Low
Non-designated	MEL1836	MEL1836	Springfield	Cropmark of enclosure or ring ditch	Late Prehistoric	375342	671106	1 km Study Area	Low
Non-designated	MEL1838	MEL1838	Springfield	Cropmarks, posible enclosure and pits	Late Prehistoric	375299	670799	1 km Study Area	Low
Non-designated	MEL7730	MEL7730	Hoprig	Cropmark of an enclosed settlement.	Late Prehistoric	374989	669981	1 km Study Area	Low
Non-designated	Canmore 58858	Canmore 58858	Kirklands	Cropmarks on AP's taken by RCAHMS, in 1976 and 1980, reveal an enclosure, possibly a settlement, about 300m SSE of Kirklands.	Late Prehistoric	375844	670278	1 km Study Area	Low
Non-designated	Canmore 58860	Canmore 58860	Kirklands	Part of an enclosure, possibly a settlement, is revealed by cropmarks on a gravel terrace about 200m E of the now abandoned farm of Kirklands. Roughly oval on plan, it measures about 60m by 50m within a ditch up to 4m broad; there is an entrance on the E	Late Prehistoric	375785	670577	1 km Study Area	Low
Non-designated	Canmore 58861	Canmore 58861	Kirklands	What is probably the Site of a double-ditched settlement is revealed by cropmarks on a gravel terrace about 100m SE of Kirklands. It is roughly trapezoidal on plan, measuring about 38m by 30m internally; there is an entrance on the SE.	Late Prehistoric	375739	670450	1 km Study Area	Low
Non-designated	Canmore 58863	Canmore 58863	Kirklands	Five archaeological features were located during a watching brief: a short cist with a single inhumation; a section of ditch; part of a possible ring-ditch; a shallow pit; and a small feature overlain by gravels.	Late Prehistoric	375724	670755	1 km Study Area	Low
Non-designated	Canmore 58871	Canmore 58871	Kirklands	Enclosure 4, Kirklands: visible on air photographs taken in 1976.	Late Prehistoric	375980	670553	1 km Study Area	Low
Non-designated	Canmore 58909	Canmore 58909	Hoprig, Dean Dykes	In May 1919 in a field on Hoprig Farm a plough came into contact with a large stone which proved to be a grave slab covering human remains buried in a doubled-up position characteristic of the Bronze Age.	Late Prehistoric	375800	670700	1 km Study Area	Low
Conservation Area	CA288	n/a	Oldhamstocks	The village of Oldhamstocks is recorded in the Medieval period, The village with the earliest physical remains in the village dating to the 14th century, with documentary sources pushing its origins back to the 12th century. with its church consecrated in the 13th century. The oldest building is the	Medieval to Post Medieval	374093	670026	Within Site	High

DESIGNATION	MAIN REFERENCE	HER / CANMORE ID	NAME	DESCRIPTION	PERIOD	EASTING	NORTHING	DISTANCE FROM SITE BOUNDARY (M)	VALUE
				church that dates from the 16th Century but is built on foundations of a 14th century church					
Garden and Designed Landscape	GDL00154	n/a	Dunglass	The Picturesque designed landscape of Dunglass was laid out between 1776 and 1832. It incorporated an earlier landscape associated with the existing house, church and French Camp. The design structure has remained relatively consistent although the composition of individual components has altered over the years. The original Dunglass Castle was built in the 14th century by Sir Thomas Home who had acquired the estate through his marriage to its heiress. In 1403 The Collegiate Church was built by their descendant, Sir Alexander Home.	Medieval to Post Medieval	375976	671487	1 km Study Area	High
Non-designated	MEL13155	MEL13155	Harp Law	Area of rig located to south-west of Linkshead farmstead adjacent to Great North Road/Coastal Road	Medieval to Post Medieval	374747	673453	1 km Study Area	Low
Non-designated	MEL1845	MEL1845	Black Castle, Oldhamstocks	Former site of Black Castle at Oldhamstocks, located north of Oldhamstocks Burn, close to the church. The Site of a castle which belonged to the Hepburn family. Castle depicted on Adair's 1682 map of the area	Medieval to Post Medieval	373810	670699	1 km Study Area	Low
Scheduled Monument	SM3191	Canmore ID 58903	French Camp ,fort, Dunglass	16th century English fortification and used during the occupation of Haddington in 1548-9. By the Treaty of Boulogne in 1550 the defences were handed over to the Scots and by them destroyed. Located within Dunglass GDL.	Post-Medieval	376318	671623	1 km Study Area	High
Listed Building	LB14698	MEL1827/Canmore ID 58884	Bilsdean Bridge	Probably George Burn, circa 1800. 2 segmental spans, each circa 20' wide. Coursed rubble, bull-faced at centre pier and on keystones remaining on S span. Moulded surround to blank medallion set between arches. Band course below crenelated and coped parapet.Dunglass New Bridge by Burn in 1797 is very similar to that at Bilsdean, hence the probable authorship.	Post-Medieval	376291	672515	1 km Study Area	Medium
Listed Building	LB14702	Canmore ID 234455	Dunglass, farm dairy	Circa 1930. Single storey, symmetrical model dairy building. Rubble with ashlar dressings. Architects possibly Orphoot, Whiting and Bryce who designed a similarly sturdy pantiled composition at Templecroft, Gullane, about this date.	Post-Medieval	376347	672214	1 km Study Area	Medium
Listed Building	LB14703	MEL 1826/Canmore ID 58883	Dunglass, Farm Lodge	Early 19th century, made L-plan late in century. Random rubble sandstone with droved ashlar dressings, heavily pointed. Gate Lodge to Home Farm of former Dunglass House. Plain, but retaining small window size, and unaffected dignity.	Post-Medieval	376345	672464	1 km Study Area	Low
Listed Building	LB14704	MEL1830/Canmore ID 211935	Dunglass, gardener's house with retaining walls and gate piers	Possibly Richard Crichton, early 19th century. 2-storey L-plan house with single storey additions. Coursed sandstone. Richard Crichton built Dunglass House and stables in similar materials in 1807, and the simple classical form of the gardener's house suggests it was also designed by him. The Old Gardener's House and Walled Garden to SW are listed separately.	Post-Medieval	376321	672154	1 km Study Area	Low

DESIGNATION	MAIN REFERENCE	HER / CANMORE ID	NAME	DESCRIPTION	PERIOD	EASTING	NORTHING	DISTANCE FROM SITE BOUNDARY (M)	VALUE
Listed Building	LB14708	Canmore ID 211905	Oldhamstocks, October Cottage with retaining wall	Earlier 19th century. Single storey L-plan cottage, formed of 2 adjoined 3-bay cottages. Rubble with ashlar dressings and E gable harled. Retaining wall: rubble coped rubble wall, curving to S, shielding cottage from road at junction to E.	Post-Medieval	374237	670562	1 km Study Area	Low
Listed Building	LB14709	Canmore ID 211906	Oldhamstocks, The Old Manse with walled garden and boundary walls	Earlier 19th century. 2-storey, L-plan, 3-bay, symmetrical manse. Squared and snecked rubble with droved ashlar dressings and base course. 12-pane glazing pattern to sash and case windows; piended slate roof. Ashlar shouldered end stacks; some original cans retained. INTERIOR: tripartite vestibule screen, winding stone stair with decorative cast-iron railings. WALLED GARDEN: rectangular plan high rubble walled garden to E of Old Manse, circa 200' x 75', with remains of former cottage/toolshed on N wall at W. Arched gateway at W and gateways in E and N walls. Brick buttress to N. Rubble boundary walls with 2 sets of decorative wrought-iron gates to N gateways. 1 of 2 buildings listed.	Post-Medieval	373872	670590	1 km Study Area	Medium
Listed Building	LB14710	Canmore ID 58913	Oldhamstocks Parish Church (Church of Scotland) with graveyard walls and watch house	16th century aisle adjoined to church built in 1701, built on part foundations of circa 14th century church. Medieval aisle in coursed red sandstone rectangular blocks; main church harled and with ashlar margins. HEPBURN AISLE: gabled aisle at E end, with low, broad doorway to S in blocked roll-moulded surround; boarded door with iron fittings. Hoodmoulded, reticulated traceried, 3-light pointed arch window on E gable, flanked by heraldic panels, that to the S, initialled TH and MS and dated 1581, both brought from the remains of Blackcastle in mid to later 19th century. Moulded cornice and ashlar coped skews; onion finials on skewputts, thistle finial at apex. Stone slab roof. CHURCH: Coombed timber ceiling, pointed stone barrel vault to chancel (Hepburn Aisle). Doorway at W tower end, blocked. Segmental heads to embrasures and segmental arch into N jamb, with round piers attached to ingoes. Ashlar surround chamfered arises, to segmental chancel arch. Stained glass in chancel lights. Commemorative panel to restoration by Richard Hunter in memory of Sir James Miller of Manderston. Lorimeresque furnishings, circa 1930. WALLS AND GRAVESTONES: Rubble coped rubble graveyard walls with simple wrought-iron gates. Selection of fine 17th and 18th century gravestones, much-weathered, including 2 to Broadwood family (piano makers of London). WATCH HOUSE: 1824. Small, single chamber watch house, set in S boundary wall. Droved ashlar with raised base course and eaves course. Doorway at the E end. Pedimented gables to E and W, with weathered plaque in E pediment. Pointed arch window to N at centre with intersecting glazing pattern. Ashlar coped skews and grey slates; stack by W gable. Simple chimneypiece inside at W end. 1907 restoration may have been affected by John Kinross RSA, who was architect to both Hunter and Miller in preceding years, and an expert at restoration; however, the later interior alterations obliterated any work which might have confirmed this authorship, and no attribution is made in	Post-Medieval	373799	670646	1 km Study Area	High

DESIGNATION	MAIN REFERENCE	HER / CANMORE ID	NAME	DESCRIPTION	PERIOD	EASTING	NORTHING	DISTANCE FROM SITE BOUNDARY (M)	VALUE
				church papers. The sundial form is close to that on angle buttress at Cockburnspath Church, similarly of possible 16th century date. The bell and belfry were apparently gifted by the family of Broadwood and Sons of London. An early restoration was in circa 1860, when the armorials were added. 1 of 3 buildings listed.					
Listed Building	LB14711	Canmore ID 58933	Oldhamstocks, market cross	18th century. Ashlar market cross set on village green. Bull-faced ashlar blocks (20th century?) forming pedestals, with narrow shaft above, chamfered at arises, terminating in moulded neck and small ball finial. The market cross was preserved in the grounds of the manse, early this century. It is suggested that the Tweeddale family bequeathed the green and gave the market cross to Oldhamstocks, for the holding of public fairs, which were permitted weekly from 1627. If this is so the cross could be earlier than 18th century, though this appears a more likely date.	Post-Medieval	373909	670607	1 km Study Area	Medium
Listed Building	LB14712	Canmore ID 211917	Oldhamstocks, wellhead	18th century. Droved ashlar, square section wellhead, coped and with pyramidal cap. Handle missing, but keyhole surround evident on S side. Notable feature on village green. See Alexander Carse's painting 'Oldhamstocks Fair'.	Post-Medieval	373974	670585	1 km Study Area	Medium
Listed Building	LB14713	Canmore ID 211920	Oldhamstocks, The Wight House with retaining walls	Late 18th century. 2-storey house with single storey block adjoining and additional outbuilding. Rubble, formerly harled, with ashlar margins. RETAINING WALLS: ashlar coped rubble parapet to N garden front with 2 separate cast-iron gates; higher rubble boundary walls to E and to walled garden adjoined at W.	Post-Medieval	373951	670574	1 km Study Area	Medium
Listed Building	LB14724	MEL1834/Canmore ID 58894	Dunglass, gatepiers at west lodge	Early 19th century. Square section classical ashlar gatepiers. Raised base; recessed panel to outer faces with decorative paterae below coping. Ball finials on ashlar bases set on coping. Possibly designed by Richard Crichton who built the house and stables in 1807. Identical gatepiers at East Lodge (listed separately).	Post-Medieval	376272	672579	1 km Study Area	Low
Listed Building	LB14725	Canmore ID 58891	Dunglass, gazebo	Dated 1712. Heptagonal, classical summer house, of outstanding quality, set on high ground to W of former house and SW of lake. Ashlar; base course, rusticated walls, and ornate entablature. Each face with depressed arch doorway with cavetto surround and ornamented keystone; fluted pilasters flanking. Triglyps and metopes carved with variety of classical motifs; fleur-de-lys, winged cherub, and floral details, for example. Small-pane glazing pattern to doors and fanlights. Lead flashings to ogeed roof with large, lead ball finial. Architect unknown, but fine form echoes work of James Smith and Alexander McGill, who may possibly have been the authors.	Post-Medieval	376352	671723	1 km Study Area	High
Listed Building	LB14728	Canmore ID 211937	Dunglass, old gardener's house	Earlier 19th century. 2-storey, 3-bay house. Squared and coursed rubble sandstone with droved ashlar dressings. Sited	Post-Medieval	376174	672132	1 km Study Area	Low

DESIGNATION	MAIN REFERENCE	HER / CANMORE ID	NAME	DESCRIPTION	PERIOD	EASTING	NORTHING	DISTANCE FROM SITE BOUNDARY (M)	VALUE
				to NW of walled garden. Listed C(S) for its relation to walled garden and other estate buildings at Dunglass.					
Listed Building	LB14732	Canmore ID 209377	Dunglass, walled garden and service buildings and hot-houses	Early 19th century. Rectangular plan walled garden with lean-to service buildings to N and circa 1925 traditional hot-houses against interior of N wall. High rubble, ashlar-coped, walls, rounded at corners, enclosing 400' x 225' of garden. Service buildings with top-hopper windows, boarded doors, one set of sliding doors, and wallhead stack to heating chamber. Hot-houses, almost certainly by Mackenzie and Moncur, leaning on N wall with ashlar base courses and projecting canted centrepiece with finial; cast-iron brackets; heating pipes. Unusually intact and fine example of a walled garden with ancillary buildings. Old Gardener's Cottage, listed separately. 1 of 3 buildings listed.	Post-Medieval	376236	672100	1 km Study Area	Medium
Listed Building	LB14733	Canmore ID 211888	Oldhamstocks, Braeview with retaining walls	"Late 18th century. 2-storey house with single storey wing to E, each of 2 bays. Rubble with painted ashlar margins. RETAINING WALLS: rubble coped rubble enclosing garden to rear and E. Listed Category B as one of the least altered late 18th century buildings, prominently sited by the village green.					
"	Post-Medieval	374000	670604	1 km Study Area	Medium				
Listed Building	LB14734	Canmore ID 211922	Oldhamstocks, Bridge	"18th century or possibly earlier. Single span, bridge with semi-circular arch. Rubble, with ashlar dressings and semi-circular coping. Wrought-iron ties. Bridging Dunglass Burn.					
Dunglass Old Bridge to NE, listed separately was of a 17th century date, and as the Oldhamstocks Bridge is similarly formed, it may also share an early date."	Post-Medieval	374666	670388	1 km Study Area	Medium				
Listed Building	LB14735	Canmore ID 211898	Oldhamstocks, Greenend Cottage	Late 18th century. Single storey 3-bay cottage, with modern extension at rear. Harled with painted ashlar margins and quoins.	Post-Medieval	373891	670659	1 km Study Area	Low
Listed Building	LB14736	Canmore ID 211901	Oldhamstocks, Hillcrest with retaining walls	Later 19th century. 2-storey gabled house with 1st floor breaking eaves and with single storey rear extensions. Rubble with ashlar dressings, chamfered arises to openings, raised quoins. Piend-roofed outbuilding to NW, presumably former stable. Built after 1854 OS Map.	Post-Medieval	373916	670580	1 km Study Area	Low
Listed Building	LB18958	Canmore ID 211904	Oldhamstocks,Mill Cottage	Early 19th century, single-storey,3-bay millers cottage with later additions, whitewashed rubble. Modern timber boarded porch to E windows flanking with modern shutters, modern	Post-Medieval	374103	670437	1 km Study Area	Low

DESIGNATION	MAIN REFERENCE	HER / CANMORE ID	NAME	DESCRIPTION	PERIOD	EASTING	NORTHING	DISTANCE FROM SITE BOUNDARY (M)	VALUE
				timber additions to each gable. Original openings intact to rear. Sash and case windows with 12-pane glazing. Red pantiles rubbled coped stacks.					
Non-designated	MEL10345	MEL10345	Ferneylea	Farmhouse and steading shown on 1st edition OS map, labelled 'Fairnly'. Adjacent mill pond, dam, sluice and lade.	Post-Medieval	374753	669873	1 km Study Area	Low
Non-designated	MEL11335	MEL11335	Lawfield	Cropmarks of track and enclosure	Post-Medieval	375585	673089	1 km Study Area	Low
Non-designated	MEL11335	MEL11335	Lawfield	Cropmarks of track and enclosure	Post-Medieval	375737	673126	1 km Study Area	Low
Non-designated	MEL11517	MEL11517	Oldhamstocks, cromwellhall	Inn	Post-Medieval	374336	670505	1 km Study Area	Low
Non-designated	MEL12191	MEL12191	Branxton / Threepland Hill	Farm steading, early 19th c or earlier	Post-Medieval	374389	672613	1 km Study Area	Low
Non-designated	MEL12215	MEL12215	Lawfield	Farm steading, early 19th c or earlier	Post-Medieval	375222	673002	1 km Study Area	Low
Non-designated	MEL12216	MEL12216	Dunglass Mains	Farm steading, early 19th c or earlier	Post-Medieval	376327	672222	1 km Study Area	Low
Non-designated	MEL12217	MEL12217	Cocklaw	Farm steading, early 19th c or earlier	Post-Medieval	373217	671110	1 km Study Area	Low
Non-designated	MEL12218	MEL12218	Wallycleugh / Woollands	Farm steading, early 19th c or earlier	Post-Medieval	374061	670105	1 km Study Area	Low
Non-designated	MEL1883	MEL1883	Oldhamstocks Mains	Farmhouse and steading shown on 1st edition OS map.	Post-Medieval	374336	671747	1 km Study Area	Low
Non-designated	MEL2395	MEL2395	Cydum: Lunciwick, Firth of Forth / Thorntonloch, Thornton loch, Cockburns path, Cockburnspath, Outer Forth Estuary	Wreck of a scooner.	Post-Medieval	376000	672999	1 km Study Area	Low
Non-designated	MEL2602	MEL2602	Bilsdean, road bridge / Bilsdean, railway underbridge	Road bridge over railway.	Post-Medieval	376079	672909	1 km Study Area	Low
Non-designated	MEL2604	MEL2604	Lawfield	Farmhouse and steading	Post-Medieval	375253	673014	1 km Study Area	Low
Non-designated	MEL2823	MEL2823	Oldhamstocks	Three unroofed buildings annotated Ruins, two of which are conjoined, are depicted on the 1st edition of the OS 6-inch map (Haddingtonshire 1855, sheet 12). One unroofed building is shown on the current edition of the OS 1:10000 map (1991).	Post-Medieval	374330	670349	1 km Study Area	Low

DESIGNATION	MAIN REFERENCE	HER / CANMORE ID	NAME	DESCRIPTION	PERIOD	EASTING	NORTHING	DISTANCE FROM SITE BOUNDARY (M)	VALUE
Non-designated	MEL3757	MEL3757	Bilsdean toll house	Toll house established in 1752.	Post-Medieval	376209	672758	1 km Study Area	Low
Non-designated	MEL4494	MEL4494	Oldhamstocks, Candy Cottage	House	Post-Medieval	374103	670590	1 km Study Area	Low
Non-designated	MEL4495	MEL4495	Oldhamstocks, The Cottage	Building	Post-Medieval	373860	670640	1 km Study Area	Low
Non-designated	MEL4496	MEL4496	Oldhamstocks, The Cottage	House	Post-Medieval	374223	670569	1 km Study Area	Low
Non-designated	MEL4497	MEL4497	Oldhamstocks, dovecot / Dovecot Cottage	House	Post-Medieval	374211	670569	1 km Study Area	Low
Non-designated	MEL4500	MEL4500	Oldhamstocks, Leeside / Leaside	House	Post-Medieval	373899	670588	1 km Study Area	Low
Non-designated	MEL4504	MEL4504	Oldhamstocks, Rose Cottage and Daisy Cottage / Tacoma, Talomee	Cottage (Period Unassigned)	Post-Medieval	374043	670601	1 km Study Area	Low
Non-designated	MEL4505	MEL4505	Oldhamstocks, Old Smithy and Smithy Cottage / the Smithy House	Blacksmiths Workshop	Post-Medieval	374266	670573	1 km Study Area	Low
Non-designated	MEL4506	MEL4506	Oldhamstocks, Sunnyside	House	Post-Medieval	373900	670580	1 km Study Area	Low
Non-designated	MEL4510	MEL4510	Oldhamstocks, East Cottage	House	Post-Medieval	374263	670561	1 km Study Area	Low
Non-designated	MEL4514	MEL4514	Birnieknowes farm cottages	Farm steading	Post-Medieval	375620	672379	1 km Study Area	Low
Non-designated	MEL4515	MEL4515	Oldhamstocks, Dunain	House	Post-Medieval	374271	670559	1 km Study Area	Low
Non-designated	MEL4516	MEL4516	Oldhamstocks, the cottage	House	Post-Medieval	374025	670603	1 km Study Area	Low
Non-designated	MEL8929	MEL8929	Birnieknowes / Palmerton	Farmhouse and steading	Post-Medieval	375469	672455	1 km Study Area	Low

DESIGNATION	MAIN REFERENCE	HER / CANMORE ID	NAME	DESCRIPTION	PERIOD	EASTING	NORTHING	DISTANCE FROM SITE BOUNDARY (M)	VALUE
Non-designated	MEL8930	MEL8930	Springfield	Farmhouse and steading, early 19th c. or earlier	Post-Medieval	375072	671224	1 km Study Area	Low
Non-designated	MEL9278	MEL9278	Bilsdean / salt pan hall	Salt works from about 1670	Post-Medieval	376056	672973	1 km Study Area	Low
Non-designated	MEL9840	MEL9840	Lawfield	Close beside the road from Oldhamstocks, about 250 yards S of the farm cottages of Lawfield, there is an oval mound, bare of vegetation, measuring about 45 feet by 30 feet and standing about 9 feet high on an average. It is the spoil-heap of a coal mine.	Post-Medieval	375000	672799	1 km Study Area	Low
Non-designated	Canmore 58869	Canmore 58869	Cockburnspath	This was the Site of an archaeological monument, which may no longer be visible.	Post-Medieval	375600	670500	1 km Study Area	Low
Non-designated	Canmore 58905	Canmore 58905	Dunglass Dean	One unroofed long building of five compartments annotated Dean Mill (Ruins of), what may be a second unroofed building with only three walls marked, one enclosure and a length of wall are depicted on the 1st edition of the OS 6-inch map.	Post-Medieval	375690	671150	1 km Study Area	Low
Non-designated	Canmore 96354	Canmore 96354	Hoprig	Farmstead (18th Century)	Post-Medieval	375372	669797	1 km Study Area	Low
Non-designated	MEL11368	MEL11368	Oldhamstocks war memorial	War Memorial (20th Century)	Modern	373821	670655	1 km Study Area	Low
Non-designated	MEL2650	MEL2650	Branxton, roc observation post	Royal Observer Corps Monitoring Post (20th Century)	Modern	374753	672487	1 km Study Area	Low
Non-designated	Canmore 278503	Canmore 278503	Berwick bridge	Road Bridge (Modern)	Modern	375093	669811	1 km Study Area	Low
Non-designated	MS3.1	N/A	MS3.1	Geophysical anomalies possibly relating to archaeology. Within Land Parcel 3.	Unknown	375231	672153	Within Site	Low
Non-designated	MS5.1	N/A	MS5.1	Geophysical anomalies possibly relating to archaeology. Within Land Parcel 5.	Unknown	374851	672091	Within Site	Low
Non-designated	MS8.1	N/A	MS8.1	Geophysical anomalies possibly relating to archaeology. Within Land Parcel 8.	Unknown	374516	671257	Within Site	Low
Non-designated	MS12.1	N/A	MS12.1	Geophysical anomalies possibly relating to archaeology. Within Land Parcel 12.	Unknown	374358	670809	Within Site	Low
Non-designated	MS16.1	N/A	MS16.1	Geophysical anomalies possibly relating to archaeology. Within Land Parcel 16.	Unknown	374293	671296	Within Site	Low

APPENDIX B: GEOPHYSICS REPORT

Geophysical Survey Report

Springfield

East Lothian

For

ERM

Magnitude Surveys Ref: MSNT1875

April 2025

3 Captain Street

Bradford

BD1 4HA

01274 926020

info@magnitudesurveys.co.uk

Report By:

Leigh A. Garst BFA MSc MCIfA

Report Approved By:

Dr Paul S. Johnson FSA MCIfA

Issue Date:

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Abstract

Magnitude Surveys was commissioned to assess the subsurface archaeological potential of a c. 184ha area of land at Springfield, East Lothian. A fluxgate gradiometer survey was successfully completed across the survey area. Probable and possible archaeological activity has been identified in the form of linear and curvilinear anomalies indicative of cut features, possibly indicating the presence of enclosures. Anomalies associated with agricultural activity have also been identified as former field boundaries as well as former and modern ploughing trends. Further linear, curvilinear, and discrete anomalies have been identified across the survey area but are of undetermined origin. Natural anomalies indicative of colluviation are present throughout the area. Magnetic disturbance corresponds to field boundaries, electric fences, and structures.

Contents

List of Figures

1. Introduction

1.1. Magnitude Surveys Ltd (MS) was commissioned by ERM to undertake a geophysical survey over a c. 184ha area of land near Springfield, East Lothian (NT 74552 713590).

1.2. The geophysical survey comprised hand-pulled/quad-towed cart-mounted, and hand-carried, 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 (Ho, 2024).

1.5. The survey commenced on 23/09/2024 and took 3 deployments to complete.

2. Quality Assurance

2.1. Magnitude Surveys is a Registered Organisation of the Chartered Institute for Archaeologists (CIfA), the chartered UK body for archaeologists, and a corporate member of ISAP (International Society for Archaeological Prospection).

2.2. The directors of MS are involved in cutting edge research and the development of guidance/policy. Specifically, Dr Chrys Harris has a PhD in archaeological geophysics from the University of Bradford, is a Member of CIfA and has served as the Vice-Chair of the International Society for Archaeological Prospection (ISAP); Finnegan Pope-Carter has an MSc in archaeological geophysics and is a Fellow of the London Geological Society, as well as a member of GeoSIG (CIfA Geophysics Special Interest Group); Dr Paul Johnson has a PhD in archaeology from the University of Southampton, is a Fellow of the Society of Antiquaries of London and a Member of CIfA, has been a member of the ISAP Management Committee since 2015, and is currently Chair of the Archaeological Prospection Community of the European Archaeological Association.

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

3. Objectives

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

4. Geographic Background

4.1. The survey area was located c. 85m north of Oldhamstocks (Figure 1). Gradiometer survey was undertaken across 20 fields under arable cultivation The survey area was bordered by further agricultural land and plantation (Figure 2).

4.2. Survey considerations:

Survey Area	Ground Conditions	Further Notes
1	Arable stubble field slopping sharlyy down from the southwest corner and from north to south.	The survey area was bordered on al sides by hedgerows.
2	Arable stubble field slopping down from west to east.	The survey area was bordered on all sides by hedgerows.
3	Undulating pasture field slopping from the centre down to all sides.	The survey area was bordered on all sides by metal fencing and hedgerows.
4	Pasture sloping down from the centre of the field to the east and west.	The survey area was bordered on all sides by metal fencing. A pylon was present in the field running northwest to southeast roughly centre of the field.
5	Pasture field with a steep slope from the south to north.	The survey area was bordered on all sides by metal fencing and hedgerows.
6	Arable field with young crop with a slight slope from the centre of the field down to the north and south.	The survey area was bordered by hedgerows and fencing on all sides. Five telegraph were present in the survey area with overhead cables.
7	Flat arable field with young crop.	The survey area was bordered on the north, west and south by hedgerows with no physical boundary to the east.
8	Arable stubble field slopping down to the north.	The survey area was bordered by hedgerows to the north, west and northeast and metal fencing to the southeast and south. Three telegraph poles were present in the centre of the field with overhead cables running north-south.
9	Flat arable field with turnip crop.	The survey area was bordered by metal fencing and hedgerows to the north, south and west with no physical boundary to the east. A pylon was present in the southern corner with overhead cables running along the eastern boundary. Telegraph lines ran along the northern boundary.
10	Arable stubble field sloping down from the centre to the north and south.	The survey area was bordered by hedgerows and metal fences to the north, east and west and a stone wall with metal fence to the south.
11	Arable stubble field sloping down from the northeast.	The survey area was bordered by hedgerows to the south and west with a stonewall to the north and no physical boundary to the east. A pylon was present on the southeastern boundary of

		the area and overhead cables along the east boundary.
12	Arable stubble field sloping down from the south and north into the centre.	The survey area was bordered on all sides by metal fencing and hedgerows.
13	Arable field with turnip crop slopping gently down to the north.	The survey area was bordered by trees to the east, hedgerows to the north, a cobblestone wall to the west and no physical boundary to the south. A badger set was present on the northeast corner of the field and was not surveyed.
14	Arable field with turnip crop slopping gently down to the north.	The survey area was bordered by hedgerows to the north, cobblestone walls to the east and west and no physical boundary to the south. A badger set was present on the southwestern corner and was not surveyed.
15	Arable sloping down from northwest to southeast.	The survey area was bordered by a stonewall to the west, hedgerows and a metal fence to the south and a metal fence and tress to the north and east. A badger set was present on the northeast corner of the field and was not surveyed.
16	Arable field with young crop sloping down from west to east.	The survey area was bordered on all sides by metal fencing and hedgerows. A telegraph pole with overhead cables was present in the north of the field orientated roughly east to west.
17	Arable stubble field slopping down from the west to east.	The survey area was bordered on all sides by metal fencing with trees on the north and eastern boundaries.
18	Arable field with hay bales in situ.	The survey areas was bordered on all sides by hedgerows. The scheduled monument in the northern edge of the field was not surveyed.
19	Arable field sloping down from south to north with hay bales in situ.	The survey area was bordered by metal fencing on the north, south and eastern boundaries and no physical boundary to the west.
20	Pasture slopping down from south to north and ravine splitting the field in half.	The survey area was bordered by Metal fencing on all sides with hedges to the south, east and west. A pylon was present in the field with cables ran from north to south across the northeastern corner of the field.

4.3. The underlying geology comprises sandstone, siltstone and dolomitic limestone of the Ballagan Formation to the north, and sandstone and argillaceous rocks of the Stratheden Group and Inverclyde Group to the south. Superficial deposits consist predominantly of Devensian diamicton Till, with glaciofluvial deposits of gravel, sand, and silt to the north and south and bands of alluvial clay, silt, sand and gravel on the northern borders of Areas 5 and 20 and southern boundary of Area 1 (British Geological Survey, 2025).

4.4. The soils consist of freely draining brown soils (Scotland's Soils, 2025).

5. Archaeological Background

5.1. The following is a summary of Historic Environment Records (HER) produced by CANMORE and provided by ERM.

5.2. The Scheduled Monument Oldhamstocks Mains (MEL1906) is located to the north of Areas 18 and 19, and comprises of remains of an enclosed settlement with associated possible field boundaries or a stock control system of prehistoric date visible in aerial photography.

5.3. Further cropmarks of possible rectilinear enclosures are recorded within Area 5 (MEL13329 and MEL1894) and in the field directly to its east (MEL1820). A possible oval enclosure, measuring 70m by 50m was identified through LiDAR imagery in the forest immediately north of Area 17 (MEL13329). Further cropmarks of possible enclosures and pits were recorded through satellite imagery in the field to the east of Area 11 (MEL1837 & MEL1838).

5.4. Geophysical survey undertaken in 2022 identified nine possible oval pits c. 4m x 3m which may be storage or refuse pits (MEL13147), and a possible linear ditch, to the north of Areas 18 and 19.

5.5. The village of Oldhamstocks is located c. 85m south of the survey area. Oldhamstocks has Anglo-Saxon origins, meaning “the farm of” or “by the old homestead”. Documentary sources date the origins of the village to the 12th century with the church consecrated in the 13th century.

5.6. The site of Black Castle is located c. 440m to the southwest of the survey area. The castle was depicted on Adair’s 1682 map and belonged to the Hepburn family. The remnants of the castle earthworks, consisting of the surrounding settlement are visible as cropmarks.

5.7. A 20th-century observation post, Braxton, ROC (MEL2650), is located in the field to the west of Area 2. These underground monitoring posts were constructed for the purpose of monitoring in the case of a nuclear attack, and would have been manned by three members of the Royal Observer Corps (ROC). The ROC was stood down in 1991 following the end of the Cold War and the monitoring post was abandoned.

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 hand-pulled/quad-towed cart system and hand-carried GNSS-positioned system.

6.1.4.1. MS' cart and hand-carried 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 (Figures 3, 6, 9, & 12). 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 17, 20, 23, 26, 29, 32, 35, 38, 41, 44, 47, 50, 53, 56, 59 & 62). XY trace plots visualise the magnitude and form of the geophysical response, aiding anomaly interpretation.

6.3.2. Geophysical results have been interpreted using greyscale images and XY traces in a layered environment, overlaid against open street maps, satellite imagery, historical maps, LiDAR data, and soil and geology maps. Google Earth (2025) was also consulted, to compare the results with recent land use.

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

7. Results

7.1.Qualification

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

7.2.Discussion

7.2.1. A fluxgate gradiometer survey was carried out over c. 184ha of land at Springfield, East Lothian. The geophysical results are presented in combination with satellite imagery and historical maps (Figures 4, 7, 10 & 13).

7.2.2. The fluxgate gradiometer survey has responded well to the environment of the survey area. Anomalies of possible archaeological, agricultural, natural, and undetermined origins have been identified.

7.2.3. The survey data indicated a strong magnetic background derived from the underlying geology of the survey area. Modern interference is limited to the edges of the fields near metal wire fencing, structures, and farming equipment.

7.2.4. The geophysical survey has identified anomalies of probable archaeological origin in Area 12 of the survey, close to Oldamstocks village and Black Castle. The strong magnetic enhancement of the anomalies, and their location suggest a probable archaeological origin. Further anomalies of possible archaeological origin were identified in Areas 3, 5, 7, 8, 9, 13, 14, 16 & 20 (Figures 6, 8, 10, 12). These anomalies suggest the presence of rectilinear to sub-circular enclosures and are interpreted as such due to their morphology, defined edges, concentration, and location in proximity to mapped remains.

7.2.5. Anomalies resulting from agricultural activities have been identified in the form of possible former field boundaries, and pre-modern to modern cultivation.

7.2.6. Numerous anomalies with strong positive and negative signals and distinctive morphology have been observed and identified as the result of lightning strikes. The heat generated by the lightning strike causes remanent magnetism by altering the composition of the rock.

7.2.7. Anomalies of natural origins have been observed and are likely related to the process of colluviation. This is visible in the data as wide positive bands most apparent in the total field plots (Figures 3, 6, 9, 12).

7.2.8. Various discrete linear to curvilinear anomalies are classified as ''Undetermined''. These anomalies could be archaeological, agricultural, and natural origins but a confident classification is not possible. A series of small c. 1-2m diameter discrete pit-like positive anomalies have been detected in alignment across Areas 8, 10 and 11. Although it is possible that these anomalies are archaeological, a more confident classification cannot be made from the geophysical data alone.

7.2.9. General Statements

7.2.9.1. Geophysical anomalies will be discussed broadly as classification types across the survey area. Only anomalies that are distinctive or unusual will be discussed individually.

7.2.9.2. **Ferrous (Spike)** – Discrete dipolar anomalies are likely to be the result of isolated pieces of modern ferrous debris on or near the ground surface.

7.2.9.3. **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.

7.2.9.4. **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.

7.2.9.5. **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.

7.2.10. Magnetic Results - Specific Anomalies

7.2.10.1. **Archaeology Probable (Strong & Weak) –** Several strong and weak linear and curvilinear anomalies have been identified across Area 12 (Figures 10 & 54). These anomalies appear to form rectilinear enclosures. The anomalies do not directly correspond to any known heritage assets, but are in proximity to the village of Oldhamstocks and to Black Castle.

7.2.10.2. **Archaeology Possible (Strong & Weak) –** Concentrations of weak linear and curvilinear anomalies have been identified in Areas 3, 5, 7, 8, 9, 13, 14, 16 & 20 (Figures 4, 7, 10, 13, 16, 19, 22, 25, 28, 37, 40, 46, 49, 52 & 58). Although the anomalies do not correspond with known heritage assets, their nature is suggestive of cut features with enhanced fill, and the concentration and location within an area where enclosures have been recorded through satellite, and LiDAR imagery suggests a possible archaeological origin.

7.2.10.3. **Agricultural (Weak) –** Weak linear and curvilinear anomalies have been identified within survey Areas 3, 8, 10, 11 & 20 (Figures 4, 10 & 13). These anomalies do not correspond directly with former field boundaries on available historical mapping but do correlate with cropmarks visible on satellite imagery related to agricultural practices.

7.2.10.4. **Agricultural (Trends) –** Parallel, closely-spaced (c. 10-15m apart) linear anomalies exhibiting weak magnetic enhancement have been identified in Areas 2 and 17 (Figures 4 & 7). These anomalies correspond with modern ploughing trends and are visible on satellite imagery.

7.2.10.5. **Former Agricultural (Trends) –** Weakly enhanced, parallel linear and curvilinear anomalies c. 8m apart, have been identified in Areas 4, 5, and 20 (Figures 4 & 7). The anomalies differ from current agricultural practices and are interpreted as indicating former ploughing regimes.

7.2.10.6. **Lighting Strike (Spread) –** Several discrete irregular, strong, dipolar anomalies have been identified in some of the survey areas (Areas 1, 5, 6 and 16). These anomalies, most prominent in the Total Field plots (Figures 3 & 6), appear to radiate from a central point. Their dipolar signal and dendritic morphologies are characteristic of lightning-induced magnetism. This type of anomaly results from the flow of electrical current through the ground along paths of low resistance, inducing a magnetic field around the flow path (Trinks and Biwall,

2011). The heat generated by the lightning strike can also cause remanent magnetism by altering the composition of the rock.

7.2.10.7. **Natural (Strong/Weak/Spread) –** Anomalies that are classified as "Natural" have been identified throughout the survey areas. These patterns are likely the result of colluvial processes.

7.2.10.8. **Undetermined (Weak) –** Several linear and curvilinear anomalies have been detected across the survey area. They are close to the anomalies that are identified as possible archaeology however, these anomalies are morphologically indistinct and supporting contextual evidence to permit a confident classification is absent. Several discrete pit-like anomalies have been detected in alignment in Areas 8, 10 and 11. The anomalies are roughly 1-2m in diameter and though an anthropogenic origin is likely, it is unclear from the data whether these are archaeological or of modern agricultural origin.

8. Conclusions

8.1. A fluxgate gradiometer survey was successfully completed across the survey area. The geophysical survey has detected anomalies related to probable and possible archaeological, agricultural, natural, and undetermined origins. The underlying geology has produced a generally enhanced magnetic background. Variations in the background of the survey area have been identified and are likely related to colluvial processes. Magnetic disturbance is predominantly limited to extant pylons, telegraph poles, fencing, and field boundaries.

8.2. Evidence of probable and possible archaeological anomalies have been identified. Although the anomalies do not correspond directly with assets recorded in the HER, the concentration, morphology and their proximity to known features suggests an archaeological origin.

8.3. Agricultural activities have been identified across the survey area in the form of former field boundaries, former and modern ploughing trends, and cropmarks that are visible on satellite imagery.

8.4. Anomalies identified as lighting strikes have also been identified across the survey area.

8.5. Anomalies of undetermined origin have been detected. While these anomalies are considered likely the result of modern agricultural and/or natural processes, an archaeological origin cannot be entirely ruled out.

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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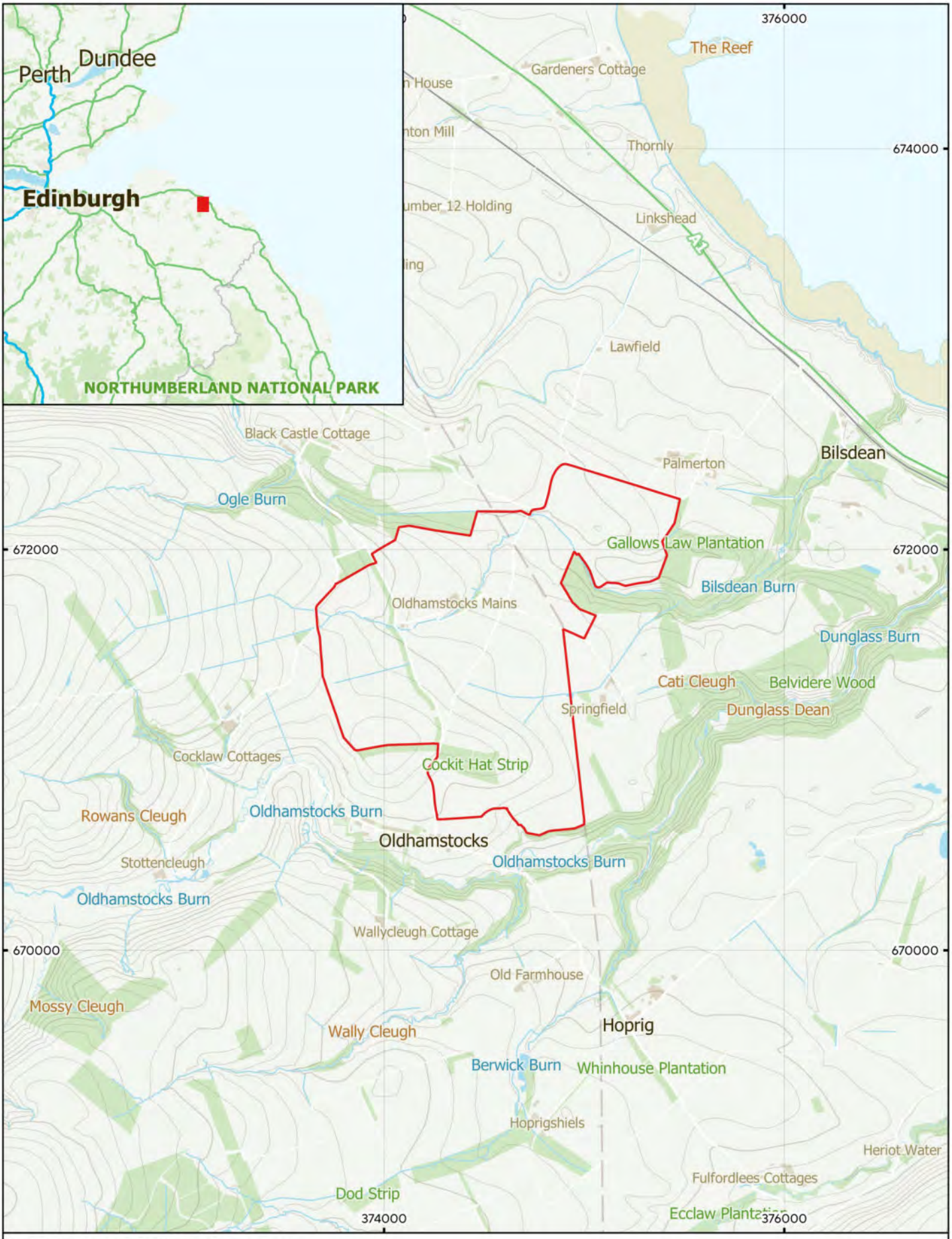
12. Project Metadata

MS Job Code	MSNT1875
Project Name	Springfield, East Lothian
Client	ERM
Grid Reference	NT74552 71359
Survey Techniques	Magnetometry
Survey Size (ha)	184ha (Magnetometry)
Survey Dates	2024-09-23 to 2025-04-26
Project Lead	Leigh A. Garst BFA MSc MCIfA
Project Officer	Leigh A. Garst BFA MSc MCIfA
HER Event No	Update if relevant or N/A
OASIS No	Update if relevant or N/A
S42 Licence No	Update if relevant or N/A
Report Version	0.2

13. Document History

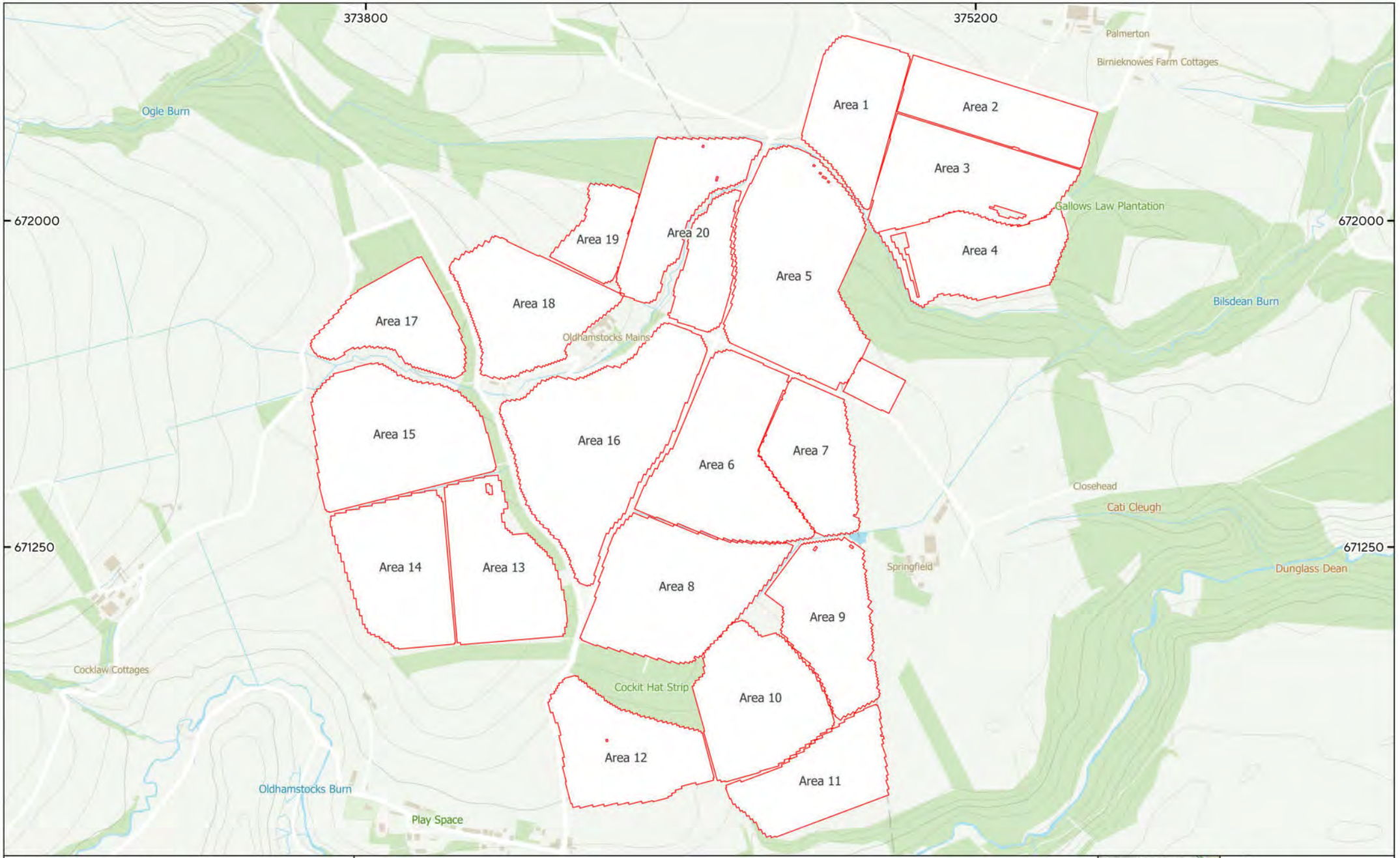
Version	Comments	Author	Checked By	Date
0.1	Initial draft for Project Lead to Review	AJ	LAG	16 April 2025
0.2	Director Sign Off	LAG	PSJ	29 April 2025



MSNT1875 - Springfield, East Lothian
Figure 1 - Geophysical Survey Location
1:25,000 @ A4

Site Boundary

0 0.5 1 km

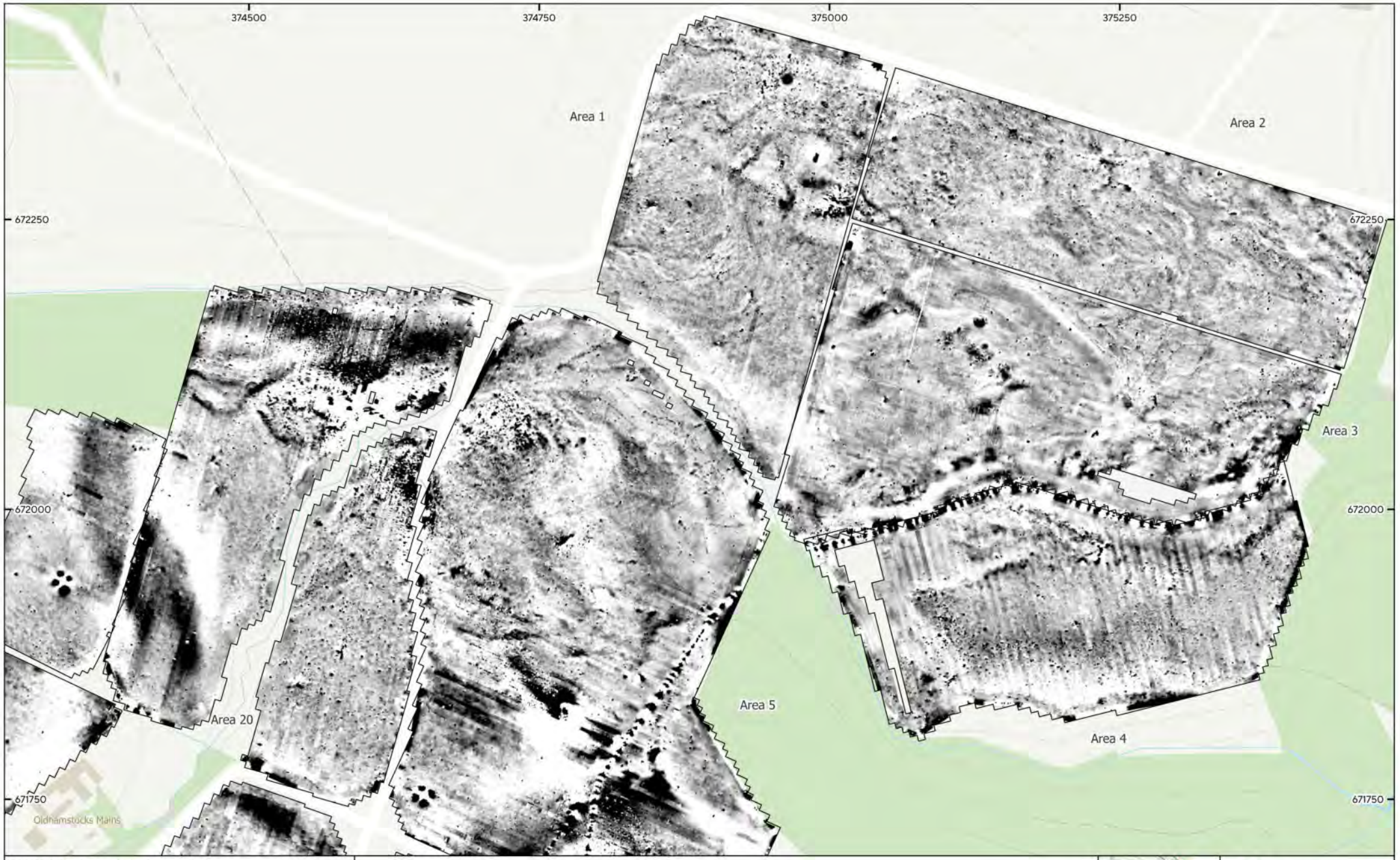


MSNT1875 - Springfield, East Lothian
Figure 2 - Geophysical Survey Areas
1:8,000 @ A3

Geophysical Survey Areas

Magnitude Surveys

0 80 160 240 320 m



MSNT1875 - Springfield, East Lothian
Figure 3 - Magnetic Total Field (Lower Sensor) (Areas 1 - 5, & 20)
1:3,000 @ A3

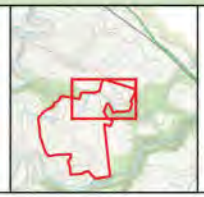
MSNT1875 - Springfield, East Lothian
Figure 4 - Magnetic Interpretation over Historical Mapping & Satellite Imagery (Areas 1 - 5, & 20)
1:3,000 @ A3

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

Magnitude Surveys

0 30 60 90 120 m

MSNT1875 - Springfield, East Lothian
Figure 5 - GNSS Plot (Areas 1 - 5, & 20)
1:3,000 @ A3



Magnitude Surveys

0 30 60 90 120 m

MSNT1875 - Springfield, East Lothian
Figure 6 - Magnetic Total Field (Lower Sensor) (Areas 15 - 20)
1:3,000 @ A3

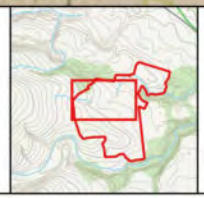
48,990 nT 49,020

Magnitude Surveys

0 30 60 90 120 m

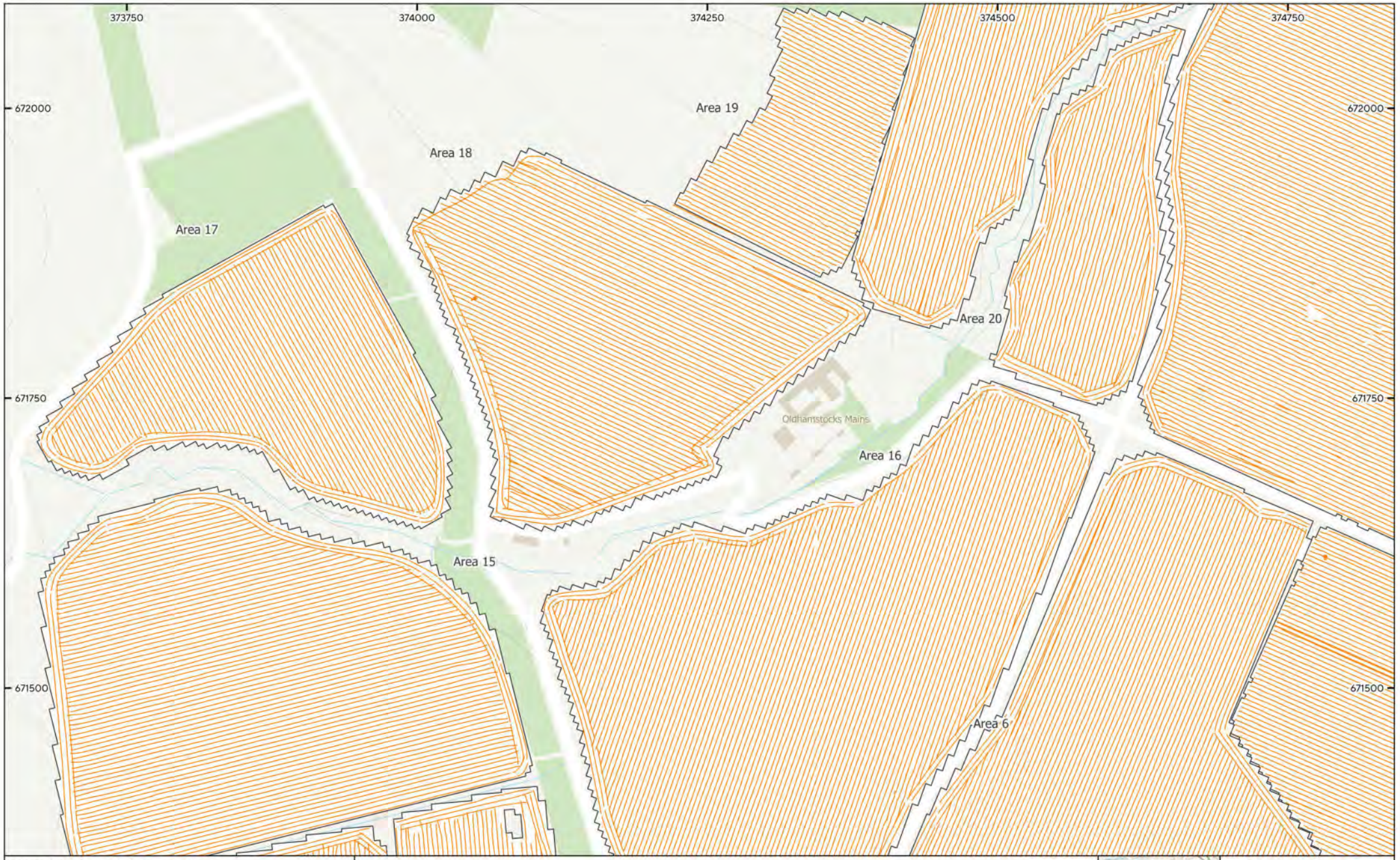
MSNT1875 - Springfield, East Lothian
Figure 7 - Magnetic Interpretation over Historical Mapping & Satellite Imagery (Areas 15 - 20)
1:3,000 @ A3

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

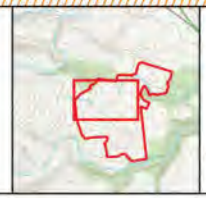


Magnitude Surveys

0 30 60 90 120 m



MSNT1875 - Springfield, East Lothian
Figure 8 - GNSS Plot (Areas 15 - 20)
1:3,000 @ A3



Magnitude Surveys

0 30 60 90 120 m

MSNT1875 - Springfield, East Lothian
Figure 9 - Magnetic Total Field (Lower Sensor) (Areas 8, 12 - 14, & 16)
1:3,000 @ A3

48,990 nT 49,020

Magnitude Surveys

0 30 60 90 120 m

MSNT1875 - Springfield, East Lothian
Figure 10 - Magnetic Interpretation over Historical Mapping & Satellite Imagery (Areas 8, 12 - 14, & 16)
1:3,000 @ A3

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

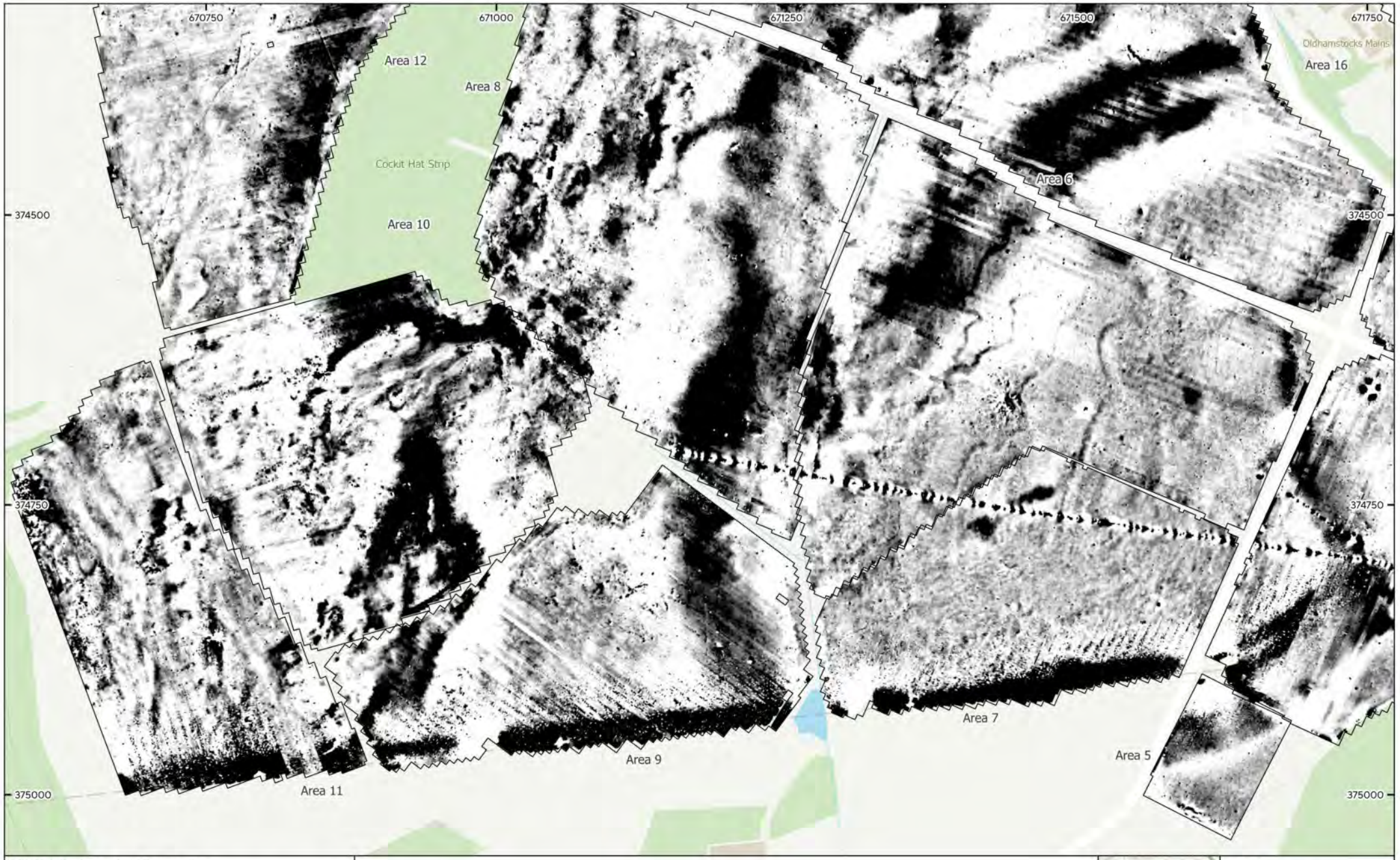
Magnitude Surveys

0 30 60 90 120 m

MSNT1875 - Springfield, East Lothian
Figure 11 - GNSS Plot (Areas 8, 12 - 14, & 16)
1:3,000 @ A3

Magnitude Surveys

0 30 60 90 120 m



MSNT1875 - Springfield, East Lothian
Figure 12 - Magnetic Total Field (Lower Sensor) (Areas 5 - 11, & 16)
1:3,000 @ A3

48,990 nT 49,020

Magnitude Surveys

0 30 60 90 120 m

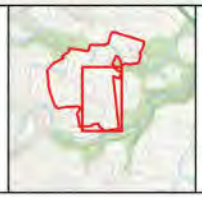
MSNT1875 - Springfield, East Lothian
Figure 13 - Magnetic Interpretation over Historical Mapping & Satellite Imagery (Areas 5 - 11, & 16)
1:3,000 @ A3

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

Magnitude Surveys

0 30 60 90 120 m

MSNT1875 - Springfield, East Lothian
Figure 14 - GNSS Plot (Areas 5 - 11, & 16)
1:3,000 @ A3



Magnitude Surveys

0 30 60 90 120 m

MSNT1875 - Springfield, East Lothian
Figure 15 - Magnetic Gradient (Areas 1 & 2)
1:1,500 @ A3

-1 nT 2

Magnitude Surveys

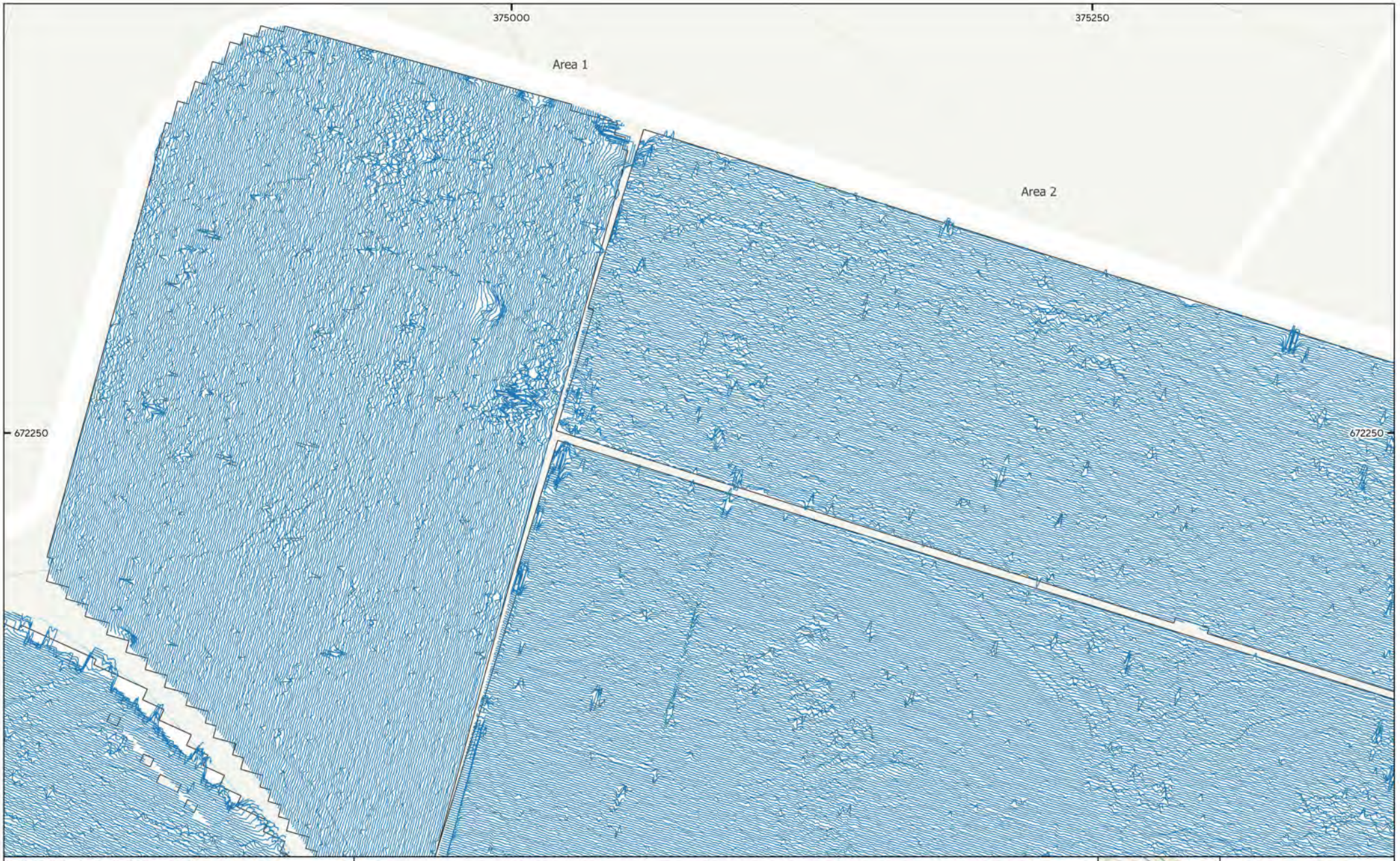
0 15 30 45 60 m

MSNT1875 - Springfield, East Lothian
Figure 16 - Magnetic Interpretation (Areas 1 & 2)
1:1,500 @ A3

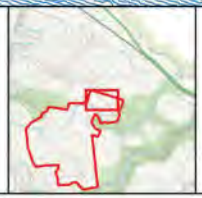
- Agricultural (Weak)
- Archaeology Possible (Weak)
- Magnetic Disturbance
- Ferrous/Debris (Spread)
- Natural (Spread)
- Natural (Strong)
- Natural (Weak)
- Undetermined (Weak)
- Lightning Strike
- Agricultural (Trend)
- Ridge and Furrow (Trend)
- Ferrous (Spike)

Magnitude Surveys

0 15 30 45 60 m

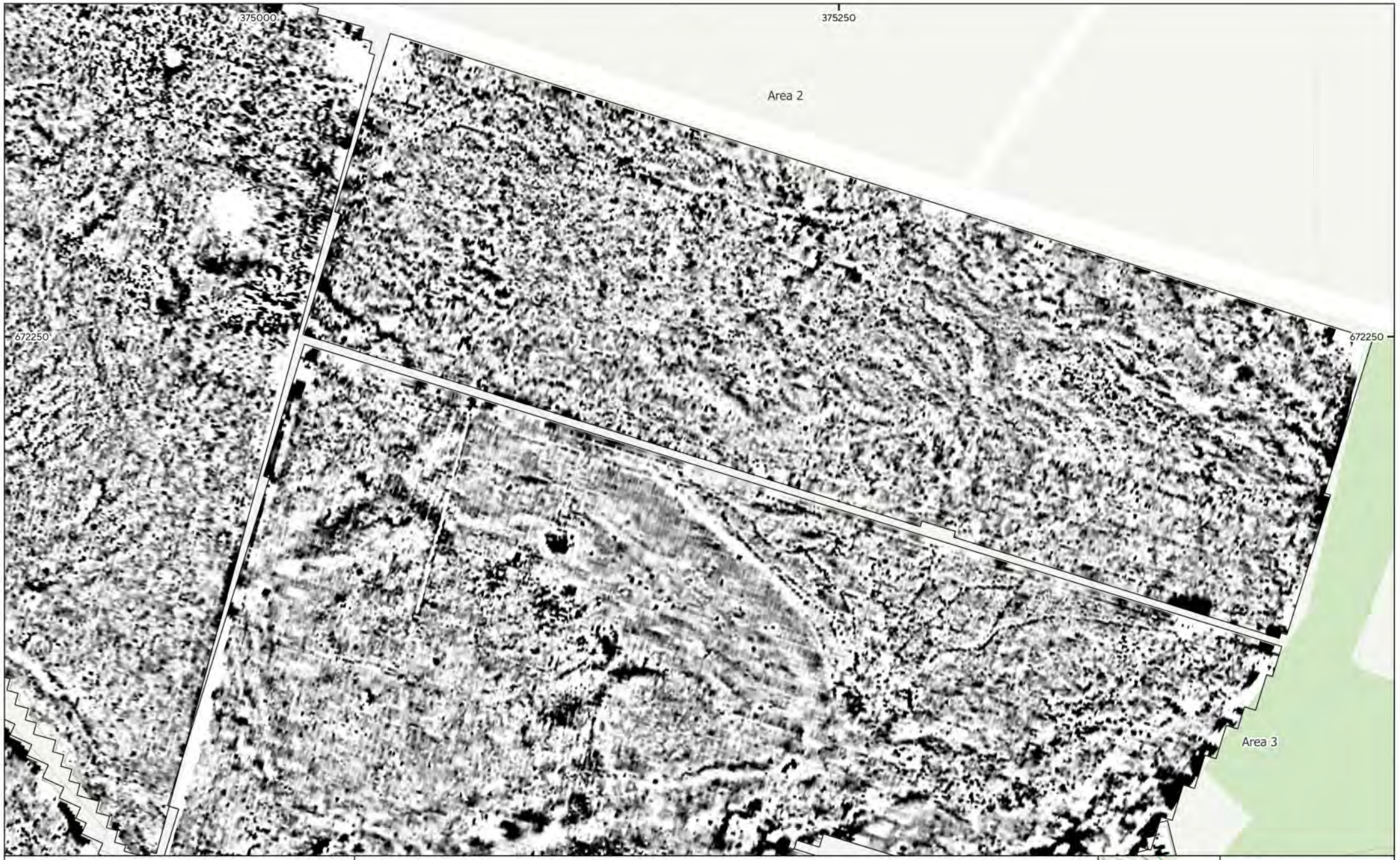


MSNT1875 - Springfield, East Lothian
Figure 17 - XY Trace Plot (Areas 1 & 2)
1:1,500 @ A3



Magnitude Surveys

0 15 30 45 60 m



MSNT1875 - Springfield, East Lothian
Figure 18 - Magnetic Gradient (Areas 2 & 3)
1:1,500 @ A3

-1 nT 2

Magnitude Surveys

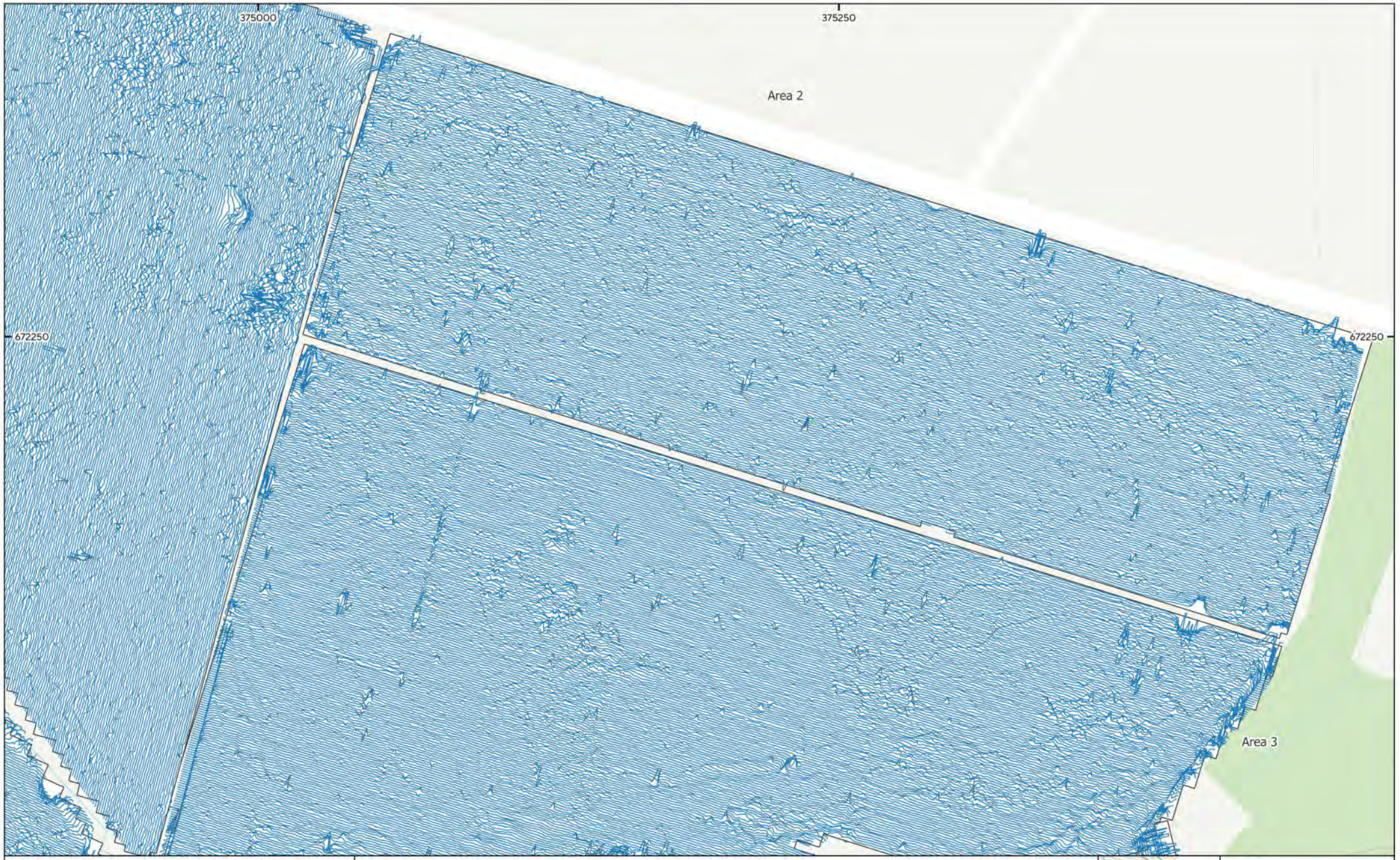
0 15 30 45 60 m

MSNT1875 - Springfield, East Lothian
Figure 19 - Magnetic Interpretation (Areas 2 & 3)
1:1,500 @ A3

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

Magnitude Surveys

0 15 30 45 60 m



MSNT1875 - Springfield, East Lothian
Figure 20 - XY Trace Plot (Areas 2 & 3)
1:1,500 @ A3

Magnitude Surveys

0 15 30 45 60 m

MSNT1875 - Springfield, East Lothian
Figure 21 - Magnetic Gradient (Areas 3 & 4)
1:1,500 @ A3

-1 nT 2

Magnitude Surveys

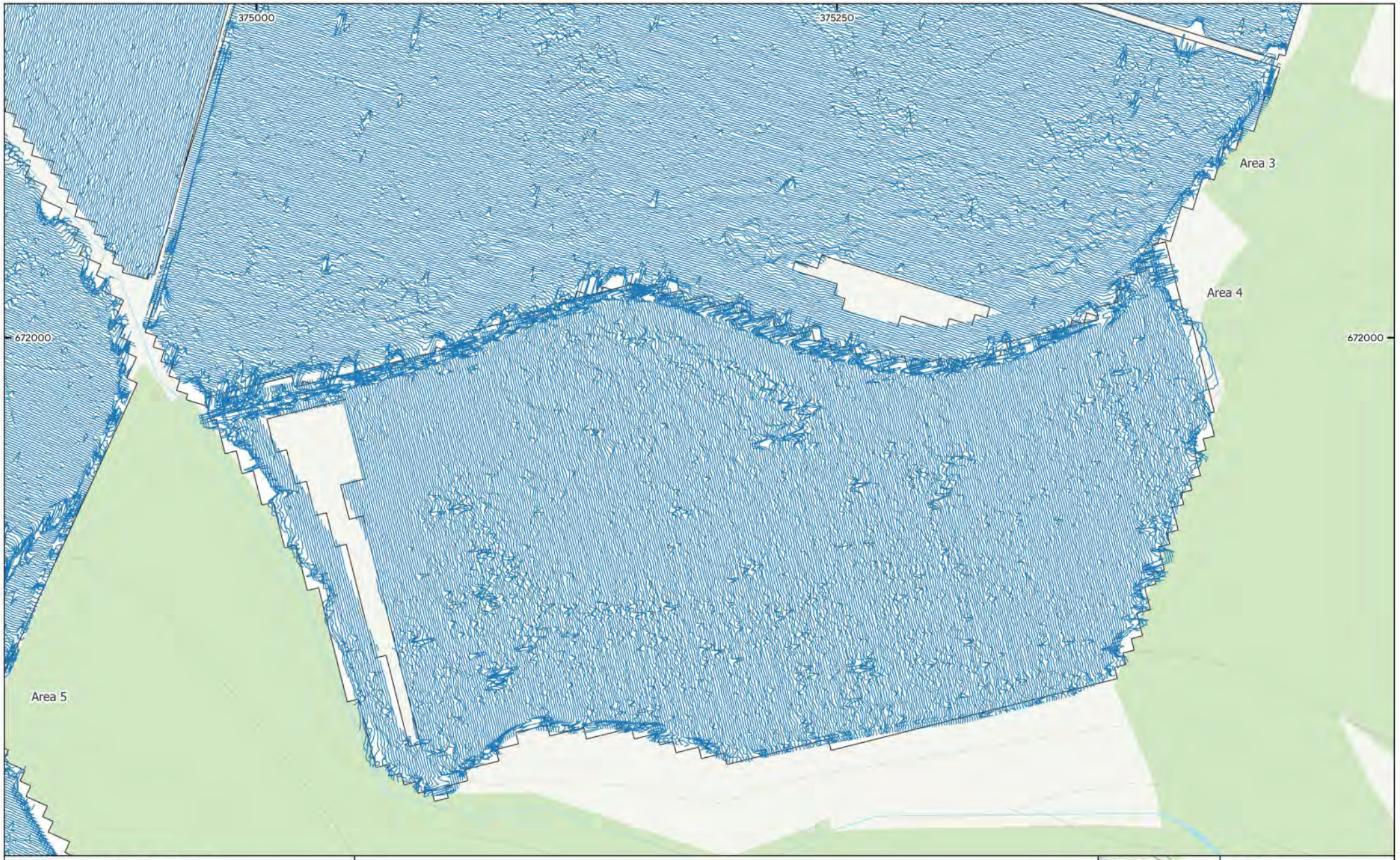
0 15 30 45 60 m

MSNT1875 - Springfield, East Lothian
Figure 22 - Magnetic Interpretation (Areas 3 & 4)
1:1,500 @ A3

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

Magnitude Surveys

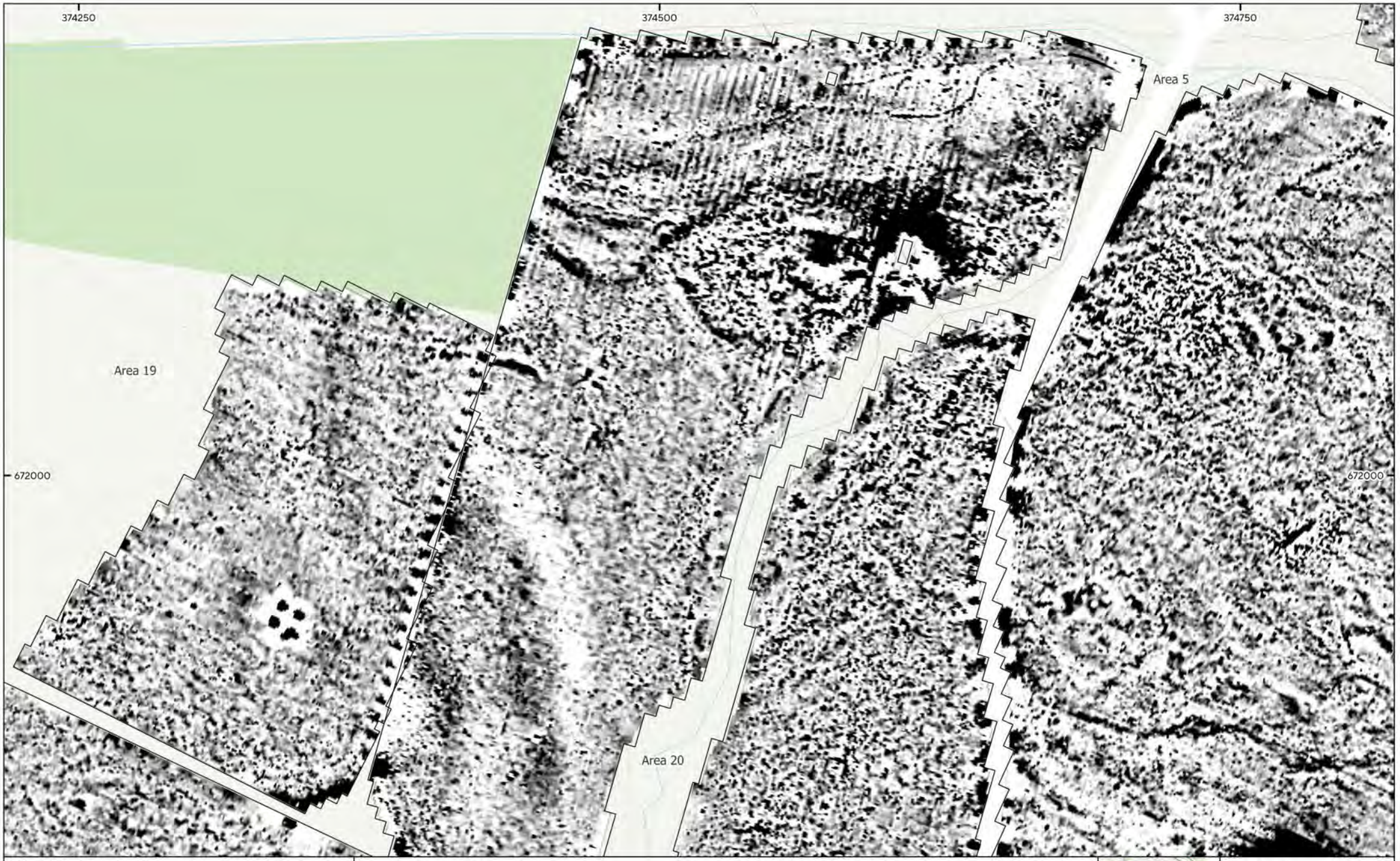
0 15 30 45 60 m



MSNT1875 - Springfield, East Lothian
Figure 23 - XY Trace Plot (Areas 3 & 4)
1:1,500 @ A3

Magnitude Surveys

0 15 30 45 60 m



MSNT1875 - Springfield, East Lothian
Figure 24 - Magnetic Gradient (Areas 5, 19, & 20)
1:1,500 @ A3

-1 nT 2

Magnitude Surveys

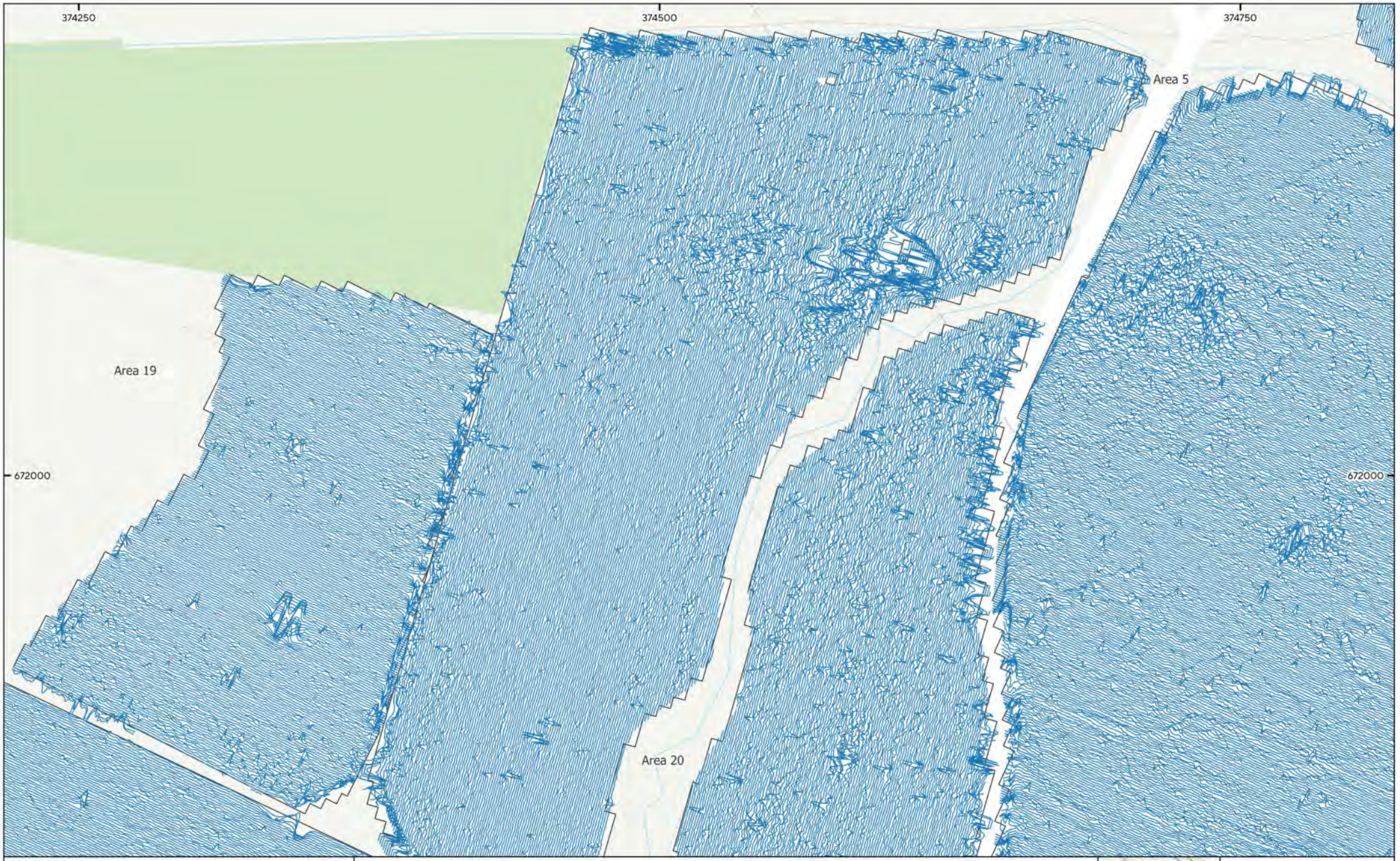
0 15 30 45 60 m

MSNT1875 - Springfield, East Lothian
Figure 25 - Magnetic Interpretation (Areas 5, 19, & 20)
1:1,500 @ A3

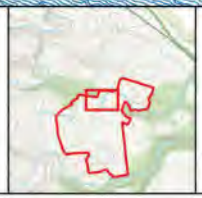
- Agricultural (Weak)
- Archaeology Possible (Weak)
- Magnetic Disturbance
- Ferrous/Debris (Spread)
- Natural (Spread)
- Natural (Weak)
- Undetermined (Weak)
- Overhead Cables
- Lightning Strike
- Agricultural (Trend)
- Service
- Ridge and Furrow (Trend)
- Ferrous (Spike)

Magnitude Surveys

0 15 30 45 60 m



MSNT1875 - Springfield, East Lothian
Figure 26 - XY Trace Plot (Areas 5, 19, & 20)
1:1,500 @ A3



Magnitude Surveys

0 15 30 45 60 m

MSNT1875 - Springfield, East Lothian
Figure 27 - Magnetic Gradient (Areas 5 & 20)
1:1,500 @ A3

-1 nT 2

Magnitude Surveys

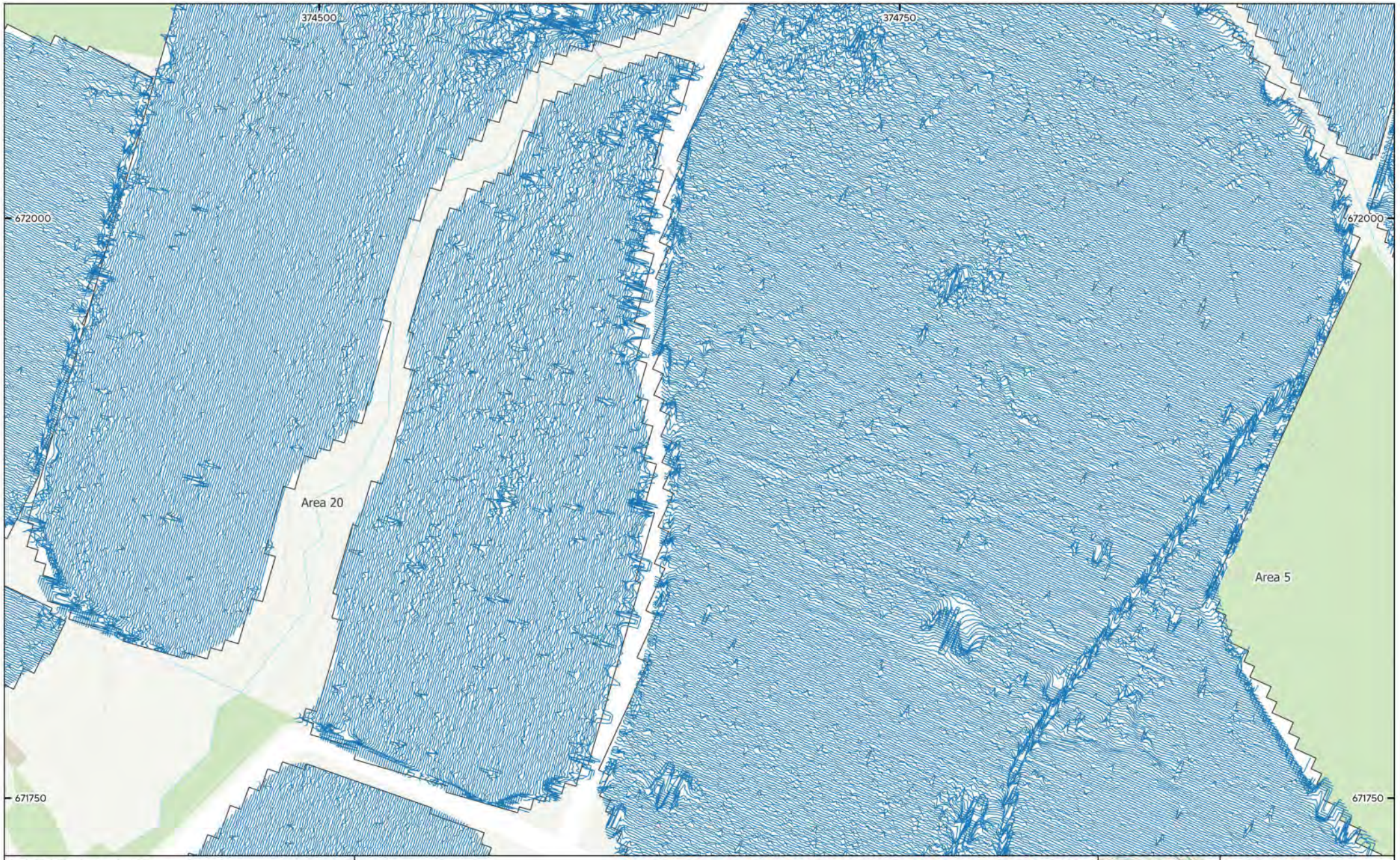
0 15 30 45 60 m

MSNT1875 - Springfield, East Lothian
Figure 28 - Magnetic Interpretation (Areas 5 & 20)
1:1,500 @ A3

- Archaeology Possible (Weak)
- Magnetic Disturbance
- Ferrous/Debris (Spread)
- Natural (Spread)
- Natural (Strong)
- Natural (Weak)
- Undetermined (Weak)
- Overhead Cables
- Lightning Strike
- Agricultural (Trend)
- Service
- Ridge and Furrow (Trend)
- Ferrous (Spike)

Magnitude Surveys

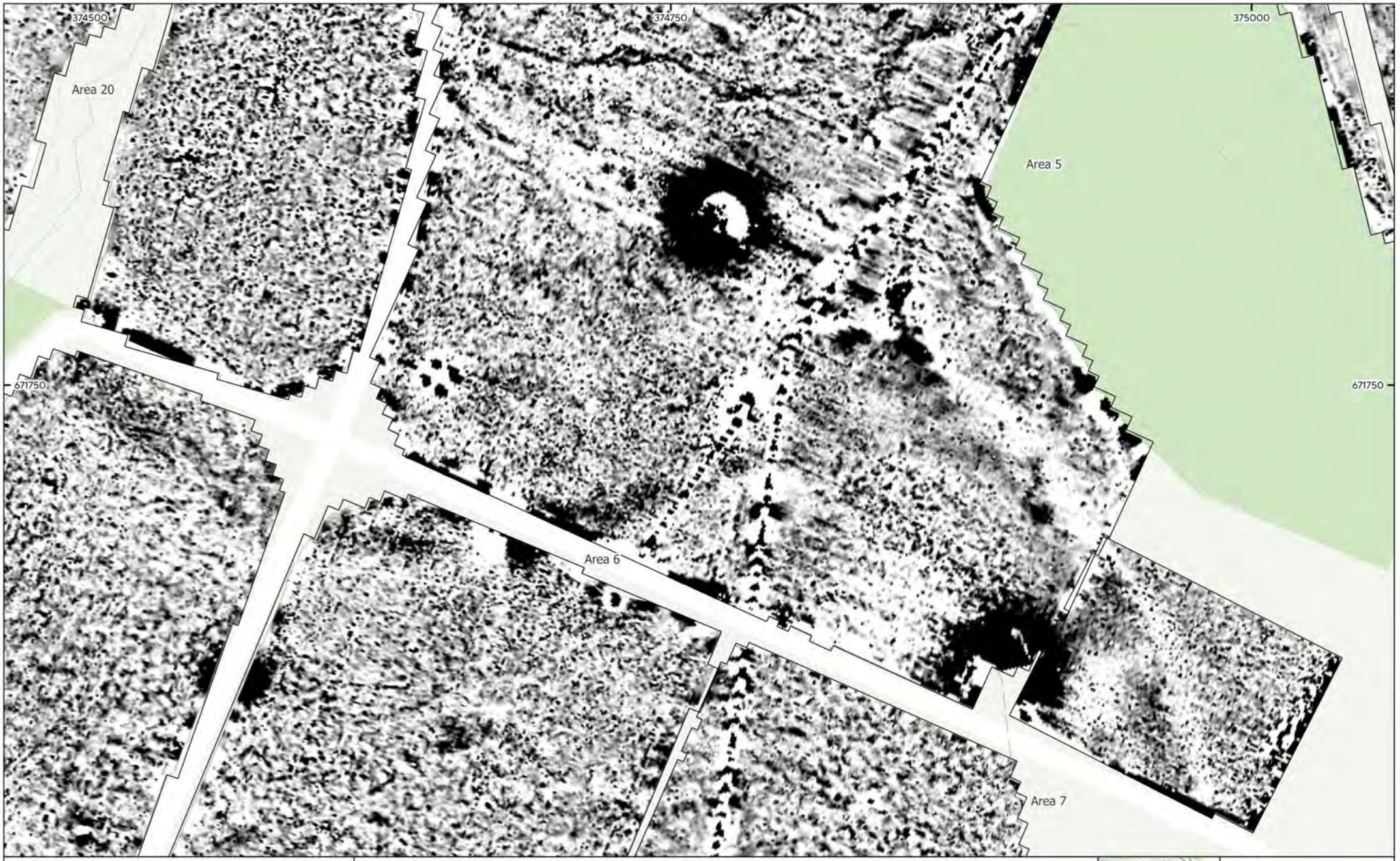
0 15 30 45 60 m



MSNT1875 - Springfield, East Lothian
Figure 29 - XY Trace Plot (Areas 5 & 20)
1:1,500 @ A3

Magnitude Surveys

0 15 30 45 60 m



MSNT1875 - Springfield, East Lothian
Figure 30 - Magnetic Gradient (Areas 5 - 7)
1:1,500 @ A3

-1 nT 2

Magnitude Surveys

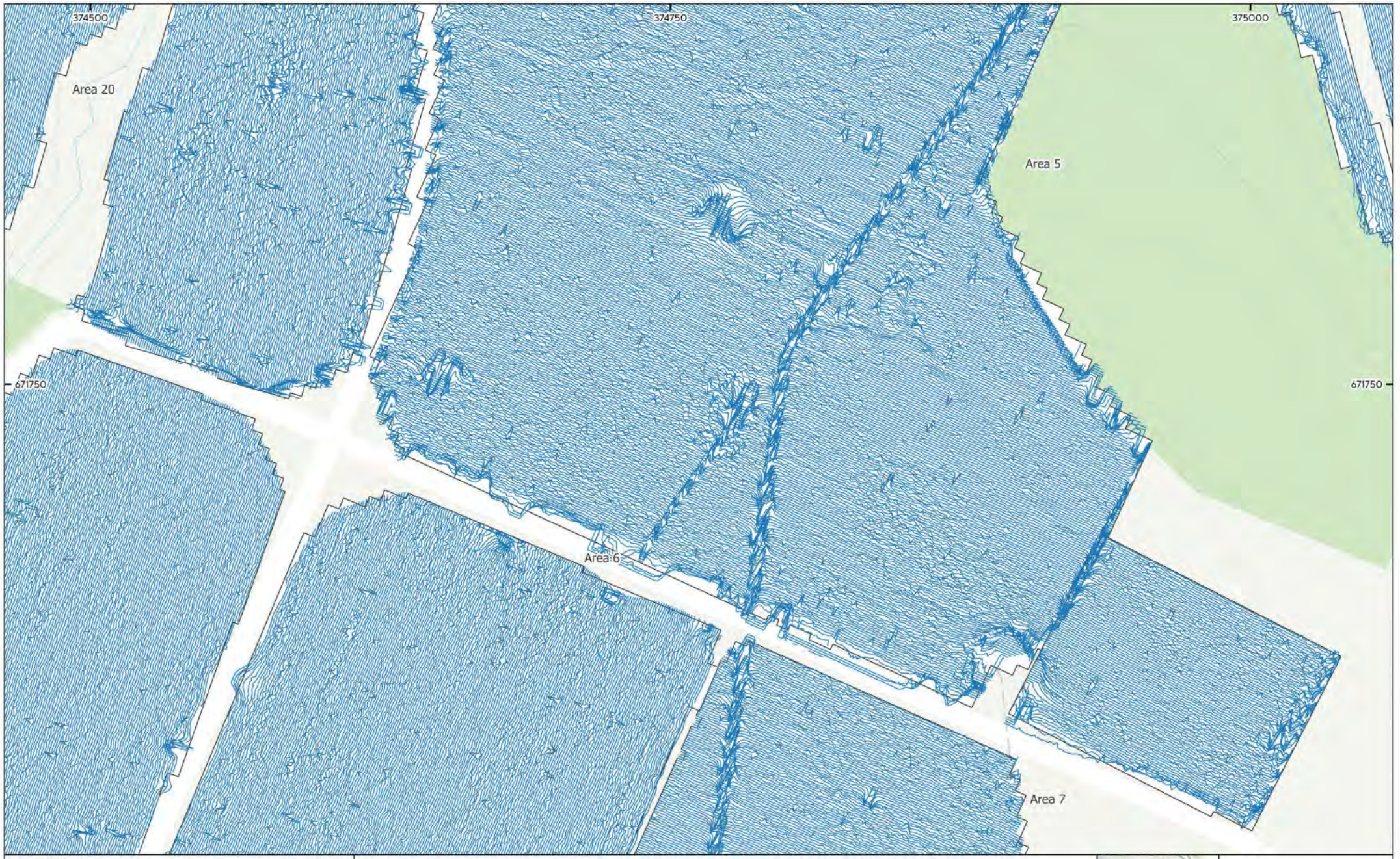
0 15 30 45 60 m

MSNT1875 - Springfield, East Lothian
Figure 31 - Magnetic Interpretation (Areas 5 - 7)
1:1,500 @ A3

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

Magnitude Surveys

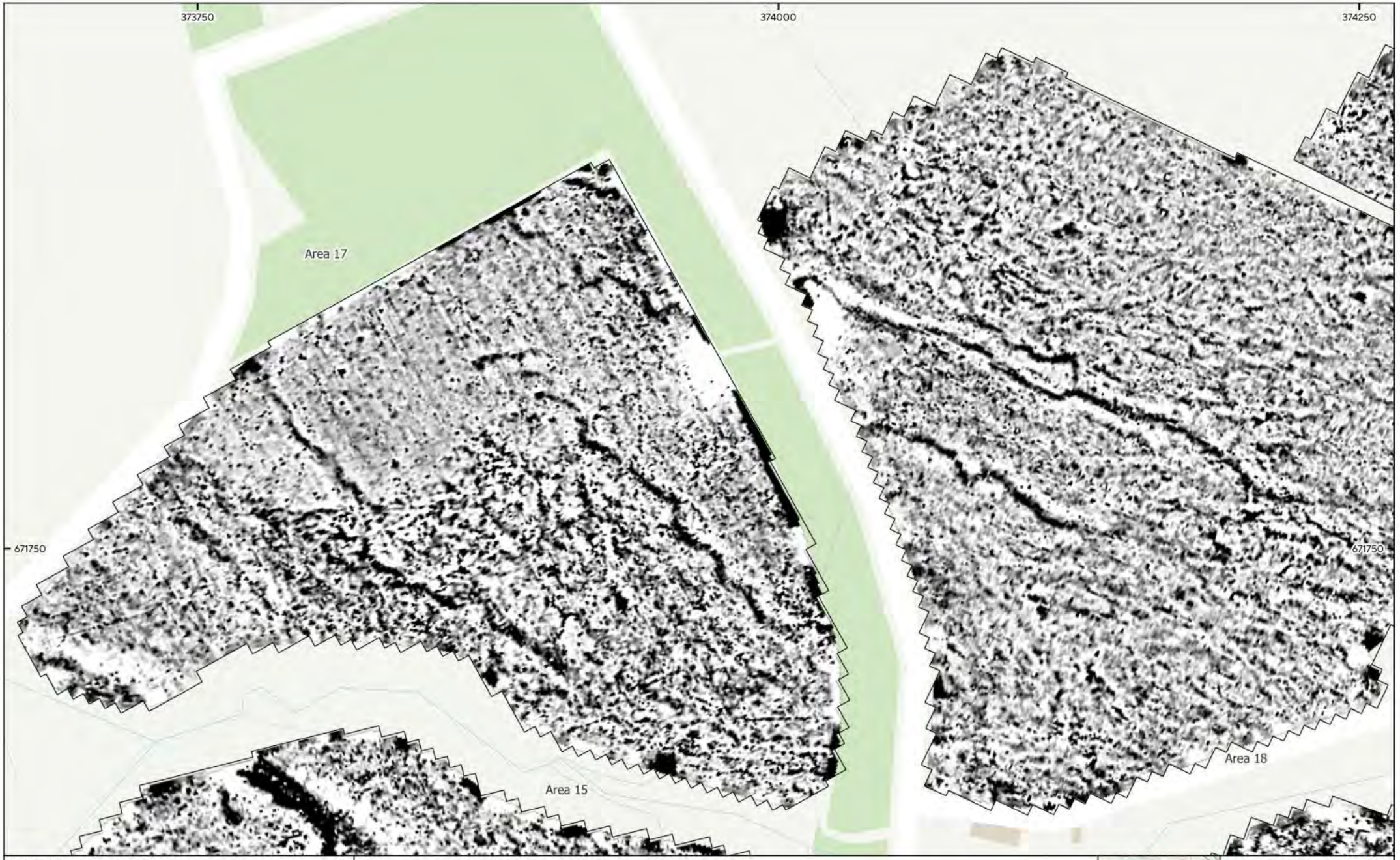
0 15 30 45 60 m



MSNT1875 - Springfield, East Lothian
Figure 32 - XY Trace Plot (Areas 5 - 7)
1:1,500 @ A3

Magnitude Surveys

0 15 30 45 60 m



MSNT1875 - Springfield, East Lothian
Figure 33 - Magnetic Gradient (Areas 17 & 18)
1:1,500 @ A3

-1 nT 2

Magnitude Surveys

0 15 30 45 60 m

MSNT1875 - Springfield, East Lothian
Figure 34 - Magnetic Interpretation (Areas 17 & 18)
1:1,500 @ A3

- Archaeology Possible (Weak)
- Magnetic Disturbance
- Ferrous/Debris (Spread)
- Natural (Spread)
- Natural (Strong)
- Natural (Weak)
- Undetermined (Weak)
- Lightning Strike
- Agricultural (Trend)
- Ferrous (Spike)

Magnitude Surveys

0 15 30 45 60 m

MSNT1875 - Springfield, East Lothian
Figure 35 - XY Trace Plot (Areas 17 & 18)
1:1,500 @ A3

Magnitude Surveys

0 15 30 45 60 m

MSNT1875 - Springfield, East Lothian
Figure 36 - Magnetic Gradient (Areas 13 & 15)
1:1,500 @ A3

-1 nT 2

Magnitude Surveys

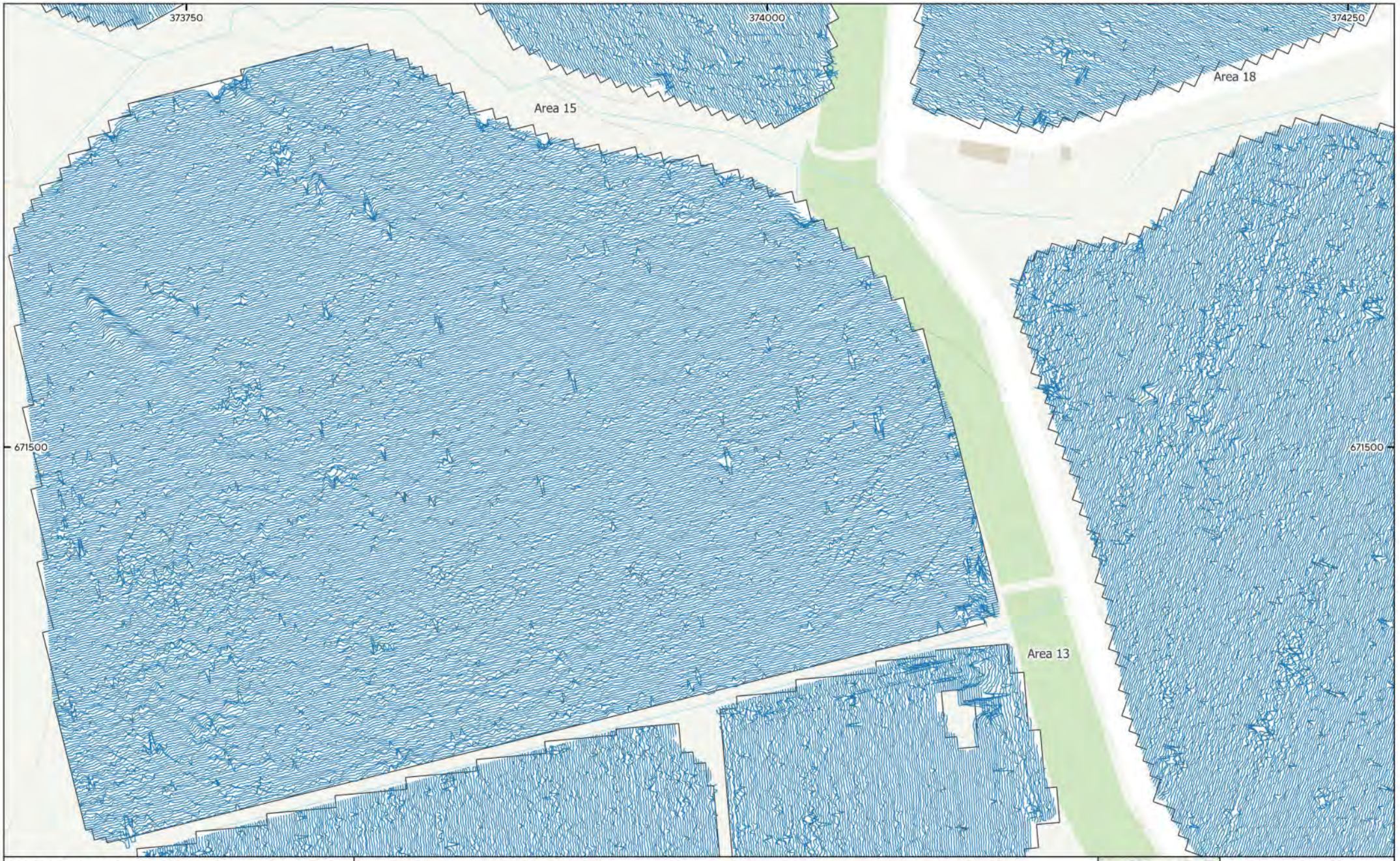
0 15 30 45 60 m

MSNT1875 - Springfield, East Lothian
Figure 37 - Magnetic Interpretation (Areas 13 & 15)
1:1,500 @ A3

Archaeology Possible (Weak)
Magnetic Disturbance
Ferrous/Debris (Spread)
Natural (Spread)
Natural (Strong)
Natural (Weak)
Undetermined (Strong)
Undetermined (Weak)
Lightning Strike
Agricultural (Trend)
Ferrous (Spike)

Magnitude Surveys

0 15 30 45 60 m



MSNT1875 - Springfield, East Lothian
Figure 38 - XY Trace Plot (Areas 13 & 15)
1:1,500 @ A3

Magnitude Surveys

0 15 30 45 60 m

MSNT1875 - Springfield, East Lothian
Figure 39 - Magnetic Gradient (Areas 13 & 14)
1:1,500 @ A3

-1 nT 2

Magnitude Surveys

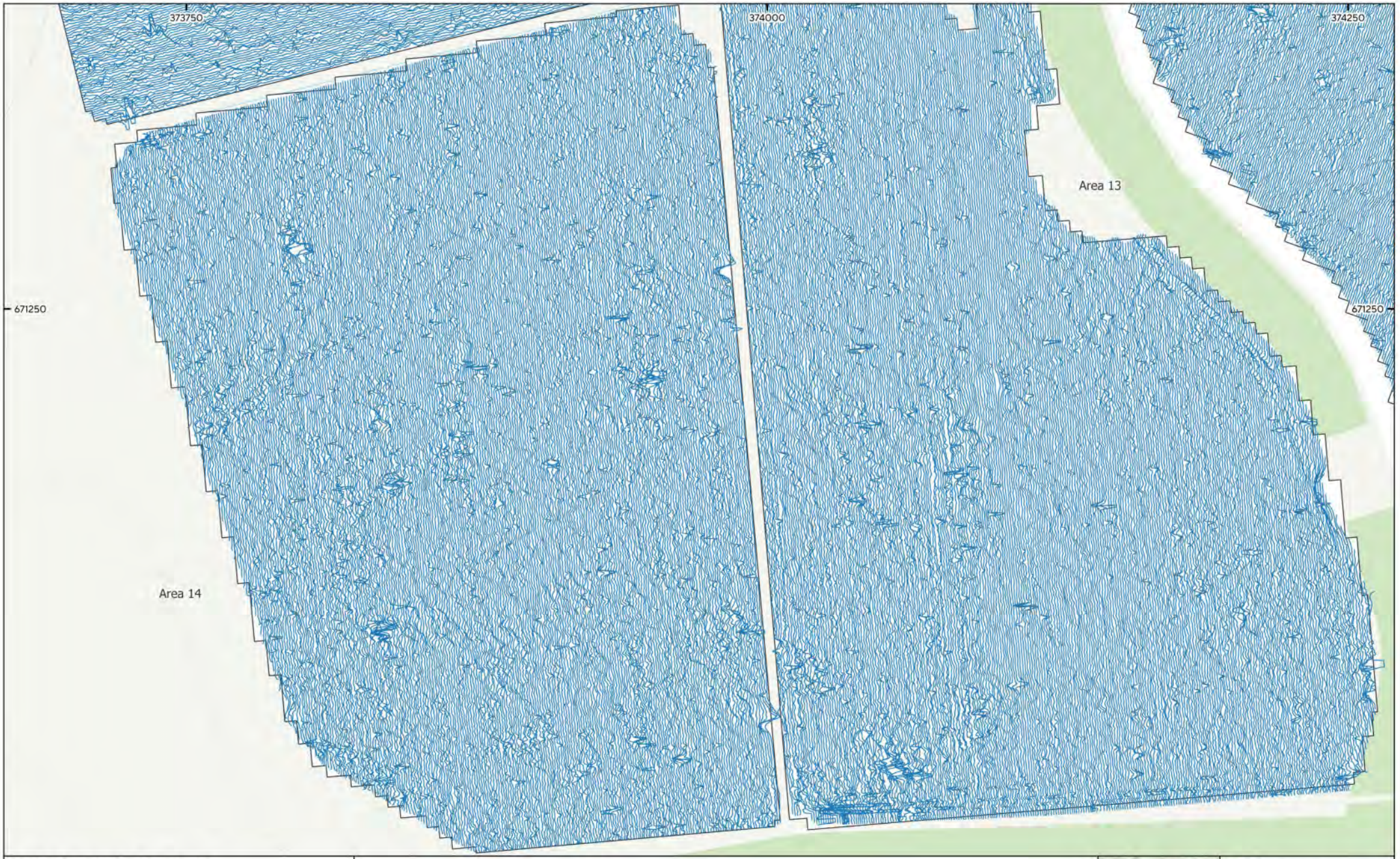
0 15 30 45 60 m

MSNT1875 - Springfield, East Lothian
Figure 40 - Magnetic Interpretation (Areas 13 & 14)
1:1,500 @ A3

Archaeology Possible (Weak)
Magnetic Disturbance
Ferrous/Debris (Spread)
Natural (Spread)
Natural (Weak)
Undetermined (Weak)
Ferrous (Spike)

Magnitude Surveys

0 15 30 45 60 m



MSNT1875 - Springfield, East Lothian
Figure 41 – XY Trace Plot (Areas 13 & 14)
1:1,500 @ A3

Magnitude Surveys

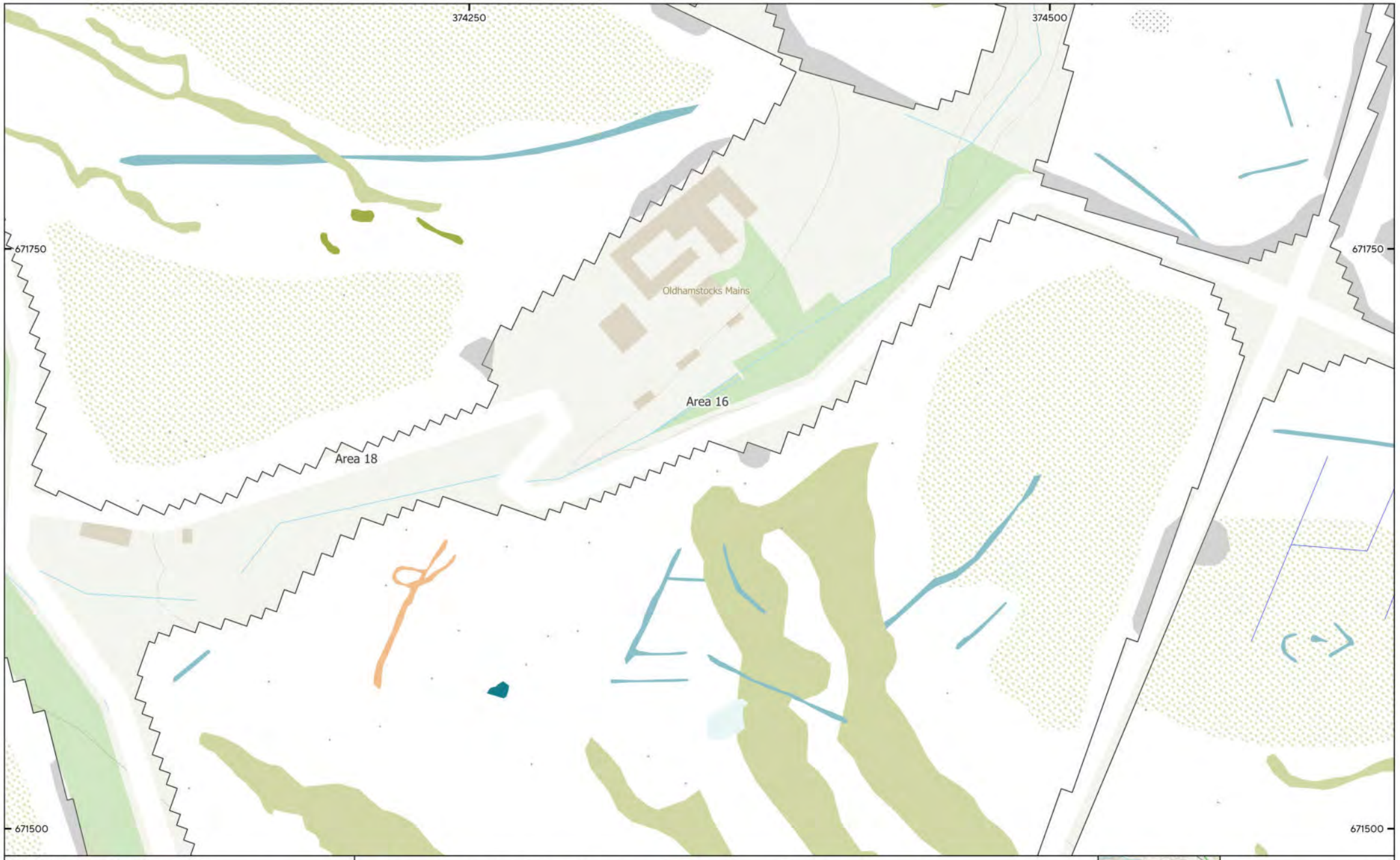
0 15 30 45 60 m

MSNT1875 - Springfield, East Lothian
Figure 42 - Magnetic Gradient (Areas 16 & 18)
1:1,500 @ A3

-1 nT 2

Magnitude Surveys

0 15 30 45 60 m



MSNT1875 - Springfield, East Lothian
Figure 43 - Magnetic Interpretation (Areas 16 & 18)
1:1,500 @ A3

- Archaeology Possible (Weak)
- Magnetic Disturbance
- Ferrous/Debris (Spread)
- Natural (Spread)
- Natural (Strong)
- Natural (Weak)
- Undetermined (Strong)
- Undetermined (Weak)
- Lightning Strike
- Drainage Feature
- Ferrous (Spike)

Magnitude Surveys

0 15 30 45 60 m

MSNT1875 - Springfield, East Lothian
Figure 44 - XY Trace Plot (Areas 16 & 18)
1:1,500 @ A3

Magnitude Surveys

0 15 30 45 60 m

MSNT1875 - Springfield, East Lothian
Figure 45 - Magnetic Gradient (Area 16)
1:1,500 @ A3

-1 nT 2

Magnitude Surveys

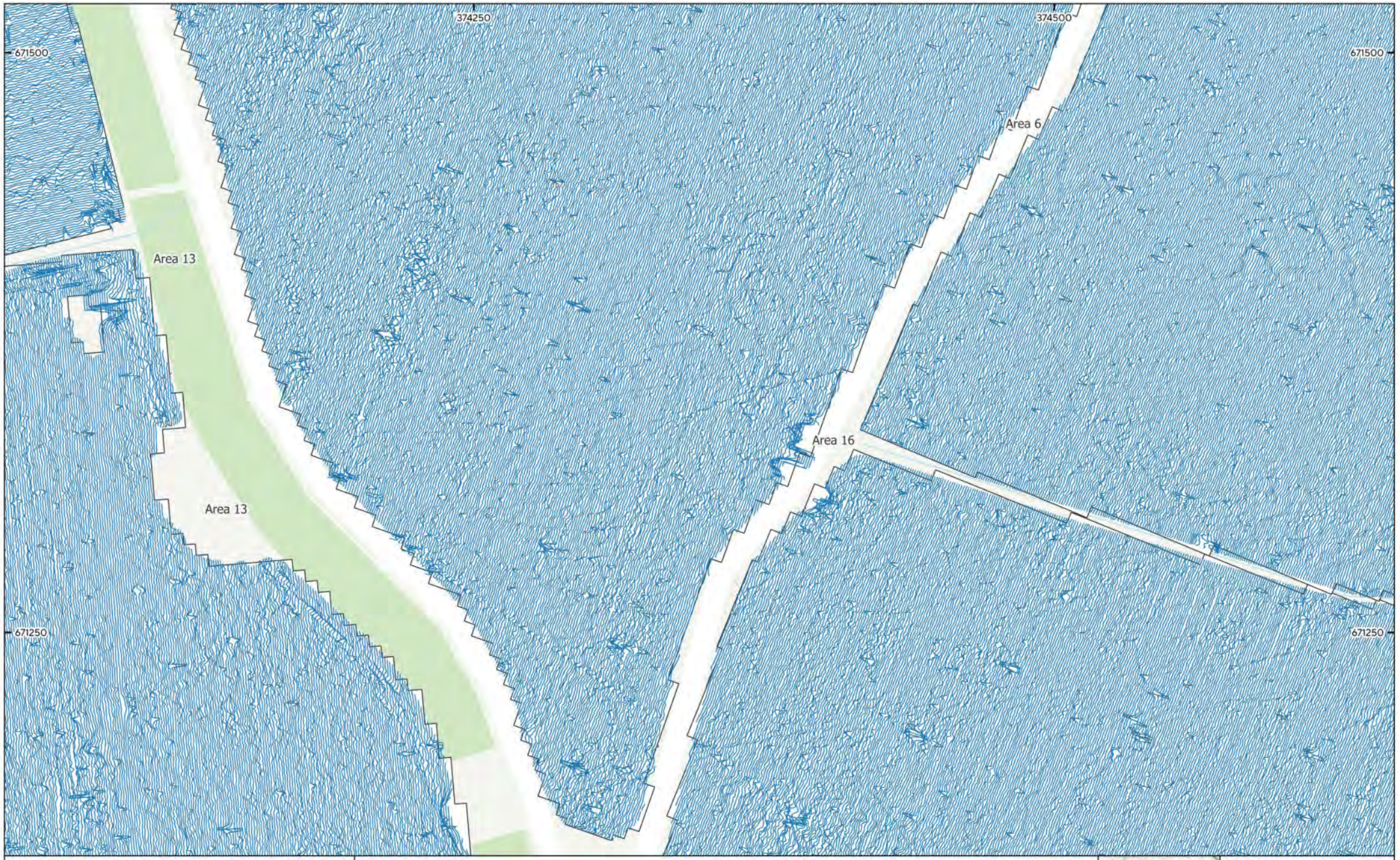
0 15 30 45 60 m

MSNT1875 - Springfield, East Lothian
Figure 46 - Magnetic Interpretation (Area 16)
1:1,500 @ A3

- Agricultural (Weak)
- Archaeology Possible (Weak)
- Magnetic Disturbance
- Ferrous/Debris (Spread)
- Natural (Spread)
- Natural (Weak)
- Undetermined (Weak)
- Lightning Strike
- Ferrous (Spike)

Magnitude Surveys

0 15 30 45 60 m



MSNT1875 - Springfield, East Lothian
Figure 47 - XY Trace Plot (Area 16)
1:1,500 @ A3

Magnitude Surveys

0 15 30 45 60 m

MSNT1875 - Springfield, East Lothian
Figure 48 - Magnetic Gradient (Areas 6 & 7)
1:1,500 @ A3

-1 nT 2

Magnitude Surveys

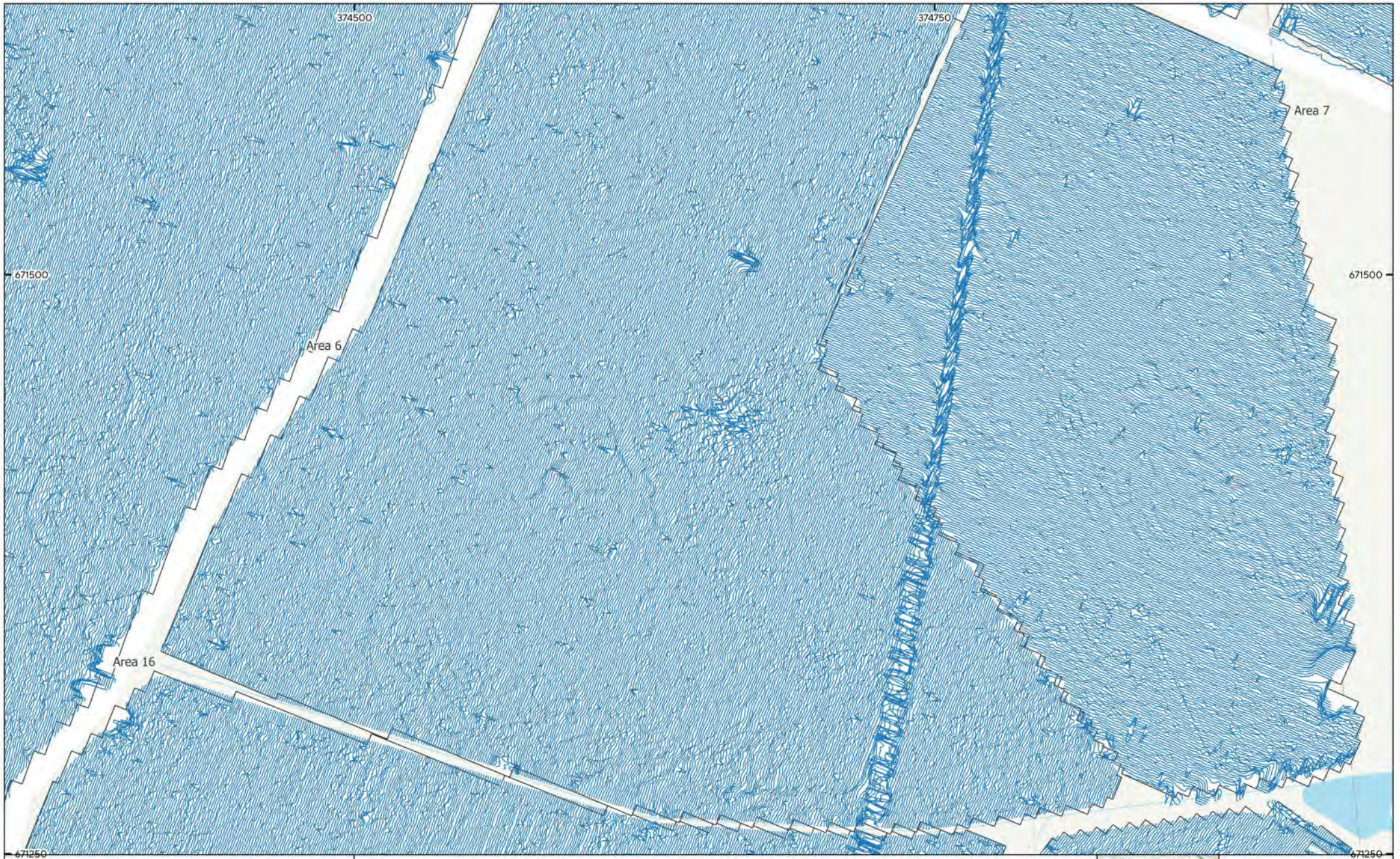
0 15 30 45 60 m

MSNT1875 - Springfield, East Lothian
Figure 49 - Magnetic Interpretation (Areas 6 & 7)
1:1,500 @ A3

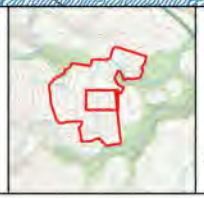
Archaeology Possible (Weak)
Magnetic Disturbance
Natural (Spread)
Natural (Weak)
Undetermined (Weak)
Lightning Strike
Service
Drainage Feature
Ferrous (Spike)

Magnitude Surveys

0 15 30 45 60 m

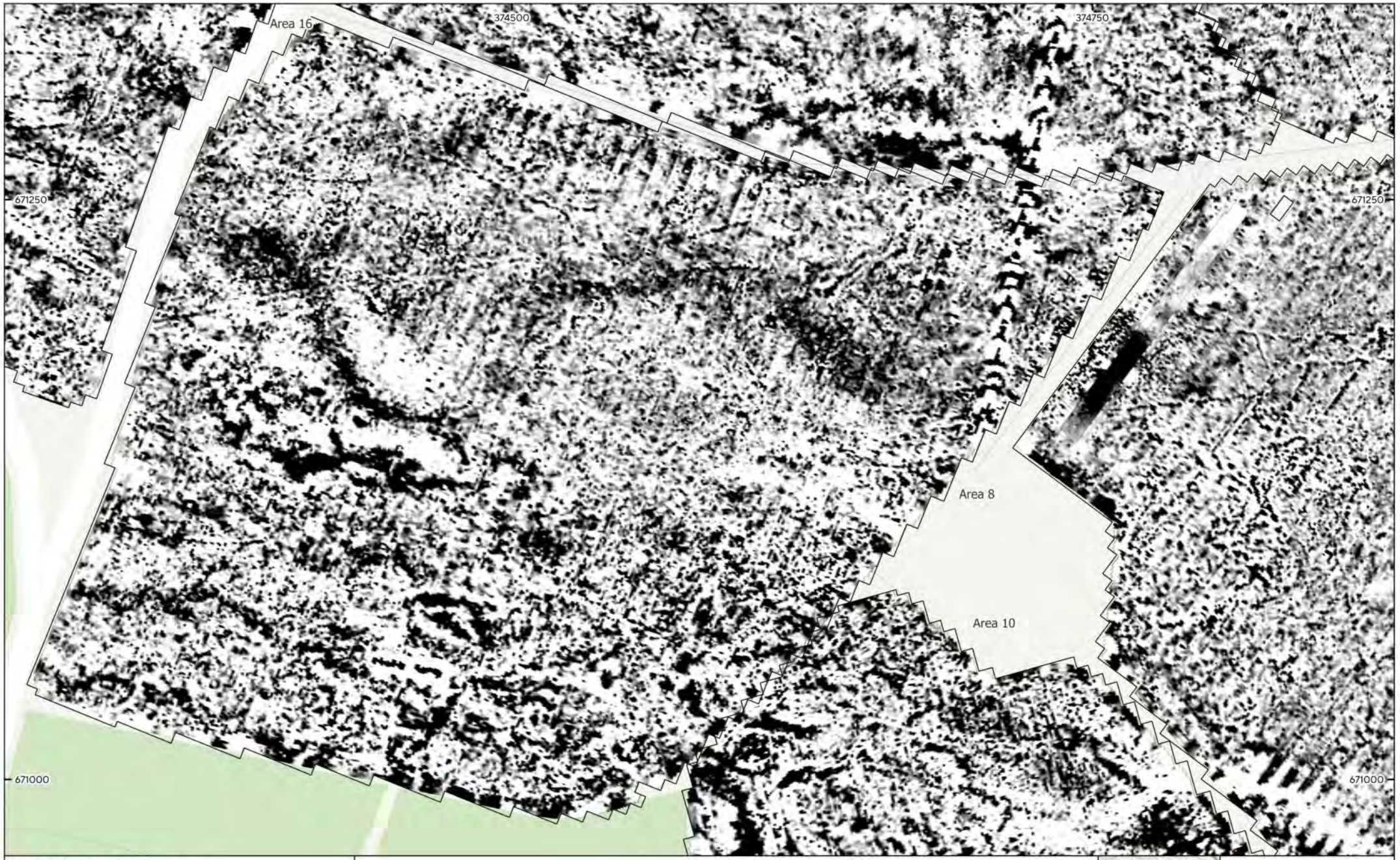


MSNT1875 - Springfield, East Lothian
Figure 50 - XY Trace Plot (Areas 6 & 7)
1:1,500 @ A3



Magnitude Surveys

0 15 30 45 60 m



MSNT1875 - Springfield, East Lothian
Figure 51 - Magnetic Gradient (Area 8)
1:1,500 @ A3

-1 nT 2

Magnitude Surveys

0 15 30 45 60 m

MSNT1875 - Springfield, East Lothian
Figure 52 - Magnetic Interpretation (Area 8)
1:1,500 @ A3

- Agricultural (Weak)
- Archaeology Possible (Weak)
- Magnetic Disturbance
- Ferrous/Debris (Spread)
- Natural (Spread)
- Natural (Strong)
- Natural (Weak)
- Undetermined (Weak)
- Agricultural (Trend)
- Service
- Drainage Feature
- Ferrous (Spike)

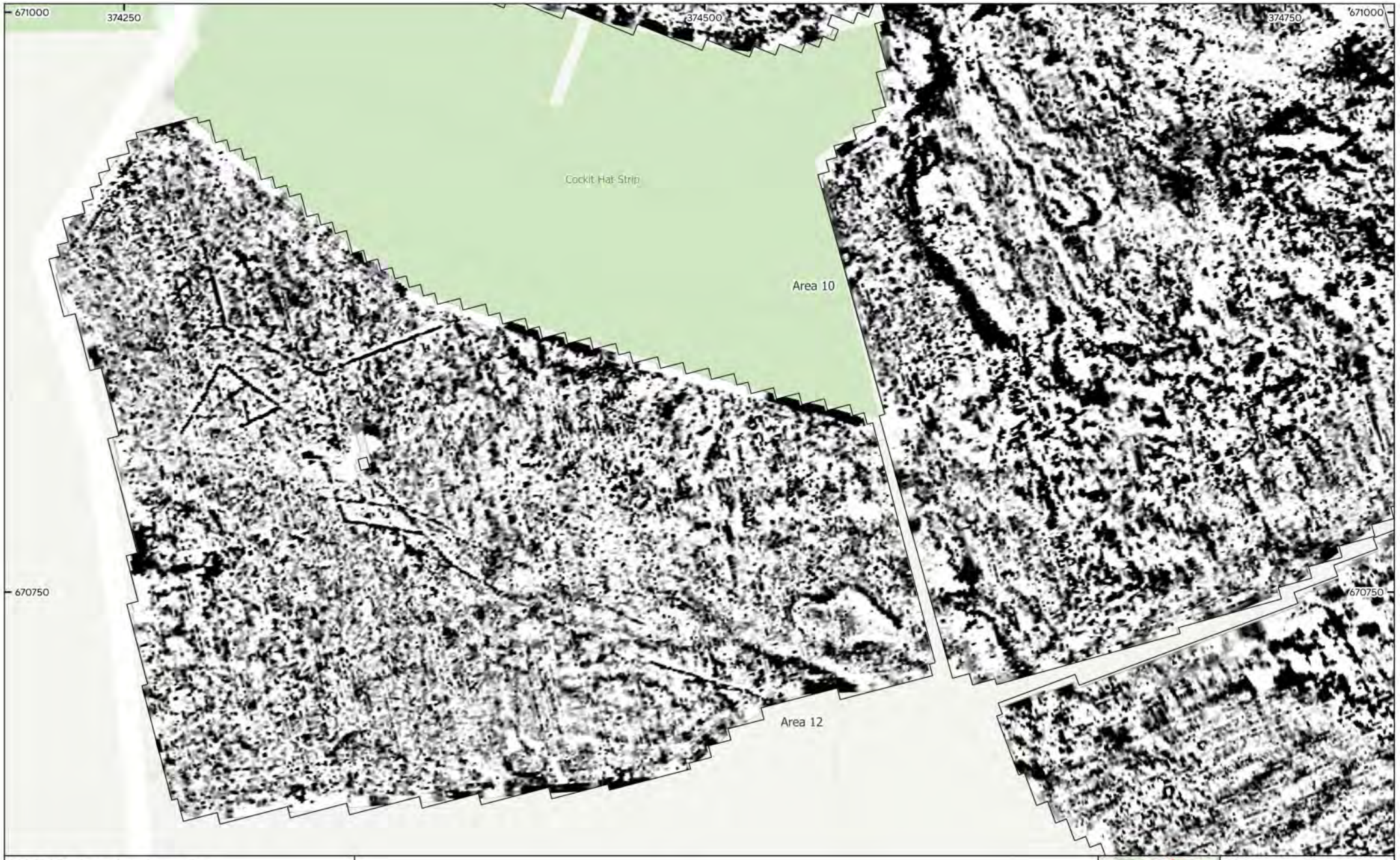
Magnitude Surveys

0 15 30 45 60 m

MSNT1875 - Springfield, East Lothian
Figure 53 - XY Trace Plot (Area 8)
1:1,500 @ A3

Magnitude Surveys

0 15 30 45 60 m



MSNT1875 - Springfield, East Lothian
Figure 54 - Magnetic Gradient (Areas 10 & 12)
1:1,500 @ A3

-1 nT 2

Magnitude Surveys

0 15 30 45 60 m

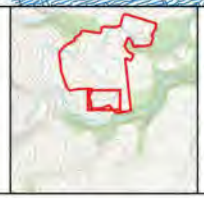
MSNT1875 - Springfield, East Lothian
Figure 55 - Magnetic Interpretation (Areas 10 & 12)
1:1,500 @ A3

- Archaeology Probable (Strong)
- Archaeology Probable (Weak)
- Magnetic Disturbance
- Ferrous/Debris (Spread)
- Natural (Spread)
- Natural (Strong)
- Natural (Weak)
- Undetermined (Weak)
- Ridge and Furrow (Trend)
- Ferrous (Spike)

Magnitude Surveys

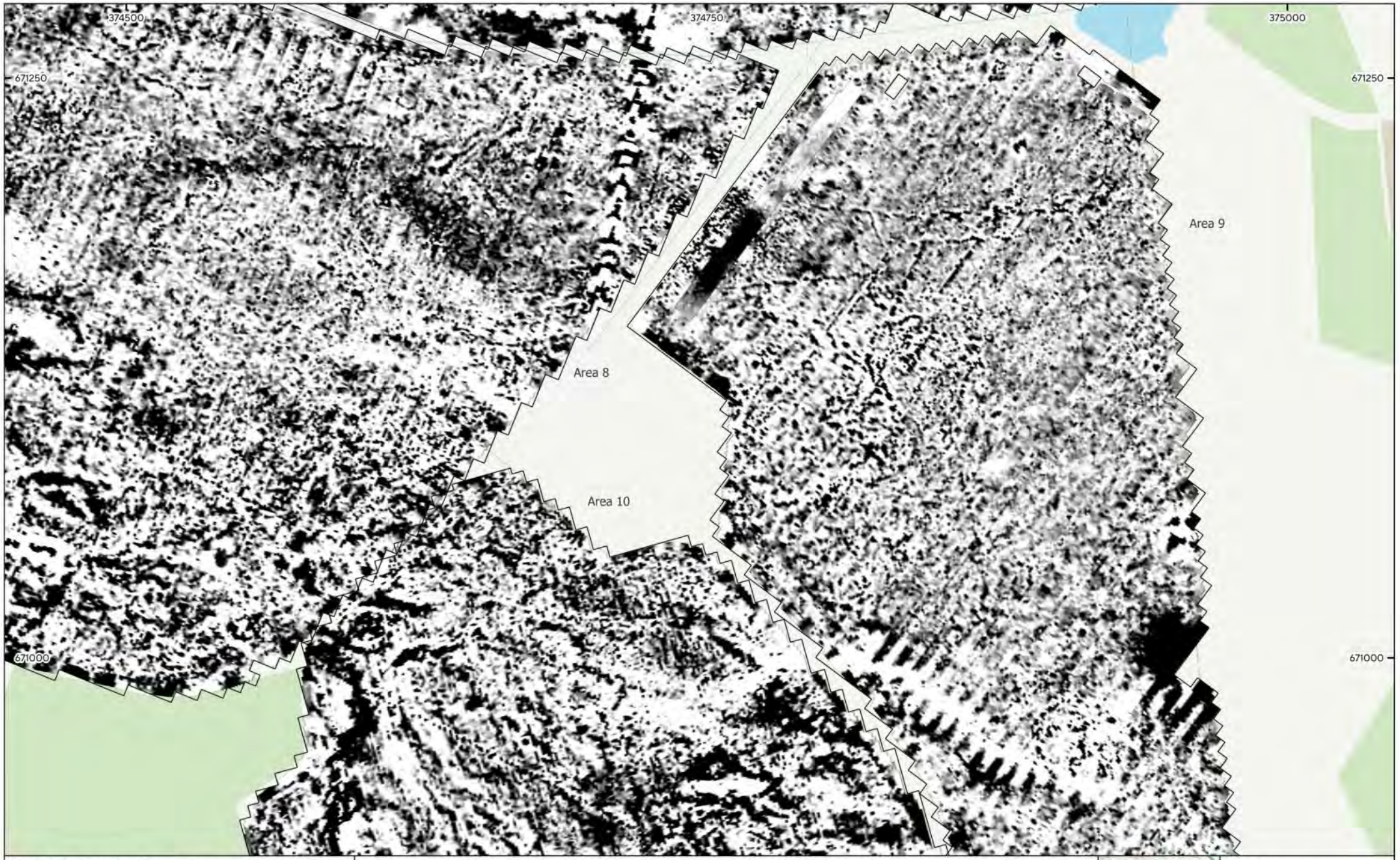
0 15 30 45 60 m

MSNT1875 - Springfield, East Lothian
Figure 56 - XY Trace Plot (Areas 10 & 12)
1:1,500 @ A3



Magnitude Surveys

0 15 30 45 60 m

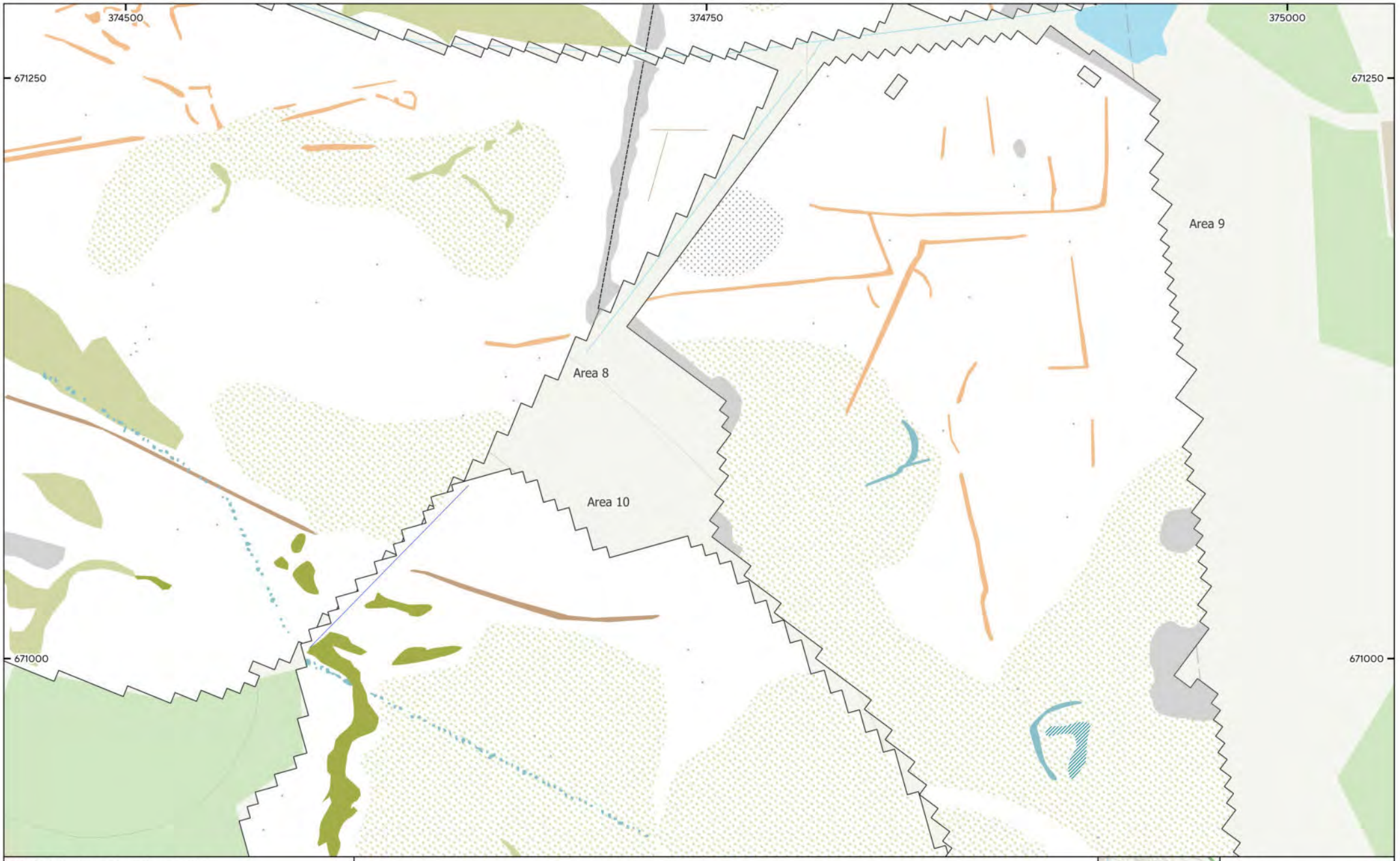


MSNT1875 - Springfield, East Lothian
Figure 57 - Magnetic Gradient (Areas 8 - 10)
1:1,500 @ A3

-1 nT 2

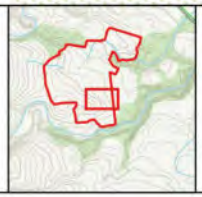
Magnitude Surveys

0 15 30 45 60 m



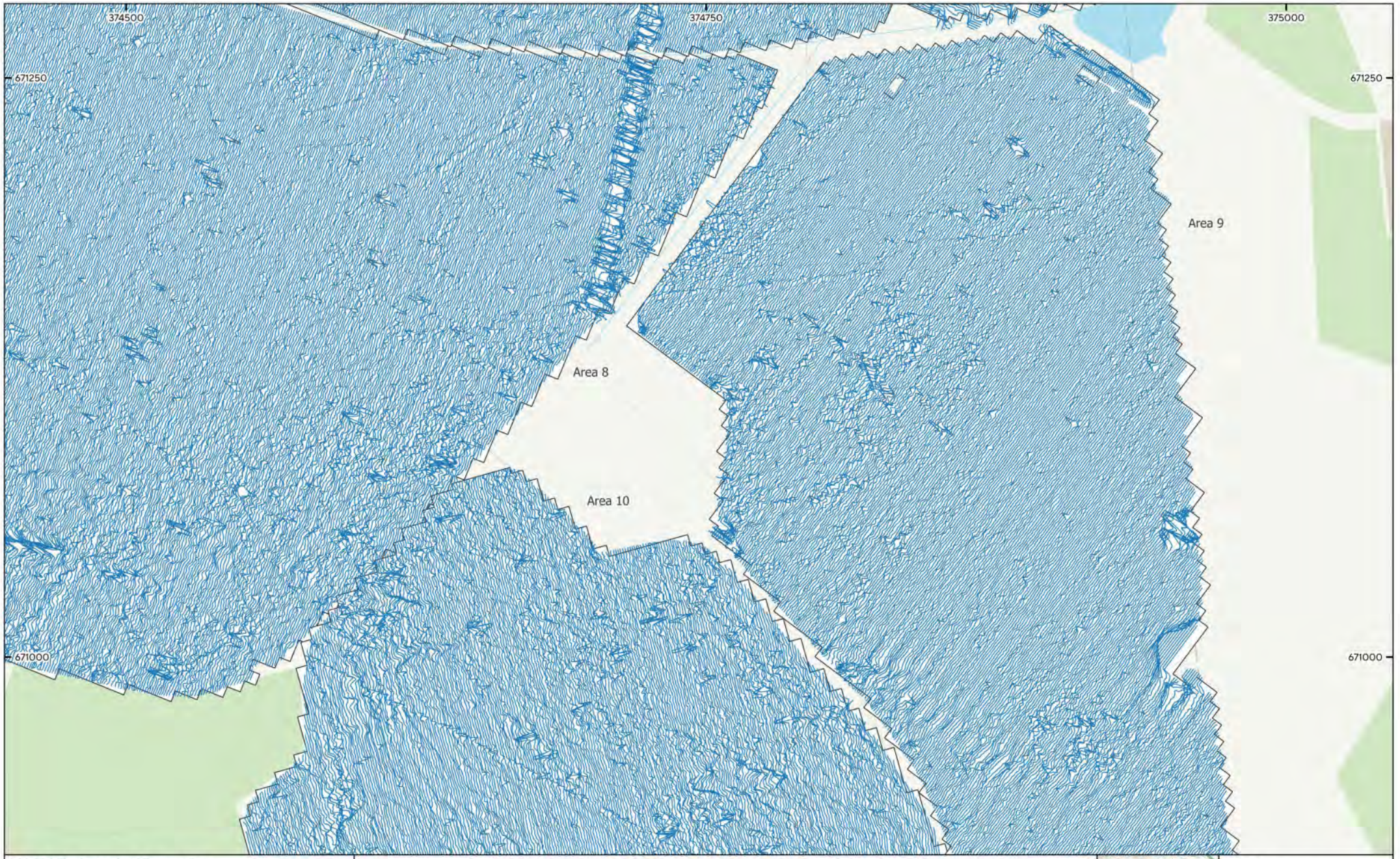
MSNT1875 - Springfield, East Lothian
Figure 58 - Magnetic Interpretation (Areas 8 - 10)
1:1,500 @ A3

- Agricultural (Weak)
- Archaeology Possible (Weak)
- Magnetic Disturbance
- Ferrous/Debris (Spread)
- Natural (Spread)
- Natural (Strong)
- Natural (Weak)
- Undetermined (Spread)
- Undetermined (Weak)
- Agricultural (Trend)
- Service
- Drainage Feature
- Ferrous (Spike)



Magnitude Surveys

0 15 30 45 60 m



MSNT1875 - Springfield, East Lothian
Figure 59 - XY Trace Plot (Areas 8 - 10)
1:1,500 @ A3

Magnitude Surveys

0 15 30 45 60 m

MSNT1875 - Springfield, East Lothian
Figure 60 - Magnetic Gradient (Areas 9 - 12)
1:1,500 @ A3

-1 nT 2

Magnitude Surveys

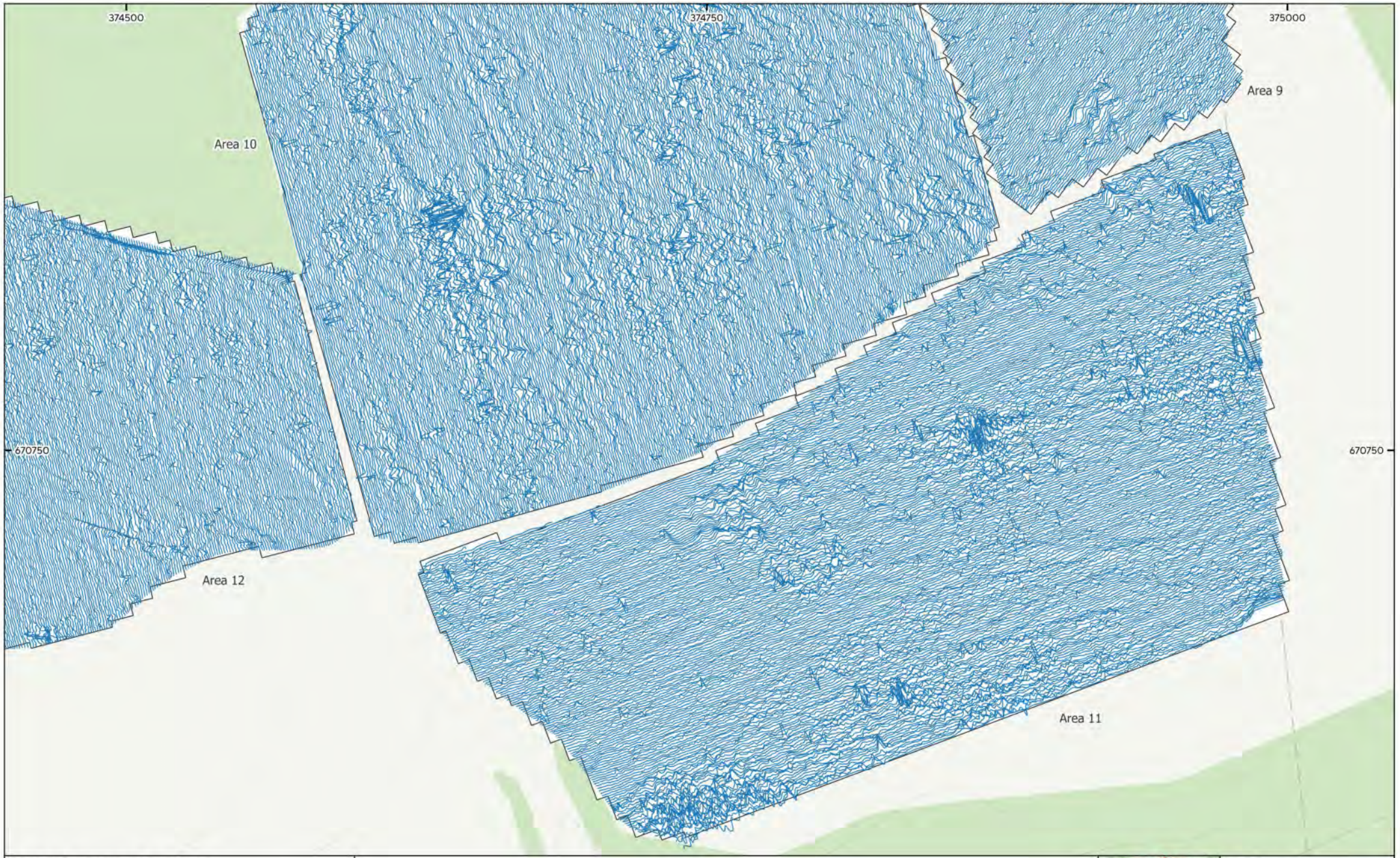
0 15 30 45 60 m

MSNT1875 - Springfield, East Lothian
Figure 61 - Magnetic Interpretation (Areas 9 - 12)
1:1,500 @ A3

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

Magnitude Surveys

0 15 30 45 60 m



MSNT1875 - Springfield, East Lothian
Figure 62 - XY Trace Plot (Areas 9 - 12)
1:1,500 @ A3

Magnitude Surveys

0 15 30 45 60 m