

HISTORIC ENVIRONMENT DESK-BASED ASSESSMENT

**LAND AT GREAT HOUGHTON
BARNLEY, SOUTH YORKSHIRE**

**PREPARED BY LANPRO SERVICES
ON BEHALF OF
HARRON HOMES**

September 2021



Project Reference: 2456/01

Document Prepared by: Mitchell Pollington MCIfA

Revision	Reason for Update	Document Updated

Contents

List of Figures	ii
List of Plates	ii
Non-Technical Summary	iii
1 INTRODUCTION	1
2 LEGISLATION, POLICY AND GUIDANCE.....	1
3 METHODOLOGY	9
4 SITE LOCATION AND DESCRIPTION	11
5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND	12
6 ASSESSMENT OF SIGNIFICANCE	16
7 IMPACT ASSESSMENT.....	17
8 CONCLUSIONS	18
9 REFERENCES	19

Figures

Plates

Appendix 1: Gazetteer

Appendix 2: Geophysical survey plans (ASWYAS 2021)

List of Figures

Figure 1. The study site and search area with the location of HER and NHLE records

Figure 2. Extract from the Great Houghton tithe map of 1840

Figure 3. Extract from the Ordnance Survey 6 inch map of 1854

Figure 4. Extract from the Ordnance Survey 25 inch map of 1892

Figure 5. Extract from the Ordnance Survey 25 inch map of 1906

Figure 6. Extract from the Ordnance Survey 25 inch map of 1930

Figure 7. Extract from the Ordnance Survey 25 inch map of 1950

Figure 8. Extract from the Ordnance Survey 1:2500 scale map of 1962

Figure 9. Extract from the Ordnance Survey 1:10,000 scale map of 1989

Figure 10. Aerial photograph of the study site with 'important' hedgerows highlighted (Google 2021)

List of Plates

Plate 1. The western side of the study site, looking north-east

Plate 2. The western side of the study site, looking south-west

Plate 3. The eastern side of the study site, looking north-east

Plate 4. The eastern side of the study site, looking south-west

Plate 5. Modern agricultural buildings on the south-western side of the study site, looking south-east

Plate 6. Modern agricultural buildings and silos on the south-western side of the study site, looking north-east

Non-Technical Summary

Lanpro was commissioned by Harron Homes to produce an historic environment desk-based assessment to inform a planning application for a proposed residential development of land at Great Houghton, Barnsley, South Yorkshire (centred at SE 4295 0703). The study site covers approximately 3.58ha, consisting primarily of an arable field and a field laid down to grass, with a farmyard containing modern agricultural buildings on its south-western side.

The historic environment desk-based assessment addresses the information requirements set out in the National Planning Policy Framework (NPPF) and provides the proportionate response sought by the NPPF. It draws together the available archaeological, historical, topographic and land-use information in order to clarify the significance and archaeological potential of the study site.

The assessment has established that there are no designated heritage assets in the study site and that the proposed development will have no impact upon any designated heritage assets in the surrounding area.

The assessment has identified sections of hedgerow forming field boundaries within the study site that could be considered 'important' within the criteria of the Hedgerows Act 1997. Although detailed development plans have not been finalised, the aim will be to retain the majority of the hedgerows to minimise any impact on the legibility of the overall field pattern.

The available archaeological records, combined with the results of a geophysical survey, suggest that there is very low potential for the survival of prehistoric and Roman period remains within the study site. The study site is likely to have remained primarily in agricultural use through the medieval and post-medieval periods. It is possible that buried remains relating to medieval or early post-medieval agriculture, such as ploughing or drainage features, could survive, but these would be considered to be of negligible significance. There may also be some potential for the survival of sub-surface remains relating to a former house situated on the north-western side of the study site, which was demolished in the middle of the 20th century, but it is considered that any such remains would be unlikely to be of greater than local significance.

1 INTRODUCTION

- 1.1 This historic environment desk-based assessment of land at Great Houghton, in the Metropolitan Borough of Barnsley, South Yorkshire, has been prepared by Lanpro Services Limited on behalf of Harron Homes. This assessment has been undertaken to inform a planning application for the proposed residential development of the study site.
- 1.2 This document provides an assessment of the potential for the survival of archaeological remains within the study site and assesses the potential impacts that the proposed development could have on these and other heritage assets in the vicinity.
- 1.3 The assessment has been undertaken to meet the requirements of the National Planning Policy Framework (NPPF; Section 16: 'Conserving and enhancing the historic environment'; revised July 2021) and is in line with the Chartered Institute for Archaeologists (CIfA) guidelines *Standard and guidance for historic environment desk-based assessment* (CIfA 2020).

2 LEGISLATION, POLICY AND GUIDANCE

- 2.1 In considering any planning application for development, the local planning authority will be guided by current legislation, the policy framework set by government planning policy, by current Local Plan policy and by other material considerations.

Current Legislation

- 2.2 The applicable legislative framework is summarised as follows:
- Ancient Monuments and Archaeological Areas Act (AMAAA) 1979;
 - Planning (Listed Buildings and Conservation Areas) (P(LBCA)) Act 1990
- 2.3 The AMAAA largely relates to Scheduled Monuments (SMs) and designated archaeological areas, detailing in particular what can and cannot be undertaken on archaeological grounds.
- 2.4 The Planning (Listed Buildings and Conservation Areas) Act 1990 (the 1990 Act) provides for the protection of listed buildings and Conservation Areas and is largely expressed in the planning process through policies in regional and local planning guidance, as outlined below. This act is the primary legislative instrument addressing the treatment of listed buildings and Conservation Areas through the planning process.
- 2.5 Section 66 of the 1990 Act states that '*...in considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority or, as the case may be, the Secretary of State shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses*'.

2.6 Section 72 then adds that ‘...with respect to any buildings or other land in a Conservation Area, of any powers under any of the provisions mentioned in subsection (2), special attention shall be paid to the desirability of preserving or enhancing the character or appearance of that area’.

2.7 As far as Section 72 is concerned, it has previously been established by the Courts that development which does not detract from the character or appearance of a Conservation Area is deemed to be in accordance with the legislation. In other words, there is no statutory requirement to actively ‘enhance’.

National Planning Policy Framework

2.8 Section 16 of the NPPF (revised July 2021), entitled *Conserving and enhancing the historic environment* provides guidance for planning authorities, property owners, developers and others on the conservation and investigation of heritage assets.

2.9 Overall, the objectives of Section 16 of the NPPF can be summarised as seeking the:

- Delivery of sustainable development
- Understanding the wider social, cultural, economic and environmental benefits brought by the conservation of the historic environment, and
- Conservation of England's heritage assets in a manner appropriate to their significance

2.10 Section 16 of the NPPF recognises that intelligently managed change may sometimes be necessary if heritage assets are to be maintained for the long term. Paragraph 194 states that planning decisions should be based on the significance of the heritage asset, and that the level of detail supplied by an applicant should be proportionate to the importance of the asset and should be no more than sufficient to review the potential impact of the proposal upon the significance of that asset.

2.11 A Heritage Asset is defined in Annex 2 of the NPPF as: ‘A building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions, because of its heritage interest. It includes designated heritage assets and assets identified by the local planning authority (including local listing).’

2.12 Annex 2 also defines ‘Archaeological Interest’ as a heritage asset which holds or potentially could hold, evidence of past human activity worthy of expert investigation at some point. Heritage Assets with archaeological interest are the primary source of evidence about the substance and evolution of places, and of the people and cultures that made them.

2.13 A Designated Heritage Asset comprises a World Heritage Site, Scheduled Monument, Listed Building, Protected Wreck Site, Registered Park and Garden, Registered Battlefield or Conservation Area.

- 2.14 Significance is defined as: *'The value of a heritage asset to this and future generations because of its heritage interest. The interest may be archaeological, architectural, artistic or historic. Significance derives not only from a heritage asset's physical presence, but also from its setting. For World Heritage Sites, the cultural value described within each site's Statement of Outstanding Universal Value forms part of its significance.'*
- 2.15 In short, government policy provides a framework which:
- Protects nationally important designated Heritage Assets (which include World Heritage Sites, Scheduled Ancient Monuments, Listed Buildings, Protected Wreck Sites, Registered Parks and Gardens, Registered Battlefields or Conservation Areas)
 - Protects the settings of such designations
 - In appropriate circumstances seeks adequate information (from desk based assessment and field evaluation where necessary) to enable informed decisions
 - Provides for the excavation and investigation of sites not significant enough to merit in situ preservation

Planning Practice Guidance

- 2.16 The Planning Practice Guidance is a web-based resource which is to be used in conjunction with the NPPF. It is aimed at planning professionals and prescribes best practice within the planning sector. The relevant section is entitled *'Conserving and enhancing the historic environment'*. The guidance given in this section sets out the best practice to applying government policy in the NPPF.

Local Planning Policy

- 2.17 Barnsley's Local Plan was adopted on 3rd January 2019 and sets out how the council will manage physical development of the borough on behalf of residents and businesses.

Policy HE1 The Historic Environment

We will positively encourage developments which will help in the management, conservation, understanding and enjoyment of Barnsley's historic environment, especially for those assets which are at risk.

This will be achieved by:-

a. Supporting proposals which conserve and enhance the significance and setting of the borough's heritage assets, paying particular attention to those elements which contribute most to the borough's distinctive character and sense of place.

These elements and assets include:-

The nationally significant industrial landscapes of the Don Valley which includes Wortley Top Forge and its associated water management system.

Elsecar Conservation Village, its former ironworks and its workshops which were once part of the Fitzwilliam Estate.

A number of important 18th and 19th century designed landscapes and parks including Wentworth Castle parkland (the only grade I Registered Park and Garden in South Yorkshire), and Cannon Hall Park.

The well preserved upstanding remains of the Cluniac and Benedictine monastery at Monk Bretton.

18 designated conservation areas of special and architectural interest including three town centre conservation areas, as well as large areas incorporating Stainborough Park, Cawthorne, Penistone and Thurlstone.

The 17th century Rockley Blast Furnace and its later engine house.

Gunthwaite Hall Barn, a large 16th century timber framed barn.

Barnsley Main Colliery Engine House and Pithead structures.

The 17th century Worsbrough Mill (the only historic working water mill in South Yorkshire).

Relatively widespread evidence of pre-historic settlements, and occupation which are often archaeological and below ground but sometimes expressed as physical or topographic features.

The boroughs more rural western and Pennine fringe characterised by upland and (often) isolated settlements or farmsteads surrounded by agricultural land and dominated by historic and vernacular buildings built from local gritstone.

b. By ensuring that proposals affecting a designated heritage asset (or an archaeological site of national importance such as a Scheduled Ancient Monument) conserve those elements which contribute to its significance. Harm to such elements will be permitted only where this is outweighed by the public benefits of the proposal. Substantial harm or total loss to the significance of a designated heritage asset (or an archaeological site of national importance) will be permitted only in exceptional circumstances where there is a clearly defined public benefit.

c. By supporting proposals that would preserve or enhance the character or appearance of a conservation area. There are 18 conservation areas in the borough and each is designated for its particular built and historic significance. This significance is derived from the group value of its constituent buildings, locally prevalent styles of architecture, historic street layouts and its individual setting which frequently includes views and vistas both into and out of the area. Particular attention will be given to those elements which have been identified in a Conservation Area Appraisal as making a positive contribution to its significance.

d. By ensuring that proposals affecting an archaeological site of less than national importance or sites with no statutory protection conserve those elements which contribute to its significance in line with the importance of the remains. In those cases where development affecting such sites is acceptable in principle, mitigation of damage will be ensured through preservation of the remains in situ as a preferred solution. When in situ preservation is not justified, an understanding of the evidence to be lost must be gained in line with the provisions of Policy HE6.

e. By supporting proposals which conserve Barnsley's non-designated heritage assets. We will ensure that developments which would harm or undermine the significance of such assets, or their contribution to the character of a place will only be permitted where the benefits of the development would outweigh the harm.

f. By supporting proposals which will help to secure a sustainable future for Barnsley's heritage assets, especially those identified as being at greatest risk of loss or decay

Policy HE2 Heritage Statements and general application procedures

Proposals that are likely to affect known heritage assets or sites where it comes to light there is potential for the discovery of unrecorded heritage assets will be expected to include a description of the heritage significance of the site and its setting.

This description will need to include an appropriate but proportionate level of detail that allows an understanding of the significance of the asset but no more than is necessary to understand the impact of the proposal. For sites with significant archaeological potential, a desk based assessment may be required in line with the provisions of Policy HE6.

Applications made in outline form will not be accepted for proposals which will which affect a conservation area, a listed building or any other designated heritage asset. In such cases, sufficiently detailed plans and drawings to enable an assessment to be made of the likely impact of the development upon the significance of any heritage assets affected will be required.

Policy HE6 Archaeology

Applications for development on sites where archaeological remains may be present must be accompanied by an appropriate archaeological assessment (including a field evaluation if necessary) that must include the following:

Information identifying the likely location and extent of the remains, and the nature of the remains;

An assessment of the significance of the remains; and

Consideration of how the remains would be affected by the proposed development.

Where preservations of the remains are not justified, permission will be conditional upon:-

Archaeological recording of the evidence (including evidence that might be destroyed), whether buried remains or part of a standing structure or building;

Analysis of the information gathered; Interpretation of the results gained;

Public dissemination of the results; and

Deposition of the resulting archive with an appropriate museum or archive service.

Hedgerow Regulations

- 2.18 The Hedgerow Regulations 1997, made under section 97 of the Environment Act 1995 set out criteria that must be used in determining which hedgerows are ‘important’. These Regulations apply to any hedgerow growing in, or adjacent to, any common land, protected land, or land used for agriculture, forestry or the breeding or keeping of horses, ponies or donkeys, if—
- i) it has a continuous length of, or exceeding, 20 metres; or
 - ii) it has a continuous length of less than 20 metres and, at each end, meets (whether by intersection or junction) another hedgerow
- 2.19 The regulations do not apply to hedgerows which mark the boundary of the curtilage of a dwelling-house even though the land on the other side may be used for one of the purposes set out above. For example, where the hedgerow marks the boundary line between agricultural and residential land, such as the edge of a town, the regulations do not apply.
- 2.20 Regulation 8(4) indicates that a hedgerow is ‘important’ if:
- iii) it has been in existence for 30 years or more, and
 - iv) it satisfies at least one of the criteria set out in Part II of Schedule 1 to the Regulations.
- 2.21 Hedgerows of archaeological and historic importance are identified by the criteria in Paragraphs 1 to 5 of Part II of Schedule 1 to the Regulations.
- 2.22 Schedule 1, Part II, Criterion 1 states:

Schedule 1

Additional Criteria for Determining ‘Important’ Hedgerows

Part II: Criteria Archaeology and History

Paragraph 1. The hedgerow marks the boundary, or part of the boundary, of at least one historic parish or township; and for this purpose ‘historic’ means existing before 1850.

Paragraph 2. The hedgerow incorporates an archaeological feature which is:

(a) included in the schedule of monuments compiled by the Secretary of State under section 1 (schedule of monuments) of the Ancient Monuments and Archaeological Areas Act 1979; or

(b) recorded at the relevant date in a Sites and Monuments Record.

Paragraph 3. The hedgerow:

(a) is situated wholly or partly within an archaeological site included or recorded as mentioned in paragraph 2 or on land adjacent to and associated with such a site; and

(b) is associated with any monument or feature on that site.

Paragraph 4. The hedgerow:

(a) marks the boundary of a pre-1600 AD estate or manor recorded at the relevant date in a Sites and Monuments Record or in a document held at that date at a Record Office; or

(b) is visibly related to any building or feature of such an estate or manor.

Paragraph 5. The hedgerow:

(a) is recorded in a document held at the relevant date at a Record Office as an integral part of a field system pre-dating the Inclosure Acts; or

(b) is part of, or visibly related to, any building or other feature associated with such a system, and that system:

(i) is substantially complete; or

(ii) is of a pattern which is recorded in a document prepared before the relevant date by a local planning authority, within the meaning of the 1990 Town and Country Planning Act, for the purposes of development control within the authority's area, as a key landscape characteristic.

- 2.23 Several of the criteria refer to records made before 'the relevant date', that is before the Regulations were made on 24th March 1997.
- 2.24 Further detail and guidance relating to the identification and documentation of archaeologically and historically important hedgerows is provided by *The Hedgerow Regulations 1997: A Guide to the Law and Good Practice* (DoE). Additionally, the interpretation of Schedule 1 Part II, Paragraph 5 has been defined by a Judicial Review case (Flintshire County Council v NAW & Mr J T Morris), with a subsequent amendment to the guide issued by DEFRA in 2002.
- 2.25 *The Hedgerow Regulations 1997: A Guide to the Law and Good Practice* (DoE) clarifies that the phrase 'pre-dating the Inclosure Acts' should be taken to mean before 1845 (whether or not Inclosure Acts exist for the area in question).
- 2.26 Several of the criteria refer to the 'Sites and Monuments Record' (SMR). The SMR has been retitled the Historic Environment Record (HER), however, its role remains identical.

Professional Guidance

- 2.27 The ClfA *Standard and Guidance for Historic Environment Desk-based Assessment* (2020) provides guidelines and recommendations for best practice in undertaking archaeological desk-based research and assessment.
- 2.28 The Historic England publication *Historic Environment Good Practice Advice in Planning Note 2: Managing Significance in Decision Taking in the Historic Environment* (2015) outlines a seven-stage process for the assembly and analysis of relevant information relating to heritage assets potentially affected by a proposed development:

- Understand the wider social, cultural, economic and environmental benefits brought by the conservation of the historic environment;
 - Understand the significance of the affected assets;
 - Understand the impact of the proposal on that significance;
 - Avoid, minimise and mitigate impact in a way that meets the objectives of the NPPF;
 - Look for opportunities to better reveal or enhance significance;
 - Justify any harmful impacts in terms of the sustainable development objective of conserving significance and the need for change; and
 - Offset negative impacts on aspects of significance by enhancing others through recording, disseminating and archiving archaeological and historical interest of the important elements of the heritage assets affected.
- 2.29 In order to understand the nature, extent and level of significance the note advocates considering the four types of heritage value an asset may hold, as identified in Conservation Principles (English Heritage 2008): aesthetic, communal, historic and evidential. Significance results from a combination of any, some or all of the values.
- 2.30 The Historic England publication *Historic Environment Good Practice Advice in Planning Note 3 (Second Edition): The Setting of Heritage Assets* (2017) recognises that whilst setting is not a heritage asset, elements of a setting ‘*may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral*’ (para. 4). Setting is described as being distinct to curtilage, character and context. This guidance also notes that the contribution of setting to the significance of a heritage asset is often expressed by reference to views, although the importance of setting lies in what it contributes to the significance of the heritage asset, and this can be influenced by a number of other factors.
- 2.31 In order to assess the contribution made by setting to the significance of a heritage asset, and the implications of new developments, the guidance recommends that a systematic and staged ‘5-step process’ to assessment should be adopted, namely:
- i) identify which heritage assets and their settings are affected;
 - ii) assess the degree to which these settings make a contribution to the significance of the heritage asset(s) or allow significance to be appreciated;
 - iii) assess the effects of the proposed development, whether beneficial or harmful, on that significance or on the ability to appreciate it;
 - iv) explore the way to maximise enhancement and avoid or minimise harm;
 - v) make and document the decision and monitor outcomes.

- 2.32 This report therefore follows steps (i) and (ii) to identify the local heritage assets and their settings and then makes an assessment of the potential impact of the proposed development having regard to steps (iii) and (iv).
- 2.33 The Historic England advice note, *Statement of Heritage Significance: Analysing Significance in Heritage Assets. Historic England Advice Note 12* (2019), brings together all of the above guidance in an analysis of an appropriate approach for applicants for heritage and other consents in providing an understanding of the significance of heritage assets in line with NPPF. This is aimed at providing assistance for owners, applicants, local planning authorities, planning and other consultants in the implementation of not only the guidance but also historic environment legislation and policy. It emphasises the level of detail required in support of both planning and listed building consent applications, which should be no more than is necessary, i.e. proportionate to the significance of the heritage asset affected, to reach an informed decision.

3 METHODOLOGY

Information Sources

- 3.1 The following sources of information have been consulted in order to meet the requirements of the assessment and are in line with the guidelines laid down by the ClfA (2020).

Heritage Assets

- 3.2 A gazetteer of all designated and non-designated heritage assets and archaeological records held on the South Yorkshire Historic Environment Record (HER) and the Historic England National Heritage List for England (NHLE) for within a 1km search area is provided in Appendix 1, and their locations marked on a plan in Figure 1.

Historical Documentary and Cartographic Sources

- 3.3 The holdings of the Barnsley Archives, together with on-line repositories, were consulted for historical maps and plans, and relevant documentary sources.

Published and Online Sources

- 3.4 A range of published and unpublished material has been consulted, including the online *South Yorkshire Historic Environment Research Framework* (SYHERF 2021).

Walkover Survey

- 3.1 A walkover survey was undertaken on 19th August 2021 in dry, clear conditions to provide an assessment of the character of the study site and appraise the potential impact of the proposed development on any heritage assets (Plates 1 to 6). The majority of the study site was divided between an arable field that had recently been harvested and a field containing a grass crop, with the southern end of the site occupied by a disused yard area and modern agricultural structures.

Geophysical Survey

- 3.2 An archaeological geophysical (magnetometer) survey was undertaken on 19th August 2021 (ASWYAS 2021). Anomalies relating to the agricultural activity were recorded, including possible medieval ridge and furrow and former field boundaries. Modern ploughing and field drains were present, with geological responses throughout. Magnetic disturbance towards the south of the study site was assigned to activity around the nearby farmyard. On the basis of this survey, the archaeological potential of this site was deemed to be low.

Assessment Criteria

Setting

- 3.3 The NPPF defines the setting of a heritage asset as: *'The surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve. Elements of a setting may make a positive or negative contribution to the significance of an asset, may affect the ability to appreciate that significance or may be neutral'*
- 3.4 Historic England's *Historic Environment Good Practice Advice in Planning Note 3: The Setting of Heritage Assets Setting* (2017) was used to inform the methodology for this assessment which follows steps i) to iv) outlined in the guidance.

Significance

- 3.5 Paragraph 194 of the NPPF (2021) states that planning decisions should be based on the significance of the heritage asset, and that the level of detail supplied by an applicant should be proportionate to the importance of the asset and should be no more than sufficient to review the potential impact of the proposal upon the significance of that asset.
- 3.6 It is recognised that not all parts of a heritage asset will necessarily be of equal significance. In some cases, certain elements could accommodate change without affecting the significance of the asset. Change is only considered harmful if it erodes an asset's significance. Understanding the significance of any heritage assets affected and any contribution made by their setting (paragraph 194, NPPF 2021) is therefore fundamental to understanding the scope for and acceptability of change.
- 3.7 Assessment of significance has been undertaken in accordance with the Historic England's *Statements of Heritage Significance. Analysing Significance in Heritage Assets* (2019).

Definition of Harm

- 3.8 Current guidance by Historic England is that 'change' does not equate to 'harm'. The NPPF and its accompanying PPG effectively distinguish between two degrees of harm to heritage assets – substantial and less than substantial. Paragraph 201 of the NPPF states that:
- 'Where a proposed development will lead to substantial harm to (or total loss of significance of) a designated heritage asset, local planning authorities should refuse consent, unless it can be demonstrated that the substantial harm or total loss is necessary to achieve substantial public benefits that outweigh that harm or loss...'*

3.9 Paragraph 202 of the NPPF states that:

‘Where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal...’

3.10 In determining the effects of the Proposed Scheme this assessment is cognisant of case law. Including the below:

- Flag Station, Mansel Lacy, Herefordshire [22/09/2015] Case Number EWHC 2688

3.11 This ruling has emphasised the primacy of the 1990 Planning Act – and the fact that it is up to the decision makers in the planning system to ‘have special regard to the desirability of preserving the [listed] building or its setting’. As stated by HH Judge David Cooke in a judgment of 22 September 2015 regarding the impact on the setting of a listed building:

‘It is still plainly the case that it is for the decision taker to assess the nature and degree of harm caused, and in the case of harm to setting rather than directly to a listed building itself, the degree to which the impact on the setting affects the reasons why it is listed.’

- PALMER Appellant and Herefordshire Council and ANR [04/11/16] Case No: C1/2015/3383

3.12 The judgment was agreed by Lord Justice Lewison at the Court of Appeal, who stated that:

‘It is also clear as a matter both of law and planning policy that harm (if it exists) is to be measured against both the scale of the harm and the significance of the heritage asset. Although the statutory duty requires special regard to be paid to the desirability of not harming the setting of a listed building, that cannot mean that any harm, however minor, would necessarily require planning permission to be refused.’

Limitations

3.13 All work relating to this assessment has been carried out in line with the guidance provided on the ClfA webpage *Coronavirus challenges: Standards and guidance advice* (ClfA 2021).

4 SITE LOCATION AND DESCRIPTION

4.1 The study site is situated on the north-western side of Great Houghton, in the Metropolitan Borough of Barnsley, South Yorkshire (centred at SE 4295 0703; Figure 1). The site is bounded to the west by Moor Lane (B6273) to the west of which are modern housing developments, to the north and east by fields and to the south by modern barns associated with Manor Farm and Hawthorne House Farm.

4.2 The study site covers approximately 3.58ha, consisting primarily of an arable field and a field laid down to grass, with a farmyard containing modern agricultural buildings on its south-western side. The ground level within the site is generally level and situated at a height of around 60m above Ordnance Datum (aOD).

- 4.3 The recorded bedrock geology across the majority of the study site comprises mudstone, siltstone and sandstone of the Pennine Upper Coal Measures Formation, although a band of sandstone of the Newstead Rock formation is recorded along the study site's south-western side. No superficial deposits are recorded (BGS 2021).

5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

Introduction

- 5.1 This section reviews existing archaeological evidence for the study site and the archaeological and historical background of the surrounding area, based on a consideration of evidence in the HER and the NHLE.
- 5.2 It is not the purpose of this document to create a detailed archaeological or historical narrative of the area, but to provide an assessment of the study site's historical development and archaeological potential in accordance with the NPPF.

Designated Heritage Assets

- 5.3 There are no designated heritage assets within the study site.
- 5.4 There is one designated heritage asset within the 1km search area; the Grade II* Listed Church of St Michael and All Saints, Great Houghton (NHLE 1151170). This is situated over 375m to the south of the study site, between which is modern residential development, and the study site is not intervisible with the church and does not have any historical associations with this building.
- 5.5 Therefore, following step i) of the Historic England setting guidance (2017; see Section 2.31), the Church of St Michael and All Saints, Great Houghton has been scoped out of further assessment.
- 5.6 There are no other designated heritage assets (i.e. Scheduled Monuments, Conservation Areas, Registered Parks and Gardens, Registered Battlefields or World Heritage Sites) within the search area.
- 5.7 The locations of all designated heritage assets within the search area are shown on Figure 1.

Non-designated Heritage Assets

- 5.8 There are no records held on the HER recorded within the study site.
- 5.9 The HER contains eleven 'monument' records for within or partly within the wider search area, including the Grade II* Listed Church of St Michael and All Saints which is also recorded on the NHLE.
- 5.10 Details of all HER records are listed in a gazetteer in Appendix 1 and their positions marked on Figure 1.

- 5.11 The HER records relating to archaeological remains, buildings, finds or investigations within the search area are divided by period in the following table. Some records cover more than one period.

Period	Within Study Site	Within Search Area
Prehistoric	0	7
Roman	0	7
Early medieval	0	0
Medieval	0	2
Post-medieval/19 th century	0	5
Modern	0	2
Unknown / Undated / None	0	2

Prehistoric and Roman Periods (c. 9500 BC – c. AD 410)

- 5.12 There is no recorded evidence for prehistoric or Roman period activity within the study site.
- 5.13 Aerial photographic analysis has identified possible enclosures of a probable Iron Age or Roman period origin across the search area. These include features such as a circular enclosure situated in a field around 900m to the north of the study site, enclosures to the west of Moor Lane (MSY4455; MSY 4456; MSY5668), field boundaries between Hodster Lane and Park Lane c.770m to the north-west of the study site (MSY6642), a sub-rectangular enclosure c.600m to the study site's south-west (MSY5893), and probable field systems on Sandhill to the south of Great Houghton (MSY5525). A geophysical survey undertaken together with a watching brief at the former Houghton Main Colliery also identified the remains of a possible Iron Age or Romano-British field system (MSY13018).
- 5.14 Although there is evidence for probable Iron Age and Roman period activity across the search area, this has all been identified at least 600m from the boundary of the study site. The geophysical survey undertaken to inform this assessment has not identified any anomalies that could represent prehistoric or Roman period activity. Therefore, it is considered that there is very low potential for the study site to contain archaeological remains dating to these periods.

Medieval Period (c. AD 410– c. 1540)

- 5.15 There is no recorded archaeological evidence for medieval activity within the study site.
- 5.16 A settlement is recorded at Great Houghton in the Domesday Book of 1086 (Williams and Martin 1992), with the name deriving from the Old English meaning ‘farmstead in a nook of land’ (Mills 2011, 248).
- 5.17 Archaeological evidence relating to the medieval period across the wider search area is, however, limited to earthwork remains of ridge and furrow recorded in West Haigh Wood, almost 1km to the north of the study site (MSY12578), and evidence of ridge and furrow identified during a watching brief at Houghton Main opencast coal site in 1997 (ESY1238).
- 5.18 The geophysical survey has recorded anomalies that may represent ridge and furrow ploughing, and the narrow form of the fields shown on the 1840 tithe map may also suggest that these field were enclosed following the alignment of medieval and early post-medieval field systems (see Figure 2). There is no evidence for medieval settlement within the vicinity of the study site, and it is likely that the site has remained in agricultural use from at least the medieval period. Therefore, any potential buried archaeological features dating to the medieval period within the study site are likely to relate to agricultural activity, such as ploughing or drainage, which would be considered to be of negligible significance.

Post-medieval and Modern Periods (c.1540 – Present)

- 5.19 The earliest large-scale map depicting the study site is the Great Houghton tithe map of 1840, which shows the site divided across all or parts of six parcels of land (Figure 2). The majority of the study site was divided between four narrow fields (Nos 20, 21, 23 and 24), which are named as crofts associated with the farms to the south on the tithe apportionment, and all of which were under grass at this time. A further narrow plot (no. 25) occupied the study site’s north-western edge and consisted of a house and garden. The south-western corner of the study site also occupied part of the north-western side of land recorded as forming part of a garden.
- 5.20 The first edition Ordnance Survey map of 1854 (Figure 3) shows the study site much as it was depicted on the earlier tithe map, albeit with the addition of a north-west to south-east aligned boundary sub-dividing one of the central fields. A possible pond was located at the corner of a field on the study site’s south-western side, to the south of which was an orchard.
- 5.21 By the time that the Ordnance Survey map of 1892 had been surveyed (Figure 4), the field boundary dividing the two main fields on the western side of the study site had been removed to create a single larger field, at the north-eastern corner of which three ponds had been dug which appear to have been accessed along a track running from the west. On the north-western edge of the study site, the house depicted on the earlier mapping appears to have been extended. A track is also shown curving across the south-western side of the study site, providing access between Moor Lane and the rear of Manor Farm.

- 5.22 The 1906 Ordnance Survey map shows little change to the study site, although two of the three ponds on its northern side had been infilled (Figure 5), and there was no significant changes within the study site until at least the 1950s (see Figures 6 to 7). By the early 1960s the house on the study site's north-western side appears to have been demolished, although the boundary of the plot in which it had been situated remained (see Figure 8).
- 5.23 There was extensive residential development to the west of the study site by the 1980s, along Crabtree Drive, and it appears that during this time Moor Lane was widened, with the remains of the area of the plot of the former house on the north-western side of the study site being merged with the study site's westernmost field. To the east, a further field boundary was removed creating the two main fields that exist today, with the study site's south-western corner occupied by small enclosures which, by the 1990s, were partly occupied by the present agricultural structures.
- 5.24 There may be some potential for the survival of sub-surface remains relating to the former house situated on the north-western side of the study site, which was demolished in the middle of the 20th century, but it is considered that any such remains would be unlikely to be of greater than local significance.
- 5.25 There may also be potential for the survival of buried remains relating to former post-medieval field boundaries, ponds and other agricultural activity within the study site, but these would be considered to be of negligible significance.

Hedgerows

- 5.26 The five criteria relating to the identification of archaeologically and historically important hedgerows are detailed in Section 2.22 above. Of these five criteria 5(a) can be found to apply to sections of hedgerow within the study site (see Figure 10).

Paragraph 5. The hedgerow:

(a) is recorded in a document held at the relevant date at a Record Office as an integral part of a field system pre-dating the Inclosure Acts;

- 5.27 The tithe map of 1840 (Figure 2) depicts what is now the boundary that divides the study site's two main fields, as well as the field boundaries forming the northern and eastern side of the study site, on the same alignment as the hedgerows that survive today. Figure 10 shows the extant sections of hedgerows that fulfil Criterion 5(a) of the Hedgerows Regulations 1997, which can be demonstrated to form part of a field system pre-dating 1845 and which are not currently within the curtilage of, or forming the curtilage boundary of adjacent dwellings. These hedgerows are therefore regarded as 'important' in terms of the regulations.

6 ASSESSMENT OF SIGNIFICANCE

- 6.1 Paragraph 194 of the NPPF states that planning decisions should be based on the significance of the heritage asset, and that the level of detail supplied by an applicant should be proportionate to the importance of the asset and should be no more than sufficient to review the potential impact of the proposal upon the significance of that asset.
- 6.2 It is recognised that not all parts of an archaeological asset will necessarily be of equal significance. In some cases, certain elements could accommodate change without affecting the significance of the asset. Change is only considered harmful if it erodes an asset's significance. Understanding the significance of any heritage assets affected and any contribution made by their setting (paragraph 195, NPPF 2021) is therefore fundamental to understanding the scope for and acceptability of change.

Designated Heritage Assets

- 6.3 The study site does not contain any designated heritage assets.
- 6.4 There is one Grade II* Listed Building within the 1km search area, the Church of St Michael and All Saints, Great Houghton (NHLE 1151170). This is situated over 375m to the south of the study site, between which is modern residential development, and the study site is not intervisible with the church and does not have any historical associations with this building. Therefore, the study site does not make any contribution to the significance of the Church of St Michael and All Saints.

Hedgerows

- 6.5 Although the hedgerows shown on Figure 10 are considered to be 'important' under the Hedgerow Regulations 1997 these are not considered to be designated heritage assets as defined by the NPPF. The NPPF describes a heritage asset as a building, monument, site, place, area or landscape identified as having a degree of significance meriting consideration in planning decisions because of its heritage interest. Given that hedgerow's are considered 'important' due to their historic significance and that their 'important' status merits their consideration in planning decisions they can be described as 'non-designated heritage assets' in terms of the NPPF.
- 6.6 The hedgerows themselves contain no evidential value or archaeological interest, i.e. they do not hold any evidence for past human activity worthy of archaeological investigation. The significance of the 'important' hedgerows is therefore vested in their historic value in relation to the understanding and survival of the pre-1845 field pattern, i.e. the pattern of land division and allocation established by the enclosure of the parish by the mid-19th century. They are considered to be of very limited potential to add to regional or national research objectives and as such are considered to be of no more than local significance.

Potential Sub-Surface Archaeological Remains

- 6.7 There is no previously recorded evidence for prehistoric or Roman period activity in the study site. Although prehistoric and Roman period remains are recorded within the wider search area, the geophysical survey has not identified any potential archaeological remains dating to these periods within the study site, and there is no evidence to suggest that remains of any significance dating to these periods would be present within the study site.
- 6.8 It is likely that the study site has remained in primarily agricultural use since at least the medieval period. Any medieval or post-medieval remains that could survive would likely represent former agricultural activity, such as ploughing or drainage, and would be considered to be of negligible significance. Buried remains relating to the former house situated on the north-western side of the study site could also survive, but it is unlikely that these would be of greater than local significance.

7 IMPACT ASSESSMENT

Previous impacts

- 7.1 The study site has been impacted by modern ploughing, the early 20th century ponds that were present on its northern side, as well as the construction and demolition of the house on the site's north-western edge, and the construction of modern agricultural buildings on the south-western side of the study site.

Proposed Development

- 7.2 The development proposals comprise residential development together with associated infrastructure and services.

Designated Heritage Assets

- 7.3 The proposed development will have no direct impact upon any designated heritage assets.
- 7.4 The study site is not considered to contribute to the significance of any designated heritage assets through forming part of their setting. The proposed development will, therefore, not impact any designated heritage assets.

Hedgerows

- 7.5 Development plans have not been finalised at this stage but the aim will be to minimise any impact on the 'important' hedgerows within the study site, and maintain legibility of the overall field pattern where possible.

Potential Sub-Surface Archaeological Remains

- 7.6 This assessment has established that there is very low potential for the survival of remains of a prehistoric or Roman period date to survive in the study site that could be impacted by the proposed development. If any remains dating to these periods did survive within the study site there is no evidence to suggest that these would be of greater than local significance.
- 7.7 There is some potential for the survival of sub-surface features relating to medieval and post-medieval agricultural activity, such as ploughing or drainage features, which could be impacted by the proposed development, but any such remains would be considered to be of negligible significance.
- 7.8 There may also be some potential for the survival of sub-surface remains relating to the former house situated on the north-western side of the study site, which was demolished in the middle of the 20th century, but it is considered that any such remains would be unlikely to be of greater than local significance

8 CONCLUSIONS

- 8.1 This archaeological desk-based assessment draws together the available archaeological, historical, topographic and land-use information, in order to determine the archaeological potential and significance of land proposed for residential development at Great Houghton, South Yorkshire. The assessment addresses the information requirements set out in the NPPF and provides the proportionate response sought by the NPPF.
- 8.2 This assessment has established there are no designated heritage assets in the study site and that the proposed development will have no impact upon any heritage assets in the surrounding area.
- 8.3 The assessment has identified sections of hedgerow forming field boundaries within the study site that could be considered 'important' within the criteria of the Hedgerows Act 1997. Although detailed development plans have not been finalised, the aim will be to retain the majority of the hedgerows to minimise any impact on the legibility of the overall field pattern.
- 8.4 The available archaeological records, combined with the results of a geophysical survey, suggest that there is very low potential for the survival of prehistoric and Roman period remains within the study site. The study site is likely to have remained primarily in agricultural use through the medieval and post-medieval periods. It is possible that buried remains relating to medieval or early post-medieval agriculture, such as ploughing or drainage features, could survive, but these would be considered to be of negligible significance. There may also be some potential for the survival of sub-surface remains relating to the former house situated on the north-western side of the study site, which was demolished in the middle of the 20th century, but it is considered that any such remains would be unlikely to be of greater than local significance.

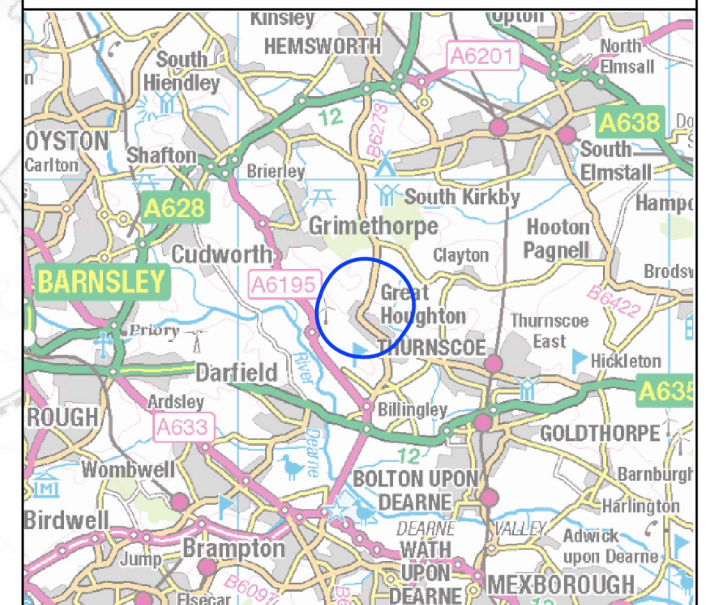
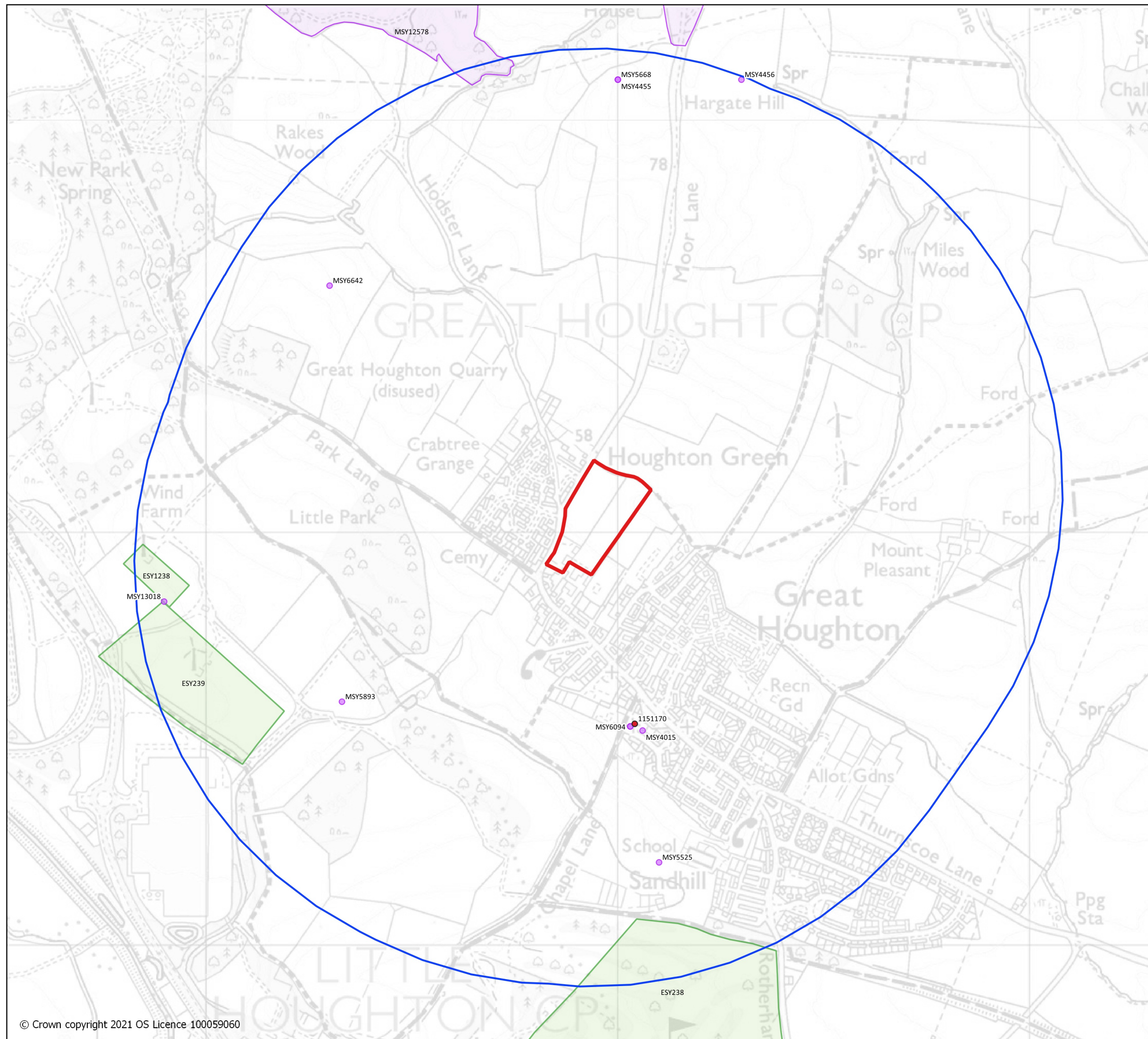
9 REFERENCES

- ASWYAS 2021, *Land at Great Houghton, Barnsley, South Yorkshire. Geophysical Survey*, report no. 3627
- BGS 2021, British Geological Survey website, www.bgs.ac.uk/data/mapViewers/home.html (last accessed 8th September 2021)
- ClfA 2020, *Standard and guidance for historic environment desk-based assessment*
- ClfA 2021, *Coronavirus challenges: Standards and guidance advice*, www.archaeologists.net/practices/coronavirus_and_standards (last accessed 21st July 2021)
- DCLG 2019, *National Planning Policy Framework*
- DCMS 2010, *Scheduled Monuments. Identifying, protecting, conserving and investigating nationally important archaeological sites under the Ancient Monuments and Archaeological Areas Act 1979*. March 2010
- DOE 1997, *The Hedgerow Regulations 1997: A Guide to the Law and Good Practice*, Department of the Environment
- English Heritage 2008, *Conservation Principles*
- Historic England 2017, *Historic Environment Good Practice Advice in Planning Note 2: Managing Significance in Decision Taking in the Historic Environment*
- Historic England 2019, *Statements of Heritage Significance. Analysing Significance in Heritage Assets*
- Mills, A.D. 2011, *A Dictionary of British Place Names*
- SYHERF 2021, *South Yorkshire Historic Environment Research Framework*, online resource, <https://researchframeworks.org/syrf/> (last accessed 8th September 2021)
- Williams, A. and Martin, G.H. 1992, *Domesday Book. A Complete Translation*

Historical Mapping

- Great Houghton tithe map, 1840
- Ordnance Survey 1854, Ordnance Survey County Series 6 inch, (Yorkshire) sheet 275
- Ordnance Survey 1892, Ordnance Survey County Series 25 inch, (Yorkshire) sheet CCLV.7
- Ordnance Survey 1906, Ordnance Survey County Series 25 inch, (Yorkshire) sheet CCLV.7
- Ordnance Survey 1930, Ordnance Survey County Series 25 inch, (Yorkshire) sheet CCLV.7
- Ordnance Survey 1950, Ordnance Survey County Series 6 inch, (Yorkshire) sheet CCLV.NE
- Ordnance Survey 1962, Ordnance Survey National Grid Series 1:2500 scale SE 40 NW
- Ordnance Survey 1989, Ordnance Survey National Grid Series 1:10,000 scale SE 40 NW

Figures



- Study Site
- Search Area
- HER 'monument' point
- HER 'monument' area
- HER 'event' area
- Listed Buildings

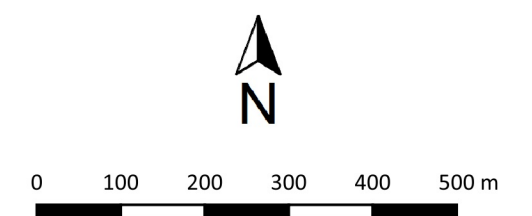


Figure 1. The study site and search area with the location of HER and NHLE records

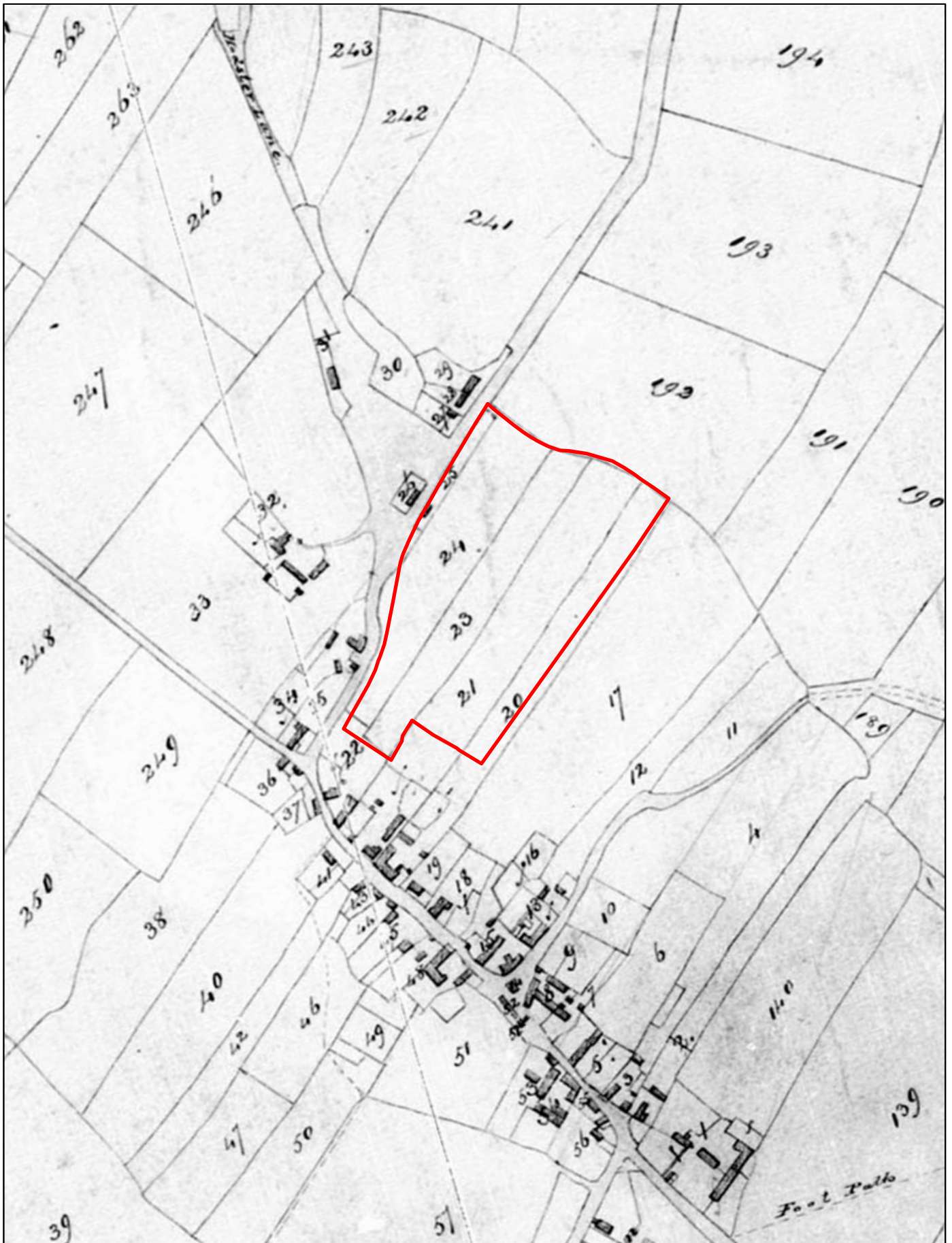


Figure 2. Extract from the Great Houghton tithe map of 1840



 Study Site

0  100m

Lanpro»



Figure 3. Extract from the Ordnance Survey 6 inch map of 1854



 Study Site

0  100m

Lanpro»

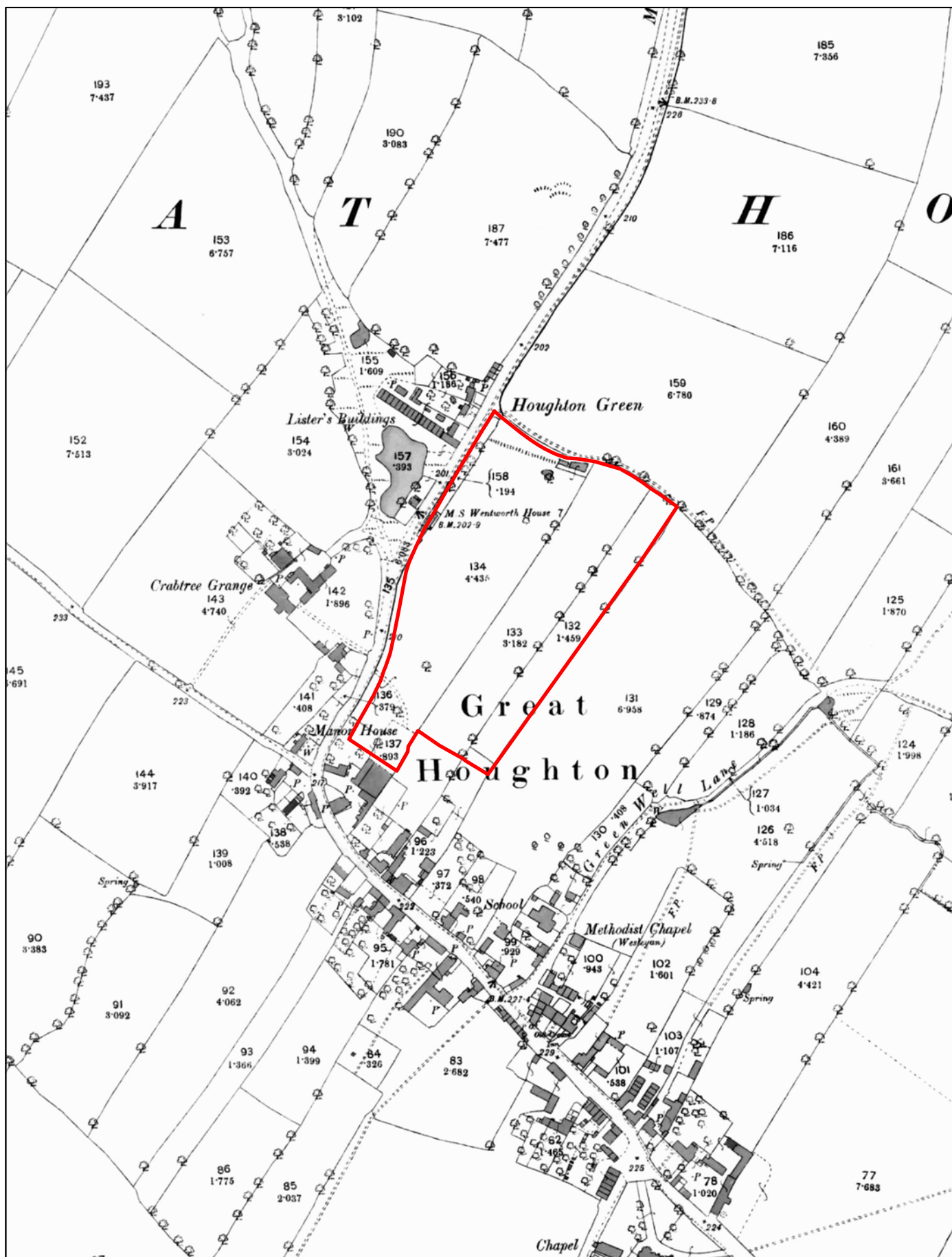


Figure 4. Extract from the Ordnance Survey 25 inch map of 1892

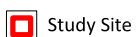
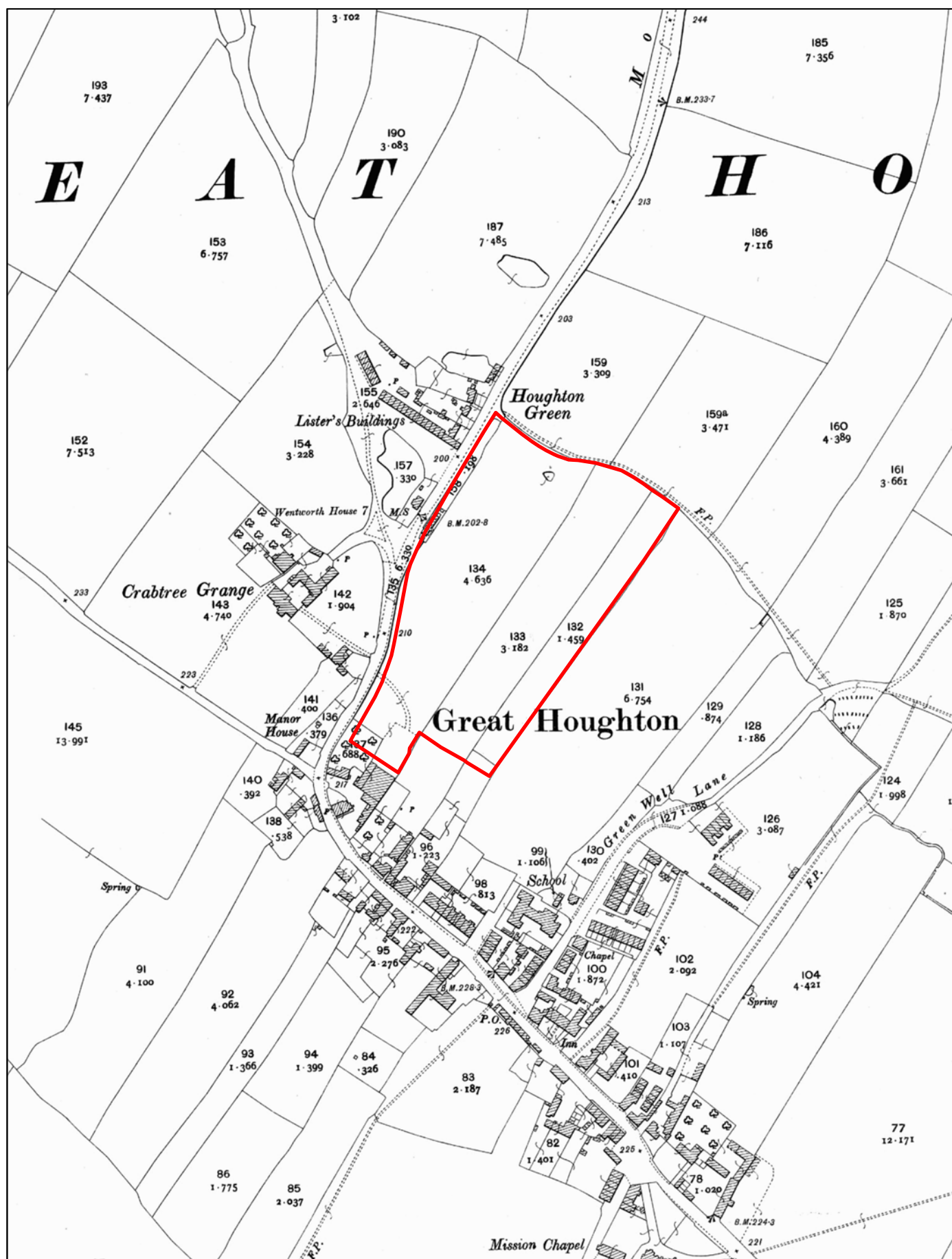


 Study Site

0 100m



Lanpro»



Lanpro»

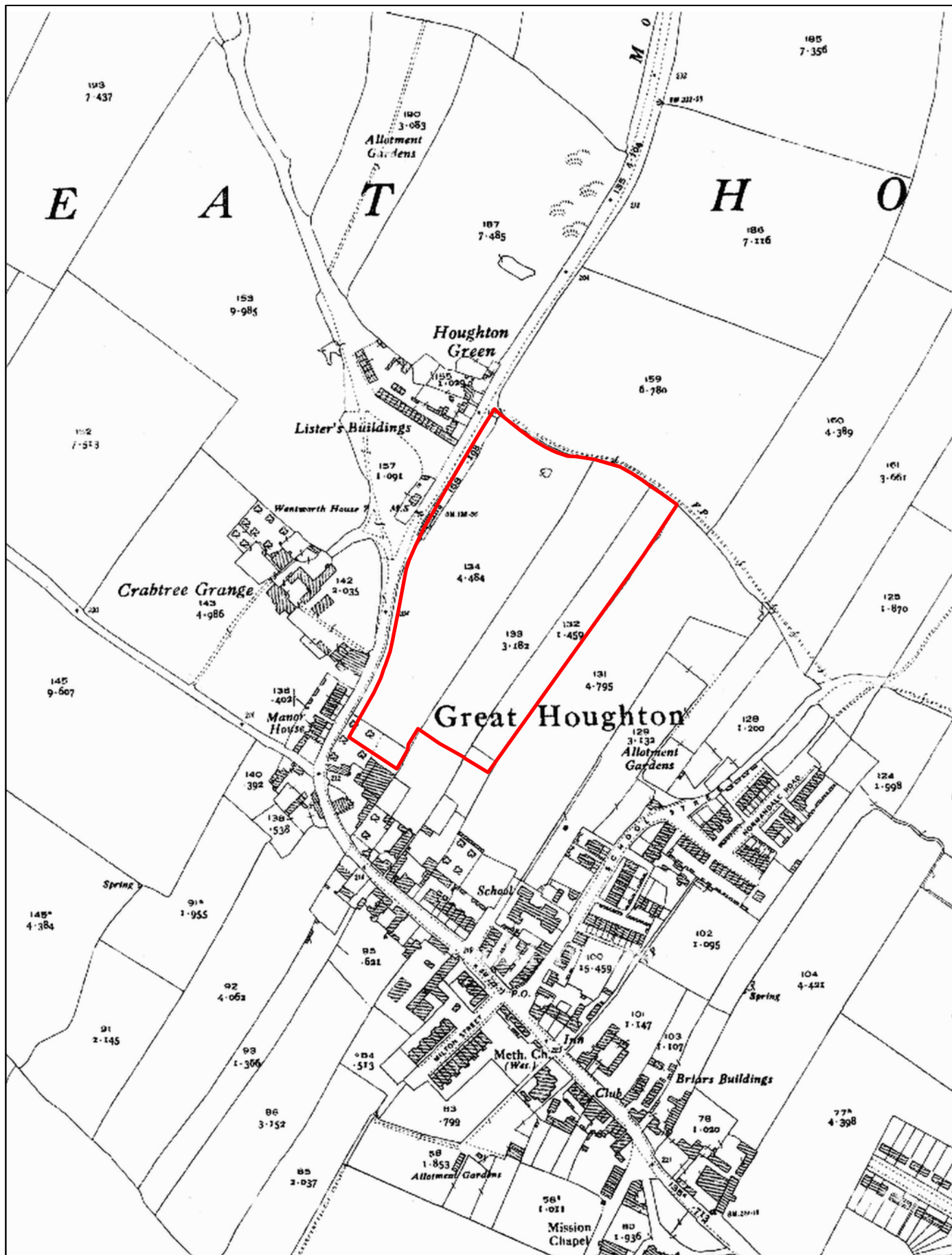


Figure 6. Extract from the Ordnance Survey 25 inch map of 1930



 Study Site

0 100m

Lanpro

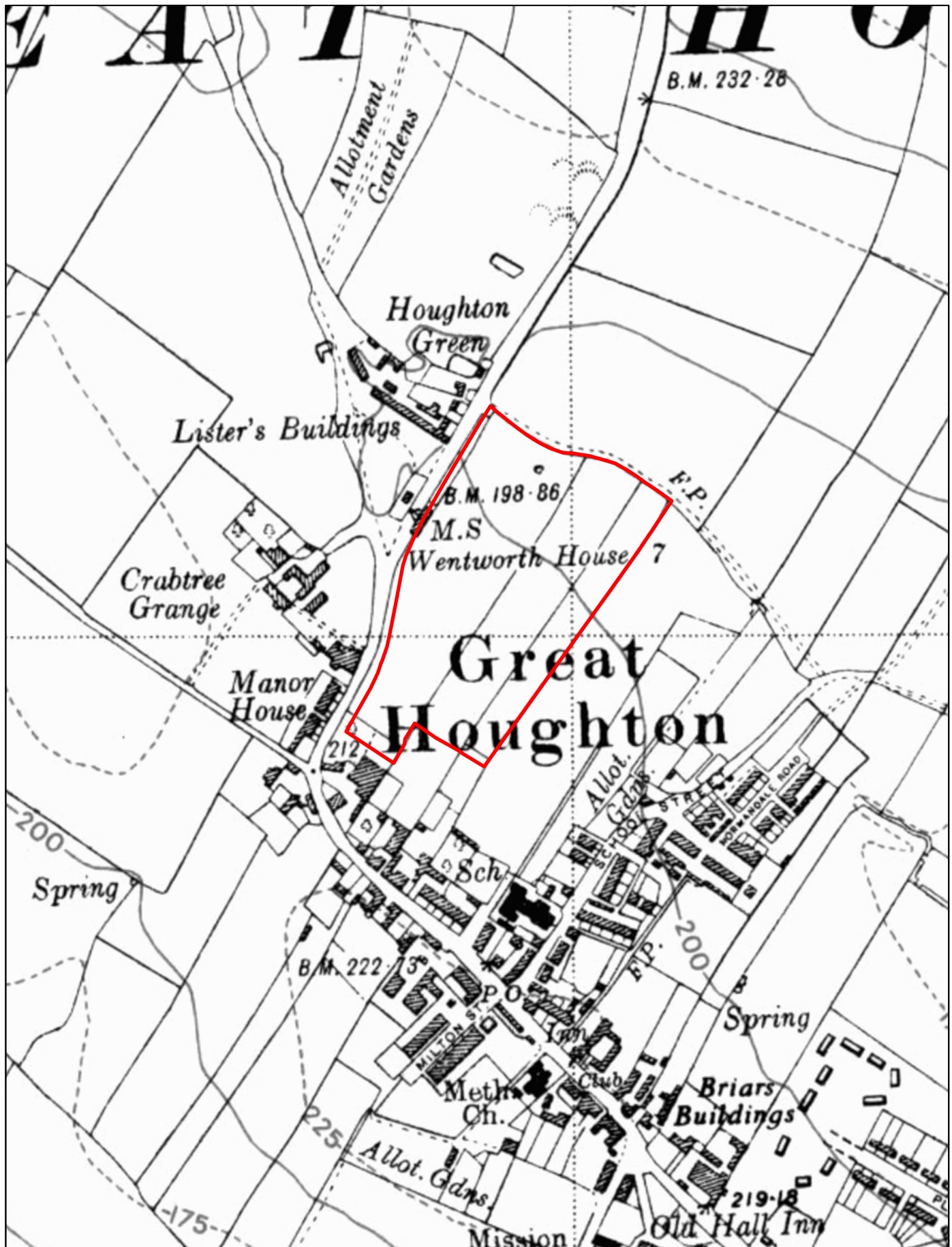


Figure 7. Extract from the Ordnance Survey 6 inch map of 1950



 Study Site

0 100m

Lanpro»

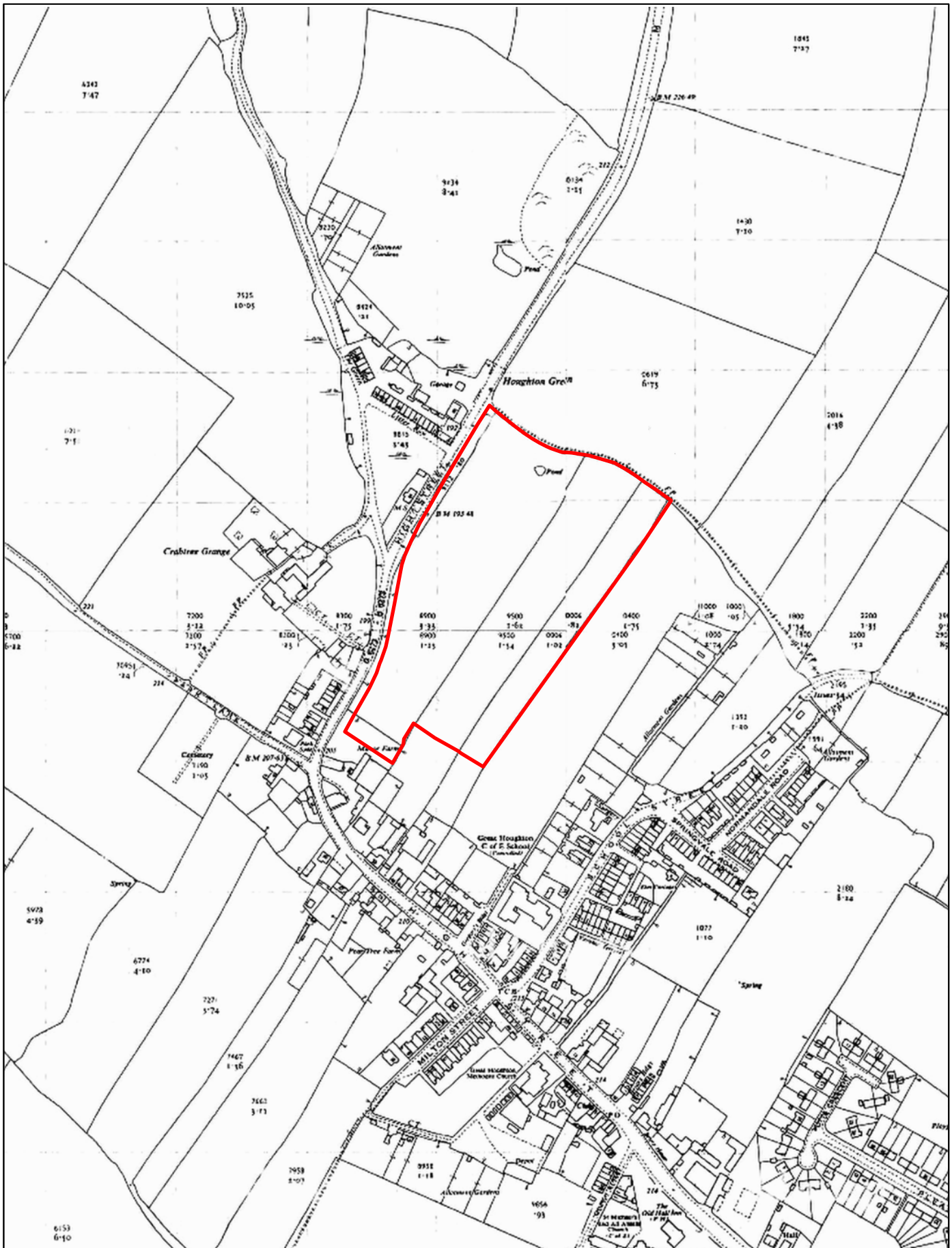


Figure 8. Extract from the Ordnance Survey 1:2500 scale map of 1962



 Study Site

0 100m

Lanpro

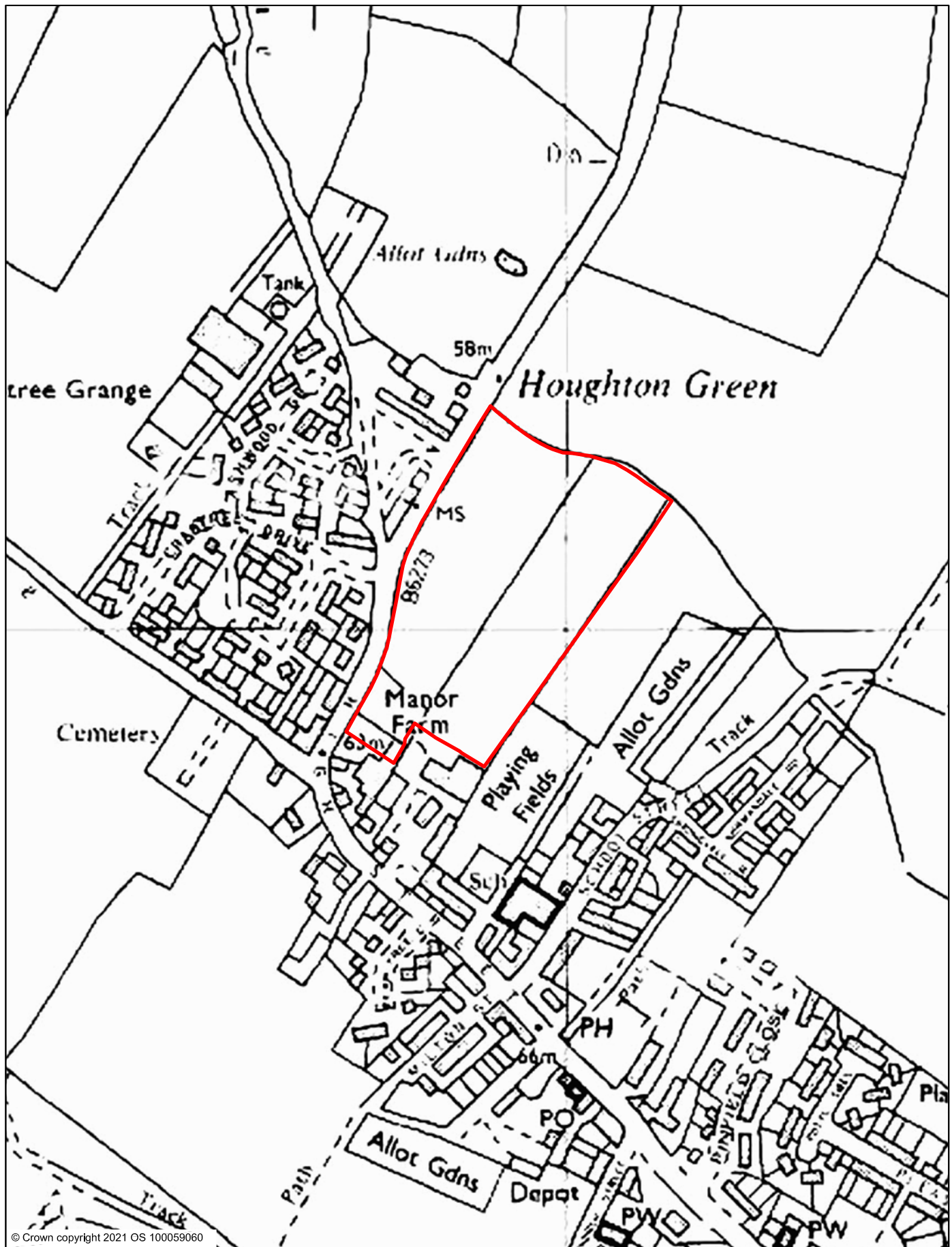


Figure 9. Extract from the Ordnance Survey 1:10,000 scale map of 1989



 Study Site

0 100m

Lanpro»



Figure 10. Aerial photograph of the study site with 'important' hedgerows highlighted (Google Earth 2021)

Plates



Plate 1. The western side of the study site, looking north-east



Plate 2. The western side of the study site, looking south-west



Plate 3. The eastern side of the study site, looking north-east



Plate 4. The eastern side of the study site, looking south-west



Plate 5. Modern agricultural buildings on the south-western side of the study site, looking south-east



Plate 6. Modern agricultural buildings and silos on the south-western side of the study site, looking north-east

Appendix 1: Gazetteer

The following table provides details of heritage assets recorded on the South Yorkshire HER and NHLE for within 1km of the study site. These have been listed in order of their reference numbers, and their locations are marked on Figure 1.

Ref.	Name	Description	NGR	Designation	Period
HER 'monument' records:					
MSY4015	The Hall, Great Houghton	Site of a hall which was built between 1578 and 1588 and used as a public house from the mid-19th century to the 1960s before being demolished.	SE 4306 0652		Post-medieval / Modern
MSY4455	Possible Iron Age or Roman Enclosures, near Great Houghton	Location of cropmark enclosures visible on aerial photography.	SE 4300 0810		Prehistoric / Roman
MSY4456	Unidentified Cropmark at Hargate Hill, Great Houghton	Location of a cropmark feature visible on aerial photography.	SE 4330 0810		Prehistoric / Roman
MSY5525	?Iron Age or Romano-British Cropmark, Great Houghton	Location of a possible Iron Age or Romano-British field system visible on aerial photography.	SE 4310 0620		Prehistoric / Roman
MSY5668	Iron Age or Romano-British Circular Enclosure, Great Houghton	Location of a circular enclosure visible on aerial photography.	SE 4300 0810		Prehistoric / Roman
MSY5893	Iron Age or Romano-British Enclosure and Lane, Little Houghton	Location of a sub-rectangular enclosure and lane visible on aerial photography.	SE 4233 0659		Prehistoric / Roman
MSY6093	St Michael and All Angels Church (formerly the Rodes Family Chapel), Great Houghton	Presbyterian chapel which dates to c.1650 which is now a church, with 20th century additions. It is of ashlar sandstone which is weathered and part rendered with a 20th century tile roof.	SE 4303 0653	LB II* 1151170	Post-medieval
MSY6094	Old duplicated record	N/A	N/A	N/A	N/A
MSY6642	Iron Age or Romano-British Enclosure and Field Boundaries, Great Houghton	Location of an enclosure and field boundaries.	SE 4230 0760		Prehistoric / Roman
MSY12578	West Haigh Wood and Houghton Common Medieval to Post-Medieval Features	Location of a range of earthwork remains including banks, pits, platforms, trackways, quarrying, ponds and ridge and furrow.	SE 4277 0861		Medieval - Post-medieval
MSY13018	Possible Iron Age or Romano-British field system, Houghton Main Colliery	Location of linear features identified by geophysical survey and watching brief.	SE 4189 0683		Prehistoric / Roman

Ref.	Name	Description	NGR	Designation	Period
HER 'event' records					
ESY169	Archaeological Survey of West Haigh Wood	An archaeological survey of West Haigh Wood and Houghton Common carried out by ASE Ltd in December 2005. The topographic position of West Haight Wood is characteristic of an area of ancient woodland and features such as coppice stools, charcoal burning platforms and saw pits identified during survey support this interpretation.	SE 42770 08615		Post-medieval?
ESY238	Geophysical Survey of Little Houghton Golf Course	In September 1991 a geophysical survey was undertaken for a proposed golf course at Little Houghton. The results demonstrated that there were a number of features that were originally detected from aerial photographs including enclosures and field systems.	SE 43069 05652		Undated
ESY239	Geophysical Survey at Houghton Main Open Cast Coal Site	In April 1997 a geophysical (gradiometer) survey was conducted for the Houghton Main open cast coal site. The results identified positive linear anomalies likely to be a ditch and trackway, and an isolated positive anomaly, which could be a possible kiln. The other anomalies probably relate to recent infilled ditches and earlier agricultural regimes.	SE 41964 06636		Undated
ESY845	Archaeological Survey at Barnsley Ancient Woodlands, West Haigh Wood and Houghton Common	ASE Ltd commissioned to carry out a Level 2 archaeological survey of West Haigh and Houghton Common. This survey was carried out in December 2005. It constituted the second stage of a project, funded by a grant from the Bid Lottery Fund, designed to inform interpretations and future management practise. A total of one hundred and fifty archaeological sites were identified within the woodland and common, only six of which had been recorded prior to the commencement of the survey. The majority of the sites identified during the course of the archaeological survey were considered to be post mediaeval or modern in date. Several of the Houghton Common had been significantly damaged or disturbed. No significant ongoing threats were identified during the course of the level 2 archaeological survey.	SE 4277 0861		Post-medieval / Modern
ESY1238	Watching brief at Houghton Main Open Cast Coal Site	In September 1997 a watching brief was conducted during stripping of a containment cell at the Houghton Main open cast coal site. The area was thought to be the site of a medieval farmstead but no evidence for this was uncovered. Evidence for ridge & furrow and a ditch pre-dating this was identified.	SE 4187 0689		Medieval
Listed Buildings:					
1151170	Church of St. Michael and all Saints and adjoining wall to west side of churchyard	Presbyterian chapel which dates to c.1650 which is now a church, with 20th century additions. It is of ashlar sandstone which is weathered and part rendered with a 20th century tile roof.	SE 43041 06536	LB II*	Post-medieval - Modern

Appendix 2: Geophysical survey plans (ASWYAS 2021)





© ASWYAS 2021.
Archaeological Services W Y A S,
Nepshaw Lane South, Morley, LS27 7JQ
Tel: 0113 535 0163 Email: archaeology@wyjs.org.uk www.aswyas.com

Project ID: XB91_GHB21

Survey location showing processed greyscale magnetometer data

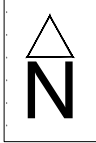
Reproduced from the Ordnance Survey mapping with the permission of the Controller of Her Majesty's Stationery Office.
© Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.
Wakefield Metropolitan District Council licence 100019574, 2021.

Title	
	SURVEY AREA
	UNSUITABLE FOR SURVEY
	PHOTO LOCATIONS



1:1250 @ A3

Fig. 2





© ASWYAS 2021.
Archaeological Services W Y A S,
Nepshaw Lane South, Morley, LS27 7JQ
Tel: 0113 535 0163 Email: archaeology@wyjs.org.uk www.aswyas.com

Project ID: XB91_GHB21

XY trace plot of minimally processed magnetometer data

Reproduced from the Ordnance Survey mapping with the permission of the Controller of Her Majesty's Stationery Office.
© Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.
Wakefield Metropolitan District Council licence 100019574, 2021.

15.0 nT/cm



1:1250 @ A3

Fig. 3





© ASWYAS 2021.
Archaeological Services W Y A S,
Nepshaw Lane South, Morley, LS27 7JQ
Tel: 0113 535 0163 Email: archaeology@wyjs.org.uk www.aswyas.com

Project ID: XB91_GHB21

Interpretation of magnetometer data

Reproduced from the Ordnance Survey mapping with the permission of the Controller of Her Majesty's Stationery Office.
© Crown Copyright. Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings.
Wakefield Metropolitan District Council licence 100019574, 2021.

Interpretation

	FERROUS		AGRICULTURAL
	MAGNETIC DISTURBANCE		FORMER FIELD BOUNDARY
	FIELD DRAIN		GEOLOGY
	RIDGE & FURROW		



1:1250 @ A3

Fig. 4

Norwich:

Brettingham House
98 Pottergate
Norwich
Norfolk
NR2 1EQ

01603 631 319

Chelmsford:

The Aquarium
101 Lower Anchor Street
Chelmsford
Essex
CM2 0AU

01245 929 074

York:

Stanley Harrison House
The Chocolate Works
Bishopthorpe Road
York
YO23 1DE

01904 803 800

London:

70 Cowcross Street
London
EC1M 6EL

020 3011 0820

Manchester:

Peter House
Oxford Street
Manchester
Greater Manchester
M1 5AN

0161 711 1740

Cambridge:

33/35 Regent Street
Cambridge
CB2 1AB

01223 778 160



info@lanproservices.co.uk