HESLINGTON EAST,

HESLINGTON, YORK

A REPORT ON AN

ARCHAEOLOGICAL EVALUATION

by

Neil Macnab

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Tel: (01904) 663000 Fax: (01904) 663024 Email: enquiries@yorkarchaeology.co.uk

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ABSTRACT

From November 2003 to February 2004 York Archaeological Trust conducted an archaeological evaluation at Heslington East, Heslington, York. The site lies some 3km to the south-east of York City centre close to Heslington village and incorporates within it part of a glacial moraine and also part of the low lying Vale of York basin. This evaluation involved the excavation of 115 trenches, the siting of which was determined by a series of geophysical surveys undertaken from September 2003 to February 2004. The geophysical surveys had identified a number of areas and features of potential archaeological interest and significance. The geophysical survey built on earlier work which consisted of several detailed desk-top studies and a campaign of field walking. The evaluation was carried out for Casella Stanger for the University of York.

Three areas of high archaeological significance (Areas A1-A3) were identified as well as seven areas of secondary significance (B1-7). The archaeology within these areas dated from the Neolithic through to the Anglian period and included a peat bog, possible Neolithic and Bronze Age settlement, an Iron Age round house within an enclosure with associated waterlogged deposits, Iron Age and Roman field systems, a series of Iron Age enclosures associated with two springheads with good organic preservation, a probable Roman villa with a heated bathroom in its north-west corner and a furnace base to supply the heat in the north-east corner, a Roman road leading up to the probable building, a further Roman structure of cobbles and boulders, and possible areas where Anglian settlement may exist. No evidence for the use of the site during the Anglo-Scandinavian period was recovered. During the medieval, post- medieval and modern periods the site has been used for agriculture, and where the land has not been protected by thick layers of colluvium (hillwash), aeolian (windblown) sands and plough drag, the original ground surface has been truncated to varying degrees by medieval ridge and furrow, modern ploughing and subsoiling activity. A backfilled post-medieval pond, with good organic preservation as well as a modern quarry hole were also recovered. Artefacts were not numerous, but included material dated to the Bronze Age, Iron Age, Roman, Anglian, medieval, post medieval and modern periods.

1. INTRODUCTION

1.1 Location and Scope of Work

Following two preliminary desk-top studies (Evans 2002; Mason and McComish 2003), a campaign of field walking (Kendal 2003; Mason 2003) and a series of geophysical surveys (Bartlett 2003; Bartlett and Noel 2003; 2004a; 2004b), an archaeological evaluation excavation was undertaken by York Archaeological Trust (YAT) on behalf of Casella Stanger, Environmental Consultants for the University of York, at Heslington East, York (centered on NGR SE 640506; see Fig. 1).

The geophysical surveys (Bartlett 2003; Bartlett and Noel 2003; 2004a; 2004b) identified a number of areas across the Heslington east site where geophysical anomalies (numbered f1 to f34 within the reports) appeared to be concentrated. These were targeted

by the archaeological evaluation, as well as areas were geophysical anomalies were much more scattered and were geophysical anomalies did not appear.

The evaluation took place between 6th November 2003 and 4th February 2004, directed by the author. A total of 115 trenches was excavated across the Heslington East site, the position of which are shown on Figure 2. Approximately 1.58% (c. 16,300 square metres) of the proposed 103 hectare development area was evaluated. The evaluation was carried out to a specification prepared by the Principal Archaeologist for City of York Council. The site records are currently stored by YAT under the Yorkshire Museum accession code YORYM:2002.569 and YAT project number 1069.

1.2 Aims

The general evaluation objectives were:

- To establish the presence or absence of archaeological remains within the proposed development area.
- To determine as far as was reasonably possible, the location, extent, date, character, condition, significance and quality of any surviving remains.
- To make available the results of the investigation.

1.3 The Evaluation Brief

The research objectives prepared by the Principal Archaeologist for City of York Council are listed below (1.3.1). They were amended and expanded to take account of the data which came to light during the evaluation programme and as the geophysical surveys progressed (1.3.2).

1.3.1 Initial Research objectives

- What was the prehistoric land use of this site?
- Did the character and pattern of land use alter as a result of the Roman occupation? What was the character and pattern of land use during the Roman period?
- Is there any evidence for medieval activity?
- Does the site contain any significant palaeo-environmental sequences?
- What is the profile of natural deposits across the site?
- Are there well preserved waterlogged or arid archaeological deposits situated across the site and if so at what depth?

- Can a meaningful archaeological deposit model for the site as a whole, indicating the nature and preservation of prehistoric, Roman, Anglian, Anglo-Scandinavian, medieval and post-medieval strata be made?

1.3.2 Additional research objectives

- Is there any evidence for Roman burials?
- Does the site contain any evidence for Anglian or Anglo-Scandinavian occupation?
- Did the medieval graveyard extend into this area?
- Is there any surviving evidence to suggest the position of the medieval tithe barn?
- What evidence is there for the use of the site during World War II?

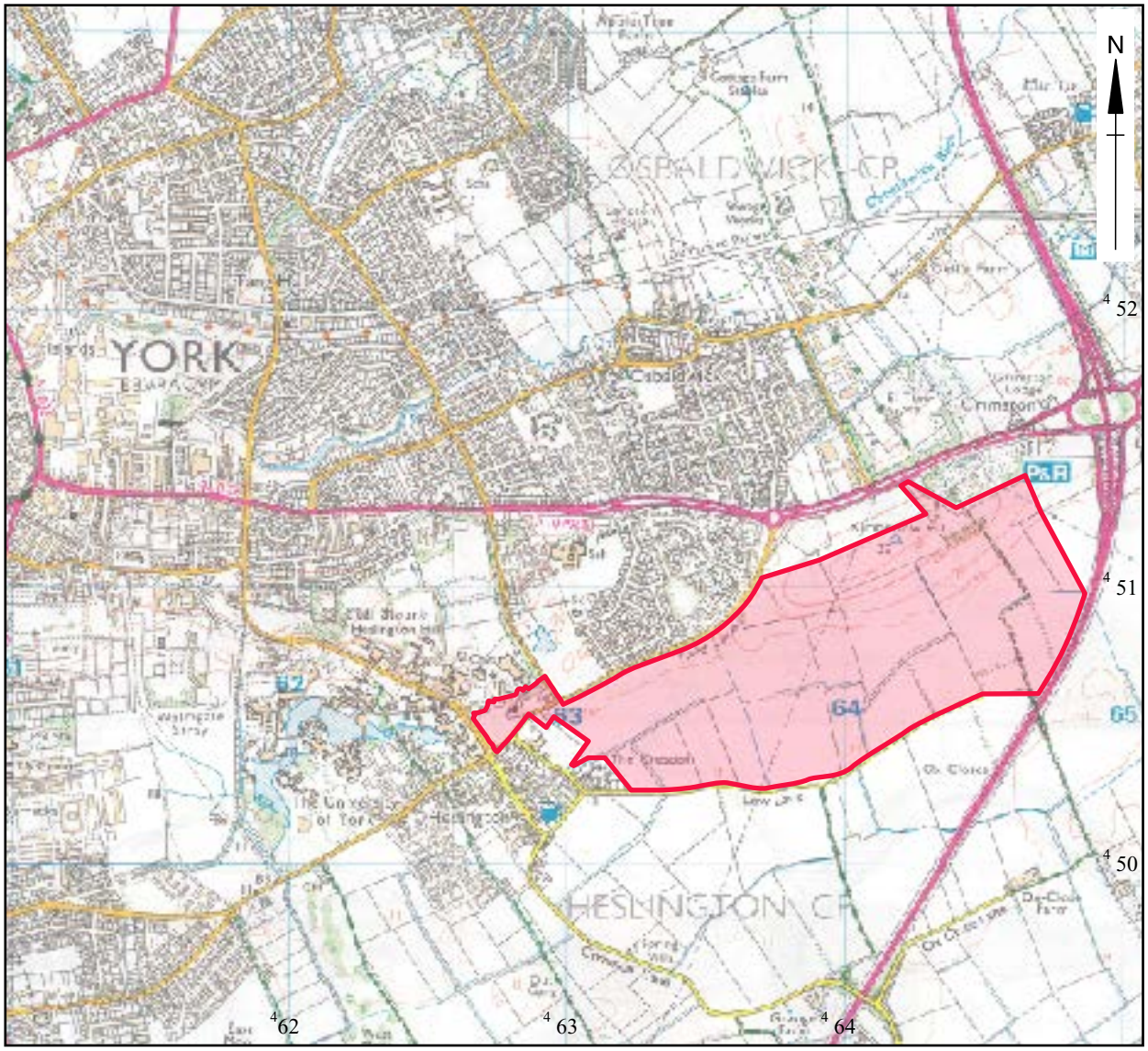

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Fig. 1 Site Location

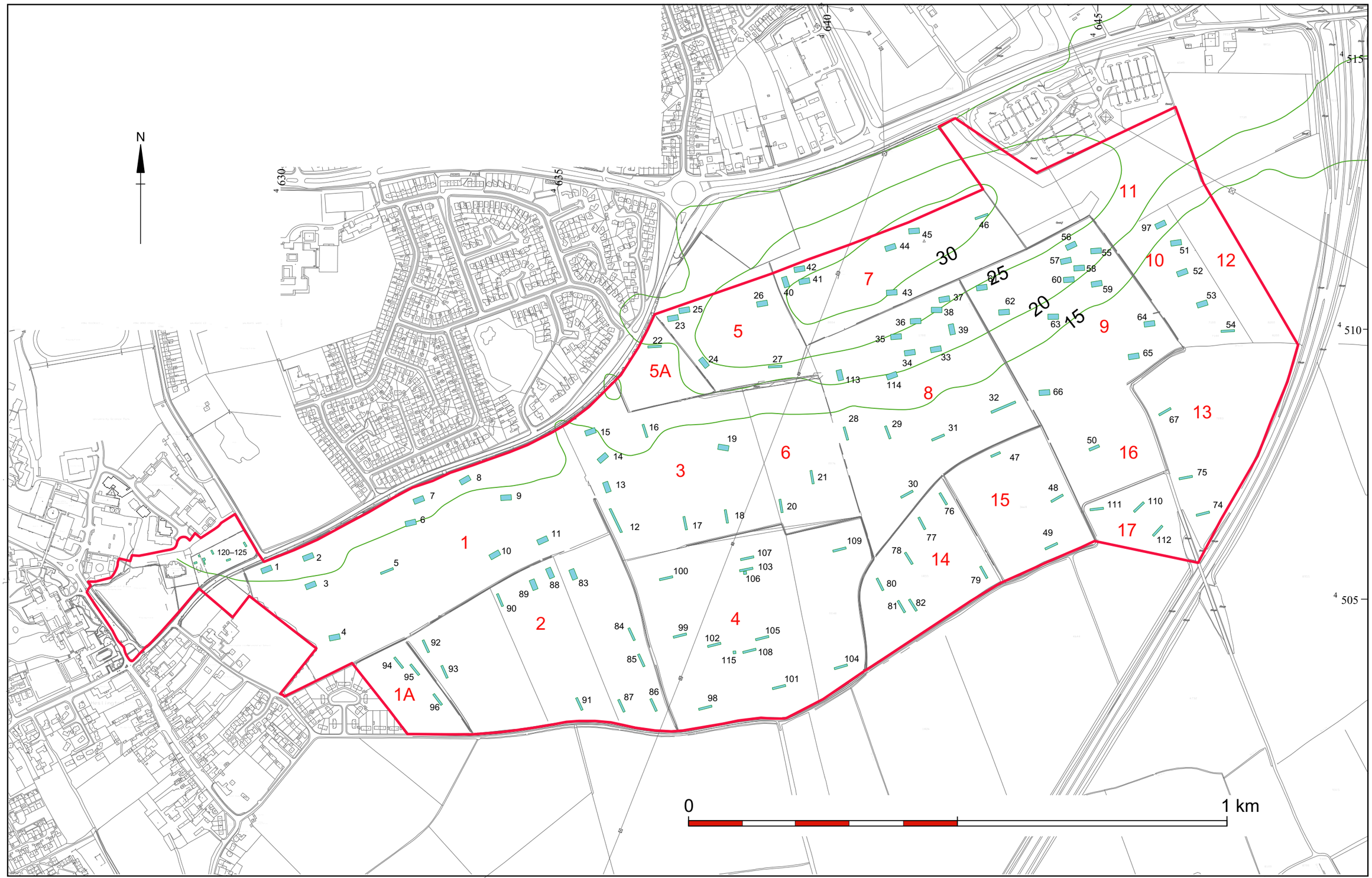

Fig. 2 Trench location plan

Fig. 3 Trench Location in Zone E

2. METHOD STATEMENT

The evaluation excavation was based on a c. 1.58% sample of the development area, and consisted of 115 trenches of varying sizes and orientations (see Figure 2). The majority (109 trenches covering 16,160 square metres) evaluated 100 or 200sq. metre areas. These trenches were positioned to intercept specific areas of anomalies identified by the geophysical survey, and by way of a control, also investigated areas where no anomalies were recorded.

In Area E, six trenches were excavated covering 138 square metres, each trench measuring approximately 25 square metres in area. These trenches were positioned to target geophysical anomalies highlighted by the geophysical survey (see Figure 3), the location of the tithe barn based on cartographic evidence, the area immediately east of the present church graveyard wall (to recover medieval burials), and the area on the eastern side of the area (to locate Roman burials).

In the majority of trenches the overburden was removed by a 360-degree mechanical excavator, using a toothless ditching bucket, under close archaeological supervision. In Area E a JCB site master was used. Deposits were removed to the top of the first significant archaeological level, usually at a depth of c. 0.40m – 1m. This process generally involved the machine removal of the ploughsoil, subsoil and any other modern material. In most cases this revealed natural deposits cut by archaeological features. In a few trenches (for example Trench 36), archaeological deposits were located on top of colluvium (hillwash) of uncertain date. In these cases the colluvium was left unexcavated, and therefore the original natural ground surface was not revealed. In several other trenches (for example Trench 51), the post-glacial colluvial material was excavated by machine to reveal the natural glacial deposits below. Occasionally it was necessary to leave layers of undated sterile colluvial material unexcavated (for example in Trenches 28 and 29) as they contained modern land drains which could not be removed. Wherever possible in these trenches, colluvium was removed to the top of the underlying natural. It was also necessary, in certain trenches (for example Trenches 1 and 37) to machine excavate small areas to a greater depth, either to investigate large features or the natural deposits. These excavations did not exceed 1.5m in depth.

The machine- and hand-excavated material was separated into topsoil and subsoil, and stored by the trench side in separate piles. Close observation of this procedure, the weather conditions, the nature of the natural subsoil and its wetness, and the presence or absence of land drains was undertaken in conjunction with a land drainage and soil structure consultant (ADAS Environmental Surveyors, Leeds). The exposed surface of the natural glacial deposits, or colluvium, and archaeological deposits, was then cleaned by hand, with a view to identifying archaeological features, for example, ditches, pits and post-holes, cut into the underlying subsoil or natural, or to expose structural evidence, for example, wall foundations and post-pads, sitting on top of subsoil or natural – which are the traces of ancient settlement. The vertical faces of the trench sides were also cleaned by hand, with a view to identifying distinct deposit horizons above the natural. Selective hand excavation of archaeological features was undertaken to determine their nature and extent, and to recover artefacts and deposit samples. In certain cases (for example Trenches 121 and 123), where the authenticity of the natural deposits was uncertain and

there was no machine available, small investigative trenches were dug into these deposits by hand.

Full recording in drawn, written and photographic form of archaeological features and deposits was carried out. The trenches were then backfilled with the subsoil, followed secondly by the topsoil (monitored in conjunction with ADAS). Recording followed procedures laid down in the York Archaeological Trust Context Recording Manual (1996).

3. LOCATION, TOPOGRAPHY AND GEOLOGY

The majority of the Heslington East site (c. 100 hectares) is at present under arable cultivation, principally sugar beet, potatoes, and cereal crops. The highest point is at c. 32m Above Ordnance Datum (AOD), situated at Kimberlow Hill, on the northern edge of the development area. From here there are good views across the Vale of York to the south, south-west and south-east; the tower of York Minster to the east-north-east can also be seen from this vantage point. Kimberlow Hill lies on an east-west running glacial moraine (composed of debris deposited in the last Ice Age). The land falls away steeply from here to the Vale of York basin to the south, situated at c. 11m AOD and gradually to the north and north-west towards Hull Road and Field Lane (c. 21m AOD in the north-west corner of Field 5). The A64 ring-road flanks the land to the south-east, a country lane (Low Lane) flanks the development area to the south-west, Heslington village flanks it to the west, and Field Lane and Hull Road flank it to the north-west and north.

A trapezoidal addition to the development area (Area E) was situated within Heslington village, centred on the parish church with Field Lane to the south-east, University Road to the south-west, and Windmill Lane to the north-east. The portion of Area E which was evaluated, east of the church, consisted of a small tree nursery and an adjacent field left as open pasture. The rest of Area E consisted of parkland used communally by the village and the University to the south and west of Heslington Church, and the southern portion of University Road, with its green islands and roundabout. The topography varies across the site from 17.70m AOD close to Windmill Lane to 13.00m AOD close to Heslington Hall.

The whole of the northern part of the Heslington East site is situated on the glacial moraine which is composed of gravels, sands and boulder clay. The southern portion lies over glacial sands as well as silts and clays. In certain areas colluvium (hillwash) covers the glacial deposits, and in a small piece of Field 4 aeolian sands (wind blown deposits) have built up. The solid geology is Bunter and Keuper sandstones (Geological Survey of England and Wales, Sheet 63). As water seeps down through the glacial moraine, it must encounter a natural band of gravel or sand at a certain point within it which allows water to be channeled to the surface at a number of natural springs (a spring line). These springheads are located along the south-facing slope of Kimberlow Hill in Fields 1, 8, 9 and perhaps 12, though field 12 was not archaeologically investigated.

Localised variations in the topography have produced certain landscape features across the Heslington site area. At the eastern end of Field 1 a valley runs north-west to south-east to the southern edges of Fields 1, 3 and 6. This appears to drain an area of former

peat bog or marsh, which formed within a hollow on top of the glacial moraine (now drained and laid out as a green area in the Badger Hill estate). Another shallow linear depression runs east - west, along the southern edge of Fields 1, 3, 6, 8-10 and 12. The land to the south of this rises slightly to form a chain of low relief clay islands in Fields 4, and 13 - 17. Further south, adjacent to Low Lane, the land drops away again to a second shallow linear depression. A number of streams, which probably originally meandered across the Heslington East site have been either culverted or dyked to follow the modern field boundaries. This process was probably carried out when the fields were enclosed in the post-medieval and modern periods. A natural depression or possible quarry hole is focussed centrally within Field 5A.

4. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The evaluation excavation was carried out as it was thought on the basis of both previous archaeological discoveries and historical sources, that significant evidence would be recovered for the following periods:

4.1 The Prehistoric Period (to the late 1st Century AD)

Prehistoric activity in the immediate York area appears to have been concentrated on the ridge of high ground formed by the glacial moraine which runs east – west across the Vale of York. The moraine provided both a natural communications route through the low lying and, in places, marshy vale, and an attractive area for agriculture and settlement (RCHMY3, xxxxviii; Radley 1974; Manby 1980; 1988; Manby et al., 2003, 94). The majority of datable prehistoric finds from the York area date from the Neolithic period onwards; there is very little evidence for the Palaeolithic or Mesolithic periods.

The fieldwalking at Heslington East has significantly increased the quantity of flint found in the locality. The majority of worked pieces recovered from the site were dateable to the late Neolithic or early Bronze Age, and included two scrapers, several broad-flat flakes, end-scrapers and an angle graver. Part of a late Neolithic or early Bronze Age polished stone axe was also found. Set alongside other recent archaeological investigations in the area, including those at Heslington Hill by Field Archaeology Services (FAS 2003) and at Germany Beck (MAP 1996), some 2km to the south-west of Heslington East, which have also produced appreciable quantities of flint of similar date, it is clear that prehistoric activity on the moraine on the east and south-east side of York was much more intense than previously thought.

In addition to the discoveries already noted, the City of York SMR records that at other sites on the moraine a flint axe was found near Heslington Common, and a flint scraper was found in an uncertain location in Fulford. Two bronze socketed axes of Bronze Age date were found in the area of York Cemetery, c. 2.5km to the west of the Heslington East site, a bronze palstave was recovered in Fulford (NGR SE c. 6100 4900), and a looped spearhead, possibly of the Bronze Age, was found in Heslington Field in 1889.

Geophysical survey in the Heslington East development area combined with the finds of flint noted above predicted that the development area was likely to contain prehistoric settlement (Bartlett 2003).

Although little Iron Age or Roman material was found in field walking, evidence of settlement in the development area during the later prehistoric and/or Roman period was suggested by the study of aerial photographs of the surrounding area. A number of possible sites have been identified from the characteristic form of crop marks, south of Heslington, approximately 1.5km from St Paul's Church (Evans 2002; Mason and McComish 2003). They include two ditched enclosures (at NGR SE 6305 4885, NMR No. SE 64 NW 18 and at NGR SE 6397 4916, NMR No. SE 64 NW 19) and a double-ditched enclosure (NGR SE 6315 4872, NMR No. SE 64 NW 17). They are all thought to be Iron Age or Roman in date and to represent field systems.

It may be noted that the development area lies (at its closest point) some 700m to the south-east of Siward's How (NGR SE 6219 5086), which is a scheduled Ancient Monument (SAM 26623). This has been variously interpreted as a prehistoric burial mound (Elgee 1933), an early medieval burial mound (Thurnham 1849; Ramm 1965) or even a late medieval mill mound (Short 1994). Some worked flints have been recovered in the area immediately to the south-west of the mound, but they were few in number and undiagnostic as to date (Perring 1999). Another earthwork in the area is the Green Dykes, located c. 1000m west of the study area, existing as a line of banks and ditches running north – south across the moraine. As in the case of Siward's How, the precise date of this feature is uncertain, although it is possibly an Iron Age defensive boundary dyke cutting across the approach to York from the east (Ramm 1966; RCHMY3, xxxviii); an early medieval date is preferred by Perring (1999, 21).

4.1.1 Summary

The evidence produced by the desk-top studies, field walking and geophysical surveys suggests that prehistoric activity on the site takes several distinct forms. The earliest, dated to the late Neolithic or early Bronze Age (c. 3200 to 1500 BC), was focused on the moraine, which was primarily used, probably seasonally for camps and as a routeway across the Vale of York. In the later prehistoric period, dated to the Iron Age (c. 700 BC to 70 AD), parts of the landscape appear to have been sub-divided into fields and settlement enclosures. Aerial photographic evidence suggests that these fields are situated to the south of the development area, in the Vale basin, and not on the moraine. The meaning and use of the moraine in this period is unknown.

4.2 The Roman Period (late 1st to the 5th centuries AD)

The Heslington East site lies c. 3 km to the east of the Roman fortress and civilian town (*Colonia*) at York (*Eboracum*) where the River Ouse cuts through the moraine. Two Roman roads are known in the area, located to the north and west of the site. The first was the main approach road to York from the east, originating in Brough-on-Humber (RCHMY1, 1; Road 2), the line of which is largely followed by the present-day A1079. This road lies just to the north of the development area, at a distance of c. 100m at its closest point, and was recorded just south of Bingley House in 1975 (YAT 1997, 1975.17). The line of the second Roman road (RCHMY1, 1; Road 1), approaching York from the south-east, is preserved in the form of a straight parish boundary over two miles long between Pool Bridge and Germany Beck, Fulford. It was observed at Germany Beck

in a drainage trench in 1965 (Radley 1966, 559). If projected north-west from Germany Beck, then the line of the road would lie c. 1000m to the south-west of the site

Aerial photography in this area has identified possible Roman settlement (Perring 1999, 21) on the high ground close to Heslington Hill, approximately 400m north-west of the site. It is seen as a ditched enclosure around a number of smaller rectilinear features. An excavation on Heslington Hill by FAS discovered pits containing Roman pottery, which also contained Anglian pottery in their upper fills (FAS 2003).

In addition, two stone coffins were found in 1831, 250m east of Heslington parish church (Yorkshire Philosophical Society 1832) which suggests the presence of a Roman cemetery.

There have also been a number of stray Roman finds in the Heslington area. The most impressive was a hoard of 2800 late Roman coins in a pottery jar found during the construction of Alcuin College in 1966. Other finds from Heslington include fragments of amphora and a small bronze bird figurine, possibly Roman, and a Roman military strap-end (Perring 1999, 20); precise locations for these finds are unknown. According to the tenant farmers, investigation by metal detectorists has produced a small number of Roman coins from the fields on the site. Very little Roman material was found during fieldwalking.

Other Roman sites identified in the Heslington area include Metcalfe Lane, Osbaldwick, 1km north of Heslington East where post-holes and gullies, probably representing field boundaries, of possible 2nd or 3rd century date were found (Macnab 2002). Further evidence for Roman field systems in use from the 1st to 4th centuries was found at Germany Beck, Fulford (MAP 1996). The quantity of pottery and building materials from the Germany Beck site may suggest that a high-status Roman building, possibly a villa, lay in the area.

4.2.1 Summary

Patterns of land use established in the Iron Age, probably continued into the early years of the Roman occupation within the Heslington East site. This is consistent with evidence from elsewhere in the Vale of York (Ottaway 2003, 146). The proximity of *Eboracum* and of two important Roman roads, suggests that settlement in the Heslington area assumed a Romanised character by the early 2nd century with the adoption of structures and material culture (pottery, metalwork etc) of Roman type. By the 2nd or 3rd century there are indications, including the two stone-coffined burials, that wealthier landowners in the area may have established estates based on villas, i.e. Romanised country houses. One of the research objectives of the current evaluation is to clarify the presence of Roman settlement in the area, and its changes through time.

4.3 Anglo-Saxon and Anglo-Scandinavian periods (5th to 11th centuries AD)

The place name Heslington has an Old English origin and can be interpreted as ‘Farmstead near the hazel wood’; *haesling* meaning a place overgrown with hazels (Smith 1970, 274).

Various sites of the Anglo-Saxon and Anglo-Scandinavian periods have been uncovered in the area. An inhumation cemetery was found at Lamel Hill, in the grounds of The Retreat, off Heslington Road, c. 1.4km to the west of the Heslington East site. Further Anglian inhumations were found in 1983 at Belle Vue House, Heslington, which were presumably associated with the Lamel Hill cemetery (YAT 1997, Site 1983.31). Disturbed Anglo-Saxon cremation vessels and quantities of unabraded pottery, which may date to the 5th or 6th century, were found during works at the new University Medical School (FAS 2003) near Heslington Hill. In addition, evidence of Anglian settlement was seen in a watching brief on Heslington Hill in 2002 (FAS 2003), and a possible toft enclosure (i.e. dwelling and yard) was found at Osbaldwick (Macnab 2002).

As stated above, it has been suggested that Siward's How is an early medieval burial mound (Thurnam 1849). This is largely based on the place-name evidence as 'How' is derived from the early English *hlaew* (Ramm 1965; FAS 2003). Siward was Earl of Northumbria in the early 11th century, but his burial is known to have taken place in St. Olave's church in York. Although a mound referred to as Siward's How can be found in documents dating from the late 15th and 16th centuries, Ramm (1965) believes that they are describing Lamel Hill rather than the mound in Heslington. The interpretation of Siward's How as an early medieval burial mound is therefore, doubtful, and the SMR entry for the site follows Ramm's interpretation.

4.3.1 Summary

Little is understood of how the landscape changed in the York hinterland from the late Roman to the Anglian period (Ottaway 2003, 148). Although an important burial ground has been located at Lamel Hill, and perhaps a second at Heslington Hill, dating to the early part of this period, the positions of settlements and land use within the Heslington East site and its immediate locality are unknown. It is possible that the villages of Heslington, Grimston and Osbaldwick all had their origins in the Anglian or Anglo-Scandinavian periods, but the precise dates of the founding of these settlements are still unknown. It was hoped that the archaeological evaluation would shed light on some of these uncertainties.

4.4 The Medieval Period (11th to the mid 16th centuries AD)

The following account is largely drawn from the Victoria County History (VCH) published in 1976.

Heslington village is similar to many others in the Vale of York in having a main street flanked by properties apparently laid out in a very regular manner behind which there are secondary back lanes. The pattern is usually thought to result from deliberate planning in the 11th – 12th centuries, although this cannot be conclusively demonstrated at present.

The village is named as Eslinton in the Domesday Book of 1086 (Smith 1970, 274). At that time the village was split between three estates which were held by Count Alan of Brittany, Hugh son of Baldric and the Archbishopric of York. It is possible that the principal residence on the Archbishop's land was on the site of the present Manor House on Main Street (VCH 1976, 70). During the 12th and 13th centuries the spelling of the

village name varied (Heselingtuna, Heslingetun, Eselington, Hesslington) but Heslington was in use from 1438 onwards (Smith 1970, 273). In terms of religious administration the village and its associated open fields were split between two parishes, St Lawrence's (the church of which was located just outside Walmgate Bar) and St Paul's, situated within the village. The two portions were known respectively as Heslington St Lawrence (the capital manor – owned by a secular lord) and Heslington St Paul (the prebendal manor owned by a Canon of York Minster).

The Canons of York Minster were important church and state officials, drawing their main income from manors in and around York. Thomas, the first Norman Archbishop of York (1070 - 1100) is said to have constituted the prebends (estates) which belonged to the cathedral. The prebendal manor of Heslington St Paul was probably founded at this time. Each Canon or prebendary held a prebend (or estate) consisting of prebendal manors, sokes and berewicks, which were mainly situated in Yorkshire.

By 1148 five carucates of land in Heslington had been given to St Peter's (later St Leonard's) Hospital in York. Sometime between 1219-34 much of the land held by the Archbishopric of York was assigned to the Ampleforth Prebend, with a smaller portion to the Driffield Prebend. Ampleforth owned the tithes from Heslington St Paul, and provided the curate for the church, which was technically a chapel until it became fully parochial in 1299. The tithes from Heslington St Lawrence belonged to the chapter of York but some were assigned to Driffield Prebend in the late 12th century. The church and graveyard are first referred to in 1299, but nothing remains above ground of the medieval church, as it was rebuilt in the 19th century. It had been thought that the graveyard may have extended further north than at present, but construction of the Science Park failed to provide any evidence of this (Perring 1999, 23).

At the end of the 12th century a York citizen was allowed to feed animals in the pasture of St Leonard's Hospital in Heslington (VCHY 1961, 498). In 1299 the lessee of St Lawrence's rectory leased a plot of land adjacent to St Paul's churchyard from the Prebend of Ampleforth. A tithe barn was subsequently built on this plot. Evaluation excavations within the field to the east of the church (within Area E) may ascertain the position of this medieval building. In 1377 there were 73 poll tax payers in the village excluding the lands belonging to York Minster. Windmills are recorded in the parish at various times. St. Mary's Abbey in York owned a windmill at 'Siward Mill Hill' in Heslington (VCHY 1961, 507), and a windmill is mentioned in the village in 1503. During the medieval period the Green Dykes were clearly in use; the first reference to them is in 1374, and by 1484 they were functioning as a droveway (Perring 1999, 21).

In fields to the north-west of Hill Farm and Manor Farm, Elvington Lane, Grimston, are earthworks which are believed to be part of the shrunken medieval village of Grimston. These include a possible medieval moated site (NGR SE 6506 5135).

Ridge and furrow (fossilised evidence under pasture for arable agriculture, usually of medieval / early post-medieval date) is visible on aerial photographs to the south of Prospect Farm, and close to Murton and Osbaldwick. In addition, aerial photographs, taken prior to the construction of the University, reveal an impressive range of ridge and furrow crop marks, probably of medieval origin (codes for YAT collection: AP 7 SE622

505, PVA 77:1:3/36-38, AJC084/19, AJC035/24, AP15 SE629505, AJC092/3, AP 13 SE 635 501, AJC 035/23-5, AJC084/19 and AJC92/1,2). Ridge and furrow has also been recorded on a number of sites in this area including Heslington Hill during the course of an evaluation excavation (FAS 1997), and may be observed on Low Moor /Walmgate Stray, west of Heslington village.

The geophysical surveys carried out at Heslington East revealed extensive traces of ridge and furrow, suggesting that during the medieval period the land was used for arable agriculture. Fieldwalking evidence suggests that the distribution of finds reflects medieval manuring patterns.

It has been suggested that Siward's How was originally a medieval windmill mound. This interpretation is based partly on the evidence of late medieval pottery discovered on the surface of the mound (Short 1994) rather than any structural remains.

4.4.1 Summary

During the medieval period the Heslington East site appears to have been principally used as agricultural land by the villages of Heslington and Grimston. The origins and form of the medieval village of Heslington is not fully understood at present. It has been suggested that the medieval manor, was situated where the Manor House is today, at the southern end of Main Street. This would give the village a similar layout to the nearby village of Osbaldwick, with the manor situated at one end of the street and the church at the other. Documentary evidence for Heslington suggests the presence of a medieval tithe barn in the field to the east of the church, but its exact position is still unknown. The archaeological evaluation will help to clarify these uncertainties.

4.5 The Post-medieval period (mid 16th to 19th centuries)

This summary is largely drawn from the account in the Victoria County History (VCH) published in 1976.

A major change to the parish of Heslington followed the creation of the Heslington Hall estate, the origins of which lie in the dissolution of the monasteries. At the time of the dissolution the property in the village owned by St Leonard's Hospital was valued at £26. This land was let in 1557 by the crown to Thomas Eynns, who built Heslington Hall between 1565-8. Although heavily restored in the Victorian period, the original plaster ceiling of the great hall and part of the original panelling survive (Pevsner and Neave 1995, 463).

The Eynns manor passed through various hands until 1601 when it belonged to Thomas Hesketh. He founded a hospital in the parish in 1609, which was located on the north side of York (now University) Road. The hospital was endowed with £50 per annum in revenue from York City Mills. The hospital was later moved to a new location on Fulford Road, and nothing remains at the original site. In 1693 two sisters, Mary Norcliffe and Anne Yarburgh inherited the estate. The manor was reunified in 1793 when the Yarburgh family bought the manorial lands held by the Norcliffe family. The manor remained in the hands of the Yarburgh family from then on. Several of the people who inherited the

manor were either married daughters or nephews with differing surnames, but all of them adopted the name Yarburgh on, or shortly after, inheriting the manor.

It is probable that the medieval field systems referred to above lasted into the post-medieval period, although Perring (1999, 24) claims that the ridge and furrow field system observed in the area where the University now stands does not usually date from earlier than c.1500. The straight nature of the furrows suggests, therefore, that they relate to early 16th century improvements to the agrarian landscape in the area.

Heslington Lane is seen to cut across the ridge and furrow, suggesting that it was an addition to the landscape. The road is seen on Jeffrey's map of 1775, but it must date from at least 1568 as Heslington Hall respects it. Jeffrey's map of 1775 also suggests that there were buildings between Heslington Hall and the Church, flanking the eastern side of York (now University) Road. These have been suggested to be farms (Petts, pers. comm.).

Some idea of the value of the village in the 17th century is suggested in the 1649 tithes from Heslington St Paul which were worth £30, while the tithes belonging to Driffield Prebend were worth £6 13s and 4d in 1650. At the time of the hearth tax in 1672 there were 59 households present in the village, four of which were excused the tax. Of the remainder, 40 households had one hearth, eight households had two hearths, five households had three or four hearths and one household had six hearths. Heslington Hall had 16 hearths. The land of the Driffield Prebend had eight houses and eight bovates of land in 1685.

During the early to mid 18th century the village population seems to have been reasonably stable. Heslington St Paul had 23 families in 1743 and 20 families by 1764. By the late 18th century the village had developed in two sections. The larger portion was located to either side of Main Street, south of Heslington Hall. There was a village pond at the south end of the street but this was infilled in 1855. The smaller section of the village was located along both sides of Heslington Lane to the immediate west of Heslington Hall. By the mid 18th century there were three alehouses in the village although this was later reduced to two. In 1769 a steeple was added to the church. A number of 18th century buildings are present in Heslington village.

The enclosure of the parish in 1762 and again in 1857 gave rise to a more regular field pattern in the area, but part of the original common land within the parish survived. The village remained largely arable, with turnips, potatoes, mustard flax and chicory being grown during the late 18th century.

Some industrial activity occurred in addition to farming. From the 18th century, or possibly earlier, gravel was extracted from the area to the east of Windmill Lane which became known as 'gravel field'. In 1772 a windmill occupied the site of Siward's How and in 1787 two windmills were located to the north-east of the village. In 1794-5 a new smock mill was opened while the first school was built in the village in 1795.

Roads in the area were gradually improved during the 18th century. The main York to Hull road (which followed the line of the Roman road from York to Brough) was made a

turnpike in 1765. It remained in the hands of a turnpike trust until 1872. The Yarburgh family are also known to have improved the road across their estate in 1798.

The fieldwalking within the development area has suggested that the medieval manuring patterns on the agricultural land between the villages of Grimston and Heslington continued into the 16th and 17th centuries. During the 18th century the distribution of pottery fragments reveals a more intensive and widespread distribution across the whole area, rather than being concentrated close to the villages.

4.5.1 Summary

In the post-medieval period the Heslington east site area was mostly agricultural land, and the medieval strip fields continued to function into the early part of this period. The biggest alteration to the village was the construction of Heslington Hall between 1565-8. Heslington Lane, from Heslington to Fulford, was also constructed at this time. It is not known how Heslington Hall relates to the earlier medieval manor and village, and what changes its construction brought to the landscape, although it has been suggested that Manor House Farm, at the southern end of Main Street, was the site of the medieval manor. A number of farms appear to have been situated between the Hall and the Church in the post-medieval period. The medieval church and tithe barn remained as important structures within the village at this time, and a school was built on School Lane at the end of the period. Geophysical survey and the archaeological evaluation may clarify some of the uncertainties associated with the construction of Heslington Hall and its impact on the medieval landscape in its locality.

4.6 The Modern Period (19th to 21st centuries)

This summary is largely based on the account in the Victoria County History (VCH) published in 1976.

During the 19th century Heslington village's population remained largely unaltered. In 1801 the village had a population of 416 of whom 150 lived in the parish of Heslington St Paul with the remainder in Heslington St Lawrence. The population remained fairly constant until the mid-20th century, being 513 in 1821, 571 in 1861, 477 from 1881-1891, 506 in 1901 and 477 in 1931. The economy of the village remained largely agricultural, and from the 19th century onwards market gardening was present in addition to the traditional arable crops. Some industrial development took place with the building of a bleach works to the north-west of the village in 1804, but this was short-lived lasting only until c. 1857. A gravel dealer was present in the village in 1840.

By 1835 there were 20 boys and 20 girls being educated at their parents' expense in the village school. In 1841 the tithes from Heslington St Paul were worth £190. An Ice House is shown on the 1853 OS map located to the north of Heslington Lane (Perring 1999, 25).

During the mid 19th century the Yarburgh family were highly active in the parish. In 1851 they purchased the Ampleforth prebendal lands. Between 1855 and 1890 the tithe barn adjacent to St Paul's churchyard was demolished. In 1855 Heslington Lane was realigned

and straightened, and Windmill Lane was properly laid out. The family also had the parish church rebuilt between 1857-8 on the site of the earlier parish church (Pevsner and Neave 1995, 461). Spring Lane was moved away from the hall in 1865 to enable the extension to the fish pond. Heslington Hall was heavily restored in 1852-5 by P.C. Hardwick on behalf of the Yarburgh family. The old hall was effectively recased with Victorian walls, though the original style of the building exterior was maintained (ibid., 463). The gardens of the hall were extensively remodelled between 1852-5 (Perring 1999, 24). In 1869 the portion of Heslington that belonged to the parish of St Lawrence's was unified with St Paul's parish and in 1871, for the first time, a parsonage was provided by the Yarburgh family. In 1892 the lord of the manor became the 2nd Baron Deramore.

A number of 19th to early 20th century buildings are present in Heslington village, including the Wesleyan chapel of 1844, a new village school built in 1856, and the Lady Deramore Memorial Cottages almshouses of 1903 (Pevsner and Neave 1995, 462). Despite its proximity to York, Heslington remained a separate rural village until the mid-20th century. Enclosure of the open fields was apparently completed in 1857.

Evidence revealed by the study of 20th century maps suggests that the electricity pylons that traverse the Heslington East site from Kimberlow Hill were installed in 1938.

During World War II, Heslington Hall was the headquarters of Bomber Command for the York area and No. 4 Bomber Group. There was a Women's Auxiliary Air Force (WAAF) camp of Nissen huts, situated on Hall Park on the south side of Heslington Lane, opposite the walled Garden for Heslington Hall. The Women's Royal Air Force (WRAF) officers' mess was situated at the Manor House, at the south end of the village. A number of teleprinter huts, that kept the aerodromes in touch with headquarters, were erected to the north of the church (Ward 2000, 21).

Cartographic evidence and aerial photographs as well as personal memories (Hawkswell, pers comm) suggest that a sewage works was situated on the southern edge of Field 1 within the Heslington East site area. This probably was constructed in the late 1940s, and was superseded by the sewage works at Naburn by 1964.

Post-war development within the parish has led to a steady growth in population from 822 in 1951, to 1223 in 1961 and 2029 in 1971. Among the first early 20th century developments were 32 council houses and four council bungalows in the parish; this was coupled with massive suburban growth along the main York to Hull road. Modern housing was also constructed on Heslington Lane from the late 1960s onwards. In 1957 the York Waterworks Company built a water tower, in the style of a castle, at Heslington Hill. The parish church was extended in 1971-3 by the removal of the north nave wall and insertion of a series of octagonal rooms (Pevsner and Neave 1995, 461).

Major changes to the area took place in the 1960s when the Deramore estate was sold and broken up. Heslington Hall was sold in 1956 to the Joseph Rowntree Social Service Trust Ltd., but in 1962 it became part of the newly created University of York, and various alterations to the interior took place. The creation of the university led to the infilling of most of the land between the village and the city boundary with the campus. The fish

pond of Heslington Hall was extended to a lake around which the University buildings were arranged, and the buildings were designed (by Robert Matthew, Johnson-Marshall and Partners) using a clasp system of light steel frames and concrete cladding (ibid., 69). At around the same time Field Lane was also improved and given a new junction to the main York-Hull road.

A Conservation Area, of 17.5ha. in extent, was created for Heslington in 1969. This is centred on Heslington Hall and radiates outwards along Main Street, Heslington Lane and towards the parish church. Many of the buildings within the Conservation Area are listed (mainly Grade II listings). Part of the Heslington East site area (Area E) is located within the Conservation Area.

In the early 1970s the York outer ring road (A64) was constructed to the east and south of the development area. A large borrow-pit, for the extraction of material to construct the road was dug in the north-eastern corner of the development area in Field 11. This was later used as a municipal landfill site, which was eventually filled and closed by the mid 1990s. The construction of the A64 meant that several farms, including Grimston Grange were cut off from the Hull Road (A1079) and so a new bridge was constructed, and the original farm track, which crossed the middle of Field 13, was moved further west to its present position.

The results of the fieldwalking and geophysical survey suggest that intensive manuring continued across the agricultural land that forms the majority of the development area. Modern interventions within the development area include a concrete Ordnance Survey trig point (pillar) on Kimberlow Hill, a modern water pipeline that crosses Area E, the western sides of Fields 1 and 1A, and the southern sides of Fields 2 and 4, a telecommunications mast in the south-west corner of Field 11, and a City Park and Ride facility also within Field 11. The area immediately to the east of the church has been partially used as a tree nursery for the University in recent times.

4.6.1 Summary

The village of Heslington today still retains much of its rural character, even though the modern University overshadows it. Major changes to Heslington Hall and St. Paul's Church occurred in the mid-19th century, and the medieval tithe barn and buildings situated between the church and the Hall were demolished. The green, landscaped area between Heslington Hall and Heslington church probably took its modern form at this time. This area may have been used for some unknown purpose during WWII associated with Bomber Command. The full extent of associated structures, such as teleprinter huts is still unknown. Minor changes to the road layout just to the east of Heslington Hall have been made in the late 20th century. The rest of the development area has been agricultural land throughout the modern era, probably being completely enclosed by 1857. The current field layout differs slightly from that of 1857, as hedgerows have been removed to facilitate modern agricultural practices. Evidence for modern activity includes a sewage works, a borrow–pit and landfill site, new bridge and track associated with the construction of the A64, services including water and electric which traverse the development area, a modern Ordnance Survey trig point (pillar), telecommunications mast, a City Park and Ride facility and a tree nursery.

5. EVALUATION RESULTS

5.1 Introduction

The evaluation results presented below are discussed in field order, i.e. from Field 1 through to Field 17, and then Area E. Within each field, the trenches are discussed in numerical order. The archaeological deposits within each trench are discussed context by context in chronological order, from the earliest deposits to the most recent. Some modern contexts are only discussed briefly and the evaluation archive should be consulted for more detail.

5.2 Field 1

5.2.1 Description

The field was situated in the north-western corner of the Heslington East development area and was flanked by Field Lane to the north and the village of Heslington to the west. Topographically the field sloped from north-west to south-east, being situated on the south facing slope of the glacial moraine. Slight undulating hollows and a natural valley were noted in the north-eastern corner of the field. All of the trenches within this field were aligned north-east to south-west, with the exception of Trench 9, which was aligned east to west. The trenches all measured 20m long and 10m wide, except for Trench 5, which measured 25m long and 4m wide.

5.2.2 Trench 1

Trench 1, the most westerly within Field 1, was positioned to target a group of unnumbered geophysical anomalies situated in this part of the field. Topographically the ground varied slightly from the general trends noted across the field (see above), the slope being aligned north-east to south-west in the vicinity of the trench.

The earliest deposit was natural (1001) consisting of a firm, orangey pink, slightly clayey sand with moderate pebbles and cobbles. This was located at 15.98m AOD in the north-west corner and at 15.78m AOD at the southern edge of the trench. A patchy layer of friable, mid to dark brown, slightly silty sand subsoil (1002), interpreted as the remnants of a buried ploughsoil, sealed the natural to a maximum thickness of 0.10m. Truncating 1002 in the northern, central and eastern portions of the trench was a large quarry hole (1006) with near vertical sides. A portion of its backfill (dateable by pottery to the 20th century) was machine excavated in the north-eastern corner of the trench to a maximum depth of 1m below the present ground surface. The full depth and dimensions of the quarry were not ascertained. The quarry hole was backfilled with mixed layers of loose, slightly brownish pink, sandy gravel and compact, greyish brown, sandy silt (1003-5), probably relating to residues left from gravel extraction, and excess soil stripped prior to gravel quarrying. Modern ploughsoil then sealed the trench at between 16.95m AOD in the north-east and 16.04m AOD in the south-west corner of the trench. The geophysical anomaly clearly relates to 20th century quarrying.

5.2.3 Trench 2

Situated to the north-east of Trench 1, this and Trench 3 were placed to target geophysical anomalies designated f5, thought to be pit-like features.

The natural consisted of a firm, brownish orangey pink, sandy clay and orangey brown sand with patches of loose cobbles and pebbles (2001). It was located at 17.25m AOD in the north-west and at 16.84m AOD in the south-east corner of the trench. Sealing natural was a friable, reddish brown, silty sand subsoil (2002) which was up to 0.28m thick. This was interpreted as a buried ploughsoil. Approximately 5m from the eastern end of the trench, a north-south aligned linear strip of subsoil, which was only a few centimeters thick, was located. This may represent the last remnants of a furrow, which had been almost completely ploughed away. A modern land drain (2003-4) truncated the subsoil, and appeared to follow the line of the possible furrow. Modern plough soil then leveled the trench up to 17.86m AOD in the north-west and 17.21m AOD in the south-east corners of the trench. The geophysical anomalies may be natural in origin, produced by the patches of cobbles in the top of the glacial moraine.

5.2.4 Trench 3

Positioned to the south of Trench 2, this trench targeted the same set of geophysical anomalies (f5).

In this area the natural consisted of a friable, orangey yellow, fine-grained, sand (3001), with bands of stiff, grey clay and cobbles across the central and southern portions of the trench. The natural was located at between 14.10m AOD in the north-west and 13.92m AOD in the south-west corner of the trench. A friable, mottled, mid-brownish orange, sand subsoil (3002) covered the entire base of the trench to a maximum thickness of 0.36m. This was interpreted similarly to 2002 (see above). A fragment of Roman brick and two large, thick, gritty handmade pottery rim sherds, one of which has the possible start to a raised lug or handle were recovered from 3002. The pottery probably dates to the Iron Age but could alternatively be of Anglian date. These finds may suggest that Roman, Iron Age/Anglian occupation may be situated nearby. Modern ploughsoil (3000) then sealed deposit 3002. The top of the modern ground surface was located at 15.22m AOD on the north and at 14.54m AOD on the south side of the trench. The geophysical anomalies are likely to be of natural origin.

5.2.5 Trench 4

Trench 4 was positioned to the south-east of Trench 3, on a part of Field 1 which was relatively flat. Its purpose was to target a number of scattered geophysical anomalies to the south of geophysical anomaly f5.

Natural, which was situated at c. 11.00m AOD in this trench, consisted of a friable, brownish orange, silty sand (4001) with patches of manganese flecks and blueish grey sand. Three linear features (4006, 4008 and 4010) aligned approximately north-south, which were interpreted as furrows, truncated 4001. Cuts 4006 and 4008 had shallow sides, concave bases, and measured c. 1.6m wide and up to 0.20m deep.

Plate 1 *Trench 4, looking north-west*

Unusually, Cut 4010 differed from the others, containing five undulations in its base profile, and measuring c. 2.50m wide. Furrow 4006, was situated c. 5.5m west of 4010, whilst 4010 was only c. 1.5m from 4008. The odd distances between the furrows and the undulating base of 4010 may suggest that the furrows had been realigned, possibly in the early 16th century. The furrows were filled with friable brownish orange or greyish brown silty sands (4005, 4007 and 4009) with orange sand flecking. One sherd of gritty ware pottery dating to the 12th century was recovered from Deposit 4009. A layer of firm, orangey brown, sand subsoil (4002), which was up to 0.25m thick then sealed the furrow fills. This deposit was interpreted as a buried ploughsoil. A modern land drain (4003-4), aligned north-west to south-east, then truncated the earlier deposits. This was sealed by modern ploughsoil (4000), which leveled the trench area up to c. 11.50m AOD across the whole trench. The geophysical anomalies may be of natural origin.

5.2.6 Trench 5

Situated randomly in Field 1 to the east of Trenches 2- 4, the ground in the vicinity of this trench sloped gently down from north to south.

The earliest deposit, located at c. 13.15m AOD across the base of the trench, was a compact, light brownish orange, sand (5001) which was clearly of natural origin. As with Trench 4, three linear features (5003, 5005, and 5009), on a north to south alignment truncated 5001. These had gradual sloping sides, with concave bases, and measured between 1.4m and 1.7m wide, and up to 0.20m deep. The features were interpreted as furrows, which were evenly spaced at c. 8.5m apart. Filling the furrows was a friable, grey brown, orange brown, and dark brown, sandy silt (5004, 5006 and 5010) with varying concentrations of very abraded brick and tile fragments and flecks, manganese

and charcoal flecks. Fragments of pottery dating from the 12th to the 16th centuries were recovered from furrow backfills 5006 and 5010. Sealing the backfills to a maximum thickness of 0.45m, was a layer of friable, dark orange brown, sandy silt subsoil with occasional pebbles (5002). This was interpreted as a buried ploughsoil. A land drain (5007-8) aligned north - south then truncated the earlier deposits, c. 4.5m from the western end of the trench. Modern ploughsoil (5000) finally covered Trench 5 leveling the trench up to c. 13.70m AOD.

5.2.7 Trench 6

The trench was positioned centrally, on the north side of Field 1. Its purpose, together with Trenches 7 and 8, was to locate the extent of a series of pit-like geophysical anomalies identified as f6 in the geophysical survey.

Machine clearance within this trench revealed a friable, mixed, dark to mid-brown, sandy silt and a light yellow to mid-orange brown, sand (both numbered 6001) at the base of the trench. These deposits, located at between 15.82m and 14.83m AOD, contained patches of clay and cobbles, and were interpreted as of natural origin. The traces of two possible linear features (6003 and 6005) then truncated 6001. Both were aligned north-north-west / south-south-east, were very shallow with undulating bases, and measured between 0.4m and 0.7m wide. They were spaced c. 10m apart and were interpreted as the possible traces of medieval furrows, that had almost completely been removed by modern ploughing. Filling 6003 and 6005 was a friable, brownish orange, sand (6004 and 6006), with frequent pebbles and occasional charcoal flecks. The whole trench was then sealed by a similar, though slightly siltier subsoil deposit (6002). This was interpreted as a buried ploughsoil, measuring up to 0.55m thick. Modern ploughsoil then covered the entire trench and leveled the ground up to 16.46m AOD in the north-west and 15.61m AOD in the south-east corners of the trench. The geophysical anomalies may relate to variations in the underlying natural.

5.2.8 Trench 7

Located to the north-west of Trench 6, this trench was positioned to directly target f6, a series of pit-like anomalies that were revealed in the geophysical survey. To avoid the headland (a 15m strip around the edge of the field), the trench was moved slightly south-east of its original designated target spot, to an area of the field where the topography sloped down from north to south.

The natural in this trench consisted of a compact, mixed, light brownish orange, sand with a compact, grey brown, sandy silt (7001). This was located at between 17.16m and 16.83m AOD across the base of the trench. In the north-east corner, a compact, light greyish white, silty clay (6003) was observed. This deposit may also be of natural origin, perhaps relating to the course of a palaeo-channel (relict stream course) that crossed the area. All of the natural deposits were then sealed by a friable, orange brown, silty sand (7002) subsoil, that was up to 0.45m thick. As with the earlier trenches, this was interpreted as a buried soil horizon. Modern ploughsoil (7000) then leveled the trench off at between 17.81m and 17.31m AOD. The geophysical anomalies are probably of natural origin.

5.2.9 Trench 8

Positioned to the north-east of Trench 7, this trench targeted the eastern extent of geophysical anomalies f6. As with Trench 7, this trench had to be moved slightly to the south-east, away from the headland to a part of the field which sloped from north-east to south-west.

The earliest deposits were of natural origin consisting of friable, brownish orange, sand (8001) and friable, mid-brown, sandy gravel (8003). These were located in the base of the trench at between 17.98m and 16.92m AOD. A layer of compact, mid-brown, sandy silt subsoil (8002), that measured up to 0.70m thick, sealed the natural deposits. This was interpreted as a buried soil horizon. A layer of modern ploughsoil (8000) then leveled the top of the trench off at between 18.53m and 17.74m AOD. No significant archaeological deposits were located within Trench 8, and the geophysical anomalies probably relate to variations in the underlying natural.

5.2.10 Trench 9

Trench 9 was situated on the northern side of Field 1, towards its eastern end. It was positioned to target several small magnetic anomalies that appeared in the geophysical survey, but which had not been grouped as a definable feature set.

Located at between 14.08m and 13.61m AOD, the earliest deposit consisted of a friable, light grey to light orange, sand (9001) which had occasional cobble inclusions. A concentrated patch of flint cobbles in a matrix of friable, dark grey, sand (9014) was located towards the western end of the trench. Both of these deposits were interpreted as of natural origin.

Two parallel linear features (9004 and 9008), aligned approximately east - west and spaced c. 6.5m apart, truncated 9001. Their edges broke sharply from the surface, had moderately steep sloping sides, flattish bases and measured between 0.9m and 1m wide and up to a maximum depth of 0.56m. They were interpreted as a pair of parallel ditches which may date to the prehistoric (Iron Age) or Roman periods. The ditches were filled with a compact, dark grey, sandy silt (9007) and a friable, dark brown, sand (9003) with cobble and pebble inclusions.

Truncating 9003 and 9007 on a north-west to south-east alignment, was a third linear feature (9006). Its edge broke sharply from the surface, with near vertical sides, a concave base and it was 0.9m wide and up to 0.14m deep. Feature 9006 was interpreted as a gully, but its exact function is not fully understood. It was completely filled with a deposit (9005) which was very similar to 9007 (see above).

A circular feature (9015), situated centrally within the western half of the trench then truncated backfill 9005. It measured c. 1.8m in diameter and between 0.15m and 0.20m deep and had irregular sides and an undulating base. Filling the feature completely was a compact, dark brown to dark grey, silty sand (9013) with occasional cobbles. The feature was interpreted as a tree-throw hole (a depression created in the ground when a tree blows or is pulled over) or it could also possibly be a shallow pit.

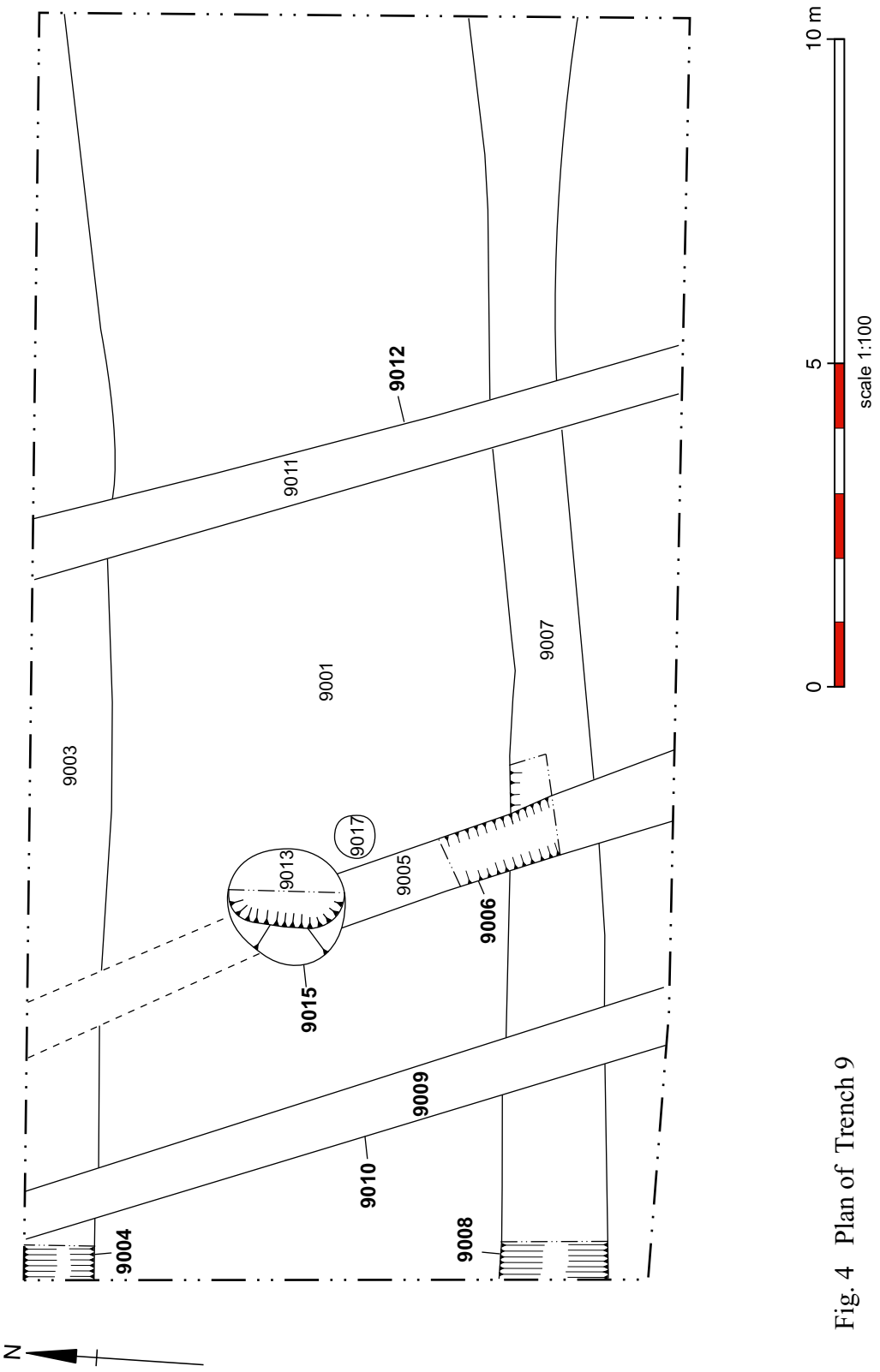

Fig. 4 Plan of Trench 9

Two further linear features (9010 and 9012) then truncated earlier ditch fills 9003 and 9007. These were aligned north-west to south-east, had shallow sloping sides, concave bases and measured up to 0.9m wide and 0.20m deep. They were spaced c. 9m apart and were interpreted as furrows. A compact, light brownish orange, silty sand (9009 and 9011) filled both furrows completely, and were markedly different from the earlier ditch and gully fills. A layer of deposit (9002), similar to 9009 and 9011, then sealed the entire trench to a maximum thickness of 0.55m. This was interpreted as a buried soil horizon. Modern ploughsoil (9000) then leveled the trench up to between 14.97m and 14.39m AOD.

5.2.11 Trench 10

Situated on the south side of Field 1, towards its eastern end, this trench was positioned to target a series of geophysical anomalies (f4), which were revealed in the geophysical survey. These were interpreted as a broad irregular sequence of magnetic anomalies that may be of natural origin. The topography within this part of the field sloped down north-south, differing slightly from the general field trends.

The trench was machine-excavated to natural deposits which consisted of firm, yellow, clay sand (10001) with occasional patches of dark grey clay. This appeared at the base of the trench at a height of between 11.10m and 10.98m AOD. Completely sealing the natural was a soft, light greyish brown, sandy clay subsoil (10002), which measured up to 0.10m thick. A sequence of modern land drains (10003-8) then truncated the subsoil. Modern ploughsoil (10000) then leveled the whole of the trench up to between 11.50m and 11.30m AOD. The geophysical anomalies were probably natural in origin and relate to patches of clay.

5.2.12 Trench 11

Positioned to the north-east of Trench 10, this was the most easterly trench within Field 1. It was sited to target a series of geophysical anomalies, not numbered individually in the geophysical survey, but situated to the north-east of f4. Topographically this part of the field sloped down slightly from north-east to south-west, differing from the general field trends.

Natural deposits that consisted of firm, grey mottled, yellow, sand (11001) were located at the base of the trench, at between 10.91m and 10.61m AOD.

Truncating 11001 in the north-east corner of the trench was a feature (11013), aligned north-west / south-east, but which curved slightly further towards the south-east at its southern end. The feature had a sharp break of slope from the surface, steep sides and a rounded base giving a U-shaped profile. It measured 0.65m wide and 0.45m deep. Feature 11013 was interpreted as a gully, possibly of prehistoric or Roman date, and was completely filled by a firm to stiff, yellowish grey, clay (11012).

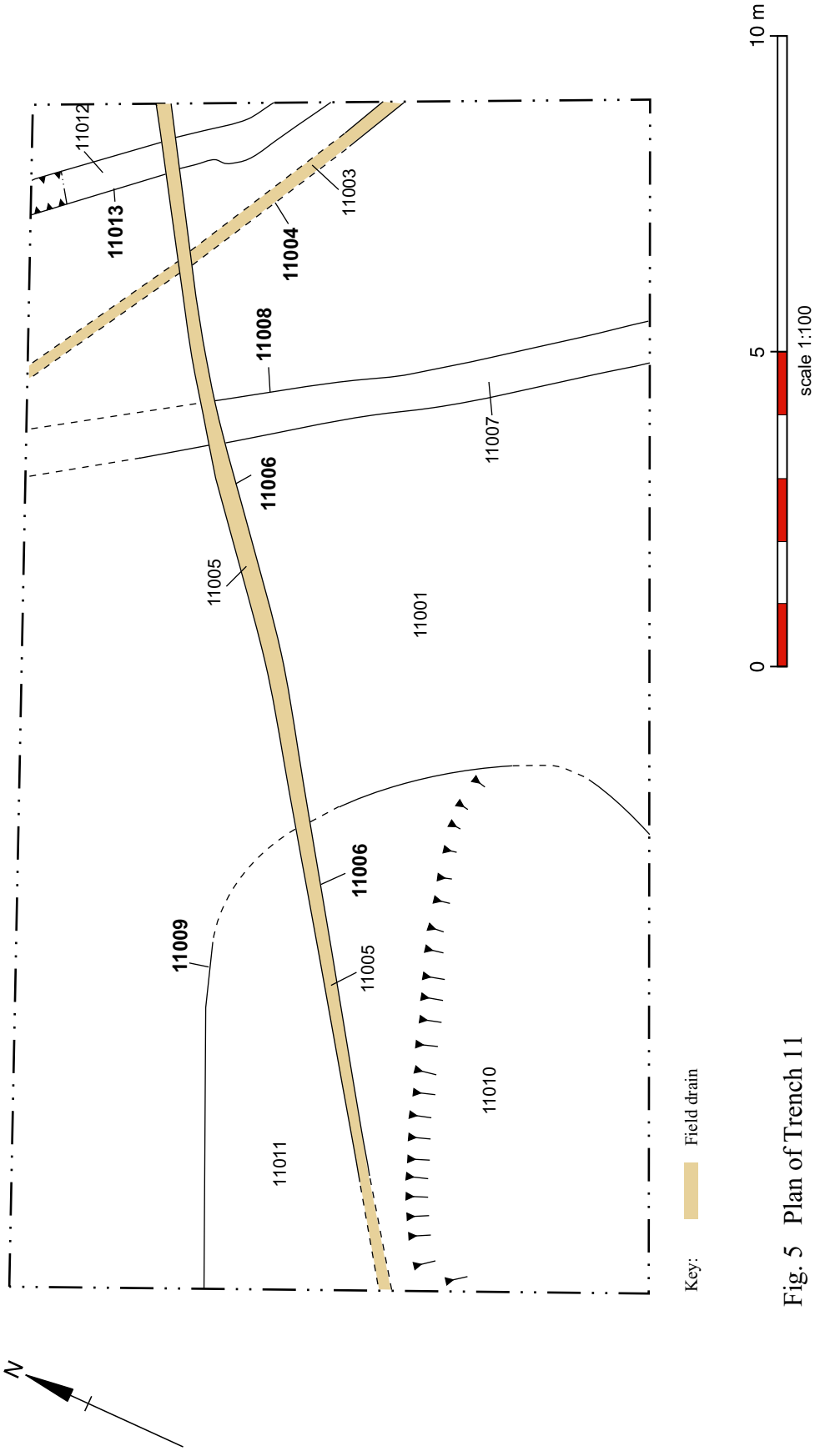

Fig. 5 Plan of Trench 11

To the west of Gully 11013, a second linear feature (11008) was recorded. This was aligned north-west / south-east, had shallow gentle sloping sides, a concave base and measured 0.85m wide and 0.10m deep. Feature 11008 was interpreted as a furrow and was backfilled with a soft, brownish grey, slightly silty sand (11007).

In the south-western corner of the trench, the north-eastern corner of a large sub-circular feature (11009) was recorded. Its edge broke sharply from the surface and had moderately steep sloping sides, but its base was not revealed as water was starting to well up within the feature. Feature 11009 was interpreted as a pond and was backfilled with a soft, spongy, orangey brown to black, organic, gritty silt with twigs and straw (11010). Deposit 11010 was sampled: the plant remains consisted of pond weed fruits, fresh water green algae, water-plantain and bur-reed. A few fresh water snails were recovered. The invertebrates included water beetles and other aquatics, which were numerous and diverse. All of this suggests that the pond held more or less permanent still water with weed and established waterside vegetation. The pond was then leveled with a soft, plastic, greyish brown, sandy silty clay (11011) which was dated by pottery to the early 19th century, and contained a post-medieval leather shoe fragment (sf150) and a glass bottle fragment (sf125). Sealing the levelling deposit and the entire trench was a layer of firm, slightly reddish brown, silty sand subsoil (11002), which measured up to 0.20m thick. A sequence of land drains (11003-6) then truncated the earlier deposits. Modern ploughsoil (11000) finally raised the ground level to between 11.35m and 11.13m AOD. The geophysical anomaly probably relates to the pond.

5.3 Field 1A

5.3.1 Description

This field is situated on the south side of the Heslington East site area, adjacent to Heslington village. The trenches were located randomly within this field, measured 25m long and 4m wide, and were all aligned north-west / south-east. The field was relatively flat topographically.

5.3.2 Trench 94

The trench was positioned at the northern end of Field 1A.

Natural deposits consisting of firm to friable, mottled, greyish yellow, silty sand with patches of dark grey to black manganese (94001), were located across the base of the trench. The top of natural was situated at c. 10.25m AOD. The only feature to be revealed within this trench was a modern land drain (94002-3), aligned north- south and the track left by a piece of modern agricultural machinery known as a subsoiler. Modern ploughsoil (94000) sealed these features at c. 10.57m AOD.

5.3.3 Trench 95

The trench was located to the south-east of Trench 94.

The earliest deposits were of natural origin, consisting of a soft, friable, yellow orange, sand (95001), the top of which was located at c 10.22m AOD.

Located almost halfway along the trench base was a circular feature (95008). This had steep sides, a flattish base and measured 0.8m in diameter and 0.28m deep. It may be interpreted as either a pit or a tree-throw hole (produced when a tree blows or is pulled over). The feature was completely filled with a friable, mid brown, sandy silt (95009) which was undated.

Approximately 2.75m to the north of the tree-throw hole was a linear feature (95006). It was aligned north-east / south-west, had moderately steep sloping sides and an undulating but flattish base. Feature 95006 was interpreted as a post-medieval to modern field boundary ditch, which was up to 2m wide and 0.30m deep. Completely filling 95006 was a soft, friable, orange mottled, mid-grey brown, sandy silt (95007) with occasional white limestone fragments.

Between the field boundary ditch and the tree-throw hole or pit, was a second linear feature (95002), aligned parallel to 95006. This had gently sloping sides, a concave base and measured c. 1.4m wide and 0.20m deep. It was completely filled with a soft, mid-brown, slightly sandy silt (95001). This may be interpreted as an almost completely ploughed-out furrow remnant, a gully, or a hedge planting trench associated with the field boundary ditch 95006 to the north. A modern land drain (95004-5) appeared to respect the field boundary ditch, and drained into it from an easterly direction. Modern ploughsoil (95000) then sealed the entire trench and leveled it up to c. 10.51m AOD.

5.3.4 Trench 96

The trench was positioned on the eastern side of Field 1A to the south-east of Trench 95.

Machine excavation, within this trench proceeded to the top of natural, at c. 10.33m AOD, which consisted of compact, mid-yellow brown, sandy clay and firm, greyish orangey yellow, clayey sand (96001). A furrow (96007) aligned north-west / south-east then truncated 96001. This had gently sloping sides, an undulating base and measured up to 2.0m wide and 0.10m deep. It was completely filled with a friable, firm, mottled, orangey grey brown, clayey sandy silt (96006). Several modern land drains (96002-5 and 96008-9) then truncated the earlier deposits. The drains were not aligned with the furrow and suggest that it had been leveled before their insertion. Modern ploughsoil (96000) then raised the ground to its present height at between 10.81m and 10.31m AOD, the modern ground surface sloping down slightly to the south-east.

5.4 Field 2

5.4.1 Description

The field was situated on the south side of the Heslington East site adjacent to Low Lane. Modern drainage dykes separated it from Fields 1, 1A, 3 and 4. The field was relatively flat sloping gently from north-west to south-east and the trenches were all aligned north-

west / south-east. Trenches 83, 88 and 89 were 20m long and 10m wide, whilst Trenches 84-7 and 90-3 measured 25m long and 4m wide.

5.4.2 Trench 83

The trench was positioned on the north-west side of Field 2 to target the spread of a set of geophysical anomalies (f16) revealed during the geophysical survey. The ground in the trenches vicinity rose slightly towards the south-east.

Natural deposits consisting of firm, mottled, grey brown to orangey yellow, sand (83001), were revealed at the base of the trench at c. 12.38m AOD.

Truncating 83001 in the south-western corner of the trench was a portion of a large, probably circular feature (83009). This had moderately steep sloping sides, a flattish base and measured over 1.65m in diameter and up to 0.24m deep. The feature may be interpreted as the heavily truncated remains of a pit which was completely filled with a firm, friable, mid orangey brown, slightly clayey sand (83010), with occasional charcoal and manganese flecks. The date of this feature is unknown.

A furrow (83004), aligned north-west / south-east, then truncated 83001 on the eastern side of the trench. This had gently sloping sides, a flattish but slightly undulating base and measured up to 3.28m wide and 0.26m deep. The furrow was completely filled with a firm, friable, mid orangey brown, silty sand (83003) which was pottery dated to the 13th century. Spread across the whole trench was a patchy layer of moderately compact, mixed, orangey yellow, sand and grey brown, silty sand subsoil (83002), which was up to 0.05m thick. A land drain (83005-6), aligned east-south-east / west-north-west then truncated 83002. Modern ploughsoil leveled the trench up to its current level at between 12.76m and 12.54m AOD. The geophysical anomalies may relate to the undated pit 83009.

5.4.3 Trench 84

Trench 84 was positioned randomly on the eastern side of Field 2.

Machine excavation within this trench proceeded to the top of natural, consisting of a compact, orange, sand with occasional whitish grey, clay patches (84001), which was observed at the base of the trench at c. 10.60m AOD. A furrow (84008) aligned north-west / south-east then truncated 84001 in the south-western corner of the trench. This had moderately steep sloping sides, a flattish base and measured up to 3m wide and 0.3m deep. It was completely filled with a firm, greyish orange to mid-brown, slightly sandy clay (84007 and 84015). Deposit 84007 contained 18th century pottery, an iron nail fragment (sf164), as well as some residual Roman pottery fragments and tile dated from the 13th to the 16th century. A patchy layer of compact, mottled, greyish orange to mid-brown clayey sand subsoil (84002), then sealed the entire trench to a maximum thickness of 0.05m. A plethora of modern land drains (84003-6 and 84009-13) then truncated deposits in the southern half of the trench. These were sealed by modern ploughsoil which raised the ground up to its current height at c. 10.83m AOD.

5.4.4 Trench 85

Positioned randomly on the eastern side of Field 2, this trench was situated in a relatively flat part of the field to the south-east of Trench 84.

The earliest deposits within this trench were of natural origin and consisted of friable, light orangey yellow, sandy silt (85001), with patches of light to mid-orange brown sand. This was located across the base of the trench at c.10.57m AOD. Truncating 85001, on a north-south alignment was a furrow (85009). This had gently sloping sides, an undulating slightly concave base and measured up to 2m wide and 0.5m deep. It was completely filled with friable, greyish orange, silty sand (85008). A sequence of three modern land drains (85002-7) aligned east - west and north-west / south-east then truncated the earlier deposits. These were sealed by modern ploughsoil, the top of which was located at a height of c. 10.90m AOD.

Plate 2 *Trench 86 looking north*

5.4.5 Trench 86

The trench was randomly located in the south-east corner of Field 2.

Deposits of natural origin were the earliest recovered within this trench. They consisted of a firm, orangey yellowish grey sand with occasional pebbles (86001), which was situated at c. 10.58m AOD at the base of the trench. A furrow (86006) aligned north - south then truncated 86001. This had gently sloping sides, a flat base and measured up to 2.75m wide and 0.2m deep. It was completely filled with a friable, mottled, orangey brown, silty sand (86005) which contained residl Roman brick fragments. A patchy layer of firm, mid-grey brown, silty sand subsoil (86004) then sealed the entire trench to a maximum thickness of 0.05m. Three modern land drains (86002-3 and 86007-10) then truncated the earlier deposits. Modern ploughsoil finally leveled the ground up to c. 10.90m AOD.

5.4.6 Trench 87

Trench 87 was positioned randomly on the southern side of Field 2 in a part of the field that sloped gently down from north-west to south-east.

Natural deposits consisting of moderately compact, mixed, orange brown, gritty sand (87001) were located across the base of the trench at between 10.65m and 10.10m AOD. A furrow (87005) then truncated 87001, on a north-south alignment. This had gentle sloping sides, a concave base and measured c. 2.5m wide and 0.28m deep. A moderately compact, light to mid brownish grey, silty sand (87004) completely filled furrow 87005. A modern land drain (87002-3), aligned east-south-east / west- north-west cut through the earlier deposits and was subsequently sealed by a layer of ploughsoil (87000) which raised the ground up to its present height at between 10.99m and 10.76m AOD.

5.4.7 Trench 88

Targeting several geophysical anomalies (f16), this trench was positioned on the northern side of Field 2, where the ground sloped gently down to the north-west.

The earliest deposits were of natural origin, consisting of soft, orange mottled, pale grey, silty sand (88001), with patches of manganese, and dark orange and pale yellow sandy silt. These appeared across the base of the trench from 10.57m AOD.

Truncating 88001 were several large amorphous features (88005, 88007, 88009 and 88013). These were shallow with gently sloping sides and uneven concave bases. The features, which were interpreted as tree-throw holes, measured between 1.40m and 3m long, 1m and 1.90m wide and up to 0.22m deep. They were completely filled with firm dark grey silts (88006, 88008, 88010 and 88014) all of which were undated.

The remnants of a furrow (88003) aligned north-west / south-east, but curving north at its northern end, then truncated 88001. This was shallow, with gentle sloping sides, a flat base and measuring up to 2.5m wide, 0.15m deep. Furrow 88003 was completely filled with a soft, mid-greyish brown, silty sand (88004). Sealing 88004, and the entire trench was a patchy layer of soft, mid-grey brown, silty sand subsoil (88002), that was up to 0.10m thick. Deposit 88002 was dated by tile fragments to the 13th to 16th centuries. A number of amorphous linear features (all numbered as 88011) then truncated the eastern side of the trench on a north-west to south-east alignment. The eastern most portion may be part of an earlier furrow with gentle sloping sides and a flattish base measuring over 1.80m wide and 0.24m deep. The other linear marks, which were difficult to define, may possibly be interpreted as deep plough scars. The features were backfilled with a soft mid brown silty sand (88012) which was pottery dated by Humber and Ryedale wares to the 16th century. A layer of modern ploughsoil (88000) raised the ground up to its present height at between 11.02m and 10.78m AOD.

5.4.8 Trench 89

The trench was located on the northern side of Field 2, where the ground sloped down slightly from south-west to north-east, and as with Trench 88, it targeted geophysical anomalies (f16).

The trench was machine-excavated to the top of natural deposits, consisting of compact, mid- to light orangey yellow sand with occasional patches of light to mid-brown sand (89001) and located across the base of the trench from 10.52m AOD. Truncating 89001, on the western side of the trench was a sub-circular feature (89006). This had gentle sloping sides, a concave base and measured up to 2m wide and 0.16m deep. Feature 89006 was interpreted as a tree-throw hole and was initially filled with friable, dark grey, silt (89005) before a firm, light to mid brownish orange, sandy silt (89004) filled the rest of it. A furrow (89003) aligned north-west / south-east then truncated 89001. This had gently sloping sides, a concave base and measured up to 1.55m wide and 0.18m deep. It was completely filled with a firm, mid- to light brownish yellow silty sand (89002) which was dated by tile and brick fragments from the 14th to the 16th centuries. The whole trench was then covered with a layer of modern ploughsoil (89000) which raised the ground up to its present level at between 10.82m and 10.68m AOD.

5.4.9 Trench 90

Trench 90 was positioned randomly on the northern side of Field 2 in a part of the field which sloped down slightly from south-east to north-west.

A firm, compact, yellowish orange, silty sand (90001) of natural origin, was the earliest deposit recorded in this trench. This appeared from 10.29m AOD. Four modern field drains (90002-9) then truncated 90001. A layer of modern ploughsoil (90000) then leveled the ground up to its present height at c. 10.63m AOD.

5.4.10 Trench 91

Randomly located on the southern side of Field 2, this trench was situated in a part of the field which sloped from north-west to south-east.

Natural deposits consisting of friable, yellow-brown sand (91001) appeared at between 10.24m and 9.89m AOD at the base of the trench. A furrow (91005) aligned north - south then truncated 91001. This had gentle sloping sides, a concave base and measured up to 2.5m wide and 0.18m deep. It was completely backfilled with a firm, light brown, silty sand (91004). A modern land drain (91002-3) cut through the earlier deposits on an east - west alignment and the modern ploughsoil raised the ground up to its present height at between 10.57m and 10.18m AOD.

5.4.11 Trench 92

Positioned randomly in the north-western corner of Field 2, the ground in the locality of this trench was relatively flat.

The earliest deposits located within Trench 92 were of natural origin and consisted of firm, light brown to yellow, sand, a stiff, greyish brown, sandy clay and a firm, light grey, clay sand (92001). These appeared at the base of the trench from 10.26m AOD. Two modern land drains (92002-5) then truncated 92001 before the modern ploughsoil (92000) leveled the ground up to its current height at c. 10.55m AOD.

5.4.12 Trench 93

Trench 93 was randomly positioned on the western side of Field 2, just to the south of Trench 92.

Deposits of natural origin, consisting of a firm, greyish orange, slightly silty sand (93001), with occasional manganese patches, were located across the base of Trench 93 from 10.25m AOD. A furrow (93002), aligned north-west / south-east, then truncated 93001 at the northern end of the trench. This had gently sloping sides, a concave base and measured up to 2m wide and 0.32m deep. It was completely filled with a firm, mid-grey, silty sand (93003) which was dated by Humber and Brandsby ware pottery fragments to the 14th or 15th centuries. To the west of Furrow 93002 a sub-circular feature (93008) was recorded. This measured 1.5m in diameter and 0.55m deep, had near vertical sides and a concave base. It was interpreted as a pit, and was completely filled with rounded cobbles in a matrix of soft dark grey silt. (93009). The pit may have been dug to dispose of assorted cobbles which had been dug up during ploughing. Two modern land drains (93004-7) then truncated 93001 before the ploughsoil finally sealed the trench at 10.59m AOD.

5.5 Field 3

5.5.1 Description

Field 3 is positioned near the centre of the Heslington East site. It is flanked by dykes to the west and south, and a hedge and Field Lane to the north and north-west. The original division between Fields 3 and 6 has been removed, the former division only remaining in the presence of two trees. The field slopes down from north-west to south-east, being situated on the south-facing slope of the glacial moraine. At its western end the field slopes down from north-east to south-west into a slight valley. The trenches within this field were mostly aligned north-west / south-east with the exceptions of 14 (north-east / south-west), 15 (east-north-east / west-south-west) and 19 (east-south-east / west-north-west). Trenches 13-15 and 19 measured 20m long and 10m wide, whilst Trenches 16-18 were 25m long and 4m wide, and Trench 12 was 50m long and 4m wide.

5.5.2 Trench 12

Situated in the south-west corner of Field 3, this trench targeted geophysical anomalies (f3) at the western end of the field. The trench position was moved slightly eastward to avoid the headland on the west side of the field and was elongated so as not to disturb a known main drain.

The earliest deposit within the trench consisted of a compact, yellowish orange-brown, very slightly silty sand (12001). This contained frequent manganese flecks and large, very compact, patches of purple and deep red iron pan. The iron pan patches were more numerous towards the northern end of the trench. Natural appeared in the base of the trench at between 11.47m and 10.99m AOD.

Truncating 12001, 17.5m from the southern end of the trench was a linear feature (12008) aligned north-east / south-west. This had steep sides, a flattish base and measured 0.45m wide and up to 0.10m deep. It was interpreted as a gully, which was completely filled with a compact, yellowish brown, very slightly silty sand (12007), and may be of prehistoric or Roman date.

Approximately 4.5m to the south of 12008, a second linear feature (12014) was located on the eastern side of the trench. This was aligned north-west / south-east, had gentle shallow sloping sides, a flattish base, and measured over 0.6m wide and up to 0.10m deep. Feature 12014 was interpreted as a furrow which was completely filled with a soft, greyish brown, silty sand (12011). Backfill 12011 was dated broadly by tile fragments to between the 13th and 16th centuries. Completely sealing the trench was a layer of moderately compact, mid- to light grey-brown, sandy silt subsoil (12002). This was up to 0.3m thick and was interpreted as a buried ploughsoil. Four land drains (12003-6, 12009-10 and 12012-13) then truncated 12002. These were all aligned north-east / south-west and were spaced c. 14m apart. A layer of modern ploughsoil (12000) then sealed the entire trench, levelling the ground up to between 12.03m and 11.41m AOD.

5.5.3 Trench 13

Located just to the north-west of Trench 12, this trench was positioned to directly target f7, a group of geophysical anomalies situated at the western end of Field 3. The trench was moved slightly to the east to avoid a main drain and the field headland.

Natural consisted of a friable, orangey grey, sandy silt with patches of light grey, sand (13001), which contained manganese staining and cobbles. An unusual feature (13033) with no definable edges was recorded on the western side of the trench. This contained three deposits consisting of a friable slightly greyish clay, dark grey sandy clay and grey-brown silty clay (13017-18 and 13031) with moderate cobbles and manganese staining and occasional organic matter. This feature may be of natural origin, its variable fills perhaps reflecting the position of the trench in the base of a valley, with shifting palaeo-channels (relict stream courses) and episodes of colluvium (hill wash).

The earliest archaeological deposit, situated in the north-eastern corner of the trench, was a friable, orangey yellow, sandy silt on top of light grey, silty sand with occasional rounded pebbles (13030). This was interpreted as episodic layers of colluvium (hillwash). Twenty large sherds of unabraded prehistoric pottery (perhaps of Late Bronze Age or Early Iron Age date c. 1500BC to 700BC) were recovered from this deposit. Although they were mixed within the colluvium, it was clear that they had not travelled far, if at all, and may suggest that Bronze Age settlement was situated close by. There was no evidence of post or stake-holes truncating the top of the colluvium.

Cutting through 13030, was a north-west / south-east aligned linear feature (13014-5 and 13028). This had been almost completely ploughed out at its northern end, but further south it measured 2.85m wide and up to 0.75m deep with steep sides and a flattish base. It was interpreted as a ditch and in its northern and central sections it was backfilled with a friable, greyish brown, sandy silt (13013 and 13029), whilst in the southern sections it was backfilled with three deposits. The earliest of these was a friable, mid-grey, silty

sand with occasional pebbles and woody material (13036). This was sealed by lenses of dark grey to brown, organic, silts and pale yellow sands (13037). Finally levelling up this part of the feature was a friable, pale yellowish grey, silty sand (13021 and 13038). The organic matter in the primary fill consisted of twigs that gathered in the base of the ditch. This may suggest that trees/shrubs were growing in the vicinity. This ditch may be of Iron Age or Roman date. A sample from Ditch 13015 suggests that the ditch was seasonally wet with still water conditions with stinging nettles close by. A single dung beetle was insufficient evidence to indicate grazing in the vicinity.

A second possible ditch (13020), aligned north-east / south-west and situated to the east of ditch 13015, may have been part of the same field system. It had gentle to moderately steep sloping sides and a slightly concave base. Its relationship with Ditch 13015 was not completely clear (see below) and it measured 1.25m wide and 0.16m deep. A soft, light orangey brownish grey, silty sand with occasional manganese flecking, iron pan flecks and pebbles (13019) completely filled this ditch.

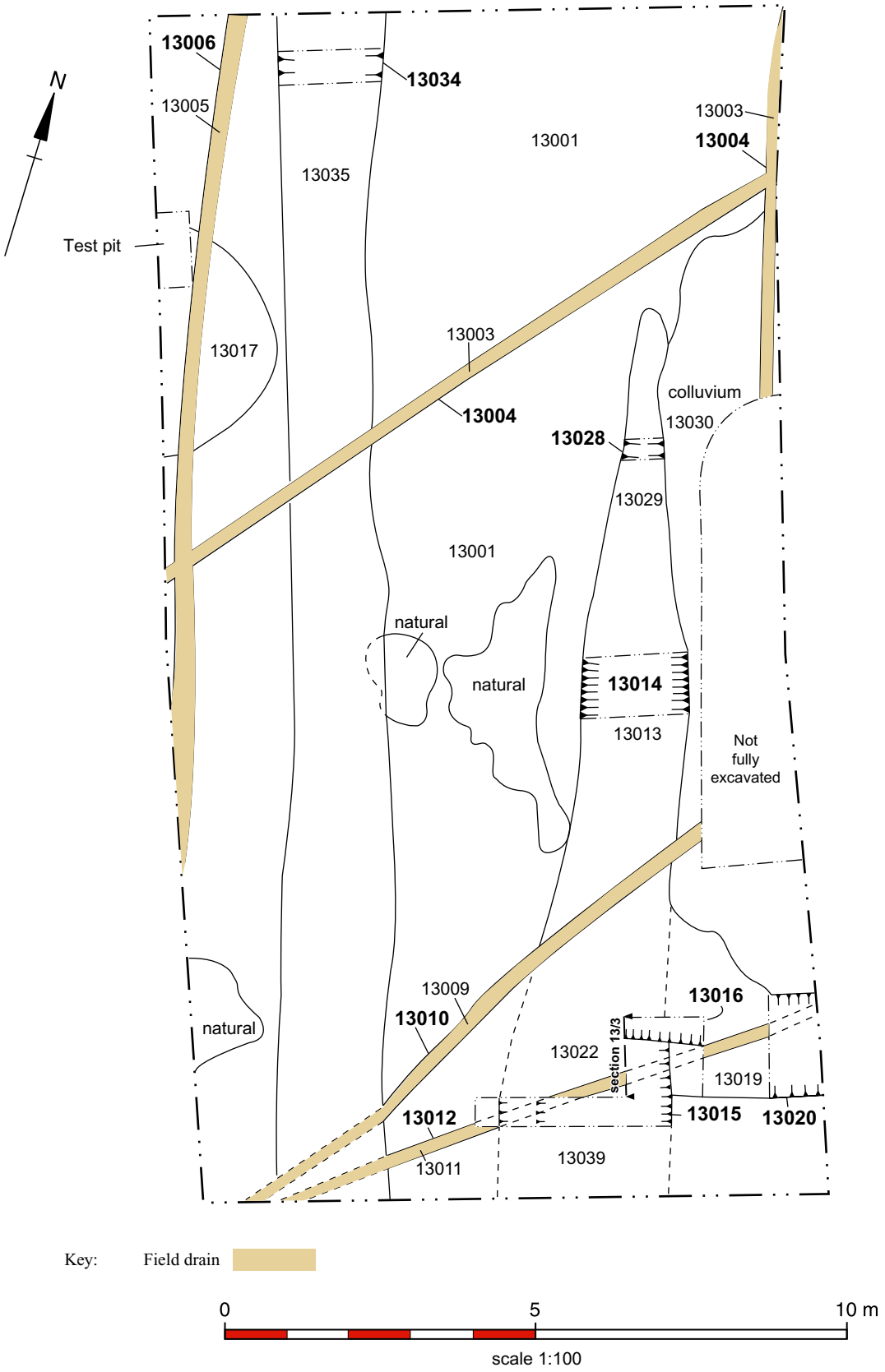

Fig. 6 Plan of Trench 13

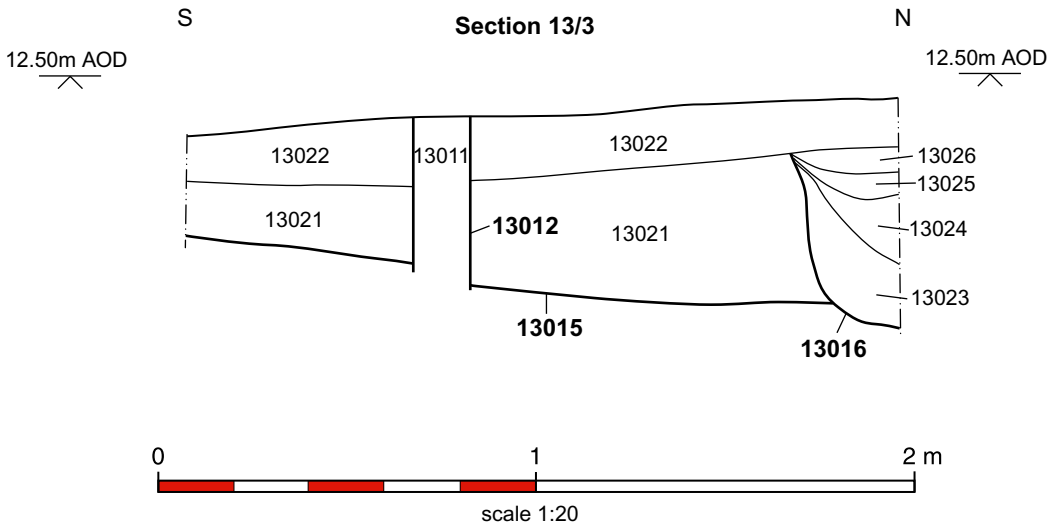

Fig. 7 Trench 13, section 13/3

The relationship between Ditches 13015 and 13020 was investigated by hand excavation. This suggested that a feature (13016) did truncate Ditch 13015, but as its cut edge was on a slightly different alignment to that of 13020, and the feature was of a much greater depth, it was not clear if the two were part of the same feature. Feature 13016 was aligned north-east / south-west, and the hand excavated archaeological slot just clipped its southern side. Its edge was steep to near vertical with a flattish base, and it measured over 0.45m wide and up to 0.60m deep. Feature 13016 may be interpreted as a pit or a shallow well. It appears to have silted up episodically with four separate fills. The primary fill consisted of a dark greyish brown, organic, silt (13023). This was sealed by a soft, mid-grey, silty sand (13024) followed by a soft, chocolate brown silt with black flecking (13025). Finally a friable, dark greyish brown, sandy silt (13026) with charcoal flecks leveled off the top of the pit or well.

A series of final silting deposits leveled off both Ditch 13015 and Feature 13016. These may have been partly caused by colluvium (hillwash) and consisted of friable, yellowish grey, silty sand (13022, 13027 and 13039) with orangey grey sand mottling.

On the western side of the trench, a further linear feature (13034) aligned north-west / south-east was recorded. This was 1.5m wide, up to 0.2m deep, with gently sloping sides and a concave base. It was interpreted as a furrow and was completely filled with a soft, orangey brown, silty sand (13035). A layer of compact, orangey brown, sandy silt subsoil (13002), then sealed the entire trench to a maximum thickness of 0.32m. This was interpreted as a buried ploughsoil. A sequence of modern land drains (13003-12) then truncated the subsoil, before a layer of ploughsoil (13000) finally leveled the entire trench up to between 13.67m AOD and 12.90m AOD. Of interest, was that unstratified Roman and Anglian pottery was recovered from 13000.

5.5.4 Trench 14

Positioned to the north of Trench 13, this trench was situated to further investigate anomaly f7, revealed in the geophysical survey.

The earliest deposits within this trench were revealed only at occasional spots at the base. These consisted of a compact, mid-brownish orange sand (14001), which was revealed at c. 13.34m AOD, and was interpreted as of natural origin. Overlying the natural sand at the southern edge of the trench was a soft, plastic, light grey to white clay (14011-12) which contained occasional organic (wood) fragments. This may have formed naturally within a hollow in the natural ground surface or have been a deposit within a palaeo-channel or relict stream course.

Sealing the majority of the base of the trench was a sticky, dark brown to black, very organic, silty peat (14006 and 14009-10) which was up to 0.20m thick. This appears to have accumulated naturally within a hollow in the landscape, perhaps linked to the valley which was situated in the vicinity of Trench 14. Deposit 14006 was sampled and contained extremely decayed wood, water-plantain fruits as well as caddis larva case fragments. The material also contained evidence of charred heather root or basal twig, that may represent the burning of peat or turves. The presence of wood charcoal and cinders may indicate occupation in the vicinity.

On the southern edge of the bog a linear feature (14002 and 14004) was recorded. This had steep sides, a slightly concave base and measured up to 1.10m wide and up to 0.25m deep. It was interpreted as a ditch, of prehistoric or Roman date, which attempted to drain the marshy area. The ditch was completely filled with a firm, dark brown, organic, peaty silt (14003 and 14005), very similar to deposits 14006 and 14009-10. A sample from 14005 revealed that the deposit contained woody debris and very decayed wood and bark. The ditch environment is suggestive of still or gently flowing water with plants including water-plantain, water-dropwort and water-crowfoot. Other plant remains suggest the presence of hedge, woodland or scrub close by. The presence of charcoal may also indicate occupation in the vicinity. The invertebrate remains identify the ditch as a place of permanent and fairly clean water with water fleas and water beetles present. A few dung beetles may also suggest grazing land in the vicinity.

A number of subsoil layers then built up, perhaps caused by a combination of ploughing, colluvium (hillwash) and aeolian (windblown) deposits. These consisted of compact, mid- grey brown silty sand (14008), with occasional patches of white sand, and compact, mid orange brown, sand (14007). A plethora of modern land drains (all shapes and sizes) then crisscrossed the trench. At least eight land drains (14013-16 and 14023-32) had been inserted on different occasions forming a network of pipes. Modern ploughsoil (14000) then leveled the trench up to between 14.47m and 13.85m AOD.

5.5.5 Trench 15

Trench 15 was located in the north-west corner of Field 3 and was positioned to target the northern end of the spread of geophysical anomalies (f7) located during the geophysical survey.

Natural, which was the earliest deposit located within the trench consisted of a compact, light brownish orange sand with occasional pebbles (15001). This was situated at between 15.63m and 14.91m AOD. Natural was truncated by two north-west / south-east aligned curvilinear features (15003 and 15005) which curved to the north at their northern ends. Both of these features had gently sloping sides with flattish bases and measured c. 2m wide and c. 0.15m deep. They were interpreted as furrows which were spaced c. 6.75m apart. Both furrows were backfilled with a friable, light grey to mid-orangey brown, silty sand with frequent pebbles and charcoal flecks (15004 and 15006). A layer of compact, light grey to light brown, sandy silt subsoil (15002) then sealed the entire trench to a maximum thickness of 0.56m. This was interpreted as a buried ploughsoil. A layer of modern ploughsoil (15000) then leveled the trench up to between 16.19m and 15.33m AOD. Nothing of archaeological significance was recovered.

5.5.6 Trench 16

Positioned to the north-east of Trenches 14 and 15, this trench was randomly placed within the northern part of Field 3.

The trench was machine-excavated to the top of natural deposits, which consisted of compact, orangey brown, silty sand at the northern end of the trench, and mid yellow to

light brown, sand at the southern end. Both deposits were given context number 16001. Sealing 16001 was a soft, mid- to light orange brown, slightly silty sand subsoil (16002). This was up to 0.15m thick and was interpreted as a buried ploughsoil. A thick layer of modern ploughsoil (16000) then sealed the trench and leveled the ground surface up to its present height at between 17.96m and 16.43m AOD.

5.5.7 Trench 17

Situated at the southern side of Field 3, in a relatively flat part of the field, this trench was positioned randomly and did not target any geophysical anomalies.

The earliest deposit located within the trench consisted of soft, brownish orangey yellow, sand (17001) with light grey and bright yellow sand mottling. This may be a sterile post-glacial colluvial or hillwash deposit; no dateable artefacts being recovered from it. Completely sealing this natural material was a soft, light grey brown, silty sand subsoil (17002). This was up to 0.20m thick and may have form part of a buried ploughsoil horizon. A herring bone style land drainage system (17003-6 and 17009-10) then truncated the earlier deposits. A fourth land drain (17007-8) not directly linked to the other system was also recorded. Modern ploughsoil (17000) then sealed the trench, leveling the ground up to c. 11.32m AOD.

5.5.8 Trench 18

Trench 18 was randomly situated at the southern edge of Field 3, to the east of Trench 17, in a relatively flat part of the field.

The trench was machine-excavated to natural deposits which consisted of a soft, yellowish orange sand (18001). This may be similarly interpreted to 17001, and contained no artefacts. Truncating the natural on a north-west to south-east alignment was a linear feature (18004). This had gently sloping sides, a concave base and measured up to 1.5m wide and 0.17m deep. It was completely filled with a soft, orangey yellow, sandy silt (18003). A layer of friable, orangey brown, sandy silt subsoil (18002) then sealed the entire trench to a maximum thickness of 0.20m. This was interpreted as a buried ploughsoil. Two land drains (18005-8) truncated the subsoil, aligned north-west / south-east. These appear to curve to the west at their southern ends and probably indicate that the field had ridge and furrow earthworks when they were inserted. A layer of modern ploughsoil (18000) then leveled the trench up to its present height at between 11.32m and 11.09m AOD.

5.5.9 Trench 19

Positioned on the eastern side of Field 3, this trench targeted a cluster of geophysical anomalies that had been identified during the geophysical survey.

Natural glacial deposits were located at the base of the machine-excavated trench and consisted of a compact, mottled, orange and grey, sand with moderate cobbles (19001). Towards the western end of the trench, the natural changed to a mid- to light brown, silty sand (19005), and may suggest the presence of colluvium (hillwash) in this area. The

hillwash was sterile of archaeological finds. Just to the east of the interface between 19001 and 19005 a patch of cobbles in a matrix of friable, light brown to yellow gravelly sand (19006) may indicate a further natural variation. The natural deposits were located at the base of the trench at between 13.55m and 12.89m AOD. Sealing the entire trench was a layer of orangey brown, silty sand subsoil (19002), which was up to 0.15m thick. This was interpreted as a buried ploughsoil. A modern land drain (19003-4) aligned north to south across the trench then truncated the earlier deposits. This was sealed by a modern ploughsoil (19000) which leveled the ground in the vicinity of the trench up to between 13.83m and 13.34m AOD. The geophysical anomalies are probably of natural origin.

5.6 Field 4

5.6.1 Description

This field was situated on the southern side of the Heslington East development area adjacent to Low Lane. A sequence of modern dykes flanks its northern, western and eastern sides. All of the trenches were aligned east-north-east / west-south-west and measured 25m long and 4m wide apart from Trenches 106 and 115. The field was relatively flat, apart from a slight island of higher ground in the vicinity of Trenches 102, 105, 108 and 115).

5.6.2 Trench 98

The trench was located randomly in the south-west corner of Field 4.

The earliest deposits consisted of friable, orangey yellow, sand (98001) with occasional pebbles, which was located from 10.48m AOD across the base of the trench.

A linear feature (98013), aligned north-north-west / south-south-east, then truncated 98001. This broke sharply from the surface with steep sides and a rounded base, giving a U-shaped profile. Feature 98013 was interpreted as a gully and measured up to 0.80m wide and 0.28m deep. It was completely filled with a moderately compact mid-grey silty sand (98014). This gully may date to the prehistoric or Roman period and be part of a field system.

A series of three furrows (98005, 98011 and 98015) then truncated 98001. These were aligned north-north-west /south-south-east except for the easternmost which was aligned north - south. The furrows had gentle to moderate sloping sides, concave bases and measured up to c.2.0m wide and 0.25m deep. They were filled with a firm, mid-orangey grey to greyish brown silty sand (98006, 98012 and 98016). Three modern land drains (98003-4 and 98007-10) then truncated the earlier deposits before a layer of ploughsoil (98000) leveled the trench up to its present height at c. 10.93m AOD.

5.6.3 Trench 99

Positioned randomly on the western side of the field, this trench was in a part of the field which sloped down slightly from east to west.

Natural deposits consisting of a mottled, mid-orange and mid-grey silty sand (99002) with extensive patches of pale yellow orange clay appeared in the base of the trench at between 10.85m and 10.75m AOD.

Three features (99006, 99009 and 99013) then truncated natural 99002. Both features 99006 and 99009 were linear in plan, aligned east - west with gently sloping sides, and had flattish irregular bases. They measured up to 2m wide and 0.10m deep and were filled with a soft, mid-pinkish brown and pinkish grey, silty sand (99005). These may be prehistoric gullies, perhaps relating to features within Trenches 102 and 115 to the south-east, or are of natural origin. Feature 99013 had moderately steep sides, a concave base and measured over 1.25m long, 0.25m wide and up to 0.30m deep. It was filled with a soft, mixed, orangey grey sandy silt (99014) and may be similarly interpreted to features 99006 and 99009.

Plate 3 *Trench 99 looking west*

A further linear feature (99004) was located to the west of features 99006, 99009 and 99013. This was aligned north - south, had moderately steep sides, a concave base and measured up to 1.25m wide and 0.20m deep. The feature was interpreted as a gully which was perhaps of prehistoric or Roman date. It was completely filled with a firm, orangey grey, silty sand (99003).

A layer of compact, mid greyish brown, sandy silt subsoil (99001), up to 0.35m thick, then sealed the entire trench. Two modern land drains (99007-8 and 99011-12) then cut through the earlier deposits before a layer of ploughsoil (99000) sealed the top of the trench at between 11.37m and 11.13m AOD.

5.6.4 Trench 100

The trench was located randomly in the north-west corner of Field 4.

Deposits of natural origin consisting of soft, light greyish orangey brown, clayey sand (100001) were the earliest revealed within the trench, the top of which was located at c. 10.75m AOD.

Truncating 100001 at the eastern end of the trench was a sub-circular feature (100010) interpreted as a tree-throw hole. This had gently sloping sides, an undulating base and measured over 0.80m long, 0.60m wide and up to 0.04m deep. It was completely filled with a soft, dark grey silty sand (100009).

A linear feature (100006), aligned north-west / south-east was located 8.5m from the west end of the trench. This had gently sloping sides, an undulating base and measured up to 0.40m wide and 0.08m deep. It was interpreted as a heavily truncated gully and was completely filled with a friable, mid brown, sandy silt (100005). This feature may be of prehistoric or Roman date.

A furrow (100004), aligned north-north-west / south-south-east then truncated 100001. Located c. 4.75m from the eastern end of the trench, it had gently sloping sides, an undulating base and measured up to 1.40m wide and 0.16m deep. A mid-orangey greyish brown, sandy silt (100003), dated broadly by tile fragments to between the 13th and 16th century, was its only backfill.

Two land drains (100007-8 and 100011-12), aligned north-east / south-west, then truncated the earlier deposits before a layer of modern ploughsoil (100000) leveled the trench up to 11.04m AOD.

5.6.5 Trench 101

Located randomly on the southern side of Field 4, this trench was situated equidistantly between Trenches 98 and 104.

Trench 101 was machine-excavated to the top of natural, which consisted of compact, mixed, yellow orange, sand (101001), exposed at a height of c. 10.22m AOD across the base of the trench. Truncating 101001 was a furrow (101011), aligned north-east / south-west, which appeared to curve slightly to the north at its eastern end. This had gently sloping sides, a concave base and measured up to 1.60m wide and 0.20m deep. Furrow 101011 was filled with a compact, light grey, sandy silt (101010). A sequence of four modern land drains (101002-9) then truncated the earlier deposits prior to being sealed by a layer of ploughsoil, the top of which was situated at c. 10.60m AOD.

5.6.6 Trench 102

Randomly located within Field 4, this trench was situated on a part of the field that sloped gently down to the east-north-east. The immediate locality of the trench was slightly higher than the surrounding land, perhaps forming an island within the field.

Natural deposits consisting of mixed, orangey yellow, sand (102001) with cobble and yellow clay patches was located across the base of the trench from 10.26m AOD.

At the western end of the trench, a linear feature (102006) aligned east-north-east / west-south-west was recorded. This had shallow, gently sloping sides, a concave base and measured 0.5m wide and 0.15m deep. It was interpreted as a gully and was completely filled with a compact, pinkish brown, silty clay with occasional iron pan flecks (102005). This extended for 5m into the trench before it petered out.

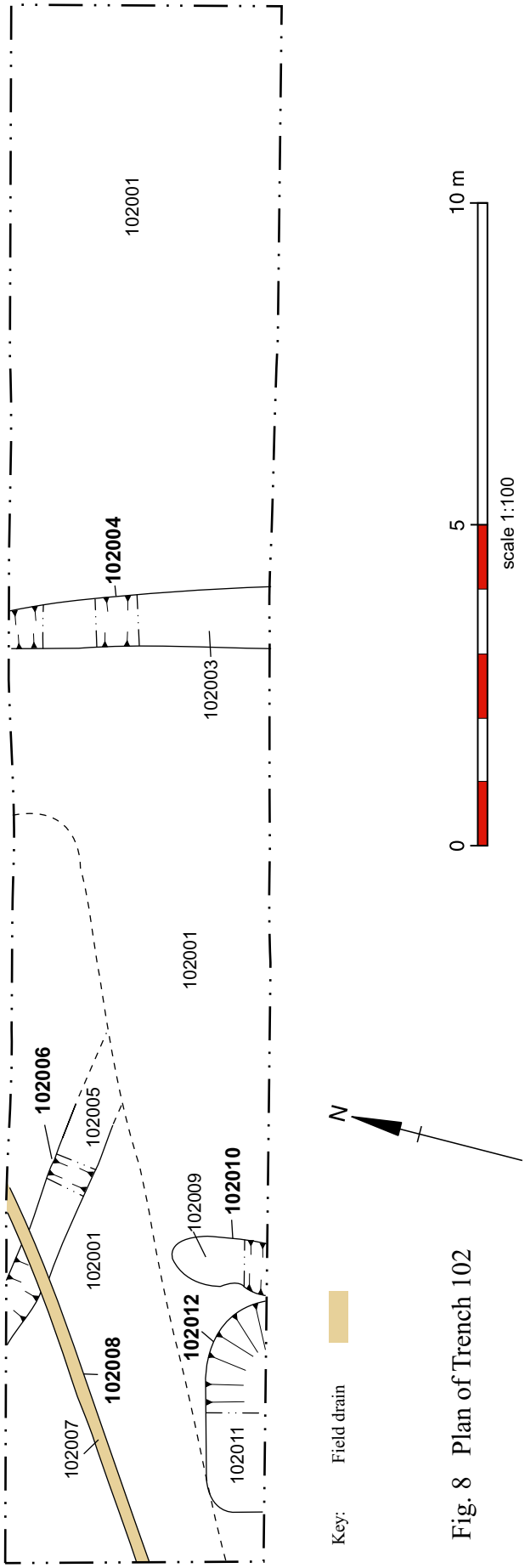

Fig. 8 Plan of Trench 102

Approximately 9m from the eastern end of the trench a second linear feature (102004) was located. This was aligned north-north-west / south-south-east, had moderately steep sloping sides, a concave base and measured up to 0.95m wide and 0.27m deep. This was also interpreted as a gully and was completely filled with a compact, light to mid-brown silty sand (102003). It is not known whether the gullies are contemporary, but the difference in their fill colours may suggest that they are not. Perhaps Gully 102006 was earlier, the colour of its backfill deposit being more heavily leached than 102003. These gullies may have been part of prehistoric or Roman field systems.

Two other features (102010 and 102012) were located at the western end of Trench 102, just to the south of gully 102006. Feature 102010 was amorphous in plan, had moderately steep sloping sides, a flat base and measured over 1.50m long, 0.75m wide and up to 0.09m deep. It was filled with a compact, mid-yellowish brown, silty sand (102009). Feature 102012 was sub-rectangular in plan, and positioned just to the west of 102010. It had moderately steep sloping sides, a flattish base and measured 3.5m long, over 1.05m wide and up to 0.08m deep. Its fill (102011) was similar to 102009, but contained frequent pebbles and gravel towards the base. It is difficult to interpret these features, and they may form part of a larger spread of possible shallow prehistoric pits and gullies.

Sealing the entire trench was a layer of compact, mid-yellow brown, silty sand (102002) subsoil, which was up to 0.40m thick. This build-up of deposit may have been partially aeolian (wind blown) in origin. Truncating gully backfill 102005 was a modern land drain aligned north-east / south-west. A layer of ploughsoil (102000) then sealed the top of the trench at between 11.66m and 11.53m AOD.

5.6.7 Trench 103

The trench was positioned randomly on the northern side of Field 4. Coincidently it targeted geophysical anomaly (f23) revealed by Phase 3 of the geophysical survey.

The earliest deposits revealed within Trench 103 were of natural origin, consisting of a soft, greyish orange, clay sand (103001). This was revealed across the base of the trench from c. 10.81m AOD.

Truncating 103001 at the eastern end of the trench was a curvilinear feature (103016 and 103041). This entered the north-east corner of the trench on a north-north-west / south-south-east orientation, before abruptly turning through 90 degrees and heading in a west-south-west direction. Its edge broke moderately from the surface and fell with steeply sloping sides to a flattish, slightly undulating base. The feature, which was interpreted as an enclosure ditch, measured c. 2.5m wide and up to 1m deep. It was filled with three fills. The primary fill consisted of a compact, dark greenish grey, organic clay silt (103020 and 103040). This was sealed by a firm, mottled, mid- to dark greyish brown, silty sand (103019 and 103039) and finally the ditch was leveled up with a friable, mottled, dark greyish brown, silty sand (103018 and 103038). Deposit 103019 was pottery-dated to the Iron Age. Deposit 103020 was sampled and this revealed that the deposit was mainly made up of small twigs and woody debris (probably alder, of which fruits and female cone axes were recovered) as well as hawthorn (berries and pyrenes) and blackthorn. A hedge may therefore have existed close to the ditch, within which

herbs such as chervil and upright hedge parsley grew. Weeds and aquatic plants were also found, including duck weed and water-crowfoot, likely to be growing in the ditch. Charcoal and charred heather fragments also point to occupation in the vicinity with the burning of wood and turves. The invertebrates included water fleas and water beetles suggesting at least fairly permanent water, perhaps drying out or greatly reduced in the summer. Terrestrial invertebrate species were also abundant indicating herbaceous vegetation and plant litter, including dung beetles of two or more species, suggesting that either grazing land or an animal compound was close by. The ditch therefore dates to the Iron Age and enclosed several features within this trench (see below) plus a ring ditch or drip trench from a round house in Trench 107 (see below). A hedge and animal compound were probably also situated close to it.

Plate 4 *Trench 103, east facing section of ditch 103016*

As mentioned above, the enclosure appears to have contained a number of features (103007, 103023, 103025, 103030 and 103033). Features 103007, 103023 and 103025 were linear in plan, both 103007 and 103025 being aligned north-north-west / south-south-east, whilst 103023 was aligned east-south-east / west-north-west. Feature 103007 broke moderately from the surface, with moderately steep sides, and had a concave base, and measured over 1.75m long, 0.55m wide and up to 0.48m deep. Feature 103025 was aligned parallel to 103007 at a distance of 3.5m from it. It had steep sides, a concave base and measured over 0.85m long, 0.50m wide and up to 0.46m deep. Both were interpreted as gullies or slots but their exact function is unknown. Feature 103023 had moderately steep sloping sides, a flattish base and measured 2.10m long, 1.05m wide and up to 0.40m deep. This may also be a slot or gully, but its exact function within the enclosure is also unknown. These features were filled with compact, dark grey, silty sands (103006 and 103026) and plastic, dark grey, sandy clay silt (103022) with occasional cobbles and pebbles. Deposit 103022 contained pottery provisionally identified as Anglian by the

pottery specialist, but could alternatively be of Iron Age date (see the pottery report, pages 134-5).

Two sub-oval or sub-circular features (103030 and 103033) then truncated 103001 on the southern side of the trench, to the south of 103007 and 103025. Their edges broke sharply from the natural ground surface, had steep sides and flattish bases. They measured over 1m long and 1m wide and were up to 0.50m deep. The features were interpreted as large post-holes or small pits, the post-hole interpretation being supported by a possible packing deposit, consisting of a compact, mid-greyish brown, slightly silty clay (103031) on the western side of post-hole 103030. Their relationship to the enclosure ditch and features within Trench 106 to the south, may suggest a gate across an entrance to the enclosure, supported by posts set within these post-holes. The gate would have been c. 2m - 2.20m wide. Once the posts were removed, post-holes 103030 and 103033 were backfilled with compact, dark grey, silty sands (103029 and 103032). Deposit 103029 was pottery-dated to the Iron Age.

The northern ends of backfills 103029 and 103032 were then truncated by two further possible post-holes (103035 and 103037). These were sub-rectangular and sub-square in plan. Post-hole 103035 had moderately steep sides, a concave base and measured 0.80m long, 0.50m wide and up to 0.30m deep, whereas post-hole 103037 had gentle to moderately steep sides, a flattish base and measured 0.60m long and up to 0.10m deep. These features may have been a replacement gate structure for the enclosure entrance, c.2.10m wide. Once the structure went out of use, the posts were removed and the post-holes backfilled with a compact, yellowish grey, silty sand (103034 and 103036).

Plate 5 *Trench 103, working shot, looking east*

Sealing backfills 103006, 103026, 103034 and 103036 stratigraphically was a trackway which consisted of cobbles and pebbles in a matrix of firm, dark brownish grey, clayey sand silt (103004). The trackway was up to 3.80m wide and 0.20m thick and aligned north-north-west / south-south-east. This appears to be a late addition to the enclosure entrance, and perhaps signifies a change of ownership and use.

A small fragment of a buried soil horizon, which post-dated backfill 103022 but pre-dated later medieval furrows (see below) was located to the west of trackway 103024. This consisted of a friable, mid-grey, silty sand (103024). The deposit was up to 2.10m long by up to 0.24m thick and may be the remnants of Roman or post-Roman agricultural soils. At the eastern end of the trench, a compact, mottled, orange grey, clay sand (103017) may also be a remnant of a buried agricultural soil, or a leveling deposit sealing the top of enclosure ditch backfills 103018 and 103038 to a maximum thickness of 0.22m.

Two furrows (103009 and 103027) then truncated the earlier deposit 103024 and the trackway 103004. These were aligned north-north-west / south-south-east, had gently sloping sides, concave bases and measured up to c. 5m wide in section by 0.30m deep. They were set 3m apart and were completely filled with firm, orangey brownish grey, sandy silts (103008 and 103028). Deposit 103008 contained residual Roman pottery fragments. A patchy layer of friable, orangey brown, silty sand subsoil (103021) then sealed the western side of the trench to a maximum thickness of 0.12m.

Several modern land drains (103002-3 and 103010-15) truncated the earlier deposits. These varied in their orientation and date of insertion. Modern ploughsoil sealed the top of the trench from 11.74m AOD.

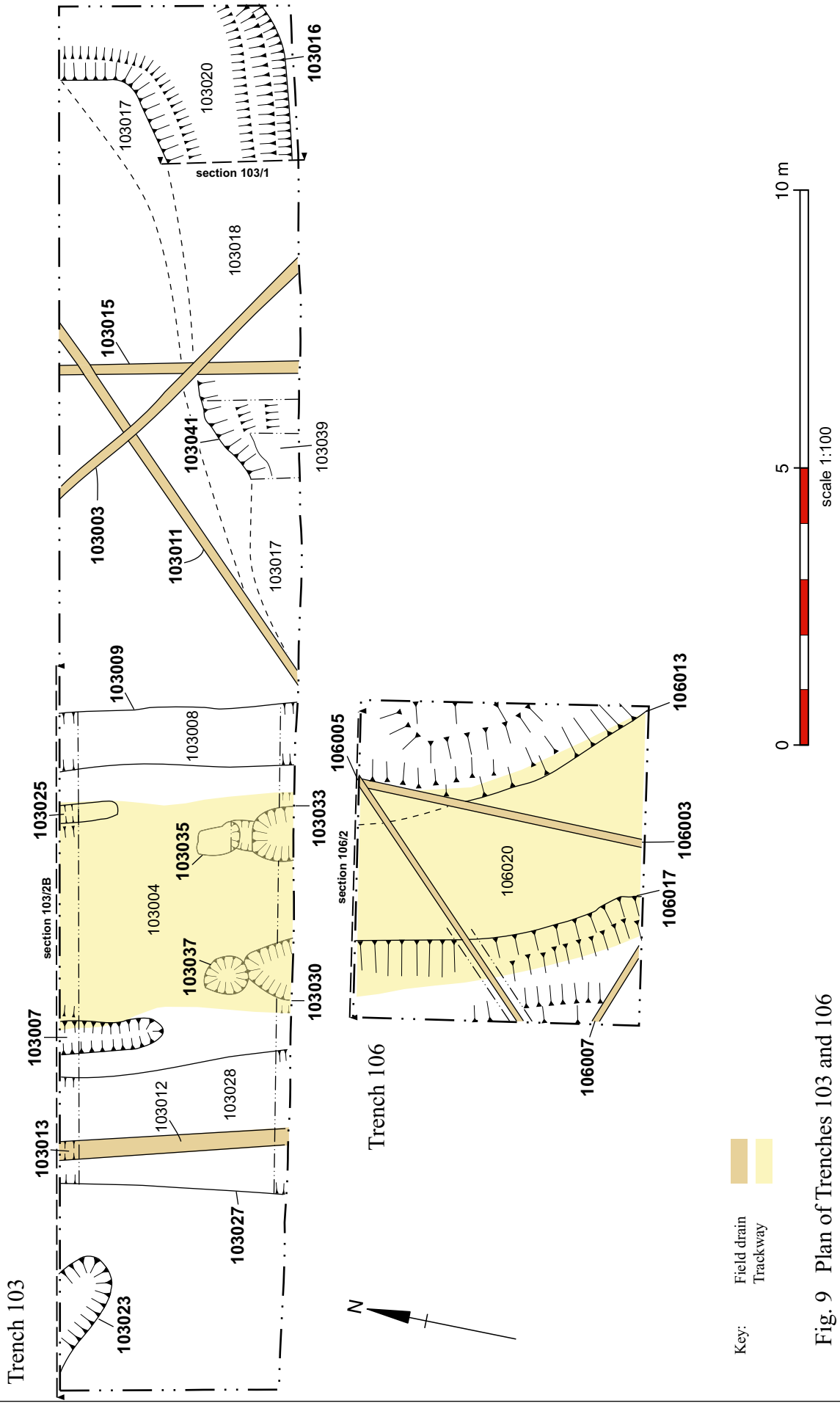

Fig. 9 Plan of Trenches 103 and 106

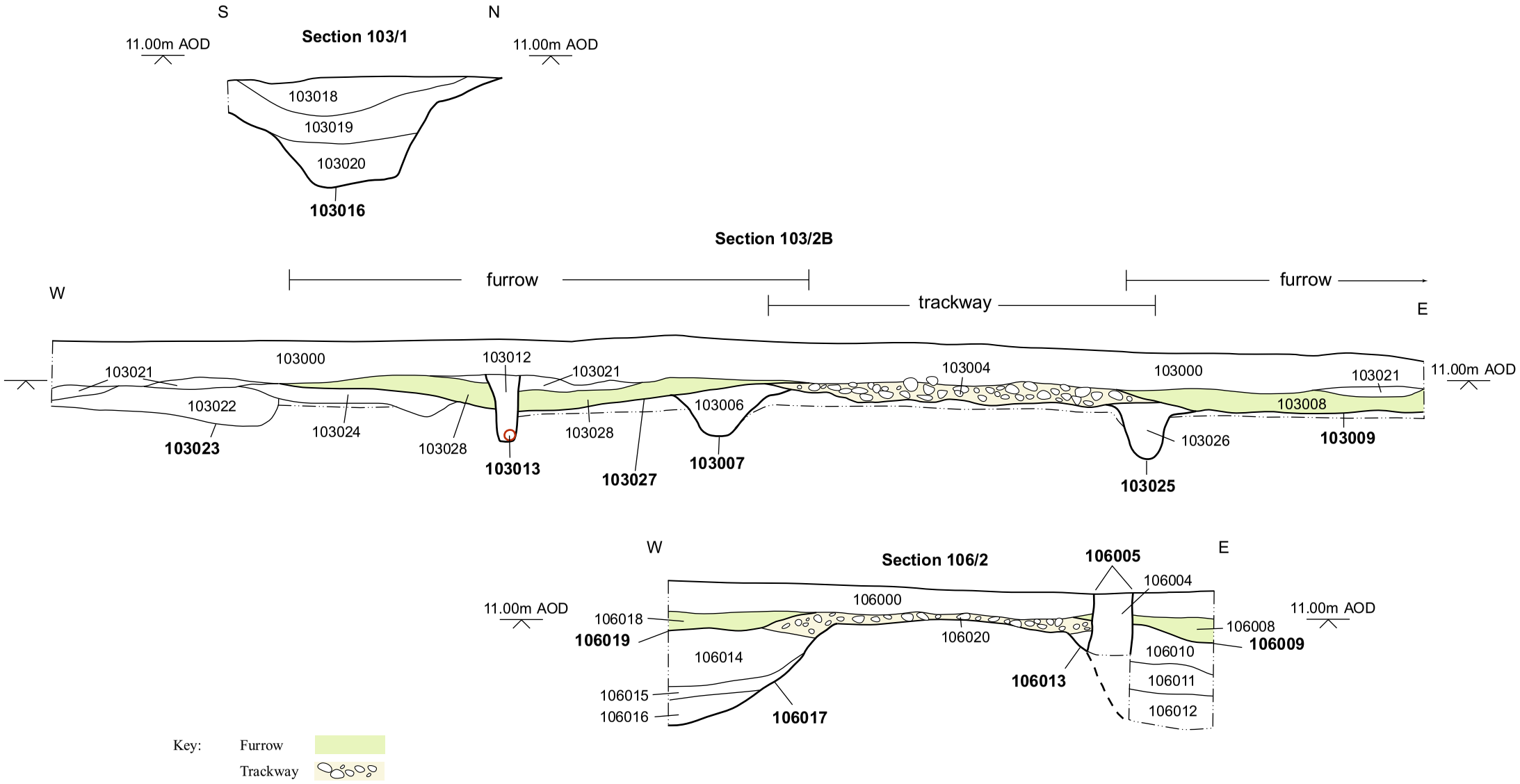

Fig. 10 Trench103, sections 103/1, 103/2B and Trench 106, section 106/2

5.6.8 Trench 104

Located randomly in the south-eastern corner of Field 4, this trench was positioned in a part of the field that was topographically relatively flat.

A compact, mixed, yellowish orange sandy clay (104001), with bands of brownish orange, silty sand, was the earliest deposit recorded within the trench. This was interpreted as of natural origin, the top of which was located at 10.26m AOD. A furrow (104005) aligned north-east / south-west then truncated 104001. This had gentle sloping sides, a concave base and measured up to 2m wide and 0.21m deep. It was completely filled with a friable, mid-orangey brown silty sand (104004). A modern land drain (104002-3) truncated the earlier deposits before a layer of ploughsoil (104000) sealed the trench from 10.56m AOD.

5.6.9 Trench 105

Situated randomly on a slight ridge of higher ground in the centre of Field 4, the trench was positioned here to investigate the ridge and additionally to intercept the trackway located in Trenches 103 and 106 as it traversed Field 4. The ground in the vicinity of the trench sloped down gently to the east-north-east.

Natural deposits consisting of compact, mottled, yellowish orange, sandy clay (105002) with occasional iron pan flecks and patches of yellow clay, were located across the base of the trench from 10.74m AOD. An amorphous feature (105010) was located almost centrally within the trench. This had moderately steep sloping sides, a concave base and measured up to 1.65m long, 1.20m wide and up to 0.24m deep. It was completely filled with a compact, mid- to dark greyish yellow, silty sand (105009). This may be a tree-throw hole or a prehistoric feature perhaps similar to 102010 and 102012 in Trench 102 .

To the west of feature 105010, a linear feature (105006) aligned north-north-west to south-south-east was recorded. This had moderately steep sloping sides, a concave base and measured up to 0.90m wide and 0.11m deep. It was interpreted as a gully and was completely filled with a light to mid brownish grey, sandy silt (105005).

Truncating 105005 was a second linear gully (105008). This was aligned north-east / south-west, had gentle to moderately steep sloping sides, a rounded base, and measured 1.30m wide and up to 0.26m deep. It was completely filled with a compact, light greyish yellow, sandy silt (105007) with occasional patches of brownish orange clay and cobbles. The truncation of an earlier gully suggests the possibility of a realignment of land divisions, or a re-organisation of land distribution in the area.

Sealing the entire trench was a compact, mid- to dark orangey brown, sand subsoil (105001) which was up to 0.30m thick. As with trenches 102 and 108, this build-up of material may have been partially aeolian (wind blown) in origin. A land drain (105003-4) then truncated the earlier deposits on a north-west / south-east alignment before a layer of modern ploughsoil (105000) raised the ground to its present level at between 11.44m and 11.25m AOD.

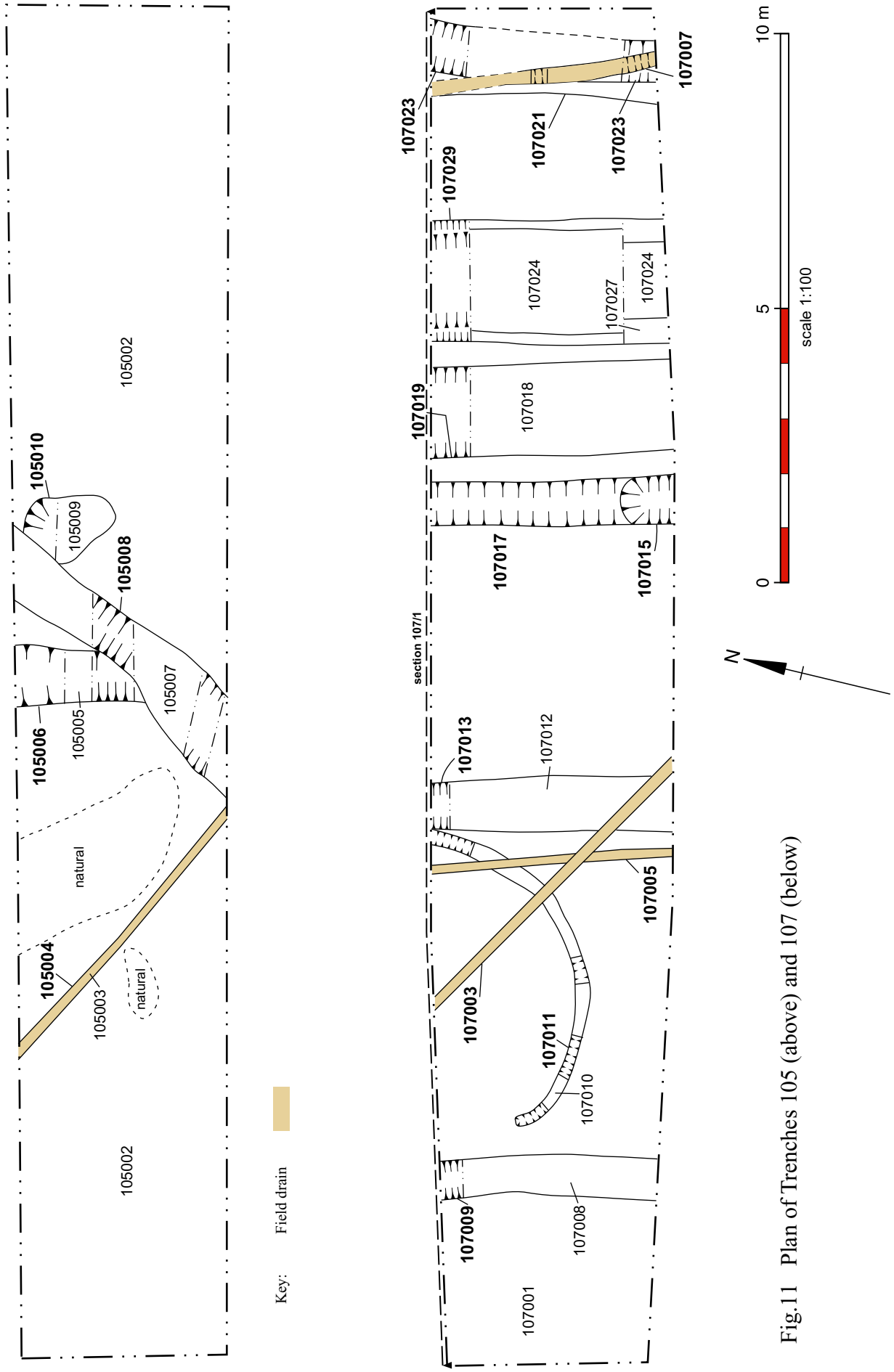

Fig.11 Plan of Trenches 105 (above) and 107 (below)

5.6.10 Trench 106

The trench was located to the south of Trench 103, specifically to further investigate the ditches and trackway that had been located within that trench. The trench measured 6m long and 5m wide.

The earliest deposits located across the base of the trench were of natural origin and consisted of firm, mottled, greyish yellow, slightly silty sand (106001), the top of which was situated at c. 10.77m AOD.

Truncating 106001 on the western side of the trench was a slightly curvilinear feature (106017). This was aligned north-north-west / south-south-east and broke moderately sharply from the natural ground surface, with steep sides and a slightly concave base. The feature measured over 2.40m wide and up to 0.95m deep. It was interpreted as a ditch that flanked the western side of an entrance to an Iron Age settlement enclosure. It was filled with three deposits. The primary fill consisted of compact, dark greenish grey, organic, silty clay (106016) which filled the base of the ditch and was up to 0.30m thick. The secondary fill consisted of a firm, mottled, mid- to dark brownish grey, slightly clayey silty sand (106015) which was up to 0.28m thick. Finally a friable, mottled, dark brownish grey sandy silt (106014) filled the upper part of the ditch. Deposit 106015 was pottery-dated to the Iron Age.

A sample from 106016 was analysed for palaeo-environmental evidence. This contained wood debris, twigs and bark (including alder), evidence for imported peat in the form of bog rosemary seeds, a spindle from a cotton grass, moss and the flowers and twig fragments of heather. The charred remains also corroborate the imported peat or turves interpretation, perhaps for fuel, but also point to heathland as well as moorland sources. The ditch environment may have been intermittently wet and there is a suggestion of a hedgerow close by. The invertebrates suggest deposition of this deposit within a body of water, perhaps permanent, with aquatic vegetation. The terrestrial insects were also abundant and indicate a range of habitats including nettle feeders, a range of decaying matter from fairly dry litter to dung, woodworm beetles (from natural dead wood or structural wood, for example, a fence post). The dung beetles were fairly abundant suggestive of either grazing land close to the ditch or an animal compound.

Cutting natural deposits 106001 on the eastern side of the trench was a further curvilinear feature (106013). This appeared to relate to Ditch 103017 and 103041 from Trench 103. The ditch entered the north-eastern corner of the trench on a east-north-east / west-south-west alignment. It then turned through 135 degrees to a north-west / south-east alignment, exiting the trench in the south-east corner. The ditch had a similar profile to 106017 and measured over 1.80m wide and over 1m deep (it was not fully excavated due to depth restrictions). The ditch was filled with three deposits. The earliest consisted of compact, dark greenish grey, organic, silty clay (106012). This was sealed by a firm, mottled, mid- to dark brownish grey, slightly clayey silty sand (106012) which contained pottery identified as either Anglian or Iron Age (see the pottery report, pages 134-5). Finally a firm, mottled, dark brownish grey, sandy silt (106010) filled the upper portion of the ditch.

The two ditches (106013 and 106017) may have flanked an entrance to an Iron Age settlement enclosure, the entrance itself being c. 2.60m wide and curving to the south-east. The curve in the entrance may have been for defensive purposes, perhaps to prevent projectiles being thrown directly into the enclosure from the south.

Plate 6 *Trench 106, post-excavation shot, looking north*

Once the ditches were backfilled, a track (106020) was laid through the entrance to the enclosure, corresponding with 103004 in Trench 103. The track consisted of cobbles in a matrix of friable, mixed, dark orange to grey brown sandy silt and was 3.40m wide and 0.22m thick. The presence of an oyster valve in Context 106020, would indicate that a Roman date for this deposit is perhaps more likely rather than Iron Age as oyster shells are generally not recovered from inland Iron Age sites. This, if correct, adds significant weight to the argument that the trackway is a Roman addition and may therefore signify a change of ownership of the enclosure. If proven, this site could produce rare (for the Vale of York) evidence to show how the site changed in this transitional period. A fragment of intrusive tile, dated broadly to between the 13th and 16th centuries was also recovered from 106020.

Two furrows (106009 and 106019), aligned north-north-west / south-south-east then truncated the earlier deposits. These had gently sloping sides, concave bases and measured over 1.40m wide and 0.24m deep. They were completely filled with firm, mottled, orangey to brownish grey, clayey sandy silts (106008 and 106018).

A sequence of three land drains (106002-7) then truncated furrow backfills 106008 and 106018 before a layer of modern ploughsoil sealed the trench from 11.18m AOD.

5.6.11 Trench 107

Located to the north of Trench 103, this trench was situated specifically to target any evidence for occupation within the enclosure ditch revealed in Trenches 103 and 106. The ground sloped gently down to the east-north-east in this part of Field 4.

The trench was machine-excavated to the top of natural deposits which consisted of moderately compact, mottled, orangey yellow, silty sand (107001) in this area. The top of natural was revealed from 11.43m AOD.

A small, isolated patch of light orangey grey sand (107031) which was up to 0.40m long and 0.05m thick, left as an island between two later features in the eastern half of the trench, may be the earliest deposit. Its interpretation is problematic as so little of it remained, but perhaps it is an isolated patch of buried ploughsoil of prehistoric date.

The eastern side of deposit 107031 was truncated by a large linear feature (107029). This was aligned north-north-west / south-south-east and was situated 3.80m from the eastern end of the trench. Its edge broke moderately sharply from the natural ground surface with a steep western side and a gentle slope to the east before breaking into a moderately steep side to a flattish base. Feature 107029, which was interpreted as a ditch, measured up to 2.25m wide and was up to 0.86m deep. The ditch was probably associated with ditches 103017, 103041 and 106013, forming the eastern side of an Iron Age settlement enclosure. The ditch had two fills, the primary consisting of a compact, very dark grey, organic, silty clay (107028), and the secondary a firm, light grey sand (107027) with orange sand flecks. The ditch appears to have been re-cut (107026) at some point in its life. The re-cut replicated the original alignment, but was narrower. The re-cut broke sharply from the surface, had steeply sloping sides and a concave base. It measured 2.06m wide and 0.72m deep, and was filled initially with a compact, light grey to mid-orangey brown, silty clay (107025). This primary fill was, in turn, sealed by a firm, dark grey, sandy clay (107024) secondary fill. The enclosure ditch may have functioned as a defensive structure.

Situated approximately 2.5m to the west of ditch 107029, was a second linear feature (107017). This was aligned parallel to 107029, had moderate to steep sloping sides and a concave base. It measured up to 0.80m wide and up to 0.30m deep. This was interpreted as a ditch, probably of contemporary date to 107029, and may have functioned to keep animals within the enclosure and away from the defensive ditch. It was completely filled with a friable, dark grey brown, sandy silt with moderate cobbles, some of which appeared to be fire cracked (107016). A sample from 107016 revealed traces of fine charcoal and cinder. Deposit 107016 contained several scraps of prehistoric pottery that are probably of Iron Age date. The southern portion of the ditch revealed in Trench 107 appears to have then been re-cut (107015). This followed the same alignment as 107017, had steep sides and a V-shaped profile, a slot being incorporated into its base. The re-cut measured 0.85m wide and 0.46m deep and was completely filled with a friable, very dark greyish brown, silty sand (107014) which contained the remains of a smashed cooking pot either of Iron Age or Anglian date (see the pottery report, pages 134-5). This pot was situated in the backfilled terminus of the re-cut c. 1m north of the southern edge of the trench.

Plate 7 *Trench 107, smashed cooking pot in situ, context 107014*

At a distance of c. 5.60m west of ditch 107017, a ring ditch or drip gully (107011) for an Iron Age round house was located. This had moderate to steeply sloping sides and a concave base which was much disturbed by animal burrowing. The ditch measured 0.25m wide and up to 0.30m deep; the full diameter of the round house was c. 5.5m externally and 4.5m internally. This may be one of several buildings within a settlement enclosure.

The building was eventually demolished and the ring ditch backfilled with a friable, dark greyish brown, sandy silt (107010). No evidence for post-holes was recovered.

Located 2.10m to the east of enclosure ditch 107029, a further linear feature (107023) was excavated. This was aligned north - south, curving away slightly from 107029 at its northern end. The feature, which was interpreted as a gully, had steep sides and a slightly concave base giving a U-shaped profile. It measured 0.60m wide, up to 0.40m deep and was completely filled with a compact, orangey grey, sandy silt (107022). This may have been part of an animal enclosure or a field system to the east of the defensive enclosure ditch.

A set of three furrows (107013, 107019 and 107021) then truncated the earlier deposits. These were aligned north-north-west / south-south-east, had gently sloping sides and rounded bases and measured up to 1.75m wide and 0.25m deep. The furrows were spaced c. 5.8m apart and were completely backfilled with a moderately compact, mid- to dark greyish brown sandy silt (107012, 107018 and 107020). Deposit 107018 was pottery-dated to the 17th century. At a distance of c. 5.90m to the west of Furrow 107013, a further linear feature (107009) was recorded, aligned parallel to the other furrows. This

had steep sides, a flattish base and measured up to 0.60m wide and 0.40m deep. It was filled with a friable, mid- to dark brown, sandy silt (107008). The comparability between its fill and the furrow backfills and its spatial relationships to them, may suggest that this feature, possibly interpretable as a gully or field ditch, is of medieval date. It clearly is unrelated to the Iron Age roundhouse (107011) which is a mere 0.50m to the east. The alternative is that the feature is a furrow, perhaps being over dug during excavation, due to an increasing occurrence of animal burrows towards the western end of the trench. The furrows were then sealed with a patchy layer of firm, light grey to grey brown, sandy silt subsoil (107030) which was up to 0.15m thick in places.

Plate 8 *Trench 107, working shot of Iron Age ring ditch 107011*

Modern land drains (107002-7) truncated the earlier deposits. These were sealed by a layer of modern ploughsoil which leveled the trench up to between 11.18m and 11.02m AOD.

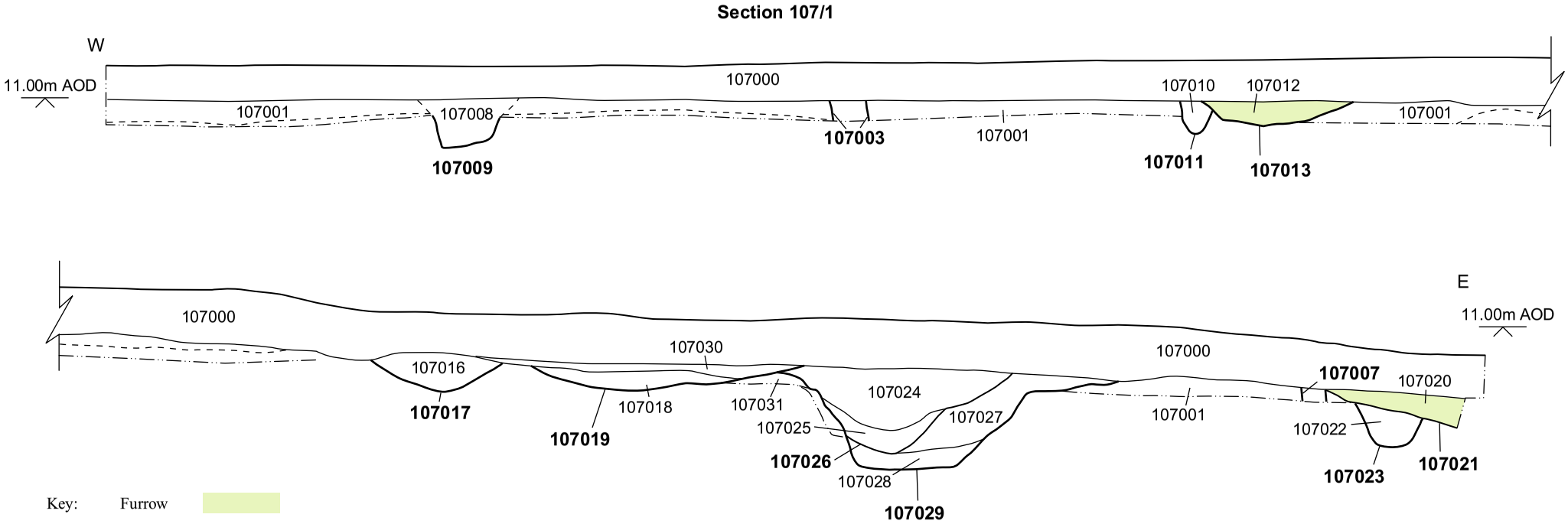

Fig. 12 Trench 107, section 107/1

5.6.12 Trench 108

Positioned in the central portion of Field 4 which was slightly higher than the rest of the surrounding land, the trench was located to target geophysical anomaly (f22).

Natural consisting of compact, light to mid-orangey brown sand (108001) was located from 11.15m AOD, across the base of the trench. A strip of compact, brownish orange, clay at the western end of the trench was also found to be of natural origin. A layer of friable, mid-orangey brown sandy silt subsoil (108002), which was up to 0.40m thick and may partially be of aeolian (wind blown) origin, then sealed the entire trench. A modern land drain (108003-4) then truncated the earlier deposits at the eastern end of the trench. This was sealed by modern ploughsoil (108000) from 11.66m AOD.

5.6.13 Trench 109

This trench was situated randomly in the north-east corner of Field 4 in a part that was relatively flat.

The earliest deposit located within this trench consisted of a firm, light to mid orangey brown clay sand (109001) which appeared across the base of the trench from 10.76m AOD. This was interpreted as of natural origin.

Truncating 109001 at the western end of the trench was an amorphous feature (109006). This had a gently sloping side to the west, a steep side to the east and a rounded base. The feature measured 1.05m long, 0.50m wide and up to 0.20m deep. It was completely filled with a compact, light to mid-grey, sandy silt (109005). Feature 109006 was interpreted as a tree-throw hole, perhaps created as a tree was blown over to the east.

A second feature (109010) was located almost centrally within the trench. This had moderately steep sides, a flattish base and measured 1.75m long, over 0.55m wide and up to 0.44m deep. The feature was completely filled with a firm, light grey sand (109009) and may possibly be interpreted as a second tree-throw hole.

Cutting through 109009, on a north-north-west / south-south-east alignment, was a linear feature (109008). Its edge broke sharply from the natural ground surface, had steeply sloping sides and a concave base. The feature, which was interpreted as a ditch, was up to 1.10m wide and up to 0.50m deep. It contained two fills. The primary fill consisted of a firm to compact, light to mid grey, sandy silt (109011) with orangey yellow sand mottling. This was sealed by a similar deposit (109007) with no mottling. The ditch is probably part of a prehistoric (possibly Iron Age) or Roman field system.

Sealing the entire trench was a layer of soft, light to mid-brown sandy silt subsoil (109002) with occasional pebbles and iron pan flecks. This was truncated by a modern land drain (109003-4) which was aligned north-north-west / south-south-east. Modern ploughsoil then sealed the top of the trench at 11.05m AOD. An unstratified fragment of sandstone saddle quern was recovered from 109000. This is a diagnostic artefact that can be dated from the Late Neolithic to the Middle Iron Age (2500 to 500 BC) (Manby, King and Vyner 2003, 37), usually indicative of settlement or an occupation site as they do not

tend to travel far due to their weight.

5.6.14 Trench 115

The trench was situated to the west of Trench 108 to target the central portion of geophysical anomaly (f22) located during the geophysical survey. The trench measured 5m square and was situated on a relatively flat piece of higher ground within Field 4.

Machine excavation revealed a stiff, orangey pink, clay (115001) which was revealed across the base of the trench from 11.43m AOD. This deposit was interpreted as of natural origin.

Truncating 115001 across the middle of the trench, on a north-east / south-west alignment, was a linear feature (115003). This had steep sides, a concave base and measured up to 0.85m wide and 0.35m deep. Feature 115003 was interpreted as a ditch and was completely filled with a firm, brownish red, clayey sandy silt (115002).

Plate 9 *Trench 115, looking west*

The pale colour of this deposit, caused by the leaching or filtering of minerals out of the soil by the passage of water through the backfill over a long period of time, may signify that it is of prehistoric date, perhaps dating to the Neolithic or Bronze Age. A sample from 115002 was not particularly informative containing a little oak and alder/hazel charcoal. The charcoal, however, had been encrusted by iron minerals, caused by the leaching process described above, from soil strata higher up in the ditch backfill, and collecting, over a long period of time, on these particles. There were also a few fragments of charred rhizome, presumably from burnt turves.

A furrow (115005) aligned east - west then truncated 115001 on the south side of the trench. This had gently sloping sides, an undulating base and measured over 1.2m wide and over 0.30m deep. It was completely filled with a firm, mid-pinkish brown, very silty sand (115004).

Three modern, post-holes square in plan (115007, 115009 and 115011) then truncated the earlier deposits. Each had vertical sides and measured 0.25m long and over 0.30m deep (they were not fully excavated). They were completely filled with a soft, friable, mid greyish brown, sandy silt (115006, 115008 and 115010). This group appeared to form a quarter circle in the south-west corner of the trench perhaps making the corner of a fenced area. Modern ploughsoil then sealed the top of the trench from 11.74m AOD.

5.7 Field 5

5.7.1 Description

Field 5 was situated at the northern limit of the development area to the east of Field 5A and incorporating the western flanks of Kimberlow Hill. All of the trenches within the field were aligned roughly east - west, with the exception of Trench 24 which was aligned north-west / south-east. The trenches dimensions were generally 20m long by 10m wide, other than Trench 27 which measured 25m long by 4m wide, and topographically the land sloped down from a hillock situated where Trench 26 was placed.

5.7.2 Trench 23

Trench 23 was positioned in the north-west corner of Field 5 to target a group of anomalies revealed by the geophysical survey in this area. The trench was moved slightly to the east to avoid the field headland and the ground sloped down from south-east to north-west.

Deposits of natural origin, consisting of a firm, orange to reddish brown, clay sand with patches of gravel (23001) with moderate to frequent cobbles, were the earliest revealed in the trench. These appeared at between 21.61m AOD and 20.69m AOD across the base of the trench. No archaeological deposits or features were observed, Deposit 23001 being completely sealed by modern ploughsoil (23000) which leveled the ground up to between 21.92m AOD and 21.00m AOD. The geophysical anomalies probably relate to changes in the natural.

5.7.3 Trench 24

Positioned to the south-west of Trench 23, and with similar topography to the latter trench, it was located to target a geophysical anomaly situated on the western side of Field 5.

Natural glacial deposits were revealed at the base of Trench 24 at between 22.57m AOD and 21.72m AOD. These consisted of compact, pale orange brown, slightly clayey sand (24001). Towards the south-western corner of the trench a T-shaped strip of friable, light

grey brown, silty sand (24013) was located. This deposit was up to 0.80m wide and 0.05m deep. It may form the backfill of a shallow, heavily truncated feature (24012) of uncertain function, but is more likely to be a slight variation in the top of the natural.

Sealing 24001 and 24013 was a layer of compact, orange brown silty sand subsoil (24002) which was up to 0.25m thick. This layer was interpreted as a buried ploughsoil. In the centre of the trench a sub-rectangular feature (24009) was then excavated. This had moderately steep sides to the north, gently sloping sides to the south and a flattish base, except on the northern side where there was a cut into the base with a V-shaped cross-section. The pit measured 1.40m long and 1.10m wide. Its primary deposit was a friable, mid-brownish red, fine- grained sand and gravel (24011). This gave the appearance of being heavily scorched. The secondary fill was a very friable, black, sandy charcoal with occasional red burnt sand patches, burnt stone, charred wood fragments and occasional cobbles (24010). The pit was interpreted as a fire pit for a bonfire perhaps of post-medieval or early modern date. A sample from 24010 indicated the presence of wood charcoal from willow/poplar/aspen as well as a few charred goosegrass fruits. A series of three land drains (24003-8) then truncated subsoil 24002. These were aligned east - west across the trench. Modern ploughsoil (24000) then leveled the trench up to its modern ground surface at between 22.93m AOD and 21.91m AOD.

5.7.4 Trench 25

Situated to the north-east of Trench 23, on ground which sloped down from south-east to north-west, this trench was positioned to target the same geophysical anomalies in the north-western corner of Field 5.

A soft, yellow brown, silty sand with patches of pebbles and plastic, orangey pink, clay sand of natural origin (25001) was the earliest deposit recorded in the trench at between 21.69m AOD and 20.57m AOD. Sealing 25001 in the north-west corner of the trench was a layer of friable, orangey brown, very slightly silty sand (25015). This was up to 0.5m thick and was interpreted as a layer of colluvium (hillwash). In the south-eastern corner of the trench a crescent-shaped feature (25012) was recorded. This measured over 1.45m long, 0.45m wide and up to 0.09m deep. It had moderately steep sides and a slightly concave base. The feature was interpreted as a tree-throw hole (a natural depression created in the underlying natural strata when a tree is blown over or pulled up). The feature then silted up with a compact, mid- to light grey brown, clay silt (25011).

In the north-western corner of the trench a sub-rectangular feature (25014) was recorded. This had moderately steep sides, a flattish base and measured 2.5m long by over 1.15m wide (extending beyond the western limit of excavation) and up to 0.24m deep. This feature was interpreted as a pit. It was completely filled with a moderately compact, mid orangey brown, silty clay (25013) with occasional pebbles and moderate patches of charcoal. The pit contained a fired clay spindle whorl (sf161) and three sherds of Iron Age pottery which hints at the presence of an Iron Age settlement close by. Deposit 25013 was sampled and only contained fine charcoal which was unidentifiable to species.

Three linear features (25006, 25008 and 25010) aligned north-north-west / south-south-east then truncated the earlier deposits. These had shallow, moderately steep, sloping sides, flattish bases and measured up to 3.12m wide and up to 0.40m deep. They were evenly spaced at between 4m and 5.5m apart and were interpreted as furrows. Completely filling Furrows 25006, 25008 and 25010 was a moderately compact, slightly orangey brown, sandy silt (25005, 25007 and 25009). A layer of friable, pale orangey brown, silty sand (25002) subsoil then sealed the entire trench to a maximum thickness of 0.35m. This was interpreted as a buried ploughsoil. A modern land drain (25003-4) aligned north-east / south-west then truncated the earlier deposits. Finally a layer of modern ploughsoil (25000) leveled the trench up to its present height between 21.69m AOD and 21.02m AOD.

5.7.5 Trench 26

Trench 26 was located on top of a natural hill on the eastern side of Field 5. It was positioned here to target a geophysical anomaly (f9) located during the geophysical survey. The anomaly was interpreted as a possible pit-like feature, but was situated in an area of strong (natural?) magnetic background activity. The ground in the immediate vicinity of the trench sloped down from south to north.

The trench was machine-excavated to natural deposits which consisted of friable, mixed, orangey brown, sand and compact, orangey grey, gravel (26001). This was located between 28.18m AOD and 27.71m AOD across the base of the trench. A large boulder (26013-14), 0.5m in diameter, was located centrally within the trench. It was embedded into the top of the glacial deposits and is therefore of natural origin. On the southern side of the trench there was a marked change in the natural to a friable, orange-brown, sand (26005-6). This was originally thought to have been the backfill of a large quarry hole (26006), but the steepness and smoothness of the sides, the absence of artefacts and the presence of cleaner sterile yellow sand below 26005 suggests a natural origin.

In the north-western corner of the trench a narrow linear feature (26008) was dug. This was aligned east - west with moderately steep sides and an undulating base which varied from V-shaped to flattish. It measured up to 1.05m wide and up to 0.25m deep. Feature 26008 was interpreted as a gully and was completely filled with a friable, dark brown, sandy silt (26007) which contained an iron nail (sf157). The gully is probably of post-medieval date.

Truncating its northern side was a large sub-circular feature (26012). This had moderately steep sides and a rounded base and measured c. 0.90m in diameter and up to 0.50m deep. It was almost completely filled by a large boulder (26011) with a mid-orange brown, sandy gravel. Feature 26012 had obviously been dug for the disposal of this large glacial erratic, probably in post-medieval or modern times.

Truncating the eastern side of 26011 and 26007 was a further linear feature (26003 and 26010) aligned north-west / south-east. This had moderately steep, sloping sides and an irregular flattish base. The feature measured up to 3.80m wide and up to 0.20m deep. Its interpretation is not certain. It was completely backfilled with a friable, grey-brown, sandy silt (26004 and 26009) which contained 18th century pottery and an iron nail (sf

158). One possible interpretation is that it formed an erosion hollow from people walking up from Field Lane or Hull Road to this vantage point, otherwise the purpose of the feature is uncertain.

A layer of friable, grey brown, silty sand subsoil (26002) then sealed the entire trench to a maximum thickness of 0.20m. This was interpreted as a buried ploughsoil. Modern agricultural soil leveled the ground up to its present height between 28.79m AOD and 28.02m AOD.

5.7.6 Trench 27

The trench was randomly positioned in the south-eastern corner of Field 5 in a part of the field that sloped down from north to south.

Natural glacial deposits were located at the base of the trench at between 24.57m AOD and 24.05m AOD. These consisted of moderately compact, mid-orangey brown, silty sand (27001) with frequent pebbles and occasional manganese flecking. The natural was completely sealed by a moderately compact, grey mottled, mid-brown, sandy silt subsoil (27002) which was up to 0.22m thick. Modern ploughsoil (27000) then raised the trench up to its present ground level at between 25.05m AOD and 24.43m AOD. No archaeological deposits were recorded.

5.8 Field 5A

5.8.1 Description

Situated adjacent to Field Lane to the north of Field 3, this field has a hollow in its centre. Geophysical anomalies were recorded in the centre of this depression, and perhaps indicate the position of linear features that are successive attempts at drainage (including a modern culvert – Hawkswell, pers. comm.). The hollow may be natural in origin or the result of quarrying. If it is natural in origin it may contain preserved peat deposits. Other magnetic anomalies may indicate the presence of dumped material, to raise the ground level and dry out the land. One trench was excavated in this field – Trench 22, which was aligned east - west.

5.8.2 Trench 22

Positioned randomly in the north-eastern corner of the field, prior to the geophysical survey, Trench 22 measured 25m long and 4m wide, and was located within a part of the field that sloped down from north-east to south-west.

A friable, orange-brown sandy silt (22001) of natural origin was the earliest deposit revealed across the base of the trench, with a patch of friable, dark orange brown, sandy silt (22009), perhaps derived from colluviation (hillwash). The natural appeared at between 19.81m and 19.07m AOD.

A curvilinear feature (22004) was located at the eastern end of the trench. This was aligned north-east / south-west and curved slightly northwards at its eastern end. The

edge broke sharply from the surface, had moderately steep sides, a flattish base and measured 0.68m wide and 0.15m deep. It was completely filled with a soft, light yellow and grey brown silty sand (22003), which was pottery-dated to the Anglian period. This feature may therefore be a gully in an Anglian field system or close to an Anglian settlement. A spread of mid-grey brown and light grey, sands and silty sands (22010) sealed 22003, to a maximum thickness of 0.20m at the eastern end of the trench. This may have derived from further colluvium (hillwash) or possibly even aeolian (windblown) soil action.

A linear feature (22008), aligned north - south then truncated the natural deposits at the western end of the trench. This had gently sloping sides, a flattish base and measured 3.5m wide and up to 0.22m deep. This feature was interpreted as a medieval furrow. It was completely backfilled with a friable, orange to grey brown sandy silt (22007). A layer of friable, dark brown to reddish brown, sandy silt subsoil (22002) then sealed the trench to a maximum thickness of 0.45m. This was interpreted as a buried ploughsoil. A modern land drain (22005-6) aligned north-east / south-west then truncated the earlier archaeological deposits. This was sealed by modern ploughsoil (22000) which leveled the trench up to its present height between 20.54m and 19.70m AOD.

5.9 Field 6

5.9.1 Description

Located to the east of Field 3, this field naturally slopes down from north-west to south-east, forming part of the south-facing slope of the glacial moraine and Kimberlow Hill. Very few geophysical anomalies were recorded in this field and so two random trenches, aligned north-west / south-east, and measuring 25m long and 4m wide were machine-excavated.

5.9.2 Trench 20

Trench 20 was positioned randomly on the southern side of Field 6 in a part of the field that was relatively flat.

The earliest deposit consisted of soft, friable, grey mottled, orangey yellow, sand and compact, light pinkish brown, sandy clay (20001). This was of natural origin and was found across the base of the trench at a c. 10.85m AOD. Sealing the entire trench was a soft, slightly brownish grey, silty sand subsoil (20002) which was up to 0.15m thick. This was interpreted as a buried ploughsoil. A land drain (20003-4), aligned east - west, truncated the earlier deposits. This was sealed by a layer of modern ploughsoil (20000) which raised the ground to c. 11.30m AOD, its present height.

5.9.3 Trench 21

Located to the north-east of Trench 20, this randomly placed trench was in a part of Field 6 which sloped down from north-west to south-east.

Natural consisted of a mixed, soft, yellow orange, sand with grey sand mottling (21001) and patches of manganese flecks. The natural was located at between 11.09m and 10.92m AOD. Sealing 21001 was a layer of moderately compact, mid- to light brown, sandy silt (21002) subsoil, which measured up to 0.10m thick. This was interpreted as a buried ploughsoil. A sequence of three land drains (21003-8) then truncated 21002 before a layer of modern agricultural soil (21000) covered the entire trench leveling the ground up to between 11.45m and 11.27m AOD.

5.10 Field 7

5.10.1 Description

This field, on the northern limits of the Heslington East site, combines the top of the moraine, known as Kimberlow Hill and its sloping flanks to the north, south, east and west. Few anomalies were identified during the geophysical survey, but it is a prime spot for monumental or defensive archaeological features (barrows, hillforts etc.) as it has a good vantage point overlooking the Vale of York to the north and south, and providing views towards the Wolds to the east and the River Ouse to the west. The trenches in this field were mostly aligned north-east / south-west apart from Trench 40 which was aligned north-west / south-east and Trench 43 which was east-west. All of the trenches measured 20m long and 10m wide except for Trench 46 which was 25m long and 4m wide.

5.10.2 Trench 40

The trench was located in the north-west corner of Field 7 and was positioned to target f11 a geophysical anomaly thought to be part of the southern side of an enclosure. The field sloped down from south-east to north-west and the trench was moved slightly eastwards to avoid the field headland.

Trench 40 was machine excavated to natural deposits that consisted of compact, light orange brown, sand, with mottled patches of orange clay and light grey, silty sand (possibly colluvium) (40001). The natural was situated between 27.30m and 26.63m AOD. A layer of moderately compact, mid- to light orange brown, sandy silt subsoil (40002) then sealed the entire trench to a maximum thickness of 0.55m. Three modern land drains (40003-8) aligned east - west then truncated the subsoil deposit and a layer of modern ploughsoil (40000) leveled the whole trench up to between 28.65m and 26.82m AOD. The enclosure ditch was not revealed, but as large balks were left to support the land drains, it is possible that the enclosure ditch is situated beneath one of these.

5.10.3 Trench 41

Situated in the north-west corner of Field 7, just to the east of Trench 40, the purpose of this trench was to target the eastern side of a possible enclosure (f11) which was revealed during the geophysical survey. Trench 41 was situated in a part of Field 7 which sloped down from south-east to north-west.

The earliest deposit revealed within the trench consisted of friable, greyish orangey brown, sand natural with patches of, possibly colluvially derived, soft grey sand (41001). This was revealed in the base of the trench at between 29.34m and 28.27m AOD.

Truncating 41001, on a north-north-west / south-south-east alignment, was a linear feature (41005, 41012 and 41014). This had moderately steep to steep sides, an uneven concave base, and measured up to 1.0m wide and 0.35m deep. This feature was interpreted as a ditch, and may be the feature revealed in the geophysical survey as the eastern side of a ditched enclosure. The ditch is likely to be of late prehistoric (Iron Age) or Roman date and was completely backfilled with a soft, pale to mid grey, very clayey sandy silt with occasional cobbles (41006, 41011 and 41013).

At the eastern end of Trench 41 a second linear feature (41009) was recorded, aligned north-west / south-east. This had gently sloping sides, a concave base and measured 1m wide and 0.11m deep. It was interpreted as the base of a ditch, perhaps of similar date to that situated to the west. The ditch appeared to end at a rounded terminus, the portion of 41009 revealed within the trench being c. 5m long. Ditch 41009 was completely backfilled with a soft, light yellowish brown, sandy silt (41010).

Between the two ditches a third linear feature (41007) was observed aligned north-west / south-east. This had gently sloping sides and a slightly undulating flattish base. The feature, which measured 1.80m wide and up to 0.20m deep, was interpreted as a furrow and was completely filled with a moderately compact, mid- to light grey brown, clay silt (41008). A layer of friable, dark grey brown, sandy silt subsoil (41002) then sealed the whole trench to a maximum thickness of 0.30m. A modern land drain (41003-4), aligned east - west then truncated the earlier deposits. This was then sealed by a layer of modern ploughsoil (41000), the modern ground surface being situated at between 29.89m and 28.70m AOD.

5.10.4 Trench 42

Located to the north of Trench 41, and with similar topography to it, the trench also targeted the eastern side of the enclosure ditch (f11) indicated in the geophysical survey.

Machine-excavated to between 27.94m and 26.73m AOD, the earliest deposits of natural origin revealed within the trench consisted of compact, pinkish orangey brown, slightly sandy clay (42001). Deposit 42001 contained occasional patches of yellowish orange sand, and frequent cobbles and pebbles. The patches of sand (42005, 42007, 42011 and 42022) appear to form linear bands across the top of the glacial deposits, perhaps indicating the presence of rain gullies or ice cracks (42004, 42006, 42010 and 42023) in the top of the glacial moraine which had subsequently silted up. Deposit 42004 contained a very small fragment of very abraded, unidentified pottery as well as an abraded fragment of Roman Brick. These are most likely to be intrusive, occurring in these deposits either due to worm or animal burrowing or by deep ploughing or subsoiling.

Truncating the natural deposits at the eastern end of the trench was a linear feature (42014, 42018 and 42021) aligned north-west / south-east. This had, steeply sloping sides, a flattish base and measured up to 0.90m wide and 0.50m deep. Interpreted as a

ditch, this feature was probably the same feature as the ditch (41005, 41012 and 41014) in Trench 41. Ditch 42014, 42018 and 42021 was completely filled with a compact, mid-brown, sandy silt with occasional cobbles and pebbles (42015, 42017 and 42020) and probably dates to the late prehistoric (Iron Age) or Roman periods. Twenty-two fragments of horse teeth, mostly upper molars and pre-molars were recovered from 42015.

Plate 10 *Trench 42, south facing section of gully 42014*

These appear to come from a single individual, of c. five years old. The deposition of a horse skull (only the teeth surviving due to the soil conditions) within the ditch backfill may suggest some kind of ritual activity, this type of special deposit being relatively common in the Iron Age and Roman periods, for example deposits at Shiptonthorpe (Mainland 1988), Hayton and Goodmanham (Hall *et al.* 2003), East Riding of Yorkshire.

Two further linear features (42002 and 42008) aligned north-west / south-east then truncated the earlier deposits. These had shallow sloping sides, flattish, but slightly uneven bases and measured up to 2.25m wide and 0.20m deep. Features 42002 and 42008 were spaced 5.25m apart and were interpreted as furrows. These were completely backfilled with a friable, dark grey, mid-orangey brown and yellowish grey, sandy silts (42003, 42009 and 42019). A sherd of 13th century pottery was recovered from 42009. A patchy layer of compact, mid-brown, sandy silt subsoil (42016) then sealed parts of the trench to a maximum thickness of 0.22m. The line of a modern land drain (42012-13) aligned east - west across the centre of the trench was then recorded. This was covered by a layer of modern ploughsoil which raised the ground level to its present level at between 28.33m and 26.97m AOD.

5.10.5 Trench 43

Positioned on the southern side of Field 7, to target the northern spread of a geophysical anomaly f12 from Field 8, Trench 43 was topographically situated on a north-west / south-east slope. The trench was moved to the north-west from its original target position to avoid the field headland.

A compact, dark orange to mid- brown, silty clay with occasional cobbles (43001) was revealed at the base of the machine-excavated trench. This was the earliest deposit and was situated between 30.74m and 30.42m AOD. A patch of manganese (43002-3) and two natural sand-filled gullies (43004-5 and 43010-11) were the only features recorded in the trench. The gullies may relate to rain gullies or ice cracks, etched and eroded into the top of the glacial moraine. Two modern land drains (43006-8) then truncated the natural deposits and a layer of modern ploughsoil (43000) sealed the trench between 31.29m and 30.58m AOD. No evidence was recovered for the spread of settlement from the top of Field 8 to this part of Field 7. Two sherds of unstratified pottery of possible Anglian date were recovered from the ploughsoil as was a coin (sf152) dated 1695-1701, which due to its worn character, may have been lost in the mid to late 18th century.

5.10.6 Trench 44

This trench was located on top of the glacial moraine in the central part of Field 7, just to the west of the OS trig point. It was positioned here to target several sporadic geophysical anomalies, not given individual feature numbers, within the geophysical survey. The trench was situated just on the edge of the moraine as the slope started to drop to the north-west from where there are spectacular views of York Minster.

Natural glacial deposits were revealed at the base of the trench at between 30.46m and 29.81m AOD. These consisted of very compact, orange-brown, silty clay with frequent pebbles (44001). Several linear deposits of orangey brown, sandy silt (allocated number 44001 as well) were also revealed in the top of the clays. These were interpreted as the backfills of natural rain gullies or ice cracks that had been carved into the top of the glacial moraine. A thin layer (0.10m thick) of compact, mid-orangey brown, sandy silt subsoil (44002) then sealed the whole trench to a maximum thickness of 0.10m. Two linked modern land drains (44003-6) truncated the earlier deposits and a layer of modern ploughsoil (44000) covered the trench levelling it up to the present height between 30.94m and 30.03m AOD. No archaeologically significant deposits were located within this trench.

5.10.7 Trench 45

North of the OS trig point and to the north-east of Trench 44, this trench was positioned to target several faint anomalies located during the geophysical survey on top of the moraine. Trench 45 was situated on the dip slope of the moraine, the ground sloping down from south-east to north-west.

A similar sequence of deposits was revealed in this trench as in Trench 44. Natural glacial deposits, consisting of compact, yellowish orange, sandy clay and cobbles with

patches of yellow clay sand (45001) was revealed at between 30.98m and 29.81m AOD across the base of the trench. A thin (0.10m thick) layer of firm, mid-greyish brown, clay sand subsoil (45002) then sealed the trench. A fragment of post-medieval earthenware pottery was recovered from this deposit. Three modern land drains (45003-8) of varying orientations then truncated 45002. These all appeared to have their starting points within the trench. Modern ploughsoil (45000) then sealed the whole trench, and brought the ground up to its present level at between 31.30m and 30.07m AOD. No archaeological deposits were revealed.

5.10.8 Trench 46

Located to the north-east of Trenches 44 and 45, this trench was randomly placed at the eastern end of Field 7 on a part of the top of the moraine which sloped from south-west to north-east.

Trench 46 was machine-excavated to the top of natural deposits which consisted of soft, slightly plastic, orange to yellowish brown, sandy clay (46001). These were located between 30.17m and 29.73m AOD across the base of the trench. Patches of slightly greyer, sandy clay were also situated at the western end of the trench and these were also thought to be of natural origin.

Three north-west to south-east aligned linear features (46011, 46013 and 46015) truncated 46001. Observed as generally shallow features, with gentle sloping sides and flattish bases, they measured between 2.5 and 3.6m wide, up to 0.25m deep and were spaced evenly at c. 5m intervals. The features were interpreted as a set of parallel furrows, evidence for medieval agriculture in the area, and they were completely filled with friable, grey, sandy silts (46012, 46014 and 46016).

Four modern land drains (46003-10) aligned north-east / south-west then truncated the earlier deposits. A layer of modern ploughsoil (46000) sealed the trench, the top of the present ground surface being situated at between 30.45m and 30.08m AOD.

5.11 Field 8

5.11.1 Description

Situated on the south-east sloping face of Kimberlow Hill this large field is almost centrally placed within the Heslington East site. The ground slopes down from north-west to south-east across the field. Trenches 33 to 38 were aligned east - west, Trenches 28, 29, 39 and 113 were aligned north-west / south-east, and Trenches 30-32 and 114 were aligned north-east / south-west. Two-thirds of the trenches (33-9 and 113-14) measured 20m long by 4m wide, the majority of the remainder (Trenches 28-31) measured 25m long and 4m wide, whilst Trench 32 measured 50m long and 4m wide.

5.11.2 Trench 28

The trench was positioned randomly on the western side of Field 8.

The earliest deposit recorded within Trench 28 was a compact, mottled greyish yellow, light greyish brown, sand (28001). This was situated at between 13.39m and 11.98m AOD. A machine-dug hole in the north-eastern corner through this natural material suggested that it was derived from colluvium (hillwash) of unknown date (probably post-glacial / very early prehistoric). No artefacts were recovered from this deposit.

A layer of compact, orangey brown, silty sand subsoil (28002) completely sealed the trench to a maximum thickness of 0.28m. This was interpreted as a buried ploughsoil. Two land drains were then inserted. The earliest (28005-6) was aligned east-south-east / west-north-west. This was subsequently truncated by a later land drain (28003-4) aligned east-north-east / west south-west. A layer of modern ploughsoil sealed the whole trench leveling the ground to its present level at between 13.84m and 12.50m AOD.

5.11.3 Trench 29

Trench 29 was randomly placed to the east of Trench 28 within Field 8.

Natural (29001) in this trench was of a similar composition and origin to that in Trench 28, situated at between c. 12.28m and 11.76m AOD. This was overlain by subsoil (29002) which was the same as 28002. Five land drains (29003-12) then truncated the subsoil on various alignments before a layer of ploughsoil (29000) sealed the trench between 13.26m and 12.12m AOD, raising the ground to its present level.

5.11.4 Trench 30

Randomly placed close to the south-western corner of Field 8, Trench 30 was sited on a relatively flat part of the field.

The trench was machine-excavated to a natural deposit which consisted of a firm, light brown to yellowish orange, sand (30001) which was situated at the base of the trench between 10.63m and 10.29m AOD. A mixed, light brown, slightly silty sand (30002) subsoil with orange and grey sand mottling, manganese flecks and patches of light grey clay then sealed the trench to a thickness of 0.23m. This was truncated by the construction cut for a horseshoe-shaped land drain (30003-4), followed by a modern plastic land drain (30005-6). A layer of recent agricultural soil covered the trench and raised the ground to its present level between 11.10m and 10.92m AOD.

5.11.5 Trench 31

Positioned randomly, Trench 31 was situated in the south central area of Field 8.

A friable, mottled greyish yellow, orange, sand with occasional manganese and iron pan flecks (31001) was the earliest deposit recorded in the base of the trench. This was of natural origin and was revealed at 10.52m AOD.

Truncating the natural, on a north-west / south-east alignment was a linear feature (31020). This was not fully excavated due to the depth limits placed on the trench, but it had steep sides and measured up to 1.45m wide and over 0.30m deep. This feature was

interpreted as a ditch, possibly dating to the late prehistoric (Iron Age) or Roman periods. It was completely backfilled with a friable, light to mid-grey, sandy silt (31019). A deposit of similar composition (31022) then sealed 31019. This may have derived from colluvium (hillwash) down slope and it was up to 0.20m thick.

Three linear features (31003, 31008 and 31021) then truncated the earlier deposits. These were aligned north-west / south-east, angled more to the west than 31020. These features were shallow and had gently sloping sides, concave bases and measured up to 2.75m wide and up to 0.23m deep. They were interpreted as furrows and were completely backfilled with soft, grey mottled, light orangey brown, silty sand (31004 and 31009) and a compact, mid to light grey, sandy silt (31014). Two very abraded 13th century Scarborough Ware pottery fragments were recovered from 31009.

A number of deposits then sealed the furrow backfills. These consisted of friable, mid-orangey brown to light grey-brown, sands and silty sands with varying concentrations of charcoal, brick and tile, dark brown and orange sand, manganese and iron pan flecks, pebbles and cobbles (31005 and 31012-13). These had a total thickness of 0.50m and may have derived from a mixture of ploughing and colluvium (hillwash). A layer of moderately compact, light orangey brown, silty sand subsoil (31002) then sealed the trench to a maximum thickness of 0.35m. This was interpreted as buried medieval ploughsoil.

Four modern land drains (31006-7, 31010-11 and 31015-18) truncated the earlier deposits. These were aligned north-west / south-east. Modern ploughsoil (31000) then sealed the whole trench, leveling it up to its present height between 11.41m and 11.06m AOD.

5.11.6 Trench 32

Trench 32 was located in the south-east corner of Field 8, and was situated here to target a number of scattered anomalies revealed in the geophysical survey. Originally it was intended to align the trench north-west / south-east, and to have it measuring 20m long and 10m wide, but due to concerns over the land drainage scheme in this area, the trench was re-aligned north-east / south-west and narrowed. The trench thus measured 50m long and 4m wide.

Natural glacial deposits were the earliest revealed in the trench, consisting of soft, friable, mottled, greyish yellow, sand (32001). This appeared at c. 11.68m AOD in the base of the trench. A patchy spread of soft, very dark grey to black manganese rich sand with varying concentrations of rounded pebbles and angular gravel (32010-12), and a yellow brown, slightly silty sand with frequent manganese patches (32006-7), located at the base of the trench, were also thought to be of natural origin.

The earliest archaeological feature (32013) within the trench was curvilinear in plan. This curved from a south to north direction to a more north-easterly direction at the eastern end of the trench. It had moderately steep sides, measured up to 1.40m wide and over 0.23m deep and was not fully excavated due to depth restrictions. It was completely filled

with a compact, light greyish yellow, sand with orange sand mottling (32014). The ditch may date to the late prehistoric (Iron Age) or Roman periods.

At the western end of the trench a small rectangular slot (32002) was identified. This was aligned north-west / south-east, had steep sides and a flattish base and measured 1.6m long, 0.4m wide and up to 0.13m deep. The feature was completely filled with a soft, yellowish grey, sand (32003).

Some 16.5m to the east of 32002, a linear feature (32008), aligned north-west / south-east, was recorded. This had gentle sloping sides, a concave base and measured up to 1.20m wide and up to 0.08m deep. It was interpreted as a furrow, and had been almost completely ploughed away. This may suggest why it was the only furrow recorded in the trench. Furrow 32008 was completely filled with a soft, friable, slightly yellow brown, silty sand with frequent patches of manganese (32009). A layer of compact, orangey brown, sand subsoil (32017), which was up to 0.60m thick then sealed the archaeological deposits. This was truncated by two modern land drains (32004-5 and 32015-16) aligned north-west / south-east across the trench. Modern ploughsoil (32000) covered the trench raising the ground level up to its present level at between 12.30m and 12.08m AOD.

5.11.7 Trench 33

The southern spread of anomalies (f14) revealed in the geophysical survey was the principal target of this trench.

It was machine-excavated to natural deposits that were situated at between 21.47m and 20.63m AOD at the base of the trench. They consisted of friable, orange, sand with large patches of light to mid grey and white sands and orange gravels (33001).

In the north central part of the trench a large possible natural cut, sub-rectangular in plan (33060 and 33062) then truncated the natural. This was interpreted as a spring head, which may have formed a pond or pool in the prehistoric period. Its long axis was aligned north-east / south-west and it had moderately steep to steep sides and a flattish base, which appeared to shelve into the natural hillside. The feature measured up to 7m long by 4.80m wide and was perhaps up to 0.70m deep, although it was not totally excavated to this depth. Springhead 33060 and 33062 was filled mainly with compact, light to mid-grey and mid-brown, sandy silts, silty sands and pure fine-grained sand deposits with varying concentrations of gravel, pebbles and cobbles (33003, 33009, 33034-35 and 33061). A fragment of deer bone was recovered from deposit 33003. The most interesting deposit, however, was a further backfill consisting of a friable, dark brown to black, organic, silty sand (33033). This deposit was sampled and was almost entirely made up of elder seeds, with a trace of charcoal. It is highly probable, therefore, that elder trees grew close to or surrounded this springhead when this deposit was formed.

To the west of the pond, a curvilinear feature (33026 and 33051) was then recorded, which may have terminated in the trench. This entered the excavation area on a north-east / south-west alignment before curving northwards. It may have terminated under the baulk left to support a modern land drain. The feature had steep sides, a flat base and measured up to 1.85m wide and over 0.25m deep. It was completely backfilled with a

sticky, mid- to dark grey, silty sand with moderate to frequent cobbles and pebbles and occasional charcoal/organic flecks (33002 and 33052). In the top of 33002 a large number of fragments of pottery of late 1st to early 2nd century AD date were recovered. This may suggest that the ditch had finally gone out of use and was filled in by this date, suggesting that it originally was dug in the late prehistoric (Iron Age) period.

Truncating ditch backfills 33002 and 33052 and pond backfill 33003 was a further slightly curvilinear feature (33021, 33025, 33032 and 33043). This was aligned east - west, but curved slightly to the north-east towards the eastern end of the trench, perhaps following the contour of the slope. The feature terminated in a rounded terminus 0.25m from the western end of the trench and was interpreted as a ditch. This may have formed part of an enclosure perhaps of late Iron Age or early Roman date. The ditch had steep sloping sides, a flattish base and measured between 1.25m and 1.60m wide, and up to 0.57m deep. As this ditch was clearly a linear feature, a number of test slots were hand excavated along its length to sample the backfills. These slots revealed that the ditch contained three fills. The primary fills consisted of interleaving bands of light to dark brown and grey sands, silty sands, sandy silts and dark grey brown, organic, silts (33031, 33036-37, 33045-6 and 33063) suggestive of rapid silting and erosion deposits. These were generally overlain by thicker secondary fills consisting of friable, light to mid-brown, silty sand (33030) probably formed by a slower silting process. Tertiary deposits that filled the upper parts of the ditch were composed of dark grey brown, sandy silts with pebbles and gravel (33022 and 33044), and may indicate a stagnation phase in the top of the ditch backfill. At the western end of the ditch a firm, dark grey to black, organic, silt with laminated bands of organic matter (perhaps reed-based) (33008) accumulated on top of a firm, friable, very mixed, grey to brownish yellow, sandy silt. These deposits in the terminus definitely indicate that the final fill of the ditch formed in a wet stagnant environment. A sample of 33008 mostly consisted of wood, bark and peaty undisaggregated sediment. Elder fruits and seeds and blackberry were present as well as a trace of charcoal suggestive of occupation in the vicinity. The invertebrates included water fleas, beetles (click beetle, weevil and a wood borer) and suggest that the deposit probably formed in an open grassland landscape. It was also suggested that the sample contained bird droppings from roosting birds, perhaps resting in trees close to the ditch.

Truncating the southern side of the ditch backfills described above, a third curvilinear feature (33006, 33023 and 33038) was recorded. This was aligned north-east / south-west but curved slightly to the west at the eastern end of the trench. It had steep sides and a flattish base and measured up to 1.60m wide and 0.55m deep. This feature was interpreted as a realignment or recutting of the earlier ditch. As the ditch appears to have been again re-cut, only a limited number of fills were observed within this ditch. These consisted of compact, light to dark grey brown, sandy silt (33028-9 and 33041), mid grey, clay silt (33039) and soft, dark grey-brown, organic, silt (33007). Deposit 33007 contained a fragment of wood working waste (sf191), a hone stone fragment (sf134), a flint scraper (sf135) and a fragment of dog bone. The scraper was the only worked flint found during the evaluation excavation. Deposit 33041 contained a fragment of Ebor ware pottery dated to the 2nd century AD.

The ditch was again re-cut (33042 and 33054) on the same alignment as 33006, 33023 and 33038. This had moderately steep to steep sloping sides, a flat base and measured up to 1.10m wide and up to 0.34m deep. The primary fill of this ditch re-cut consisted of soft, friable, dark brown, silty sand (33027) and dark grey, clay silt (33040) suggestive of a wet environment when these ditch fills formed. Deposit 33027 was sampled and contained moderately frequent elder seeds as well as traces of charred cereal grain and charcoal, suggestive of occupation close by. A fragment of horse bone was recovered from 33040. Towards the eastern end of the ditch a friable, mid-brown, silty sand (33024), dated by pottery to the 2nd or 3rd centuries AD, then sealed 33027 and leveled off the top of the ditch. Its formation processes suggest a rapid leveling event with drier materials, perhaps originating from a slighted bank, the stagnant environment within the ditch abruptly ceasing.

To the south of Ditch 33006, 33023 and 33038 another possible linear feature (33065) was identified, but not thoroughly investigated. This was aligned north-east / south-west, had steep sides but was not fully excavated. The feature may represent a further ditch, that could measure over 1m wide and over 0.15m deep. It was completely filled with a light grey, silty sand (33064).

Truncating the top of Ditch Fill 33008 was a small sub-square cut (33004). This had steep sides and a concave base and measured 0.45m long and 0.30m deep. The cut was completely filled with a friable, black, organic, silt with occasional wood fragments (33005). Within the fill, a small hoard of four very well-preserved Roman coins (sf114-117) was found. Two of them were *sestertii* of Trajan (AD 97 – 117) whilst the others were *sestertii* of Hadrian (AD 117-138). The four coins showed little sign of wear and may indicate loss in the second quarter of the 2nd century. This suggests that the ditch had been completely backfilled, and was stagnating by c. 120 to 130 AD. A sample of deposit 33005 indicated that there were no remains of a container for the hoard; the sample was rich in uncharred plant remains and contained fragments of insect cuticle. It appears that the pit or hole was a stagnant hollow in the top of the ditch, which was used as the receptacle for the hoard.

To the north-east of Pit 33004 was a crescent-shaped feature (33055). This had steep uneven sides and an undulating base. It measured 1.25m long, 1.00m wide and up to 0.15m deep, and was interpreted as a tree-throw hole. A firm, dark grey, organic, silt (33014) completely filled 33055, the depression probably filling up in a stagnant environment, perhaps around the same time as the formation of ditch fill 33008.

A further curvilinear feature (33047 and 33056) was recorded in the north-western corner of Trench 33. This was aligned north-east / south-west, before curving sharply north at its eastern end perhaps forming the south-east corner of a ditched enclosure. The ditch truncated 33009 and probably earlier ditch fill 33002. The ditch had moderate to steep sloping sides, a concave base on the eastern side, and steep sides and a flat base on its western side. It measured up to 1.70m wide and up 0.50m deep. The westernmost section through the ditch revealed that it was initially filled with a mid- to dark grey, sand (33057), and then secondarily with a similar, slightly siltier deposit with iron pan staining (33058). The northern side of 33058 had been disturbed by extensive animal burrows

(33059). Further east the ditch fill was primarily a silty sand of a slightly browner hue (33048). The enclosure ditch is probably of Roman date.

In the north-eastern corner of the trench a feature (33015) was recorded. This may be a pit or ditch terminus that extends beyond the northern limits of excavation. It was irregular in plan and had gentle to moderately steep sides and a flat base, measuring over 1.55m long, 1.25m wide and up to 0.20m deep. It was completely filled with a compact, mid-grey brown, silty sand (33016) and may relate to the ditched enclosure (33047 and 33056) to the west. Deposit 33016 contained a fragment of Roman imbrex tile.

Layers of compact, light to mid-brown and light grey, sand and silty sand subsoil (33049, 33050 and 33053) then sealed the entire trench to a maximum thickness of 0.76m. This was interpreted as a mix of colluvium (hillwash) and buried ploughsoils. A post-medieval stone-filled land drain (33010-11) then truncated 33049, 33050 and 33053, followed by a network of three modern land drains (33012-13, 33017-18 and 33019-20). Modern ploughsoil finally leveled the trench up to its present height at between 22.18 and 21.11m AOD.

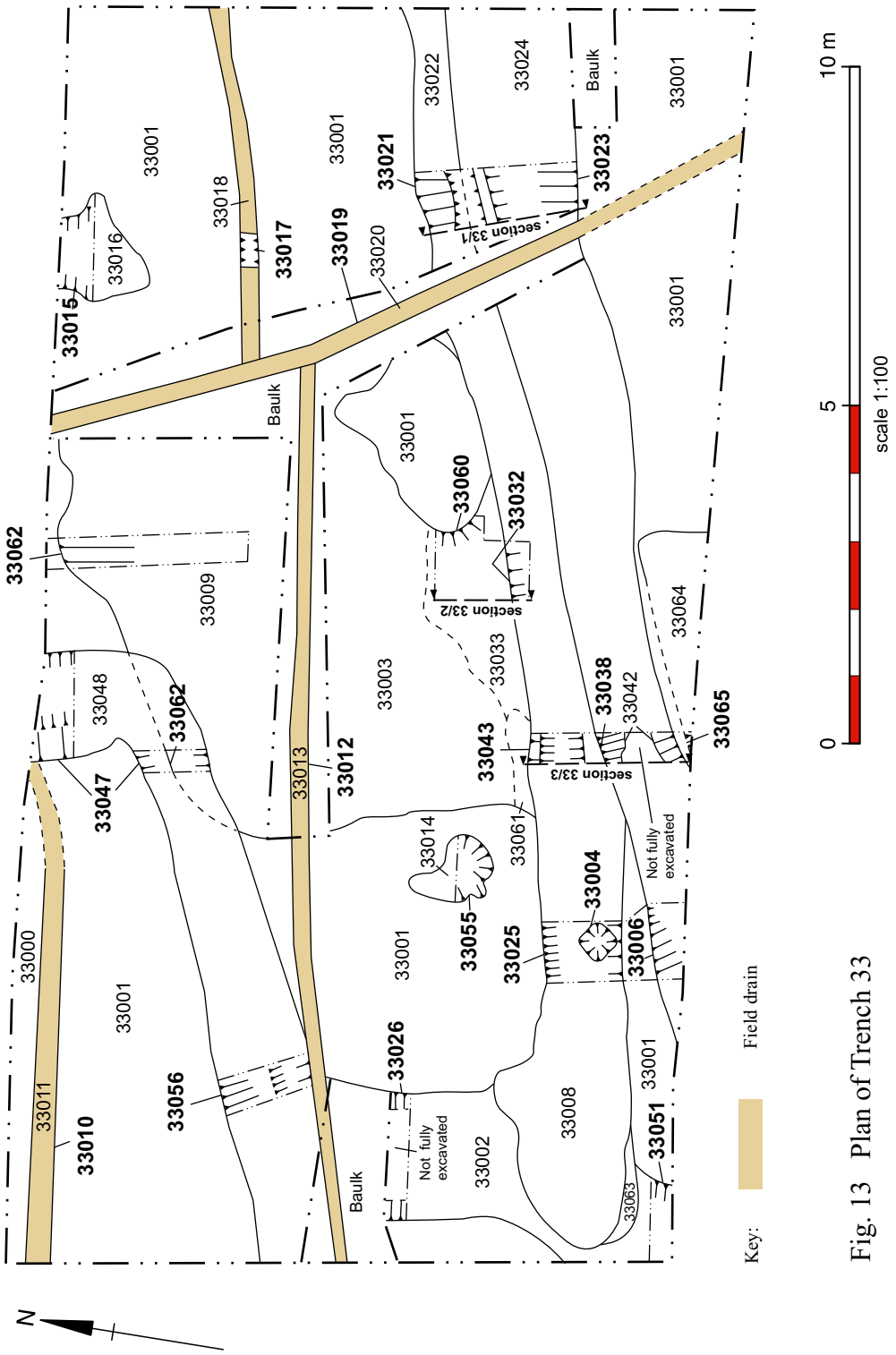

Fig. 13 Plan of Trench 33

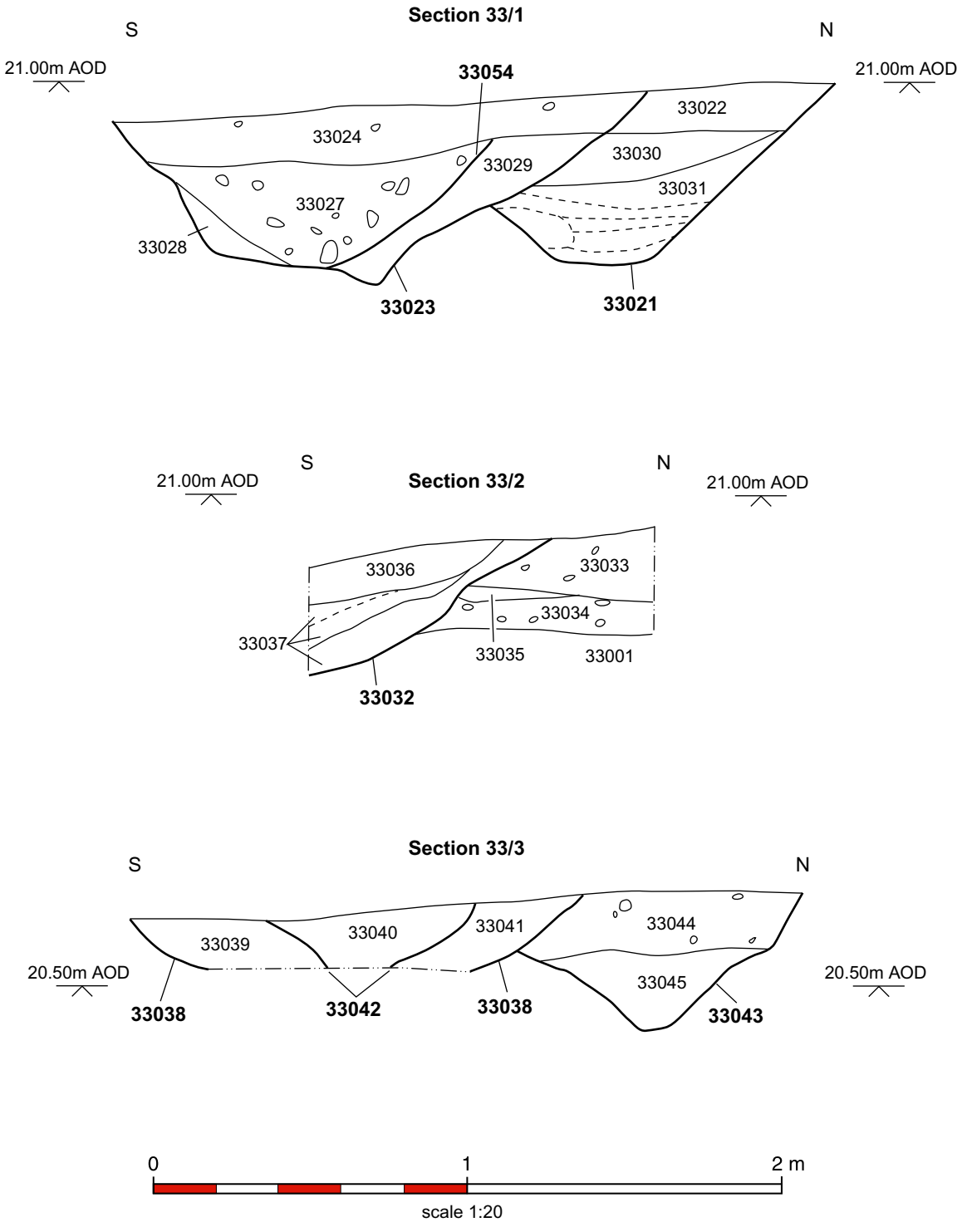

Fig. 14 Trench 33, sections 33/1, 33/2 and 33/3

5.11.8 Trench 34

Positioned to the west of Trench 33, this trench also targeted the southern spread of anomalies (f14) revealed in the geophysical survey.

Natural glacial deposits, consisting of compact, light grey and yellow, sand with occasional patches of very compact, mid orange, clay (34001), were observed across the base of the trench at between 22.19m and 21.31m AOD. Overlying this on the western side of the trench was a light grey brown sand (34008) which was interpreted as a layer of colluvium (hillwash), possibly of post-glacial date.

Truncating the natural in the south-eastern corner of the trench was a linear feature (34003). This was aligned north-east / south-west, had moderately steep sides, a flat base and measured over 1.75m wide and 0.50m deep. This feature, interpreted as a ditch, may be the continuation of enclosure ditch (33047 and 33056) in Trench 33. It was completely filled with a friable, mid- to dark grey brown, slightly silty sand with moderate orange and light grey sand flecks and occasional small rounded pebbles (34002). Deposit 34002 contained a sherd of Roman grey ware dated to the 2nd or 3rd centuries AD.

Situated 2.80m to the north of ditch 34003 and 4.80m from the eastern end of the trench was a sub-oval feature (34007). This had moderately steep sloping sides, but was not fully excavated, so its depth is unknown. The feature's long axis was aligned east - west and it measured 1.34m long, 0.82m wide and over 0.20m deep. A compact, mid- grey brown, sandy silt (34006) backfilled the feature, before the insertion of an animal burial (34010).

Plate 11 *Trench 34, animal burial 34010*

The skeleton was flexed, with a large head and long gracile legs, these attributes may suggest that it was the burial of a young animal, perhaps a foal. Animal burials similar to this are known from the Iron Age and Roman periods, for instance at Shiptonthorpe (Mainland 1988), Hayton and Goodmanham (Hall *et al.* 2003), East Riding of Yorkshire. The bone was very fragile, and in places, had decayed to a body stain, so for this reason it was left in situ and not lifted. A further layer of 34006 then sealed the burial.

A layer of friable, light to mid-brown, slightly silty sand subsoil (34005) then sealed the entire trench to a maximum thickness of 0.25m. A modern land drain (34004 and 34009) truncated 34005 on a north-east / south-west alignment. Modern ploughsoil then covered the trench and leveled to its present height between 22.81m and 21.74m AOD.

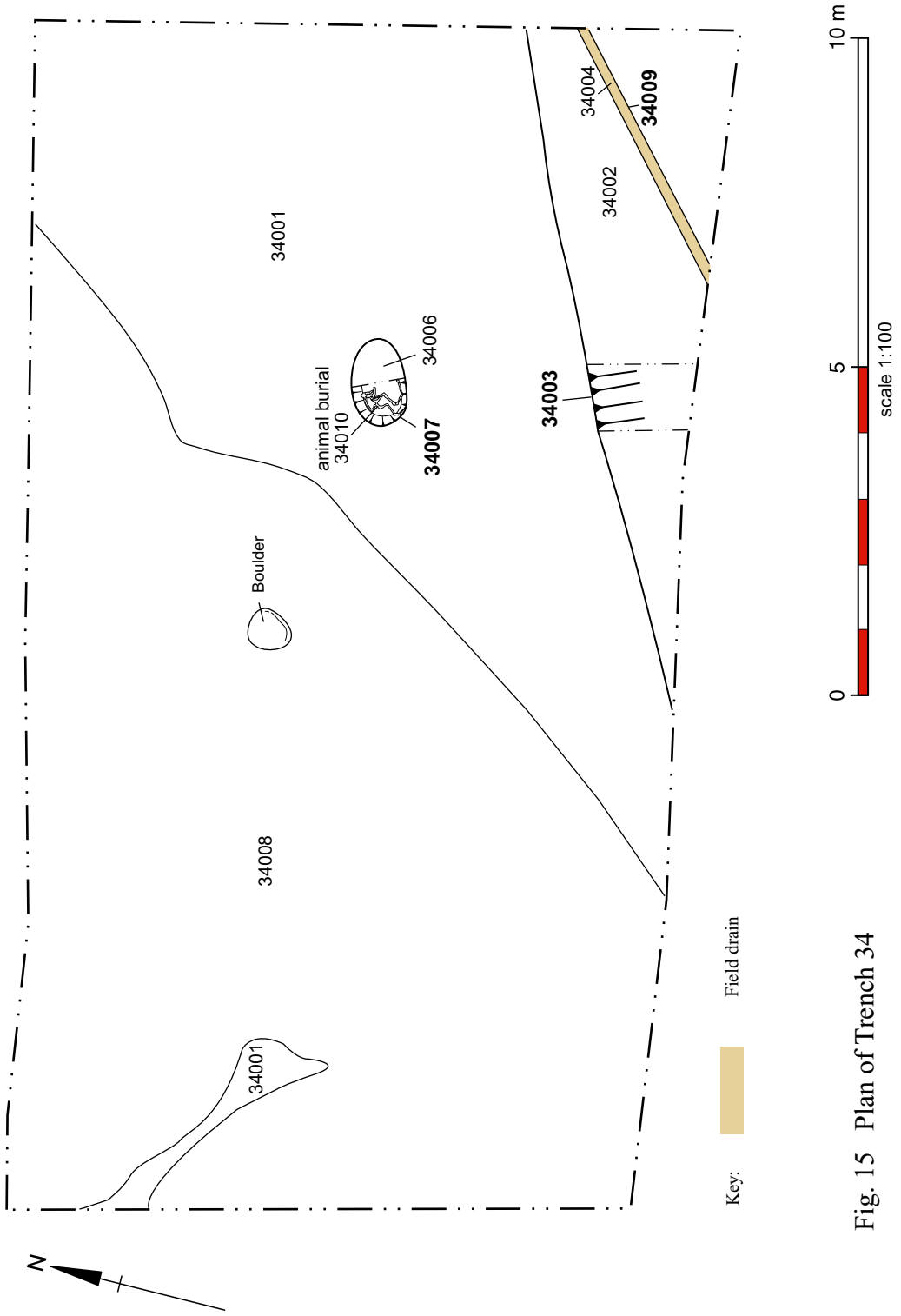

Fig. 15 Plan of Trench 34

5.11.9 Trench 35

Situated to the north-west of Trench 34, this trench targeted the western spread of anomalies, known as f14, revealed in the geophysical survey (Bartlett 2003).

The trench was machine-excavated to natural deposits which consisted of firm, mixed, pink to light brown, sandy clays and soft, greyish yellow, sands (35001). These deposits were revealed in the base of the trench at between 25.16m and 24.36m AOD.

On the southern side of the trench a large feature semi-circular in plan (35007) was recorded. This may be part of a larger feature – perhaps a ditch terminus or large pit. It had gentle to moderately steep, sloping sides and a concave base, and measured up to 3.5m long, over 1.75m wide and up to 0.66m deep. Feature 35007 was completely filled with a compact, mid-brown, silty sand (35008) which contained the poorly preserved disarticulated remains of a cow, with the fore limb, and part of the skull present.

To the north of 35007 a linear feature (35003) was observed truncating the natural. This was aligned north - south, had steep sides, a flattish base and measured 1.07m wide and 0.52m deep. It was interpreted as a gully which appeared to terminate in the middle of the trench. This may be deceptive, however, because on investigation of the terminus it was revealed that gully 35003 had almost been completely ploughed out in this area. It was filled with three deposits. The earliest consisted of a soft, mid-orange brown, slightly silty sand (35016) with occasional rounded gravel. This deposit had clearly slumped into the gully from the east. Deposit 35016 was sealed by compact, rounded pebbles and cobbles, in a matrix of mid- grey brown, slightly clayey sandy silt (35015) which had slumped in from the west, perhaps suggestive of slighted bank material. Finally a soft, friable, mid-orange brown, slightly silty sand (35004) backfilled the ditch. The last fill may have been the result of erosion and silting.

To the west of the two features described above a large feature, curvilinear in plan (35010-11) was discovered. This was aligned north-south, but curved to the west slightly at its northern end. This may be interpreted as a large boundary ditch. It had steep sloping sides and a flattish base and measured up to 2.45m wide and 0.75m deep. The southernmost section was filled with three deposits suggestive of successive dumping into the ditch. The primary fill was a compact, orange and black, charcoal rich, sand (35013). This appears to have been cast in from the eastern side of the ditch, and may indicate burning in the vicinity. The primary deposit was then sealed by a compact, charcoal-flecked, mid - brown silty sand (35014) and finally a compact, grey-brown, silty sand (35009) leveled off the feature, the latter perhaps being derived from erosion and silting processes. In the northern section the whole feature was filled with a compact, mid-brown, silty sand (35005 and 35012), with no evidence of burning. This may suggest that certain sections of the ditch were infilled at different times and using different processes. Deposit 35005 was pottery-dated to the 2nd or 3rd centuries and contained lead working waste (sf142 and 143), whilst 35009 was pottery-dated to the late 3rd or 4th century (with an intrusive sherd of 14th century pot). This evidence suggests that the ditch probably dates to the late Roman period – perhaps the mid to late 3rd century AD.

Approximately 5.5m to the east of ditch 35010-11 a further linear spread of compact,

mid- to dark brown, silty sand (35006) was observed in plan. Upon excavation this was revealed to be less than 0.05m thick, and may be the basal deposit within a medieval furrow (35017) which measured c.2.75m wide. The furrow was aligned north-north-west / south-south-east across the trench. A layer of friable, light greyish, orangey-brown, silty sand subsoil (35002) up to 0.46m thick then sealed the entire trench. This was interpreted as a buried ploughsoil. A further ploughsoil (35000), of modern date, then sealed the entire trench and brought the ground level up to its current level, between 25.53m and 23.95m AOD.

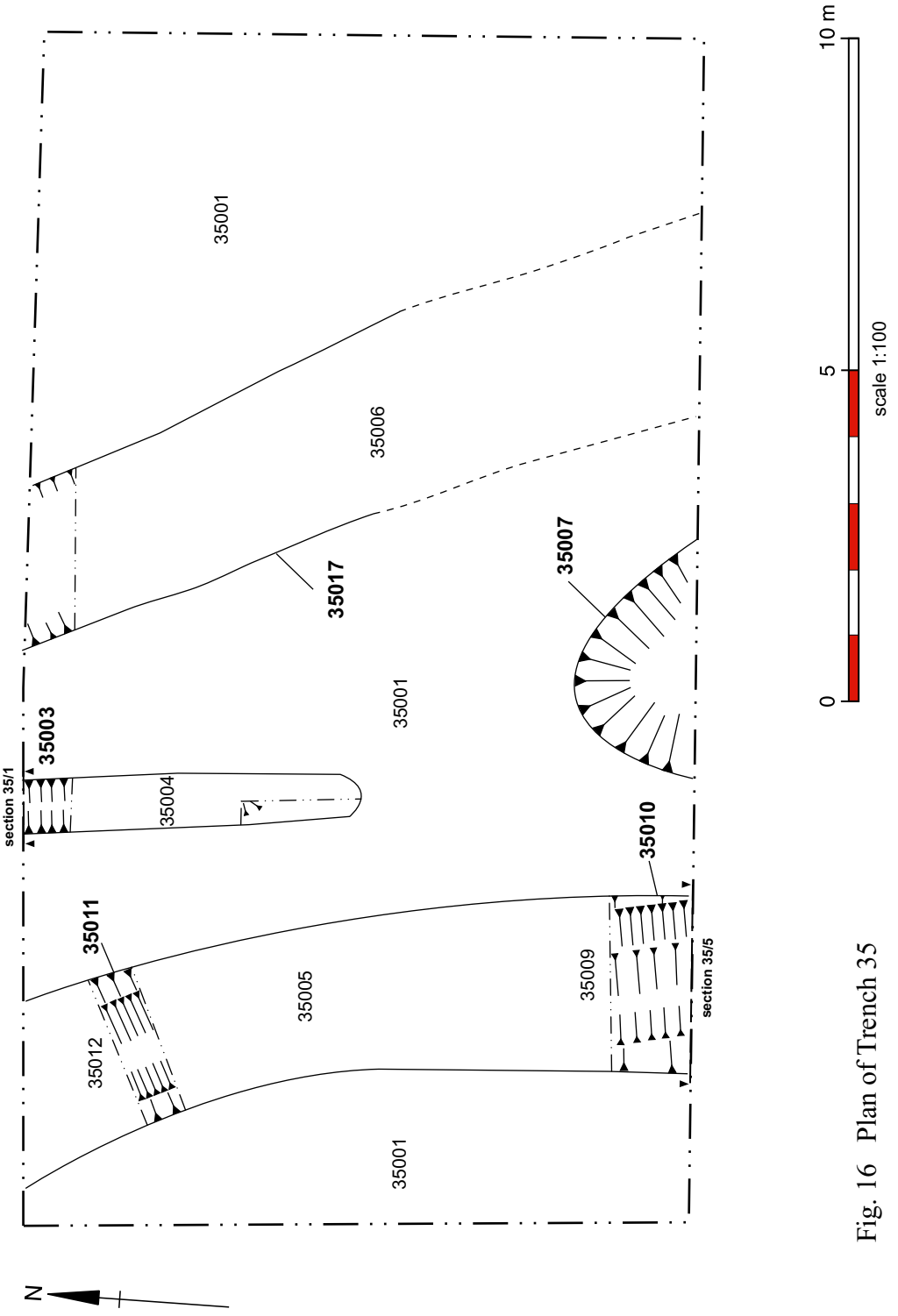

Fig. 16 Plan of Trench 35

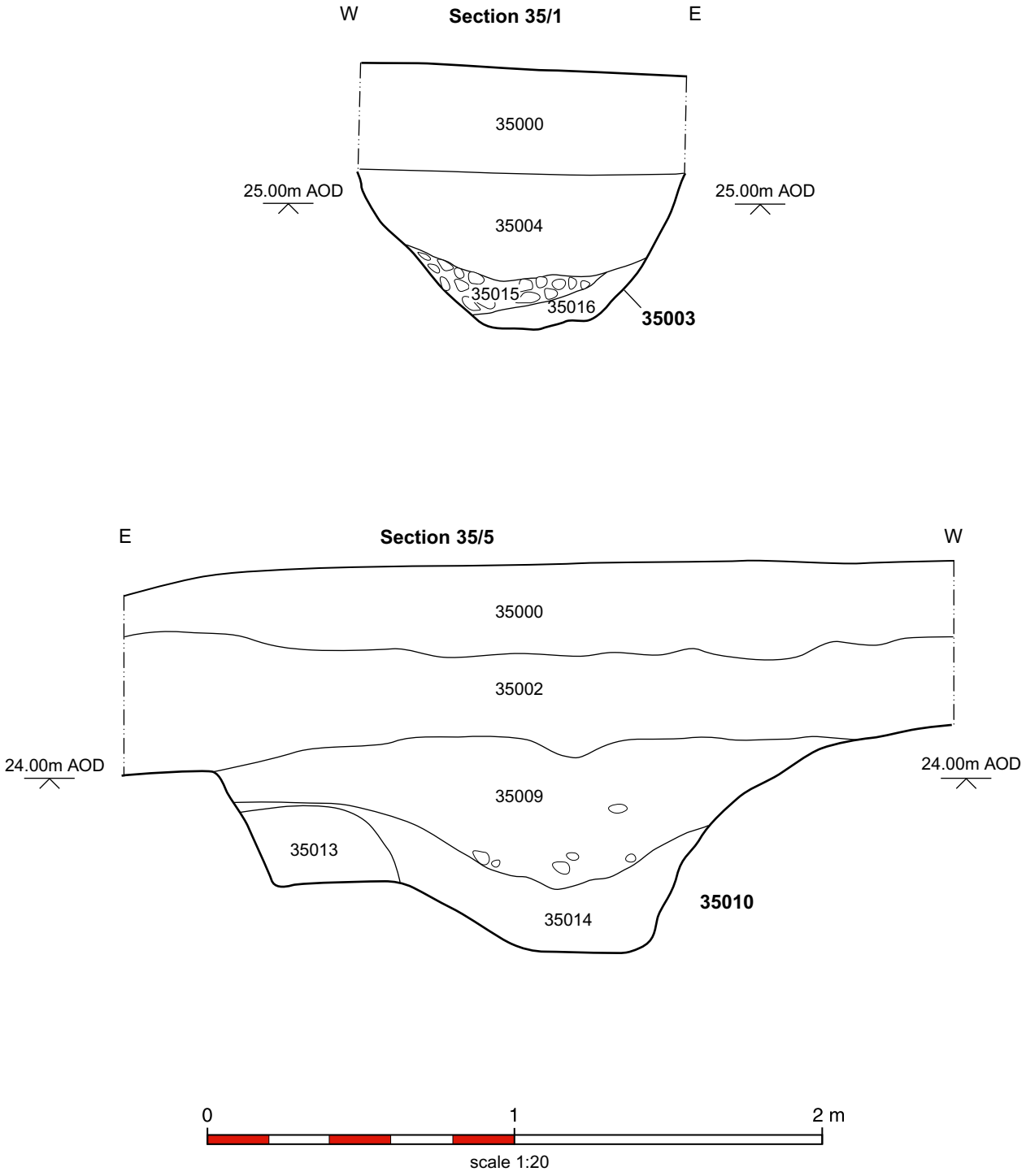

Fig. 17 Trench 35, sections 35/1 and 35/5

5.11.10 Trench 36

Geophysical anomaly f14, located in the north-eastern part of Field 8, was the main target of Trench 36.

Plate 12 *Trench 36, working shot, looking north-east*

Deposits of natural origin consisting of moderately compact, light to mid-yellow brown, silty sand (36001) and very compact, mid-yellow brown to reddish brown, mottled clay (36031) were located at the base of the trench at between 25.83m and 24.95m AOD. Sealing the majority of the trench was a layer of moderately compact, mid-orange and yellow-brown, sandy silt (36023-4 and 36032) which was interpreted as colluvium (hillwash). These deposits filled several natural undulations or depressions (36040-1 and 36043) across the trench, which were not fully excavated. The colluvium measured up to 0.40m thick. Colluvium 36024 contained several sherds of Roman pottery of 2nd to 3rd century date in the top of it as well as fragments of iron chain links (sf127), whilst 36032 contained a Roman coin (sf149) dated to AD 259-68, showing little sign of wear, as well as lead alloy metalworking waste (sf148). All of these finds may have worked their way into the top of the colluvium by a combination of animal burrowing, worm disturbance and root action.

In the central portion of the trench, two linear spreads of compact dark grey-brown silty clay with occasional limestone rubble and cobbles were located (36026-7). These were up to 0.10m thick, aligned north - south, and were interpreted as leveling deposits.

To the east of the levelling material, a building was then constructed. This was rectangular in plan, aligned north-west / south-east, and measured over 7.25m long and

8.25m wide. The south-west and north-west walls consisted of compact, closely packed, rammed cobbles and limestone rubble in a matrix of mid- to dark brown and yellowish brown, silty clay (36009-10, 36018, 36029 and 36036). These were packed into construction trenches (36035) with moderate to steep sloping sides and rounded bases which measured up to 1.50m wide and 0.45m deep. Foundation material (36009) was pottery dated to the 2nd - 3rd centuries AD. On the north-eastern side of the building a set of three holes (36020, 36049 and 36051) sub-square in plan were aligned parallel to the south-west wall of the building. These had steep, near vertical sides, and undulating bases and measured up to 0.75m long and 0.30m deep. A gap of c. 3.25m was evident between 36020 and 36051, whilst only a 2m space existed between 36020 and 36049. These holes were completely filled with rammed cobbles in a matrix of very compact, slightly greenish yellow and grey, sandy clay (36021, 36048 and 36050). These features were interpreted as the foundations for post-pads as the northern most post pad survived (36052). Post-pad 36052 consisted of two large blocks of limestone, the first measuring 420mm x 300mm x 120mm, and the second measuring 250mm x 220mm x 120mm. It is envisaged that the south-west and north-west walls of the building supported either a timber beam or a limestone footing, though no evidence for either was located, and the north-east wall supported a sequence of limestone blocks, which in turn supported timber upright posts, perhaps forming a veranda that faced out towards the Wolds.

In the north-west corner of the building a clearance cut (36069) sub-rectangular in plan had been excavated inside the building, running up to the north-west and south-west walls. This had vertical sides, a flat base and measured over 3m long and 2.14m wide. The face of the north-west side of the clearance cut appears to have been plastered with creamy white plaster (36063) and may suggest that the whole of the interior walls of the cut were similarly treated. The base of the clearance cut was then skimmed with an off-white to yellow mortar with rounded gravel and small pebbles (36015) to form a level floor. On top of this a hypocaust was constructed. This consisted of up to 15 pillars (*pilae*) built out of pinkish red tile, only six of which now remain (36013 and 36070-74), on top of a pinkish red mortar bedding (36014 and 36075-85).

Plate 13 *Trench 36, hypocaust pila 36072*

Those *pilae* situated adjacent to the north-west wall of the building survived to four tiles in height (0.18m), whilst those in the centre were up to three tiles in height (0.14m). All of the *pilae* were mortared together with a pinkish cream and white mortar. The basal tile for those close to the north-west and south-west walls were rectangular in shape and measured either 320mm long, 280mm wide and 25mm thick or 320mm long, 220mm wide and 25mm thick, whilst the basal tile for the central *pila* was square, measuring 280mm long and 25mm thick. All of the other tiles making up the second, third and fourth courses of each *pila* were square and measured 200mm long by 25mm thick. The *pilae* were set in three rows, aligned north-west / south-east, parallel to the south-west and north-east walls and probably 5 rows aligned north-east to south-west. The gap between the rows aligned

north-west to south-east widened slightly to the south, being c. 0.75m at the north-west end and c. 0.85m at the south-east end. The five rows aligned north-east to south-west appear to be evenly spaced, measuring 0.90m to 0.95m between each *pila*.

Plate 14 *Trench 36, hypocaust pilae*

To the east of the hypocaust, two limestone block foundations were constructed. The first (36012) consisted of two limestone blocks measuring 350mm - 400mm long, 250 and 350mm wide and 70mm thick. The blocks were laid flat, aligned north-east / south-west and mortared with a similar mortar to the *pilae*. Foundatios 36012 appears to have been scorched and it may have supported a flue structure bringing hot air from the furnace to circulate under the floor which the hypocaust supported. To the north of 36012, two courses of yellow to creamy white limestone slabs (36011), created a wall foundation, perhaps for a partition wall, aligned north-west / south-east, between 36012 and the north-west wall of the building. This was mortared with a creamy off-white mortar and measured c. 1.50m long, 0.25m wide and up to 0.16m thick. In the south-eastern corner of the hypocaust a further limestone block foundation (36062) was recorded. This consisted of two blocks of limestone, unmortared and each measuring 400mm long, 300mm wide and 150mm thick. These may have also been part of a wall foundation, perhaps for a partition wall, aligned north-east / south-west.

In the north-east corner of the building two large limestone rubble foundations (36053 and 36055) were constructed within separate construction trenches (36054 and 36056). The southernmost (36055) was constructed of large, roughly shaped, unmortared,

limestone blocks which measured 400mm - 500mm long, 300mm - 400mm wide and 200mm thick. The foundation, possibly to support the south side of a furnace structure, measured 1.6m long by 0.55m wide and was not excavated. The northern foundation (36053) consisted of frequent, medium-sized chunks of rough limestone rubble in a matrix of mid-orange brown silt, with occasional mortar flecks. This foundation measured 1.95m long by 1.12m wide and appeared to be of a different build to the southern foundation. This foundation may have supported the north side of a furnace structure or have been part of the north-west wall of the building and appears to be stratigraphically later than post-pad footing 36052. Foundations 36053 and 36055 were positioned 1.60m apart.

Plate 15 *Trench 36, votive pots 36003-7*

Just to the south of the southern furnace structure foundation, inside the building, a group of five pots (36003-7) had been set into holes circular in plan (36057-61). The holes varied between 0.09m and 0.11m in diameter and up to 0.05m deep. The pots were small, well-burnished, thin-walled jars or beakers, and may represent a votive offering to bless the building. The votive pots were dated to the 2nd century suggesting a 2nd century date for the construction of the building.

The building is best interpreted as part of a Roman villa complex, incorporating a probable bath house. This building would have been constructed in the mid to late 2nd century, and signifies a change of ownership and land use and its organisation in the area, the previous Iron Age and Early Roman field systems probably going out of use at this

point. Situated c. 3.5km from the fortress and civilian settlement of *Eboracum*, and close to the Roman approach road from the east, it is sited in a classic villa situation, on a south-facing slope with stunning views of the Wolds to the East and the Vale of York to the south. The building's position, its pretension, and the obvious effort and expense needed for its construction signifies that this was an important building in the landscape, and indeed its construction points to the Romanisation of the landscape and this part of the Vale of York.

Plate 16 *Trench 36, working shot, looking north-east*

To the north-west of the building a feature (36037-39) curvilinear in plan was observed. This was aligned north-east / south-west, before curving sharply to the north-west at its eastern end. It may represent an enclosure ditch to the north-west of the building, perhaps part of a field system or stock enclosure. The ditch had moderately steep sides and a flattish base. Its southern side measured between 0.50m and 1m wide and it was only up to 0.10m deep, probably signifying that this area had been plough-damaged. The eastern end, where the enclosure ditch turned north-west, measured 2.25m wide and up to 0.15m deep. The ditch was completely filled with a moderately compact, dark brown, clay silt (36030 and 36065-66), which contained 2nd century pottery, disarticulated animal bone and Roman brick and tile.

To the west of the building, two linear slots (36042 and 36064) were observed truncating the earlier levelling deposits 36026-27. These slots were aligned parallel to the building, had steep sides and flat bases and measured up to 3m long, 0.60m wide and 0.20m deep. They may have held wooden beams, perhaps to support a wooden structure, separate from or leaning against the western side of the building, or scaffolding for the building during construction or demolition. The slots were filled with moderately compact, very dark brown to black, silty clay (36028 and 36047).

The building appears to have been occupied into the 3rd century, until perhaps as late as the middle of that century, but was then demolished, robbed and the ground cleared. The hypocaust and the area beneath the furnace base was filled with 36008, a compact, dark brown to black, ashy silty sand with frequent building rubble (brick and tile fragments, mortar, and limestone), occasional black charcoal and soot flecking, the latter being densest in the area to the east of the hypocaust, between it and the furnace. This material was pottery-dated to the 2nd or 3rd centuries AD and contained iron nails (sf121 and

sf137) and a copper alloy vessel fragment (sf136). A sample of this deposit revealed that it contained wood charcoal including oak, as well as traces of charred heather root/twig material perhaps from peat or turves. This may suggest that the materials burnt in the furnace to heat the hypocaust included wood and turf.

Once the building was cleared and the ground leveled, a linear feature (36046) was constructed to the west of the building. Feature 36046 was aligned north-west / south-east and had steep sides; it was not completely excavated due to the depth restrictions on the trench. This was interpreted as a boundary ditch similar to that located in Trench 35, and measured over 1m wide and over 1.35m deep. The ditch was filled with three deposits consisting of moderately compact, dark grey-brown to ashy black, clay silt with moderate brick and tile fragments and occasional pebbles, yellow clay patches and rounded stones (36022, 36033 and 36045). The ashy nature may suggest that demolition material from the clearance of the Roman building may have been burnt in the vicinity. The purpose of this activity is unknown. Deposits 36033 and 36045 were pottery dated to the late 3rd and 4th centuries. The boundary ditch may therefore be similar to that excavated in Trench 35, probably being dug in the mid- to late 3rd century AD. Deposit 36033 was sampled and was found to contain charred cereal grains (oats, barley and wheat) as well as evidence for the burning of peat/turves in the form of heather root/twig and sedge nutlets. Charcoal identified as oak and ash was also recovered.

A narrow linear feature (36044) aligned north-west / south-east was observed between Ditch 36046 and Slots 36042 and 36064. This had steep sides, a flat base and measured 0.52m wide and 0.23m deep. This may be interpreted as a slot for a land drain (the pipe for which was not laid), or a deep plough scar. The land drain interpretation is favoured here due to the regularity of the cut, and its isolation. Modern ploughsoil then sealed the whole trench and leveled it up to its present height between 26.53m and 25.31m AOD.

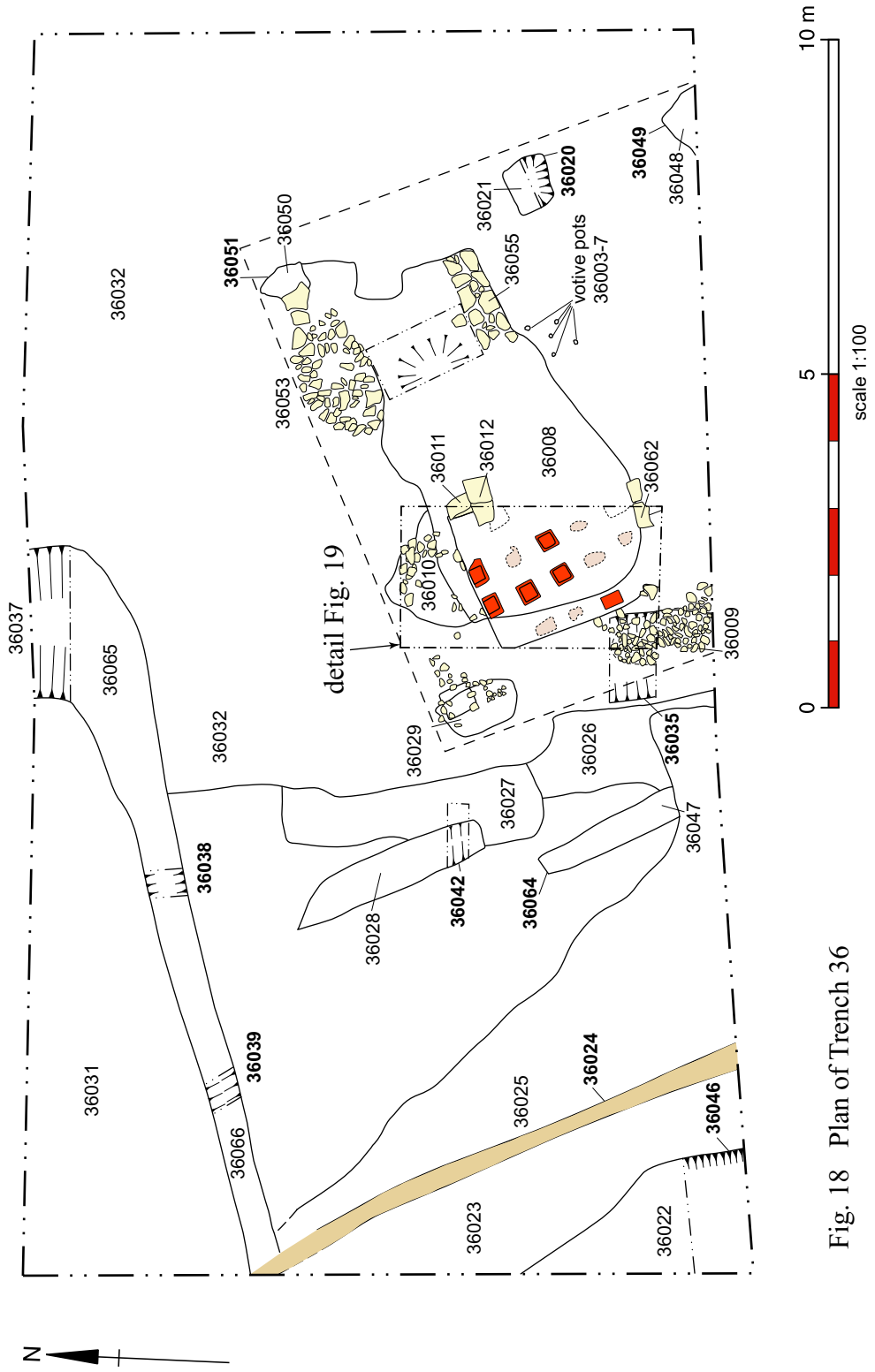

Fig. 18 Plan of Trench 36

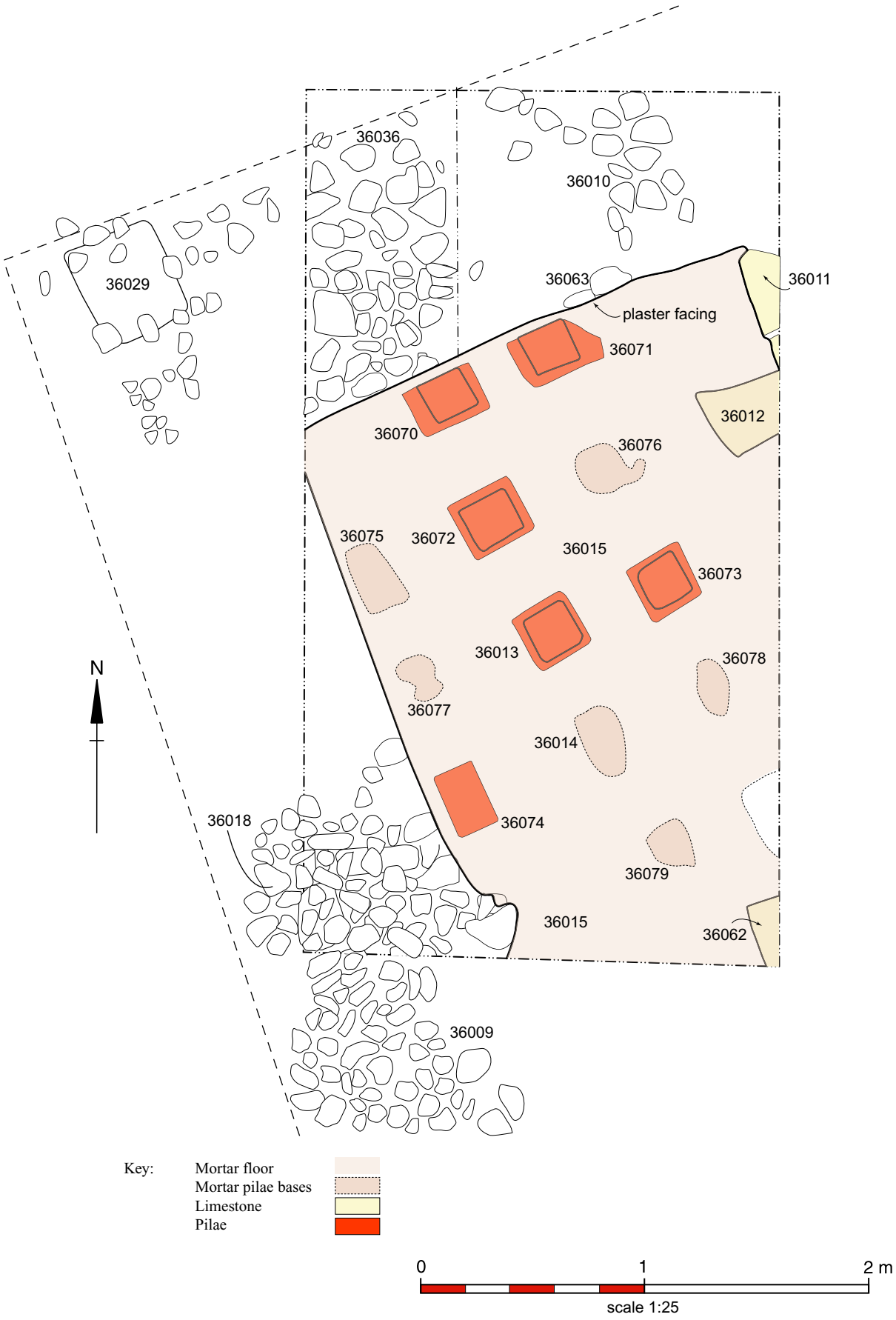

Fig. 19 Trench 36, detailed post-excavation plan of hypocaust

5.11.11 Trench 37

Targeting the spread of geophysical anomalies in this part of Field 8, the trench was situated on a part of the field that sloped west to east.

The earliest deposit located within this trench was of natural origin and consisted of a fine-grained, yellow sand (37001). This was situated c. 25.11m AOD at the base of a machine dug test-pit in the south-west corner of the trench. Above this a second natural deposit of compact, light orange brown, silty gravel and sand (also numbered 37001), was observed spreading across the whole trench from between 26.58m AOD to 25.11m AOD. A compact, mid-brown, sandy silt subsoil (37002) then sealed the trench to a maximum thickness of 0.25m before a layer of modern ploughsoil (37000) covered the entire trench leveling it up to between 27.10m and 25.65m AOD. No significant archaeological deposits were recovered.

5.11.12 Trench 38

Trench 38 was located to the south-west of Trench 37, and positioned to target the spread of anomalies to the north-west of f14 revealed in the geophysical survey.

Compact, orangey brown and yellow brown, sands and gravels (38001) were the earliest deposits revealed across the base of the trench. These were of natural origin and were situated at between 25.10m and 24.48m AOD.

Truncating 38001 on the south side of the trench were two features sub-rectangular in plan (38006, 38010, 38019 and 38028). These were interpreted as quarry holes. The westernmost (38019 and 38029) had steep, near vertical sides, a flattish base which sloped from north-east to south-west and measured over 3.75m long (extending beyond the southern limit of excavation), 4.75m wide and over 0.60m deep. The eastern quarry hole (38006 and 38010) had steep sides and a flat base and measured over 3.65m long (also extending beyond the southern limit of excavation) and over 2.50m wide (extending beyond the eastern limit of excavation) and up to 0.55m deep. Both of the quarry holes were backfilled with compact, mid-brown and orangey brown, sandy silts and clay silts (38015-17 and 38025-26) with occasional rounded gravel and charcoal flecks. The uppermost fills (38005, 38009, 38018 and 38027) in both quarry pits, however, were compositionally similar, but of a dark grey-brown hue. It is possible that the upper portion of the quarry holes stagnated as the lower fills settled, but no organic material survived. Deposit 38017 was pottery-dated to the 2nd century and contained iron nails (sf138 and sf140) and 38005, which also contained iron nails (sf133), and 38018 were pottery dated to the 2nd - 3rd centuries AD.

The quarry holes were dug for cobbles for the construction of a road or path, directly to the north. It was aligned north-east / south-west, and was composed of compacted large cobbles and large angular stones in a matrix of fine, compacted, mid-brown, clay silt (38008).It measured c. 5.25m wide by up to 0.52m thick and was cambered. The northern edge of the westernmost quarry hole must have been backfilled completely before the construction of the road, as the projected alignment of the road covers the north-western corner of the quarry hole.

Plate 17 *Trench 38, section through roman road 38008*

The road must have led from the north-east to the Roman building in Trench 36. Modern ploughing had damaged the surface of the road so badly that patches of cobbles spread over much of the trench. A heavily worn *sestertius* of Faustina II (sf166) post-145 AD in date was recovered from the road surface. The numismatist suggests that it was probably lost in the mid third century.

Flanking the northern side of the road was a linear feature (38014 and 38023-24). This was interpreted as a ditch which ran parallel to the road. It had moderately steep to steep sides and a base, which though concave in profile towards the east flattened out towards the west, perhaps due to the nature of the underlying natural. The ditch may have originally measured between 1m and 1.15m wide and up to 0.34m deep. Its eastern end was completely filled by a moderately compact, mid-grey brown sandy silt (38004 and 38022) with occasional pebbles and charcoal flecks, but towards the west, a section of the road may have slumped into the ditch as this section was filled with cobbles set around a matrix of mid-brown, silty sand (38013). Deposit 38004 was pottery dated to the 3rd century.

The roadside ditch was then re-cut; the new ditch (38002, 38012 and 38021) truncating the northern side of the earlier one. The re-cut had steep sides and a rounded base to the east, the base flattening again in profile towards the west. This new roadside ditch measured between 0.80 and 0.90m wide, and up to 0.32m deep. It was completely filled with a moderately compact, mid- brownish grey, sandy silt (38003 and 38020) to the east and a light brown, silty sand (38011) further west.

Sealing the entire trench was a layer of compact, orange-brown silty sand subsoil (38007) which was up to 0.30m thick. This was pottery-dated to the late 3rd - 4th century AD. Modern ploughsoil then leveled the ground to its present height at between 26.30m and 24.95m AOD.

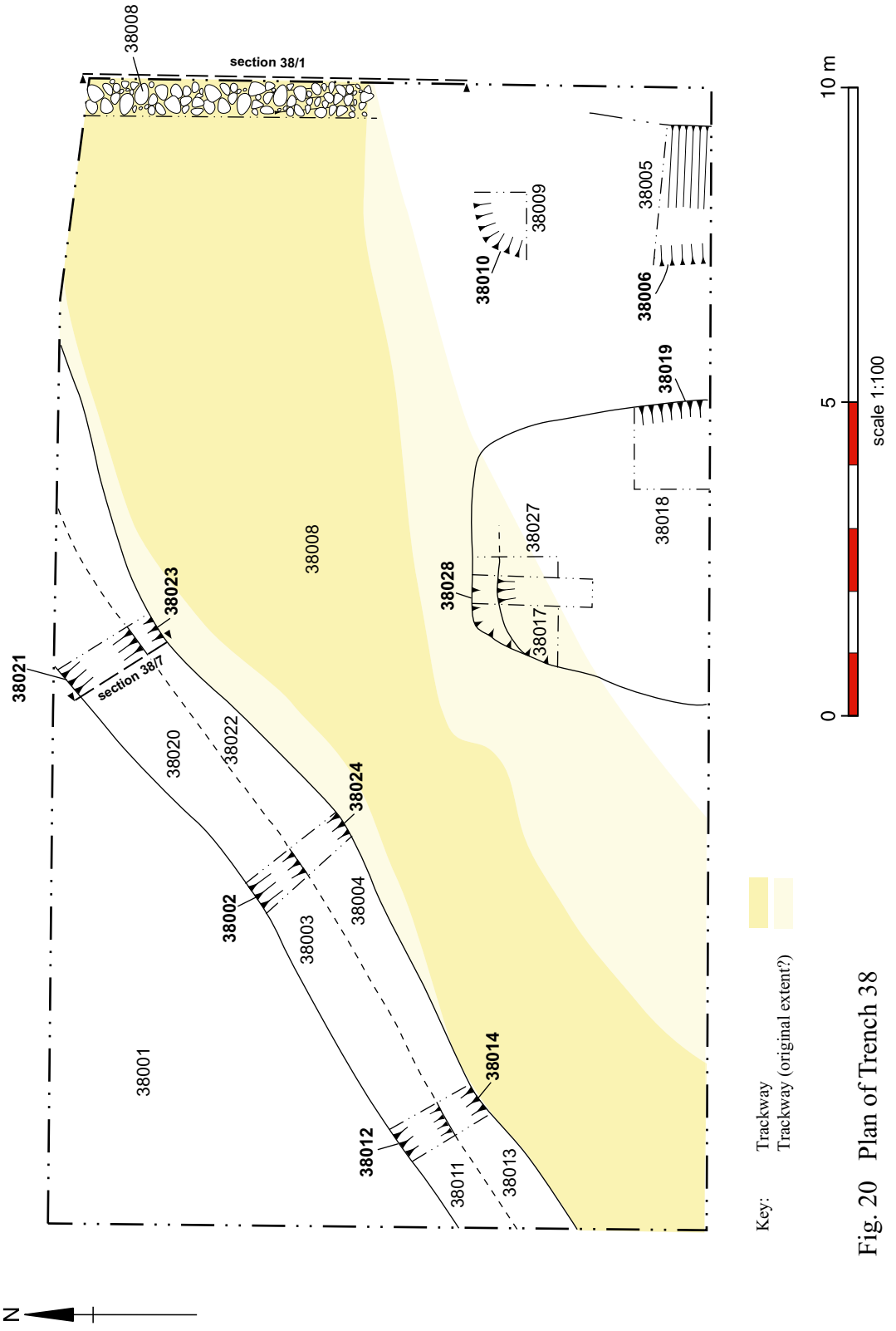

Fig. 20 Plan of Trench 38

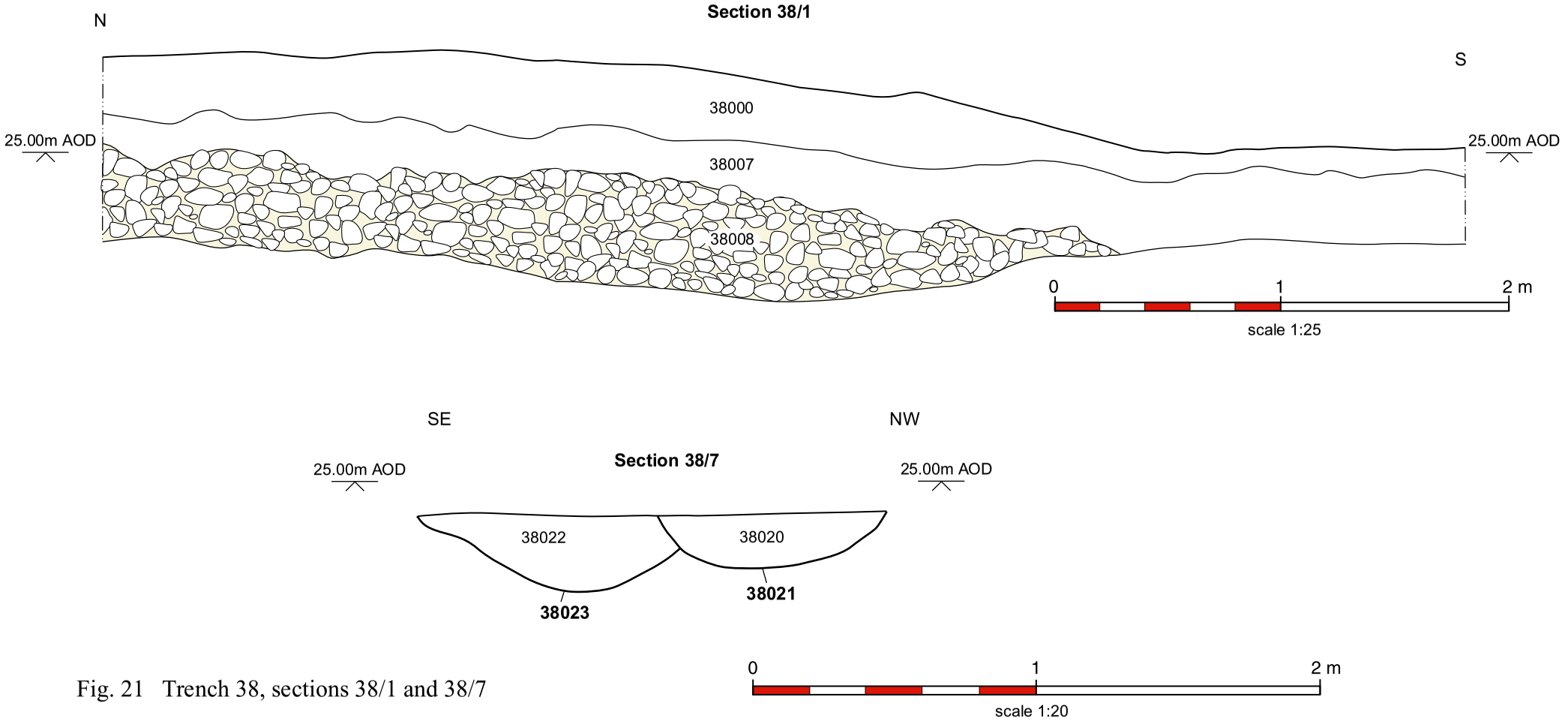

Fig. 21 Trench 38, sections 38/1 and 38/7

5.11.13 Trench 39

Situated to the south-east of Trench 38 and targeting the eastern limits of the anomalies identified as f14 in the geophysical survey, Trench 39 was positioned at the base of a slight shelf or flattening out of the hillside in Field 8. At present, it is difficult to say whether this terrace is of natural or man-made origin.

Natural deposits consisting of fine, light orange-brown, silty sands and gravels (39001) were revealed at the base of the trench at between 22.86m and 22.08m AOD. At the northern end of the trench a hole circular in plan (39006) with steep, near vertical sides, a concave base, and measuring 0.35m in diameter and up to 0.30m deep was located. This was filled with cobbles and peagrit (39005) which may signify a natural origin.

A large linear feature (39012, 39026 and 39028), aligned north-east / south-west then truncated 38001 at the northern end of the trench. This had steep sides, but was not fully excavated due to depth restrictions. It measured over 2.75m wide and over 0.30m deep and was interpreted as a large ditch. Completely backfilling Ditch 39012, 39026 and 39028 was a compact, orangey brown, silty sand (39011, 39025 and 39027). Deposit 39011 was pottery-dated to the 2nd century AD and contained an iron nail.

A second large linear feature, probably a ditch (39019, 39030 and 39032) was identified between 0.75m and 2.00m to the south of Ditch 39012, 39026 and 39028. This was aligned east-north-east / west-south-west, had steep sides and measured up to 2.45m wide and over 1.10m deep. It was not fully excavated due to depth restrictions. Two fills were recorded in the excavated portion of this feature. The earliest consisted of a compact, light to mid-grey-brown sandy silt which contained occasional charcoal flecks and occasional orange sand spotting (39020). This deposit was pottery-dated to the 2nd century. The latest fill consisted of a similar deposit (39021, 39029 and 39031) only being of a light orangey brown hue, and was pottery-dated to the 2nd-3rd centuries AD.

Truncating the latest backfill of the southernmost ditch was a pair of features parallel and curvilinear in plan, aligned north-north-west / south-south-east, interpreted as gullies. The westernmost (39018, 39034, 39038, 39042 and 39049) had moderately steep sloping sides and a flat base, and measured up to 0.68m wide and 0.40m deep. This gully was completely filled with moderately compacted, mid-brown sandy silt (39017, 39033, 39037, 39041 and 39048) with occasional patches of orange and red sand, perhaps indicating that the fill contained burnt material. In one of the sections that was dug across this gully, 6m from the southern end of the trench, the articulated legs of a large mammal, possibly a horse or cow were located with a cluster of adjacent stones. This may represent an animal burial or offering. Backfill 39017 which sealed the burial was pottery-dated to the late 3rd or 4th centuries AD and contained an iron nail fragment (sf126). The eastern gully (39024, 39036, 39040, 39044 and 39051), situated only c. 0.05m to the east of the other at its northern end but c. 0.85m to the east at the southern end of the trench, had steep sides, a concave base and measured up to 0.60m wide and 0.30m deep. This was completely backfilled with a compact, mid-orangey brown, sandy silt (39022, 39035, 39039, 39043 and 39050) which contained moderate to frequent angular gravel and occasional charcoal flecks. The gullies probably formed a sub-

division of a bigger field system or a re-definition of field boundaries in the mid- to late 3rd century.

Once the parallel gullies had been backfilled, a set of four features truncated their combined backfills on the same alignment. The northernmost was sub-square in plan (39008), with moderately steep sides, a flat base and measured 0.58m long and 0.10m deep. This was interpreted as a post-hole. Positioned 1.55m to the south-west of 39008, a large pit (39010) circular in plan was dug. This had steep sides, a concave base and measured 1.90m in diameter and 0.60m deep. Two further shallow features sub-oval in plan (39014 and 39016) were located 1.70m and 5.65m to the south and south-east of 39010. These had gentle sloping sides, flat bases and measured between 1.75m and 2.02m long, between 1.20m and 1.35m wide, and up to 0.28m deep. The features were backfilled with similar deposits consisting of moderately compact, mid- to dark brown, sandy silt with varying concentrations of cobbles and pebbles, bone flecks and fragments, and charcoal flecks (39007, 39009, 39013 and 39015). A sample from 39009 revealed that it contained poorly preserved charred barley grains, some wheat and perhaps even rye. Charred heather root or twig was also noted as well as some spelt (which may argue for a Roman date for this deposit). Deposit 39013 was pottery-dated to the late 3rd or 4th centuries AD and contained an iron nail, whilst 39009 was pottery dated to the Anglian period (see the pottery report, pages 134-5); backfills 39007 and 39015 contained residual pottery of the 2nd to 3rd centuries. Iron nails (sf132 and sf141) were also recovered from 39015. These features may date to the late Roman or early Anglian period but interpreting them is problematic. They may have been either a line of holes dug for trees or shrubs to redefine a boundary, or a pit alignment of a similar function. Whatever their function, they appeared to use an existing hollow in the landscape for their purpose, or to closely follow that hollow which may have been a significant boundary within the landscape.

In the north-western corner of the trench a feature (39004) curvilinear in plan was recorded. This was aligned north-west / south-east, but curved towards the south at its southern end. Feature 39004 was interpreted as a narrow gully and had moderately steep sloping sides, a flattish base, and measured up to 0.36m wide and up to 0.18m. The gully was very similar in character to Gully 22004 in Trench 22 which was pottery-dated to the Anglian period. Gully 39004 was completely filled with a moderately compact, mid-brown, sandy silt (39003) which contained a probably intrusive very abraded sherd of medieval pottery. Due to its form and character, a late Roman or Anglian date is preferred for this feature.

Sealing the whole of the northern half of the trench was a layer of compact, light orangey brown, sandy silt (39023). This was up to 0.36m thick and was interpreted as a layer of colluvium (hillwash). A similar mid-brown deposit (39002), which was up to 0.38m thick and contained frequent pebbles then sealed 39023. The layer was interpreted as subsoil and may be a mixture of colluvium (hillwash) and ploughed material. Modern ploughsoil then leveled the whole trench up to the present height between 23.49m and 22.47m AOD.

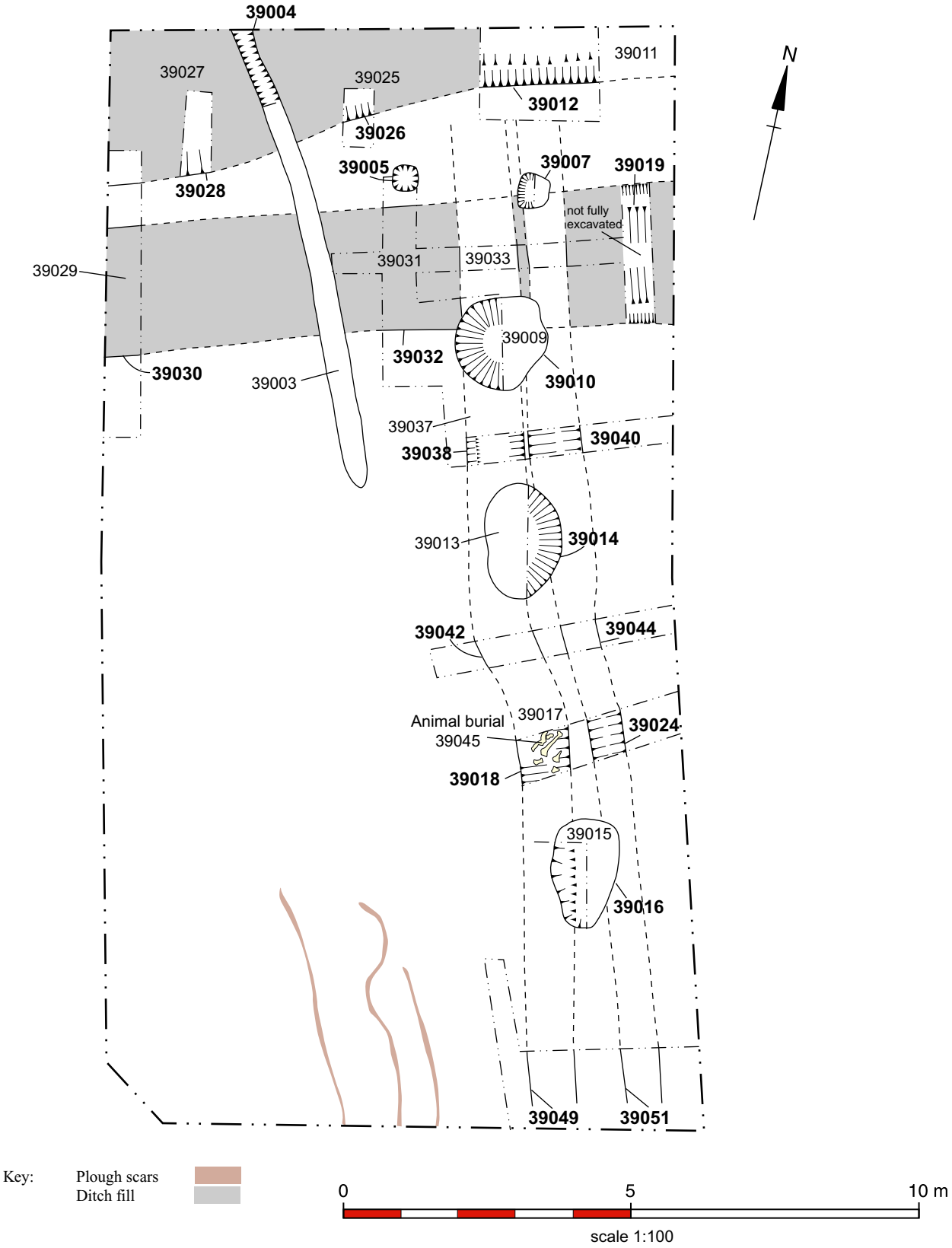

Fig. 22 Plan of Trench 39

5.11.14 Trench 113

The trench was positioned close to the north-western corner of Field 8 to investigate if a track-way, thought to run along the northern edge of Fields 3 and 6 and a parallel bank, continued into Field 8.

The trench was machine-excavated to the top of a friable, orangey brown, silty sand with frequent rounded cobbles and pebbles (113001), which was located across the base of the trench. This was of natural glacial origin and was situated between 22.64m AOD and 20.99m AOD. A machine-dug test-pit investigated this deposit in the north-western corner to a depth of 21.87m AOD. A firm, mixed, reddish brown, clay sand (113002) subsoil then sealed the trench to a maximum thickness of 0.60m. This was interpreted as a buried agricultural soil horizon. Modern ploughsoil (113000) then sealed the entire trench leveling it up to between 23.43m and 21.49m AOD. No evidence for a track or of a bank was located within the trench.

5.11.15 Trench 114

To investigate the possible spread of prehistoric, Roman and Anglian occupation south-west of Trench 34, Trench 114 was machine-excavated.

Deposits of natural origin consisting of compact, grey brown, sandy silts and firm, yellow, sand (114001) were located at the base of the trench at between 20.43m and 19.59m AOD. A friable, orangey brown, sandy silt subsoil (114002) then sealed the entire trench to a maximum thickness of 0.15m. Three modern land drains (114003-8) of various dates and alignments truncated the subsoil. Modern ploughsoil raised the ground level up to its present height between 20.94m and 19.81m AOD. No evidence for any archaeological deposits were recorded within this trench.

5.12 Field 9

5.12.1 Description

Located to the north-east of Field 8, this large field incorporates part of the north-west / south-east slope of the glacial moraine and Kimberlow Hill. All of the trenches were aligned either east - west or north-east / south-west and measured 20m long by 10m wide. Topographically the field slopes down from north-west to south-east.

5.12.2 Trench 55

The trench was part of a cluster situated in the north-eastern corner of the field, to target anomalies (f17) located during the geophysical survey.

Machine excavation within this trench revealed the top of natural deposits which consisted of moderately compact, yellow sand (55001). This was situated at between 21.99m and 21.25m AOD. A patch of cobbles in a matrix of loosely compacted, yellowish brown sandy silt (55003) was located in the north-eastern corner of the trench. This was also thought to be of natural origin. A layer of compact, brownish yellow, silty

clay subsoil (55002) which was up to 0.50m thick then sealed the entire trench. This deposit contained Roman pottery (Ebor and grey wares) and tile, late medieval brick and a sherd of 15th century Langewehe stoneware pottery. Modern ploughsoil (55000) then leveled the ground up to its present level at between 22.91m and 22.03m AOD. The latter deposit contained a possible fragment of a sandstone rotary quernstone (sf192).

5.12.3 Trench 56

Trench 56 was located in the north-eastern corner of Field 9 and was part of the same cluster of trenches targeting geophysical anomalies as Trench 55.

A compact, reddish orange, sandy gravel (56001) was the earliest deposit revealed within the trench. This was thought to be of natural origin, the top of which was situated at between 24.53m and 23.85m AOD.

The earliest features located within the trench were a series of three linear ditches (56005, 56008 and 56016). The most westerly (56005) truncated 56001 in the south-west corner of the trench. It was aligned north-west / south-east, had steeply sloping sides and a flattish base. It measured up to 1.5m wide and 0.35m deep, and was completely filled with a friable, greyish orangey brown, sandy silt (56004). Pottery from the fill was dated to the 2nd - 3rd centuries AD. Approximately 3m to the north-east was a second ditch (56008). This was parallel to 56005 and had steep sides and a slightly concave base. It measured 1.25m wide and 0.45m deep, and was completely filled with a moderately compact, mid-brown, slightly silty sand (56007). This deposit contained a lava rotary quernstone fragment (sf160). The third ditch (56016), was also aligned parallel to 56005, but situated 11m to the north-east of 56008. This had moderately steep sloping sides, a flattish base and was up to 1.5m wide and 0.22m deep. The feature appeared to terminate a mere 1.5m from the northern trench edge, perhaps being truncated by modern ploughing. Its fill (56015), which was pottery-dated to the 2nd - 3rd centuries AD, was similar in composition and colour to 56007, and was disturbed by animal burrows. These three ditches may form part of a field system laid out in the Roman period, probably dating to the 2nd century AD.

A structure (56022), built of glacial erratics (boulders and large cobbles), was then constructed on the southern side of Trench 56. This was situated c. 3.5m from the eastern end of the trench, was sub-square in plan, and was aligned with one side on a north-west / south-east alignment and the other on a north-east / south-west alignment. The cobbles and boulders, which measured up to 420mm x 400mm x 220mm, were held loosely in a matrix of friable, light to mid-brown sand and the overall structure measured 3m long by 2.8m wide and up to 0.50m thick. The structure, perhaps a footing or base for a small building contained pottery dating to the 2nd - 3rd centuries AD (finds context number = 56030), as well as iron nails (sf154 and sf156) and a fragment of rotary quernstone of lava (sf153). The structure appears to be contemporary with the building in Trench 36, but its exact function and its relationship to the latter are as yet unknown.

Situated c. 2m to the north-west of Structure 56022 a feature sub-rectangular in plan (56012) was excavated. This had steep sides, a concave base, a U-shaped profile, and measured up to 1.60m long, 0.80m wide and up to 0.35m deep. The feature was

interpreted as a pit for the disposal of domestic waste and was completely filled with a friable, very dark brown, silty sand with frequent charcoal flecks (56011). The pit backfill was pottery-dated to the 2nd- 3rd centuries AD, suggesting that it was contemporary with Structure 56022. Deposit 56011 was sampled and was found to contain wood charcoal, charred cereal grain (wheat caryopses, traces of chaff and glume, bases of spelt and spikelet forms which were perhaps emmer). Charred sedge nutlets and sheep sorrel might have arrived in turves as well as charred heather root or twig, root or rhizome material.

To the east of Structure 56022, a further feature (56019) was recorded. This was a thin narrow diamond shape in plan, aligned north-west / south-east, and measured 3.5m long, 1m at its widest point and up to 0.18m deep. The feature had steep sides and a flattish base which sloped down to the south-east. Filling it completely was a friable, mid orangey brown, silty sand which contained moderate pebbles and cobbles (56018) and large fragments of a cooking pot dated possibly to the Iron Age or more likely to the 4th century AD. Deposit 56018 also contained a fragments of rotary quernstone one hewn from sandstone and one from lava (sf159 and sf170). A sample of 56018 revealed that it contained coal and charcoal as well as cinder and a few charred seeds and very poorly preserved cereal grain. It was therefore interpreted as a domestic rubbish pit, perhaps suggesting that domestic occupation in the vicinity of Structure 56022 continued into the 4th century.

The southern end of Pit 56019 was truncated by a further pit (56025) sub-oval in plan. This had moderately steep sloping sides, a flattish base, which sloped down to the south-east and was 1.5m long, 0.50m wide and up to 0.22m deep. A friable, dark orangey brown, silty sand with moderate cobbles and pebbles (56026) filled the feature completely, which was similarly interpreted to 56019, but had no finds to date it.

In the south-western corner of the trench a further feature (56028) then truncated earlier ditch backfill 56004. This was circular in plan, had moderately steep to steep sloping sides, a rounded base and measured 1.35m in diameter and 0.38m deep. The feature, interpreted as a pit or possible tree-throw hole, was filled with a friable, mid-orange greyish brown, sandy silt (56009) which was pottery dated to the Roman period.

A large feature (56027), situated in the north-west corner of the trench, then truncated the backfills of ditches 56005 and 56008. This was amorphous in plan, had gently sloping sides, a flattish base and measured over 8.5m long, over 6.5m wide and over 0.45m deep. It was completely filled with a soft, mid orangey brown, fine grained, sand (56006). The feature was difficult to interpret, and its relationship to the ditches was not completely clear. It is possible that this formed a shallow quarry hole which truncated the ditch fills. Alternatively the ditches led off from a natural hollow, depression or springhead, the springhead being kept clear as a possible watering hole after the ditches had silted up, the hollow then naturally silting up with colluvium and aeolian deposits after it had gone out of use.

To the east of the quarry hole, in the north-eastern corner of the trench a patchy layer of soft, grey brown to mid brown, sandy silt (56003 and 56024) then sealed the earlier deposits. This was generally c. 0.05m thick, but close to the north trench edge was up to

0.24m thick. It was interpreted as a layer of buried ploughsoil and colluvium, and was pottery dated to the Roman period.

Truncating the central portion of the trench on a north-west / south-east alignment was a furrow (56010). This had gently sloping sides, a concave base and measured up to 1.60m wide and 0.28m deep. It was completely filled with a friable, mid-orangey brown, sandy silt (56009). A patchy layer of soft, orangey brown, sandy silt subsoil (56002) then sealed the trench. This was interpreted as a buried ploughsoil which appeared to be at its thickest, up to 0.25m thick, where it sealed the backfills of Ditches 56005, 56008 and 56016, perhaps suggesting that furrows followed the alignment of these much earlier features.

A modern plastic land drain (56013-14) then truncated 56002, on an east - west alignment before a layer of ploughsoil (56000) leveled the trench up to its present height at between 25.02m and 24.32m AOD. Deposit 56000 contained residual pottery of 2nd - 3rd century date as well as Roman brick and tile, medieval tile and a fragment of stone tile.

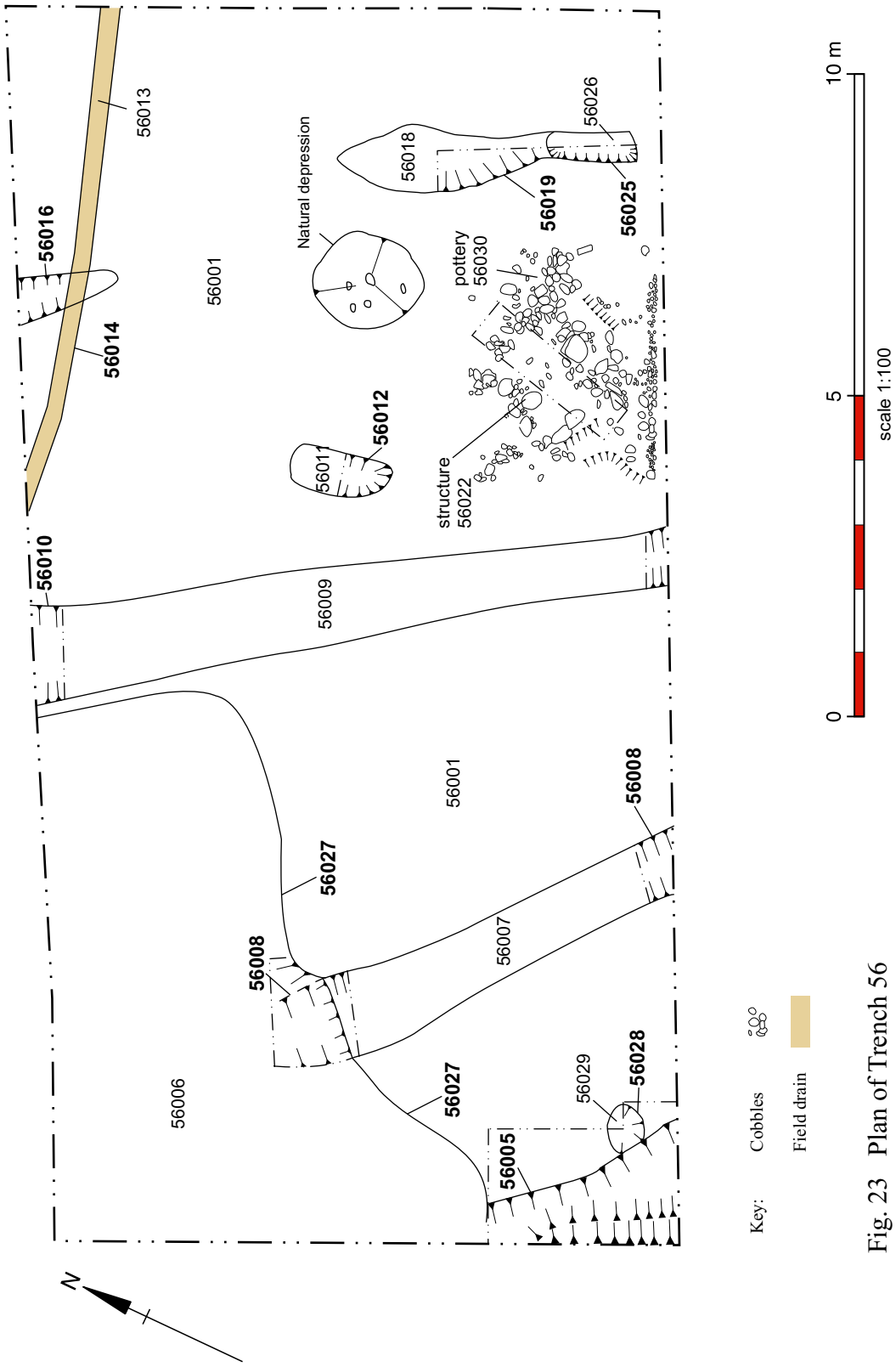

Fig. 23 Plan of Trench 56

5.12.4 Trench 57

One of a cluster targeting geophysical anomaly (f17) in the north-eastern corner of Field 9, this trench was positioned to the south of Trench 56 and to the north-west of Trench 58.

Natural deposits consisting of compact, mid-orange brown, yellowish grey, and reddish brown clays, silty clays, banded sands and silty sands with cobble patches (57001) were located between 23.23m and 22.74m AOD across the base of the trench.

Truncating 57001 was a linear feature (57004 and 57012) aligned north-east / south-west. This had moderately steep sides, a flattish base and measured up to 2.5m wide and 0.40m deep. This was interpreted as a ditch and was filled with compact, mid-orange to grey brown, silty sands and clays (57003 and 57011). This ditch may be of prehistoric or Roman date.

To the north-west of Ditch 57004 and 57012 the almost completely ploughed-out traces of three furrows (57006, 57008 and 57010) were recorded, aligned north-west / south-east. These had gently sloping sides, concave bases and measured up to 0.50m wide and up to 0.10m deep. The furrows were spaced evenly c. 7.5m apart and were completely filled with a compact, mid-brownish grey and brownish orange silty sands (57005, 57007 and 57009). A layer of compact, mid-orangey brown silty clay subsoil (57002) then sealed the entire trench up to a maximum thickness of 0.32m. Modern ploughsoil (57000) then leveled the trench up to the modern ground surface between 23.89m and 23.02m AOD.

5.12.5 Trench 58

Situated in the north-eastern corner of Field 9, this trench was part of a cluster of trenches which targeted geophysical anomaly f17.

Deposits of natural origin consisting of friable, orange to white sands (58001) were the earliest, revealed at between 21.60m and 20.86m AOD across the base of the trench.

Plate 18 *Trench 58, working shot of ditch 58011*

Truncating 58001 were two parallel, linear features aligned north-west / south-east. The westernmost (58008 and 58011) measured c.1.6m wide and up to 0.70m deep, and was interpreted as a ditch. Two test slots were dug across this ditch, the profile recorded in the northern slot (58008) was a flattened U-shape, with moderately steep sides and a concave base, whilst the profile in the southern section (58011) was V-shaped, with a shelf or step to the east and steep sides. The southern slots profile does not necessarily entail a Roman military presence (as it could be described as an 'anle breaker') as ditches dateable to the Iron Age have been found within the Vale of York with similar profiles (Ottaway, pers.

comm.). It is possible that the differences in profile indicate that the ditch has simply been re-cut, but no evidence for this was recorded. In the northern test slot the fill was a compact, light grey-brown silty sand with frequent gravel (58007). Initially, the fill recorded in the southern test slot was a compact, orange to dark bluish grey, silty sand with occasional large cobbles, gravel and charcoal flecks (58010). This primary fill was sealed by a compact, mid-brownish grey silty sand with occasional small gravel and pebble patches (58009). Pottery recovered from 58010 includes a fragment of 2nd century AD Ebor ware, as well as nine sherds of handmade pottery. The latter may date to the Iron Age or the Anglian period (see the pottery report, pages 134-5). The feature may therefore be Iron Age in date extending into the Roman period, or Roman in date, extending into the Anglian period. An iron nail (sf151) was also recovered from 58010.

Approximately 9m to the east of 58008 and 58011, a parallel ditch (58003 and 58005) was recorded. This had moderately steep sloping sides and a slightly irregular concave base, in the northern section, and a flattish base in the southern section. The ditch measured up to 1.65m wide and 0.45m deep, and was completely filled with a mid- to dark orangey grey-brown silty sand (58002 and 58004).

A layer of friable, mid-brownish orange silty sand subsoil (58006) then sealed the trench to a thickness of 0.50m. A modern land drain (58012 and 58013) aligned north - south then truncated the earlier deposits before a layer of ploughsoil raised the ground up to its present level, between 22.50m and 21.32m AOD.

5.12.6 Trench 59

Positioned to target the south-eastern spread of f17, a cluster of anomalies revealed during the geophysical survey, this trench was part of the same cluster of trenches described above.

The trench was machine-excavated to natural glacial deposits which consisted of a compact, orange brown, clay silt (59002) situated between 17.27m and 16.71m AOD. Natural 59002 was then truncated by three north-west / south-east aligned furrows (59006, 59008 and 59010) which were evenly spaced at c. 6m apart. These had shallow gently sloping sides, undulating bases and measured up to 2m wide and 0.21m deep. They were completely filled with a compact, light brownish orange, sandy silt (59005, 59007 and 59009). A layer of compact, mid-brownish grey, sandy silt subsoil (59001) then sealed the entire trench to a maximum thickness of 0.40m. This was truncated by a land drain (59003-4) aligned north-east / south-west before a layer of modern ploughsoil finally raised the ground level to its present height at between 17.92m and 16.85m AOD.

5.12.7 Trench 60

Trench 60 was part of the cluster of trenches focused on f17, a group of geophysical anomalies situated in the north-eastern corner of Field 9.

The earliest deposits situated at the base of the machine-excavated trench, between 21.58m and 20.38m AOD, consisted of compact, light orange brown and light yellow orange, sands (60002). These were interpreted as of natural glacial origin.

Truncating 60002, in the south-eastern corner of the trench was a large feature (60010) of unknown shape or dimensions as it extended beyond the limits of excavation to the south and east. Feature 60010 had moderately steep sloping sides and a base of unknown form as it was below the depth restriction placed on the trench. The feature measured over 5m in diameter and over 0.70m deep. It was interpreted as a springhead and three of its upper fills were excavated. The earliest consisted of a soft, light grey clay (60014). This was sealed by a compact, black, organic, silty clay (60011) which in turn was covered by a moderately compact, grey-brown, organic, silty clay (60009) with a piece of preserved wood which was not excavated. A sample of 60011 suggests that the material contained wood charcoal and very decayed wood, charred peat and turves, charred cereal grain (including barley and wheat), as well as a charred ash seed. The waterlogged conditions had also preserved fruits and seeds of elder and alder, and annual weeds (some perhaps from cultivated land). The invertebrates consisted of beetles and mites, of which aquatic species were preserved in small numbers sufficient to suggest at least temporary water, whilst the terrestrial species included dung beetles, a few plant feeders and litter dwellers. The date of the spring head is unknown, but it may be of prehistoric or Roman origin. It may have lasted as a landscape feature for a considerable length of time.

Sealing the entire trench was a layer of compact, light to mid-grey brown, clayey silt subsoil (60001), which was up to 0.35m thick. A sequence of four modern land drains (60003-8 and 60012-13) then attempted to drain the surface of the wet springhead and the field in general. A layer of modern ploughsoil (60000) then raised the trench up to its present height at between 22.10m and 20.69m AOD.

5.12.8 Trench 61

The trench was located in the north-west corner of Field 9, to target the eastern spread of f14, a cluster of geophysical anomalies situated in the north-east corner of Field 8.

Natural deposits were located at the base of the trench between 25.12m and 24.25m AOD. These consisted of compact, mid-pinkish orange and orangey brown, sandy silts (61002). Sealing 61002 was a layer of friable, pinkish orangey brown, silty sand subsoil (61001) which was up to 0.25m thick. A sequence of five land drains (61003-12) of different dates and orientations then truncated 61002. Modern ploughsoil then covered the entire trench and raised the ground to its present height, between 25.89m and 25.24m AOD.

5.12.9 Trench 62

Sited on the western side of Field 9, to the south-east of Trench 61, this trench was positioned here for similar reasons to the aforementioned trench.

Friable, orange-brown, slightly silty sand (62010) was the earliest deposit recovered from this trench. This was located across the base of the trench at between 22.31m and 21.18m AOD, and was natural in origin. Truncating this at the western end of the trench was a furrow (62009), aligned north-west / south-east. This had gently sloping sides, a flat base and measured up to 1.50m wide and 0.10m deep. Furrow 62009 was completely

backfilled with a firm, orange-brown, silty sand (62008). A layer of compact, mid- to dark brown, silty sand subsoil (62007) which was up to 0.20m thick then sealed the entire trench.

A sub-oval feature (62006) truncated the subsoil on the eastern side of the trench. This had moderate to steep sloping sides, a concave base and measured 1.70m long, 1m wide and up to 0.37m deep. The feature was filled with a soft, slightly orangey, mid-grey brown, sandy silt (62005) which contained 19th century pottery and a tobacco pipe fragment (sf163). The feature probably represents a modern rubbish pit. Two modern land drains (62001-4) then truncated 62005 and the earlier deposits. Modern ploughsoil leveled the trench up to between 22.61m and 21.57m AOD.

5.47 Trench 63

Situated to the south-west of Trench 60, this trench targeted the spread of geophysical anomalies from cluster f17 in the north-east corner of Field 9.

The trench was machine-excavated to natural glacial deposits which consisted of compact, yellow brown, clayey sand (63001) situated at between 18.77m and 17.21m AOD.

A linear feature (63004, 63016 and 63018), aligned north-west / south-east then cut 63001. This had been heavily truncated by modern ploughing towards its northern end, but generally had moderate to steep sloping sides, a rounded base and was up to 1.2m wide and 0.30m deep. The feature was interpreted as a gully which may have been part of a prehistoric or Roman field system or enclosure. Gully 63004, 63016 and 63018 was backfilled with a soft, friable, mid greyish brown, sandy silt and orangey brown, clay sand (63003, 63015 and 63017).

Compact, mid-grey brown, silty clay subsoil (63002) which formed a layer up to 0.30m thick then sealed the trench. A sequence of modern land drains (63005-14), the exact sequence of which was unclear, truncated the earlier deposits. Modern ploughsoil leveled the trench up to its current level at between 19.25m and 17.56m AOD.

5.12.10 Trench 64

This trench was positioned randomly on the north-east side of Field 9.

Natural deposits consisting of moderately compact, mottled, brownish orange, silty sand (64001) were located at the base of the trench between 11.83m and 11.40m AOD. Truncating this, on a north-west / south-east alignment were two furrows (64013 and 64017). These were only distinguishable as traces of deposit across the base of the trench, and had therefore been virtually completely ploughed out. They were up to 2m wide and spaced c. 7m apart. Furrows 64013 and 64017 were completely filled with a moderately compact, mid-greenish brown, silty clay with orange sand flecks (64014 and 64018). Deposit 64014 contained a clay pipe fragment that probably dates from the late 17th to 18th century. A mass of intercutting land drains (64002-12, 64015-16, 64019-21), forming at least three drainage schemes, then truncated the furrow backfills. Modern

ploughsoil leveled the trench up to its present height at between 12.62m and 11.69m AOD.

5.12.11 Trench 65

Located randomly to the south-west of Trench 64, this trench was situated close to the base of the glacial moraine.

Machine excavation within this trench revealed natural deposits consisting of moderately compact, mottled, orangey grey, silty clay (65002) situated between 11.04m and 10.81m AOD across the base of the trench. Two parallel furrows (65019-21) aligned north-west / south-east, then truncated the natural. These had gently sloping sides, flattish bases and measured up to 2m wide and 0.16m deep. They were spaced c. 7m apart and were filled with moderately compact, grey mottled, light orangey brown, sandy silts and silty clays (65017-18, 65022 and 65024). A stone-filled land drain (65015-16 and 65023), dating perhaps to the 18th century, then truncated furrow backfills 65018 and 65024. A layer of compact, light brown, silty clay subsoil (65001), up to 0.30m thick then sealed the entire trench. Six modern land drains (65003-14), from at least three different drainage schemes then truncated the earlier deposits. A modern ploughsoil raised the trench up to between 12.12m and 11.20m AOD.

5.12.12 Trench 66

The trench was randomly placed in the south-west corner of Field 9.

Natural deposits consisting of friable, mid-orangey grey, silty sand (66002) were located across the base of the trench between 11.78m and 11.56m AOD. Truncating this were two north-west / south-east aligned furrows (66009 and 66011). These had gentle sloping sides, a concave base and measured up to 0.30m wide and up to 0.30m deep. The furrows were spaced 5.75m apart and were completely filled with a moderately compact, mid-creamy brown, slightly silty sand (66010 and 66012). The fills contained frequent iron pan flecks, patches of pale tan brown sand, occasional charcoal, occasional CBM (brick and tile) flecks and very occasional cobbles. Truncating the furrow backfills were three modern land drains (66003-8) of differing dates and orientations. Modern ploughsoil then sealed the trench, leveling it up to between 12.34m and 11.96m AOD.

5.13 Field 10

5.13.1 Description

Situated at the north-eastern end of the development area, this field was the most easterly to be evaluated. Topographically it sloped down from its north-western corner to the north-east and south-east. The majority of the trenches were aligned north-east / south-west, and measured 20m long and 10m wide. The exception was Trench 54 which was aligned east - west and measured 25m long and 4m wide.

5.13.2 Trench 51

The trench was positioned on the north-eastern side of Field 10, to target the spread westward of f18, a group of strongly magnetic geophysical anomalies to the north-east in Field 12.

Machine excavation within this trench revealed deposits of natural origin, which consisted of fine, mid-orange brown sand (51001). This was situated between 14.19m and 13.34m AOD across the trench, the natural sloping from north-west / south-east.

Truncating 51001 was a linear feature (51003), aligned north-east / south-west across the eastern half of the trench. This had moderately steep sloping sides and a flattish uneven base. Feature 51003 was interpreted as a ditch, and measured up to 2m wide and 0.10m deep. Ditch 51003 was completely filled with a friable, mid-grey-brown, sandy silt (51004). This feature may date to the late Neolithic or early Bronze Age on stratigraphic grounds as a thick layer of firm, orange brown, sandy silt (51002) which was up to 0.66m thick then sealed the backfilled ditch. This probably derived mostly from a build-up of colluvium (hillwash). Dumped into the upper portion of this were several large fragments of saddle quern and a grinding cobble (used for grinding cereal) (sf193 and sf195) made from limestone and coarse-grained sandstone respectively.

Plate 19 *Trench 51, saddle quern and grinding cobble*

These artefacts are dated to between the late Neolithic and the Middle Iron Age (2500 to 500 BC) (Manby, King and Vyner 2003, 37), and their size and weight may signify that they have not traveled far from a settlement. This could suggest the presence of a

prehistoric settlement close to Trench 51, perhaps represented by the strong magnetic anomalies situated at the north end of Field 12 (f18).

Two modern land drains (51005-8) aligned north-west / south-east then truncated 51002. The trench housed the starting points for these drains. Modern ploughsoil sealed the trench and leveled it up to the present ground level at between 15.21m and 14.21m AOD.

5.13.3 Trench 52

Positioned on the north-eastern side of Field 10, just to the south of Trench 51 this trench was situated here for similar reasons to the aforementioned trench.

Natural glacial deposits were located at the base of the trench between 12.30m and 11.96m AOD. These consisted of light to mid-orangey sand (52025) with mottled, yellowish brown sand patches. A small patch of cobbles (52024), possibly of natural origin, was also recorded, in the north-eastern corner of the trench.

A linear feature (52023), aligned north - south, then truncated 52025. This had moderately steep sides, a concave base, and measured up to 0.81m wide and 0.16m deep. The feature was interpreted as a gully and was completely backfilled with a compact, light grey brown sandy silt (52022).

Two further parallel linear features (52008, 52012 and 52017), aligned north-west / south-east were also observed to truncate 52025. These had gently sloping sides, concave bases and measured up to 2.25m wide by 0.16m deep, the westernmost being extremely disturbed by animal burrows. These features may be either the bases of ditches, or divergent furrows, the features being spaced c. 5m apart at their northern ends, and c. 7.75m at their southern ends respectively. They were filled with a moderately compact, light brown to brownish grey, sandy silt (52007, 52011 and 52016) which was heavily animal burrowed.

A layer of light to mid- brown, silty clay subsoil (52001) then sealed the entire trench to a maximum thickness of 0.32m. This was truncated by two stone-filled post-medieval land drains (52003-6 and 52015) which appeared to form a land drainage system, one aligned north-west / south-east, following the line of the earlier feature 52008, suggesting that this earthwork was still upstanding and likely to be a furrow; whilst the second was aligned at right angles to it i.e. north-east / south-west. Three further 19th century horseshoe-shaped land drains (52013-14, 52018-21) were inserted in the 19th century aligned north-west / south-east and east-south east / west-north-west. Modern ploughsoil then sealed the top of the trench to between 13.07m and 12.51m AOD.

5.13.4 Trench 53

Situated on the north-eastern side of Field 10 to the south of Trench 52, Trench 53 targeted the same spread of geophysical anomalies as Trenches 51 and 52.

The earliest deposits recovered in this trench consisted of soft, friable, mottled grey and white, orange sand (53001). This was of natural glacial origin and was situated at the base of the trench between 10.89m and 10.55m AOD.

Four amorphous features (53024, 53029, 53042 and 53044) then truncated 53001, scattered over the southern and eastern sides of the trench. These had gently sloping sides and either undulating or concave bases. They measured between 1.20m and 1.75m long, between 0.75m and 1.75m wide and between 0.04m and 0.13m deep. Features 53024, 53029, 53042 and 53044 were interpreted as tree-throw holes, created when a tree was blown or pulled over. Filling them completely was soft, friable, light orangey grey sandy silt (53025, 53030, 53041 and 53043). The tree-throw holes are likely to be of natural origin.

Traversing the trench, on a north-east / south-west alignment was a linear feature (53003) which truncated backfills 53041 and 53025. This had gently sloping sides, a concave base and measured up to 1.1m wide and 0.15m deep. This was interpreted as a ditch or wide gully and it was totally filled with a friable, light orangey and yellowish grey, sandy silt (53004). The feature may be of prehistoric or Roman date.

Truncating gully backfill 53004, close to the south-east corner of the trench, was a second linear feature (53016) aligned north-west / south-east. This had moderate to steep sloping sides, a rounded base and measured 1.5m wide and 0.50m deep. The feature, interpreted as a ditch, appeared to terminate where it truncated the backfill of 53004, perhaps suggesting that it respected this feature. The terminus was bulbous in plan, widening out to c. 3.20m at this point, and was filled with three individual deposits. The primary consisted of a friable, brownish orange sandy silt (53006). This was sealed by secondary and tertiary fills which were similar in composition, but dark grey and greyish orange in colour (53007-8).

To the north-west of these features, a set of post-medieval field boundaries was laid out. One of these (53017 and 53037), was aligned north-west / south-east and included a cut for a ditch (53037) and to the east of this a cut for the planting of a hedge (53017). Ditch 53037 may have been up to 2.5m wide, and over 1.10m deep. The only surviving edge for this feature was its western one. This was moderately steep-sided and its base was not observed. The lowest excavated backfill consisted of a soft, dark grey, organic, silt (53036) which was sealed by a firm, mid- orange brown, sandy silt (53045). The hedge planting trench (53017) adjacent to the ditches eastern side was perhaps 1.75m wide and 0.50m deep, with an uneven steep to moderately steep side and a flattish base. This contained the truncated remains of a hedge root system (53039) as well as a soft, light to mid- grey-brown, slightly sandy silt (53038) backfill.

Cutting 53038 was a north-east / south-west aligned post-medieval field boundary (53027). This had moderately steep sides, a flattish though slightly undulating base and measured 1.80m wide generally, though it widened to c. 2.50m in the vicinity of the intersection with 53017 and 53037. It measured up to 0.40m deep and was completely filled with a compact, mid- brown, very silty sand (53028). This feature may represent either a ditch re-cut (as the original ditch cut would have been laid out at the same time as 53017 and 53037 and therefore backfill 53038 would not have been truncated) or a

clearance cut for a hedge, where the hedge has been subsequently completely removed. It was not completely sectioned so the remnants of a hedge root system may still survive.

Several land drains respected the post-medieval field boundaries. The earliest (53034-5) was filled with stones and may date from the 18th century. Other, more modern land drains, which respected the boundaries, and possibly drained into them, included (53009-10, 53019-20 and 53031-32). Several other, modern, flat-bottomed land drains in the north-eastern corner of the trench, had been so damaged by modern subsoiling and ploughing that their alignments could not be ascertained. The hedge (53039) appears to have been cleared in the 19th or 20th century, the clearance trench (53040) ripping the hedge out to its root system, but leaving this latter in situ. The clearance trench was c. 2.50m wide and 0.45m deep, though its exact edges were difficult to see as its backfill (53033) was exactly the same as 53045. The finds from 53033 and 53045 were collectively numbered 53002 and consisted of 19th century tin-glazed earthenware and Humber ware pottery, a selection of brick and tile fragments dating from the Roman and medieval periods and a late medieval iron horseshoe (sf169).

A modern land drainage system (53011-14 and 53022-3), which did not respect the post-medieval field boundaries, then truncated the earlier deposits. A layer of ploughsoil then raised the ground to its present height between 11.24m and 10.98m AOD.

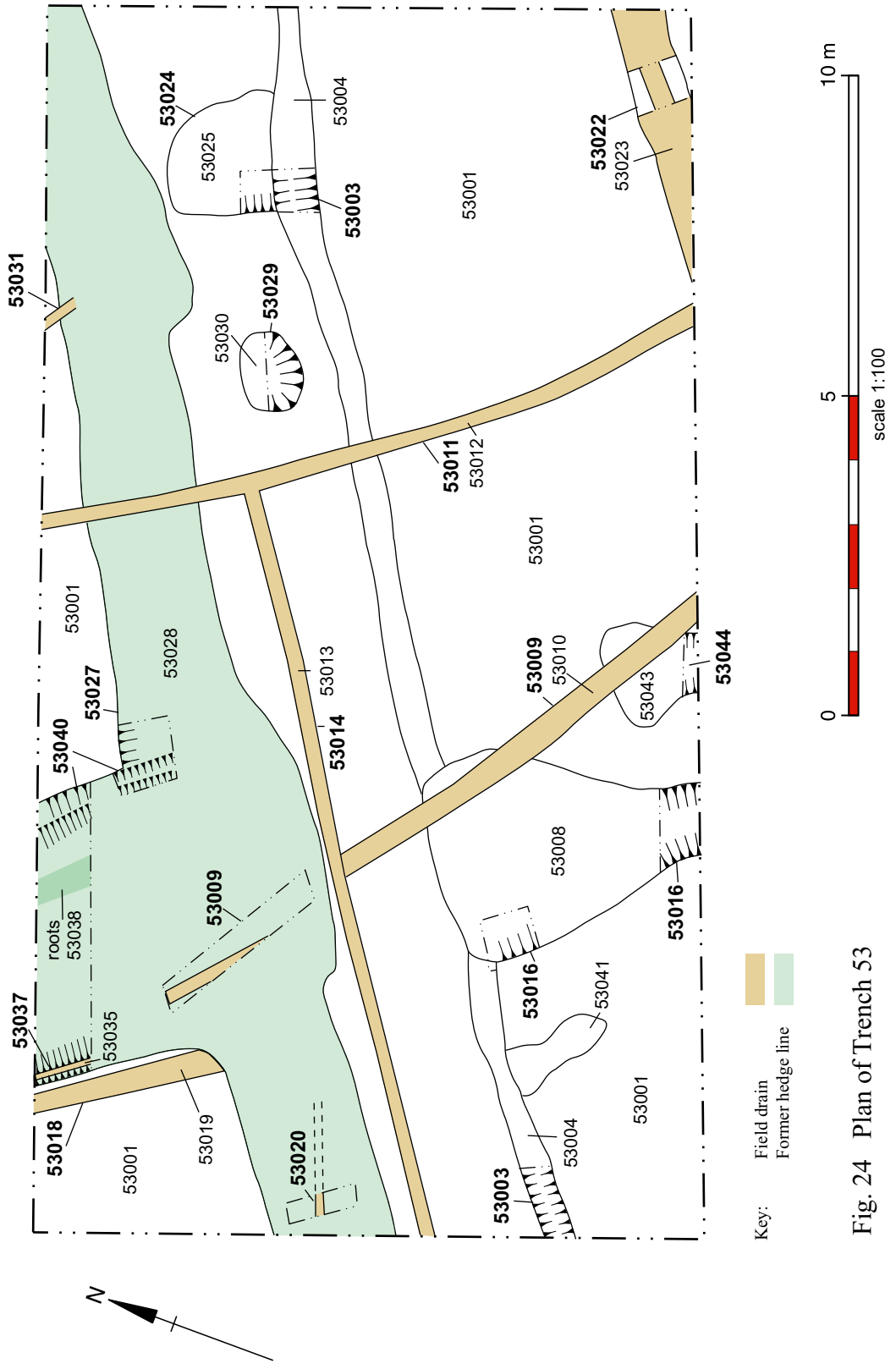

Fig. 24 Plan of Trench 53

5.13.5 Trench 54

Trench 54 was located randomly in the south-eastern corner of Field 10 in a relatively flat part of the field.

Soft, yellowish orange sands (54001) were situated at c. 10.50m AOD in the base of the trench. Truncating these at its eastern end was a possible palaeochannel (54020), of unknown orientation, width or depth. Two fills were excavated from within it. The earliest consisting of a mid- to dark grey-brown, clay silt (54019), the latest being a stiff, orange, clay. (54018). The palaeochannel may be of post-glacial date.

Situated c. 12m from the western end of the trench was an amorphous feature (54004). This had steep sides and an irregular, undulating base. The feature measured 1.75m long by 0.60m wide and up to 0.36m deep. It was interpreted as a tree-throw hole and was completely filled with a compact, light greyish yellow clayey silt (54005). This may be of natural origin resulting from a tree windfall.

Truncating the top of palaeochannel backfill 54018 was a feature (54002) curvilinear in plan measuring some 4m in length. This was aligned north-east / south-west, but curved to the east and terminated 0.25m from the eastern end of the trench.

Plate 20 *Trench 54, curvilinear ditch terminus 54002*

Feature 54002, which was interpreted as a ditch, had moderately steep sides, a concave base and measured up to 0.80m wide and 0.22m deep. It was completely filled with a compact, light greyish yellow, sandy silt (54003) which was pottery-dated to the 4th century AD by three sherds of calcite-gritted ware.

Six land drains (54006-17), inserted on three separate occasions, then truncated the archaeological deposits and a layer of modern ploughsoil finally leveled the ground up to c. 10.90m AOD.

5.13.6 Trench 97

Targeting the western spread of f18, a set of strong geomagnetic anomalies at the northern end of Field 12, this trench was the most northerly within Field 10.

Deposits of natural origin, consisting of soft, light orange-brown silty sand which contained moderate patches of gravel, pebbles and cobbles (97001) were the earliest and were revealed across the base of the trench. They were situated at between 18.67m and 16.74m AOD. A thick layer of soft, light to mid orangey brown silty sand (97002-3) then sealed the entire trench to a maximum thickness of 0.60m. This was interpreted as colluvium (hillwash). Modern ploughsoil (97000) sealed the colluvium and leveled the trench up to its present ground level at between 19.31m and 17.89m AOD.

5.14 Field 13

5.14.1 Description

The field is situated in the south-east corner of the Heslington East site area. Topographically it is relatively flat, although a ridge of slightly higher ground crosses the southern end of the field from north-west to south-east. A farm track flanks the western and part of the northern sides of the field, whilst the A64 (York Outer Ring Road) flanks the field's south-eastern side. Three trenches were excavated on the western side of the field. These were all aligned roughly north-east / south-west and measured 25m long and 4m wide. A further six trenches proposed for this field had to be abandoned due to soft ground conditions. The field has therefore not been fully evaluated.

5.14.2 Trench 67

Trench 67 was randomly positioned in the north-western corner of Field 13.

Natural deposits consisting of mixed, friable, mid-orangey brown clay sands (67001) were located at the base of the trench at between 11.24m and 11.16m AOD.

Two furrows (67004 and 67006) then truncated 67001. These were aligned north-west / south-east, had gently sloping sides, a concave base and measured up to 2m wide and 0.30m deep. These were spaced 8.4m apart and were completely backfilled with a friable, light to mid-yellow and grey-brown, silty sand (67003 and 67005). A layer of friable, mid-orangey brown, clay sand subsoil (67002) then completely sealed the trench to a thickness of 0.15m. Modern ploughsoil (67000) finally raised the ground to its present height at c. 11.65m AOD.

5.14.3 Trench 74

The trench was positioned in the southern corner of Field 13 to target a linear geophysical anomaly that was revealed by the geophysical survey. The trench was narrowed to a width of 4m due to the ground conditions (very soft and wet) in order not to disrupt the soil structure.

Machine excavation within this trench revealed deposits of natural origin which consisted of very compact, banded, pinkish orange-brown, clay (74001). This was situated across the base of the trench at c. 11.77m AOD.

A large linear feature (74005) aligned north-north-west / south-south-east then truncated 74001 centrally within the trench. This was c. 10m wide and up to 0.46m deep. It had moderate to steep sides, an undulating base and was completely filled with a soft, mid-orange brown silty sand (74004). The feature is of unknown purpose, and may represent a rough shallow sand quarry or a natural depression filled with colluvium or aeolian deposits. A fragment of Roman brick was recovered from 74004.

A furrow (74003) aligned north-west / south-east then truncated 74001 close to the western end of the trench. This had gentle to moderate sloping sides, a concave base and measured up to 2.10m wide and 0.22 m deep. It was filled with a friable, mottled orange, mid-grey-brown silty sand (74002) which contained a fragment of Roman brick. A layer of modern ploughsoil then leveled the ground up to its present height at c. 12.10m AOD.

The geophysical anomaly probably relates to the rough shallow sand quarry or natural depression visible centrally within the trench.

5.14.4 Trench 75

Positioned on the western side of Field 13, this trench targeted the same geophysical anomaly as Trench 74. The soft ground conditions in this area prevented a large trench being excavated. So as not to disrupt the soil structure the trench was narrowed, and was of similar dimensions to Trench 74.

The earliest deposits located within this trench were of natural origin. These consisted of compact, mid-orangey grey, silty sands and orange and grey clays (75001) which were situated at c.12.40m AOD across the base of the trench.

Four furrows (75007, 75009, 75011 and 75013) then truncated 75001. These had gently sloping sides and bases which varied from slightly concave to flat. The furrows measured 1.5m - 3m wide and up to 0.28m deep. They were evenly spaced c. 5.5m apart except for the eastern (75013) furrow which was only 2.5m from 75011. This may indicate a rearrangement of the furrows during the medieval or early post-medieval period. Furrow 75013 was backfilled with a very compact, mid- to dark greyish brown, clayey silt (75012), whilst the other furrows were filled with a friable, pinkish brown, silty sand (75006, 75008 and 75010). This may suggest that Furrow 75013 had a differing function to the rest or that the natural was simply clayier in this area. Deposits 75006, 75008 and

75012 contained fragments of medieval plain tile dating from the 13th to the 16th centuries.

Two modern land drains (75002-5) truncated the backfilled furrows. Modern ploughsoil (75000) then leveled the ground up to its present height at c. 12.70m AOD. The geophysical anomaly may relate to the backfill 75012 within Furrow 75013.

5.15 Field 14

5.15.1 Description

Adjacent to Low Lane, on the southern boundary of the Heslington East site, this field was situated between Fields 4, 8 and 15. Its northern edge was defined by a hedge and a stream, and its eastern by a farm track. The field was relatively flat, although a slight ridge of higher ground did traverse the field's centre from north-east to south-west. All of the trenches were aligned north-west / south-east to avoid disruption to the land drainage system, and measured 25m long by 4m wide.

5.15.2 Trench 76

Positioned randomly in the north-eastern corner of Field 14, this trench was located where the ground rises slightly from north-west to south-east.

Natural deposits consisting of a soft, mottled, yellow grey sand (76002) were located between 10.92m and 10.60m AOD across the base of the trench. Two amorphous features (76003 and 76005) then truncated 76002. These had gentle to moderately steep sides, slightly concave undulating bases and measured up to 1.05m long, 0.95m wide and 0.16m deep. They were interpreted as tree-throw holes, probably of natural origin, which were completely filled with soft, dark grey-brown silty sands (76004 and 76006) with moderate manganese staining. A layer of mixed, soft yellowish grey silty sand subsoil (76001) then sealed the trench to a maximum thickness of 0.24m. This was covered by modern ploughsoil (76000) which leveled the trench up to between 11.39m and 10.98m AOD.

5.15.3 Trench 77

Trench 77 was located randomly on the north-western side of Field 14, where, like Trench 76, the ground rose slightly from north-west to south-east.

The earliest deposits consisted of friable, light grey to mid- orangey brown, sand and compact, mid-brown to grey, gravelly sandy clay (77002). These were interpreted as of natural origin and were situated at between 10.93m and 10.62m AOD across the base of the trench. Truncating 77002 at the southern end of the trench was a linear feature (77004) aligned north-west / south-east. This had a moderately steep side, a convex base and measured over 0.65 wide and up to 0.12m deep. The feature was completely filled with a soft, yellowish grey, slightly clayey sandy silt (77003) which contained a fragment of brick dateable to the 14th - 16th centuries. The similarity between this backfill and 78003 and 78005 recorded in Trench 78 (see below) suggests that they were backfilled at

a similar time and therefore can be similarly interpreted. The feature is therefore interpreted as a furrow rather than the truncated remains of a gully or ditch. The whole trench was then sealed with a layer of soft, firm, mottled, pinkish yellowish grey, slightly clayey silty sand subsoil (77001) which was up to 0.10m thick. A modern land drain aligned north-west / south-east then truncated the earlier deposits. A thick deposit of modern topsoil then raised the ground up to its current level at between 11.44m and 10.85m AOD.

5.15.4 Trench 78

Located randomly on the north-western side of Field 14, this trench was situated on a relatively flat part of the field.

Machine excavation revealed deposits of natural origin across the base of the trench, consisting of soft, dark orangey grey sand (78002) with occasional patches of iron pan from c. 10.80m AOD. Two furrows (78004 and 78006) truncated 78002 on a north-east / south-west alignment. These had shallow gently sloping sides, concave bases and measured up to 1.60m wide and 0.20m deep. The furrows were spaced widely at c. 18.5m apart. However two iron pan stains revealed in the natural may suggest where former furrows existed. If so then the furrows were evenly spaced at c. 6m apart, except for 78006 which was c. 3m south of the nearest iron pan stain. The furrows were completely filled with soft, yellowish grey to grey-brown clay silts and sandy silts (78003 and 78005). A layer of compact, dark to mid-brownish grey sandy silt (78001) then sealed the entire trench to a maximum thickness of 0.26m. This was covered by modern ploughsoil (78000) which raised the ground to its present height at c. 11.28m AOD.

5.15.5 Trench 79

The trench was randomly placed in the south-eastern corner of Field 14. where the ground rose slightly to the north-west.

Deposits of natural origin were the earliest revealed across the base of the trench. These were situated at between 11.25m and 10.81m AOD and consisted of soft, light orangey brown sand (79001). Six metres from the north end of the trench, an amorphous feature (79006) was excavated. This had steep sides, a rounded but undulating base, and measured over 0.80m long, 0.60m wide and up to 0.28m deep. The feature was interpreted as a tree-throw hole of natural origin, which was filled with a soft, mid-grey, silty sand (79005 and 79011) containing manganese flecks. A layer of sticky, light brown, slightly clayey sandy silt (79002) then sealed the entire trench to a maximum thickness of 0.25m. Two land drains (79003-4 and 79009-10) aligned north-east / south-west truncated the earlier deposits before a layer of modern ploughsoil (79000) covered the trench between 11.74m and 11.19m AOD.

5.15.6 Trench 80

Randomly situated in the north-western corner of Field 14, Trench 80 was positioned in a relatively flat part of the field.

The trench was machine-excavated to the top of natural deposits which consisted of soft, pinkish brown, clayey sand with extensive bands of yellow clay (80002). This was located at the base of Trench 80 at between 10.66m and 10.59m AOD. An amorphous feature (80010) was located c. 6.5m from the north end of the trench. It extended beyond the eastern limits of excavation so its full dimensions are unknown but was up to 0.80m wide where visible. The feature was unexcavated as it was characteristically similar to the other features recorded in Trenches 76 and 79, being filled with firm, pale greyish brown, silty sand (80009). It was interpreted as part of a natural tree-throw hole. Three furrows (80004, 80006 and 80008) aligned north-east / south-west then truncated 80002. These had moderately sloping sides, concave bases and measured up to 2.10m wide and 0.20m deep. They were spaced at even intervals of between 6.25m and 7m and were completely filled with soft, mid-greyish brown, silty sand (80003, 80005 and 80007). Deposit 80003 contained a sherd of 13th century pottery. A layer of soft, brownish orange, silty sand subsoil (80001) then sealed the trench to a maximum thickness of 0.14m. The latter contained two sherds of 15th century Humber ware pottery. Modern ploughsoil (80000) then leveled the trench up to c. 10.96m AOD.

5.15.7 Trench 81

Situated randomly in the south-west corner of Field 14, this trench, like Trench 80, was located in a relatively flat part of the field.

Natural deposits consisting of firm, mid-brownish yellow sandy silt (81002) with patches of soft, pinkish orange clay silt, were located at the base of the trench at c. 11.66m AOD. A linear feature (81004) aligned north - south then truncated 81002. Its sides broke sharply from the surface of the natural and fell steeply to a concave base, the feature having overall dimensions of c. 0.80m wide and 0.70m deep. It was interpreted as a gully which was completely filled with a soft, light grey-brown silty sand (81003). The deposit contained a sherd of post-medieval earthenware pottery. However, the character of the fill may suggest a much earlier date, perhaps of the prehistoric or Roman periods, the sherd being intrusive.

A furrow (81008) aligned north-east / south-west then truncated 81002. This had moderately steep sides, a flattish base and measured up to 2.65m wide and 0.10m deep. The furrow was completely backfilled with a compact, brownish orange, clayey silt (81007). A thin patchy layer of compact, mid-brownish orange silty sand (81001) then sealed the trench to a thickness of 0.04m. A modern land drain (81005-6) aligned north-west / south-east was the latest feature recorded. This was covered by modern ploughsoil (81000) that leveled the trench to its present height of c. 11.05m AOD.

5.15.8 Trench 82

Positioned randomly within Field 14, this trench was located to the east of Trench 81, where the land rose slightly to the north-west.

The earliest deposits, consisting of friable, greyish orangey brown, slightly silty sand (82001), were revealed at c. 10.85m AOD across the base of the trench. This was interpreted as of natural origin. Two furrows (82004 and 82006) then truncated 82001

aligned north-east / south-west. These had gently sloping sides, concave bases and measured up to 2.50m wide and 0.16m deep. They were spaced 8m apart and were completely filled with friable, mid- to light grey brown sandy silt (82003 and 82005). A layer of firm, light to mid-orange brown silty sand subsoil (82002) then sealed the trench to a maximum thickness of 0.13m. A land drain (82007-8) aligned parallel to the furrows truncated the earlier deposits. Modern ploughsoil (82000) leveled the trench up to its current height at between 11.24m and 11.11m AOD.

5.16 Field 15

5.16.1 Description

The field was situated on the southern boundary of the Heslington East site at the base of the glacial moraine. A field access farm track flanked the western side of the field, and Low Lane lay to the south. The field was not completely flat as would be expected, but contained a north-west / south-east aligned bank of higher ground across its centre. The trenches in this field were all aligned north-east / south-west, to avoid disruption to the modern drain system and measured 25m long and 4m wide.

5.16.2 Trench 47

The trench was positioned randomly within Field 15 on its northern side.

Deposits of natural origin consisting of firm, mottled, orangey yellow, sand (47001) were the earliest revealed. These were situated at between 10.70m and 10.45m AOD, the natural sloping down to the north-east.

Ten metres from the western end of the trench, a linear feature (47007), aligned north-west / south-east, was recorded. This had steep sides but was not fully excavated due to depth restrictions. The feature was interpreted as a ditch and measured up to 1.25m wide and over 0.20m deep. The ditch contained two fills, the earliest consisting of a firm, mottled orange, reddish grey, clayey sand (47002), which was sealed by a similar deposit (47009) of mottled greyish yellow colour. Deposit 47002 was sampled and contained a few small fragments of coal and cinder as well as a single charred wheat grain. The ditch may be part of a prehistoric (Iron Age) or Roman field system.

Parallel to 47007, and situated 3.85m to the east of it, was a second ditch (47008). This had steep sides, an unknown base (due to depth restrictions) and measured up to 1.4m wide, and over 0.38m deep. It was filled with very similar deposits (47003 and 47010) to those backfilling 47007 and may be part of the same field system.

Sealing the entire trench was a layer of firm, slightly brownish orange, clayey silty sand subsoil (47004) which was up to 0.40m thick. Two modern land drains (47005-6 and 47011-12) then truncated the subsoil aligned north-west / south-east across the trench. These were covered by a layer of modern ploughsoil (47000) which leveled the ground up to its present level at between 11.07m and 11.24m AOD, sloping from north-east to south-west.

5.16.3 Trench 48

Trench 48 was located randomly on the north-eastern side of Field 15 and was located on the ridge of higher ground that traversed the field from north-west to south-east.

Natural glacial deposits consisting of compact, grey mottled, pinkish orange, sandy clay (48001) were the earliest recorded in the base of the trench at between 12.57m and 12.37m AOD. The natural deposits sloped down from south-east to north-west.

Three parallel furrows (48003-5) truncated 48001, aligned north-west / south-east. These had gently sloping sides, slightly undulating flattish bases and measured up to 2.5m wide and 0.35m deep. They were unevenly spaced, the distance between the westernmost (48003) and the furrow located centrally within the trench (48004) was c. 9m and between 48004 and the easternmost (48005) being 6.30m. Perhaps the furrows had been realigned and improved in the late medieval or early post-medieval period. The furrows were completely backfilled with compact, light to mid-orangey brown sandy silt which contained occasional manganese flecks and patches of orange clay (48006-8). Deposit 48006 contained a residual sherd of Ebor ware pottery dated to the 2nd century.

Sealing the entire trench was a layer of compact, mid-brown sandy silt subsoil (48002) which was up to 0.10m thick. A modern land drain (48009-10) aligned north-west / south-east then truncated 48002 before a layer of ploughsoil (48000) sealed the top of the trench and leveled it up to its present height at between 12.93m and 12.42m AOD, the ground sloping in a similar direction to the natural.

5.16.4 Trench 49

Positioned randomly on the southern side of Field 15, this trench was positioned in a relatively flat part of the field.

The trench was machine-excavated to natural glacial deposits which consisted of compact, mixed, grey, yellow and brown silty sands (49001). These were situated at the base of the trench at between 10.65m and 10.47m AOD, the natural surface sloping down from south-west to north-east.

Truncating 49001 at a distance of c. 6.5m from the eastern end of the trench was a linear feature (49016). This was aligned north-west / south-east and had moderate to steep sloping sides and a concave base. It measured up to 1.2m wide and up to 0.42m deep and was interpreted as a ditch. The ditch was completely filled with a soft, pale grey, sandy silt (49015) with occasional angular and rounded gravel.

Three furrows (49010, 49012 and 49014), aligned north-west / south-east, then truncated 49001 to the east and west of Ditch 49016. These had gently sloping sides, concave bases and measured up to 1.85m wide and 0.14m deep. They were evenly spaced at c. 7m apart and were completely filled with compact, grey mottled, mid-orange-brown silty sands and sands (49009, 49011 and 49013).

Sealing the entire trench was a deposit (49002) which was compositionally similar to the furrow backfills. This was interpreted as a layer of subsoil, which was up to 0.44m thick, probably derived from medieval ploughing. A sequence of three modern land drains then truncated 49002. The two earlier drains (49005-8) were aligned north-west / south-east, whilst the most recent (49003-4) was aligned north-east / south-west. Modern ploughsoil (49000) then leveled the trench up to the present ground level, situated between 11.19m and 11.00m AOD, sloping in a similar manner to the natural.

5.17 Field 16

5.17.1 Description

Located to the north-east of Field 15, this field contained a ridge of higher ground that also traversed the aforementioned field. Very few geophysical anomalies were recorded here and so only one trench (Trench 50) was excavated, roughly centrally within the Field. Trench 50 was aligned north-east / south-west and measured 20m long and 5m wide.

5.17.2 Trench 50

The trench was positioned randomly, almost centrally within Field 16 and on a slight slope running north-west / south-east within the field.

Natural consisting of plastic, light to mid-orange clay (50001) was located at c. 11.64m AOD at the base of the trench.

Three furrows (50003 and 50015-16) then truncated 50001. These were aligned north-west / south-east, had gently sloping sides, a concave base, and measured up to 4.2m wide and 0.15m deep. They were evenly spaced at between 6m and 6.75m apart and were completely filled with compact, mid-orange brown sandy silts and clay silts (50002 and 50006-7). Deposit 50002 contained a residual sherd of Roman grey ware pottery and Roman brick as well as two fragments of 18th century Brown glazed ware pottery. A modern land drain (50004-5), aligned north-west / south-east, then truncated 50002. Several thin ripples (50008-14) in the top of the natural, aligned approximately north - south may either be the lines of further modern land drains, or more likely, the marks left by a modern subsoiler. Modern ploughsoil (50000) then sealed the entire trench, raising the ground level to its present height at c. 12m AOD.

A remarkable jet crucifix (sf113) was recovered during the cleaning of the western baulk of this trench. This may be of medieval date.

5.18 Field 17

5.18.1 Description

Surrounded on three sides by farm tracks, this field was situated between Fields 13 and 15. All of the trenches measured 25m long and 4m wide, and Trenches 110 and 112 were

aligned north-east / south-west, whilst Trench 11 was aligned east - west. A ridge of slightly higher ground traverses the field on a north-west / south-east alignment.

5.18.2 Trench 110

Randomly positioned within Field 17, this trench was deliberately located partially on the ridge of higher ground, and partially on lower ground, and therefore sloped from south-east to north-west.

A compact, orangey brown sandy clay (110001) was the earliest deposit revealed across the base of the trench at between 12.03m and 11.60m AOD. This was of natural origin.

Truncating 110001 were three furrows (110003, 110006 and 110012), aligned north-west / south-east. These had gently sloping sides, concave bases and measured up to 4.25m wide and 0.20m deep. The furrows were unevenly spaced; 110006 and 110012 were c. 6.25m apart whilst 110012 and 110003 were only 4m apart. It is difficult to explain this discrepancy, perhaps the furrows were remodelled, or it is simply a reflection of the greater erosion of certain furrows by modern ploughing than others. The furrows were completely filled with a friable, mid- to light brownish grey, silty sand (110002, 110005 and 110011). Deposit 110005 contained two sherds of 13th century pottery and 110011 a residual sherd of Roman Ebor ware. Three modern land drains (110007-110010 and 110013-14) then truncated the furrow backfills. These were aligned parallel to the furrows suggesting that the earthworks were still upstanding when they were inserted. Modern ploughsoil then raised the ground to its current height at between 12.27m and 12.10m AOD.

5.18.3 Trench 111

The trench was located randomly in the north-west corner of Field 17 and was situated in a relatively flat part of the field.

The earliest deposits located within this trench were of natural origin. They consisted of compact, mid-orangey brown sandy clays (111001) which were situated at between 12.24m and 12.11m AOD across the base of the trench.

A linear feature (111007) aligned north - south then truncated 111001. This had moderately steep sides, a flattish base and measured 0.75m wide and 0.11m deep. Feature 111007 was interpreted as a gully and was completely filled with a compact, mottled, mid- to dark grey-brown, silty clay (111008). The gully may be of prehistoric or Roman date.

Two furrows (111005 and 111009), aligned north-south also truncated 111001. These had gentle sloping sides, concave bases and measured up to 2.2m wide and 0.27m deep. They were spaced 9.5m apart and were completely filled with a moderately compact, mid-greyish brown, sandy silt (111006 and 111010). A land drain (111003-4) aligned east - west then truncated the earlier deposits. This was sealed by modern ploughsoil which leveled the ground up to its current level at between 12.51m and 12.39m AOD.

5.18.4 Trench 112

Located randomly on and off the slight ridge of higher ground that traversed Field 17, this trench was situated where the ground sloped from north-east to south-west

The trench was machine- excavated to natural which consisted of compact, mid-orange to mid-grey sandy clay (112001). This was located across the base of the trench at between 11.79m and 11.32m AOD.

Two furrows (112009 and 112013) aligned north-west / south-east then truncated 112001. These had gently sloping sides, concave bases and measured up to 4m wide and up to 0.30m deep. The furrows were spaced 5.5m apart and were completely filled with a firm, mid-greyish brown, silty sand (112008 and 112012). Residual Roman pottery was recovered from 112008. A layer of firm, light to mid-brown sandy silt (112002) then sealed parts of the trench to a maximum thickness of 0.22m. Three modern land drains then truncated the earlier deposits and modern ploughsoil leveled the trench area up to between 12.28m and 11.69m AOD.

5.19 Area E

5.19.1 Description

Zone E was situated in the north-western corner of the Heslington East site area. It comprised a number of open green spaces between Heslington Hall and St. Paul's Church including a green space to the south of the church, and an area of rough pasture, used as a tree nursery for the University of York, situated to the east of church. The particular part of this area, which was investigated by geophysical survey and evaluation trenches, was situated to the east of the church. This modern ground surface was slightly undulating in character, perhaps suggestive of previous gravel quarrying activities, but generally sloped down from north-east to south-west.

5.19.2 Trench 120

Trench 120 was located at the west edge of the area in order to confirm the extent of the graveyard of St. Paul's church. Cartographic evidence indicated that the eastern boundary of the graveyard had not altered since the mid-19th century, however the extent of the graveyard of the medieval church prior to that was unknown. The trench was aligned north-east / south-west and measured 6m long by 3m wide.

The trench was machine-excavated to what was believed to be the top of archaeological deposits at c. 16m AOD at the western end of the trench. Hand excavation to investigate these revealed that the earliest deposits consisted of loose to firm, orange and reddish brown sands, sandy gravels and sandy clays (120009, 120011-13, 120017 and 120021). These bands of natural strata were sealed by further natural deposits including loose, light brownish orange gravel (120018), which covered approximately 50% of the trench and compact, mid-brownish green sandy clay (120010).

The natural deposits were overlain by patchy deposits including plastic, mid-grey, silty clay (120014), and compact, blue-grey and mottled orange, yellowish green, clays (120007-8). These may be interpreted as levelling deposits and contained variable concentrations of brick and tile fragments of 13th to 16th century date and pebbles. Deposit 120014 also contained a fragment of post-medieval vessel glass (sf179).

Further levelling deposits were then laid down including compact, orange-brown silty clay (120006) and friable, mid-grey-brown, slightly clayey sandy silt with moderate to occasional mortar lumps (120019-20). Both 120006 and 120020 contained 13th to 16th century dated brick and tile fragments as well as an iron nail (sf180). A thick deposit of loose, mid-grey-brown clayey silt with occasional angular chalk, brick and tile fragments and occasional rounded pebbles (120005) then sealed the earlier deposits. All of the above levelling deposits may be of late medieval or post-medieval date.

Loose, dark grey to black, sandy silt (120004) with occasional rounded pebbles then covered the whole of the trench. It was very humic in character, and may be a soil buried during landscaping for the current land use as a tree nursery. It contained fragments of 19th and 20th century bricks. Above 120004 there was an irregular, thin band of loose, orange-brown sandy gravel (120003) that contained occasional brick fragments dated to the 19th or 20th centuries. This was interpreted as a layer of re-deposited, or imported material, related to the tree nursery 3m – 4m to the south of the trench, or to the repair of the churchyard wall to the west.

Humic topsoil (120001) then raised the ground level to its present height at c. 17.08m AOD. A small feature was identified at the top of the section at the south-western corner of the trench cutting into the topsoil (120022). This small cut had a sharp break of slope from the surface, steep sides with a gentle break of slope to a concave base (observed in section only). It was filled with loose, mid-brown silty sand (120002). This modern pit may have been dug to remove a sapling from the tree plantation for transfer to the university campus.

5.19.3 Trench 121

It was hoped that Trench 121 might reveal some evidence of the position of the tithe barn (see page 16). The trench was positioned at the north-west end of the site, on a raised area of flatter ground. The trench was 3m square.

Deposits of natural origin, consisting of loose, red-brown and orange-brown sandy gravels (121002 and 121006), loose, light yellow-brown and orange fine sands (121004-5) and loose, dark orange-brown silty sands (121003) were located across the base of the trench from 16.64m AOD. Deposit 121003 was excavated by machine to test the validity of the natural interpretation. Animal bone from this deposit was recovered from animal burrows within it. Covering the whole of the excavated area was a humic topsoil of friable, dark grey sandy silt with occasional brick and tile fragments and pebbles (121001). The latter deposit also contained a medieval horseshoe nail (sf174) as well as 19th and 20th century brick.

Generally animal and root disturbance in Trench 121 was deep and widespread throughout the deposits, making the upper layers exposed by machine stripping seem darker, more disturbed and therefore potentially archaeological. Excavation however revealed only natural moraine sand, gravel and boulder clay.

5.19.4 Trench 122

The location of Trench 122 was intended to target an area of magnetic disturbance highlighted by the geophysical survey, so that part of the trench was outside of the anomaly for comparative purposes. The trench was aligned north-west / south-east, measured 8m long by 3m wide and the ground sloped gently north-east / south-west in its vicinity.

Natural deposits consisting of loose, pale yellow, mid-pinkish orange and mid-orange brown sands (122003 and 122005-10), and compact, mid- to dark pinkish brown, clay (122004) with occasional small to medium pebbles were located across the base of the trench at c. 17.29m AOD. A layer of loose, mid to dark brown, silty sand (122002) which contained small to medium round pebbles and occasional charcoal flecks then sealed part of the base of the trench. Upon excavation this appeared to be a layer of animal-disturbed natural.

Truncating the top of the natural deposits was a series of thin, parallel, linear plough scars filled with topsoil and occasional lumps of dark pinkish clay and pebbles (122001). The plough scars to the south of the trench contained almost nothing but dark pinkish clay, presumably dragged by ploughing from exposed bands of natural. Sealing the entire trench was a layer of modern ploughsoil with signs of root disturbance and animal burrowing (122000). The latter deposit levelled the ground up to its present height at c. 17.60m AOD and contained residual Roman as well as 19th - 20th century pottery and brick.

Similar to Trench 121, Trench 122 revealed only natural deposits. It seems that the magnetic disturbance found by geophysical survey was probably caused by magnetic material within the plough-soil.

5.19.5 Trench 123.

Positioned to target part of a potential archaeological feature that was highlighted by the geophysical survey, this trench was situated on the southern side of the field and measured 8m long and 3m wide. The ground sloped gently from north-west to south-east in its vicinity.

Friable, mid- to dark orange-brown, silty sands and sandy gravels (123003 and 123005-6) 23003) and compact, mid-pinkish brown clay (123004) were the earliest deposits revealed across the base of the trench at c. 16.99m AOD.

At the eastern end of the trench a linear band of friable, mid-brown sandy silt (123002) was observed across the base of the trench, aligned north-north-west / south-south-east. This may be of natural origin and is either a backfilled tree-throw hole or a band of

natural strata within the underlying geological deposits. It contained a sherd of tin-glazed earthenware dated to the 19th century as well as a fragment of brick dated from the 14th to 16th centuries, both of which have probably been incorporated within the deposit by animal disturbance.

A number of plough scars cut east-west across the top of the natural sands and gravels. Completely filling them was a friable, mid-grey brown sandy silt (123001) which was sealed by a layer of modern ploughsoil (123000) that raised the ground level to c. 17.27m AOD.

15.9.6 Trench 124.

Situated at the eastern end of Area E, this trench was primarily positioned to ascertain the presence of any Roman burials on this side of the field near to Windmill Lane. The ground dipped away into a hollow to the north-west, and the trench measured 8m long and 3m wide.

The earliest deposits revealed at c. 16.80m AOD across the base of the trench consisted of mid-orange brown, coarse gravel (124004). This was believed to be of natural origin.

Truncating 124004 was a series of parallel plough scars (124003). They were shallow with slightly irregular edges, and had a gentle to moderate break of slope from the surface, gently sloping edges and a gradual break of slope to a U- or V- shaped base in cross-section. These scars were filled with very dark grey, slightly clayey, gravelly sand silt with frequent small pebbles (124002). Covering the whole of the trench was a modern ploughsoil (124001) which raised the ground level to its present height at c. 17.00m AOD.

15.9.7 Trench 125

Trench 125 was positioned to target a low mound thought to be the location of the tithe barn (see page 16), west of the wire fence that divides the pasture from the tree nursery. The trench was aligned north-west / south-east and measured 13m long and between 2m and 5m wide. Topographically the ground sloped from north-west to south-east.

Deposits of natural origin consisting of friable, mid-orange brown, silty sands and gravels (125003-4) were revealed across the base of the trench from 17.07m AOD.

A linear feature (125001) aligned north-south truncated the natural. It had a moderate break of slope from the surface with shallow, gently sloping sides, a broad U-shaped base and measured 1.7m wide and up to 0.18m deep. It was interpreted as a furrow and was completely filled with a friable, mid-brown, sandy silt containing occasional small and medium rounded pebbles and moderate charcoal fragments (125002). A sherd of post-medieval earthenware pottery was recovered from this deposit as well as a tobacco pipe fragment (sf188).

Running east-west across the trench were a series of narrow plough scars (125005). A modern ploughsoil (125000) then raised the ground level to c 17.57m AOD.