



# WESTHEAD TO BICKERSTAFFE PIPELINE, Lancashire

## Archaeological Desk- based Assessment and Watching Brief



**Oxford Archaeology North**

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## SUMMARY

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A desk-based assessment and watching brief was undertaken by Oxford Archaeology North in May and June 2004 on an area between Westhead (SD 44092 08248) and Bickerstaffe (SD 43723 04389), Lancashire. The work was commissioned by United Utilities following their submission of an application to lay a water mains pipe between the two locations.

In total, 52 sites were identified during the desk-based assessment, of which 42 were already listed with the Sites and Monuments Record (SMR). With the notable exception of a stray find comprising a hoard of Roman coins (Site **12**), all of the sites identified related to the post-medieval period and consisted mainly of domestic dwellings, farm buildings, field boundaries and wells. None of the sites held within the SMR were considered likely to be affected by the proposed development and, of a further ten sites identified as part of the assessment, only two lay within its path, comprising Site **43**, a group of three field boundaries shown on the 1841 Bickerstaffe Tithe Map and Site **52**, a field at Stuart's Farm entitled 'Pit Field', which may be indicative of one or more pits in the immediate area.

During the watching brief a further 24 features were identified, all of which were investigated and suitably recorded. These mainly comprised field boundaries, some of which were shown on the First edition OS map of 1849. This demonstrated that large-scale field enlargement, which now characterises the area, mostly took place after this date, although it was noted that the process had actually started some time after 1841.

All of the features that were identified were considered to be of limited significance and no recommendations were made for further archaeological assessment.

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## ACKNOWLEDGEMENTS

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Oxford Archaeology North (OA North) would like to thank United Utilities for commissioning the project, and to the staff of the Murphy Group for their assistance on site. Further thanks are also due to Peter Iles of the Lancashire County Council Archaeological Service (LCCAS) and the staff of the Lancashire County Record Office, Preston (CRO(P)) for their help in collating the background data.

The documentary research was undertaken by David Tonks who also wrote the report. The watching brief was undertaken by Christina Robinson and David Tonks. The finds were examined by Jo Dawson and Daniel Elsworth. The project was managed by Alison Plummer, who also edited the report along with Emily Mercer.

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## 1. INTRODUCTION

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### 1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 Following the submission of an application to lay a new mains water pipeline between Westhead (SD 44092 08248) and Bickerstaffe (SD 43723 04389), Lancashire (Fig 1), the Lancashire County Archaeological Service (LCCAS) recommended a programme of archaeological appraisal of the area to be affected. This comprised a desk-based assessment and a watching brief during the easement topsoil strip. In response to this request, a Project Design (*Appendix 1*) was prepared by OA North and the work was commissioned by United Utilities.
- 1.1.2 The aim of the desk-based assessment was to determine the nature and potential of the archaeological resource within the study area through the identification of potentially interesting or important archaeological features.
- 1.1.3 The aim of the watching brief was to determine the existence or otherwise of sites not currently held on the Sites and Monuments Record (SMR) or identified by the desk-based assessment.
- 1.1.4 This report sets out the results of both phases of work and is complemented by a gazetteer of sites (*Appendix 2*) both new to the record and formerly known.

### 1.2 OBJECTIVES

- 1.2.1 This document sets out the results of the desk-based assessment and watching brief in the form of a short report. It both summarises and details the historical findings and the observations made during the programme of work. This is followed by an assessment of the impact of the proposed development and a discussion of the results.

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## 2. METHODOLOGY

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### 2.1 INTRODUCTION

- 2.1.1 The work undertaken followed the method statement detailed in the project design (*Appendix 1*) and complied with current legislation and accepted best practice, including the Code of Conduct and the relevant professional standards of the Institute of Field Archaeologists (IFA).

### 2.2 DESK-BASED ASSESSMENT

- 2.2.1 Archives of both primary and secondary sources were consulted in accordance with the project brief and project design. A study area of approximately 250m either side of the proposed route was examined for relevant information, but useful material encompassing a wider area was also looked at for salient archaeological resources.
- 2.2.2 **Sites and Monuments Record (SMR):** information was obtained from the Lancashire Sites and Monuments Record. This is a database of archaeological sites within the county and maintained by Lancashire County Council in Preston. A brief record including grid reference and description was obtained for the various sites within the study area and aerial photographs were examined as a potential means of identifying more.
- 2.2.3 **Lancashire County Record Office (Preston) (LCRO(Preston)):** copies of historical plans and maps obtained from LCRO(Preston) were consulted in a process known as map regression analysis. Other primary sources and secondary sources held at the Record Office were also consulted to provide additional information and general background information.
- 2.2.4 **OA North:** much of the background data for the area derives from secondary sources held within OA North's library and archives. These were examined as part of the desk-based assessment.
- 2.2.5 **Gazetteer of Sites:** the relevant archaeological sites identified during the desk-based assessment collated into a gazetteer (*Section 4*), which provides details of their location, origin, and character. Locations are given as ten figure National Grid References (NGR). A summary description of each site is provided, in conjunction with a reference to the source of the information (e.g. SMR, cartographic, documentary). An assessment is provided of the archaeological potential of each site in relation to the planning application area and the position of each site is detailed on a plan (Fig 2).

### 2.3 WATCHING BRIEF

- 2.3.1 The programme of field observation recorded accurately the location, extent, and character of any surviving archaeological features. This work comprised observation during the easement topsoil strip and the accurate recording of all

archaeological features, horizons and any artefacts found during these groundworks.

- 2.3.2 The proposed route was divided into 12 sections corresponding to existing fields as delineated by the current field boundaries (Fields **1-12**). The topsoil strip was carried out by a maximum of five mechanical excavators with toothless ditching buckets working concurrently.
- 2.3.3 The recording comprised a full description and preliminary classification of features or structures revealed on OA North *pro-forma* sheets, and their location in plan within the appropriate subdivision. Where appropriate, accurate section drawings were produced and a photographic record in colour slide and monochrome formats was compiled.

## **2.4 ARCHIVE**

- 2.4.1 A full archive of the work undertaken has been produced to a professional standard in accordance with current English Heritage guidelines (English Heritage 1991). The archive will be deposited with LCRO(Preston) and a copy of the report will be forwarded to the Lancashire Sites and Monuments Record in Preston.

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## 3. BACKGROUND

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### 3.1 LOCATION, TOPOGRAPHY AND GEOLOGY

- 3.1.1 **Location:** the proposed route is situated on the Lancashire and Amounderness Plain which extends southwards from Morecambe Bay in the north to the outskirts of Liverpool in the south (Countryside Commission 1998). The route runs from SD 44092 08248, north of Westhead, Lancashire, to Bickerstaffe (SD 43723 04389), passing through an area just south-east of Ormskirk
- 3.1.2 **Topography:** the Lancashire and Amounderness Plain comprises a relatively flat and gently rolling plain broken by isolated hills (Countryside Commission 1998). It is a large-scale agricultural landscape with a patchwork of pasture, arable fields and blocks of mixed woodland. Of particular topographical relevance is the medium to large-scale field pattern with associated isolated brick farmsteads (*ibid*).
- 3.1.3 **Geology** The solid geology largely comprises Permo-Triassic red mudstones, siltstones and sandstone ('New Red Sandstone'), although the solid rock geology rarely emerges from beneath its thick covering of glacial and post-glacial deposits. The drift geology comprises a mixture of typical clay podzols of the Anglezarke association, typical stagnoley soils of the Brockhurst 2 association and stagnogleyic argillic brown earths of the Flint association (Ordnance Survey 1983).
- 3.1.4 It is understood from local knowledge that the glass manufacturers Pilkington plc undertook a sand extraction programme within much of the study area in the 1970s. It is not known exactly what fields within the study area were affected, but the programme involved the stripping of topsoil, the removal of around 0.6m of the underlying natural sand and the subsequent re-deposition of the topsoil. What impact this has had on any archaeological horizons is unknown, but it will almost certainly have removed all but the deepest cut features and visibility of any surviving remains will doubtless have been affected by this event.

### 3.2 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

- 3.2.1 **Introduction:** the background to the study area is principally compiled from secondary sources, and is intended to give a regional context for the results of the assessment. Where possible, reference is made to specific sites within the study area.
- 3.2.2 **Early Prehistoric:** there is little evidence for prehistoric activity in the area, and none at all from the immediate post-glacial period. There are a few small areas of flint scatters within the general area dated by typology to the Early Mesolithic, but these are rare, and typically comprise small artefact scatters (Cowell and Innes 1994, 124). Later Mesolithic sites are similar in character and only slightly more concentrated, although excavated sites have identified more tangible remains (*op cit*, 125). In general, though, the area was probably

inhabited by little more than ‘*specialist groups making repeated visits to a restricted series of locations*’ (*op cit*, 127).

- 3.2.3 **Late Prehistoric:** despite the Neolithic and Early Bronze Age being the period in which large and permanent monuments begin to appear on the landscape, the evidence from the general area becomes, if anything, more obscure (*op cit*, 130). The archaeological evidence seems to be similar in many ways to that of the preceding period, with occasional finds making up the majority (*ibid*). Settlement sites are not well-recorded during the Neolithic and Early Bronze Age, although the environmental record suggests that both clearance of vegetation and cultivation of cereals was taking place from the Neolithic to the Iron Age (*op cit*, 130-1).
- 3.2.4 There are no sites of this period recorded within the study area, and little direct evidence for prehistoric activity within the development area.
- 3.2.5 **Romano-British:** again the evidence for Romano-British activity in the area is not good, although both scatters of pottery and cropmarks revealed in aerial photography suggest a potential for larger areas of settlement (*op cit*, 131). A bronze bracelet discovered on the edge of Bickerstaffe Moss is thought to date to this period, and there is evidence for possible farmsteads in a number of locations (*op cit*, 131-2).
- 3.2.6 The period is represented within the study area by a single site: the find of 110 Roman silver *denarii* (Site 12). The coins span a period of around 165 years and range in date from the Late Republican period (c27 BC) through to the rule of Hadrian (AD 117-138). The find shows that there was Romano-British activity within the area and, furthermore, that it was probably relatively early, being within the first 75 years of the Roman administration of Britain. Moreover, the earlier coins, dated to pre-AD 71-72, are rare in the North West, and could conceivably represent payment made to a client kingdom, or state, such as the Brigantes.
- 3.2.7 **Early Medieval:** archaeological evidence for the period is not particularly evident, and there are no contemporary sites known within the study area. It has been suggested that the native British kingdom of Rheged, formed at the end of the fifth century, lay west of the Pennines and extended from Hadrian’s Wall in the north and may have reached as far south as the Mersey (Morris 1973). Following the battle of Chester in AD 615, the area became part of Northumbria (Cowell and Innes 1994, 132). The region avoided the influence of the Danes who arrived in the east in the late eighth century, but became part of a wider Anglo-Norse community following the migration of Irish Norse into the North-West, with notable activity in and around The Wirral and Kirby (*ibid*). Settlement itself ‘*must have been sparse, probably based on large estates, with the dense woodland... much in evidence*’ (*ibid*). It is likely, based on the place-name evidence, that in some cases indigenous Britons continued to live in the same areas, and a hybridisation of the population occurred (Kenyon 1991, 85-6), not just between the Britons and the Angles, the latter of whom were likely to have been most influential at an aristocratic and clerical level, but also with Hiberno-Norse settlers who included commoners as well as nobles .

- 3.2.8 **Medieval:** the essentially rural nature of the study area means that there is little archaeological evidence for settlement or activity. Rural settlement was probably dispersed at this time: ‘*consisting of single family holdings, scattered throughout large estates that may have been the forerunners of the ecclesiastical parishes*’ (Newman 1996, 114). During the earlier part of the medieval period (c1100-1300) there was at first a sustained population growth with corresponding settlement expansion, which, from the fourteenth century onwards, was countered by depopulation and settlement desertion brought on by disease and border problems (*op cit*, 117). It took until the relative peace and stability of the sixteenth century for the affects of this to be fully redressed and economic prosperity to return (Cowell and Innes 1994, 136). The influence of monastic houses on the area during this period, although an important factor in many rural parts of Lancashire (Wood 1996, 148), was probably limited to small granges and landholdings (Lewis 2002, 34).
- 3.2.9 There are no sites of obvious medieval date known within the study area, although it is possible that some of those dating to the post-medieval period might have medieval origins.
- 3.2.10 **Post-medieval:** during the post-medieval period Lancashire as a whole flourished as a heartland of industrial development (Fletcher 1996, 157). The area was of key importance in this process, at first relying on copious supplies of water to drive mills and provide transport via canals, before turning to the automated steam-driven mills that powered the cotton industry (*op cit*, 159-60). The study area, however, is essentially rural in character, albeit on the edge of Liverpool, which grew rapidly as a port largely off the back of the cotton trade (*ibid*) along with tobacco, sugar and, until 1807, slaves ([http://www.bbc.co.uk/history/timelines/britain/geo\\_slavetrade.shtml](http://www.bbc.co.uk/history/timelines/britain/geo_slavetrade.shtml)).
- 3.2.11 Nevertheless, the majority of sites within the study area are post-medieval in date, many relating to small-scale industries and agriculture, both of which would have fed, and been fed by, the growth connected to the Industrial Revolution (see Table 1).



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## 4. RESULTS

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### 4.1 INTRODUCTION

- 4.1.1 Some of the results of the desk-based assessment have already been presented in the background history (*Section 3*, above). The more detailed elements of the assessment including map regression are, however, presented below.
- 4.1.2 The assessment results are based on primary documents, principally maps, and secondary sources, primarily the SMR. Figure 2 shows the location of identified sites within the vicinity of the proposed development.
- 4.1.3 In total, 52 sites of archaeological interest were identified, 42 of which were listed with the SMR. With the notable exception of Site **12**, all of the sites related to the post-medieval period and they consisted mainly of domestic dwellings, farm buildings, field boundaries and wells. These are outlined in *Section 5*.
- 4.1.4 The sources from which information about the various sites of archaeological interest was gained are presented below.

### 4.2 SITES AND MONUMENTS RECORD (SMR)

- 4.2.1 The vast majority of sites were already recorded in the SMR for Lancashire. This is a list of all known sites of archaeological interest in the county maintained by Lancashire County Council, and is the primary source for an assessment of this type. Of the 52 sites identified, 42 were already listed in the SMR. These are presented in Table 1 below.

<i>Type of Site</i>	<i>Site Numbers</i>
Domestic Dwelling	<b>01, 02, 03, 05, 06, 07, 09, 10, 19, 42</b>
Industrial	<b>04, 11, 31, 32, 34, 35, 38</b>
Agricultural	<b>14, 17, 20, 37, 40, 41</b>
Wells and Ponds	<b>22, 23, 24, 25, 26, 28, 29, 30, 33, 36, 39</b>
Other	<b>08, 12, 13, 15, 16, 18, 21, 27</b>

Table 1: SMR Sites Arranged by Type

- 4.2.2 ***Aerial Photographs***: two features were identified as a result of examining aerial photographs of the area held at the SMR (Sites **45** and **46**). Site **45** was observed as a series of cropmarks forming a grid-like pattern. It is thought that these are the remains of a World War 1 remounting depot, essentially a military stables (Peter Iles, pers comm). Site **46** was observed as a large sub-circular crop mark, directly in the line of the proposed route. It may have been a pond, but its exact nature and archaeological significance was uncertain.

### 4.3 LANCASHIRE COUNTY RECORD OFFICE (PRESTON)

- 4.3.1 **Introduction:** the (LCRO(P)) was consulted primarily in order to inspect maps for regression analysis of the study area. Cartographic material for the study area was available dating from the mid-nineteenth century onwards, representing an important source of information regarding the later development of the area. The route of the pipeline upon which the watching brief was undertaken encompassed twelve modern fields (numbered **1** to **12** running north to south), the positions of which are illustrated in Figure 3.
- 4.3.2 **Bickerstaffe Tithe Award 1841:** this map depicts the area covered by the watching brief undertaken in Field **9**, immediately north of Ormskirk Road. It can be seen from this plan that at least three field boundaries (Gazetteer Site **43**) are in place which are not on the OS First edition published just eight years later. The boundaries separate smaller fields named Nearer Poor Hey, Middle Poor Hey, Big Poor Hey and Poor Hey. The name might suggest why it was earmarked for opening out into a single plot at such an early time.
- 4.3.3 **Lathom Tithe Award 1846:** this copy map shows the area covered by modern Fields **1** to **8**. Of these, seven have names that indicate the potential presence of sites of archaeological interest, two of which, Plots 2631 and 2632 (Sites **51** and **52**) are within the easement near to Stuart's Farm. They are named House Pasture and Pit Field respectively. These, and others which are not directly affected, are detailed in *Section 5*.
- 4.3.4 **Ordnance Survey 1849** (Fig 4): there is only one discrete feature shown that is directly within the easement. In the first field north of Whiteleys Lane (watching brief Field **7**) a rectangular feature is shown, probably a pond, although this is of no particular archaeological interest. Within the wider study area, however, there are many wells, ponds and barn-like features. Of special note is the annotation "*Finger Post and Stocks*" at Stanley Gate which does not appear on later editions, and the absence of "*The Barracks*" just to the north-east of Tithe Barn Farm. Other than those mentioned in *Section 4.3.2*, the field boundaries appear to remain largely the same as those shown on the Tithe maps. No features of archaeological interest were identified within the development area.
- 4.3.5 **Ordnance Survey 1894** (Fig 5): the field boundaries changed considerably in the intervening 55 years, with many being noticeably absent from the 1894 map; there has evidently been a widespread opening out of the old field system. The general outline of the area remains largely unchanged except that the "*The Barracks*" have now been built.
- 4.3.6 A prominent addition to the 1894 edition is the Lancashire and Yorkshire Railways (L & YR) Skelmersdale Branch railway which cuts diagonally from north-west to south-east through the area just to the north of Westhead. There has evidently been some development in Westhead itself, just to the south of the main street. There appears to be more houses and the addition of St James's School. No additional sites of archaeological interest were identified through reference to this map.

4.3.7 **Ordnance Survey 1909:** there is little change evident on this map. All major structures and boundaries remain as on the second edition and there are no additions. No further sites of archaeological interest were identified by reference to this map.

4.3.8 **Ordnance Survey 1938** (Fig 6): some opening up of the field system had occurred since 1909. Field boundaries to the north-east of Tithe Barn Farm (watching brief Field **10**) are no longer evident and the same has occurred further north just to the south of Stuart's Farm (Field **8**). There are no boundaries now evident in the field east of Turner's Farm (Field **7**) and those north of the railway (fields **1**, **2** and **3**) have also disappeared. There does not, however, seem to have been any further major development of Westhead, and all the main features and buildings remain the same. No additional sites of archaeological interest were identified through reference to this map.

#### **4.4 OA NORTH**

4.4.1 OA North's library of secondary sources was examined in order to provide background information on the study area.

#### **4.5 ARCHAEOLOGICAL INTERVENTIONS**

4.5.1 There are no other recorded archaeological interventions within the study area.

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## 5. GAZETTEER OF SITES

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<b>Site No</b>	<b>1</b>
<b>Site name</b>	Bickerstaffe Windmill
<b>NGR</b>	SD 44185 04784
<b>Period</b>	Post-medieval
<b>Source</b>	SMR PRN 9900
<b>Description</b>	Grade II listed building comprising the brick tower of a windmill shown on First edition OS map and probably dating to 1756-7. Now converted to a domestic residence and known as The Old Windmill.
<b>Assessment</b>	The site lies outside the proposed development and will not be affected.

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<b>Site No</b>	<b>2</b>
<b>Site name</b>	Tithe Barn Farm
<b>NGR</b>	SD 43800 04764
<b>Period</b>	Post-medieval
<b>Source</b>	SMR PRN 18443
<b>Description</b>	Grade II listed farmhouse thought to have been built in 1723.
<b>Assessment</b>	The site lies outside the proposed development and will not be affected.

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<b>Site No</b>	<b>3</b>
<b>Site name</b>	Ottershead Farmhouse
<b>NGR</b>	SD 44620 08100
<b>Period</b>	Post-medieval
<b>Source</b>	SMR PRN 18546
<b>Description</b>	Grade II listed red brick farmhouse of mid-eighteenth century date.
<b>Assessment</b>	The site lies outside the proposed development and will not be affected.

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<b>Site No</b>	<b>4</b>
<b>Site name</b>	Ottershead Farmhouse Barn
<b>NGR</b>	SD 44580 08110
<b>Period</b>	Post-medieval
<b>Source</b>	SMR PRN 18547
<b>Description</b>	Grade II listed red brick barn of probable mid-eighteenth century date.
<b>Assessment</b>	The site lies outside the proposed development and will not be affected.

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<b>Site No</b>	<b>5</b>
<b>Site name</b>	Brighthouse Green Farmhouse
<b>NGR</b>	SD 44780 07250
<b>Period</b>	Post-medieval
<b>Source</b>	SMR PRN 18605
<b>Description</b>	Grade II listed red brick farmhouse, now a domestic dwelling, thought to date to 1768.
<b>Assessment</b>	The site lies outside the proposed development and will not be affected.

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<b>Site No</b>	<b>6</b>
<b>Site name</b>	Heyes Farmhouse
<b>NGR</b>	SD 44990 07520
<b>Period</b>	Post-medieval
<b>Source</b>	SMR PRN 18606
<b>Description</b>	Grade II listed red brick farmhouse of probable mid-eighteenth century date. Now a domestic dwelling.
<b>Assessment</b>	The site lies outside the proposed development and will not be affected.

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**Site No** 7  
**Site name** Darbyshire's Farmhouse  
**NGR** SD 44020 07070  
**Period** Post-medieval  
**Source** SMR PRN18611  
**Description** Grade II listed red brick farmhouse and barn of later seventeenth century date (dated 1677 inside). The house was enlarged and altered in the eighteenth century. The barn has recently been renovated and is now a domestic dwelling.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 8  
**Site name** St James Church of England School  
**NGR** SD 44220 07650  
**Period** Post-medieval  
**Source** SMR PRN 18612  
**Description** Grade II listed school with attached master's house dated to 1889.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 9  
**Site name** Dean's Farmhouse  
**NGR** SD 44160 07750  
**Period** Post-medieval  
**Source** SMR PRN 18620  
**Description** Grade II listed farmhouse dated to 1768. Now a domestic dwelling.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 10  
**Site name** Lund's Farmhouse  
**NGR** SD 44410 07570  
**Period** Post-medieval  
**Source** SMR PRN 18621  
**Description** Grade II listed red brick farmhouse of probable late seventeenth or very early eighteenth century. Altered in later eighteenth century and now a domestic dwelling.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 11  
**Site name** Lund's Farmhouse Barn  
**NGR** SD 44420 07560  
**Period** Post-medieval  
**Source** SMR PRN 18622  
**Description** Grade II listed red brick barn dating to the later eighteenth century.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 12  
**Site name** Seftons Brook Hoard  
**NGR** SD 44450 0810  
**Period** Roman  
**Source** SMR PRN 56  
**Description** Hoard of 110 Roman silver *denarii* recovered from the bottom of a stream. The coins range in date from very late Republican (c27 BC) to Hadrianic.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 13  
**Site name** Earthwork  
**NGR** SD 44320 08510  
**Period** Post-medieval  
**Source** SMR PRN 59  
**Description** A small earthwork sited at the foot of a gentle south-west slope. Semicircular in plan, it comprises a ditch and an outer bank, but there are no visible entrances or internal features. It is traditionally associated with a Civil War siege of the moated site approximately 350m to the north-west and is generally thought to be a Cromwellian siege bank.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 14  
**Site name** Ashcroft's Farm  
**NGR** SD 43270 04530  
**Period** Unknown  
**Source** SMR PRN 2818  
**Description** An aerial photograph showing site 0771, a disused Friends burial ground and a complex of crop marks centred on the above NGR, which may represent old field boundaries or drainage. There were several other more amorphous shapes, particularly an area of circular crop marks centred on SD 4237 0442 which may represent pitting or an old quarry. A larger feature in their midst at SD 4236 0441 might be an old marl pit as might be the feature centred on SD 4234 0465.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 15  
**Site name** -  
**NGR** SD 43700 05300  
**Period** Unknown  
**Source** SMR PRN 2819  
**Description** An aerial photograph showing a length of curved cropmark. It does not appear to be of any archaeological significance.  
**Assessment** The site lies outside the proposed development and will not be affected.

---

**Site No** 16  
**Site name** Ox Hey Field  
**NGR** SD 4364 0399  
**Period** Unknown  
**Source** SMR PRN 2820  
**Description** An aerial photograph showing crop marks of a short stretch of parallel double or possibly triple 'ditches' which are slightly curved. They appear to continue making a right-angled turn to the south-east possibly forming an enclosure, fairly central to which is a dark, rectangular crop mark. Its archaeological significance is unclear.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 17  
**Site name** Ox Hey Field  
**NGR** SD 43700 04000  
**Period** Unknown  
**Source** SMR PRN 3412  
**Description** Aerial photographs showing crop marks indicating a possible field system.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 18  
**Site name** Westhead  
**NGR** SD 44300 07200  
**Period** Post-medieval  
**Source** SMR PRN 3416  
**Description** An aerial photograph of an 'L'-shaped field with no obvious features of significance.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 19  
**Site name** Birchenholt Farm  
**NGR** SD 44600 07800  
**Period** Post-medieval  
**Source** SMR PRN5533  
**Description** A large amount of post-medieval lug-handled bowls found at Birchenholt Farm and a comparable find of similar materials in a partially filled-in marl pit 450m to the south. The vessels showed evidence of misfiring and might indicate the presence of a nearby kiln.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 20  
**Site name** Gobbins  
**NGR** SD 43950 08100  
**Period** Post-medieval  
**Source** SMR PRN9675; Ordnance Survey 1849  
**Description** A farmstead and associated well shown on Ordnance Survey map of 1849 but neither is on the current sheet.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 21  
**Site name** Halton Castle Inn  
**NGR** SD 43940 07820  
**Period** Post-medieval  
**Source** SMR PRN 9676; Ordnance Survey 1849  
**Description** Halton Castle Inn, first shown on the Ordnance Survey map of 1849 and still present.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 22  
**Site name** Westhead Well (a)  
**NGR** SD 43990 07070  
**Period** Post-medieval  
**Source** SMR PRN9677; Ordnance Survey 1849  
**Description** A well shown on Ordnance Survey map of 1849 but not on the current sheet.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 23  
**Site name** Westhead Well (b)  
**NGR** SD 43910 069520  
**Period** Post-medieval  
**Source** SMR PRN9678; Ordnance Survey 1849  
**Description** A well shown on Ordnance Survey map of 1849 but not on the current sheet.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 24  
**Site name** Westhead Well (c)  
**NGR** SD 43790 06850  
**Period** Post-medieval  
**Source** SMR PRN9679; Ordnance Survey 1849  
**Description** A well shown on Ordnance Survey map of 1849 but not on the current sheet.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 25  
**Site name** Clock, near Scarth Hill (a)  
**NGR** SD 43500 05930  
**Period** Post-medieval  
**Source** SMR PRN9682; Ordnance Survey 1849  
**Description** A well shown on Ordnance Survey map of 1849 but not on the current sheet.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 26  
**Site name** Clock, near Scarth Hill (b)  
**NGR** SD 43650 05950  
**Period** Post-medieval  
**Source** SMR PRN9683; Ordnance Survey 1849  
**Description** A well shown on Ordnance Survey map of 1849 but not on the current sheet.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 27  
**Site name** Stanley Gate School  
**NGR** SD 44070 05030  
**Period** Post-medieval  
**Source** SMR PRN9684; Ordnance Survey 1849  
**Description** A school shown on Ordnance Survey map of 1849 but not on the current sheet.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 28  
**Site name** Stanley Gate Wells  
**NGR** SD 44070 05400  
**Period** Post-medieval  
**Source** SMR PRN9690; Ordnance Survey 1849  
**Description** Two wells shown on Ordnance Survey map of 1849 but not on the current sheet.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 29  
**Site name** Dicket's Well  
**NGR** SD 44850 06950  
**Period** Post-medieval  
**Source** SMR PRN9691; Ordnance Survey 1849  
**Description** A well shown on Ordnance Survey map of 1849 but not on the current sheet.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 30  
**Site name** -  
**NGR** SD 44850 06950  
**Period** Post-medieval  
**Source** SMR PRN9692

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<b>Description</b>	Well. Pre – 1844.
<b>Assessment</b>	The site lies outside the proposed development and will not be affected.

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<b>Site No</b>	<b>31</b>
<b>Site name</b>	Dicket's Lane Brick Field
<b>NGR</b>	SD 44830 07110
<b>Period</b>	Post-medieval
<b>Source</b>	SMR PRN9693; Ordnance Survey 1849
<b>Description</b>	This brickfield is shown on Ordnance Survey map of 1849 but not on the current sheet.
<b>Assessment</b>	The site lies outside the proposed development and will not be affected.

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<b>Site No</b>	<b>32</b>
<b>Site name</b>	Westhead Gravel Pit
<b>NGR</b>	SD 44800 07780
<b>Period</b>	Post-medieval
<b>Source</b>	SMR PRN9694; Ordnance Survey 1849
<b>Description</b>	A gravel pit shown on Ordnance Survey map of 1849 and possibly also on the current sheet.
<b>Assessment</b>	The site lies outside the proposed development and will not be affected.

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<b>Site No</b>	<b>33</b>
<b>Site name</b>	Westhead Wells
<b>NGR</b>	SD 44070 07770
<b>Period</b>	Post-medieval
<b>Source</b>	SMR PRN9695; Ordnance Survey 1849
<b>Description</b>	Two wells shown on Ordnance Survey map of 1849 but not on the current sheet.
<b>Assessment</b>	The site lies outside the proposed development and will not be affected.

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<b>Site No</b>	<b>34</b>
<b>Site name</b>	Sefton Brook
<b>NGR</b>	SD 44420 08110
<b>Period</b>	Post-medieval
<b>Source</b>	SMR PRN9697; Ordnance Survey 1849
<b>Description</b>	A gravel pit shown on Ordnance Survey map of 1849 and also on the current sheet.
<b>Assessment</b>	The site lies outside the proposed development and will not be affected.

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<b>Site No</b>	<b>35</b>
<b>Site name</b>	Heys Delf
<b>NGR</b>	SD 45030 07350
<b>Period</b>	Post-medieval
<b>Source</b>	SMR PRN9701; Ordnance Survey 1849
<b>Description</b>	A quarry, 'Heys sandstone delf', shown on Ordnance Survey map of 1849 but not on the current sheet.
<b>Assessment</b>	The site lies outside the proposed development and will not be affected.

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<b>Site No</b>	<b>36</b>
<b>Site name</b>	Tithe Barn Farm Well
<b>NGR</b>	SD 43791 04768
<b>Period</b>	Post-medieval
<b>Source</b>	SMR PRN9789; Ordnance Survey 1849
<b>Description</b>	A well shown on Ordnance Survey map of 1849 to the rear of the farmhouse, but it is not on the current sheet.

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**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 37  
**Site name** Tithe Barn  
**NGR** SD 43728 04666  
**Period** Post-medieval  
**Source** SMR PRN9790; Ordnance Survey 1849  
**Description** A tithe barn shown on the Ordnance Survey map of 1849 and now converted to a domestic house.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 38  
**Site name** Bickerstaffe Tile Works  
**NGR** SD 44200 04620  
**Period** Post-medieval  
**Source** SMR PRN9799; Ordnance Survey 1849  
**Description** A tile works shown on the Ordnance Survey map of 1849 but not on the current sheet.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 39  
**Site name** Bickerstaffe Well  
**NGR** SD 44070 04840  
**Period** Post-medieval  
**Source** SMR PRN9901; Ordnance Survey 1849  
**Description** A well shown on the Ordnance Survey map of 1849 but not on the current sheet.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 40  
**Site name** School Brow, Lathom  
**NGR** SD 45004 07707  
**Period** Post-medieval  
**Source** SMR PRN16221; Ordnance Survey 1849  
**Description** A building to the east of School Brow shown on the Ordnance Survey map of 1849 but not on the current sheet. It may form a farmstead with a building to the west. Neither the building or the lane are shown on current maps.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 41  
**Site name** School Brow  
**NGR** SD 44979 07697  
**Period** Post-medieval  
**Source** SMR PRN17475; Ordnance Survey 1849  
**Description** A building to the west of School Brow shown on the Ordnance Survey map of 1849 but not on the current sheet. It may form a farmstead with a building to the east. Neither the building nor the lane are shown on current maps.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 42  
**Site name** Higher Long Lane Farm, Bickerstaffe  
**NGR** SD 43300 05000  
**Period** Post-medieval  
**Source** SMR PRN20288

**Description** Cottage of possible early eighteenth century origins. Extended in the early to mid-nineteenth century and fully refurbished in the late twentieth century.  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 43  
**Site name** Field 9  
**NGR** Centred on SD 44076 05645  
**Period** Post-medieval  
**Source** Bickerstaffe Tithe Map 1841 (DRL 1/7)  
**Description** Three field boundaries shown on the 1841 Tithe map, but not on the Ordnance Survey map of 1849 and not visible on the ground. It is reasonable to assume that they survive as linear features beneath the topsoil.  
**Assessment** The site lies within the easement and will be directly affected.

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**Site No** 44  
**Site name** Remount Depot  
**NGR** Centred on SD 45827 08306SD  
**Period** Post-medieval  
**Source** Jas Air 1988  
**Description** A series of parallel and perpendicular crop marks in a grid pattern with a diagonal line running north-east to south-west from the south-west corner of the feature. It is thought that this is the remains of a World War 1 horse remounting depot and associated railway (Peter Iles, *pers com*).  
**Assessment** The site lies outside the proposed development and will not be affected.

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**Site No** 45  
**Site name** Field 3  
**NGR** SD 44563 07624  
**Period** Post-medieval  
**Source** Jas Air 1988  
**Description** A sub-circular cropmark in Field 3 showing on an aerial photograph. It was possibly a pond, although its exact nature and archaeological significance is uncertain. It was not visible on the ground.  
**Assessment** The site lies within the line of the proposed route and may be affected.

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**Site No** 46  
**Site name** Castle Lane  
**NGR** SD 34399 40817  
**Period** Post-medieval?  
**Source** Lathom Tithe Map 1846 (DRL 1/46)  
**Description** A field named Barn Hey suggests that a barn was situated in this location.  
**Assessment** The site lies outside of the proposed development and will not be affected.

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**Site No** 47  
**Site name** Westhead  
**NGR** SD 34432 40781  
**Period** Post-medieval?  
**Source** Lathom Tithe Map 1846 (DRL 1/46)  
**Description** A field named Barn Meadow suggests that a barn was situated in this location.  
**Assessment** The site lies outside of the proposed development and will not be affected.

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<b>Site No</b>	<b>48</b>
<b>Site name</b>	Dick's Lane
<b>NGR</b>	SD 34456 40777
<b>Period</b>	Post-medieval?
<b>Source</b>	Lathom Tithe Map 1846 (DRL 1/46)
<b>Description</b>	A field named Dick's Well suggests that a well was situated in this location.
<b>Assessment</b>	The site lies outside of the proposed development and will not be affected.

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<b>Site No</b>	<b>49</b>
<b>Site name</b>	Westhead
<b>NGR</b>	SD 34440 40773
<b>Period</b>	Post-medieval?
<b>Source</b>	Lathom Tithe Map 1846 (DRL 1/46)
<b>Description</b>	A house with outbuildings is shown in this location.
<b>Assessment</b>	The site lies outside of the proposed development and will not be affected.

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<b>Site No</b>	<b>50</b>
<b>Site name</b>	Westheads
<b>NGR</b>	SD 34444 40673
<b>Period</b>	Post-medieval?
<b>Source</b>	Lathom Tithe Map 1846 (DRL 1/46)
<b>Description</b>	A field named Buck Kiln Hey suggests that a kiln of some description was situated in this location. It may be a corruption of Brick Kiln.
<b>Assessment</b>	The site lies outside of the proposed development and will not be affected.

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<b>Site No</b>	<b>51</b>
<b>Site name</b>	Stuart's Farm
<b>NGR</b>	SD 34394 40629
<b>Period</b>	Post-medieval?
<b>Source</b>	Lathom Tithe Map 1846 (DRL 1/46)
<b>Description</b>	A field named House Pasture suggests that a house was situated in or near this location.
<b>Assessment</b>	The site lies within the easement and will be directly affected.

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<b>Site No</b>	<b>52</b>
<b>Site name</b>	Stuart's Farm
<b>NGR</b>	SD 34390 40621
<b>Period</b>	Post-medieval?
<b>Source</b>	Lathom Tithe Map 1846 (DRL 1/46)
<b>Description</b>	A field named Pit Field suggests that a pit of some type was situated in this location.
<b>Assessment</b>	The site lies within the easement and will be directly affected.

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## 6. WATCHING BRIEF RESULTS

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### 6.1 INTRODUCTION

- 6.1.1 All of the fields affected by the development were monitored by a watching brief during the easement topsoil strip. The easement was subdivided into 12 fields using existing field boundaries (Fig 3). Of the 12 subdivisions, archaeological features were present in fields **5, 6, 7, 8, 10** and **12**. A total of 24 features of archaeological interest were identified which are outlined below. A general description of the field subdivisions is given below with details of their associated features. A detailed description of each feature is given in *Appendix 2*.
- 6.1.2 **Field 1:** 0.2m-0.4m deep layer of firm, dark greyish-brown sandy-clay with c5% small sub-rounded stones directly over yellow and orange clay natural with patches of yellow, brown and white sands. There were no archaeological features or finds.
- 6.1.3 **Field 2:** 0.2m-0.4m deep layer of firm, dark greyish-brown sandy-clay with c5% small sub-rounded stones directly over yellow and orange clay natural with patches of yellow, brown and white sands. There were no archaeological features or finds.
- 6.1.4 **Field 3:** 0.2m-0.4m deep layer of firm, dark greyish-brown sandy-clay with c5% small sub-rounded stones directly over yellow and orange clay natural with patches of yellow, brown and white sands. There were no archaeological features or finds.
- 6.1.5 **Field 4:** 0.2m-0.4m deep layer of firm, dark greyish-brown sandy-clay with c5% small sub-rounded stones directly over yellow and orange clay natural with patches of yellow, brown and white sands. There were no archaeological features or finds.
- 6.1.6 **Field 5:** 0.3m-0.4m deep layer of firm, dark greyish-brown sandy-clay with c5% small sub-rounded stones directly over yellow and orange clay natural with patches of yellow, brown and white sands. There were four linear features, the majority of which were field drains. A larger linear feature, **132**, which formed a large ditch, was more likely to be part of a boundary. It was considered likely that this field had been truncated by sand extraction.
- 6.1.7 **Field 6:** 0.2m-0.3m deep layer of firm, dark greyish-brown sandy-clay with c5% small sub-rounded stones directly over yellow and orange clay natural with patches of yellow, brown and white sands. A linear feature, **115**, probably a boundary ditch, was observed. It was considered likely that this field had been truncated by sand extraction.
- 6.1.8 **Field 7:** 0.3m-0.5m deep layer of firm, dark greyish-brown sandy-clay with c5% small sub-rounded stones directly over yellow, mottled orange, sand natural. A number of features were identified, all likely to date to the post-medieval period, including: cut **101**, a rectilinear field boundary, 1.0m wide,

0.18m deep, 'U' shaped in profile aligned north-east/south-west, and filled with very loose sandy-silt **100**; rubbish pit/ditch terminus cut **103**, a rectangular feature 1.96m wide by 0.18m deep, aligned north-west/south-east and filled with loose silty-sand **102**; boundary ditch cut **106** which was 2.12m wide, 0.46m deep, ran for at least 20m in a north-west/south-east direction and was filled with loose silty-sand **105**; rubbish pit cut **108**, a rectangular feature aligned north-west/south-east, measuring 1.5m x 0.5m x 0.36m deep and filled with loose silty-sand **107**; and ditch terminus cut **110**, aligned north-west/south-east, measuring more than 6.0m x 0.5m x 0.36m, with a 'U' shaped profile and filled with loose silty-sand **109**. The majority of these appear to be the remains of former field boundaries, although **108** is probably a large rubbish pit.

6.1.9 **Field 8:** 0.3m-0.4m deep layer of firm, dark greyish-brown sandy-clay with c5% small sub-rounded stones directly over yellowy-white and orangey sand natural with lenses of greyish mottled clay. A series of features, mostly linear, probably representing the remains of post-medieval former field boundaries and drains, were observed, and comprised: field boundary cut **117**, aligned north-west/south-east, 1.22m wide, 0.31m deep and filled with firm silty-sand **116**; boundary cut **119**, aligned north-west/south-east, 1.36m wide by 0.26m deep and filled with firm silty sand **118**; boundary ditch cut **121**, aligned north-west/south-east, 1.66m wide by 0.38m deep and filled with firm silty-sand **120**; boundary ditch cut **124**, aligned north-east/south-west, 1.06m wide, 0.18m deep and filled with firm silty-sand layers **122** and **123**; drainage ditch cut **127**, aligned north-west/south-east, 1.76m wide by 0.56m deep and filled with firm silty-sand layers **125** and **126**; and tree bole-removal cut **130**, sub-circular, c4.0m in diameter by 0.89m deep and deliberately backfilled with silty-sand layer **128** and peaty-sand layer **129**. It was considered likely that this field had been truncated by sand extraction.

6.1.10 **Field 9:** at the request of the landowner, no topsoil strip was effected in Field **9** and no archaeology was observed.

6.1.11 **Field 10:** in the south-west half the stratigraphy comprised 0.4m deep layer of dark brown sandy-clay topsoil over yellow-orange brown, paler in places, clay natural. Toward the north-eastern half the natural changed to a mix of yellow-orange clay natural with large patches of yellowish-orange and pale grey to whitish sand. A series of features were observed, all of which consisted of linear features probably representing field boundaries and drains. They comprised the following: ditch/field boundary cut **150**, running for at least 60m on a north-east/south-west alignment, 0.86m wide, 0.18m deep and filled with firm silty-sand **151**; drainage ditch cut **152**, aligned north-west/south-east, 0.58m wide by 0.1m deep and filled with loose to firm silty-sand **153**; modern land drain cut **154**, aligned north-west/south-east, 1.62m wide, 0.7m deep and filled with a modern field drain and backfilled with compacted silty-sand **155**; land drain **154** cuts drainage ditch cut **156**, aligned north-west/south-east, 1.46m wide, 0.38m deep and filled with firm silty-sand **157**; and boundary ditch cut **158**, aligned north-west/south-east, 0.78m wide, 0.26m deep and filled with firm silty-clay **159**. It was considered likely that this field also had been truncated by sand extraction. A large depression comprising

dark sandy-clay with brick fragments was also observed approximately 100m south-west of Ormskirk Road. When partially explored by the mechanical excavator, two tree stumps were removed. This is considered to be an infilled pond and of limited archaeological interest.

- 6.1.12 **Field 11:** within the south-eastern 50m, the stratigraphy comprised c0.5m deep layer of mid-grey sandy-clay topsoil over loose, light grey, yellow in places, homogenous fine sand natural, changing to 0.3m deep layer of mid-grey sandy-clay topsoil over very hard, compact, mid- to light brown tinged orange sandy-clay subsoil with <2% mixed small stones. The true natural, comprising firm, mid- to light brown clay with some sand, was only exposed in patches amounting to around 1% of the field's area and, therefore, any archaeological features remained obscured by the subsoil horizon. No archaeology was observed.
- 6.1.13 **Field 12:** 0.6m to 0.7m deep layer of mid- to dark grey sandy-clay topsoil directly over light yellowy-grey homogenous sand natural, mottled orange. Four post-medieval features were observed, and comprised: ditch/field boundary cut **136**, 1.4m wide by 0.25m deep and filled with silty-sand **137**; boundary ditch cut **138**, aligned north-west/south-east, 1.75m wide, 0.13m deep and filled with silty-sand **139**; possible field drain cut **141**, aligned north-west/south-east, 1.8m wide, 0.17m deep and filled with silty-sand **142**. Wall footing **140** could relate to a small-scale garden feature and comprised two parallel single courses of reused, hand-made and unbonded bricks, running for 8.0m in a north-west/south-east alignment. It was considered likely that this field too had been truncated by sand extraction.
- 6.1.14 Unless otherwise specified in *Appendix 3* linear features ran across the width of the easement or along one edge and so full lengths could not be ascertained.

## 6.2 FINDS

- 6.2.1 **Introduction:** in total, 151 artefacts and ecofacts were recovered from the site, the majority of which were fragments of pottery. The remainder comprised ceramic building material, clay tobacco pipe, glass, iron, pottery, stone, horn, and a composite object made from timber, iron, and copper alloy. The bulk of the finds were retrieved from the fills of ditches in six of the fields monitored, including primary ditch fill **105** (Field 7), boundary cut primary fill **116**, secondary boundary ditch fill **122**, drainage ditch primary fill **126** (all in Field 7), ditch primary fill **131** (field 5), land drain backfill **155**, and ditch/field boundary primary fill **151** (both in Field 10). In addition, finds were retrieved from pit primary fill **107**, ditch/pit primary fill **102** (both in Field 7) and tree-bole backfill **128** (Field 8) along with a number of unstratified deposits and surface finds. The type of finds found in ditches, pits, and other features and deposits, is summarised in Table 3, below and are also tabulated in *Appendix 3*.
- 6.2.2 All artefacts appear to fall into a date range between the seventeenth and twentieth centuries, with the pottery providing the most reliable dating evidence. The exception to this is a flint core, which may be prehistoric in

date. Details of the pottery are set out below, followed by a brief record of the other categories of finds. Whilst these finds, where they are dateable, corroborate the pottery evidence, they have little other relevance to the interpretation of the site.

- 6.2.3 **Pottery:** the numbers of fragments of different fabric types are summarised in Table 4, below. It can be seen that the earliest date to the late seventeenth or early eighteenth century, and that the majority of fineware fragments date to between the late eighteenth and twentieth centuries. All the late seventeenth to eighteenth century pottery was recovered from fill **151** of ditch **150**, which also produced a large quantity of brown-glazed red earthenware from coarseware vessels. Many of the fragments were large, and it was possible to re-fit several, demonstrating that they derived from a small number of vessels, mainly crocks, but also a pancheon.
- 6.2.4 As tableware was more finely potted and more decorative than the coarsewares in use during contemporary periods, it was more subject to changing fashions and thus is of more use in dating. Slip-decorated tableware, dating to the late seventeenth or early eighteenth century was recovered, as mentioned above. The later tablewares (late eighteenth to twentieth century) were almost as restricted: comprising only white-glazed white earthenware and porcelain. All the contexts from which pottery was retrieved, with the exception of the fill of ditch **150** and ditch fill **122**, contained white-glazed white earthenware, dating the deposits to between the late eighteenth and early twentieth centuries. White-glazed white earthenware was the most common fabric in this period, and the transfer patterns on the fragments included a dinnerware pattern (Willow; Coysh and Henrywood 2001, 29), and a teaware or breakfastware pattern (Broseley; *op cit*, 62).

	Fills of ditches	Fill of pit	Fills of other features and unstratified deposits	Total
<b>Ceramic</b>	0	0	2	2
<b>Ceramic building material</b>	17	0	1	18
<b>Clay tobacco pipe</b>	4	0	10	14
<b>Glass</b>	1	0	7	8
<b>Horn</b>	0	1	0	1
<b>Iron</b>	1	0	1	2
<b>Pottery</b>	69	2	30	101
<b>Stone</b>	1	0	3	4
<b>Timber, iron, and copper alloy</b>	1	0	0	1
<b>Total</b>	95	2	54	151

Table 2: Type of finds from different contexts



Pottery type	Date range	Quantity
Slip-decorated buff-bodied tableware	Late seventeenth - early eighteenth century	1
Yellow-glazed pinkish-buff-bodied fabric	Late seventeenth - eighteenth century	1
High-fired brown-glazed purple-bodied ware	Late seventeenth - eighteenth century	1
Beige-glazed buff earthenware	Late seventeenth - early twentieth century	1
Brown-glazed red earthenware (coarseware)	Late seventeenth - early twentieth century	39
Brown-glazed red earthenware (fineware)	Late seventeenth -early twentieth century	2
Brown-glazed and grey-glazed stoneware	Late seventeenth -early twentieth century	4
Beige-glazed white earthenware	Late eighteenth - twentieth century	3
Porcelain	Late eighteenth - twentieth century	1
White-glazed white earthenware	Late eighteenth - twentieth century	48

Table 3: Types of pottery with approximate date ranges and quantity of fragments

- 6.2.5 The material derives from a range of sources; it is likely that the coarseware vessels were all made relatively locally, although little is known of the small-scale producers of red earthenwares in Lancashire during the late seventeenth to early twentieth centuries. The tablewares reflect popular taste of the time and the vessels, fabrics, and transfer patterns represented are those of the industrial-scale potteries of Liverpool, Whitehaven, or even Glasgow.
- 6.2.6 **Building and structural materials:** the ceramic building material comprised brick, tile, and drain fragments, which were probably all post-medieval in date. It can be seen in Table 3 that the majority of the ceramic building material was recovered from the fills of ditches, and can be interpreted as a mixture of building rubble and broken ceramic field drains. Three roof slates and one fragment of window glass were recovered, and were again dated to the post-medieval period. The two corroded iron nails recovered were not closely dateable.
- 6.2.7 **Glass objects and tobacco pipes:** many of the glass bottles were produced in multi-part moulds and can thus be dated to the later nineteenth and twentieth centuries; others had no diagnostic features. Two fragments of a possible glass stirring rod were also recovered. The majority of the clay tobacco pipe fragments were stems, and were undiagnostic. A single small bulbous bowl dated to the seventeenth century (Oswald 1975, 37-9) was retrieved from pit or ditch fill **128**. It had a small, round foot, and the rim showed signs of rouletting.
- 6.2.8 **Other finds:** a slightly weathered horn sheath and a worked flint nodule were retrieved from pit or tree bole fill **128**, and a composite object was retrieved from fill **151** of ditch **150**, which produced pottery dated to the late seventeenth to eighteenth centuries.

- 6.2.9 The flint nodule from **128** is a dark grey colour with a white cortex. A number of flakes have been removed from it and deliberate abrasion has been added to a number of edges. A single striking platform is present on one face demonstrating that it has been utilised, albeit only to a limited extent, as a core. Other flakes scars and abrasion are present elsewhere. The size of the flakes and the single platform technique used would suggest a Mesolithic to early Neolithic date. The presence of post-medieval artefacts from the same fill strongly suggest that it is residual.
- 6.2.10 The composite object, largely wood, was recovered from ditch primary fill **151**. It was bun-shaped, with relatively flat upper and lower surfaces. An iron rod ran through the centre of the object and one of the flat surfaces bore eight copper alloy studs arranged radially. All the studs were identical and petal-shaped with a central shaft in the hollow underside. Evidence suggests that there was a similar arrangement on the other side, although only five studs now survive. It is unclear what purpose the object served, but it may have been a toy. It is likely to be contemporary with the other finds from ditch primary fill **151**, and date to the late seventeenth or eighteenth century.
- 6.2.11 **Discussion:** the finds are of interest as a small post-medieval assemblage from rural Lancashire; few assemblages of this date have been documented in the area. From the pottery evidence, most of the ditches, the pit, and the other features, were dated to the late eighteenth to twentieth centuries. The earliest context was fill **151** from ditch **150**, which produced a range of late seventeenth to eighteenth century pottery, and a presumably contemporary composite wooden object.

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## 7. SYNTHESIS OF RESULTS

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### 7.1 INTRODUCTION

7.1.1 Both the desk-based assessment and the watching brief identified a number of sites of post-medieval date. Many of the features identified during the watching brief formed parts of field boundaries or similar features, which might be expected to correspond to those shown on the early maps of the area, large numbers of which were evidently removed in the nineteenth century (*Section 4.3.5-4.3.8*). A field by field comparison is therefore outlined below in order to identify any corresponding features.

### 7.2 DESK-BASED ASSESSMENT

7.2.1 The sequence of historic maps shows the development of the area from the mid-nineteenth century and what is most clearly evident is the enlargement of the fields. The original, smaller fields were merged to make larger entities by selectively removing boundaries. This probably reflects the era, which saw massive national and international industrial expansion. It is likely that the fields were enlarged to cope with the associated increased demand and to accommodate the use of steam powered traction vehicles.

### 7.3 WATCHING BRIEF

7.3.1 Several former field boundaries were observed during the watching brief, many of which contained finds dated to the post-medieval period, typically the eighteenth and nineteenth century. In some cases these boundaries are likely to pre-date the post-medieval period, and probably went out of use in the nineteenth century as a result of the expansion of the existing fields.

### 7.4 SYNTHESIS

7.4.1 **Field 5:** ditch **132** (Plate 1) was not evident on the earliest available maps of the area. It undoubtedly must have been a boundary of sorts and, given its size, would have been quite a prominent feature within the landscape. The obvious conclusion that it was removed before maps of the area were made is possibly supported by finds from the fill **131** which were dated to as early as the seventeenth century.

7.4.2 **Field 6:** ditch **115** was not evident on the earliest maps examined. It was reasonable to assume that it was a field boundary, and that it pre-dated the field system evident in 1846. However, given the lack of secure dating evidence, its actual age remains unclear.

7.4.3 **Field 7:** comparing the position and alignment of the rectilinear features found in this field with those on the 1846 Tithe Award and the Ordnance Survey maps, it was clear that linear features **106** and **110** are almost certainly

the remnants of field boundaries shown to have been removed between 1909 and 1938 (*Section 4.3.8*). Cut **110** is especially convincing due to its exaggerated north-west/south-east orientation which can be clearly seen on the Ordnance Survey of 1849 (Fig 4).

- 7.4.4 It appears that ditch/boundary **101** is not on the maps and, therefore, very probably pre-dates the field system under discussion. Unfortunately, the absence of secure dating evidence has precluded the further determination of its actual antiquity.
- 7.4.5 **Field 8:** the linear features observed in Field **8** correlate extremely well with those on the earliest maps, and these were shown to have been removed some time between 1909 and 1938 (*Section 4.3.8*). Feature **117** is a little incongruous as it is shown on the Ordnance Survey map of 1849 and Tithe Award of 1846 (DRL 1/46) as a track, whilst the watching brief recorded it more as a ditch. It would appear that feature **117** represents a boundary associated with the track.
- 7.4.6 Contexts **119** and **127** are especially interesting as names can be given to the fields which they previously formed part of. The former is the north-eastern boundary of House Pasture and the latter separates House Pasture and Pit Field to the south-west.
- 7.4.7 The name Pit Field suggests there was some kind of pit/s in the area and it is interesting to speculate that **130** (Plates 2 and 3) might have been that feature. It was in the right general area, although probably not quite within the appropriate field boundaries. Its size would, however, certainly have made it an obvious feature within the landscape if it had been open for any length of time. However, its interpretation as a tree bole excavation pit was largely based on the presence of roots within the natural towards the base of the pit, and that it had evidently been rapidly backfilled with no obvious development of silt deposits. It is reasonable to assume that the crater left following the extraction of a tree stump would be deliberately, and immediately, backfilled, and this would probably preclude the suggestion that this feature was responsible for the field name.
- 7.4.8 Although not on the early maps, contexts **121** (Plate 4) and **124** appear to be aligned with extant boundaries outside Field **8** shown on the 1846 tithe map. Feature **121** might well be a southern continuation of Pit Field's eastern boundary, whilst **124** might also be a continuation of a boundary evident to the north-east. If this is the case, the conclusion must be that they were removed prior to 1846.
- 7.4.9 **Field 9:** the three field boundaries shown on the Tithe Award of 1841 (Site **43**) were not apparently affected by the topsoil strip.
- 7.4.10 **Field 10:** linear feature **150** runs largely parallel with the current field boundary and could be mistaken for the boundary ditch shown on the maps. However, a comparison of the Ordnance Survey map of 1894 with the modern map shows that the modern ditch is in exactly the same location as it was in 1894. The feature observed was c10m north-west of the present ditch and

must, therefore predate 1894. Diagnostic finds of late seventeenth to eighteenth century pottery from its fill **151** suggest that this was an earlier boundary ditch dating to around that time.

- 7.4.11 Features **152** and **156** run parallel and are aligned with similar extant features either side of a green track. The trackway is evident on the Ordnance Survey map of 1849 whilst the ditches are not. However, they are likely to have been drainage ditches to facilitate the removal of water from the trackway.
- 7.4.12 Rectilinear feature **158** correlates well on location and alignment with a field boundary shown on the earlier maps and still in existence in 1947 but not on the current sheet. It was evidently removed in the latter half of the twentieth century.
- 7.4.13 The observed large depression in Field 10 characterised by dark earth and brick fragments was in the general area of a sub-rectangular feature on the Ordnance Survey map of 1849, probably a pond. The presence of trees next to it on the map implies that it might have been a pond, and the presence of tree stumps within it reinforces that interpretation. The presence of brick fragments within the fill suggests that the pond may have been deliberately infilled with imported material.
- 7.4.14 **Field 12:** neither linear feature **136** nor **141** were evident on the early maps, implying that they both pre-date 1839. However, **138** was identified as being potentially a field boundary on the First edition OS map and is duly interpreted as such.
- 7.4.15 Brick feature **140** (Plate 7) was not identified on the early maps studied. Its insubstantial nature was very much that of a garden-type feature and, although there are gardens shown just to the north-west of its location, it lay too far away to be justifiably associated with them and was not on any alignment with other observable features. The bricks were not frogged, fairly thin and hand-made, suggesting that they pre-dated the mid-nineteenth century and were possibly seventeenth or eighteenth century in origin.
- 7.4.16 **Conclusion:** although many of the archaeological features identified during the watching brief were noted on Tithe and Ordnance Survey maps, the watching brief phase of archaeological work has located several features that were either previously unknown or, more complex than their cartographic representations indicate. Much of the ceramic evidence is late in date, but it is likely that the undated boundary features pertain to earlier field systems, which could have been remodelled as early as the seventeenth century. The presence of finds from a variety of dates, probably originally deposited in the topsoil during nightsoiling and constantly reworked through ploughing, is likely to make secure dating of any feature problematic.

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## 8. BIBLIOGRAPHY

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### 8.1 PRIMARY SOURCES

### **Maps & Plans**

DRL 1/7,1841 *Bickerstaffe Tithe Award*, LCRO(Preston)

DRL 1/46,1846 *Lathom Tithe Award*, LCRO(Preston)

Ordnance Survey, 1849 6": *1 Mile*, Lancashire Sheet **92**, SW

Ordnance Survey, 1894 6": *1 Mile*, Lancashire Sheet **92**, SW

Ordnance Survey, 1909 6" : *1 Mile*, Lancashire Sheet **92**, SW

Ordnance Survey, 1938 6": *1 Mile*, Lancashire Sheet **92** (Special Emergency Edition), NW

Ordnance Survey, 1947 6: *1 Mile*, Sheet **92** (Provisional Edition), NW

Ordnance Survey, 1983 *Soils of Northern England*, Sheet **1**, 1: 250000

### **Aerial Photographs**

Jas Air, 1988 3788/164

## **8.2 SECONDARY SOURCES**

Countryside Commission, 1998 *Countryside Character, Volume 2: North West*, Cheltenham

Cowell, RW, and Innes, JB, 1994 *The Wetlands of Merseyside*, North West Wetlands Survey **1**, Lancaster Imprints **2**, Lancaster

Coysh, AW, and Henrywood, RK, 2001 *The Dictionary of Blue and White Printed Pottery 1780-1880*, **1**, Woodbridge

English Heritage, 1991 *Management of Archaeological Projects*, 2nd edn, London

Fletcher, M, 1996 Industrial Archaeology, in R Newman (ed), *The Archaeology of Lancashire: Present State and Future Priorities*, 157-170, Lancaster

Kenyon, D, 1991 *The Origins of Lancashire*, Manchester

Lewis, J, 2002 Sefton Rural Fringes, in J Lewis and R Cowell (eds), *The Archaeology of a Changing Landscape: The Last Thousand Years in Merseyside*, J Merseyside Arch Soc, **11**, 5-88

Morris, J, 1973 *The Age of Arthur*, London

Newman, R, 1996 Medieval Rural Settlement, in R Newman (ed), *The Archaeology of Lancashire: Present State and Future Priorities*, 109-24, Lancaster

Oswald, A, 1975 *Clay Pipes for the Archaeologist*, BAR **14**, Oxford

Wood, J, 1996 Castles and Monasteries, in R Newman (ed), *The Archaeology of Lancashire: Present State and Future Priorities*, 139-56, Lancaster

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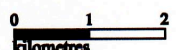
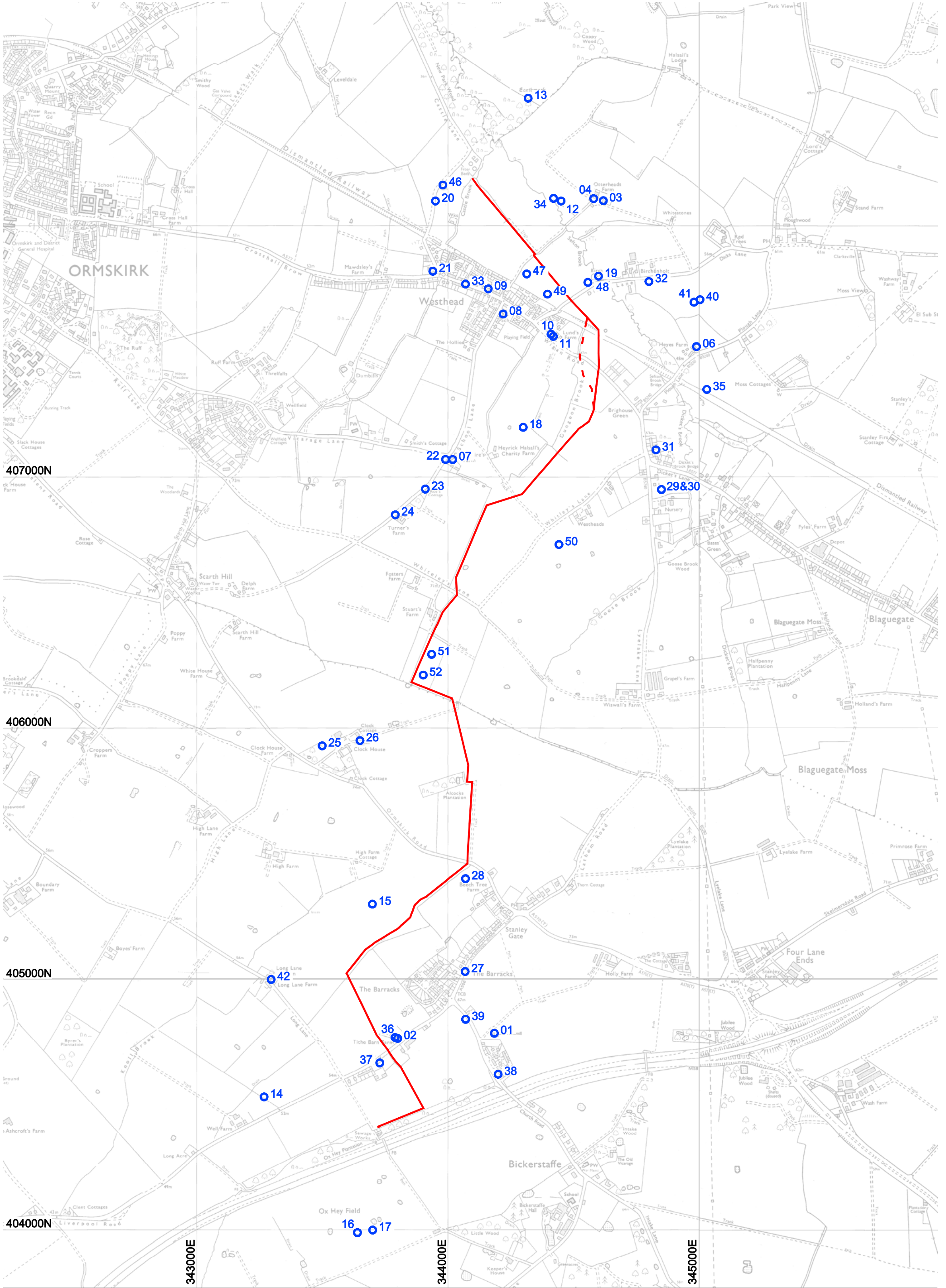


Figure 1: Location map





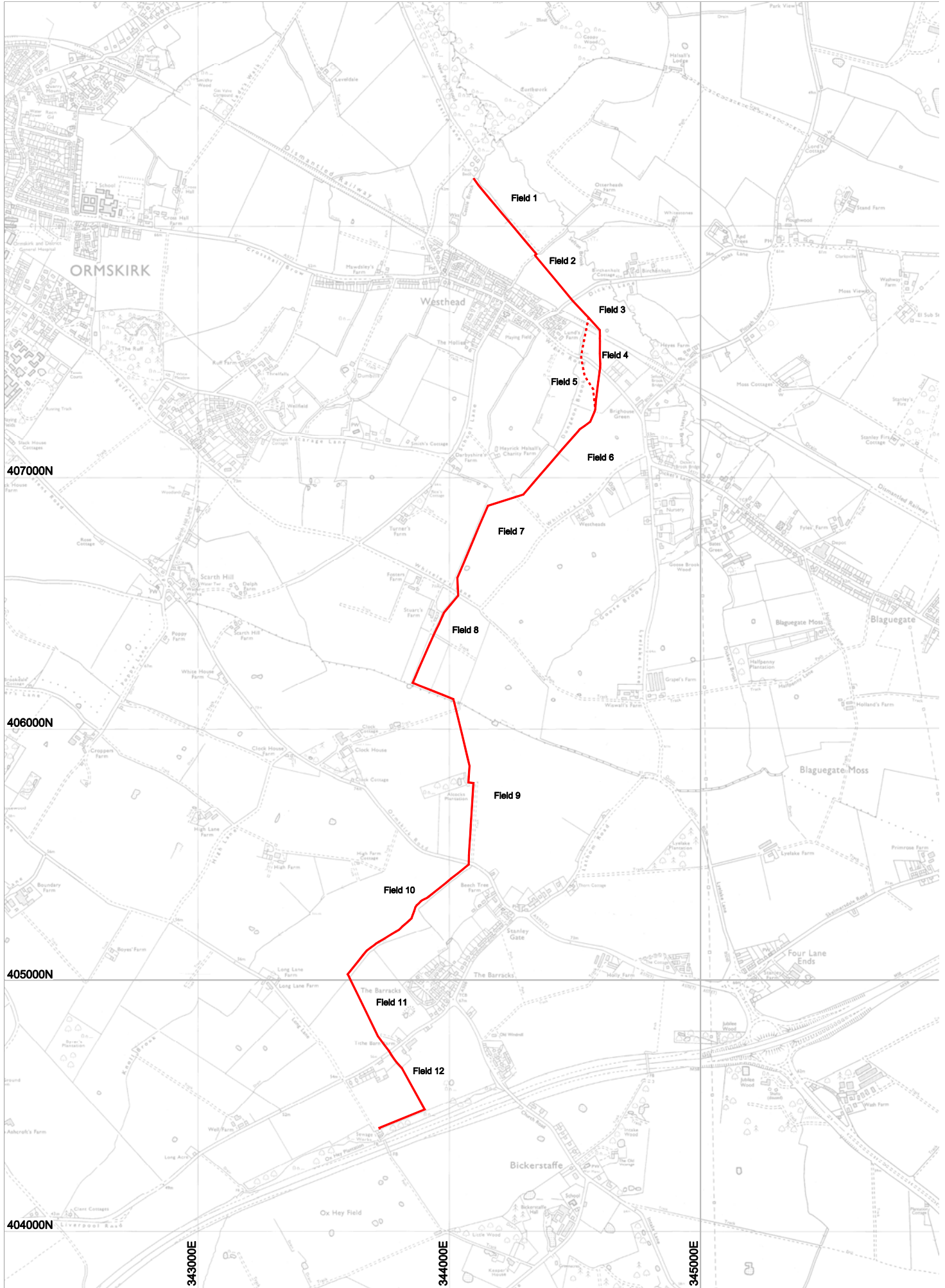
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 gazetteer sites  
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Figure 2: Plan of gazetteer sites



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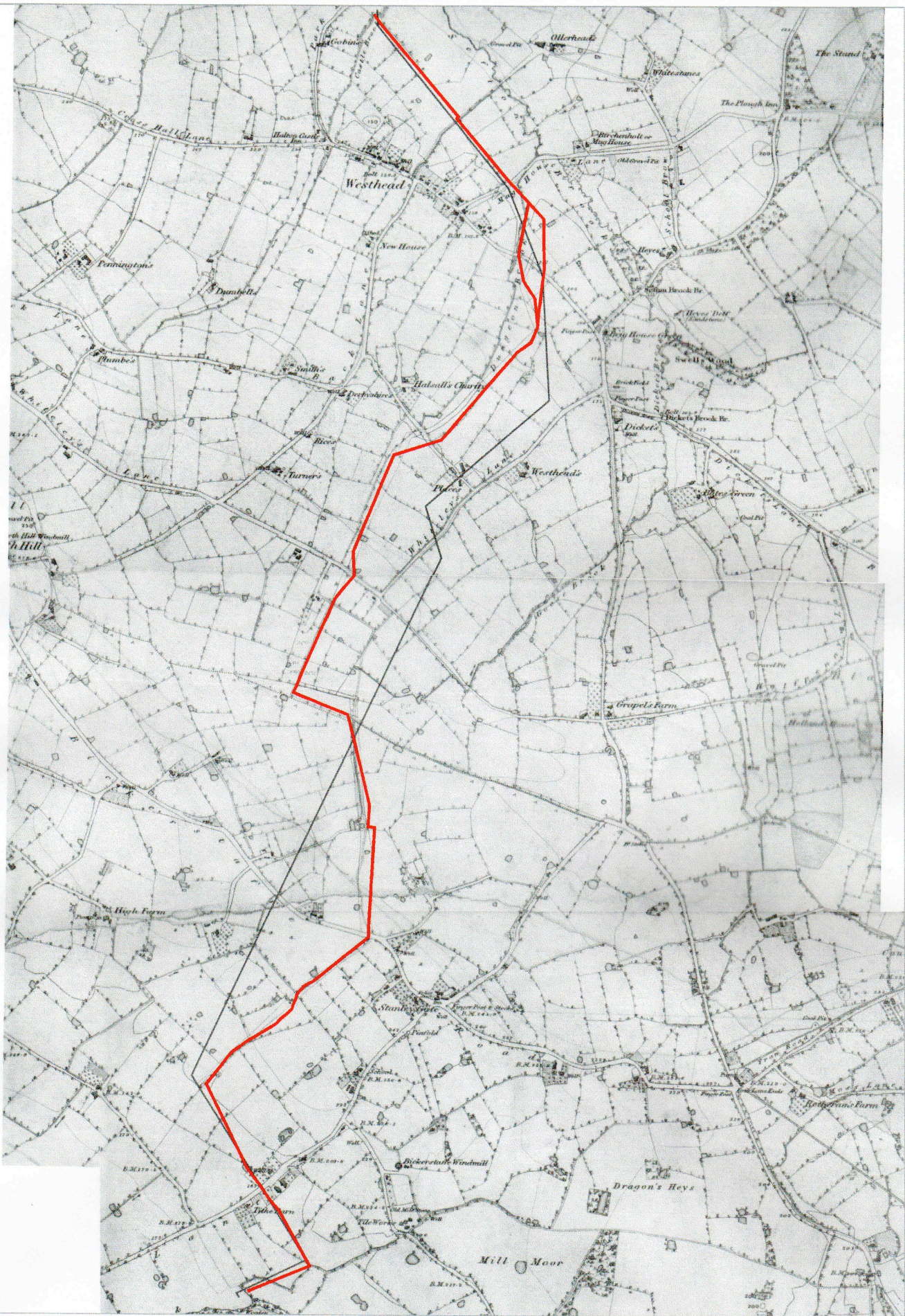
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Figure 3: Plan of watching brief field numbers





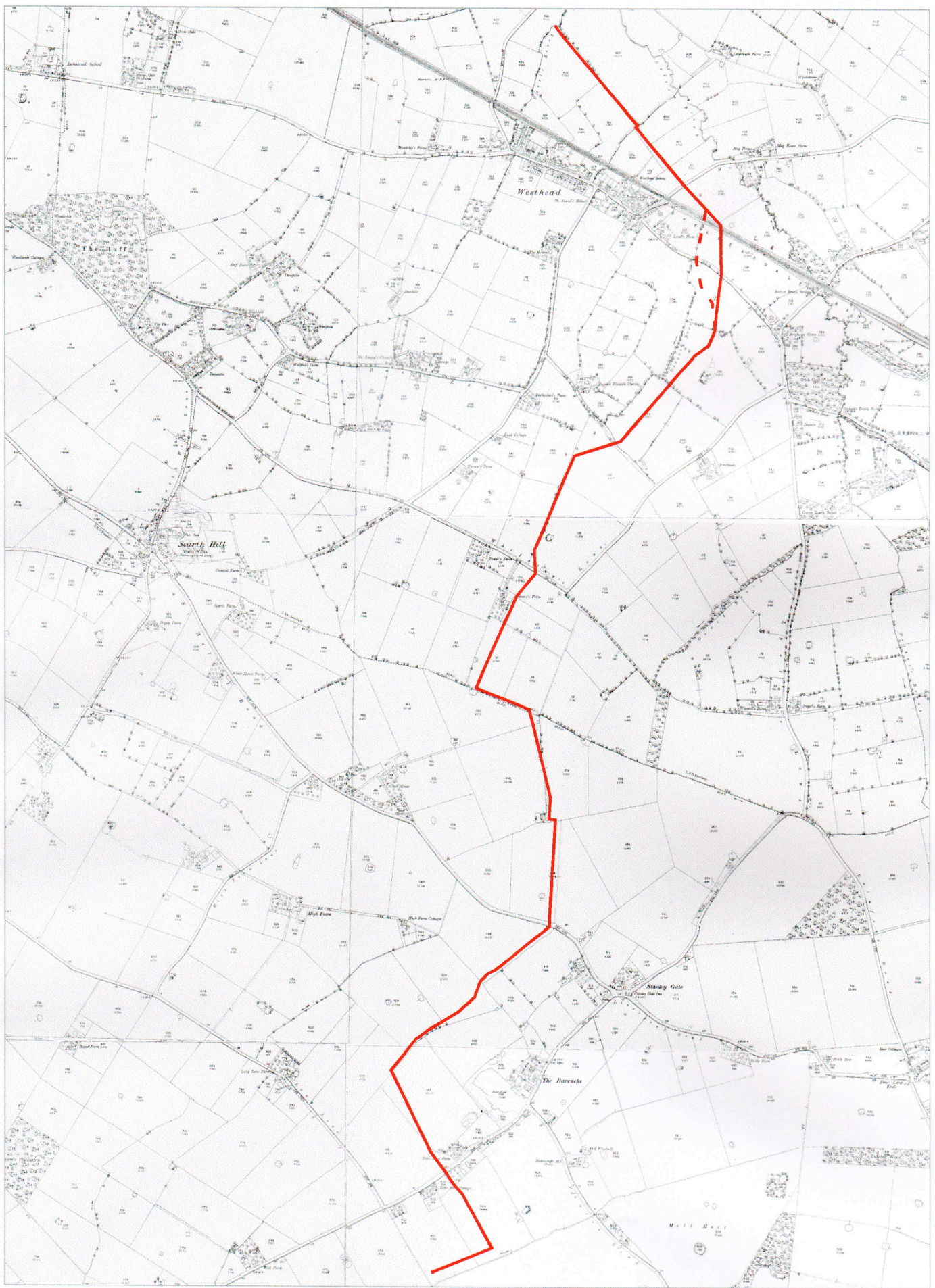
- proposed pipeline route
- final pipeline route



Scale 1:15500





Figure 4: Extract from Ordnance Survey 6" : 1 mile (1849)





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**Scale 1:15500** 



**Figure 5: Extract from Ordnance Survey 6" : 1 mile (1894)**



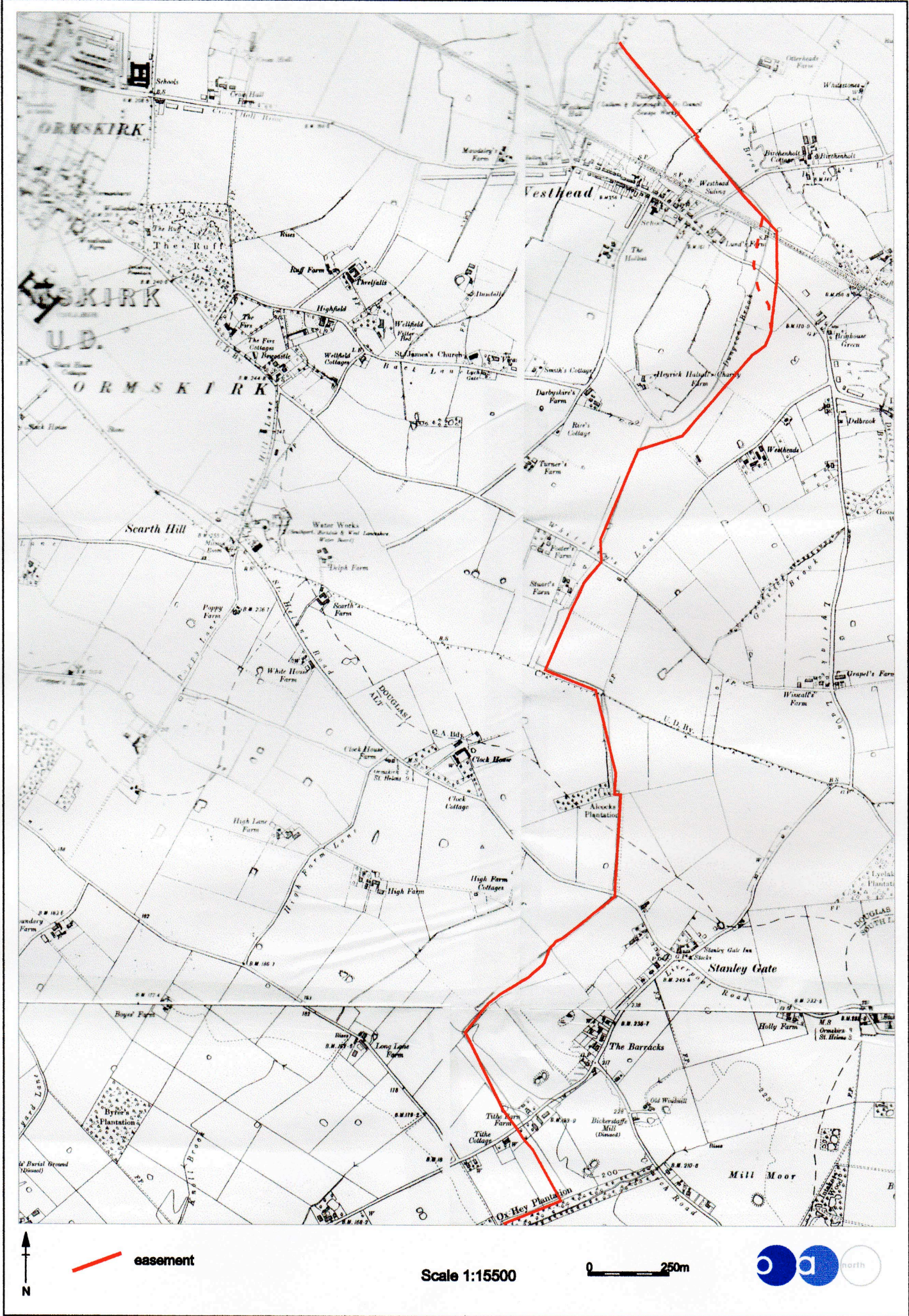


Figure 6: Extract from Ordnance Survey 6" : 1 mile (1938)





Plate 1: Field 5, linear feature *132*, facing north-east



Plate 2 : Field 8, south-west-facing section of pit-like feature *130*



Plate 3 : Field 8, pit-like feature *130* in plan, facing south-east



Plate 4 : Field 8, south-west-facing section of linear feature *121*





Plate 5 : Field **10**, linear feature **150**, facing south-west



Plate 6 : Field **10**, south-west facing section of linear feature **150**



Plate 7 : Field 12, brick feature *140*, facing south-east

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APPENDIX 1: PROJECT DESIGN

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**Oxford  
Archaeology  
North**

**May 2004**

**WESTHEAD TO BICKERSTAFFE PIPELINE, LANCASHIRE**

**ARCHAEOLOGICAL DESK-TOP ASSESSMENT AND WATCHING BRIEF  
PROJECT DESIGN**

*Proposals*

*The following project design is offered in response to a request by United Utilities for an archaeological desk-based assessment and watching brief in advance of a new wastewater transfer route.*

## 1. INTRODUCTION

- 1.1 A new wastewater transfer is proposed by United Utilities (hereafter the client), running for an approximate length of 5km, from Bickerstaffe WwTW to Westhead WwTW, Lancashire. Lancashire County Council's Archaeology Service has issued a verbal brief for a programme of archaeological works to be undertaken. This document is written in response to that brief.
- 1.2 OA North has considerable experience of the assessment, evaluation and excavation of sites of all periods, having undertaken a great number of small and large-scale projects during the past 20 years. Watching briefs, evaluations and excavations have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables. In recent years, OA North has undertaken similar types of work in many parts of Lancashire.
- 1.3 OA North has the professional expertise and resources to undertake the project detailed below to a high level of quality and efficiency. OA North is an Institute of Field Archaeologists (IFA) registered organisation, **registration number 17**, and all its members of staff operate subject to the IFA Code of Conduct.

## 2 OBJECTIVES

- 2.1 The following programme has been designed to provide for accurate recording of any archaeological deposits that are disturbed by the soil strip with the excavation of the pipeline. The watching brief will be preceded by a rapid desk-based assessment to place any findings that are made in to the context of known archaeological sites and/or artefact discovery sites in the immediate vicinity.
- 2.2 A written report will assess the significance of the data generated by the assessment and watching brief, within a local and regional context.

## 3 METHOD STATEMENT

### 3.1 RAPID DESK-BASED ASSESSMENT

- 3.1.1 The following will be undertaken as appropriate, depending on the availability of source material. The level of such work will be dictated by the time scale of the project. The emphasis of the search is to indicate potential archaeological remains rather than to relate a detailed history of the site.
- 3.1.2 **Documentary and Cartographic Material:** this work will comprise a rapid desk-based survey of the existing resource. It will include an appraisal of the data in the Lancashire SMR, appropriate sections of County histories, early maps (printed and manuscript), and such primary documentation (tithe and estate plans etc.) as may be reasonably available. Particular attention will be paid to field and place names recorded on early cartographic sources relating to estate and parish boundaries, field boundaries, woodlands and routes, as these often provide important evidence of archaeological activity and transformation of the historic landscape. All available published and unpublished documentary sources will also be examined and assessed. The Lancashire Record Office (Preston) will also be consulted.
- 3.1.3 **Aerial Photography:** any relevant photographic material held by Lancashire County Council will also be studied. This may indicate the range and survival of archaeological and structural features in the designated area no longer visible at ground level.
- 3.1.4 **Physical Environment:** a rapid desk-based compilation of geological (both solid and drift), pedological, topographical and palaeoenvironmental information will be undertaken in order

to set the archaeological features in context. Any engineering and/or borehole data relating to the site will also be examined.

### 3.2 WATCHING BRIEF

3.2.1 **Methodology:** a programme of field observation will accurately record the location, extent, and character of any surviving archaeological features and/or deposits within the topsoil stripping activities in the course of the proposed development works. This work will comprise observation during the excavation for these works, the systematic examination of any subsoil horizons exposed during the course of the groundworks, and the accurate recording of all archaeological features and horizons, and any artefacts, identified during observation.

3.2.2 During this phase of work, recording will comprise a full description and preliminary classification of features or materials revealed, and their accurate location (either on plan and/or section, and as grid co-ordinates where appropriate). Features will be planned accurately at appropriate scales and annotated on to a large-scale plan provided by the Client. A photographic record will be undertaken simultaneously.

3.2.3 A plan will be produced of the areas of groundworks showing the location and extent of the ground disturbance and one or more dimensioned sections will be produced.

3.2.4 A watching brief will be conducted of all topsoil stripping activities. Putative archaeological features and/or deposits identified by the machining process, together with the immediate vicinity of any such features, will be cleaned by hand, using either hoes, shovel scraping, and/or trowels depending on the subsoil conditions, and where appropriate sections will be studied and drawn. Any such features will be sample excavated (ie selected pits and postholes will normally only be half-sectioned, linear features will be subject to no more than a 10% sample, and extensive layers will, where possible, be sampled by partial rather than complete removal).

3.2.5 It is assumed that OA North will have the authority to stop the works for a sufficient time period to enable the recording of important deposits. It may also be necessary to call in additional archaeological support if a find of particular importance is identified or a high density of archaeology is discovered, but this would only be called into effect in agreement with the Client and the County Archaeology Service and will require a variation to costing. Also, should evidence of burials be identified, the 1857 Burial Act would apply and a Home Office Licence would be sought. This would involve all work ceasing until the proper authorities were happy for burials to be removed. In normal circumstances, field recording will also include a continual process of analysis, evaluation, and interpretation of the data, in order to establish the necessity for any further more detailed recording that may prove essential.

3.2.6 Full regard will, of course, be given to all constraints (services etc.), as well as to all Health and Safety regulations. OA North provides a Health and Safety Statement for all projects and maintains a Unit Safety policy. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Unit Managers.

### 3.3 ARCHIVE/REPORT

3.3.1 **Archive:** the results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with current English Heritage guidelines (*Management of Archaeological Projects*, 2nd edition, 1991). OA North practice is to deposit the original record archive of projects (paper, magnetic and plastic media) with the appropriate County Record Office, and a full copy of the record archive (microform or microfiche) together with the material archive (artefacts, ecofacts, and samples) with an appropriate museum. Wherever possible, OA North recommends the deposition of such material in a local museum approved by the Museums and Galleries Commission, and would make appropriate arrangements with the designated museum at the outset of the project for the proper labelling, packaging, and accessioning of all material recovered.



- 3.3.2 **Report:** one bound and one unbound copy of a written synthetic report will be submitted to the client, and a further two copies submitted to the Lancashire SMR (one digital) within eight weeks of completion of fieldwork. The report will include a copy of this project design, and indications of any agreed departure from that design. It will present, summarise, and interpret the results of the programme detailed above and will include a full index of archaeological features identified in the course of the project, with an assessment of the overall stratigraphy, together with appropriate illustrations, including detailed plans and sections indicating the locations of archaeological features. Any finds recovered will be assessed with reference to other local material and any particular or unusual features of the assemblage will be highlighted and the potential of the site for palaeoenvironmental analysis will be considered. The report will also include a complete bibliography of sources from which data has been derived.
- 3.3.3 This report will identify areas of defined archaeology. An assessment and statement of the actual and potential archaeological significance of the identified archaeology within the broader context of regional and national archaeological priorities will be made. Illustrative material will include a location map, section drawings, and plans. This report will be in the same basic format as this project design; a copy of the report can be provided on CD-ROM, if required.
- 3.3.4 **Confidentiality:** all internal reports to the client are designed as documents for the specific use of the Client, for the particular purpose as defined in the project brief and project design, and should be treated as such. They are not suitable for publication as academic documents or otherwise without amendment or revision.

## 4 PROJECT MONITORING

- 4.1 Monitoring of this project will be undertaken through the auspices of the LCAS Archaeologist, who will be informed of the start and end dates of the work.

## 5 WORK TIMETABLE

- 5.1 OA North could commence the watching brief within two weeks of receipt of written notification from the client.
- 5.2 The desk-based assessment for the pipeline is expected to take in the region of four days to complete. The duration of the archaeological presence for the watching brief is as yet unknown, being dictated by the schedule of works.
- 5.3 The client report will be completed within eight weeks following completion of the fieldwork.

## 6 STAFFING

- 6.1 The project will be under the direct management of **Alison Plummer BSc (Hons)** (OA North senior project manager) to whom all correspondence should be addressed.
- 6.2 Present timetabling constraints preclude detailing at this stage exactly who will be undertaking the desk-based assessment, walkover survey and watching brief elements of the project.

## 7 INSURANCE

- 7.1 OA North has a professional indemnity cover to a value of £2,000,000; proof of which can be supplied as required.

## APPENDIX 2: SUMMARY CONTEXTS LIST

<b>Context No/Field No</b>	<b>Extent and Description</b>	<b>Interpretation</b>
<b>100/F7</b>	1.0m in width by 0.18m in depth, a very loose, dark blackish-grey silty-sand with greenish-grey clay lenses and no stone inclusions	Primary fill of boundary cut <b>101</b>
<b>101/F7</b>	Rectilinear feature 1.0m in width by 0.18m in depth aligned north-east/south-west. A shallow 'U' shape in profile with a gradual break of slope at top and gently sloping sides breaking gradually to a flattish base	Cut for possible post-medieval hedgerow field boundary filled by <b>100</b>
<b>102/F7</b>	1.96m in width by 0.18m in depth, a dark blackish-grey, very loose silty-sand with no stone inclusions	Primary fill of ditch/pit cut <b>103</b>
<b>103/F7</b>	A rectangular feature aligned north-west/south-east, 1.96m in width by 0.18m in depth and running into the north-west section. A sharp break of slope on the south-west edge led to a vertical side with a sharp break of slope at bottom and a flat base. There were more gradual breaks of slope to the north-east with a more gradually sloping side.	Cut for ditch terminus or, more likely, a post-medieval rubbish pit/midden filled by <b>102</b>
<b>104/F7</b>	Dark greyish-brown, firm sandy-clay with 5% small sub rounded pebbles	Topsoil
<b>105/F7</b>	2.12m in width by 0.46m in depth, a mix of loose dark grey-black and white silty-sands with greeny- grey lenses	Primary fill of ditch cut <b>106</b>
<b>106/F7</b>	Rectilinear feature aligned north-west/south-east. At least 20m in length, 2.12m in width and 0.46m in depth. Gradual break of slope to the north-east with gently sloping side but a sharper break of slope to the south-west with a steep side leading to a slightly concave base	Cut for post-medieval field boundary ditch filled by <b>105</b>
<b>107/F7</b>	1.50m x 0.5m x 0.36m, a mixed grey, brown, black and white layer of loose silty-sand with no stone inclusions	Primary fill of pit cut <b>108</b>
<b>108/F7</b>	Discrete rectangular feature aligned north-west/south-east. 1.5m x 0.5m x 0.36m with a sharp break of slope at top, steep sides breaking sharply to an uneven base	Cut for a post-medieval rubbish pit filled by <b>107</b>
<b>109/F7</b>	>6.0m x 0.5m x 0.2m, a very loose, dark blackish-grey silty-sand with flecks of white but no stone inclusions	Primary fill of ditch cut <b>110</b>
<b>110/F7</b>	Irregular rectilinear feature aligned north-west/south-east. >6.0m x 0.5m x 0.2m and 'U' shaped in profile with a sharp break of slope at	Cut for post-medieval ditch terminus filled by <b>109</b>

<b>Context No/Field No</b>	<b>Extent and Description</b>	<b>Interpretation</b>
	top and steep sides breaking gradually to a concave base	
<b>111/F6</b>	1.45m in width by 0.38m in depth, a firm, dark grey-black silty-sand with no stone inclusions	Final/quaternary fill of field boundary cut <b>115</b>
<b>112/F6</b>	0.37m in width by 0.2m in depth, a firm mixed black and grey silty-sand with no stone inclusions	Tertiary fill of field boundary cut <b>115</b>
<b>113/F6</b>	0.64m in width by 0.2m in depth, a soft dark grey black organic layer with no stone inclusions	Secondary fill of field boundary cut <b>115</b>
<b>114/F6</b>	0.73m in width by 0.09m in depth, a soft mixed black ,white and grey silty-sand with no stone inclusions	Primary fill of field boundary cut <b>115</b>
<b>115/F6</b>	A rectilinear feature 1.45m in width by 0.49m in depth oriented north-west/south-east. A shallow 'U' shape in profile with a gradual break of slope at top and gently sloping sides breaking gradually to a slightly concave base	Cut for Post-medieval boundary ditch filled by <b>114, 113, 112</b> and <b>111</b>
<b>116/F8</b>	1.22m in width by 0.31m in depth, a firm dark greyish-black silty-sand with c1% poorly sorted, rounded pebbles between 40mm and 150mm in diameter	Primary fill of Post-medieval field boundary cut <b>117</b>
<b>117/F8</b>	A rectilinear feature aligned north-west/south-east, 1.22m in width by 0.31m in depth. A shallow 'U' shape in profile with a gradual break of slope at top and gently sloping sides breaking sharply on the south-west and gradually on the north-east to a slightly concave base	Cut for post-medieval field boundary filled by <b>116</b>
<b>118/F8</b>	1.36m in width by 0.26m in depth, a firm, mixed light grey and black silty-sand with c2% small rounded pebbles and disturbed by root action	Primary fill of probable post-medieval field boundary cut <b>119</b>
<b>119/F8</b>	A rectilinear feature aligned north-west/south-east, 1.36m in width and 0.26m in depth. A shallow 'U' shape in profile with a gradual break of slope at top with gently sloping sides breaking gradually to a flat base	Cut for post-medieval boundary, possibly vertically truncated in the 1970s by sand extraction. Filled by <b>118</b>
<b>120/F8</b>	1.66m in width by 0.38m in depth, a firm, mixed brown, white, grey and black silty-sand with ≤1% small rounded pebbles	Primary fill of possible post-medieval field boundary cut <b>121</b>
<b>121/F8</b>	A rectilinear feature aligned north-east/south-west, 1.66m in width by 0.38m in depth. A shallow 'U' shape in profile with a gradual break of slope at top with gently sloping sides, steeper to the north-west, breaking gradually to a flat base	Cut for probable post-medieval boundary ditch, possibly vertically truncated in the 1970s by sand extraction. Filled by



<b>Context No/Field No</b>	<b>Extent and Description</b>	<b>Interpretation</b>
		<b>120</b>
<b>122/F8</b>	0.98m in width by 0.18m in depth, a firm, mixed brown, white, grey and black silty-sand with ≤1% small rounded pebbles	Secondary fill of probable post-medieval boundary ditch cut <b>124</b>
<b>123/F8</b>	0.08m in width and 0.04m in depth, a firm, light grey silty-sand with no stone inclusions	Primary fill of probable post-medieval boundary ditch cut <b>124</b>
<b>124/F8</b>	A rectilinear feature aligned north-east/south-west, 1.06m in width by 0.18m in depth. A shallow 'U' shape in profile with a gradual break of slope at top with gently sloping sides breaking gradually to a flat base	Cut for probable post-medieval boundary ditch, possibly vertically truncated in the 1970's by sand extraction. Filled by <b>122</b> and <b>123</b>
<b>125/F8</b>	1.6m in width by 0.15m in depth, a firm, mid to light greyish black silty-sand with c2% small rounded pebbles	Secondary fill of probable post-medieval drainage ditch cut <b>127</b>
<b>126/F8</b>	1.42m in width by 0.42m in depth, a firm, dark grey silty-sand with lenses of clay and white sand. No inclusions	Primary fill of probable post-medieval drainage ditch cut <b>127</b>
<b>127/F8</b>	A rectilinear feature aligned north-west/south-east, 1.76m in width by 0.56m in depth. A shallow 'U' shape in profile with a sharp break of slope at top with steeply sloping sides breaking gradually to the south-west and more sharply to the north-east to a slightly concave base.	Cut for possible post-medieval drainage ditch filled by <b>126</b> and <b>125</b>
<b>128/F8</b>	A 0.45m thick layer of firm, dark grey to black silty-sand with clay lenses	Deliberately re-deposited secondary fill of possible tree-bole cut <b>130</b>
<b>129/F8</b>	A >0.73m thick layer of firm, mixed black to dark brown peaty sand with white, orange, yellow and brown patches. Not fully excavated	Deliberately re-deposited primary fill of possible tree-bole cut <b>130</b>
<b>130/F8</b>	A discrete feature, semi-circular in plan but running under the north-east section so as probably to be roughly circular if fully exposed. c4.0m in diameter and greater than 0.89m in depth	Cut for possible removal of tree bole. Deliberately backfilled with <b>128</b> and <b>129</b>
<b>131/F5</b>	3.85m in width by 0.59m in depth, a firm, lightish-grey silty-sand with a large lens of light yellowy-brown clay and c2% sub-angular small stones	Primary fill of large ditch cut <b>132</b>
<b>132/F5</b>	A rectilinear feature aligned north-east/south-west being at least 15.0m in length and	Cut for a large post-medieval ditch,

Context No/Field No	Extent and Description	Interpretation
	measuring 3.85m in width by 0.59m in depth. A stepped 'U' shape in profile with a sharp break of slope to the step on the north-west, truncated break of slope to flat base	truncated to north-west and south-east by two field drains. Filled by <b>131</b>
<b>133/F5</b>	A 0.45m deep layer of loose, mixed white, orange, yellow and brown sand with small peaty lenses but no stone inclusions	Natural sand sealing <b>134</b>
<b>134/F5</b>	A 0.1m deep layer of compact, dark brown to black humic peat	Interglacial/stadial peat layer
<b>135/F5</b>	Very compact, greenish blue sandy-clay with c10% small rounded pebbles	Natural clay below <b>134</b>
<b>136/F12</b>	Irregular rectilinear feature aligned north-east/south-west, 1.4m in width by 0.25m in depth. A shallow, flat-bottomed 'U' shape in profile with sharp break of slope at top and fairly steep sides breaking sharply to a flat base	Probably a disused ditch or field boundary filled by <b>137</b>
<b>137/F12</b>	1.4m in width by 0.25m in depth, a moist, dark grey to black silty-sand with some gravel concentrated towards the base	Primary fill of <b>136</b>
<b>138/F12</b>	A rectilinear feature oriented north-west/south-east, 1.75m in width by 0.13m in depth. A shallow 'U' shape in profile with fairly sharp break of slope at top and gently concave sides breaking gradually to a flat base	Cut for post-medieval boundary ditch
<b>139/F12</b>	1.75m in width and 0.13m in depth, a dark blackish grey silty-sand with occasional medium rounded pebble	Primary fill of post-medieval boundary ditch <b>138</b>
<b>140/F12</b>	Two parallel lines of brick, one course deep, set c0.05m – 0.08m apart and packed directly into the natural sand. Aligned north-west/south-east and visible for c8.0m. No bond pattern or bond material, the bricks have in part been capped by flat sandstone 'tiles' and appear to be hand-made. They are re-used, not frogged and many are broken half-bricks. Max dimensions 0.21m x 0.11m x 0.08m.	Too insubstantial to be structural. Probably the footing of a post-medieval garden wall or other garden feature.
<b>141/F12</b>	A poorly defined and irregular rectilinear feature aligned north-west/south-east, 1.8m in width and 0.17m in depth. A flattened 'U' shape in profile with gradual break of slope at top and gently concave sides breaking imperceptibly to a concave base	Possible post-medieval field drain, probably highly truncated in 1970s by sand extraction.
<b>142/F12</b>	1.8m in width and 0.17m in depth, a homogenous, dark grey silty-sand with no stone inclusions	Fill of drain cut <b>141</b>

<b>Context No/Field No</b>	<b>Extent and Description</b>	<b>Interpretation</b>
<b>150/F10</b>	A rectilinear feature at least 60m long and aligned north-east/south-west running parallel to the easement. 0.86m in width and 0.18m in depth, it is a shallow 'U' shape in profile with a gradual break of slope at top and gently sloping sides breaking gradually to a concave base	Cut for small ditch or possible post-medieval field boundary filled by <b>151</b> . Possibly vertically truncated in 1970s sand extraction.
<b>151/F10</b>	0.86m in width and 0.18m in depth, a firm, dark grey silty-sand with lenses of orangey-yellow and c2% sub-angular to sub-rounded stones between 200mm and 500mm in diameter	Primary fill of cut <b>150</b>
<b>152/F10</b>	A rectilinear feature aligned north-west/south-east, 0.58m in width by 0.1m in depth. A shallow 'U' shape in profile with a gradual break of slope at top, gently sloping concave sides breaking imperceptibly to a concave base	Cut for possible post-medieval surface water drainage ditch. Likely to have been truncated in 1970s by sand extraction.
<b>153/F10</b>	0.58m in width and 0.1m in depth, a loose to firm mottled dark grey to off-white silty-sand with no stone inclusions	Fill of possible post-medieval field boundary cut <b>152</b>
<b>154/F10</b>	A rectilinear feature aligned north-west/south-east, 1.62m in width by 0.7m in depth. A 'V' shape in profile cutting both natural and <b>157</b> with a modern field drain in the base	Cut for modern land drain physically truncating earlier ditch cut <b>156</b> and filled by <b>155</b>
<b>155/F10</b>	1.62m in width and 0.7m in depth, a highly compacted, mixed beige and dark grey to black silty-sand with clay lenses and no stone inclusions	Deliberately re-deposited fill of land drain cut <b>154</b>
<b>156/F10</b>	A rectilinear feature aligned north-west/south-east, 1.46m in width by 0.38m in depth. A gradual break of slope with shallow south-west side. Base and north-east truncated by <b>154</b>	Cut for possible post-medieval surface water drainage ditch heavily truncated by <b>154</b> and filled by <b>157</b>
<b>157/F10</b>	1.46m in width by 0.38m in depth, a firm, dark grey to black silty-sand with no stone inclusions	Primary fill of <b>156</b>
<b>158/F10</b>	A rectilinear feature aligned north-west/south-east, 0.78m in width and 0.26m in depth. A 'V' shape in profile with a sharp break of slope at top, steep sides stepped on the south-west edge, breaking sharply to a flat base	Cut for post-medieval boundary ditch filled by <b>159</b>
<b>159/F10</b>	0.78m in width by 0.26m in depth, a firm, light to dark grey silty clay with no stone inclusions	Primary fill of field boundary cut <b>158</b>

## APPENDIX 3: FINDS SUMMARY

Field	Context	Object Record	Qty	Material	Description	Date Range
5	131	24	2	Clay tobacco pipe	Stems	Seventeenth - early twentieth century
5	131	25	6	Ceramic building material	Tile or drain	Post-medieval
5	131	26	1	Pottery	Brown-glazed red earthenware (coarseware)	Late seventeenth - early twentieth century
5	131	26	10	Pottery	White-glazed white earthenware	Late eighteenth - twentieth century
5	Surface	1	1	Pottery	Brown-glazed stoneware	Late seventeenth - early twentieth century
7	102	8	2	Stone	Roof slate	Post-medieval
7	102	9	1	Ceramic building material	Green-glazed tile	Late eighteenth - twentieth century
7	102	9	6	Pottery	White-glazed white earthenware	Late eighteenth - twentieth century
7	102	10	2	Ceramic	Red earthenware	Late seventeenth - early twentieth century
7	102	11	1	Iron	Nail	Not closely dateable
7	102	12	1	Glass	Very light turquoise (bottle)	Nineteenth - twentieth century
7	102	12	1	Glass	Flat (window pane)	Post-medieval
7	102	12	2	Glass	Colourless (stirring rod?)	Nineteenth - twentieth century
7	105	13	1	Glass	Very light turquoise (bottle)	Eighteenth - twentieth century
7	105	14	7	Pottery	White-glazed white earthenware	Late eighteenth - twentieth century
7	105	15	1	Pottery	Brown-glazed red earthenware (coarseware)	Late seventeenth - early twentieth century
7	105	2	2	Pottery	Brown-glazed red earthenware (fineware)	Late seventeenth - early twentieth century
7	107	15	1	Pottery	Porcelain	Late eighteenth - twentieth century
7	107	15	1	Pottery	White-glazed white earthenware	Late eighteenth - twentieth century
7	Surface	3	3	Clay tobacco pipe	Stems	Seventeenth - early twentieth century
7	Surface	4	1	Glass	Very light turquoise (bottle)	Eighteenth - twentieth century
7	Surface	5	1	Pottery	Grey-glazed stoneware	Late seventeenth - early twentieth century

Field	Context	Object Record	Qty	Material	Description	Date Range
7	Surface	5	1	Pottery	Brown-glazed red earthenware (coarseware)	Late seventeenth - early twentieth century
7	Surface	5	6	Pottery	White-glazed white earthenware	Late eighteenth - twentieth century
8	116	33	1	Horn	Core	Not closely dateable
8	116	34	1	Iron	Nail shank?	Not closely dateable
8	116	35	1	Ceramic building material	Brick	Not closely dateable
8	Surface	6	1	Glass	Green (bottle)	Seventeenth - twentieth century
8	Surface	7	1	Pottery	Brown-glazed red earthenware (coarseware)	Late seventeenth - early twentieth century
9	126	17	2	Pottery	Brown-glazed red earthenware (coarseware)	Late seventeenth - early twentieth century
9	126	17	1	Pottery	Brown-glazed stoneware	Late seventeenth - early twentieth century
9	126	17	10	Pottery	White-glazed white earthenware	Late eighteenth - twentieth century
9	126	17	3	Pottery	Beige-glazed white earthenware	Late eighteenth - twentieth century
9	126	18	1	Stone	Roof slate	Post-medieval
10	122	16	1	Pottery	Beige-glazed buff earthenware	Late seventeenth - early twentieth century
10	128	19	1	Stone	Dark grey flint, white cortex	Late Mesolithic - early Neolithic
10	128	21	7	Clay tobacco pipe	Bowl and stems	Seventeenth - early twentieth century
10	128	22	6	Pottery	Brown-glazed red earthenware (coarseware)	Late seventeenth - early twentieth century
10	128	22	1	Pottery	Brown-glazed stoneware	Late seventeenth - early twentieth century
10	128	22	7	Pottery	White-glazed white earthenware	Late eighteenth - twentieth century
10	128	23	1	Glass	Blue (bottle)	Nineteenth - twentieth century
10	155	20	8	Ceramic building material	Tile	Post-medieval
10	155	30	1	Pottery	White-glazed white earthenware	Late eighteenth - twentieth century
10	155	31	2	Ceramic building material	Tile or drain	Post-medieval
10	155	32	1	Clay tobacco pipe	Stem	Seventeenth - early twentieth century

<b>Field</b>	<b>Context</b>	<b>Object Record</b>	<b>Qty</b>	<b>Material</b>	<b>Description</b>	<b>Date Range</b>
12	151	27	27	Pottery	Brown-glazed red earthenware (coarseware)	Late seventeenth - early twentieth century
12	151	27	1	Pottery	Slip-decorated buff-bodied tableware	Late seventeenth - early eighteenth century
12	151	27	1	Pottery	High-fired brown-glazed purple-bodied ware	Late seventeenth - eighteenth century
12	151	27	1	Pottery	Yellow-glazed pinkish-buff-bodied fabric	Late seventeenth - eighteenth century
12	151	28	1	Timber, iron, and copper alloy	Unidentified object	Not closely dateable
12	151	29	1	Clay tobacco pipe	Stem	Seventeenth - early twentieth century