

ARCHAEOLOGICAL
SERVICES
DURHAM UNIVERSITY

for
Pegasus Group

on behalf of
Barratt David Wilson Homes (Yorkshire East)
and Vistry Group

Land East of Moor Lane
Haxby
North Yorkshire

archaeological evaluation

report 5878
October 2023

Contents

1.	Summary	1
2.	Project background	2
3.	Landuse, topography and geology	3
4.	Historical and archaeological background	3
5.	The evaluation trenches	4
6.	The artefacts	7
7.	The palaeoenvironmental evidence	10
8.	The archaeological resource	11
9.	Impact assessment	12
10.	Recommendations	12
11.	Sources	12
Appendix 1: Data tables		14
Appendix 2: Stratigraphic matrices		21

Photographs

Photo 1:	Trench 11, ditch [F45], looking south-east
Photo 2:	Trench 13b, ditch [F18], looking east
Photo 3:	Trench 13b, ditch [F37], looking east
Photo 4:	Trench 15, ditch [F34], looking north
Photo 5:	Trench 3 with furrows, looking south-east
Photo 6:	Trench 25 with furrows, looking north-west
Photo 7:	Trench 37 with furrows, looking south-west
Photo 8:	Retouched knife or point from ditch [F45], context [44]

Figures

Figure 1:	Site location
Figure 2:	Trench location
Figure 3:	Trenches 11, 13a and 13b, plans and sections
Figure 4:	Trenches 15, 17 and 19, plans and sections

1. Summary

The project

- 1.1 This report presents the results of an archaeological evaluation conducted in advance of a proposed development on land east of Moor Lane, Haxby, North Yorkshire. The works comprised the excavation and recording of 37 trial trenches.
- 1.2 The works were commissioned by Pegasus Group on behalf of Barratt David Wilson Homes (Yorkshire East) and Vistry Group and conducted by Archaeological Services Durham University.

Results

- 1.3 Archaeological deposits comprising a series of ditches and gullies of Romano-British date were identified in the evaluation trenches in the north-western part of site.
- 1.4 No significant archaeological deposits were recorded across the rest of the site.
- 1.5 Roman pottery was recovered from several of the features in the north-west of the site. A flint knife tip recovered from one of the ditches may suggest human activity on the site in the Later Neolithic or Early Bronze Age.
- 1.6 Palaeoenvironmental analysis of samples from features produced charred plant remains, some of which are diagnostic palaeoenvironmental indicators and are useful for dating purposes. The presence of spelt wheat in several features from Trenches 13 and 15 suggests Late Iron Age or Romano-British activity.

Recommendations

- 1.7 A programme of archaeological excavation is recommended to mitigate the impact of the development on the archaeological resource in the north-western part of site. This should be secured via a condition on the planning permission.
- 1.8 No further scheme of archaeological work is recommended in relation to the development of the remainder of the site.

2. Project background

Location (Figure 1)

- 2.1 The site is located on land east of Moor Lane, Haxby, North Yorkshire (NGR centre: SE 60700 58900). It covers an area of approximately 33 ha. To the north, east and west is agricultural land and to the south is the town of Haxby.

Development proposal

- 2.2 The proposed development is residential with ancillary landscaping and access.

Objectives

- 2.3 The objective of the scheme of works was to assess the nature, extent and potential significance of any archaeological resource within the proposed development area, so that an informed decision may be made regarding the nature and scope of any further scheme of archaeological works that may be required in relation to the development.

Research objectives

- 2.4 The regional research framework Yorkshire Archaeological Research Framework: Research Agenda (Roskams & Whyman 2007) contains an agenda for the archaeological research in the region. The scheme of works was designed to address agenda items:

2.5 The Iron Age

Specifically, land enclosures and field systems

2.6 The Romano-British Period

Specifically, the rural landscape

Specification

- 2.5 The works have been undertaken in accordance with a Written Scheme of Investigation provided by Pegasus Group (reference P21-1774) and approved by the planning authority. Seven trenches were relocated to avoid either mature trees, an active trackway or to allow a 10m buffer zone for a gas utility. Three trenches were not excavated as the areas were inaccessible by machine due to livestock and crop. Two additional trenches were excavated to mitigate identified archaeological features.

Dates

- 2.6 Fieldwork was undertaken between 11th and 28th September 2023. This report was prepared for October 2023.

Personnel

- 2.7 Fieldwork was conducted by Meghan McCarthy, Eloise White and Caitlan Wakefield (supervisor). This report was prepared by Caitlan Wakefield, with illustrations by David Graham. Specialist reporting was conducted by Dr Helen Drinkall (lithics), Jennifer Jones (other artefacts), and Lorne Elliott and Elena Stefani (palaeoenvironmental). Sample processing was by Xavier Roberts, Archie Robson and Zach Weissand. The Project Manager was Matthew Claydon.

Archive/OASIS

- 2.8 The site code is **MLH23**, for **Moor Lane Haxby 2023**. The archive is currently held by Archaeological Services Durham University and will be transferred to York Museums Trust – Yorkshire Museum in due course. The palaeoenvironmental residues were discarded following examination. The flots and charred plant remains will be retained at Archaeological Services Durham University. Archaeological Services Durham University is registered with the **Online Access to the Index of archaeological investigations project (OASIS)**. The OASIS ID number for this project is **archaeol3-519699**.

3. Landuse, topography and geology

- 3.1 At the time of this evaluation, the proposed development area comprised 15 agricultural fields of crop and pasture.
- 3.2 The area was predominantly level with a mean elevation of approximately 15m OD.
- 3.3 The underlying bedrock geology of the area comprises Permian and Triassic sandstone of the Sherwood Sandstone Group, which is overlain by silty clay of the Alne Glaciolacustrine formation across most of the site, and by sand of the Sutton Sand Formation along the western edge (British Geological Survey 2023).

4. Historical and archaeological background

Previous archaeological works

- 4.1 A geophysical survey was conducted on the site (Gater 2014). These recorded buried plough furrows across the site as well as several anomalies which had archaeological potential. However, it could not be ruled out that these anomalies were land drains.
- 4.2 The Written Scheme of Investigation sets out a brief archaeological background, from which the relevant details are extracted below (Pegasus Group 2022).

The prehistoric and Roman period (up to the 5th century)

- 4.3 There is evidence of Iron Age and Roman activity in the form of field boundaries to the north of the site. There is also evidence of a Roman coin hoard found within the vicinity with an associated potential Roman floor; however, the record of this within the City of York HER is vague.

The medieval period (5th century to 1540)

- 4.4 The remains of ridge and furrow have potential to date to the medieval period.

The post-medieval period (1541 to 1899)

- 4.5 There is evidence of medieval and post-medieval activity within the site demonstrated by the ridge and furrow evident on aerial photographs and geophysical survey. In some fields these are visible as earthworks. The current field boundaries across the site demonstrate the remnants of strip fields.
- 4.6 The site was once part of Haxby Moor but was enclosed in the 18th century.

The modern period (1900 to present)

- 4.7 The site has continued to be in agricultural use throughout the 20th century.

5. The evaluation trenches**Introduction**

- 5.1 37 trenches were excavated, spread across 12 fields of predominantly grass and pasture (Figure 2). 31 trenches were 50m long, 5 trenches were 25m long and 1 was 75m long. Trenches 8, 9, 19, 20 and 23 were moved to allow for a 10m buffer zone for a gas pipe. Trench 29 was moved to the north to avoid excavating across an in-use farm track and trench 11 was dog-legged to avoid a shallow land drain running centrally through the trench, limiting the depth of excavation. Two contingency trenches were excavated, 39 and 40, to identify the limits of archaeological activity in the north-west of site. All trenches were excavated using a machine equipped with a toothless ditching bucket under constant archaeological supervision. Context data is summarised in Table 1.1, with trench data in Table 1.2. Selected trench plans and sections are shown on Figures 3 and 4.
- 5.2 Furrows, the remains of medieval or post-medieval ploughing were recorded in trenches 1, 3-5, 7, 8, 10, 12-29, 32-34, 39 and 40 generally spaced 2-10m apart and aligned north/south, except in trench 38 where they were aligned east/west. Land drains were also recorded in trenches 1, 9, 11-16, 18-25, 27, 28, 33, 36, 37, 39 and 40, aligned primarily north/south. In some trenches they were also aligned east/west, north-west/south-east and north-east/south-west.

Trench 11 (Figure 3)

- 5.3 This trench was 50m long and was located in the north-west of the site over a linear geomagnetic anomaly. Natural subsoil was primarily a white sand with a patch of orange sand [2] and was identified at a depth of 0.3m-0.55m. Towards the centre of the trench a large east/west ditch [F45: over 1.6m long by 1.88m wide, 0.69m deep] was identified cutting the natural subsoil (Photo 1). The base was slightly rounded, and the sides were steep and concave. This was filled by a dark brown-grey silty sand [44: 0.49m deep], from which a retouched flint knife or point was recovered. Overlying this was a secondary fill of a grey-brown silty sand [43: 0.19m deep]. To the west the ditch was cut by a north/south modern intrusion, probably a land drain, which was identified as the anomaly on the geophysical survey. Across the trench was a dark grey-brown sandy loam topsoil [1: 0.33m to 0.55m deep].

Trench 13 (Figure 3)

- 5.4 This trench was T-shaped with the short arm, 13a, measuring 25m long aligned north-west/south-east and the long arm, 13b, measuring 50m long aligned north-east/south-west. The trench was located over a curvilinear geomagnetic anomaly. Natural subsoil varied between a light grey-yellow mottled sand and an orange sand [2] and was identified at a depth of 0.3m-0.58m. In the south-eastern half of 13a were two shallow gullies; the easternmost gully [F28: over 1.6m long by 0.42m wide, 0.1m deep] was filled by a mixed orange-brown-grey silty sand [27] and was aligned roughly north/south. To the west was another gully [F30: over 1.6m long by 0.6m wide, 0.2m deep] filled by a mixed dark yellow-brown silty sand [29] and again aligned roughly north/south. This gully aligned closely with the geomagnetic anomaly.

- 5.5 At the north end of 13b was a shallow, flat-based gully [F26: over 4m long by 0.3m wide, 0.06m deep] aligned north/south. This was filled by a grey-brown loamy sand [25] containing a sherd of Roman pottery. To the south was a roughly east/west aligned gully [F24: over 1.6m long by 0.45m wide, 0.1m deep]. It was filled by a light grey-brown loamy sand [23].
- 5.6 Near the centre of trench 13b were two parallel ditches. In the north-east was a wide ditch [F18: over 1.6m long by 2.45m wide, 0.74m deep] aligned roughly east/west with a U-shaped profile (Photo 2). The primary fill was a dark brown-grey sand [17: 0.44m deep] overlain by a brown silty sand [16: 0.34m deep]. To the south-west was ditch [F37: over 1.6m long by 2.25m wide, 0.89m deep], on a parallel alignment; this was more V-shaped in profile (Photo 3). The ditch had a sharp sloping side on the south and a more gradual undulating side on the north. The primary fill was a grey silty sand [36: 0.68m deep] with eroded ironstone fragments on the north side. The upper fill was a light grey-brown silty sand [35: 0.34m deep], from which three sherds of Roman pottery were recovered. This ditch aligned closely with a geomagnetic anomaly identified in the previous geophysical survey.
- 5.7 Overlaying the entire trench was a dark grey-brown sandy loam topsoil [1: 0.3m to 0.58m deep].

Trench 15 (Figure 4)

- 5.8 This trench was 50m long, aligned north-west/south-east over a circular geomagnetic anomaly. Natural subsoil was a mottled grey-yellow sand [2], identified at a depth of 0.3m-0.4m below the ground surface. In the north-west corner was a possible pit or ditch terminus [F52]; this extended beyond the edge of excavation and was not excavated. To the south-east of this was a north/south aligned ditch [F34: over 1.6m long by 2.7m wide, 0.73m deep]. The ditch had a stepped narrow base and steep sloping sides (Photo 4). The primary fill was a black silty sand [33: 0.19m deep], which was overlain by redeposited white-yellow natural subsoil [32: 0.17m deep]. The upper fill was a dark grey-brown silty sand [31: 0.52m deep].
- 5.9 In the south-east end of the trench was a small, curvilinear gully with a terminus [F15: 1.2m long by 0.32m wide, 0.1m deep] which was filled by a light yellow-brown loamy sand [14]. The gully was cut by a large north-west/south-east ditch [F8=F40] which extended for 17m along the trench. The ditch terminus [F8: 0.65m wide by 0.35m deep] was U-shaped in profile with smooth sloping sides, filled by a dark grey-brown sandy loam [7] from which crumbs of Roman pottery were recovered. To the north-west the ditch [F40: over 0.61m wide and 0.36m deep] was filled by a dark grey silty sand [39: 0.12m deep] overlain by a dark brown-grey silty sand [38: 0.36m deep]. This ditch was cut by an east/west aligned ditch [F42: over 1.6m long by 1.05m wide, 0.5m deep], with steeply sloping sides and a rounded base. The ditch was filled by a dark brown-grey silty sand [41].
- 5.10 At the south-east end of the trench were two north/south aligned ditches. On the south-east side was ditch [F11: over 0.4m long by 0.55m wide, 0.33m deep], filled by a dark grey-brown loamy sand [10: 0.27m deep] from which crumbs of Roman pottery were recovered, overlain by a dark brown sandy loam [9: 0.24m deep]. This was cut on its south-east side by a land drain [F13] filled by a light mixed redeposited natural backfill [12]. To the north-west was another ditch [F6: over 2.1m by over 1.5m wide, 0.25m deep], with sides stepping near the base which was narrow and

rounded. It was filled by a dark grey-brown sandy loam [5] with occasional large stones, from which crumbs of Roman pottery were recovered. Cutting ditch [F6] was a furrow [F4: over 1.8m long by 2m wide, 0.19m deep] filled by a light grey-brown silty sand [3]. The relationship between ditches [F6] and [F11] could not be ascertained due to a animal burrow. This series of ditches, the plough furrow and the land drain align with the geomagnetic anomaly.

- 5.11 Overlying the entire trench was a dark grey-brown sandy loam topsoil [1: 0.3m to 0.4m deep].

Trench 17 (Figure 4)

- 5.12 This trench was 50m long was located towards the north of the site. Natural subsoil was a light orange-brown silty loam [2] and was identified at a depth of 0.3m. To the south-east was a linear ditch [F22: over 2.8m long by 0.8m wide, 0.22m deep], aligned east/west. The ditch was filled by a grey-brown sandy loam [21] from which post-medieval glass was recovered. It was cut by a furrow [F49: over 1.6m long by 4m wide] filled by a dark brown silty sand [46] from which residual Roman pottery was recovered. Across the entire trench was a dark orange-brown sandy loam topsoil [1: 0.3m deep].

Trench 19 (Figure 4)

- 5.13 This trench was 50m long and was located south of trench 17. Natural subsoil, an orange-brown silty loam [2], was identified at 0.2m to 0.4m below the ground surface. To the north-east of the trench was a shallow gully [F20: over 2.4m long by 0.45m wide, 60mm deep], aligned north/south. The gully was filled by a light grey-brown sandy loam [19] which returned a non-diagnostic palaeoenvironmental sample. It was cut by a furrow [F49: over 1.6m long by 4m wide], filled by dark brown silty sand [46]. Overlying the entire trench was a dark grey-brown sandy loam topsoil [1: 0.2m to 0.4m deep].

Trenches 39 and 40

- 5.14 These trenches were 25m long and were aligned north-east/south-west. Natural subsoil in trench 39 was predominantly a white sand with orange sand to the south-west [2] and was identified at a depth of 0.3m to 0.35m below the ground surface. The natural subsoil in trench 40 was an orange-brown silty sand [2], identified at a depth of 0.3m below the ground surface. Both trenches revealed the continuation of linear features, [F45=F50] and [F37=F51] from trenches 11 and 13b. Overlying both trenches was a dark grey-brown sandy loam topsoil [1: 0.3m to 0.35m deep].

Trenches 1-10, 12, 14, 16, 18, 20-22 and 38 (Photo 5)

- 5.15 Trenches 2, 4 and 10 were 25m long with trenches 1, 3-9, 12, 14, 16, 18, 20-22, 38 measuring 50m long. Natural subsoil [2] varied between a grey-yellow to orange-brown sand, and was identified between 0.3m to 0.6m below the ground surface. Across all trenches was a dark grey-brown sandy loam topsoil [1: 0.3m to 0.6m deep].
- 5.16 The trenches confirmed the geomagnetic anomalies were indicative of either plough furrows, plough scars or land drains.

Trenches 23-29 (Photo 6)

- 5.17 Trench 28 was 75m long whilst trenches 23-27 and 29 were 50m long. Natural subsoil [2] varied from a yellow-grey sand to an orange-pink clay, and was identified between 0.24m and 0.6m below the ground surface. Across all trenches was a dark grey-brown sandy loam topsoil [1: 0.24m to 0.6m deep].
- 5.18 The trenches confirmed the geomagnetic anomalies were indicative of land drains or variations in the natural subsoil. In trench 26 the geomagnetic anomaly was not identified.

Trenches 32-34, 36 and 37 (Photo 7)

- 5.19 These trenches measured 50m long. Natural subsoil [2] varied between a grey-orange clay and a mottled orange-grey sand, identified between 0.2m to 0.5m below the ground surface. Across all the trenches was a dark grey-brown sandy loam topsoil [1: 0.2m to 0.5m deep].
- 5.20 The trenches confirmed the geomagnetic anomalies were indicative of either plough scars or furrows, and a modern intrusion in trench 36.

6. The artefacts**Pottery assessment****Results**

- 6.1 Forty-one sherds plus crumbs were found with a weight of 742g, including c.25 sherds, plus crumbs, of Roman pottery (Table 1.3). Roman greyware (2nd-/3rd-century) and calcite-gritted ware (3rd-/4th-century) were represented in several contexts. In addition, a possible rim from a Crambeck parchment ware mortarium (c.4th century+) came from furrow fill [47] and a ?parchment ware body sherd came from furrow fill [46]. Possible (highly abraded) amphora sherds came from furrow fills [3] and [48]. Crumbs of Roman (or earlier) pottery also came from sample residues in contexts [17], [33] and [41].
- 6.2 The 16 sherds of later pottery dated to between the 14th to the 19th century, although medieval material was found only in topsoil context [1]. Several of the later sherds were found in contexts with Roman material. Sherds of 16th-century green-glazed sandy ware came from contexts [46] & [48]. Three sherds from a 16th-century German stoneware Bartmann jug were found in [47] along with an abraded body sherd of 17th-/18th-century tin-glazed earthenware and sherds of 18th-century late blackware. Another small sherd of German stoneware was found in [46]. A large 18th-century slipware body sherd came from [48]. Two pieces of yellow-glazed coarseware of late 18th-/19th-century date came from topsoil [3]. A glazed redware rim of 17th-/18th-century date was found in [1], alongside a late 18th-/19th-century sherd of plain china.

Discussion

- 6.3 This small assemblage has a strong, but poorly-preserved indication of Roman occupation in the vicinity along with hints of later activity up to around the 19th century.

Recommendation

- 6.4 While no further work on the assemblage is recommended, it should be integrated with any artefacts from further archaeological investigation at the site.

Animal bone assessment

Results

- 6.5 The sample residue from gully fill context [29] had small fragments of calcined bone, (<2g wt), not identifiable to species or element.

Recommendation

- 6.6 No further work is recommended.

Clay pipe assessment

Results

- 6.7 Two pieces of post-medieval clay tobacco pipe were found. Context [46] produced part (c.30%) of a smoked bowl with ribbed decoration. 1790-1820.
- 6.8 Context [48] had a part stem with a flat, circular heel, which had a rather poorly executed circular stamp with the initials 'AB', along with indecipherable motifs. This could be Abraham Boyes, a York pipemaker who operated from the mid-late 17th century.

Recommendation

- 6.9 No further work is recommended.

Glass assessment

Results

- 6.10 Two pieces of glass were found. The sample residue from ditch fill context [21] had a sliver of unweathered, flat, greenish glass. Probably post-medieval. Context [48] produced the broken base of a small cylindrical bottle made from unweathered, mid-blue translucent glass, 25mm diameter x 39mm high max, received in two joining pieces. The glass near the intact base was 7mm thick, thinning to 3mm at the break. The vessel was mould-blown. Possibly medicinal, post-medieval.

Recommendation

- 6.11 No further work is recommended.

Lithics assessment

Results

- 6.12 Three pieces of flint were recovered, two of them natural and not humanly worked. A large fragment of black flint came from topsoil context [1] of trench 17. Three surfaces were patinated and clearly older than the rest, which displayed the natural black colouring of the flint. However, all the surfaces had either irregular or concentric pot-lid ripples, indicating a natural origin. The edges of the piece also displayed irregular chipping consistent with plough damage.
- 6.13 A tiny flint chip was recovered from ditch fill [10] in trench 15. This was on grey flint with a pot-lid fracture on the ventral surface and was also of natural origin and not humanly worked.

- 6.14 Another ditch fill, [44] from trench 11, produced a tip from an invasively retouched knife or point (Photo 8). The piece was beautifully manufactured on good quality grey flint with a break at the proximal end. Invasive, sub-parallel, low-angled retouch was present along both edges and around the point. There was no evidence of the ventral having been retouched. It had been heated and displayed the characteristic fine cracking and blocking, especially on the break (Schmidt 2014). The form indicated that this might be the tip of a plano-convex knife, probably of Later Neolithic/Early Bronze Age date. L = 39.47mm, W = 23.90mm, Th = 5.63mm.

Discussion

- 6.15 The flint fragment from topsoil [1] and the chip from [10] both display signs of natural fracturing and are not humanly made. The knife tip from [44], however, is a particularly nice artefact, beautifully worked and may suggest human activity on the site in the Later Neolithic or Early Bronze Age.

Recommendation

- 6.16 There are no recommendations for further analysis of the flint assemblage as it currently stands. However, if additional work is undertaken on the site, the knife tip should be drawn as part of the analysis of any larger assemblage recovered. The two naturally fractured pieces ([1] and [10]) can be discarded.

Building materials assessment

Results

- 6.17 Topsoil context [1] had a piece of very hard-fired, dark grey pipe or fitting, with a partly flat and partly curved surface. Modern. Furrow context [3] had a small chunk of dark red/purple brick with no measurable dimensions, along with two small, hard-fired flakes which could not be identified as either brick or tile. All post-medieval.
- 6.18 Other tiny chips and flakes, too small to be identified as brick, tile, fired clay or even pot, came from sample residues from contexts [7], [10], [14], [19], [21], [25], [27], [29] and [44].

Recommendation

- 6.19 No further work is recommended.

Clay object assessment

Results

- 6.20 An abraded piece of unfired, pale buff clay, 45mm x 41mm x 12mm thick came from context [1]. Both faces were flat and the edges were very abraded. One face had lightly and informally incised horizontal/vertical and curved lines, set in a pattern. Unknown use. Probably a modern discard.

Recommendation

- 6.21 No further work is recommended.

Heated stones assessment

Results

- 6.22 Five pieces of cracked or reddened, heat-affected stone were recovered, one each from contexts [17] and [33] and three from context [29].

- 6.23 Stones were heated and used extensively over a long period in the past for heating water, cooking food and in aspects of domestic and industrial activity. Dateable only by associated artefacts, their presence confirms occupation and/or industrial and domestic activity in the area.

Recommendation

- 6.24 No further work is recommended.

Industrial residues assessment

Results

- 6.25 A single piece of spheroidal hammer scale was recovered from the sample residue in context [27], very scant evidence for ironworking taking place somewhere in the vicinity. Undateable.

Recommendation

- 6.26 No further work is recommended.

7. The palaeoenvironmental evidence

Methods

- 7.1 Palaeoenvironmental assessment was undertaken on 16 bulk samples taken from gully and ditch fills, possibly of Iron Age or Romano-British origin. The samples were manually floated and sieved through a 500 μ m mesh. The flots were examined for waterlogged and charred botanical remains, using a Leica MZ7.5 stereomicroscope at up to x60 magnification. Identifications were aided by comparison with modern reference material held in the Palaeoenvironmental Laboratory at Archaeological Services Durham University, and by reference to relevant literature (Cappers *et al.* 2006; Jacomet 2006). Habitat classification follows Preston *et al.* (2002). Plant nomenclature follows Stace (2010). Residues were fully scanned for additional charred plant material, industrial residues, and finds such as small bones (animal, fish and bird), marine shell and snails. This included microscopic examination of the fine fraction where appropriate.
- 7.2 Selected charcoal fragments were identified to provide material suitable for radiocarbon dating and to determine the nature and condition of the assemblages. The transverse, radial and tangential sections were examined at up to x500 magnification using a Leica DMLM microscope. Identifications were assisted by the descriptions of Schweingruber (1990), Gale & Cutler (2000) and Hather (2000), and modern reference material held in the Palaeoenvironmental Laboratory at Archaeological Services Durham University.
- 7.3 The works were undertaken in accordance with the palaeoenvironmental research aims and objectives outlined in the regional archaeological research framework and resource agendas (Roskams & Whyman 2007; Hall & Huntley 2007; Huntley 2010).

Results

- 7.4 The samples produced small to moderate-sized flots, ranging from <10-100ml and often dominated by modern roots. Fragmented charcoal and charred heather twigs are a common theme throughout the samples, though their condition ranges from good with little visible alteration to poor and mineral encrusted. The charcoal record has a range of species including, oak, alder, birch, ash, blackthorn, elder, Fabaceae

(cf. gorse), and Maloideae (apple or hawthorn), though an unusual aspect is the amount of identified conifer wood (cf. pine), which is noted in six samples from four separate trenches.

- 7.5 Charred plant macrofossils are generally sparse, usually consisting of a few cereal remains (often cindered grains with rare instances of chaff). Spelt wheat (*Triticum spelta*) and barley remains occur in four contexts from trenches 13 and 15. However, single occurrences of bread wheat and rye are likely to indicate some later intrusive material. Other charred plant material includes small fragments of hazel nutshell and weed seeds of heath-grass, sedges and ribwort plantain.
- 7.6 Detailed palaeoenvironmental results and a provisional date for each context are presented in Table 1.4. Contexts with suitable material for radiocarbon dating are also indicated.

Discussion

- 7.7 The samples have produced charred plant remains, some of which are diagnostic palaeoenvironmental indicators and are useful for dating purposes. The presence of spelt wheat in several features from trenches 13 and 15 is notable as this cereal was the principal crop of the Late Iron Age or Romano-British periods and therefore is consistent with provisional dating of the site. None of the samples are from primary contexts such as hearths, therefore the evidence represents background scatters of occupation waste. However, considering the range of evidence from these two trenches, the focus of this domestic activity is likely to be nearby.
- 7.8 As charcoal records in England rarely have evidence of pine, it is significant that this assessment has revealed so many instances of this species at Haxby. Exploring the nature of this palaeoenvironmental evidence would be of interest if further work is undertaken at the site.

Recommendations

- 7.9 If further work is undertaken at the site, the results of this assessment should be added to any additional palaeoenvironmental data produced.

8. The archaeological resource

- 8.1 Archaeological deposits were identified in the evaluation trenches in the north-western part of site. This comprised a series of gullies and ditches cut into natural subsoil in trenches 11, 13a, 13b, 15, 39 and 40. These indicate the possible presence of a series of enclosures, with activity relating to the Romano-British period in the north-west part of the site.
- 8.2 Features recorded in trenches 17 and 19 are probably of post-medieval date. No significant archaeological deposits were recorded in trenches 1-10, 12, 14, 16, 18, 20-38.
- 8.3 Furrows, the remains of medieval or post-medieval ploughing, were recorded in trenches 1, 3-5, 7, 8, 10, 12-29, 32-34, 39 and 40.

- 8.4 Roman pottery was recovered from several features in the north-west of the site. A flint knife tip recovered from one of the ditches may suggest human activity on the site in the Later Neolithic or Early Bronze Age.
- 8.5 Palaeoenvironmental analysis of samples from features produced charred plant remains, some of which are diagnostic palaeoenvironmental indicators and are useful for dating purposes. The presence of spelt wheat in several features from trenches 13 and 15 suggests Late Iron Age or Romano-British activity, which is consistent with provisional dating. None of the samples are from primary contexts such as hearths, therefore the evidence represents background scatters of occupation waste.
- 8.6 The Yorkshire Archaeological Research Framework research agenda (Roskams & Whyman 2007) contains an agenda for archaeological research in the region which is incorporated into regional planning policy implementation with respect to archaeology. In this instance, the potential archaeological resource addresses agenda items:

2.5 The Iron Age

Specifically, land enclosures and field systems

2.6 The Romano-British Period

Specifically, the rural landscape

9. Impact assessment

- 9.1 Archaeological features of Roman date were identified in trenches in the north-western part of the site. Development of the site has the potential to remove or truncate these deposits, and any other deposits which may be associated with them. Development of the remainder of the site is unlikely to impact any significant archaeological deposits.

10. Recommendations

- 10.1 A programme of archaeological excavation is recommended to mitigate the impact of the development on the archaeological resource in the north-western part of site in the vicinity of trenches 11, 13, 15, 39 and 40. This should be secured via a condition on the planning permission.
- 10.2 No further scheme of archaeological work is recommended in relation to the development of the remainder of the site.

11. Sources

- Cappers, R T J, Bekker, R M, & Jans, J E A, 2006 *Digital Seed Atlas of the Netherlands*. Groningen
- Gale, R, & Cutler, D, 2000 *Plants in archaeology; identification manual of vegetative plant materials used in Europe and the southern Mediterranean to c.1500*. Otley
- Gater, J, 2014 *Moor Lane, Haxby: geophysical survey report*. Report **G1391a**, GSB Prospection Ltd

- Hall, A R, & Huntley, J P, 2007 *A review of the evidence for macrofossil plant remains from archaeological deposits in northern England*. Research Department Report Series no. **87**. London
- Hather, J G, 2000 *The identification of the Northern European Woods: a guide for archaeologists and conservators*. London
- Huntley, J P, 2010 *A review of wood and charcoal recovered from archaeological excavations in Northern England*. Research Department Report Series no. **68**. London
- Jacomet, S, 2006 *Identification of cereal remains from archaeological sites*. Basel Pegasus Group 2022 *Written Scheme of Investigation: Trial Trench Evaluation Land East of Moor Lane, Haxby*. Report **P21-1774**, Pegasus Group
- Preston, C D, Pearman, D A, & Dines, T D, 2002 *New Atlas of the British and Irish Flora*. Oxford
- Roskams, S, & Whyman, M, 2007 *Yorkshire Archaeological Research Framework: research agenda*. York
- Schmidt, P, 2014 What causes failure (overheating) during lithic heat treatment? *Archaeol Anthropol Sci* **6**, 107-112
- Schweingruber, F H, 1990 *Microscopic wood anatomy*. Birmensdorf
- Stace, C, 2010 *New Flora of the British Isles*. Cambridge

Websites

<https://geologyviewer.bgs.ac.uk/> - The British Geological Survey

Appendix 1: Data tables

Table 1.1: Context data

The * symbols in the columns at the right indicate the presence of artefacts of the following types: P pottery, B bone, F flint, S stone, G glass, C ceramic building material, O other.

No	Trench	Description	P	B	F	S	G	C	O
1	All	Topsoil	•		•			•	•
2	All	Natural subsoil							
3	15	Fill of furrow [F4]	•					•	
F4	15	Cut of furrow cutting ditch [F6]							
5	15	Fill of ditch [F6]	•						
F6	15	Cut of ditch							
7	15	Fill of ditch terminus [F8]	•					•	
F8	15	Cut of ditch terminus							
9	15	Upper fill of ditch [F11]							
10	15	Lower fill of ditch [F11]	•		•			•	
F11	15	Cut of ditch							
12	15	Fill of land drain [F13]							
F13	15	Cut of land drain cutting ditch [F11]							
14	15	Fill of gully terminus [F15]						•	
F15	15	Cut of gully terminus							
16	13b	Upper fill of ditch [F18]							
17	13b	Lower fill of ditch [F18]	•			•			
F18	13b	Cut of ditch							
19	19	Fill of gully [F20]						•	
F20	19	Cut of gully							
21	17	Fill of ditch [F22]					•	•	
F22	17	Cut of ditch							
23	13b	Fill of gully [F24]							
F24	13b	Cut of gully							
25	13b	Fill of gully [F26]	•					•	
F26	13b	Cut of gully							
27	13a	Fill of gully [F28]	•					•	•
F28	13a	Cut of gully							
29	13a	Fill of gully [F30]		•		•		•	
F30	13a	Cut of gully							
31	15	Upper fill of ditch [F34]							
32	15	Redeposited natural fill in ditch [F34]							
33	15	Lower fill of ditch [F34]	•			•			
F34	15	Cut of ditch							
35	13b	Upper fill of ditch [F37]	•						
36	13b	Lower fill of ditch [F37]	•						
F37	13b	Cut of ditch							
38	15	Upper fill of ditch [F40]							
39	15	Lower fill of ditch [F40]							
F40	15	Cut of ditch S/A ditch [F8]							
41	15	Fill of ditch [F42]	•						
F42	15	Cut of ditch							
43	11	Upper fill of ditch [F45]							
44	11	Lower fill of ditch [F45]			•			•	
F45	11	Cut of ditch							
46	16-17	Fill of furrow [F49]	•						•
47	24, 29	Furrow fill	•						
48	32, 33	Furrow fill	•				•		•
F49	16-17	Cut of furrow cutting ditch [F22]							
F50	39	Unexcavated ditch, probably S/A ditch [F45]							
F51	40	Unexcavated ditch, probably S/A ditch [F37]							
F52	15	Unexcavated pit/ditch terminus							

Table 1.2: Trench data

Trench	Length (m)	Depth (m)	Glacial Geology	Subsoil	Features
1	50	0.38-0.4	Mottled beige-grey sand	None	0
2	25	0.35-0.5	White-orange sand (S end), Light white-grey sand (N end)	None	0
3	50	0.3-0.34	Light brown-orange sand	None	0
4	25	0.3-0.35	Light white-orange sand	None	0
5	50	0.3-0.4	Light brown-orange sand	None	0
6	50	0.3-0.35	Orange-brown sand (with white patches)	None	0
7	50	0.3-0.33	Mixed light brown-yellow sand	None	0
8	50	0.3-0.35	Mixed light red-brown to red grey-brown sand	None	0
9	50	0.3-0.45	Light brown-grey sand	None	0
10	25	0.45-0.6	Red-brown to pale yellow grey-brown sand	None	0
11	50	0.3-0.55	White sand (N end), orange sand (central), white sand (S end)	None	Ditch [F45]
12	50	0.4-0.6	Mottled brown-orange sand with white flecks	None	0
13	50/25	0.3-0.58	Mottled light grey-yellow sand to an orange sand	None	Ditches [F18] and [F37] Gullies [F24], [F26], [F28] and [F30]
14	50	0.38-0.45	Mottled light grey-yellow sand	None	0
15	50	0.4-0.5	Mottled grey-yellow sand	None	Ditches [F6], [F11], [F8=F40], [F34] and [F42] A possible pit/ditch terminus, unexcavated

Trench	Length (m)	Depth (m)	Glacial Geology	Subsoil	Features
16	50	0.4-0.5	Orange grey-brown sand	None	0
17	50	0.35-0.4	Light orange-brown silty sand	None	Ditch [F22]
18	50	0.4-0.5	Orange-brown silty sand	None	0
19	50	0.3-0.45	Orange-brown sand	None	Gully [F20]
20	50	0.3-0.5	Dark orange-brown clayey sand with patches of mixed white-orange clay	None	0
21	50	0.3-0.6	Mottled grey-orange and white clayey sand (S end), white-yellow sand (N end)	None	0
22	50	0.3-0.38	Mottled orange sand with light grey sand patches (N end), light grey-orange sand (S end)	None	0
23	50	0.24-0.4	Dark orange-brown sandy clay	None	0
24	50	0.28-0.4	Grey-brown sandy clay (NW end), dark grey-orange-brown clayey sand (SE end)	None	0
25	50	0.28-0.31	Light grey- yellow silty clay, to grey clay at N end	None	0
26	50	0.4-0.6	Grey-pink clay	None	0
27	50	0.35-0.4	Mottled yellow-grey sand	None	0
28	75	0.22-0.32	Orange-pink clay	None	0
29	50	0.25-0.4	Light yellowish-brown sandy silt, with manganese and iron stone	None	0
32	50	0.2-0.25	Grey-orange clay	None	0

Trench	Length (m)	Depth (m)	Glacial Geology	Subsoil	Features
33	50	0.3-0.35	Grey-orange clay (S end) to a grey-pink clay (N end)	None	0
34	50	0.39-0.5	Light mottled orange-grey sand	None	0
36	50	0.25-0.32	Dark yellow-grey clay	None	0
37	50	0.21-0.28	Orange-grey clay	None	0
38	50	0.3-0.38	Brown-yellow sand	None	0
39	25	0.3-0.45	Orange to white sand	None	Unexcavated ditch [F50], continuation of ditch [F45] in trench 11
40	25	0.35-0.4	Orange-brown silty sand	None	Unexcavated ditch [F51], continuation of ditch [F37] in trench 13

Table 1.3: Pottery sherd numbers by context

Context	No	Includes
1	5	RomCG; RGW; RW; CH
3	5	3 Roman; 2 YGCW
5	3+ crumbs	RomCG
7	2+crumbs	RomCG
10	4+ crumbs	RomCG; RomGW; RomOW
25	1	RomCG
27	1	RomOW
35	3	RomCG; RomGW
36	1+crumbs	RomGW
46	4	Roman; GGSW; GerSTW
47	8	RomGW; RomCRW; GerSTW; TGEW; LBW
48	4	?Roman; GGSW; SLW
Total	41+ crumbs	

Key

CH	China
GerSTW	German stoneware
GGSW	green-glazed sandy ware
LBW	late blackware
RGW	reduced greenware
RomCG	Roman calcite-gritted
RomGW	Roman greyware
RomOW	Roman oxidised ware
RW	redware
SLW	slipware
TGEW	tin-glazed earthenware

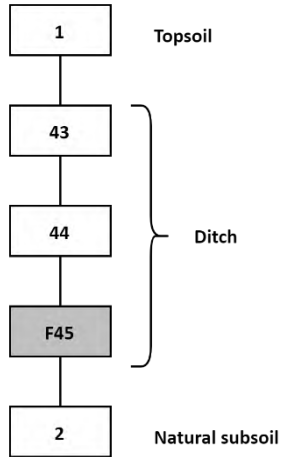
Table 1.4: Palaeoenvironmental results

Sample	Context	Feature	Trench	Volume processed (l)	Flot volume (ml)	C14 available	Rank	Notes
1	5	F6 ditch	15	18	50	Y	***	The flot has encrusted charcoal and charred heather. The charcoal is mainly alder stemwood, also oak branchwood. Occasional charred macrofossils are mainly cereal remains in variable condition (mainly cindered grains). These include barley and spelt wheat grains, and spelt chaff. Weed remains include sedges, ribwort plantain, bromes and small grass. IA / RB
2	7	F8 ditch terminus	15	8	<10	Y	**	Tiny flot with flecks of charcoal and modern roots. Some slightly encrusted charcoal in the sample residue includes oak branchwood. There is a low number of charred plant macrofossils including heather root twigs, an encrusted hazel nutshell a few barley grains (one twisted), a spelt wheat glume and poorly preserved brome caryopses. IA / RB
3	10	F11 ditch (lower)	15	12	100	Y	**	Encrusted charcoal and charred heather. A few charred macrofossils including cindered cereal grains (wheat and indeterminate), single bread wheat chaff, several small oat grains in better condition and soil fungus sclerotia. The charcoal includes blackthorn and Maloideae but many of the fragments are not identifiable due to poor condition. Small oats and bread wheat chaff may indicate a later phase possibly post-Roman activity but may be intrusive. Nothing clearly diagnostic
4	14	F15 gully terminus	15	11	10	N	*	Small flot of charred heather and modern roots. The only charred plant macrofossils are a couple of cindered cereal grains (barley and indeterminate). Small fragments of encrusted charcoal from the sample residue are mainly oak. Nothing diagnostic
5	17	F18 ditch (lower)	13b	18	15	Y	***	Small flot with flecks of charcoal and modern roots. The sample residue has charcoal and charred plant remains. The charcoal includes good evidence of pine and Maloideae and alder. The charred plant macrofossils include cereal remains (Spelt wheat and 6-row barley - grains and chaff), weed seeds (brome, ribwort plantain, heath-grass), grass-type rhizomes, basal heather twigs and an indeterminate cereal culm. The condition of the cereal grains is variable (some are cindered). All the charred plant remains, and charcoal are mineral encrusted – all were recovered from the sample residue. This sample has the most palaeoenvironmental indicators and the most diagnostic evidence. IA / RB
6	21	F22 ditch	17	13	70	?	*	The flot is mainly modern roots plus a few small fragments of charcoal and coal. The charcoal is encrusted and slightly vitrified and includes oak sapwood and Fabaceae (cf. gorse). The Fabaceae is likely to have a recent origin. The oak is less likely to be recent but uncertain. Nothing diagnostic
7	19	F20 gully	19	13	80	(?)	*	The flot is mainly modern roots plus a few fragments of charcoal and coal. The charcoal is encrusted and slightly vitrified oak sapwood and conifer (cf. pine). Due to the amount of mineral inclusions the charcoal remained in the sample residue. Coal fragments are up to 2cm. Nothing diagnostic
8	23	F24 gully	13b	12	30	Y	**	Small amount of fragmented (<4mm) charcoal and coal, and a few modern roots. The charcoal is encrusted oak stemwood, ash, conifer (cf. pine) and possibly hazel, but the poor condition of the latter prevents certain identification. The small charred macrofossil assemblage includes a rye grain in fair condition, heather root wood twigs, grass-type rhizomes and stems, sparse seeds of heath-grass, <i>Poa</i> -type grass, and sedge (cf. yellow sedge), and several soil fungus sclerotia. <i>Possible use of turves?</i> IA / RB?

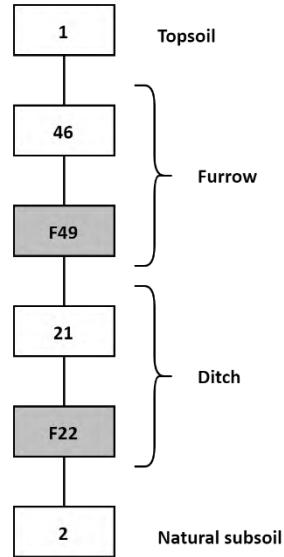
Sample	Context	Feature	Trench	Volume processed (l)	Flot volume (ml)	C14 available	Rank	Notes
9	25	F26 gully	13b	7	15	?	*	Small flot of modern roots and fragmented charcoal. The charcoal is quite encrusted and in poor condition hindering identification in some instances. Includes ash, oak sapwood, cf. willow and heather basal twig. Sparse charred macrofossils include a rye grain (encrusted), a buttercup achene and several soil fungus sclerotia. <i>Possible use of turves?</i> IA / RB?
10	27	F28 gully	13a	14	100	?	*	The flot is dominated by modern roots. There are small amounts of fragmented coal and cinder (<15mm) and several fragments of slightly encrusted charcoal (oak, ash and Maloideae). A single poorly preserved cereal grain (cf. rye) is likely to be intrusive. Nothing diagnostic
11	29	F30 gully	13a	18	100	Y	**	The flot is mainly made up of modern roots and fragmented (mostly <4mm) charcoal. The charcoal is in variable condition. Includes some mineralised oak stemwood, but most of the charcoal is in quite good condition with few inclusions (undergone little alteration). The latter includes oak stemwood heartwood, oak branchwood, alder longshoot and Maloideae (apple/hawthorn) branchwood. Only a trace of coal and cinder. A small amount of charred plant remains includes heather root twigs, grass-type rhizome, brome caryopses, seeds of ribwort plantain and field penny-cress, hazel nutshell and several cindered cereal grains (indeterminate). Also, a few <i>Cenococcum geophilum</i> sclerotia. IA / RB?
12	31	F34 ditch (upper)	15	11	30	?	*	Small amounts of fragmented (<4mm mainly) charcoal, coal and cinder and a few modern roots. The charcoal is quite encrusted conifer (cf. pine) and cf. elder. The only charred plant macrofossils are a small, grass-type rhizome and a heather twig (root). IA / RB?
13	33	F34 ditch (lower)	15	5	10	?	*	Small flot with flecks of coal and charcoal. Very fragmented (<3mm) charcoal from the sample residue includes <i>Prunus</i> (cf. blackthorn), conifer (cf. pine) and heather twigs. Charred macrofossils are sparse just a buttercup achene and a grass-type rhizome. All of the material may be too small for C14 dating. IA / RB?
14	36	F37 ditch (lower)	13b	14	10	N	*	Small flot with flecks of charcoal and coal and a few modern roots. A small amount of encrusted charcoal from the sample residue is mainly oak, possibly with elder too but the condition is too poor to be sure. The only charred plant macrofossil is part of a barley rachis. Nothing diagnostic
15	41	F42 ditch	15	15	40	Y	**	Small flot of modern roots and fragmented charcoal plus a modest number of charred plant remains. The charcoal includes ash with consistently wide annual growth rings and <i>Prunus</i> (cf. blackthorn), alder and heather (basal twigs). The charred macrofossil assemblage is mainly cindered cereal grains (predominantly barley plus a few spelt wheat). There is also a cereal culm node, redshank nutlet, and large number (>100) of small <i>Cenococcum geophilum</i> sclerotia. Includes a modest number of uncharred elder fruitstones (possibly reflecting former hedge or could be mineral-replaced remains? – depends on the depth of the ditch). IA / RB?
16	44	F45 ditch (lower)	11	11	100	Y	**	Flot is mainly modern roots with a small amount of fragmented (mainly <4mm) charcoal. No coal or cinder. The charcoal is in relatively fair condition (fewer mineral inclusions than most other contexts). Includes alder, birch, oak, conifer (cf. pine) and small heather twigs. IA / RB?

Appendix 2: Stratigraphic matrices

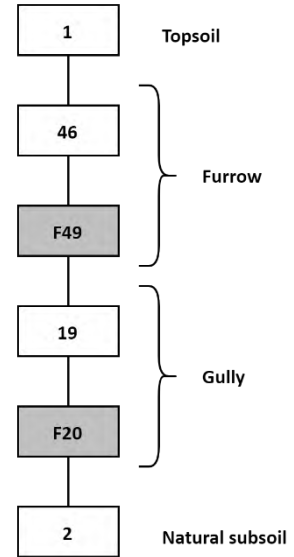
Trench 11



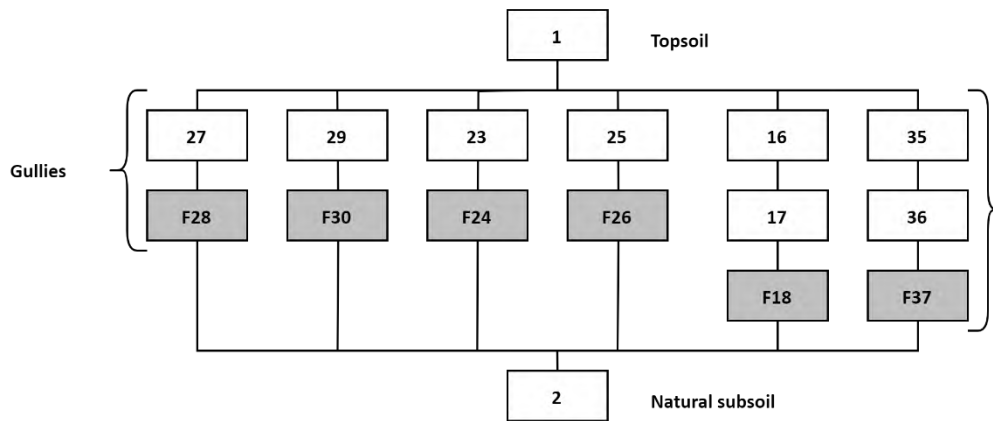
Trench 17



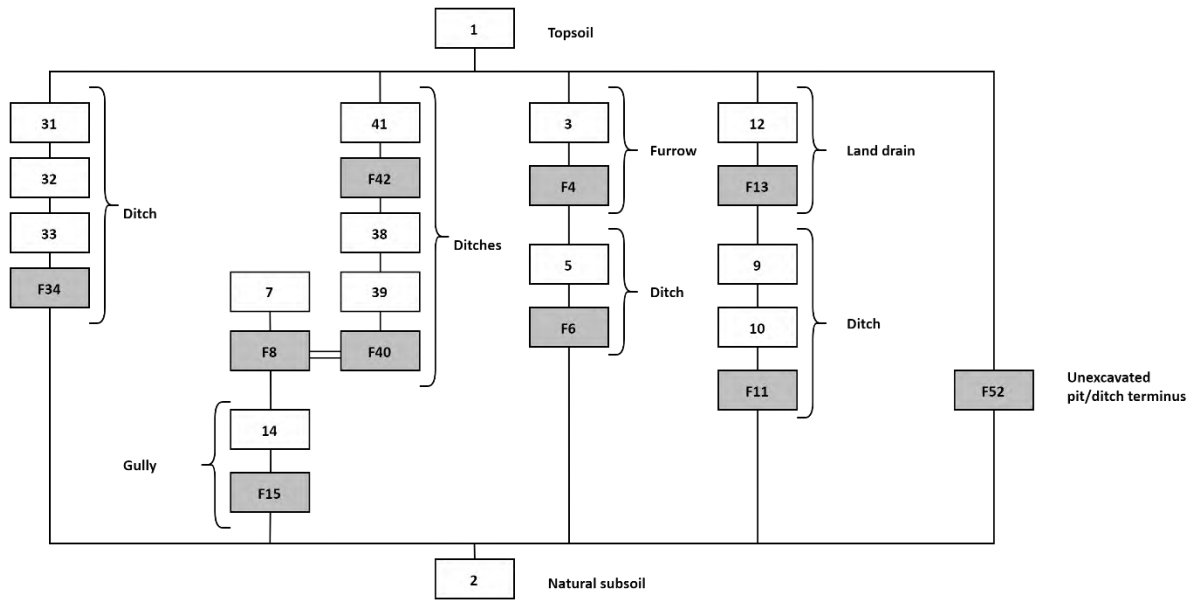
Trench 19



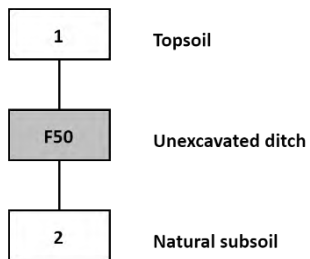
Trench 13



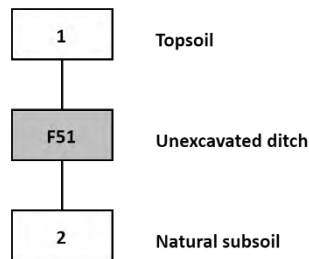
Trench 15



Trench 39



Trench 40



Trenches 1-10, 12, 14, 16, 18, 20-29, 32-34 and 36-38

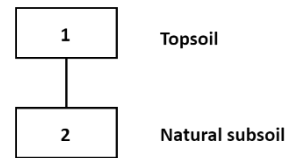




Photo 1: Trench 11, ditch [F45], looking south-east



Photo 2: Trench 13b, ditch [F18], looking east



Photo 3: Trench 13b, ditch [F37], looking east



Photo 4: Trench 15, ditch [F34], looking north



Photo 5: Trench 3 with furrows, looking south-east



Photo 6: Trench 25 with furrows, looking north-west



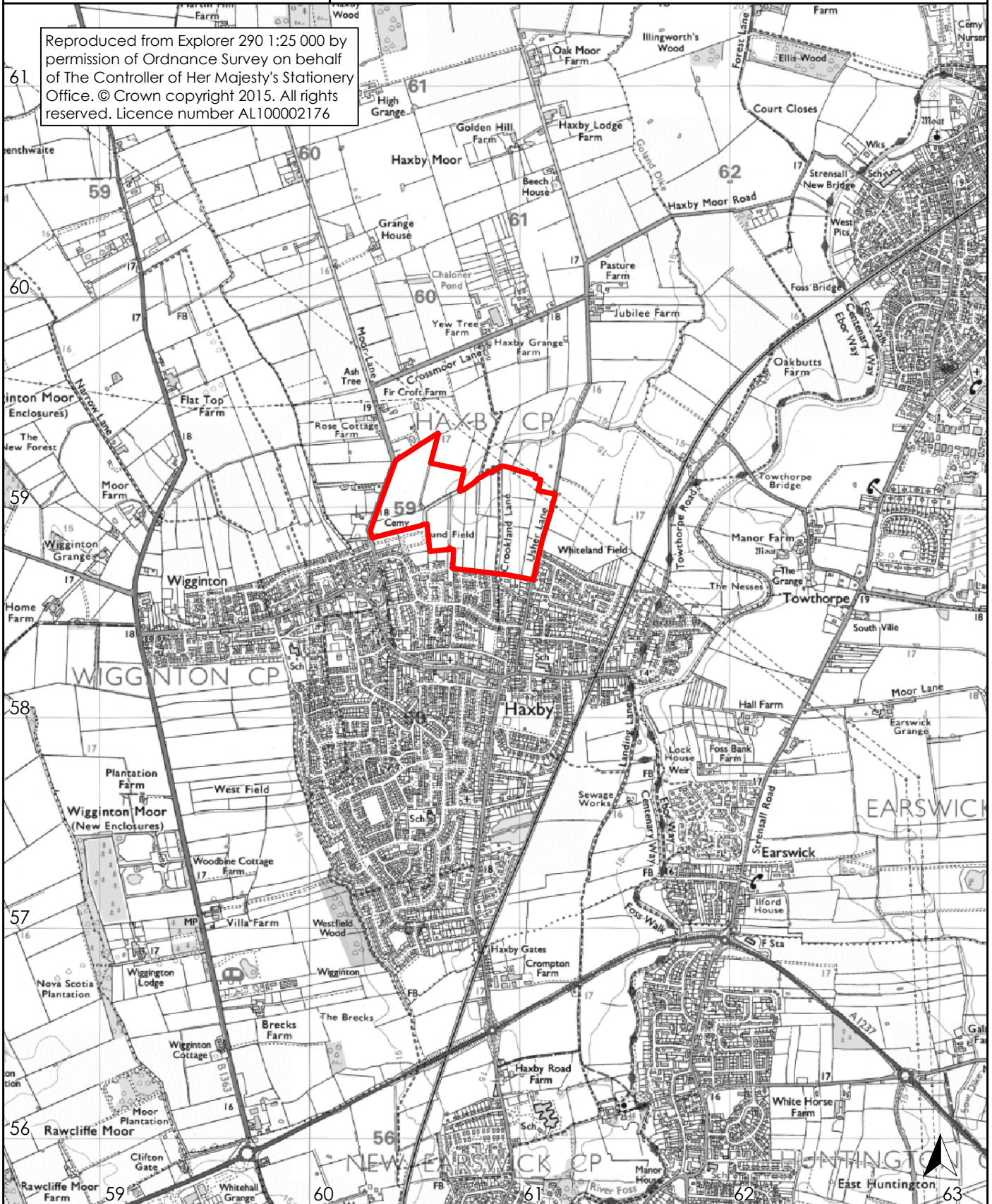
Photo 7: Trench 37 with furrows, looking south-west



Photo 8: Retouched knife or point from ditch [F45], context [44]

Figure 1: Site location

Reproduced from Explorer 290 1:25 000 by permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright 2015. All rights reserved. Licence number AL100002176



 site boundary

0 1km
scale 1:25 000 for A4 plot





Contains Ordnance Survey
Open Data © Crown copyright
and database right 2023

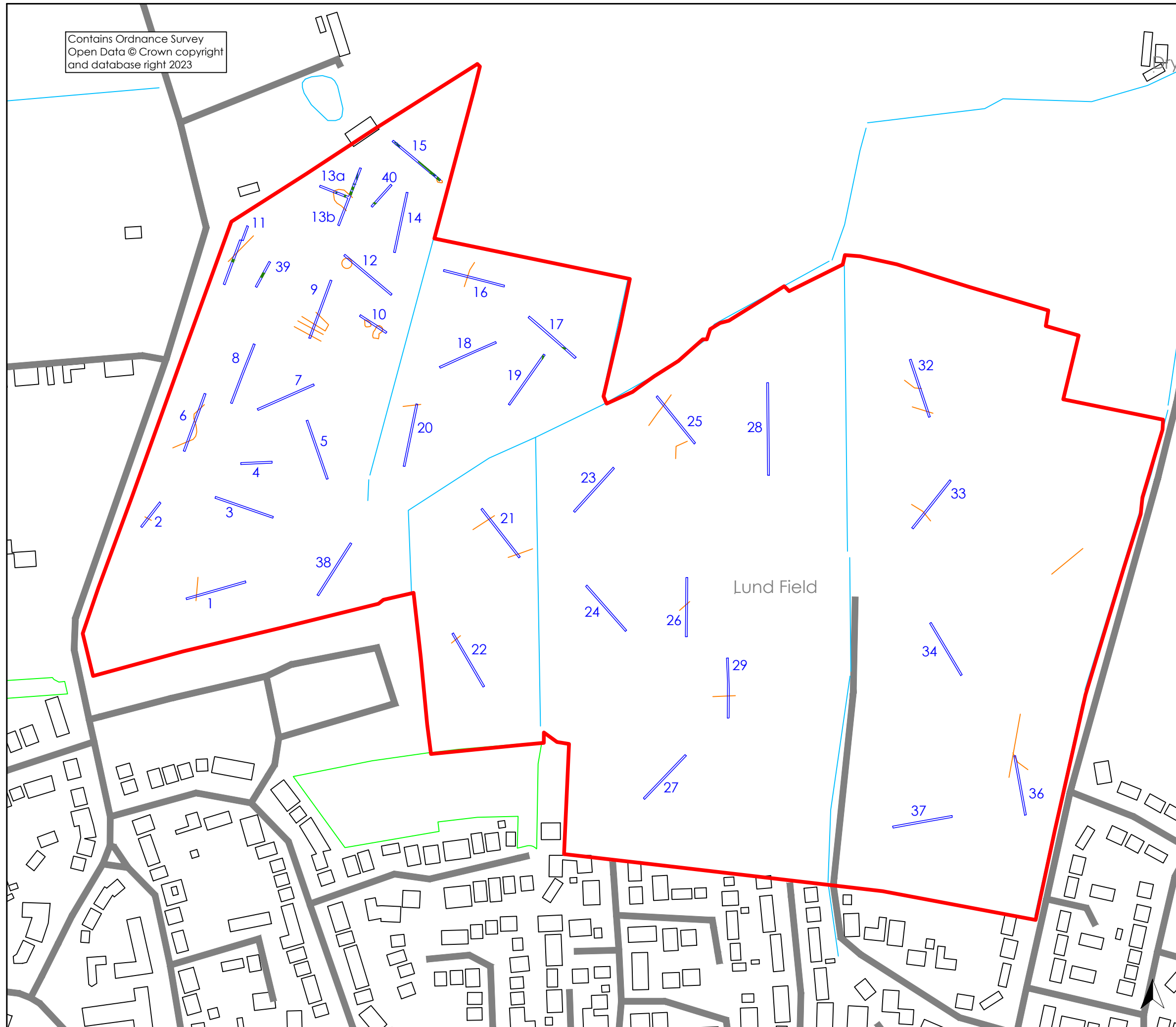
Land East of Moor Lane
Haxby
North Yorkshire

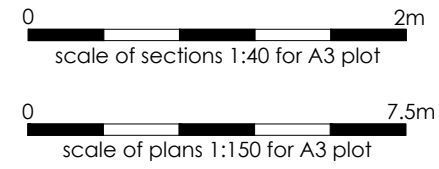
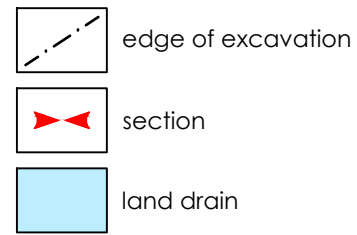
archaeological evaluation
report 5878

Figure 2: Trench locations

0 150m
scale 1:3000 for A3 plot

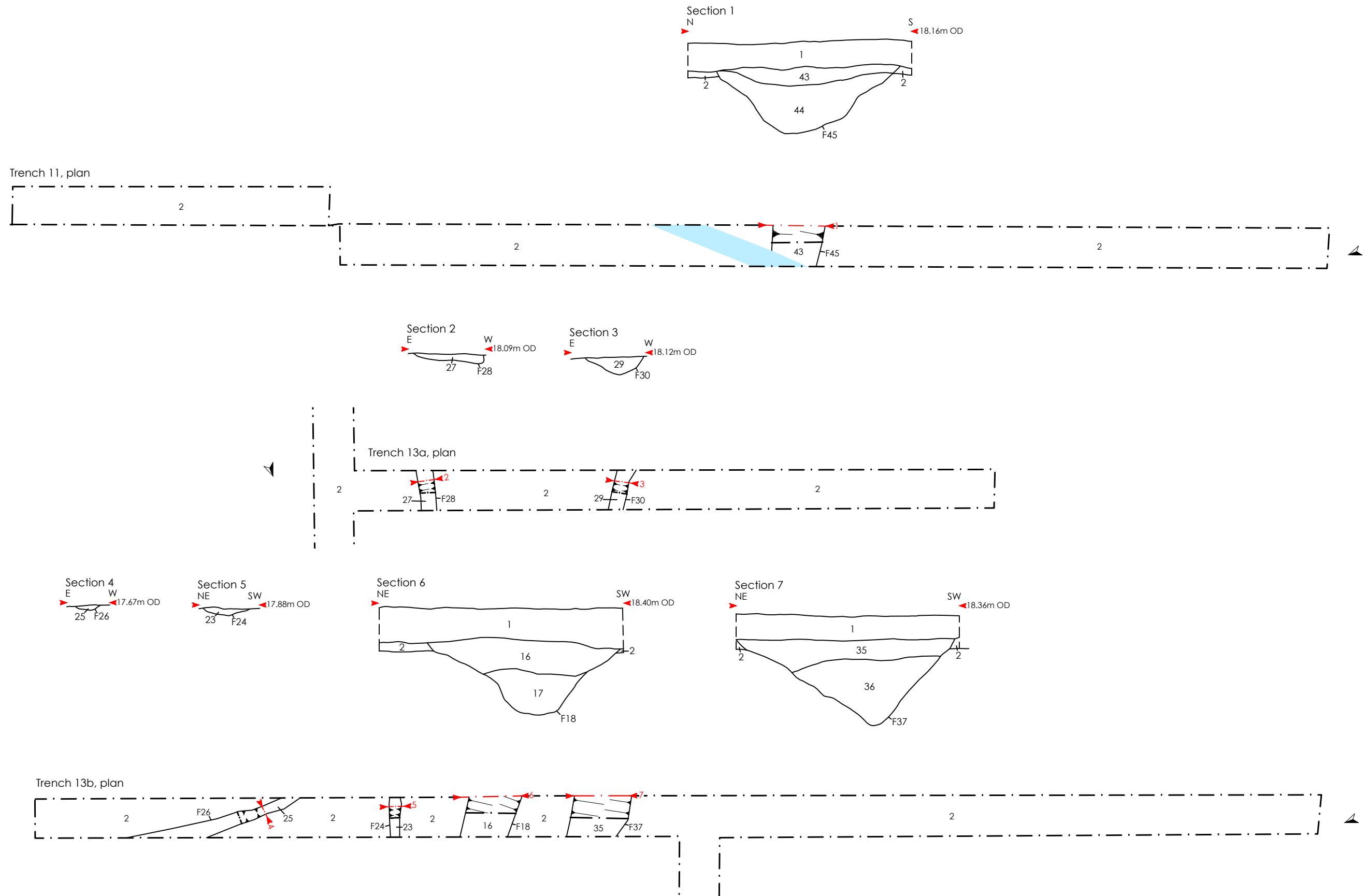
-  site boundary
-  trench
-  feature identified in trench
-  anomaly identified on geophysical survey

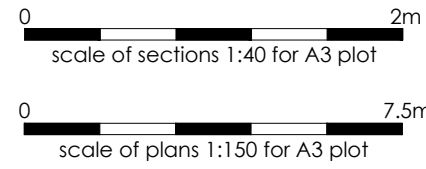
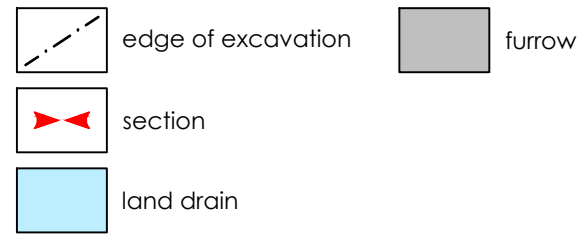




Land East of Moor Lane
Haxby
North Yorkshire
archaeological evaluation
report 5878

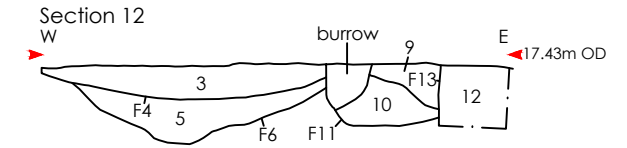
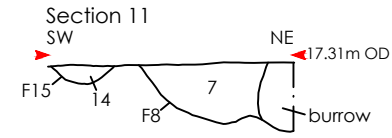
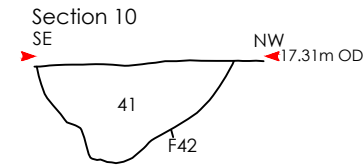
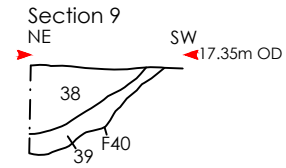
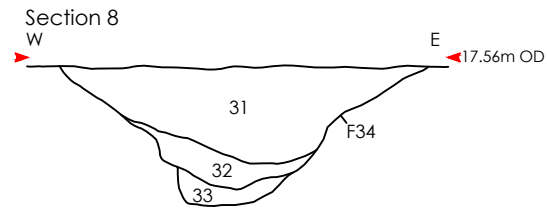
Figure 3: Trenches 11, 13a and 13b, plans and sections



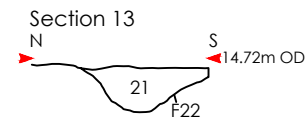
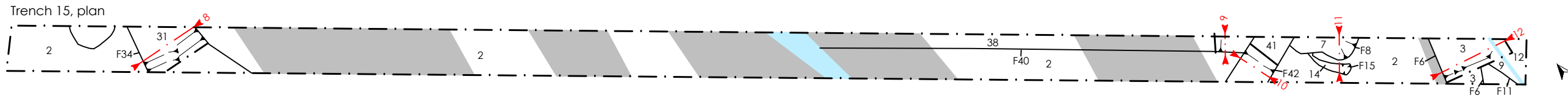


Land East of Moor Lane
Haxby
North Yorkshire
archaeological evaluation
report 5878

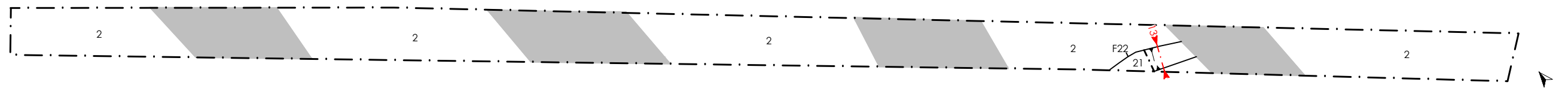
Figure 4: Trenches 15, 17 and 19, plans and sections



Trench 15, plan



Trench 17, plan



Trench 19, plan

