# Manor Farm Bessacarr Doncaster South Yorkshire SE 6160 0000 (centre)

# **Archaeological Evaluation by Trial Trenching**

Authorised by	•
Date:	•

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# Manor Farm Bessacarr Doncaster South Yorkshire SE 6160 0000 (centre)

# **Archaeological Evaluation by Trial Trenching**

#### Non-technical Summary

This Report concerns a scheme of Archaeological Trial Trenching that was carried out over seven weeks in September, October and November 2010 on an area of land where residential development is proposed at Manor Farm, Bessacarr, South Yorkshire. The trial trenching followed on from a Desk-based Assessment (MAP 2000), plus a geophysical survey that was carried out by Stratascan and a soil augur survey by ARS in 2008.

A total of 80 trial trenches were excavated (c. 5860m<sup>2</sup>), including 9 additional trenches. Features consisted of linear features of Romano-British, medieval and post-medieval date. Evidence for a highly significant area of Romano-British iron-working was also identified.

An assemblage of Romano-British, medieval and post-medieval pottery was recovered, plus a significant quantity of iron-working slag.

#### 1. Introduction

1.1 This report sets out the results of a scheme of archaeological trial trenching that was carried out by MAP Archaeological Consultancy Ltd. as part of a programme of evaluation in relation to Condition 22 APP/F4410/A/09/2100409 for residential development and associated infrastructure of 67 Ha at Manor Farm, Bessacarr, Doncaster, South Yorkshire (SE 6160 0000 centre – Fig. 1). Previous evaluation in the field took the form of a geophysical survey carried out by Stratascan in 2008, and a Soil Auger

- survey by Archaeological Research Services. The trial trenching took place over seven weeks during September, October and November 2010.
- 1.2 The trial trenching was carried out as a response to the planning application for residential development and infrastructure at the site. The archaeological work conformed to a Written Scheme of Investigation that was prepared by MAP Archaeological Consultancy Ltd at the request of Persimmon Homes Yorkshire Ltd, and agreed by South Yorkshire Archaeology Service and English Heritage.
- 1.3 The results of the trial trenching are intended to assist in identifying options for minimising or avoiding damage to, or recording, any archaeological remains to be affected by the development, in accordance with the guidance of Planning Policy Statement 5: *Planning for the Historic Environment* (2010), and to develop an overall strategy to deal with the archaeology for the remainder of the site.
- 1.4 The MAP site code for the project was 05-08-10.
- 1.5 All work was funded by Persimmon Homes Yorkshire Ltd.
- 1.6 All maps within this report have been produced from the Ordnance Survey with the permission of the Controller of Her Majesty's Stationery Office, Crown Copyright, licence No. AL 50453A.

# 2. Site Description (centred at SE 6160 0000)

2.1 The site lies in the civil parish of Cantley with Branton, within the Metropolitan Borough of Doncaster, South Yorkshire, and consisted of 21 Ha (Fields 6, 7, 8, 9, 10 and 12 – Fig. 1; Pls. 1 and 2). These six fields form the eastern part of the proposed development as a whole; Field 6 is c. 5 Ha, Field 7 c. 3.6 Ha, Field 8 c. 2.4 Ha, Field 9 c. 4.2 Ha, Field 10 c. 1.1 Ha and Field 12 c. 4.4 Ha in size.

- 2.2 The proposed development area is located between the main East Coast railway line to the west and the Doncaster to Lincoln railway line to the north. The M18 motorway runs to the east. Modern residential development extends up to the railway line to the north. At the time of the trial trenching, the site consisted of overgrown former pasture with some mature woodland, divided by drainage ditches and overgrown hawthorn hedges, and was crossed by a tarmac path that roughly follows the line of a gas main, plus unofficial footpaths.
- 2.3 The site has an elevation of between 4m and 10m AOD.

# 3. Geology and Soils

3.1 The soils at the site are recorded as being of the Adventurers 1 (1024a) and Newport 1 (551d) Associations, described respectively as deep peat soils overlying fen peat, and sandy and coarse loamy soils over glaciofluvial drift (Mackney *et al*).

# 4. Historical and Archaeological Background

#### **Historical Background**

- 4.1 The name Bessacarr has medieval origins and means "plot of land amongst the bent grasses" from the Anglo-Saxon "beos æcer" (Smith 1973, p. 40).
- 4.2 Bessacarr is first mentioned in charters in 1155 as "Besacla". Margaret Gelling notes "æcer" meaning a "piece of marginal land cultivable of limited extent" (Gelling 1984, p. 205).
- 4.3 Bessacarr is a small hamlet within the Township of Cantley and the Manor of Branton and Cantley, and is situated on the eastern border of Potteric Carr. The name Cantley derives from the Anglian personal name and means Canta's

glade or grove (*leah*). Cantley is mentioned twice in the Domesday Book (Faull and Stinson 1986). The first entry states:-

"In Branton and Cantley Toki had 14 carucates and 1½ bovates of land taxable. Land for 15 ploughs. Now Geoffrey Alselin has there 2 ploughs and 6 villages, 2 freemen and 5 smallholders who have 6 ploughs. There a priest and a church.

In the same village Alselin had 1 carucate of land taxable. Land for ½ plough. Woodland pasture 1 league long and 1 wide. The whole manor 2 leagues long and 2 wide. Value before 1066 £8, now 30s".

- 4.4 The second entry adds: "Roger de Busli, 1 carucate of land in Cantley of Alsiges's land".
- 4.5 A gift of land was made by Henry II to Kirkstall Priory and included "a carucate of land in *Bessacle* with common pasture for one thousand sheep and forty mares and foals and as many cows and hogs as please the monks" (Hunter 1974, p. 84). The land at Bessacarr was described as "one of several morasses of about four thousand acres in extent lying south of Doncaster and extending toward the villages of Loversall and Rossington" (*ibid*, p. 85).
- 4.6 The Religious Houses of Yorkshire states that "the returns for this part of Yorkshire in the *Valor Ecclesiasticus* of Henry VIII are defective, and the portion relating to Kirkstall is missing". In 1557, after the Dissolution, the Crown granted the land to Avery Rawson. The Wolstenholm family owned Cantley and Loversall in the Eighteenth century.
- 4.7 The Enclosure Act (1774) and Award (1778) for Cantley, Branton and Bessacarr is held in Doncaster Archives (DRO: P12/9/A1), but does not include the land associated with Bessacarr Carr or Common Areas. Unfortunately the Enclosure map no longer exists.
- 4.8 Historical documents specific to the site are limited until the Twentieth century.

#### **Cartographic Evidence**

- Hamlets of Doncaster, Balby, Carhouse, High Ellars, Bessicarr, Loversall, Wadworth, Rossington, Wollingley and Stanfall' (Doncaster Archives D2 MD 22). The map shows the site as laying between Bessacarr Common and Bessacarr Carr, north of Mother Drain, south of The Great North Road and south-east of Carr Lane. An area of woodland on this map probably relates to Back Wood which is of similar shape to the woodland on the 1854 First Edition Ordnanace Survey Map. The lane to Bessacarr is shown west of Back Wood and relates to the lane south of Manor Farm. Only three fields are shown and probably relate to the pre-enclosure field systems.
- 4.10 By the mid-Nineteenth century the land on Bessacarr Carr and Bessacarr Common had been enclosed by agreement, as no Act of Parliament for this enclosure exists. The First Edition Ordnance Survey Map (Sheet 285) depicts Manor House Farm south of Bessacarr Lane and the Great Northern Railway Line. The proposed development area was subdivided into twenty-three fields. A large area of woodland known as "The Warren" now dominated Bessacarr Common with Back Wood still extent west of Warren Lane and a small area of woodland plantation called Green Busks beyond. The Tithe map of 1847 (BIHR TA/5145) does not locate the site.
- 4.11 By 1904, the Great Northern and Great Eastern Joint Railway Line formed the northern boundary of the proposed development area. A field division had been removed from a field south-west of Manor Farm and another field boundary added in the filed south-west of Back Wood. An additional railway line (the Dearne Valley Railway) had been constructed on the north-western boundary of the area by the 1930s, and residential development had enveloped the Great North Road to the north-east of the proposed development area.
- 4.12 In the 1950s the area north of Bolton Hill, Bessacarr had been developed as a residential estate. The infilling of the residential developments between Cantley and Bessacarr continued and by 1982 the area north of the railway

lines was completely covered by housing on either side of Bawtry Road. The M18 had been constructed and now acts as the eastern boundary of the site between Bawtry Road and Seven Arches Bridge.

### **Aerial Photographic Anomalies**

- 4.13 Fifteen aerial photographic anomalies relevant to the site are listed on South Yorkshire Archaeology Service's Sites and Monuments Record, and include several cropmarks which have been interpreted as Iron Age/Romano-British Field systems or "brick work" field systems, and are located south of Branton and Littleworth, near Rossington (SMR Refs.: 1289, 1793, 2470, 2487, 2664, 2677, 2678, 2896, 3365). Further to the west on Potteric Carr in Loversall Parish, oval enclosures and field systems were noted in 1976 (Riley 1976, p. 21).
- 4.14 Several of the Aerial Photographic Anomaly Sites have been evaluated between 1990 and 1998, by either Geophysical Survey or Trial Trench Excavation, including the cropmarks at Hunster Grange, Rossington (Sykes 1991, p.22), Stripe Road, Rossington (Chadwick 1993, p. 65), Hayfield Farm, Rossington (Atkinson 1993, p. 65), Warning Tongue Lane, Bessacarr (Atkinson & Merrony 1994, p. 23-27), St. Catherine's Hospital, Balby (Atkinson 1995, p. 40), Church Field, Rossington (Atkinson 1998, p. 15-19), Northern Racing School, Rossington (Webb 1998, p. 49), Junction 3, M18, Loversall (Belford 1999, p. 109-110) and Carr Lodge Farm, Loversall (Slatcher et al. 1999, p. 110-112).
- 4.15 The excavations at Church Field and Stripe Road, Rossington uncovered evidence of "single phase" agricultural activity relating to the brick work field systems, which could not be dated; finds included a single sherd of pottery of indeterminate type from Church Field. Remains of a Romano-British brick work field system at Warning Tonge Lane, Bessacarr were excavated and could be dated to the Second and Third centuries AD by the thirty-one sherds of pottery. The majority of the evaluations showed that the aerial photographic anomalies related to surviving archaeological deposits.

4.16 The Geophysical Report had mapped the Aerial Photographic Cropmarks noted on the National Mapping Programme within the Development Area (Smalley 2008: Fig. 3) and these are reproduced in this report (Figs. 2 and 3).

#### **Archaeological Sites**

4.17 The area around Manor Farm and the Warren includes sites and spot finds from the Prehistoric to the Post-medieval period. Thirty-five sites and spot finds have been noted around the proposed Development Area. Several other sites that are situated further afield have also been noted in the text.

#### Prehistoric

- 4.18 The earliest artefacts recovered from the vicinity of Bessacarr are a Mesolithic and Neolithic period flint scatter and a Neolithic flint Axe Head (SMR Refs: 1972 & 937); other Prehistoric finds include two arrowheads, a Middle Bronze Age Spearhead, a Bronze Age Palstave and a Polished Stone Axe (SMR Refs: 1278, 1071, 969 and 1812). A Beaker was found during grave digging in July 1948. Three querns were found at Ellers Carr, Bessacarr and another example at Wadworth Carr.
- 4.19 An Iron Age settlement/enclosure has been listed at Wheatcroft Farm, Rossington (SMR Ref: 4509).
- 4.20 The woodland immediately west of Warren Lane, Back Wood, forms possible remnants of Ancient Woodland (SMR Ref: 3837).

#### Roman

4.21 To the east and south of the Roman town of Danum (Doncaster), there is a concentration of Roman Pottery Industry production sites that includes thirty-nine kiln sites at Cantley, five kiln sites at Bessacarr (SMR Ref.: 1280) and seven excavated kiln sites at Rossington, with a further ten kilns located by Geophysical Survey (SMR Ref: 970: National Monument No. SY1108). Kilns and possible kiln sites are known slightly further afield at Kilham Farm, east of Branton, and Blaxton Quarry, south of Branton. South of Auckley waste

- vessels were found at Templeborough, near Rotherham and at Croft Road, Finningley (MAP 1999).
- 4.22 Several different types of kiln type have been excavated, with the kiln chamber and flue at Bessacarr, Cantley and Rossington being "dug into the ground" (Buckland et al. 1981, p.147), whereas at Blaxton and Branton the kilns were constructed at ground level. The kilns produced a variety of vessels in several different forms and fabrics including Parisian ware, Black Burnished ware, Greyware and Mortaria, and were dated to the Second and Third centuries AD, with continuous production at Rossington into the Fourth century AD.
- 4.23 Roman Pottery sherds have been found within the proposed development area (Site 1277), 100m north of Manor Farm across the railway line (Doncaster Museum), as well 300m further to the north (Site 1276) and further west on Loversall Ings (SMR Ref: 1870). Roman Pottery scatters were noted to the east of Bessacarr at Branton (SE 655 029, SE 6485 0204, SE 653 033, SE 653 024 and SE 659 029).
- 4.24 Within one kilometre of The Warren are several sites of National and Regional Importance, including a Roman Fort (SMR Ref:140: National Monument No. SY1044), a Roman Road (SMR Ref: 707), a possible Roman Bridge (SMR Ref: 230) and a possible Roman Camp (SMR Ref: 966). Two Roman coins, listed as spot finds, are also noted (SMR Refs: 1876 and 956).
- 4.25 The Roman Fortress at Rossington and the Roman Road are also visible on aerial photographs (Riley 1976, p.15). A cropmark site at Ling's Farm, Dunsville, Hatfield, was excavated and dated to the Romano-British period.

Anglo-Saxon

4.26 Two Anglo-Saxon pendants were found by metal-detecting (SMR Ref.: 3454).

#### Medieval

- 4.27 Castle Hills is an earthwork that exists as a low mound with possible ditches on the eastern side, which could date to the Medieval period (SMR Ref: 965). Earthworks at Loversall are probably remains of a Medieval watermill (SMR Ref: 3642).
- 4.28 Draw Dykes is listed on the Sites and Monuments record as "possibly part of the early manor of Rossington" (SMR Ref: 231). A single Medieval Spot Find of a Halfpenny Coin dating to the reign of ?Edward III is also recorded (SMR Ref: 474).
- 4.29 Signs of agricultural activity, including plough marks, were found at St. Catherine's Hospital (SMR Ref.: 4495).

#### Post-medieval

4.30 The Colliery at Rossington (SMR Ref.: 4346), a Roofed Structure (SMR Ref: 3564) and several farm buildings in Bessacarr are the only monuments of note from this period.

#### Previous Archaeological Fieldwork at the Site

- 4.31 A Geophysical Survey carried out by Stratascan in 2008 identified numerous magnetic anomalies indicative of infilled ditches forming enclosures, trackways and field systems across much of the surveyed area (Smalley 2008). The survey recorded additional features as well discrete anomalies such as pits, hearths or kilns. There were large areas of magnetic disturbance in Fields 6, 7 and 9, suggestive of disturbed or made ground. Additionally, the gas main that crosses the site showed as a linear band of magnetic disturbance.
- 4.32 A soil auger survey was carried out by Archaeological Research Services across the entire site in 2007 (ARS 2007). Three cores (Br 16, Br 17 and Br 18) were dug at the western edge of Field 8. Topsoil consisted of brown sandy silt in Br 16 and Br 17, with black desiccated peat in Br 18. The topsoil in cores Br 16 and Br 18 overlay up to 0.35m of orange mixed clay, sand and silt

that was interpreted as made ground associated with the gas pipe-line running immediately to the east. In core Br 17 the mixed deposits graded into c. 2m of grey sand, silt and clay with occasional fine laminations and plant macrofossils, including seeds and plant stems. Inorganic sands were found at a depth of 2.5m. The sedimentary sequence in Br 17 appeared to be confined to the immediate vicinity, perhaps representing the fill of a small depression or palaeochannel cut into the surface of the glaciofluvial sands, but not visible at the surface. The presence of well-preserved plant macrofossils suggested that the feature dated to the Holocene period. A thin peat sequence was located in Br 18, the top 0.20m of which was desiccated.

4.33 The slightly higher surfaces associated with the site (ARS – Sector A) were provisionally seen as forming Pleistocene glaciofluvial and fluvial sand and gravel terraces which had thin loamy topsoils and deposits of desiccated peat; it was in this area that cropmarks gave evidence of past human activity. Sector A was felt to have little palaeoecological value; although depressions or palaeochannels that filled up during the Holocene existed here (e.g. Br 17) these features appeared to have filled up rapidly, precluding peat development.

# **Supplementary Geophysical Survey**

4.34 After the recognition of the iron-working area in Trench 59 (Field 12) a magnetometry survey was carried out with a view of establishing the limits of the metal-working zone. The survey was carried out by ASWYAS in November 2010, and identified a large area of magnetic disturbance indicative of ferrous material (ASWYAS 2010). The spread of ferrous material from immediately north-west of Trench 26, through Trench 59, giving a length of c. 50m and a width of c. 25m. An isolated dipolar anomaly at the centre of the ferrous spread could represent a furnace, as could similar, though less distinct, anomalies to the south-east of the main concentration.

# 5. Objectives

- 5.1 The construction of the proposed residential development will have an impact on significant archaeological remains that have been illustrated by the Deskbased Assessment, the National Mapping Programme, and Geophysical and Soil Auger Surveys. These remains comprise areas of prehistoric/Romano-British ditch systems, a Roman pottery scatter and possible Roman pottery kilns. The clarification of these features by archaeological trial trenching was necessary in order to finalise an appropriate mitigation strategy to either avoid any significant impacts, and/or for the investigation of any remains affected either in advance of, or during, construction.
- 5.2 The objectives of the archaeological evaluation work within the proposed development area were to establish by means of trial trenching, the nature, extent, degree of preservation and significance of archaeological features and deposits recorded within the proposed development area and evaluate further the potential for previously unrecorded remains. Specific objectives were to:
  - 1. clarify the aerial photographic cropmarks
  - 2. clarify the results of the geophysical survey
  - 3. indicate the potential for further archaeological features that might be located within the development area
  - 4. to establish the presence, nature and sequence of any areas of occupation and, where present, to investigate such areas to determine their form, and record any evidence for domestic, agricultural or industrial structures and any associated activities
  - 4. to establish where possible absolute and relative chronologies for the various activities and features recorded

- 5. to investigate the nature and pattern of the land-use and environment within the wider landscape through an appropriate sampling strategy
- 6. to establish the nature and extent of any other archaeological remains identified, and carry out appropriate investigation and recording
- 7. to produce a report on the results of the work for deposition within both the South Yorkshire Sites and Monuments Record and nationally
- 8. to undertake a scheme of works that meets with the professional standards for archaeological work both nationally and within the area of the South Yorkshire Sites and Monuments Record.

# 6. Methodology

#### 6.1 Evaluation

6.1.1 The trial trenching consisted of the excavation and recording of sample trenches within Fields 6, 7, 8, 9 10 and 12. A total of eighty trenches (Trenches 1-79E + 79W - 81, excluding Trench 56, which was not dug, and Trench 69, which was not assigned) were excavated, at agreed locations (Figs. 3 and 4) and in accordance with the Written Scheme of Investigation (Appendix 00) prepared by MAP Archaeological Consultancy Ltd and agreed with South Yorkshire Archaeology Service. The Trench sizes were as follows: 8m x 4m (Trenches 8, 16, 25, 27, 38, 39, 44, 48, 50, 53, 54, 58, 65, 71, 75 and 76); 10m x 4m (Trenches 32, 33, 36, 46, 67 and 73); 13.5m x 4m (Trench 31); 15m x 2m (Trench 33); 15m x 4m (Trench 30); 20m x 2m (Trenches 20 and 56); 22m x 2m (Trenches 60 and 80); 25m x 2m (Trenches 61, 62, 74 and 78); 25m x 4m (Trench 28); 28m x 2m (Trenches 68 and 70); 30m x 2m (Trench 29); 30m x 3m (Trench 10); 32m x 2m (Trench 57); 33m x 2m (Trench 81); 38m x 2m (Trenches 21 and 72); 40m x 2m (Trenches 43 and 51); 40m x 3m (Trenches 1-5); 42m x 2m (Trench 79E + 79W); 43m x 2m

(Trench 66); 45m x 2m (Trenches 23, 37 and 45); 46m x 2m (Trench 40); 50m x 2m (Trenches 6, 7, 11-15, 17-19, 22, 24, 26, 34, 41, 42, 47, 49, 53, 59, 63, 64 and 77). The total area of Trial Trenching was approximately c. 5860m<sup>2</sup>.

- 6.1.2 The work was undertaken in variable autumn weather, often in dull and wet conditions. Water-logging was in issue in some of the lower trenches.
- 6.1.3 The evaluation trenches were stripped of topsoil by a 16 tonne 360° tracked mechanical excavator, fitted with a toothless blade, operating under close archaeological supervision. Machining ceased at the top of either archaeological or naturally-formed deposits, depending upon which was located soonest. The exposed surfaces were cleaned by shovel, hoe or trowel as appropriate, and all subsequent excavation carried out by hand.
- 6.1.4 Postholes and pits were sectioned and segments were excavated across linear features in order to determine their function, form and relationships.
- 6.1.5 All work was carried out in line with the Institute of Field Archaeologists Code of Conduct (IFA 2009).
- 6.1.6 All artefacts were retained for specialist analysis.
- 6.1.7 Ninety-nine soil samples were taken from a range of deposits and features for general biological analysis (Appendix 5).

# 6.2 On-site Recording

6.2.1 All archaeological deposits were recorded according to correct principles of stratigraphic excavation on MAP's *pro forma* context sheets which are compatible with the MoLAS recording system. A total of 518 separate contexts were recorded.

#### 6.3 Plans and Sections

6.3.1 The full extent of archaeological deposits were recorded in plan at a scale of 1:20 on drawing film. Sections of features and individual layers were drawn at 1:10, also on drawing film, and included an OD height. There were 71 plan and 113 section drawings.

#### 6.4 Photographic Record

6.4.1 The photographic record comprised monochrome prints, and colour transparencies, in 35mm format, and a series of high-resolution digital images, recording all archaeological features encountered. There were 282 exposures in monochrome print and 278 in colour transparency, and 529 digital images.

#### 6.5 Finds

- 6.5.1 Finds were processed in accordance with English Heritage Guidelines (EH 1995). All finds were cleaned, identified, assessed, dated (where possible), marked (where appropriate), and properly packed and stored according to national guidelines.
- 6.5.2 The finds assemblage consisted of 331 pottery sherds, 21 fragments of animal bone, 5 glass fragments, 90 CBM / fired clay fragments, 1 copper alloy token, 2 iron objects and 232 fragments of slag.

#### 7. Results

#### **7.1** Field 6 (Pl. 1)

7.1.1 Five trenches were excavated in Field 6 (Trenches 1-5), which was situated at the south-west corner of the site. All of the trenches were 40m x 3m in size and were positioned to give as broad a geographical spread of the area as was feasible. Field 6 was believed to consist of made ground, and the verification of this was a primary objective in the excavation of Trenches 1-5.

#### 7.1.2 **Trench 1** (Figs. 4 and 5)

Trench 1 was aligned south-east to north-west. The natural deposit consisted of brown sandy clay with cobbles, and this was cut by a steep-sided linear feature (cut 1003, fill 1002) that was interpreted as having a natural origin, although it contained a possible 18th century ceramic land drain (Appendix 9). Cut 1003 was aligned roughly north to south, and was filled with black peaty material with paler sandy lenses (1002). The south-eastern end of the trench was occupied by a dump of modern rubble (1004), possibly from the construction of the near-by M18. The trench was covered by a 0.40m deep layer of modern topsoil (1001).

### 7.1.3 **Trenches 2-5** (Fig. 4)

Trenches 2, 4 and 5 were aligned from north-west to south-east, Trench 3 from south-west to north-east. No archaeological features, deposits or finds were present in any of these four trenches, nor were there any indications that these trenches were on an area of made-ground. The trenches were covered by silty sandy clay topsoil (2001, 3001, 4001 and 5001 respectively), which was 0.35m deep.

#### **7.2** Field 7

7.2.1 Field 7 was situated immediately north-east of Field 6. Eleven trenches (Trench 6, 7, 8, 14, 15, 19, 20, 21, 22, 23 and 24) were excavated in this area.

# 7.2.2 **Trench 6** (Figs. 4 and 6)

Trench 6 was aligned north-west to south-east and was 50m long and 2m wide. The natural deposit consisted of silty sand, with two shallow linear bands of peat (6004 and 6005) crossing the eastern half of the trench on south-west to north-east alignments. In addition, a wide shallow linear feature (cut 6003, fill 6002) was identified towards the trench's western end. Linear 6003 was of broad-U profile, measuring 1.40m wide and 0.15m deep. The fill (6002) consisted of peaty, silty sand. No other archaeological features were present, and no finds made. The trench was covered with a 0.35m deep layer of topsoil (6001).

#### 7.2.3 **Trench 7** (Fig. 4)

Trench 7 was aligned from south-east to north-west and measured 50m in length and 2m in width. No archaeological features, deposits or finds were present. The natural deposit of sandy peat was covered by a 0.30m deep layer of peaty loam topsoil (7001).

#### 7.2.4 **Trench 8** (Figs. 4 and 7; Pls. 3 and 4)

Trench 8 was aligned from north-east to south-west and was 8m in length and 4m in width. The trench was located over two pit-like geophysical anomalies. Three north-west to south-east linear features (8003, 8004 and 8006/7) were present, along with two modern plough scars (8010 and 8011). There were no finds from any of the features or the topsoil.

The natural deposits consisted of peaty sand. At the southern end of the trench two converging linear features were recorded. The earliest of these was cut 8003, a shallow feature, aligned north to south and filled with dark peaty, sandy silt (8002). It was cut by Linear 8005, which had a broadly similar alignment, with a flat-based V profile 0.76m wide and 0.32m deep. The fill (8004) consisted of dark peaty, sandy silt.

At the northern end of the trench Linear feature 8006 ran on a north-west to south-east alignment before ending in a rounded terminal (8009). The fill (8007 and 8008 respectively) consisted of brown silty sand. Terminal 8009 was cut by two modern east-west aligned plough furrows (8010 and 8011).

The features were overlain by topsoil (8001) to a depth of 0.30m.

#### 7.2.5 **Trench 14** (Figs. 4 and 8; Pl. 5)

Trench 14 was aligned north-west to south-east, and measured 50m in length and 2m in width. Four inter-cutting linear features (Cuts 14002, 14005, 14006 and 14014) were present, plus two features of natural origin (14004 and 14008).

The earliest linear feature was the north-south aligned cut 14005. Its exact form is unclear because of truncation by later features, but it appears to have had a broad-U profile, 1m wide and 0.30m deep. The fill (14010) consisted of brown peaty loam. Linear 14006 shared the same alignment as 14005, but cut into it on the eastern side. Linear 14006 also had a broad-U profile, 1m in width and 0.35m in depth. The fill (14013) consisted of dark brown peat. Linear 14006 was apparently re-cut by Linear 14014, which was a broad, shallow feature 2.70m wide and 0.20m deep. It was filled with greyish brown sandy loam (14011) on its western side, with a brown peaty deposit (14012) occupying the remainder of the feature.

Linear 14002 was aligned from the south-west to the north-east and cut into the northern end of 14005. It had a dished profile, 1.30m wide and 0.30m deep. The fill (14003) consisted of greyish brown peaty loam.

A shallow peat-filled feature (cut 14008, fill 14007) recorded in the central part of the trench was apparently natural in origin. At the eastern end of the trench, a deposit of natural peat (14004) was cut by a tree-bowl (14009).

The features in Trench 14 were overlain by a 0.40m deep layer of loamy topsoil (14001).

# 7.2.6 **Trench 15** (Fig. 4)

Trench 15 was aligned north to south and had a length of 50m and a width of 2m. No archaeological features, deposits or finds were present in this trench, which was covered by a 0.30m deep layer of topsoil (15001).

#### 7.2.7 **Trench 19** (Figs. 4 and 9)

Trench 19 had a north-west to south-east alignment, and was 50m long and 2m wide. Two north-east to south-west aligned linear features (19003 and 19005) cut into the sandy clay natural in the central part of the trench.

Linear 19003 was of rounded-V profile, measuring 1.20m in width and 0.17m in depth. It was filled with dark brown humic sandy loam. Linear 19005 entered the trench from the north-east before terminating at its southern end. This feature was also of rounded-V profile, with a width of 0.83m and a depth of 0.19m. The fill (19004) consisted of greyish brown silty sand. Neither feature contained any finds.

The features in Trench 19 were covered by a 0.30m deep layer of topsoil (19001).

# 7.2.8 **Trench 20** (Fig. 4)

Trench 20 was aligned from the north-west to the south-east, and was 20m long and 2m wide. No archaeological features, deposits or finds were present, the trench being covered by a 0.30m thick layer of sandy loam topsoil (20001).

### 7.2.9 **Trench 21** (Figs. 4 and 10; Pl. 6)

Trench 21 had a north-west to south-east alignment and was 38m long and 2m wide. Two north-south linear features (21003 and 21005) were recorded in the western part of the trench cutting into the clay sand natural.

Linear 21005 was a relatively broad, shallow feature, 1.80m in width and 0.08m in depth. The fill (21004) consisted of dark brown sandy silt. Linear 21003 was of rounded-V profile, 0.20m wide and 0.87m deep. It was filled with dark brown loamy sand (21002). Neither feature contained any finds.

Trench 21 was covered by a 0.40m deep of topsoil layer (21001).

#### 7.2.10 **Trench 22** (Figs. 4 and 11; Pl. 7)

This trench was aligned from north to south and measured 50m long and 2m wide. The natural sand was cut by a linear feature (22004) and a land-drain (22006).

Ditch 22004 had a rough east to west alignment and had a 1.60m wide, 0.30m deep, broad-U alignment. It was filled by a deposit of brown silty sand (22003), which contained no finds. Land-drain 22006 cut into the southern side of Ditch 22004, and contained a ceramic drain pipe. These features were probably connected with the former field boundary that was intercepted by Trench 22.

The trench was covered by a 0.10m deep layer of brown silty sand subsoil, with 0.30m of topsoil (22001).

#### 7.2.11 **Trenches 23 and 24** (Figs. 4 and 12; Pls. 8 and 9)

These two trenches intersected with each other; both were 2m wide, with Trench 23 having a length of 45m and Trench 24 a length of 50m. A ditch (23009 and 24008) ran through both trenches and two pit-like features (24010 and 24012) were located in Trench 24. Other features consisted of field drains, 23005 being a continuation of 24003, the remainder being excavated as 23003, 23005, 23012, 24014 and 24016.

The ditch excavated as Segments 23010 and 24008 had a flat-based-V profile up to 1.50m wide and 0.60m deep. There was a remarkable similarity in the fills between the two segments: a grey sandy clay primary fill (23009 and 24007), succeeded by deposits of brownish sand (23007 and 24005) on the east side and brownish silty sand (23008 and 24006) on the west side, with greyish sandy silt or silty sand (23006 and 24004) at the top. Context 24004 contained several horse teeth (Appendix 10).

Pits 24010 and 24012 were shallow (0.10m deep) oval features, 1.10m in length and between 0.75 and 1.20m in width. They were filled by brown silty sand (24009 and 24011 respectively). There were no finds.

The field-drains were of two different types. The drain excavated as segments 23005 and 24003 was a vertically-sided cut with a width of 0.50m and a depth

of at least 0.60m. The remaining drains (23003, 23012, 24014 and 24016) were narrow features filled with limestone gravel.

The trenches were overlain by a 0.32m thickness of topsoil (23001 and 24001 respectively).

#### 7.2.12 **Trench 27** (Figs. 4 and 13; Pl. 10)

This trench was aligned south-east to north-west, and was 8m long and 4m wide. A ditch (27005) and two tree-bowls (27003 and 27004) were recorded, probably all relating to the former field boundary known from map evidence at this location.

Ditch 27005 was aligned from north-east to south-west and had a broad-V profile with a width of 2.10m and a depth of 0.60m. It was filled with brown silty sand (27006), which contained a brick fragment of indeterminate date (Appendix 00). The ditch was cut by a land-drain (27007). The two tree-bowls (27003 and 27004) were oval features situated on the southern side of the ditch.

Trench 27 was covered by a 0.18m deep layer of brown silty sand subsoil and 0.22m of topsoil.

# 7.3 Field 8

7.3.1 Ten trenches (Trenches 9, 10, 11, 12, 13, 16, 17, 18, 25 and 26) were excavated in Field 8, which lay immediately south-east of Field 7.

# 7.3.2 **Trench 9** (Figs. 4 and 14; Pl. 11)

Trench 9 was aligned from the north-west to the south-north and was 50m in length and 2m in width. A north-south aligned linear feature (9003) was recorded at the western end of the trench.

Linear 9003 was of U-shaped profile, 1.24m wide and 0.41m deep. The fill consisted of mixed brownish grey clay sand with frequent timber fragments (9002), suggesting water-logging within the feature.

The trench was covered by a 0.15m deep layer of subsoil (9004) and 0.40m of topsoil (9001).

# 7.3.3 **Trench 10** (Figs. 4 and 15; Pls. 12 and 13)

This trench was aligned north-east to south-west and measured 30m long by 3m wide. Two linear features (10003 and 10005) were present at the north-eastern end of the trench cutting into the gravel-rich sand natural.

Linear 10003 formed a terminal at its northern end and had a 1.80m wide, 0.07m deep dished profile. The fill (10002) consisted of greyish brown peaty sand that contained 2<sup>nd</sup> century Romano-British sherds (Appendix 7).

Linear 10005 had a west to east alignment and a broad, shallow profile that was 1.15m wide and 0.17m deep. It was filled with a deposit of dark greyish brown peaty sand (1004).

A 0.40m deep deposit of topsoil (10001) covered the feature in Trench 10.

# 7.3.4 **Trench 11** (Figs. 4 and 16)

Trench 11 was aligned from north-east to south-west, and measured 50m in length and 2m in width. Two pits (11003 and 11005) were identified in the north-eastern part of the trench.

Pit 11003 measured 0.64m long, 0.53m wide and 0.08m deep, whereas Pit 11005 was a more substantial feature with a length of 0.60m and a width 0.75m and a depth of 0.10m. The pits were filled with similar deposits of very dark grey humic sand (11002 and 11004 respectively); both contained sherds of  $2^{nd}$  century Romano-British pottery (Appendix 7).

The trench was covered by a 0.45m deep layer of topsoil (11001).

# 7.3.5 **Trench 12** (Fig. 4)

This trench was aligned north-west to south-east and was 50m long and 2m wide. No archaeological features, deposits or finds were present, the trench being covered by a 0.37m thick layer of topsoil (12001).

#### 7.3.6 **Trench 13** (Figs. 4 and 17; Pls. 14 and 15)

This trench was aligned north-east to south-west and measured 50m long by 2m wide. Two gullies (13005 and 13013) were recorded, along with three pits (13003, 13007 and 13010).

Gully 13005 was represented by a rounded terminal that appeared to have a north to south alignment. It was 0.90m wide and 0.25m deep with a broad-U profile and was filled with dark brown sandy peat. Gully 13005 was cut by a later pit (13003) on the western side. Gully 13013 was identified at the western end of the trench, also having a north to south alignment; it terminated at its northern end. This gully had a U-shaped profile, 1.20m wide and 0.40m deep. The brown silty sand fill (13014) contained no finds.

The three pits were oval features with lengths of between 1.20m and 1.60m, widths between 1.00m and 1.20m and depths between 0.25 and 0.38m. Pit 13003 had a single fill consisting of dark brownish grey sandy peat. Pits 13007 and 13010 had light brownish silty sands (13009 and 13012 respectively) at the base, with dark brownish grey loamy material (13008 and 13011 respectively) at the top. No finds were recovered form the pit fills.

Trench 13 was covered with a 0.40m deep layer of modern ploughsoil (13001).

#### 7.3.7 **Trench 16** (Fig. 4)

Trench 16 was aligned from north-east to south-west and was 8m in length and 4m in width. No archaeological features, deposits or finds were present, the

silty sand with degraded peat natural being overlain by a 0.40m deep layer of topsoil (16001).

### 7.3.8 **Trench 17** (Fig. 4)

Trench 17 had a south-south-west to north-north-east alignment and measured 50m in length and 2m in width. No archaeological features, deposits or finds were present. The sandy natural (which included a patch of peat – context 17005) was cut by a number of north-west to south-east aligned plough-scars (17002, 17003 and 17004), which were presumably modern. The trench was overlain by a 0.40m depth of silty sand topsoil (17001).

#### 7.3.9 **Trench 18** (Figs. 4 and 17; Pls. 16 and 17)

Trench 18 was aligned from north-west to south east and was 50m long and 2m wide. A large ditch (18006) was recorded in the northern part of the trench and a pit (18008) at the southern end.

Ditch 18006 had a north-east to south-west alignment, and a broad-U profile, 4.40m wide and over 0.80m deep; the feature was not fully excavated due to water-logging and safety considerations. The earliest observed fills were two deposits of greyish sandy clay (18009 and 18010) on the south-east side and two deposits of pale sand (18004 and 18011) on the north-west. There were also more general deposits of dark clay (18003 and 18005), with a band of pale sand (18002) at the top of the ditch. There were no finds.

Pit 18008 was sub-circular in plan, with a dished profile 0.90m wide and 0.19m deep. The fill (18007) consisted of brown clay sand; there were no finds.

Trench 18 was covered by a 0.32m deep layer of dark brown silty sand topsoil (18001).

### 7.3.10 **Trench 25** (Fig. 4)

Trench 25 was aligned from the north-west to the south-east and was 8m long and 4m wide. No archaeological features, deposits or finds were present, the trench being covered with a 0.45m deep layer of turf and topsoil (contexts 25001 and 25002).

#### 7.3.11 **Trench 26** (Figs. 4, 19 and 20; Pls.18-23)

Trench 26 was aligned from north-west to south-east, and measured 50m x 2m. A sequence of ditches, gullies, pits and land-drains was recorded, and these are listed and described immediately below.

At the western end of the trench Ditch 26036 cut into natural deposits on a north to south alignment. The ditch was of broad-U profile, at least 1m wide and 0.40m deep. The fill (26035) consisted of dark brown sandy clay.

Ditches 26030 and 26038 ran parallel to, and immediately east of, Ditch 26036. Ditch 26030 was the earliest of the two, existing as a broad, flat-based-V cut c. 2m wide and 0.55m deep. It was filled with a single deposit of dark greyish brown clay sand (26029) that contained no finds. Ditch 26038 cut the eastern edge of Ditch 26030; this feature also had a flat-based V profile, and measured 1.52m in width and 0.60m in depth. The primary fill consisted of grey silty sandy clay (26037), with a deposit of pale sand (26042) on the western side of the ditch. The secondary ditch fill (26040) consisted of darker grey silty sandy clay, and the upper part of the ditch was occupied by dark peaty material (26041). There were no finds.

Moving east, Ditch 26028 had a north-south alignment, and a broad, flat-based-V profile 1.80m wide and 0.66m deep. It was filled by an homogenous deposit of dark yellowish brown, peaty, sandy clay (26029) which contained a number of slag fragments.

Another ditch with a broad-V profile was situated c.3m east of Ditch 26028. This ditch was recorded as cut 26026 and 26023, and it was 3.50m wide and 0.60m deep. The primary fill (26022=26025) consisted of dark grey peaty

loam and clay, with a brownish clay sand upper fill (26021=26024). The primary fill contained 2<sup>nd</sup> century Romano-British sherds (Appendix 7), with fragments of probable iron smelting slag from 26021 (Appendix 11).

A broad curving ditch (26064) was present in the central part of the trench, cutting into natural deposits (26065). It was excavated in two segments, 26045 at the west (where the sequence was complicated by a series of intercutting features) and 26031 to the east. Ditch 26031 was later than a small pit-like feature (26066 – cut by segment 26031).

The form of Pit 26066 was difficult to discern due to truncation by the ditch, but it was at least 0.30m and 0.15m deep. The brown silty sand fill (26032) contained 2<sup>nd</sup> century Romano-British sherds (Appendix 7) and possible iron smelting slag (Appendix 11).

Ditch segment 26045 had a broad-U profile, c. 5m wide and 0.70m deep. The primary fill consisted of brown silty clay sand (recorded as 26047, 26054 and 26063), from which no finds were recovered. There were indications of two possible re-cuts (cut 26051, fills 26052 and 26062; cut 26061, fills 26059 and 26058) on the eastern side. The ditch then filled up with a deposit of dark brown silty, sandy clay (26053=26058); this was then cut by two possible subcircular pits (cut 26057, fill 26050; cut 26049, fill 26048). Another possible pit (cut 26056, fill 26055) cut into Pit 26057. None of the brownish silty sand fills of these features contained any finds. The top of the ditch and the other features was overlain by a substantial deposit of dark brown silty clay (26046), which contained a number of 2<sup>nd</sup> century Romano-British sherds (Appendix 7).

Ditch segment 26031 was c. 2m wide and 0.45m deep, with a broad, rounded-V profile. The primary fill (26039) consisted of brownish silty sand, with two darker, more clay, fills above (26033 and 26034), both of which contained 2<sup>nd</sup> century Romano-British sherds (Appendix 7).

To the east of the point at which Ditch 2064 returned southwards out of the trench, a south-west to north-east aligned gully (26005) was recorded. Gully 26005 had a broad-U profile 0.73m wide and 0.17m deep. The dark grey silty sand fill (26004) contained no finds.

Three pits (26008, 26013 and 26019) were located at the eastern end of the trench. Pit 26008 lay immediately east of Gully 26005. This was a subcircular feature, with a flat base and steep-sides that flared out at the top, around 2m in diameter and 0.70m in depth. The base of the pit was filled with brownish grey silty sand (26007), with darker silty sand (26006) at the top. Fill 26006 contained probable iron smelting furnace slag fragments (Appendix 11). Pit 26019 was a broader, shallower feature with a diameter of 2.50m and a depth of 0.20m. The mixed pale yellowish brown silty fill (26018) contained no finds. Pit 26013 lay at the eastern extreme of the trench, its form being obscured by truncation by later features. The base of Pit 26013 was filled with a deposit of silty sand, with 26014 above.

Pit 26019 was cut through by a later south-west to north-east aligned gully (excavated in two segments – 26003 and 26010). The gully had a shallow-U profile and was 0.60m wide and 0.20m deep. The dark greyish brown silty sand fill (26002 and 26009 respectively) yielded no finds.

The latest features in Trench 26 were two north to south aligned land-drains, 26044 (fill 26043) at the western end of the trench, and 26011 (fills 26012 and 26016) at the eastern end. Both land-drains cut through a 0.13m deep subsoil layer (26017).

Trench 26 was covered by a 0.32m deep layer of topsoil (26001).

# 7.3.12 **Trench 58** (Fig. 4)

Trench 58 was situated in the extreme south-west tip of Field 8. It was aligned from north-east to south-west, and was 8m long and 4m wide. No

archaeological features, deposits or finds were present. The sandy clay natural was overlain by a 0.63m deep topsoil layer (58001).

#### 7.4 Field 9

7.4.1 Twenty-one trenches (Trenches 28-48) were excavated in Field 9, which was located at the north-eastern corner of the site.

### 7.4.2 **Trench 28** (Fig. 4)

Trench 28 was aligned from east-north-east to west-south-west and measured 25m in length by 4m in width. No archaeological features, deposits or finds were present. The sandy natural deposits were cut through by a number of north-north-west to south-south-east aligned plough-scars (28002). The trench was covered by a layer of modern topsoil (28001), which was between 0.28m and 0.64m deep.

### 7.4.3 **Trench 29** (Fig. 4)

Trench 29 was aligned from south-east to north-west and was 30m by 2m in size. No archaeological features, deposits or finds were present. The surface of the sandy natural was cut by a number of south-east to north-west aligned plough-scars (29002), a tree-bowl (29003) and a land-drain (29004). The trench was covered by a 0.33m thickness of topsoil (29001).

#### 7.4.4 **Trench 30** (Fig. 4)

Trench 30 was aligned from north-west to south-east, and measured 15m in length and 4m in width. No archaeological features, deposits or finds were present. The sandy natural was cut by a tree-bowl (30002). Trench 30 was covered by a 0.30m deep layer of topsoil (30001).

#### 7.4.5 **Trench 31** (Fig. 4)

Trench 31 was aligned from north-west to south-west and was 13.50m long and 4m wide. No archaeological features, deposits or finds were present. The sandy natural deposits were cut by two north-south aligned land-drains (31002 and 31003). Trench 31 was covered by a 0.32m deep layer of topsoil (31001).

#### 7.4.6 **Trench 32** (Figs. 4)

Trench 32 was aligned from north to south and was 10m long by 4m wide. No archaeological features, deposits or finds were present. The natural deposits in Trench 32 were heavily disturbed by tree roots and were overlain by a 0.40m deep layer of topsoil (32001).

# 7.4.7 **Trench 33** (Figs. 4)

Trench 33 was aligned from east to west and measured 15m long by 2m wide. No archaeological features, deposits or finds were present. The surface of the sandy natural was cut by a series of eight north-east to south-west aligned plough-scars (33002). Trench 33 was covered by a 0.40m deep layer of topsoil (33001).

#### 7.4.8 **Trench 34** (Figs. 4 and 21; Pls. 24-26)

This trench was aligned north-west to south-east and was 50m in length by 2m wide. The sandy natural deposits were cut by a pair of parallel gullies (34003 and 34005) at the western end of the trench, and two parallel ditch terminals (34007 and 34009) in the centre.

Gullies 34003 and 34005 shared a south-west to north-east alignment. Gully 34003 had a broad-U profile, 0.71m wide and 0.21m deep, whereas Gully 34005 had a conventional U-shaped profile, and was narrower at 0.43m wide, but deeper at 0.37m. The fills (34002 and 34004 respectively) were similar dark grey sands. Fill 34002 contained 2<sup>nd</sup> century Romano-British sherds (Appendix 7), but Fill 34004 had a piece of clay tobacco pipe stem (Appendix 2) suggesting a post-medieval date for this feature.

Ditches 34007 and 34009 were aligned south-east to north-west and terminated at their northern ends. Both were around 1.20m wide, with broad-U profiles; at 0.15m deep Ditch 34007 was shallower than Ditch 34009, which had a depth of 0.25m. The greyish sand fills (34006 and 34008 respectively) yielded no finds.

The sequence was completed by a 0.40m deep layer of topsoil (34001).

#### 7.4.9 **Trench 35** (Fig. 4)

Trench 35 was aligned from the south-west to the north-east and measured 10m in length by 4m in width. No archaeological features, deposits or finds were present, the trench being overlain by a 0.25m deep topsoil layer (35001).

## 7.4.10 **Trench 36** (Fig. 4)

Trench 36 was aligned roughly west to east and measured 10m in length by 4m in width. No archaeological features, deposits or finds were present, a 0.35m deep layer of topsoil (36001) being the only recorded context.

# 7.4.11 **Trenches 37, 38 and 40** (Figs. 4, 22, 23 and 24; Pls. 27-31)

These three trenches are described together because a broad, shallow ditch (37008, 38006 and 40005) passed through all three on a south-west to northeast alignment. There was also a shallower broad ditch (40009) in Trench 40 and a gully (38003) in Trench 38. The three trenches had north-west to southeast alignments; Trenches 38 and 40 were 45m in length and 2m in width, whereas Trench 38 measured 8m x 4m.

Ditch 37008/38006/40005 had a broad-U profile, c. 6m wide and 1.13m deep. Although the ditch segments were situated relatively closely together, they displayed rather different histories of in-filling. Ditch segment 37008 had a greyish brown silty sand primary fill (37003 and 37004) that was truncated by a probable re-cut (37009). Re-cut 37009 was of broad U-shaped profile, 1.50m wide and 0.60m deep. The grey mottled sand fill (37005) contained a large timber (37006), and a 17<sup>th</sup> century ceramic land-drain (37007 – Appendix 9) for which no specific cut was recognised. Fill 37005 was overlain by a deposit of brown sand (37002) that occupied the top of the ditch; this contained a possible 17<sup>th</sup> century brick fragment and a post-medieval sherd (Appendix 8). Ditch segment 38006 had a greyish brown sand primary fill (38005) with an overlying fill of yellowish brown sand (38004); these fills

contained 19<sup>th</sup> century CBM fragments (Appendix 9). The primary fill of Ditch segment 40005 consisted of dark grey silty sand (40004), with a more mixed layer above (40003) and brown sandy clay (40002) at the top of the ditch. Fill 40004 contained late 18<sup>th</sup>/19<sup>th</sup> century ceramic land drain fragments (Appendix 9). This segment was cut by the slot for a ceramic land-drain (cut 40007, fill 40006).

Gully 38003 was situated on the eastern side of Ditch segment 38006, and had a 0.67m wide and 0.42m deep U-shaped profile. The yellowish brown sand fill (38002) contained a mid-18<sup>th</sup> century ceramic land-drain (Appendix 9).

Ditch segment 40009 was identified running parallel to, and west of, Ditch segment 40005, and was a broad, relatively shallow feature, 8.60m wide and 0.41m deep. It was filled by a homogenous deposit of brown silty sand (40008) that contained post-medieval sherds (Appendix 00).

Trenches 37, 38 and 40 were covered by topsoil to a depth of 0.40m (respectively contexts 37001, 38001 and 40001).

#### 7.4.12 **Trench 39** (Fig. 4)

Trench 39 was aligned roughly west to east and measured 8m in length by 4m in width. No archaeological features, deposits or finds were present, the sandy natural deposits being overlain by a 0.40m thickness of topsoil (39001).

# 7.4.13 **Trench 41** (Figs. 4 and 25; Pl. 32)

Trench 41 had a north-west to south-east alignment and was 50m long and 2m wide. A gully (41002), similar in form and parallel to a north-west to southeast aligned land-drain (41005), probably formed part of the same drainage regime. No other features, archaeological deposits or finds were present.

Gully 41002 formed a narrow, steep-sided slot 0.30m wide and 0.14m deep, and terminated at its north-western end. Land-drain 41005 was of similar width and profile, but was deeper and contained a ceramic pipe.

The trench was overlain by a 0.40m deep topsoil layer (41001).

#### 7.4.14 **Trench 42** (Fig. 4)

Trench 42 was aligned south-west to north-east and located at the extreme north-east corner of the site. It measured 50m x 2m. No archaeological features, deposits or finds were present, the trench being sealed by 0.40m of topsoil (42001).

#### 7.4.15 **Trench 43** (Fig. 4)

This trench had a north-west to south-east alignment and was 40m long and 2m wide. No archaeological features, deposits or finds existed in the trench, a 0.40m deep layer of topsoil (43001) covering the sandy natural deposits.

#### 7.4.16 **Trench 44** (Fig. 4)

Trench 44 was aligned from north-west to south-east and was 8m long by 4m wide. No archaeological features, deposits or finds were present. Sandy, slightly stony, natural deposits were covered by a 0.42m thickness of topsoil (44001.)

#### 7.4.17 **Trench 45** (Fig. 4)

Trench 45 was aligned north-west to south-east and measured 45m by 2m. No archaeological features, deposits or finds were present, but the natural was cut through by a modern engineering test-pit (fill 45002, cut 45003). The trench was covered by a 0.36m deep layer of topsoil (45001).

#### 7.4.18 **Trench 46** (Fig. 4)

Trench 46 was aligned roughly north to south, and was 10m long and 4m wide. No archaeological features, deposits or finds were present, the clay sandy natural being overlain by a 0.40m deep layer of topsoil (46001).

# 7.4.19 **Trench 47** (Fig. 4)

This trench had an approximate west to east alignment, and was 50m in length and 2m in width. No archaeological features, deposits or finds were present. Natural deposits were covered by a 0.36m deep layer of topsoil (47001).

#### 7.4.20 **Trench 48** (Fig. 4)

Trench 48 was aligned south-west to north-east, measuring 8m in length and 4m in width. No archaeological features, deposits or finds were present, the sandy natural being overlain by a 0.39m deep layer of topsoil.

#### 7.5 Field 10

7.5.1 Field 10 was situated in the north-west corner of the site, where eight trenches (Trenches 49-51 and 57) were excavated.

# 7.5.2 **Trench 49** (Fig. 4)

Trench 49 had a north-west to south-east alignment and was 50m long and 2m wide. No archaeological features, deposits or finds were present, the trench being covered with topsoil to a depth of 0.38m.

#### 7.5.3 **Trench 50** (Fig. 4)

Trench 50 was aligned from north-east to south-west and was 8m by 4m in size. No archaeological features, deposits or finds were present, the trench being covered by a 0.35m deep layer of topsoil (50001).

# 7.5.4 **Trench 51** (Fig. 4)

Trench 51 had a north-west to south-east alignment, and was 40m long by 2m wide. No archaeological features, deposits or finds were present. The trench was covered by a 0.35m deep layer of topsoil (51001).

#### 7.5.5 **Trench 52** (Fig. 4)

This trench was aligned from the west-north-west to the east-south-east, and measured 50m in length and 2m in width. No archaeological features, deposits

or finds were present, natural deposits being overlain by a 0.37m thick layer of topsoil (52001).

#### 7.5.6 **Trench 53** (Fig. 4)

Trench 53 had a north-west to south-east alignment, and was 8m by 4m in size. No archaeological features, deposits or finds were present, but a modern concrete foundation was noted in the trench's western section. The trench was covered with topsoil to a depth of 0.30m.

#### 7.5.7 **Trench 54** (Fig. 4)

This trench measured 8m by 4m with a rough north to south alignment. No archaeological features, deposits or finds were identified.

#### 7.5.8 **Trench 55** (Fig. 4)

Trench 55 was aligned north-west to south-east and was 20m long and 2m wide. No archaeological features, deposits or finds were present. The 0.40m deep topsoil was the only context recorded.

#### 7.5.9 **Trench 56**

As previously stated, this trench was not excavated due to the proximity of an overhead power line and a footpath.

#### 7.5.10 **Trench 57** (Figs. 4 and 26; Pls. 33 and 34)

Trench 57 was aligned form the north-west to the south-east and was 32m long and 2m wide. A sequence of north-east to south-west linear features was identified in the eastern half of the trench.

The earliest feature (57007) was truncated on both east and west sides, but appears to have been linear in form, and at least 0.80m wide and 0.25m deep. The brown silty sand fill (57008) contained no finds.

Feature 57007 was cut away on its west side by a U-profiled ditch (57013) that was 0.70m wide and 0.45m deep. It was filled with brown silty sand (57014).

On 57007's eastern side another U-profiled ditch (cut 57009, fill 57010) was truncated at its southern end by the apparent northern terminal (cut 57013, fill 57014) of a re-cut. A posthole (cut 57011, fill 57012) survived to a depth of 0.07m in the base of re-cut 57013. None of these brown silty sand fills contained any finds.

A broad, shallow linear feature (57003), 2.75m wide and 0.31m deep, situated c. 2m west of Ditch 57005, may have been a furrow. The yellowish brown sandy silt fill (57006) contained 19<sup>th</sup> century sherds (Appendix 8), early 19<sup>th</sup> century brick and 18<sup>th</sup> century land drain fragments (Appendix 9), glass fragments and a small limestone block.

The features were overlain by 0.30m deep layer of modern demolition debris (57002), with a thin layer of topsoil (57001) above.

#### 7.6 Field 12

7.6.1 Field 12 lay in the central part of the site. Twenty-three trenches (Trenches 59-68 and 70-81) were excavated in this field.

#### 7.6.2 **Trench 59** (Figs. 4 and 27; Pls. 35-38)

Trench 59 was aligned from north-west to south-east and was 50m long and 2m wide. Evidence for iron-working was present in the form of dumps of slag and furnace bottoms that were backfilled into a large cut feature (59023) and apparently laid into a working surface (59009) that was associated with other burnt dumps (59025 and 59015) and two postholes (59027 and 59025). There were also a number of linear features – both ditches and gullies – that appear to post-date the iron-working.

Only part of Cut 59023 was excavated; this large ditch segment (or perhaps pit) was of broad-V profile, at least 2.10m in length, 0.83m in width and 0.93m in depth. Of the generally sandy fills (59014, 59016, 59020, 59022, 59030 and 59031), 59014, 59016 and 59022 contained iron-working slag (Appendix 11), plus 2<sup>nd</sup> century Romano-British pottery (Appendix 7) and a horse bone in

59016 (Appendix 10). Contexts 59020 and 59022 contained significant deposits of oak charcoal, which indicate dumping of large amounts of waste from industrial activity (Appendix 5). Deposit 59015 was exposed at the base of a sondage and consisted of grey silty sand; it was overlain by a deposit of dark grey silty sand with frequent fragments of furnace slag, possible lining and hammerslag (59009) that probably represented a deliberately-laid surface. Context 59015 contained oak charcoal, possibly representing dumped waste material from industrial hearths (Appendix 5). Deposit 59005 was overlain by a dump of greyish brown silty sand (59008) that contained a 2<sup>nd</sup> century sherd (Appendix 7) plus possible spheroidal hammerslag (Appendix11). Another burnt deposit with frequent slag fragments (59025) covered a posthole (cut 59027, fill 59026) that, alongside another example (cut 59029, fill 59028), hints at the presence of small-scale or temporary timber structures during this activity phase.

Towards the western end of the trench, a 1.10m wide and 0.25m deep northwest to south-east aligned ditch (59007) was recorded, filled with brown silty sand (59006). After running for around 4m the ditch was recorded as Ditch segment 59011, which was shallower at 0.12m deep; it was also filled with brown silty sand (59010). Ditch 59011 was joined from the east by an east-west gully (59013); the relationship between the two is unclear. Gully 59013 was of rounded-V profile, 0.38m wide and 0.20m deep, and filled with greyish silty sand (59012).

Deposit 59009 was cut through by a relatively shallow north-south ditch (59021) that was 1.10m wide and 0.30m deep. The dark silty sand fill (59019) contained no finds.

Another broad, relatively shallow ditch (59018) ran parallel to, and immediately east of Ditch 59009. Ditch 59018 had a dished profile and was 1.97m wide and 0.29m deep. The dark greyish fill (59017) contained slag fragments.

Finally, at the eastern end of Trench 59, a gully (59005) was cut by a later ditch (59003). Gully 59005 was aligned roughly west to east, with a 0.28m wide, 0.09m deep, U-shaped profile. The dark grey silty sand fill (59004) had no finds. Ditch 59003 had a north-west to south-east alignment, the broad-U profile being 1.99m wide and 0.35m deep. The fill (59002) consisted of dark brown silty sand, with once again no finds.

The sequence in Trench 59 was completed by a 0.35m deep topsoil layer (59001).

## 7.6.3 **Trench 60** (Fig. 4)

Trench 60 had a north-west to south-east alignment and was 22m long by 2m wide. No archaeological features, deposits or finds were present, the trench being covered by a 0.25m deep layer of topsoil (60001).

#### 7.6.4 **Trench 61** (Fig. 4)

Trench 61 was also aligned from the north-west to the south-east; it measured  $25m \times 2m$ . No archaeological features, deposits or finds were present. The trench was covered by a 0.26m thick layer of topsoil (61001).

#### 7.6.5 **Trench 62** (Figs. 4)

In common with Trenches 59-61, Trench 62 was aligned from the north-west to the south-east. Its dimensions were 25m long and 2m wide. No archaeological features, deposits or finds were present. Topsoil (62001) covered the trench to a depth of 0.25m.

# 7.6.6 **Trench 63** (Figs. 4 and 28; Pl. 39)

Trench 63 had a north-west to south-east alignment, and was 50m long and 2m wide. A ditch (63007= 63011) and a gully (63013) were present, along with a later land-drain (63004).

A broad ditch was recorded at the east end of the trench; Segment 63007 to the west of a land-drain of probable 18<sup>th</sup> century date (cut 63004; fills 63002 and

63003), and Segment 63011 to the east. The ditch was 4.90m wide and 0.74m deep, with a broad-U profile. Lenses of yellowish brown sand (63010) were recorded at the ditch's base, with deposits of greyish peaty clay (63006 and 63009) and dark silty sand (63005 and 63008) above. The only finds consisted of late-18<sup>th</sup> century ceramic land drain pipes from 63002 (Appendix 9).

Gully 63013 was located in the central part of the trench on a north-west to south-east alignment. The gully had a shallow-U profile, 0.69m wide and 0.16m deep. The fill (63012) consisted of greyish brown silty sand, which contained no finds.

Trench 63 was covered by a 0.40m deep layer of topsoil (63001).

## 7.6.7 **Trench 64** (Figs. 4 and 29; Pl. 40)

Trench 64 was aligned from north-west to south-east, and measured 50m x 2m. A ditch (64004) was recorded it the western part of the trench, with two intersecting gullies (64006 and 64008) towards the east.

Ditch 64004 appeared curvilinear in form, its course swinging from south-east to south-west. It had a rounded-V profile, 1.05m wide and 0.71m deep. The dark silty clay primary fill (64003) was overlain with dark brown peaty material (64002), neither of which contained any finds.

The earliest of the two gullies was recorded as Gully 64008; this was a shallow feature with a dished profile 0.72m wide and 0.07m deep, on a north-north-west to south-south-east alignment. The dark brown silty sand fill (64007) contained no finds. Gully 64008 was cut at its eastern end by later Gully 64006. This was aligned west to east with a broad-U profile, 0.82m wide and 0.19m deep, and was filled with dark silty sand (64005). There were no finds.

The features in Trench 64 were covered by a 0.30m deep layer of topsoil (64001).

#### 7.6.8 **Trench 65** (Fig. 4)

Trench 65 was also aligned south-west to north-east, but was smaller at 8m in length and 4m in width. No archaeological features, deposits or finds were present. The trench was covered by a 0.25m thickness of topsoil (65001).

# 7.6.9 **Trench 66** (Figs. 4 and 30; Pl. 41)

Trench 66 was south-south-west to north-north-east aligned, and was 43m long and 2m wide. A single ditch (66003) was located, lying in the northern part of the trench.

Ditch 66003 was a broad, shallow feature with a dished profile, 3.70m wide and 0.24m deep. It was filled with a deposit of dark brown silty sand (66002) that contained no finds. The general form of this feature suggested that it was a furrow.

The trench was covered by a 0.35m deep layer of topsoil (66001).

#### 7.6.10 **Trench 67** (Figs. 4 and 31; Pls. 42 and 43)

This trench was aligned from the north to the south, and measured 8m in length by 4m in width. A substantial ditch (67009) was identified at the southern end of the trench, the ditch being cut by a land-drain (67004). A shallow gully (67011) ran parallel to the land-drain at the north of the trench.

Ditch 67009 was not fully excavated (due to safety factors), but it was at least 4m wide and 1.20m deep, with an apparent broad-V profile. The ditch had appeared to fill up from the northern side, where two pale sand or sandy clay deposits (67012 and 67013) were overlain by a dark peaty layer (67008) and another pale sandy layer (67007). The centre of the ditch was filled with pale coarse sand (67006), with pale silty sand (67005) at the top. The only finds consisted of an undiagnostic brick fragment from 67005 (Appendix 9).

Gully 67011 had a shallow, dished profile, 0.62m wide and 0.12m deep. The grey silty sand fill (67010) contained no finds. Land-drain 67004 contained a ceramic drain-pipe in its fill (67003).

Trench 67 was overlain by a 0.30m deep topsoil layer (67001).

#### 7.6.11 **Trench 68** (Figs. 4 and 32; Pl. 44)

Trench 68 had a south-west to north-east alignment, and was 28m in length and 2m in breadth. A single ditch (68008) was recorded, located in the northern part of the trench, and probably relating to the ditch recorded in Trench 70 immediately to the south-west.

Ditch 68008 was aligned roughly east-west, and had a broad-U profile, 5.50m wide and 0.96m deep. The earliest fills were grey sands that had slumped down the edges of the ditch – 68006 at the north and 68007 at the west. The central part of the ditch's base was filled with dark grey clay (68003) that contained wood fragments and a horse tooth (Appendix 10). Subsequently, a deposit of brown sand (68005) accumulated along the northern edge of the ditch, with similar material (68004) along the east edge. The top of the ditch was filled with yellowish brown silty sand (68002). Fill 68003 was the only deposit to contain any finds, which consisted of Romano-British sherds, animal bone fragments and a possible copper-alloy coin (SF 1).

Trench 68 was covered with a 0.33m thick topsoil layer (68001), which contained undiagnostic brick fragments (Appendix 9).

# 7.6.12 **Trench 70** (Figs. 4 and 33; Pl. 45)

Trench 70 was aligned from the north-west to the south-east and measured 28m in length and 2m in width. A single ditch was identified that ran along the entire length of the trench and was excavated in three segments (from north-west to south-east 70010, 70016 and 70007). This ditch corresponded to Ditch 68008 in Trench 68 to the north-west. Two north-west to south-east

land-drains (cut 70005, fill 70004 and cut 70012, fill 70011) were also recorded.

The ditch was at least 2m wide and 0.50m deep, with a broad, dished profile. The basal fill (70013, 70015 and 70003) consisted of dark brown peaty clay, fill 70015 containing 15/16<sup>th</sup> century sherds, and undiagnostic brick fragment (Appendix 9) and a sheep or goat tooth (Appendix 10). The upper part of the ditch was filled with brownish silty sand (70008, 70009, 70014 and 70002), from which no finds were recovered.

Trench 70 was covered by a 0.28m deep layer of topsoil (70001).

#### 7.6.13 **Trench 71** (Fig. 4)

Trench 71 had a south-west to north-east alignment and measured 8m in length and 4m in width. No archaeological features, deposits or finds were present, the trench being overlain by a 0.30m deep topsoil layer (71001).

#### 7.6.14 **Trench 72** (Fig. 4)

Trench 72 was aligned from the north-west to the south-east, and was 38m in length and 2m in width. No archaeological features, deposits or finds were present. A series of plough-scars (72003) and three land-drains (72004, 72005 and 72006) cut into the surface of the natural, which was overlain by a 0.35m thick subsoil layer. Topsoil (72001) to a depth of 0.14m covered the trench.

# 7.6.15 **Trench 73** (Fig. 4)

Trench 73 was aligned form the south-west to the north-east and measured 10m in length and 4m in width. No archaeological features, deposits or finds were present. A modern engineering test-pit was noted. The trench was covered with a 0.37m deep subsoil layer (73002), with a 0.21m depth of topsoil (73001) above.

#### 7.6.16 **Trench 74** (Figs. 4 and 34)

Trench 74 had a north-west to south-east alignment, and was 25m in length and 2m in width. A single north-south aligned ditch (74004) was present in the central part of the trench, along with three land-drains (collectively recorded as (74002).

Ditch 74004 was of rounded-V profile, 0.90m wide and 0.62m deep. The single dark greyish brown sandy silt fill (74003) contained no finds.

The trench was covered by topsoil (74001) to a depth of 0.37m.

#### 7.6.17 **Trench 75** (Figs. 4 and 35; Pl. 46)

Trench 75 was aligned from the north-west to the south-east and was 8m by 4m in size. Two parallel south-west to north-east gullies (75009 and 75014) were present, along with a later intersecting feature (75012) and two ditches (75005 and 75007) that were parallel to gullies 75009 and 75014.

Gullies 75009 and 75014 were between 0.50m and 0.60m wide and 0.12m and 0.21m deep. Both were filled with greyish or brownish silty sand (75008 and 75013 respectively). Fill 75008 contained a Romano-British sherd (Appendix 7).

Feature 75012 cut into Gully 75014 from the south-west, at which point it terminated. The exact form of this feature was unclear as it extended beyond the excavated area, but it is likely to have been a ditch (if not a large pit) at least 1.10m wide and 0.44m deep. The primary fill consisted of brownish silty sand (75011), with greyish brown sand (75010) above. There were no finds.

Ditch 75007 was of rounded-V profile, measuring 0.80m wide and 0.47m deep. The single fill (75006) consisted of dark brown silty sand from which two cattle bone fragments were recovered (Appendix 10).

Ditch 75005 was a more substantial feature with a width of at least 1.41m and a depth of 0.79m, and an apparent flat-based-V profile. The primary fill consisted of dark loamy peat (75004), with grey sand (75003) and dark brown silty sand (75002) above. The only finds six horse teeth from 75004 (Appendix 10).

The features in Trench 75 were covered with a 0.29m deep topsoil layer (75001).

#### 7.6.18 **Trench 76** (Figs. 4 and 36; Pl. 47)

Trench 76 was aligned from the north-west to south-east and was 8m by 4m in size. A sequence of inter-cutting linear features was recorded.

The earliest feature was a sinuous gully (excavated in two segments - 76005 and 76013) that had a 0.50m wide and 0.35m deep U-shaped profile. The fill (76004 and 76012) consisted of greyish brown silty sand; a 12/13<sup>th</sup> century sherd was recovered from 76012 (Appendix 8).

Another U-profiled gully (excavated as segments 76003 and 76011) cut into the northern end of Gully 76005. This gully was around 0.45m wide and 0.20m deep and filled with greyish brown silty sand (76002 and 76010). The only find was a 12/13<sup>th</sup> century sherd from 76010 (Appendix 8).

Gully segment 76013 was truncated by a later feature (76007) that had a wide profile, at least 2.15m in width and 0.36m in depth. The form of this later feature is unclear, but it was aligned north-east to south-west and is likely to have been a ditch, albeit a shallow one. It was filled with dark greyish brown silty sand (76006) that contained 12/13<sup>th</sup> century sherds (Appendix 8) and animal bone fragments (Appendix 2), as well as pieces of late-18<sup>th</sup>/19<sup>th</sup> ceramic land drain (Appendix 9).

A more certain ditch (76015) cut into the eastern edge of Feature 76007. This too had a north-west to south-east alignment, showing a broad-V profile that

was at least 3.10m wide and 0.82m deep. The primary fill (76009) consisted of dark brown silty sand (76009), which contained 12<sup>th</sup> century sherds (Appendix 00) and a piece of timber (76014). A deposit of brownish sandy clay (76018) lay at the top/centre of the ditch, with brown sandy gravel (76008) along the southern edge. These upper fills contained no finds.

A north-west to south-east aligned cut for a late 18<sup>th</sup>/19<sup>th</sup> century ceramic land-drain (76017), packed with limestone fragments (76016), cut through the top of Ditch 76007.

The sequence was completed by a 0.44m deep layer of topsoil (76001).

# 7.6.19 **Trench 77** (Figs. 4, 37 and 38; Pls. 48-52)

Trench 77 was aligned south-west to north-east and was 50m by 2m in size. A sequence of inter-cutting features was recorded, many of which are likely to be of medieval or post-medieval origin.

Two inter-cutting ditches (77030 and 77038) were recorded in the north-eastern part of the trench on north-west to south-east alignments. Ditch 77038 was the earlier of the two, and had a 1.40m wide and 0.41m deep, flat-based V profile. There was a dark silty sand primary fill (77040) with yellowish brown silty sand (77039) above, the latter containing two Romano-British sherds (Appendix 7).

Ditch 77030 cut the north-western side of Ditch 77038 and showed a relatively complicated history of in-filling. Two greyish sand deposits (77036 and 77037) occupied depressions in the base of the ditch (these may have been natural in origin). A greyish brown sand (77032) deposit lay along the ditch's northern edge, with a similar deposit (77033) along the southern edge. The lower part of the centre of the ditch was filled with reddish brown clay (77035) with a shallow band of reddish brown sand (77034) above. The uppermost fill (77031) consisted of yellowish brown sandy loam. A late 12<sup>th</sup> sherd was recovered from fill 77031 and a 16<sup>th</sup> century sherd from 77033

(Appendix 8), with two sheep or goat teeth 77035 (Appendix 10), and early/mid 18<sup>th</sup> century brick, 18<sup>th</sup> century ceramic land drain pieces and undated tile fragments from 77031 (Appendix 9).

Ditch 77027 ran across the trench on a north-west to south-east alignment c. 2m to the south-west of Ditch 77038. This ditch was of rounded-V profile, and was 0.75m wide and 0.30m deep. A pale brown silty sand primary fill (77029) was overlain by a deposit of brown silty sand (77028). Fill 77029 contained a piece of glass (Appendix 2).

In the central and eastern areas of the trench, three linear features (77009, 77011 and 77021) pre-dated two large Pits (77003 and 77016) that were probably of relatively recent date. Gully 77009 had a north-east to south-west alignment; as it did not fully lie within the excavated area, its exact form remains unclear, but it appears to have had a flat-based-V profile, at least 0.65m wide and 0.34m deep. The fill consisted of greyish brown silty sand; there were no finds. Linear feature 77011 was 2.20m wide and 0.16m deep, with a broad-U profile. Although the brown silty sand fill (77012) contained a 12/13<sup>th</sup> century sherd (Appendix 8), the feature was felt to be probably natural in origin. Gully 77021 was of 0.50m wide and 0.42m deep rounded-V profile. The basal fill consisted of dark brown silty sand (77023) with slightly darker silty sand (77022) above; neither fill contained any finds.

Pit 77003 was at least 15m long and 2m wide; as it extended north-westwards out of the excavated area its form is uncertain, but the indications are that it was rectangular, with a broad-U profile with a maximum depth of 0.40m, this form possible suggests a pond. Three segments (77004, 77006 and 77013) were excavated into the pit, which was filled by sandy clay (77015 and 71008) at the base and silty sand (71005, 71007 and 77014) at the top. Fills 77005, 77007 and 77015 contained three pottery sherds, ranging in date from 13<sup>th</sup> to 16<sup>th</sup> century plus a fragment of 19<sup>th</sup> century pantile (Appendix 9).

Pit 77016 had a length of at least 8m and a width exceeding 1.5m; like Pit 77003 its exact form is unclear as it extended beyond the excavated area. It was bowl-shaped in profile, with a depth of around 0.45m. Most of the fills (77018, 77020, 77025 and 77026) consisted of brownish silty sands, with an additional deposit of sandy clay (77041) in 77019.

Natural deposits were covered with a 0.16m deep subsoil layer (77002), with a 0.40m thickness of topsoil (77001) above.

#### 7.6.20 **Trench 78** (Figs. 4 and 39; Pl. 53)

Trench 78 was aligned from the north-west to south-east and was 25m by 2m in extent. A north-east to south west aligned ditch (78004) was identified, along with a probable natural feature (78002) and a land-drain (78010-78012).

The shape of the Ditch 78004 in profile and the arrangement of the fills suggest that it had been re-cut. The original ditch appears to have been a U-profiled cut, 1.86m wide and 0.30m deep, filled with yellowish brown sand (78008). The subsequent re-cut had a1.10m wide 0.55m deep, flat-based V profile. The primary fill consisted of dark brown clay loam (78007), with yellowish brown sandy loam (78006) and dark brown sandy loam (78005) above. There were no finds.

Feature 78002 had a shallow, 0.07m deep dished profile and measured at least 1.32m wide and 1.83m long. The yellowish brown sandy fill (78003) contained no finds, and the general form of the cut and fill suggested that this was a natural feature.

Trench 78 had a 0.25m deep subsoil layer (78009) that was overlain by topsoil (78001) to a depth of 0.40m.

#### 7.6.21 **Trench 79 West** (Fig. 4)

Trench 79 West was c.32m long and 2m wide, and aligned from the north-west to the south-east. No archaeological features, deposits or finds were

present. A series of recent south-west to north-east aligned plough-scars (79005), land-drains (79004) and a stone-filled French drain (79003) were noted. There was a 0.18m deep subsoil layer (79002), with a covering of 0.30m of topsoil (79001).

#### 7.6.22 **Trench 79 East** (Fig. 4)

Trench 79 East was in affect a south-eastward continuation of Trench 79 West, and was 11m long and 2m wide. No archaeological features, deposits or finds were present. A number of modern plough-scars (79009) and land-drains (79010) were noted. The trench was covered by a subsoil deposit (79008) and a subsequent layer of topsoil (79007).

#### 7.6.23 **Trench 80** (Fig. 4)

Trench 80 had a north-west to south-east alignment and was 22m in length and 2m in width. No archaeological features, deposits or finds were present. Natural deposits were cut by a number of modern plough-scars (80003) and land-drains (80004). A subsoil layer (80002) and subsequent topsoil deposit (80001) were also recorded.

#### 7.6.24 **Trench 81** (Figs. 4 and 81; Pls. 54-56)

Trench 81 was aligned from the north-west to south-east and measured 33m in length and 2m in width. Four ditches were present within this trench: Ditch 81016, a pair of parallel gullies (81011 and 81014) and Ditch 81004, which pre-dated a large feature of uncertain form (81007). The alignments of these ditches were all from south-west to north-east, except for Ditch 81016, which ran from north-north-east to south-south-west.

Ditch 81016 was of flat-based V profile, 1.20m wide and 0.32m deep. It was filled with homogenous dark brown silty sand, which contained no finds.

The pair of parallel gullies (81011 and 81014) ran across the centre of the trench. These ditches had V-shaped profiles and were approximately 1.10m wide and 0.50m deep. They were filled with brownish silty sands: 81017,

81009 and 81010 in Ditch 81011; 81012 and 81013 in Ditch 810104. There were no finds.

At the south-eastern end of the trench Feature 81004 (assumed to be natural) was recorded, forming a bowl-shaped depression 11m in width and 0.40m in depth. The fills consisted of brown silty sand (81003) at the base, with pale brown sandy clay (81002) at the top; the latter contained a sherd of 12/13<sup>th</sup> century pottery (Appendix 8).

Ditch 81007 was of broad, rounded-U profile, with a width of 3m and a depth of 0.82m. There was a primary fill of brown silty sand (81005), with the majority of the ditch filled with brown sandy clay (81006), and a small deposit of pale brown silty sand (81008) in the centre of the top of the ditch. There were no finds.

Finally, the features in Trench 81 were covered by a 0.40m thick layer of topsoil (81001).

#### 8. Discussion

- 8.1 The Trial Trenching at Manor Farm was successful in clarifying aspects of both the geophysical survey and the pattern of cropmarks known from aerial photographs. The majority of the cropmarks occur on the slightly higher land with sandy subsoil, with better drainage than the peaty carrs immediately to the south-west. As well as examining the cropmarks, the trial trenching also brought to light a previously unsuspected area of Romano-British iron—working (in the area of Trench 29). The limits of this industrial area were defined by both negative evidence from adjacent trenches and a subsequent geophysical survey
- 8.2 The relative scarcity of dateable finds (principally pottery) created problems in interpreting the development of the system of linear anomalies evident at the site. The results of the trial trenching indicate that the pattern of linear

anomalies is the result of activity in the Romano-British, medieval and postmedieval periods.

- 8.3 The cropmarks are orientated with the 'spine' of the land, generally on a south-west to north-east alignment. They appear to from a series of rectangular enclosures, the most obvious of which is the example in the north-west part of Field 12 (extending into the field immediately to the west) that appears to be subdivided internally, and possibly with a trackway following its south-western and south-eastern boundaries. The enclosure measures 170m wide and at least 180m long.
- 8.4 Other linear cropmarks tallied with ditches recorded in Trenches 18, 24 and 63; unfortunately there were no associated finds so the features remain undated. Elsewhere, in Field 8, linear features and pits in Trenches 10 and 11 possibly related to scattered anomalies identified by Stratascan's geophysical survey. These anomalies were probably Romano-British to judge by the few sherds found within them. The scatter of linear features and pits identified in Field 7 remain undated, although their character is consistent with the kinds of activity associated with Romano-British rural sites.
- 8.5 Two Romano-British settlements have been excavated at Armthorpe, at Huggin Lakes and Gunhills (c. 6km north-east of Manor Farm). The Gunhills site began as an unenclosed Iron Age settlement, evolving into a trapezoidal enclosure used for agricultural purposes and subsequent Romano-British 'brickwork' fields in the 2<sup>nd</sup> century (Richardson 2008). At Huggin Lakes a system of small enclosures, seen as stock enclosures or small fields, flanked a trackway, occupation extending from the 2<sup>nd</sup> century into the 4<sup>th</sup> century (Meadows 2010). Both sites had evidence of iron-working, possibly on a more than domestic scale at Gunhills, and were laid out along trackways. Another system of ditched enclosures was excavated at Balby Carr (c. 4km west of Manor Farm Jones 2007). Further afield, excavations at Timberland, Scunthorpe (c. 20 km east of Manor Farm) recorded an Iron Age and Romano-British settlement that was laid out in relation to a 'landscape' boundary or

double-ditched trackway (Richardson 2009). There is little indication as yet that occupation at Manor Farm was organised in relation to a trackway, but the activity was certainly contemporary with the two Armthorpe sites. The key to understanding the Romano-British occupation at Manor Farm may lie in its relatively low-lying position (certainly in comparison to Gunhills, Huggin Lakes and Timberland) at the margins of cultivable sandy soils and the boggy carr-lands. Such a marginal location may have made it as attractive for industrial use than to support an agricultural settlement.

- 8.6 The evidence of iron-working recorded in Trench 59 essentially consisted of spreads and dumps of iron smelting slag and pieces of furnace-lining that appears to have been deliberately spread to form 'working surfaces'. The presence of postholes hints at the existence of temporary structures where iron-working processes may have taken place. The large pit may have started life as a sand-pit and subsequently become back-filled with slag. interesting to note the use of oak as fuel in the iron smelting as it provides long lasting and high heat. None of the samples were suitable for radiocarbon dating, because they were oak. The recent geophysical survey of this area suggests that Trench 59 lies on the eastern side of a mass of iron-working working debris that is around 50m in length and 25m in width. A strong response at the centre of this debris may represent the position of a furnace. The pottery from some of the excavated slag dumps gives a secure 2<sup>nd</sup> century date for the iron-working. Also without doubt is the fact that the scale of the iron-working was industrial rather than domestic.
- 8.7 The linear features representing the internal subdivisions of the rectangular enclosure in Field 12 were identified in Trenches 67, 70 and 81. The ditches in Trench 76, and inter-cutting linears in Trench 77, also coincide with the cropmarks of internal subdivisions; associated pottery gives a medieval date for the features in this trench. The large pits also recorded in Trench 77 were of late medieval date; their size suggest that they may have been quarries or ponds. This activity hints at medieval occupation at the site of the adjacent Manor Farm.

- 8.8 Geophysical survey in Field 9 was inhibited by the presence of scrub and small trees in the southern part of the field. Trial trenching in the southern part of the field identified a major ditch (discussed below) as well as the Romano-British activity in Trench 34. The broad, relatively shallow ditch running through Trenches 37, 38 and 40 in Field 9 apparently relates to the intermittent linear cropmark that runs in a southwest direction for a distance of c. 450m. The line of the cropmark today forms part of the western boundary of Back Wood. The First Edition Ordnance Survey map shows that at its north-eastern end the cropmark coincides with the former continuation of the boundary of Back Wood, which was later shifted to the south-east. It follows that the ditch was in existence in the mid-19<sup>th</sup> century, although its origin could be much earlier. This ditch seems to have demarcated the area of ancient woodland made up by Back Wood and The Warren. The presence of ceramic field drains both parallel to and within the ditch suggests that it was an established feature in the 18<sup>th</sup> century landscape.
- 8.9 In conclusion, the Romano-British occupation fits into a regional system of Roman settlement that has been recognised from both cropmark evidence and excavation in the hinterland of the Roman forts at Doncaster and Rossington Bridge. Although the framework of medieval and post-medieval land-division seems to echo the pattern of Romano-British enclosures and boundaries, only further excavation will disentangle the various elements from each other and fully define the nature of activity at different periods in the site's history and development. For now, the trial trenching has illustrated the date and range of archaeological activity at Manor Farm and radiocarbon dates are anticipated in the near future to provide the supporting evidence.

# 9. Bibliography

ARS	2007	Manor Farm, Bessacarr. Auger Survey and Palaeoenvironmental Assessment.
ASWYAS	2010	Manor Farm, Bessacarr – Geophysical Survey. Archaeological Services WYAS, Report No. 2145, November 2010.
Atkinson, S	1993	An Evaluation at Hayfield Farm, Rossington. <i>Archaeology in South Yorkshire 1992-1993</i> . South Yorkshire Archaeology Service.
Atkinson, S.	1995	An Archaeological Evaluation on Land adjacent to St. Catherine's Hospital, Balby, Doncaster. <i>Archaeology in South Yorkshire 1994-1995</i> South Yorkshire Archaeology Service.
Atkinson, S. and Merrony, C.J.N.	1994	An Archaeological Evaluation of Land off Warning Tongue Lane, Bessacarr, Doncaster. <i>Archaeology in South Yorkshire 1993-1994</i> . South Yorkshire Archaeology Service.
Belford, P.	1999	A Geophysical Survey on Land adjacent to Junction 3, M18, Loversall. <i>Archaeology in South Yorkshire 1996-1998</i> . South Yorkshire Archaeology Service.
English Heritage	1995	A Strategy for the Care and Investigation of Finds.
IFA	2009	Institute of Field Archaeologists Year Book.
Mackney, D. et al.	1983	Soil Survey of England and Wales, Sheet 1: Northern England.
MAP	1999	Croft Road, Finningley, South Yorkshire: Archaeological Watching Brief.
Meadows, I	2010	Archaeological Trial Trenching Evaluation of Land at Huggin Lakes, Armthorpe, Doncaster. <i>Report 10/64</i> .
Richardson, J.	2008	The Late Iron Age and Romano-British Landscape of Gunhills, Armthorpe, South Yorkshire. <i>ASWYAS Publications 10</i> .
Richardson, J.	2009	Iron Age and Roman Settlement Activity at

Timberland, Scunthorpe, North Lincolnshire. *ASWYAS Publications 11*.

Riley, D.R.	1976	Air Reconnaissance in Central and Southern Yorkshire in 1976. <i>YAJ</i> , Vol. 49, p. 19-33.
Slatcher, D., Cox, C. And Gater, J.	1999	Assessment and Fieldwork at Carr Lodge Farm, Loversall, Doncaster. <i>Archaeology in South</i> <i>Yorkshire 1996-1998</i> . South Yorkshire Archaeology Service.
Smalley	2008	Manor Farm, Bessacarr, Doncaster, Geophysical Survey Report. <i>Stratascan</i> .
Sydes, R.E.	1991	Cropmarks at Rossington. <i>Archaeology in South Yorkshire 1990-1991</i> . South Yorkshire Archaeology Service.
Webb, A.	1998	A Geophysical Survey on the Proposed Site of the Northern Racing School, Rossington, Doncaster. <i>Archaeology in South Yorkshire</i> 1995-1996. South Yorkshire Archaeology Service.

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**Appendices:** Zara Burn, Sophie Langford and John Stephens.

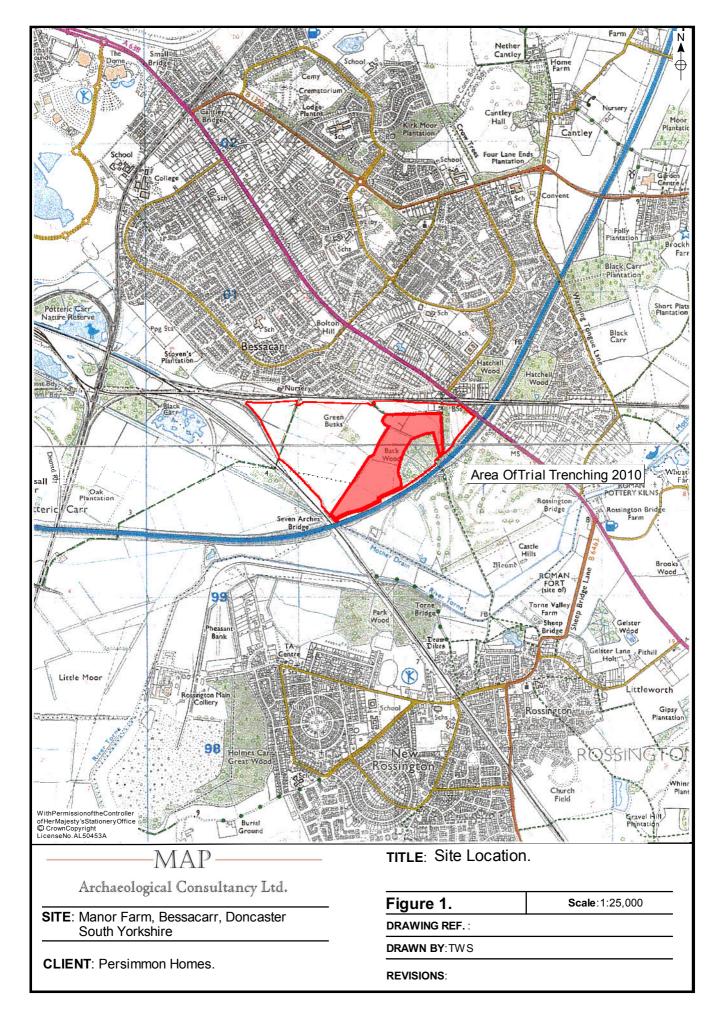
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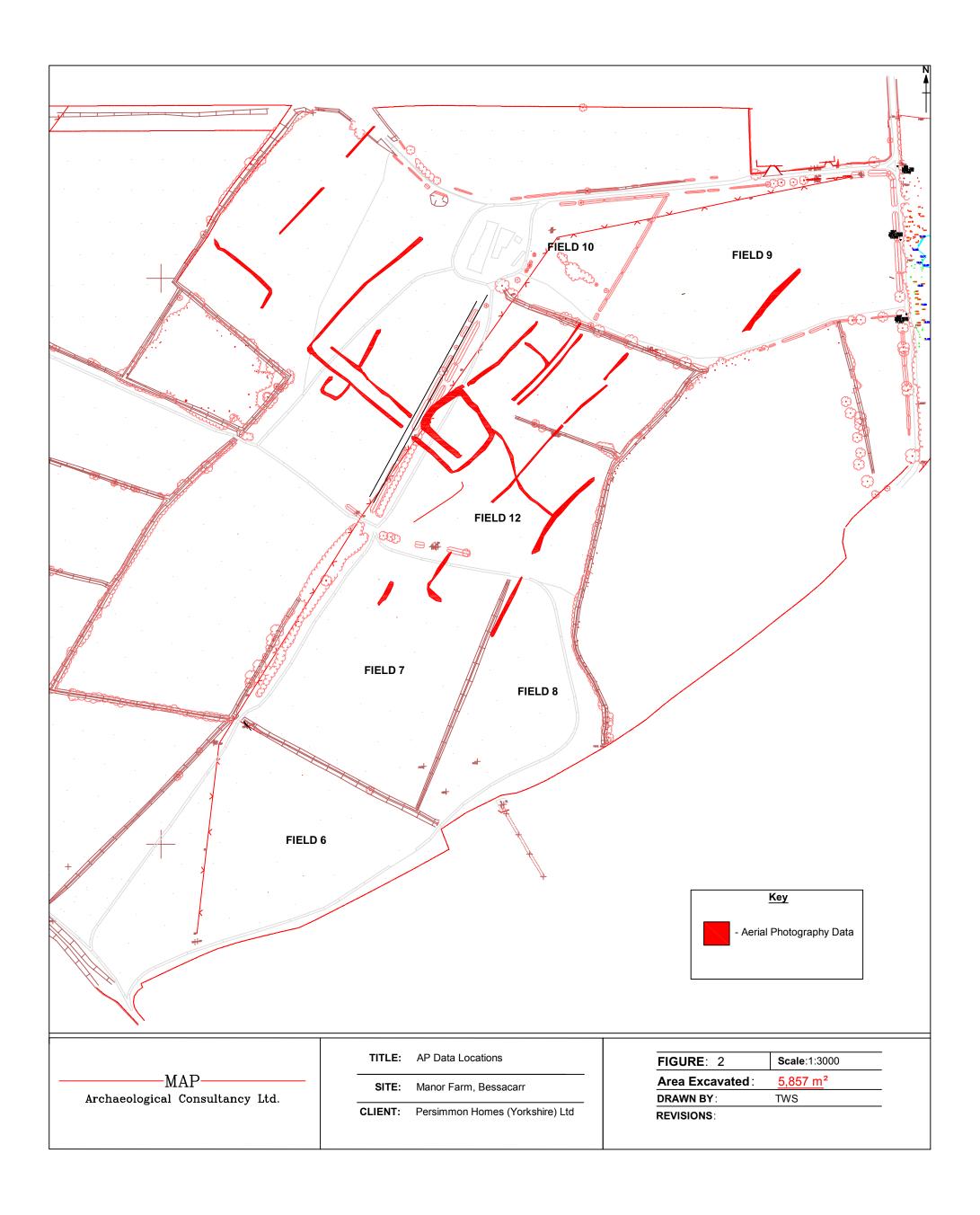
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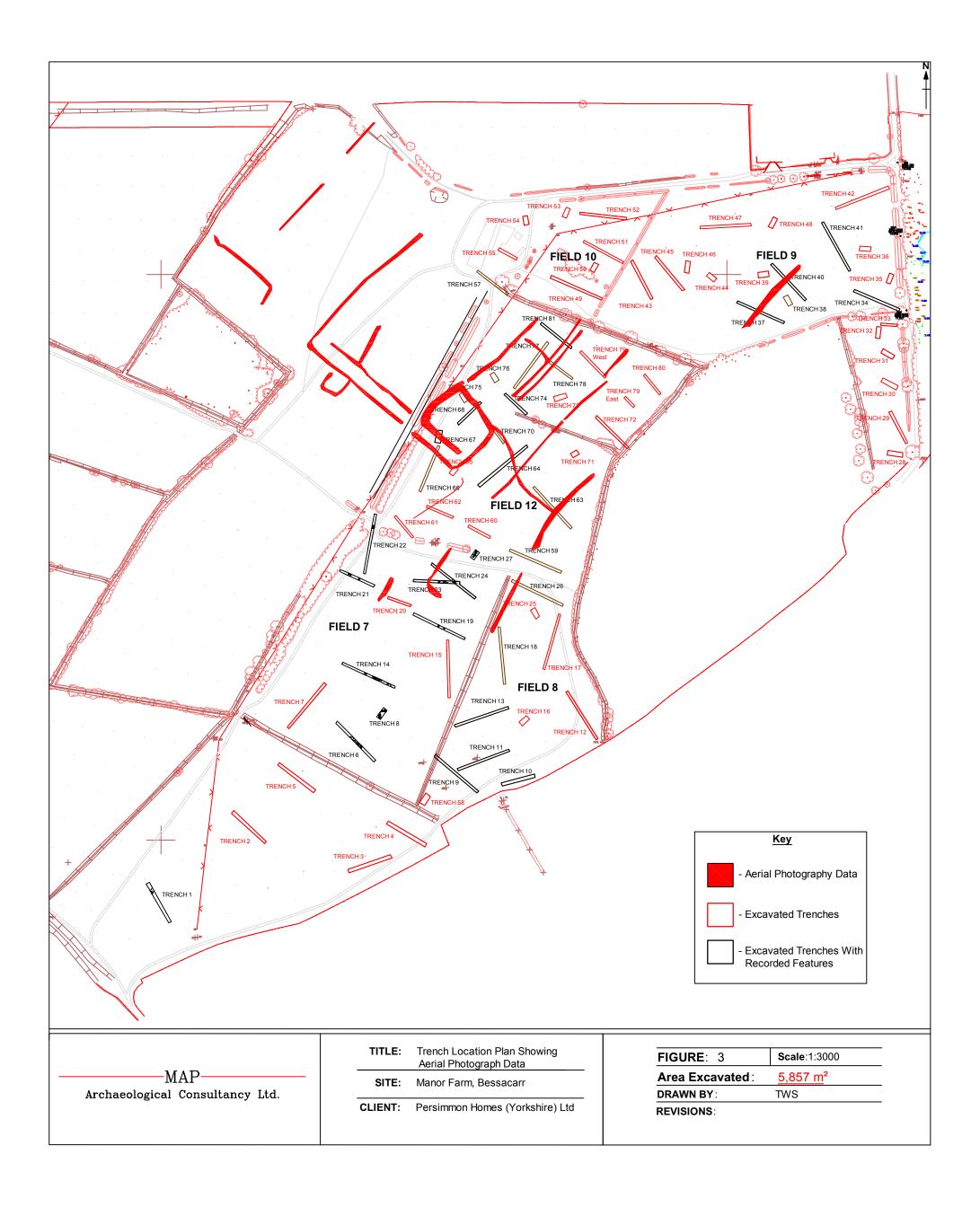
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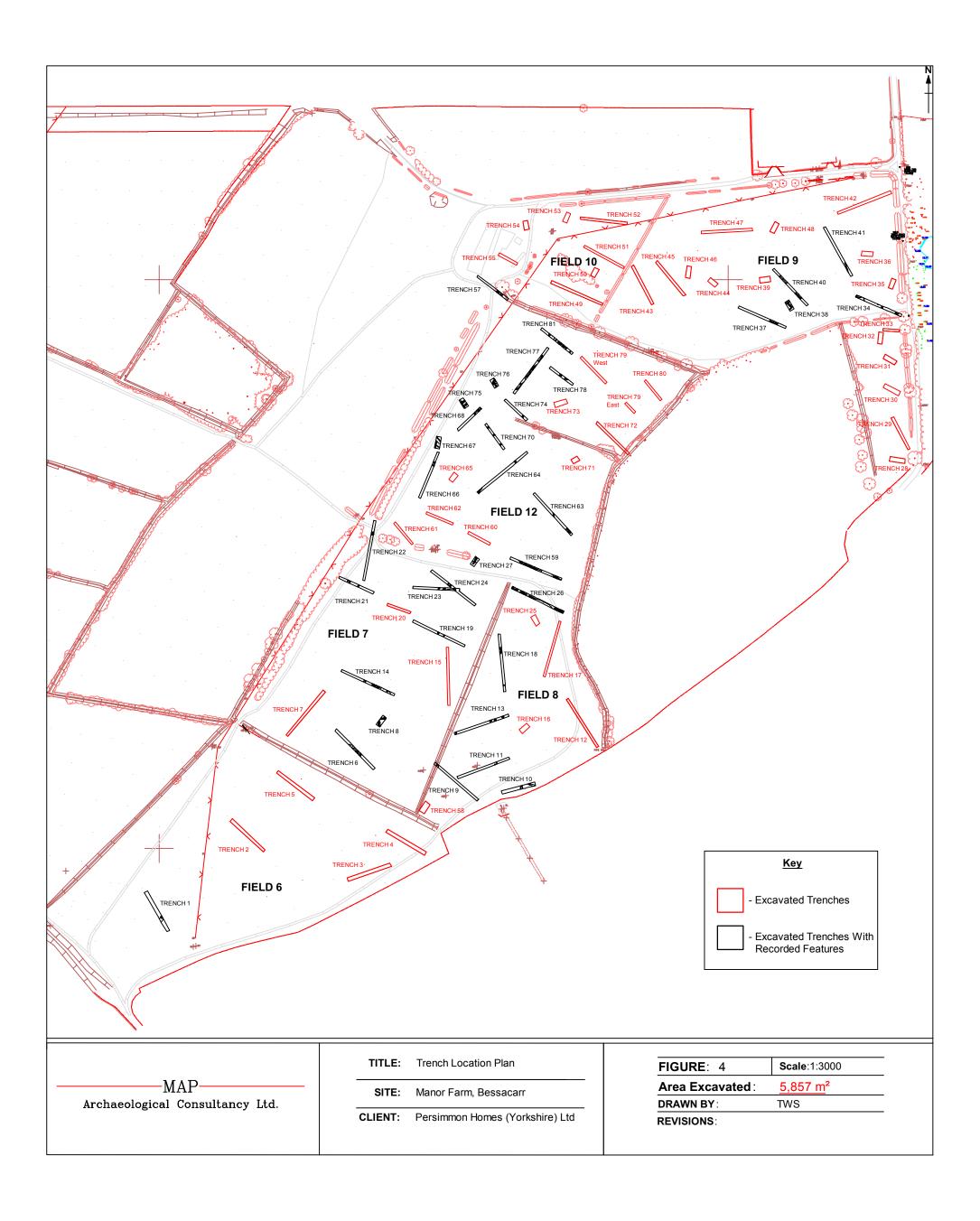
**Finds Research:** Anne Finney, Mark Stephens and Paula Ware.

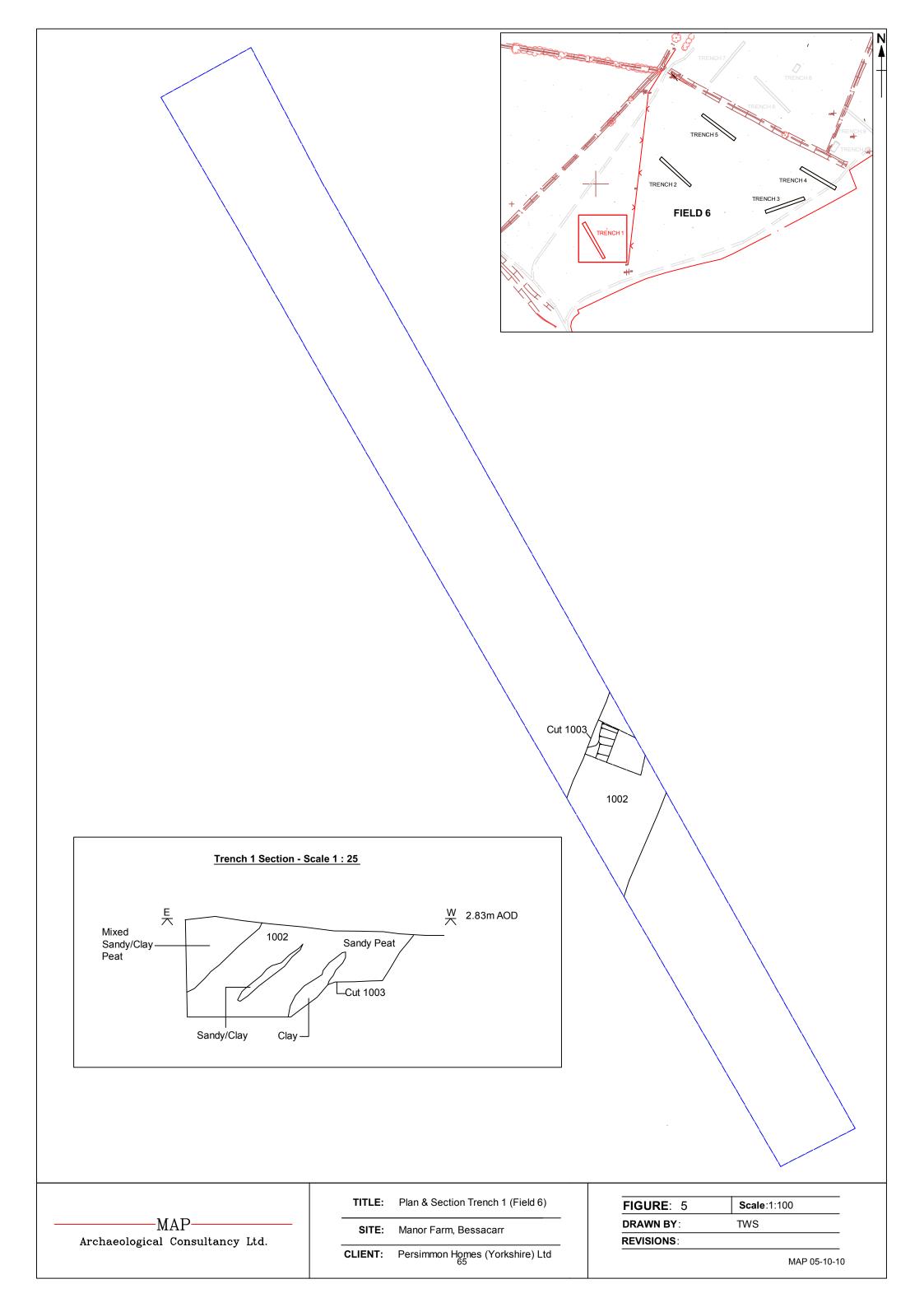
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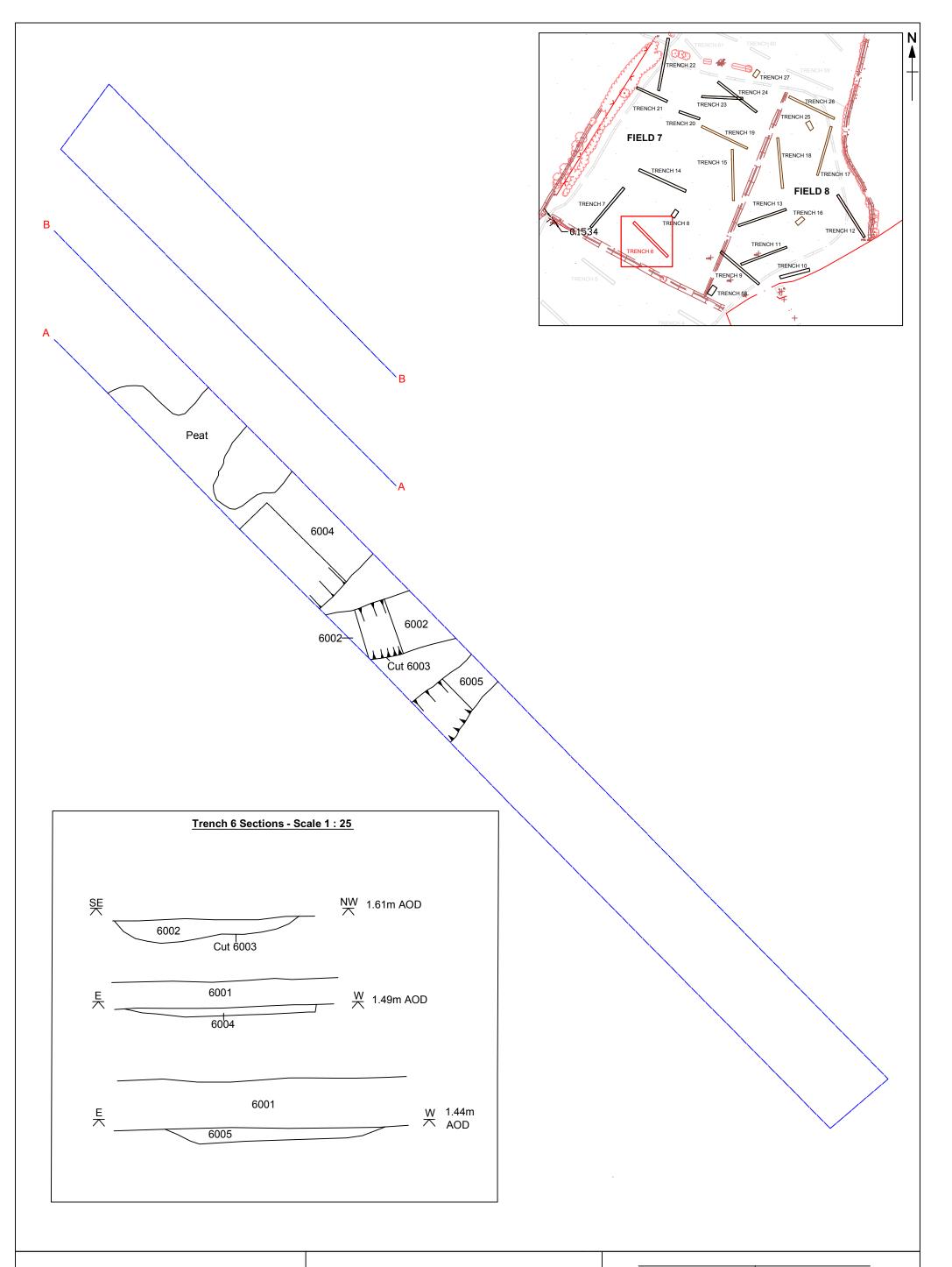












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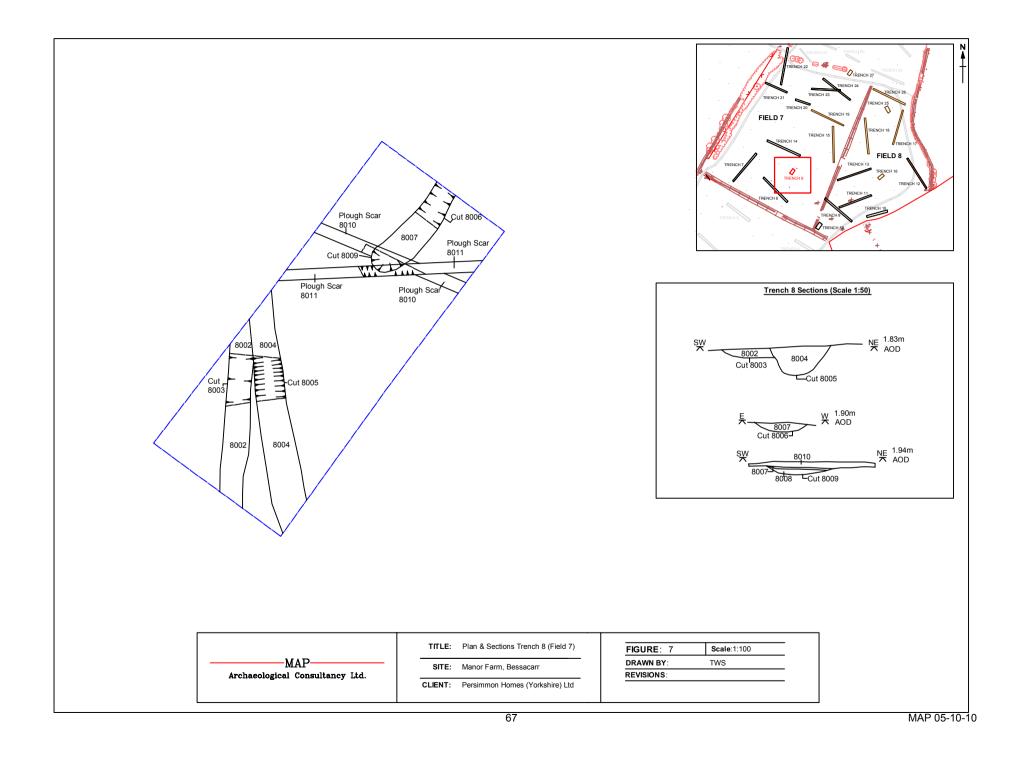
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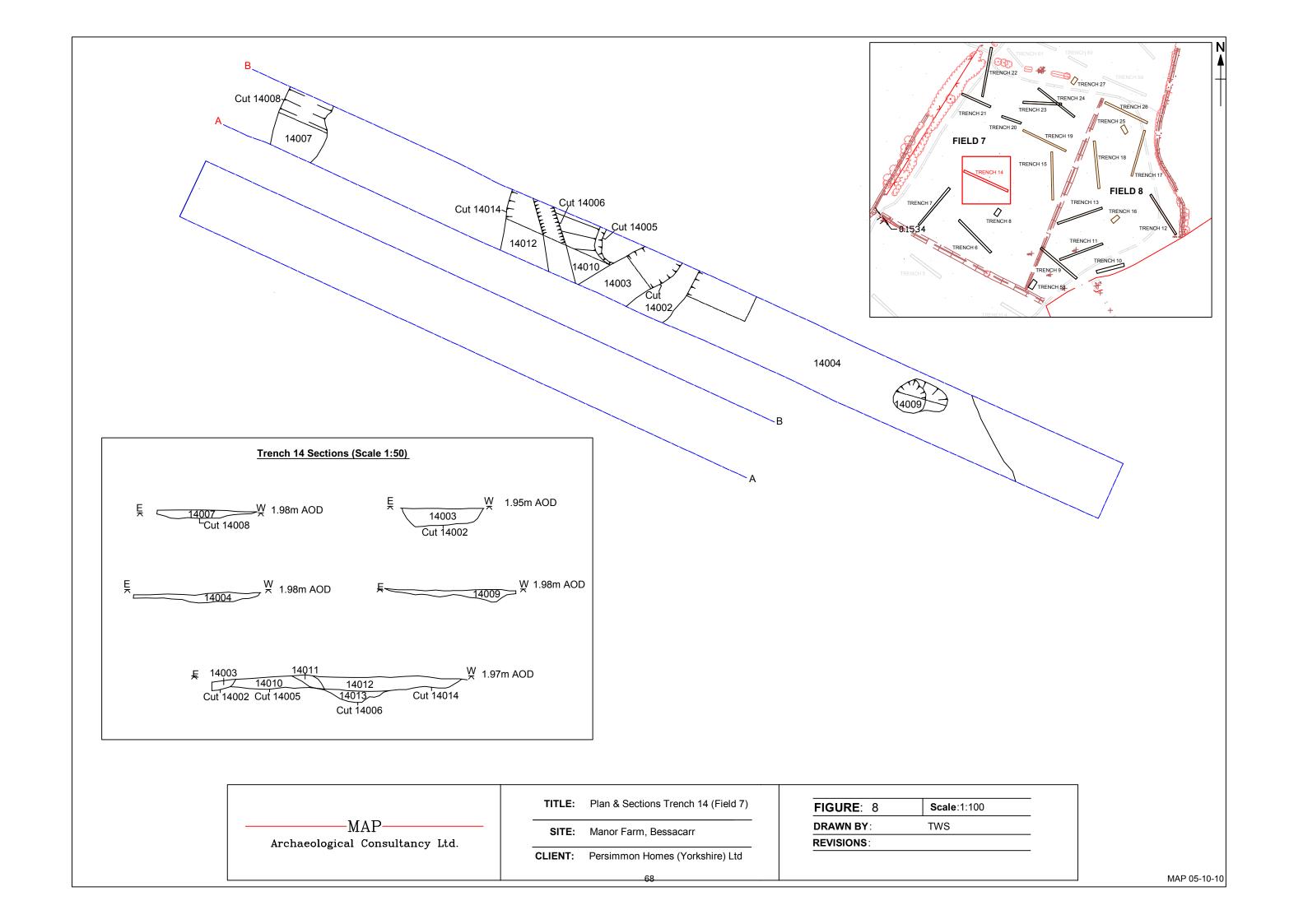
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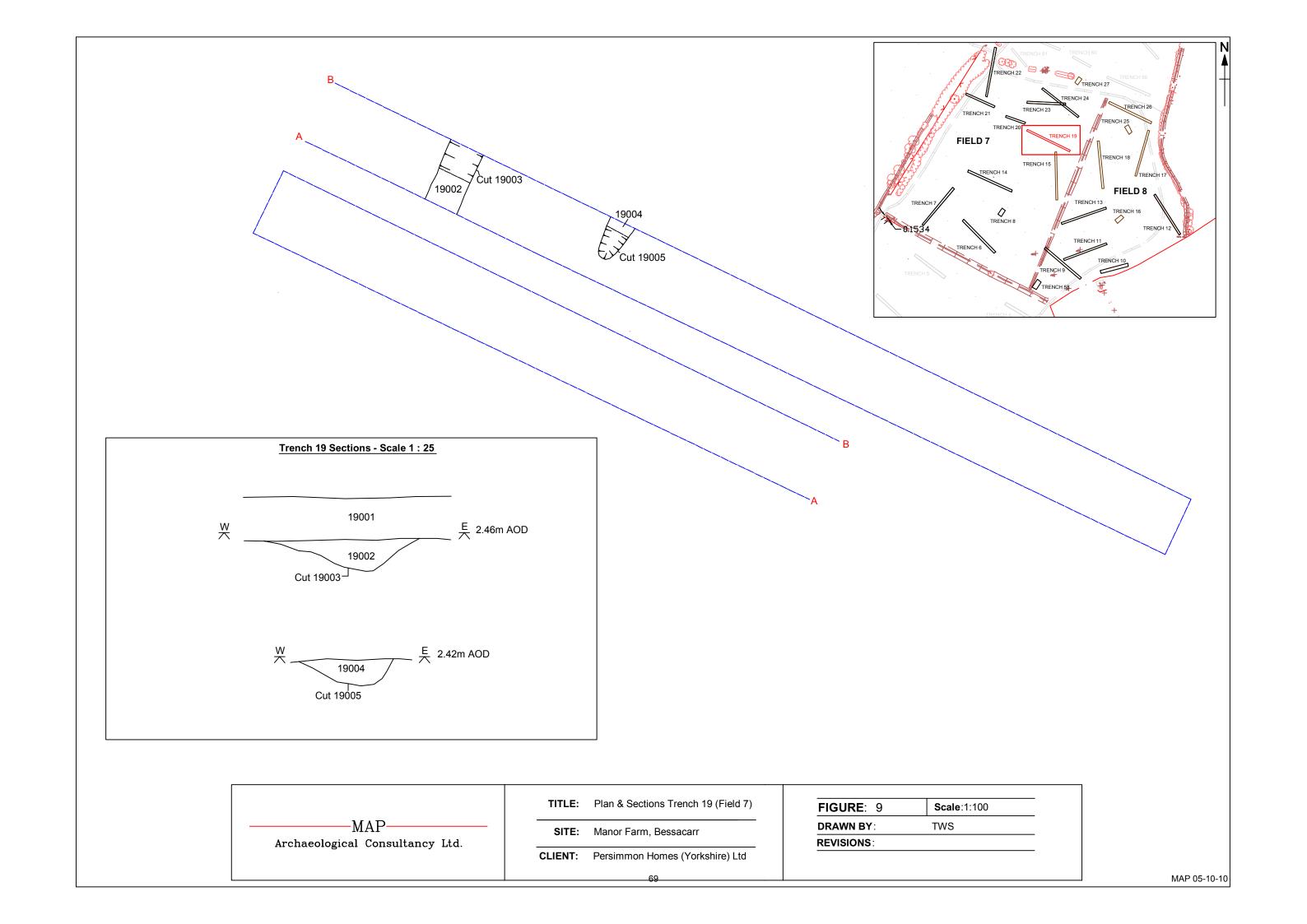
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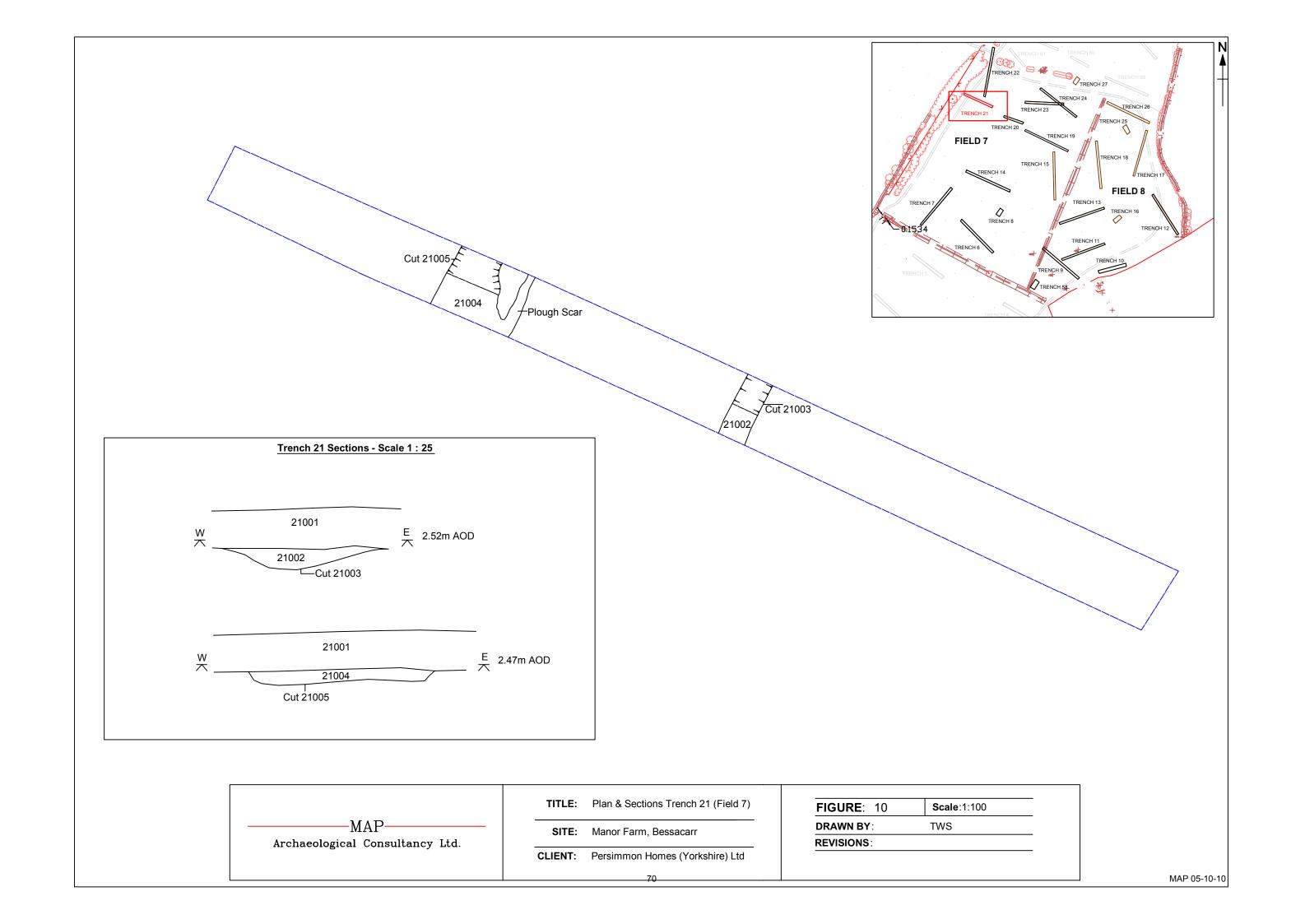
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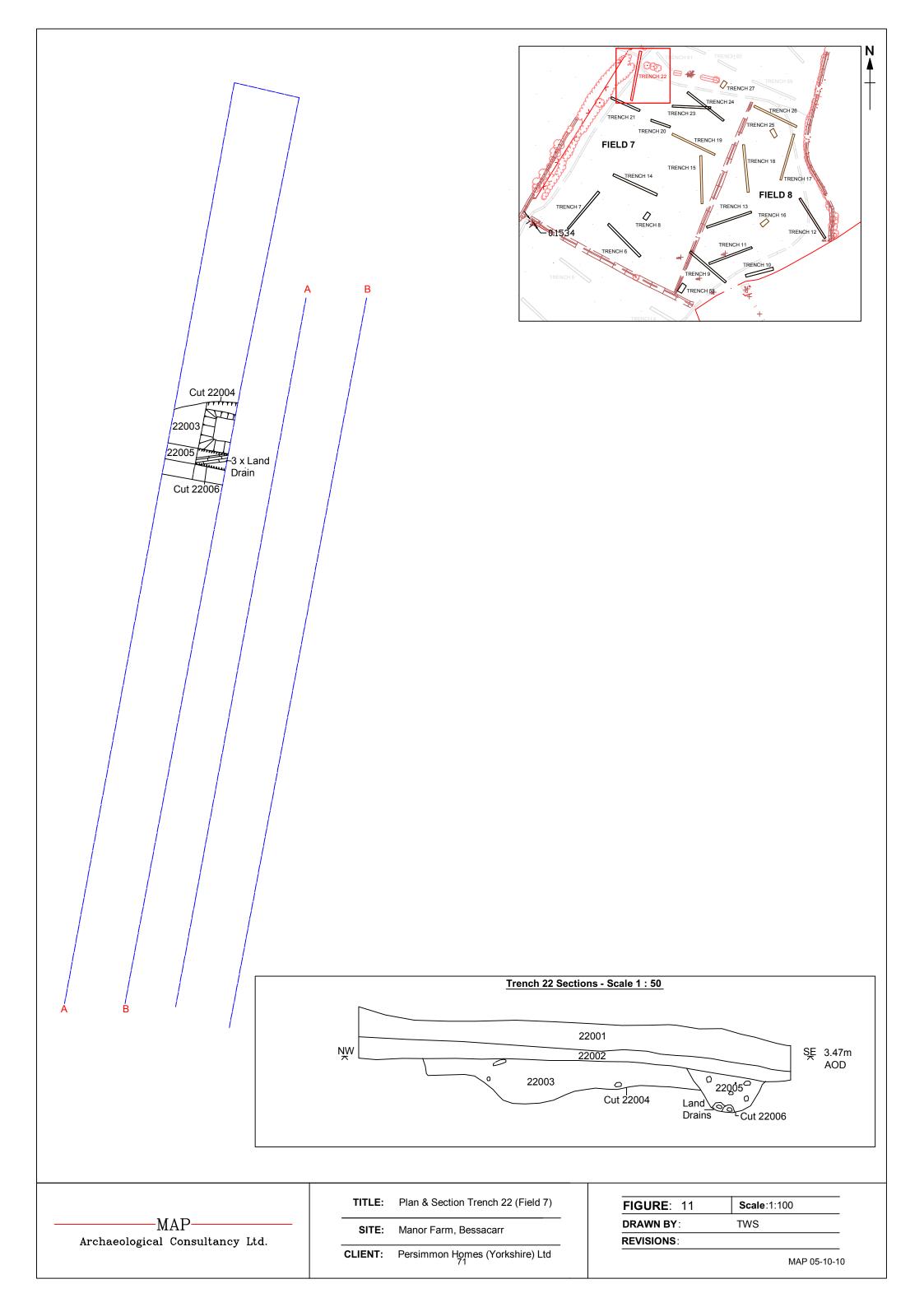
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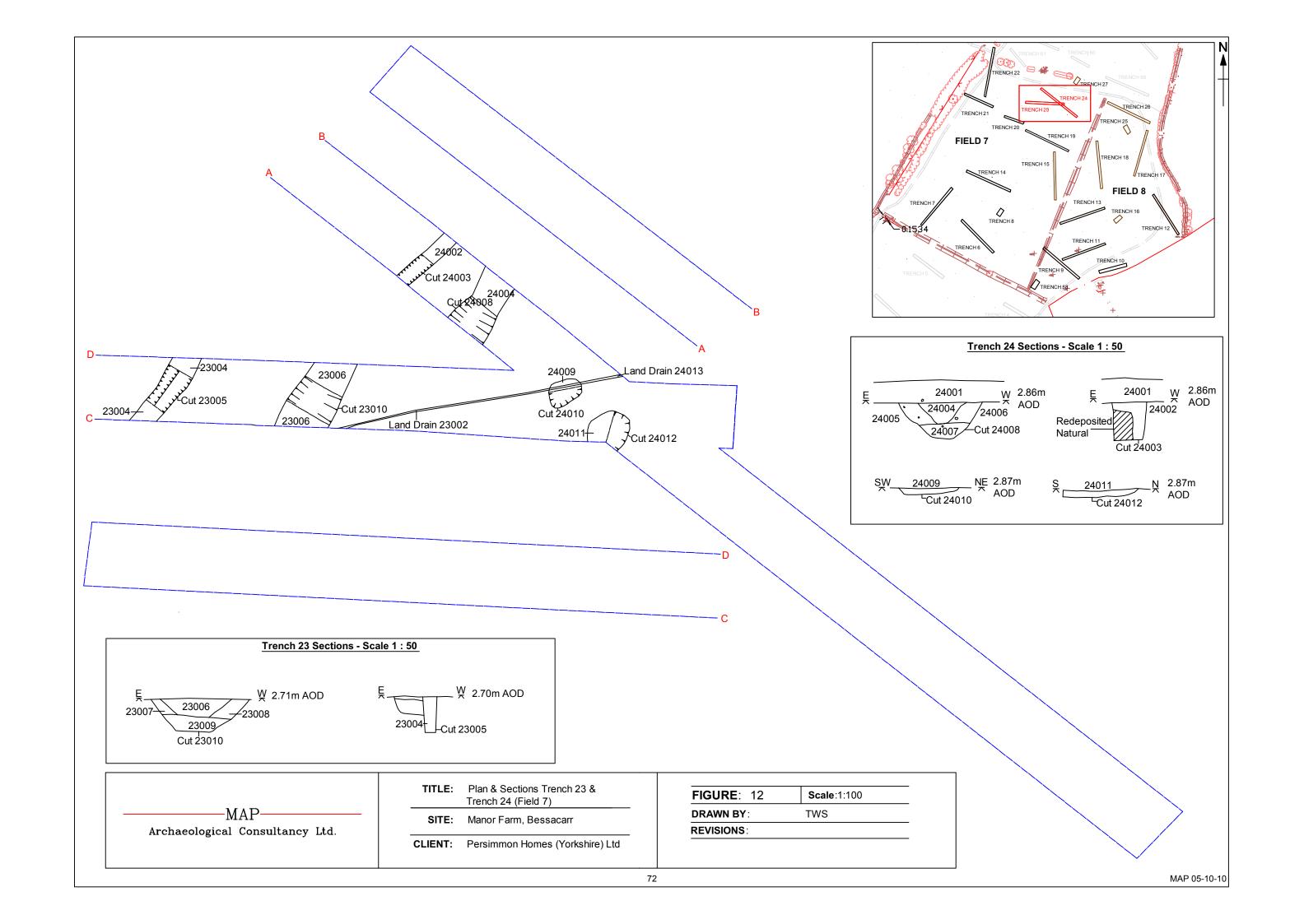


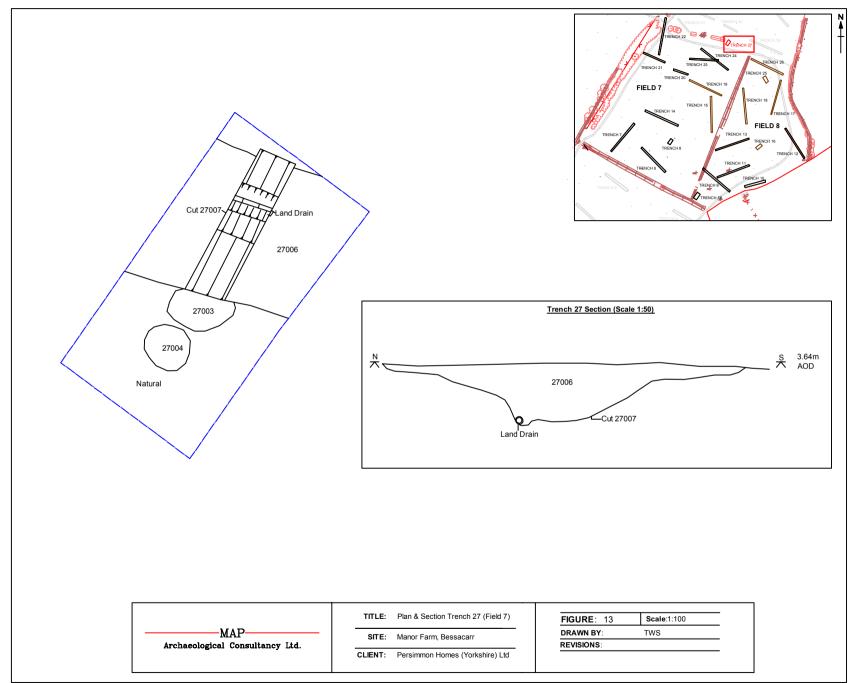


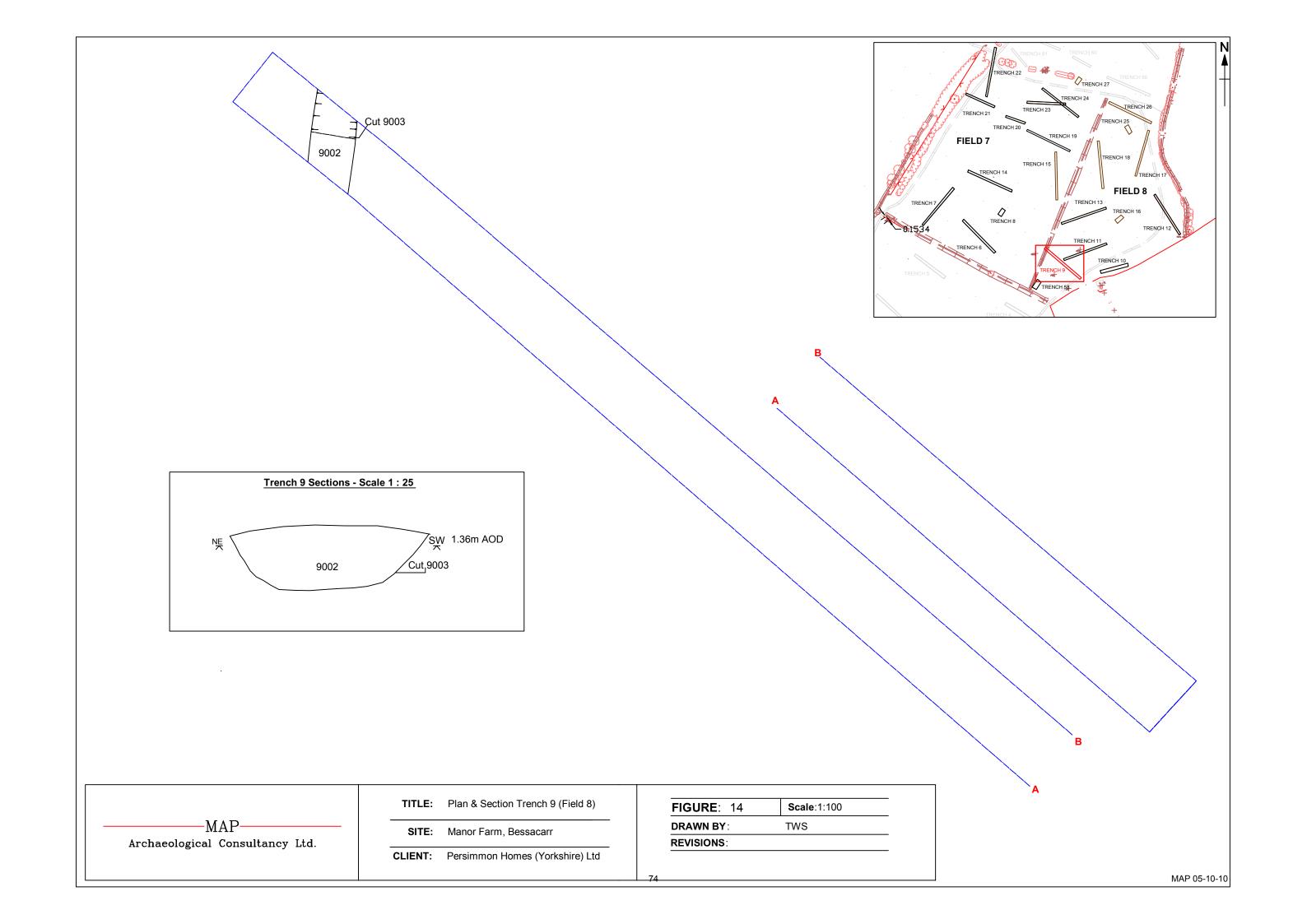


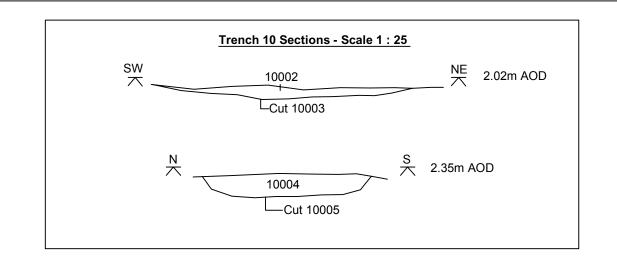


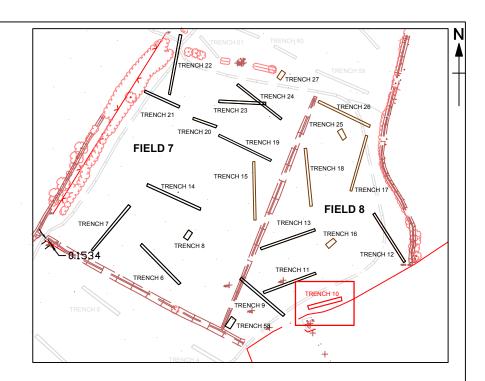


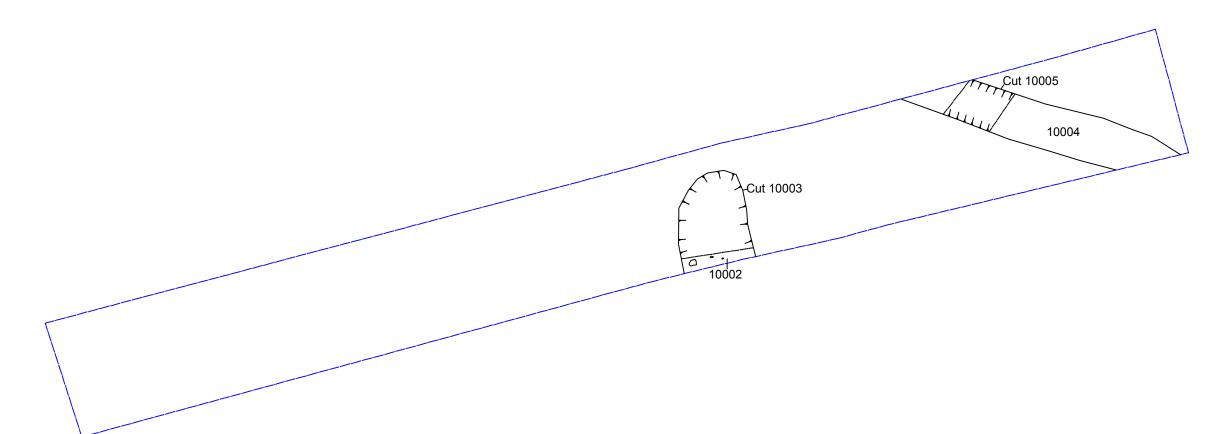












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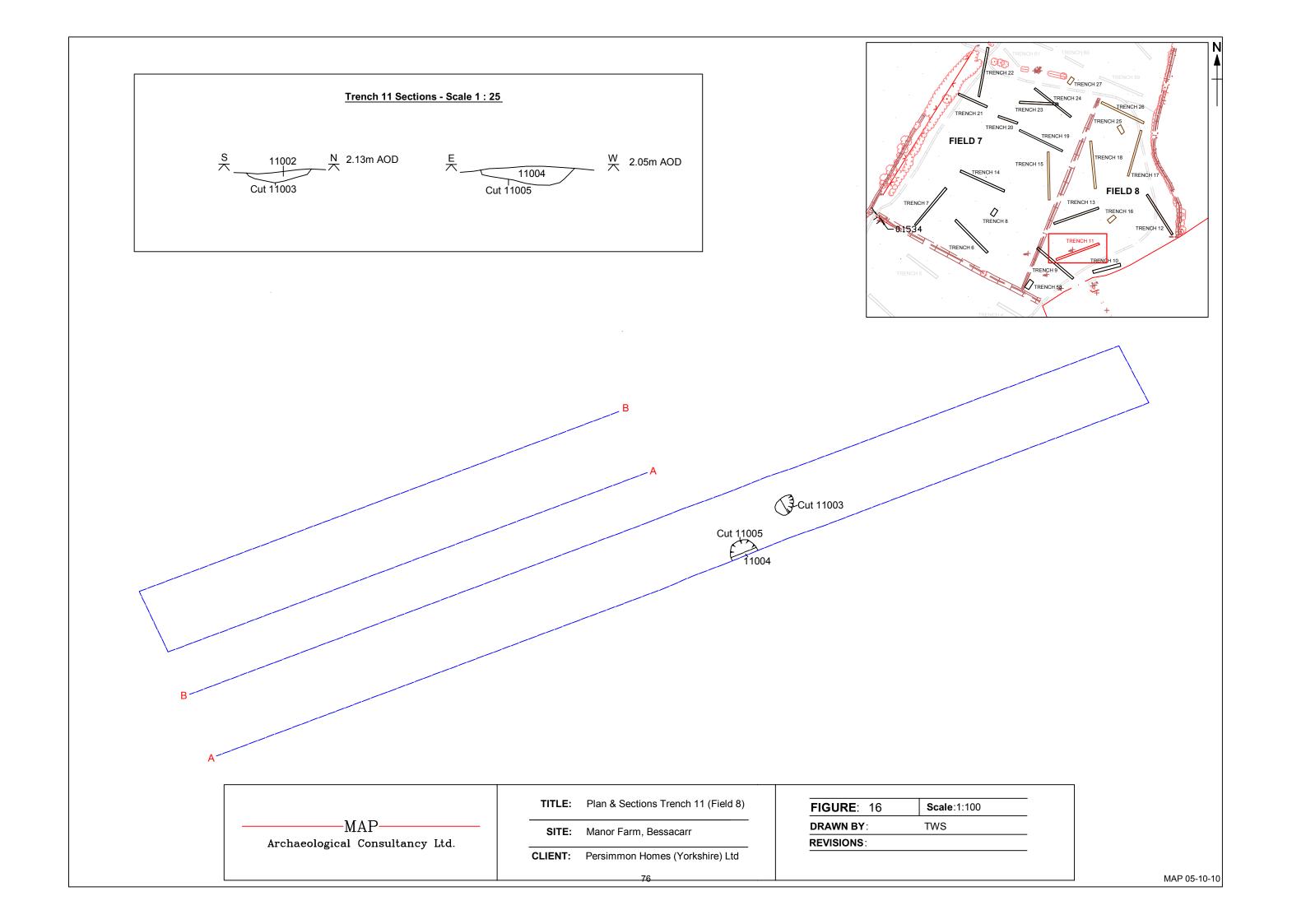
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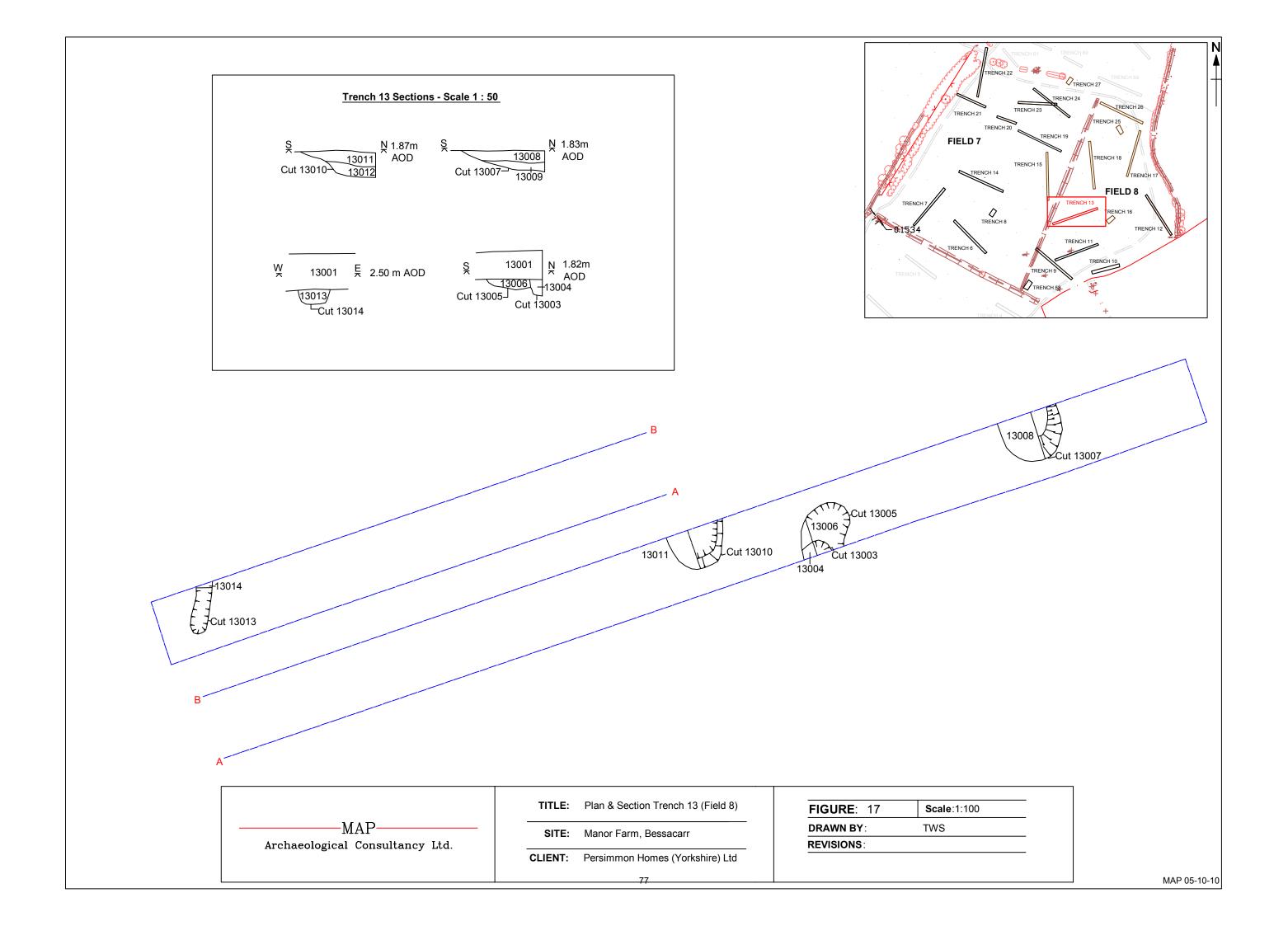
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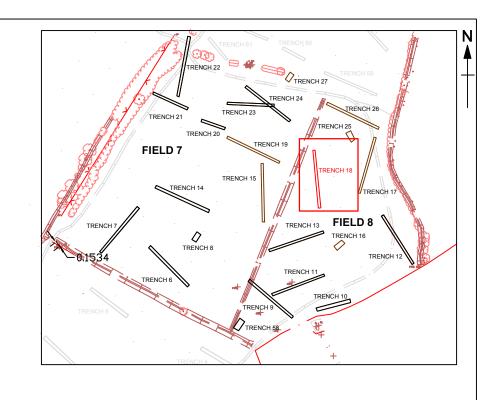
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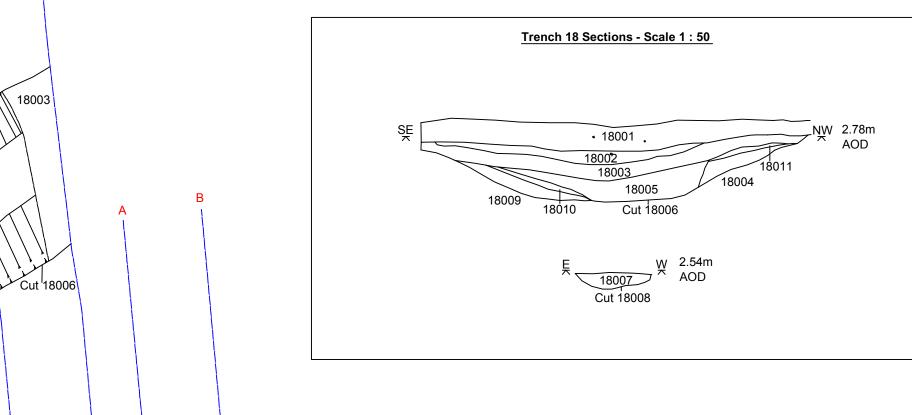
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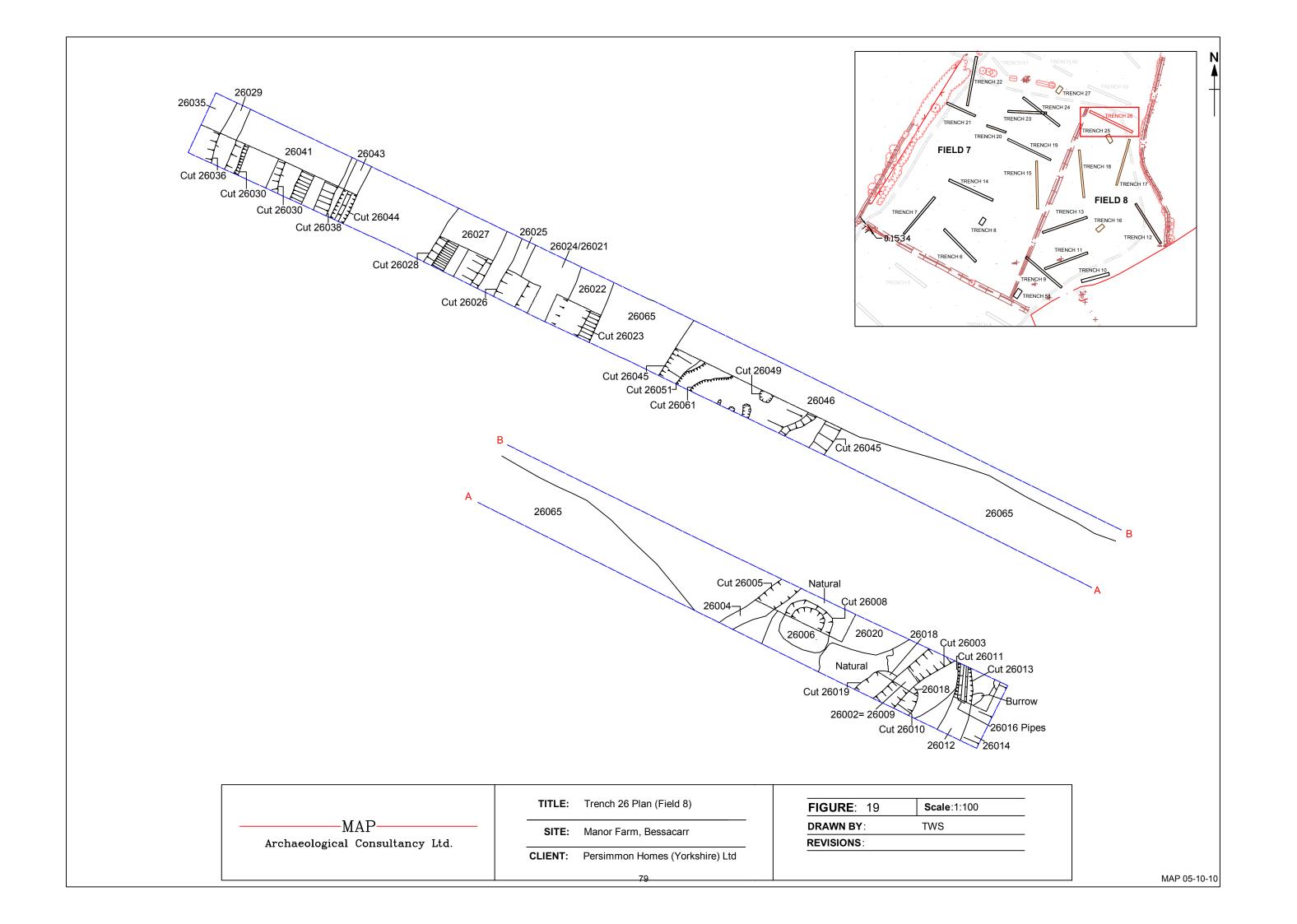
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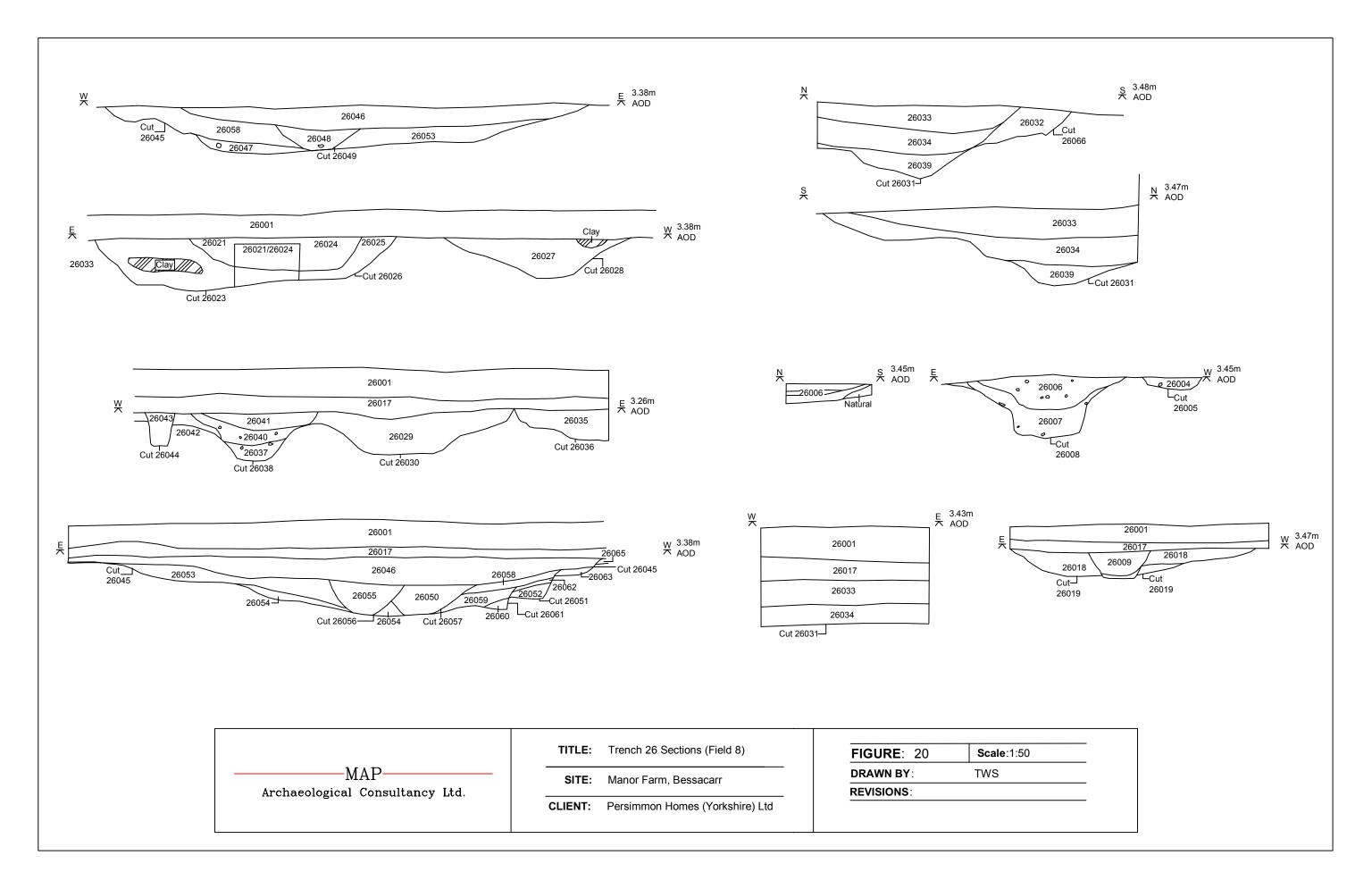
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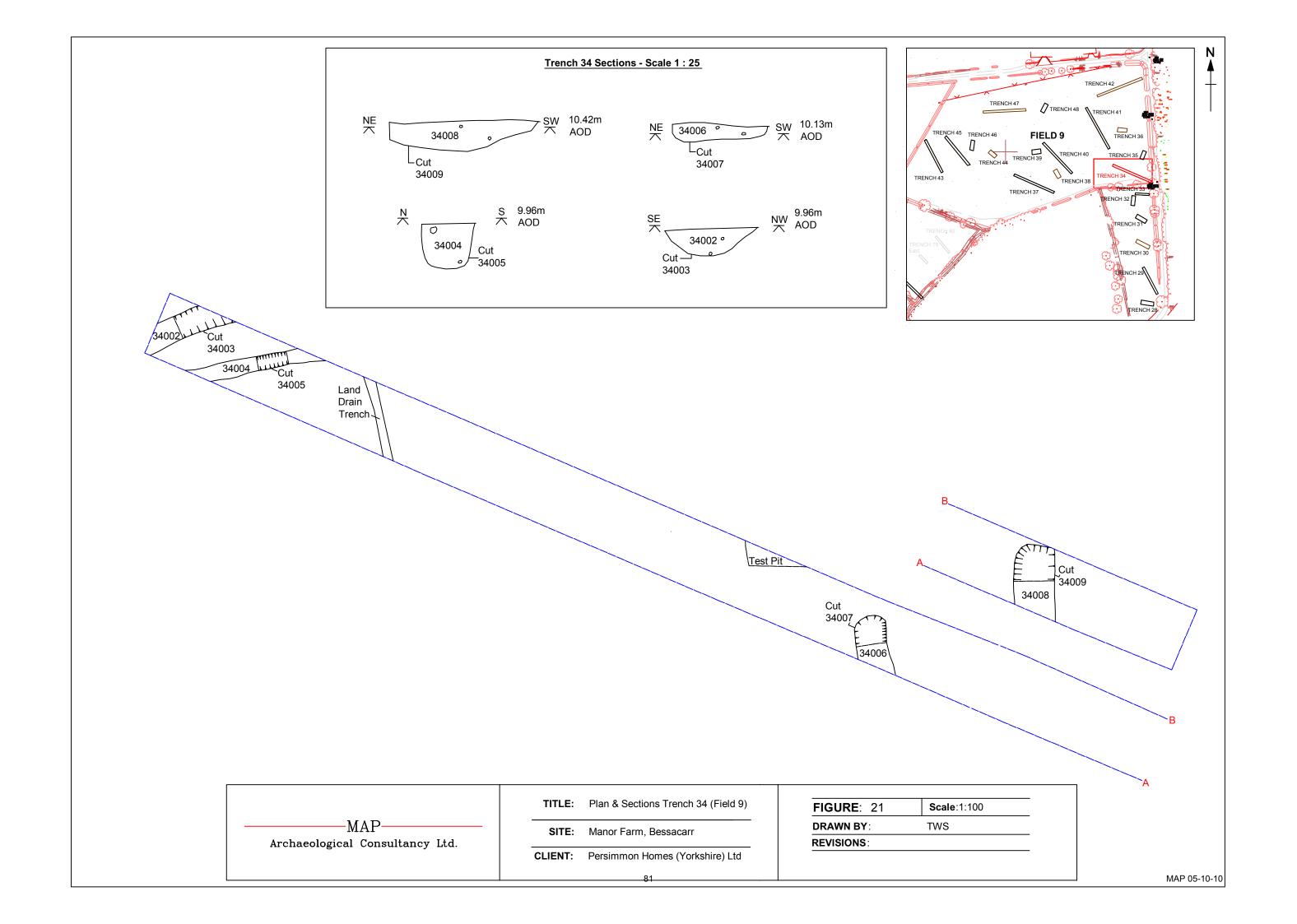
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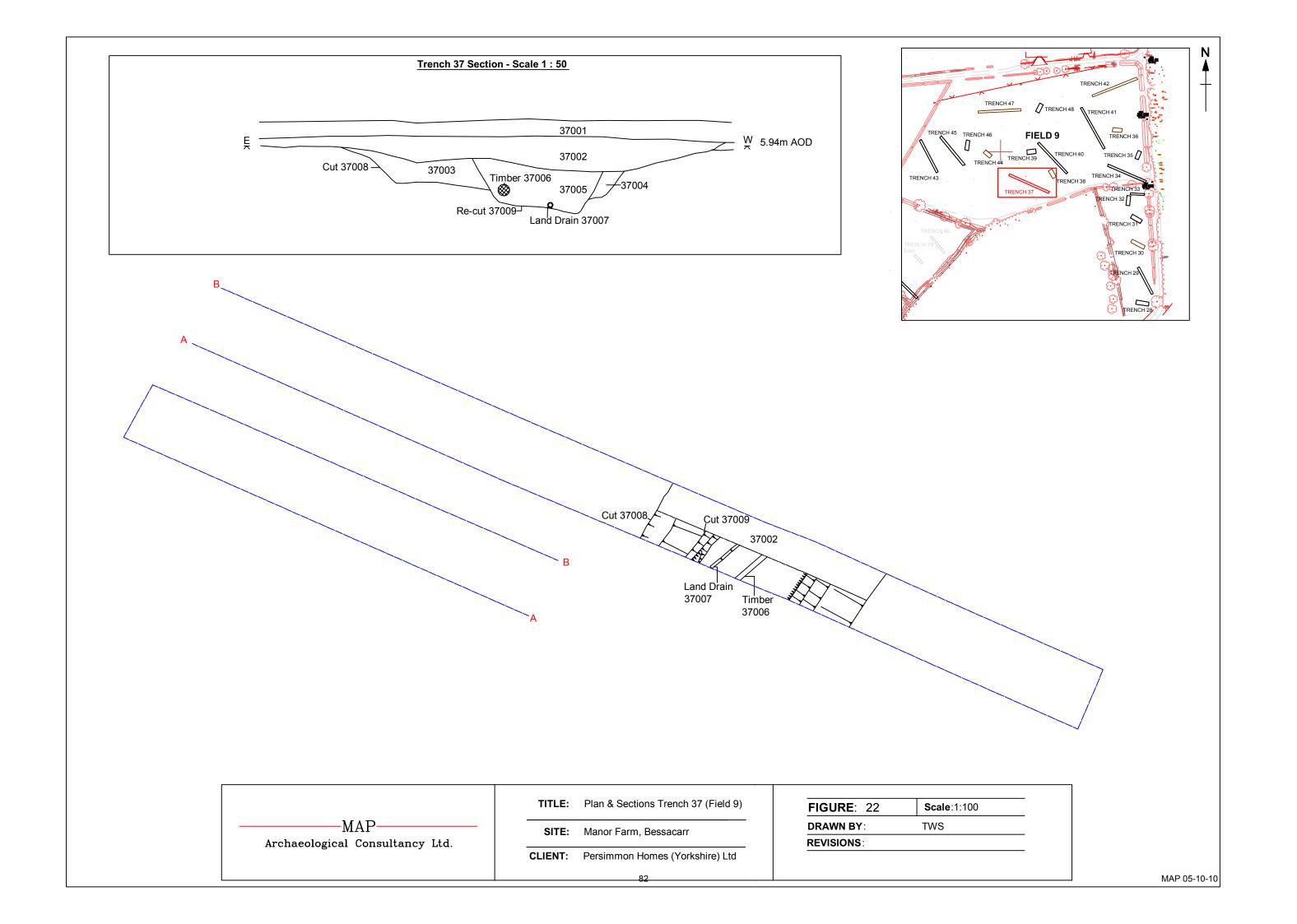
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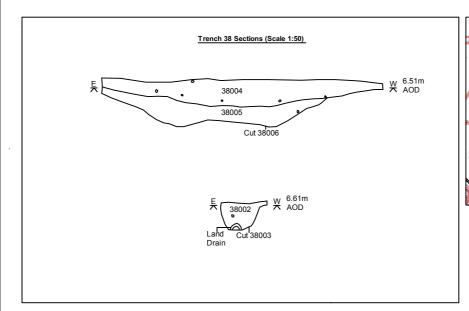
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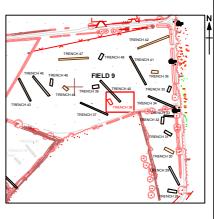


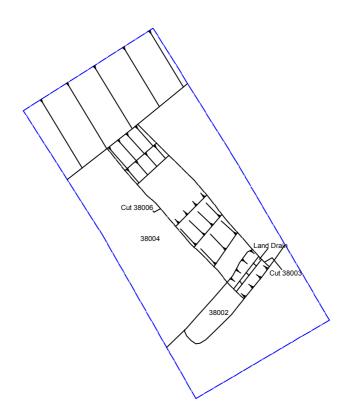












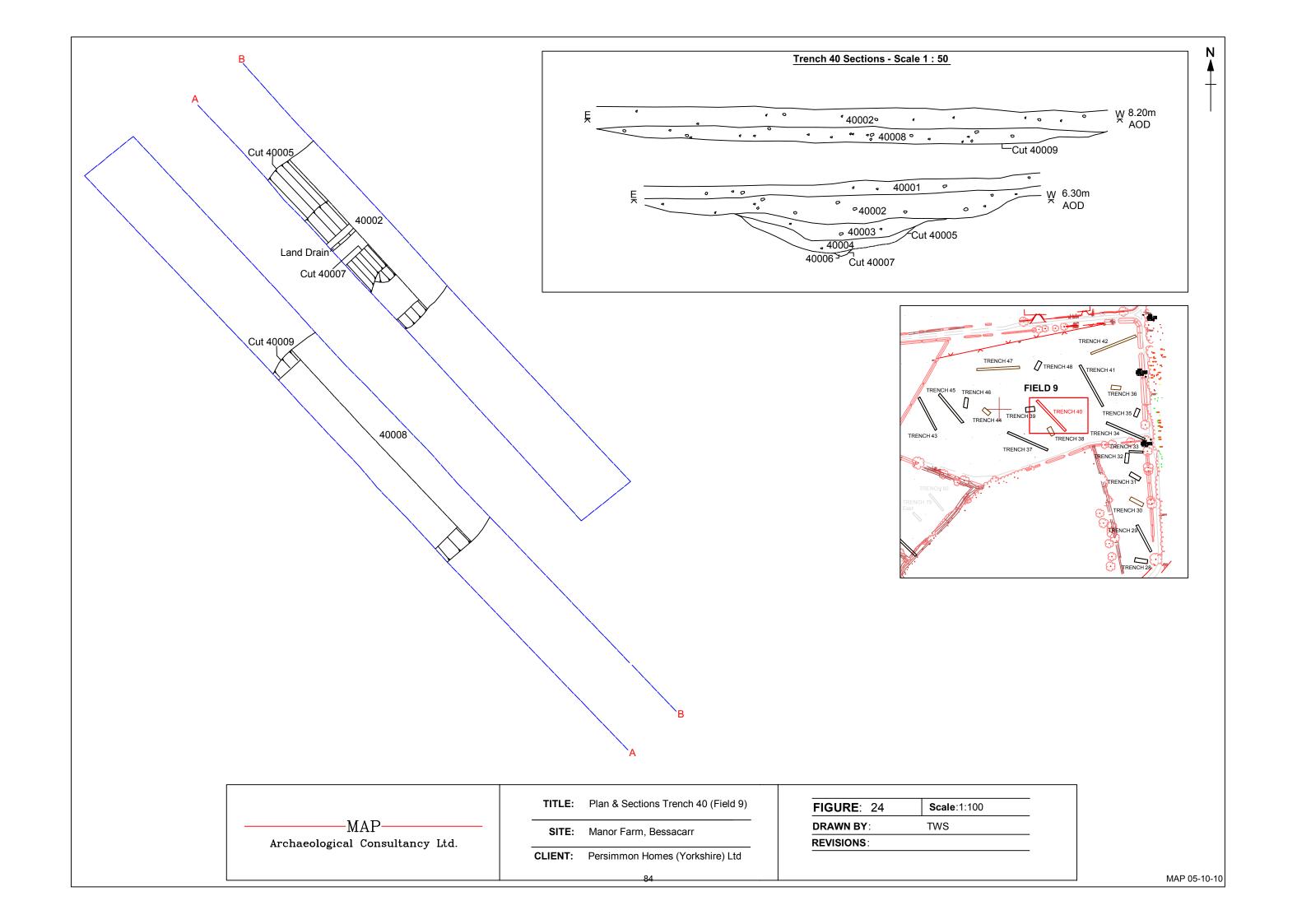
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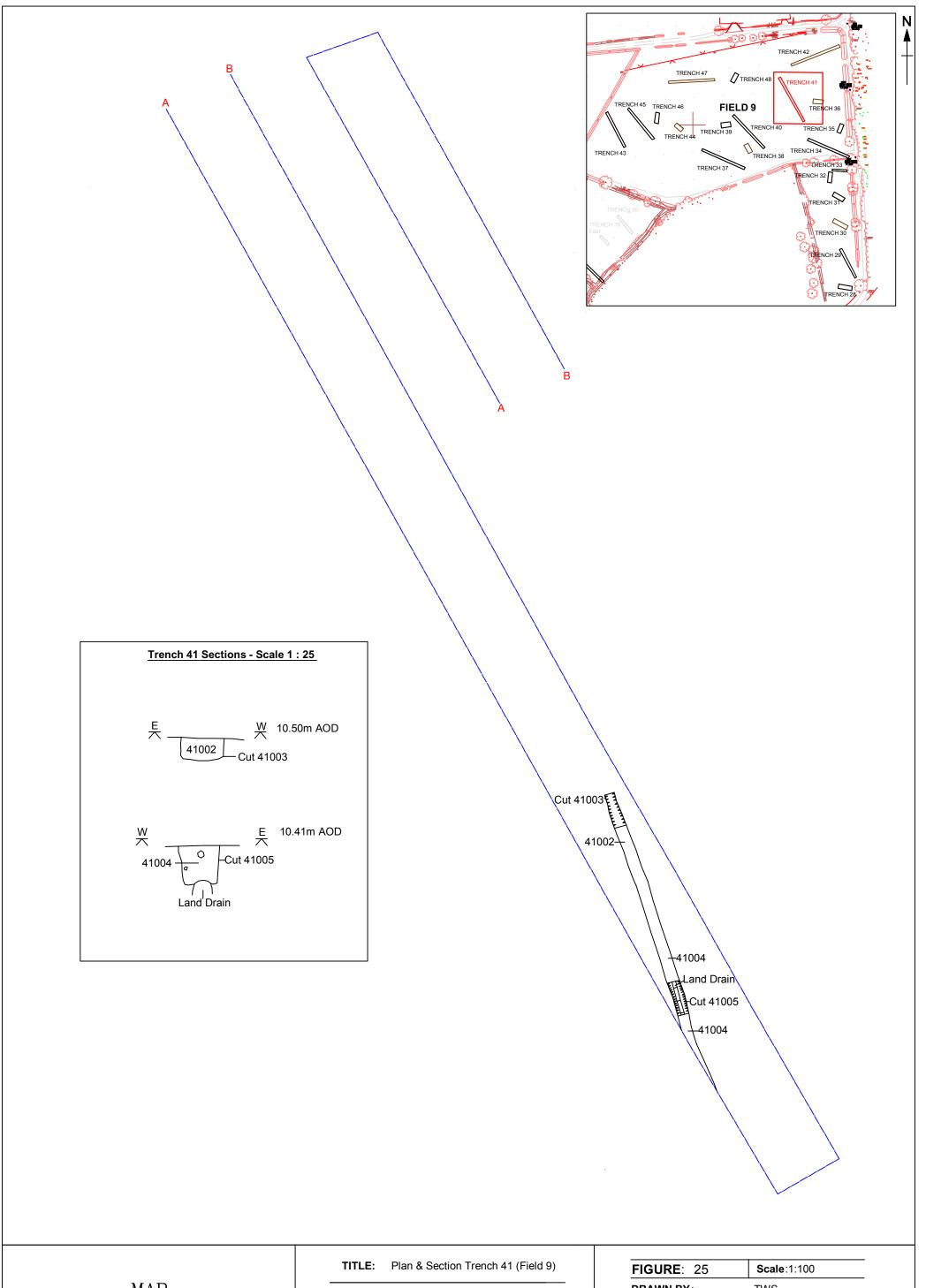
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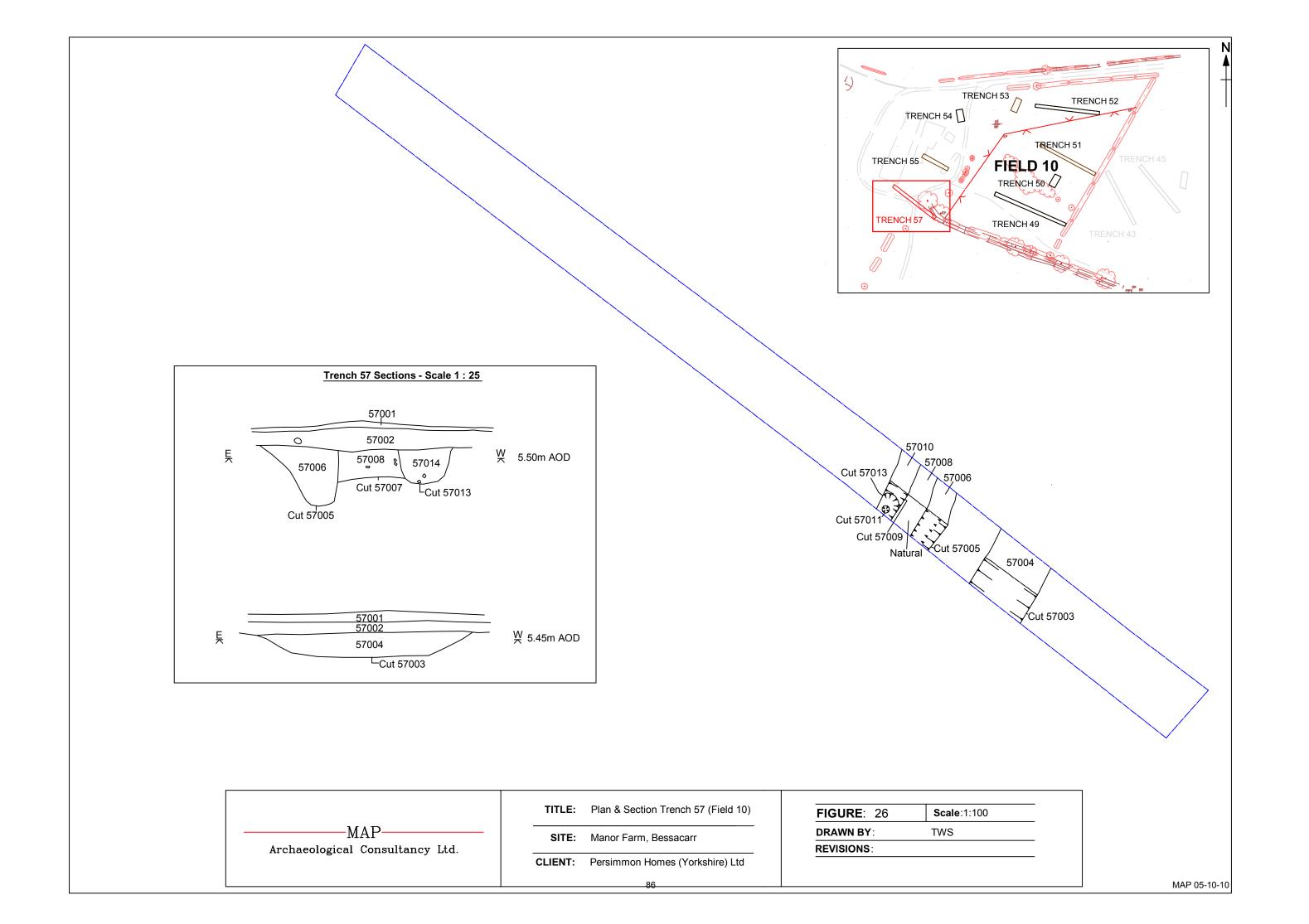
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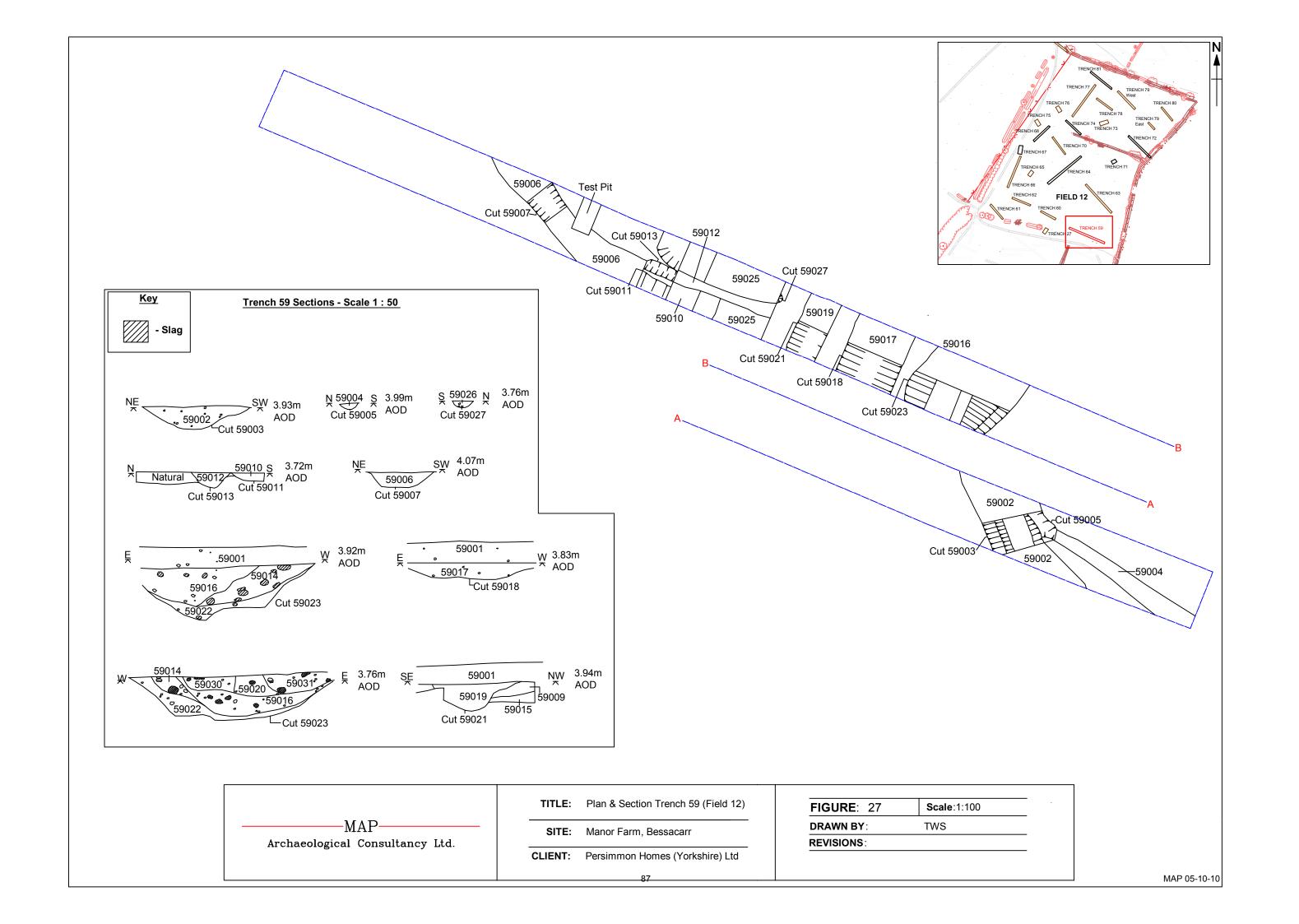
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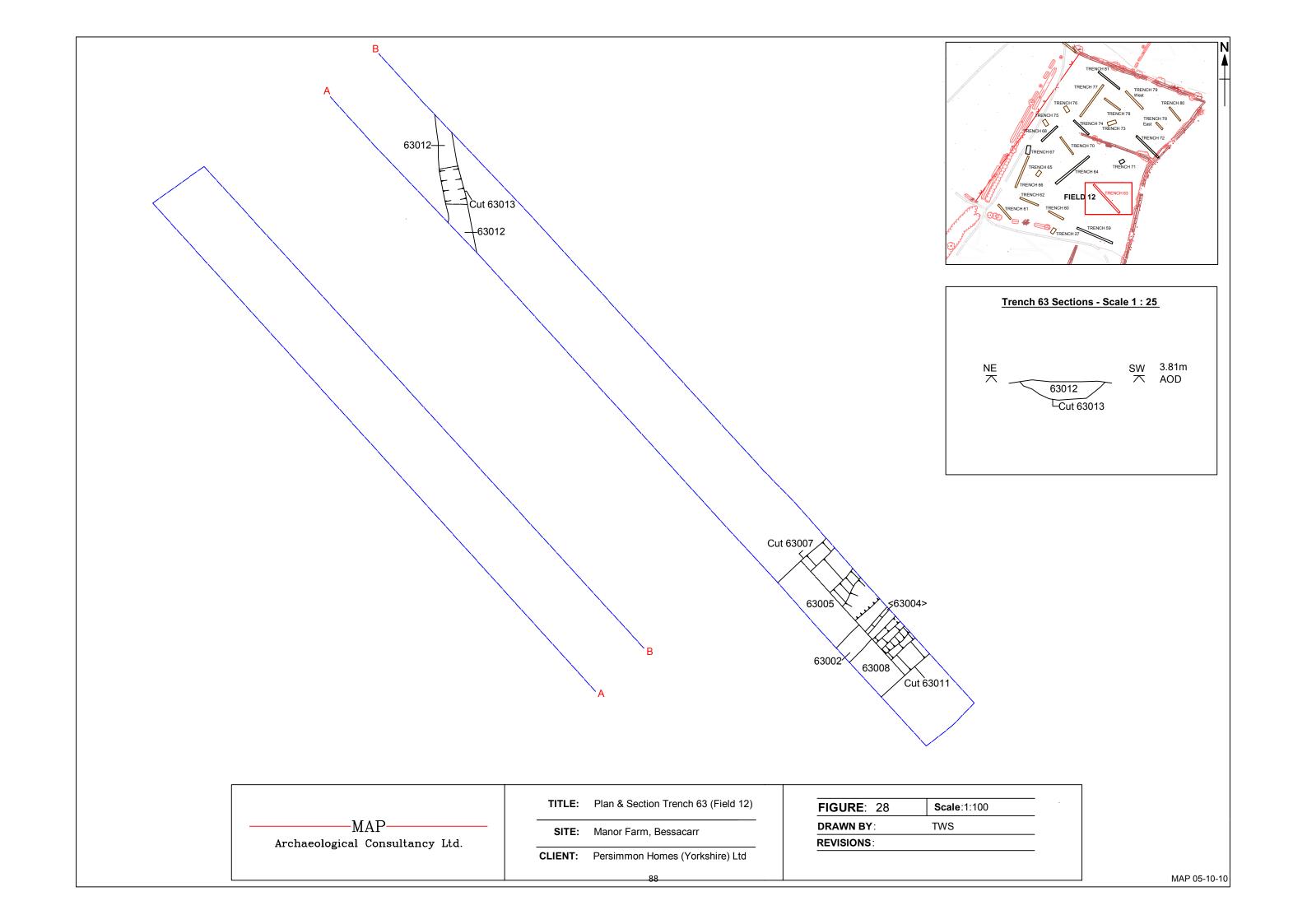
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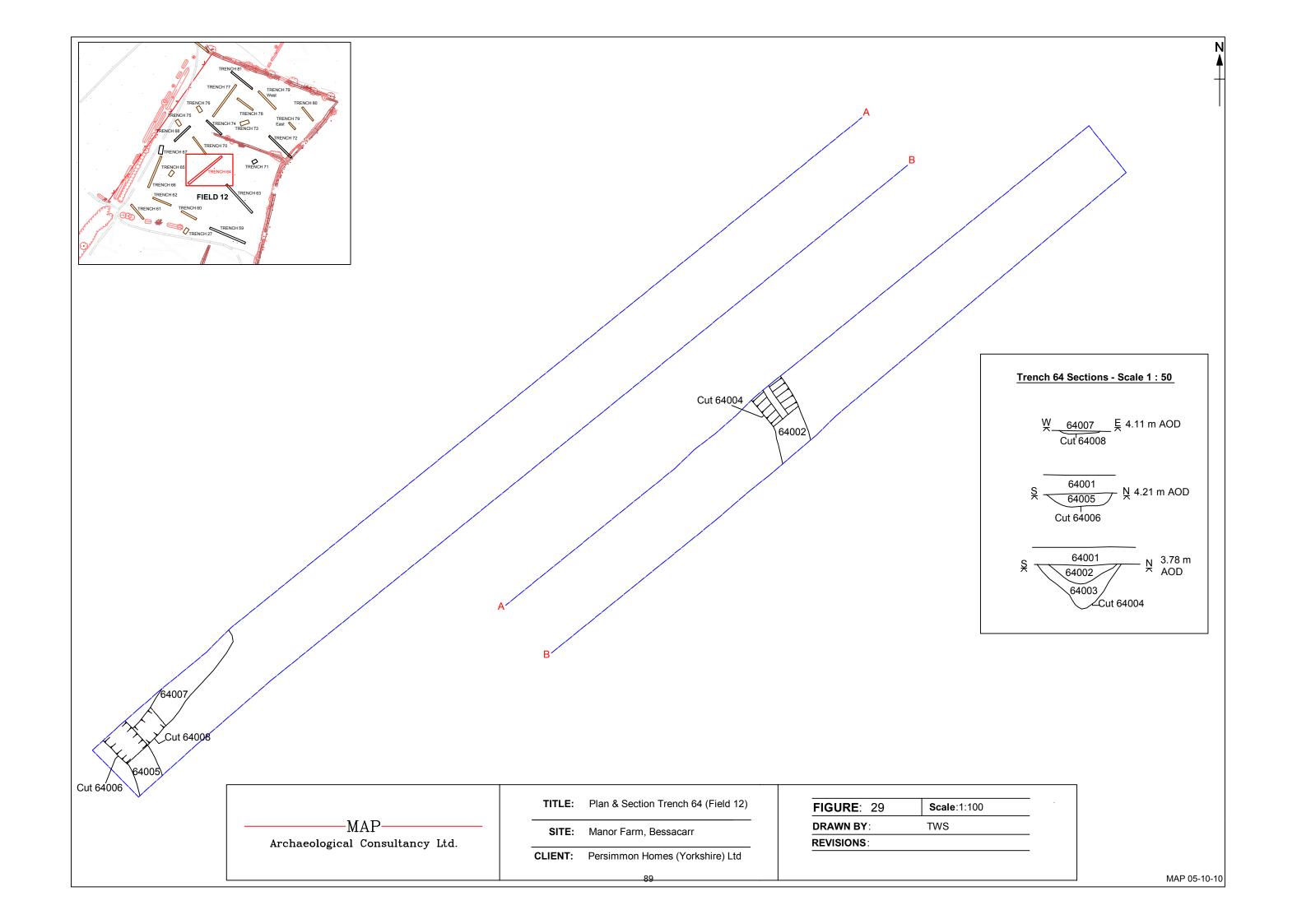
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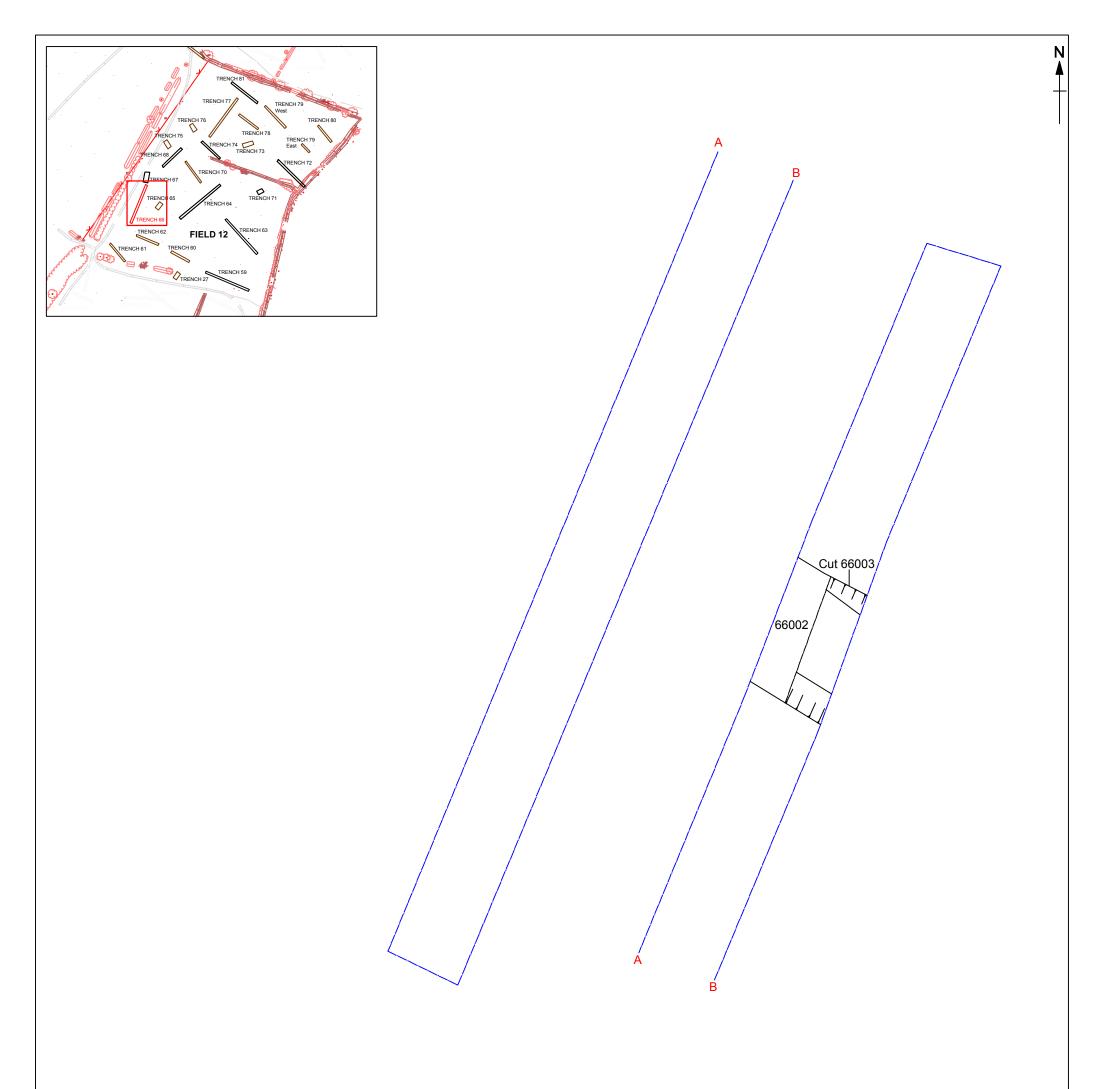
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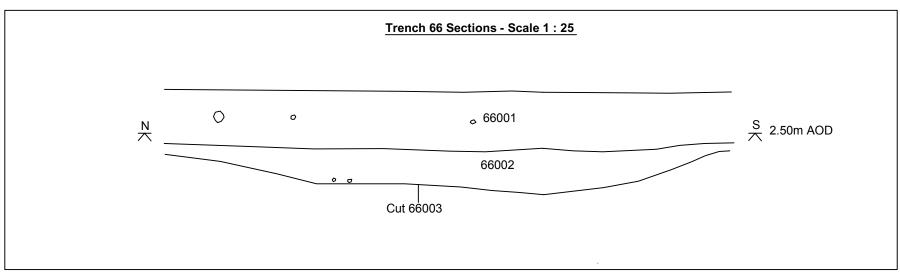










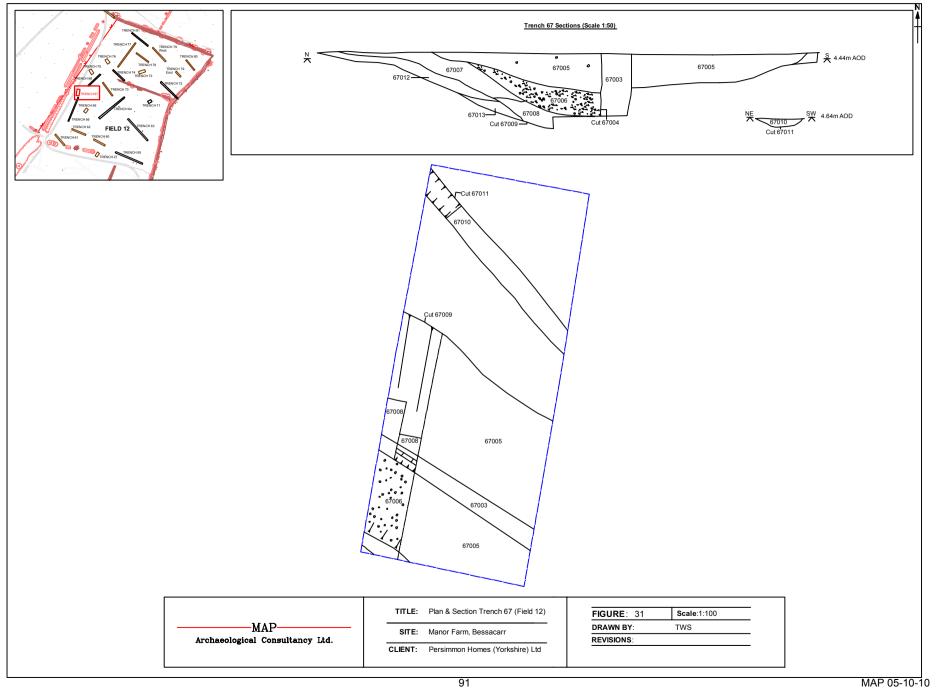


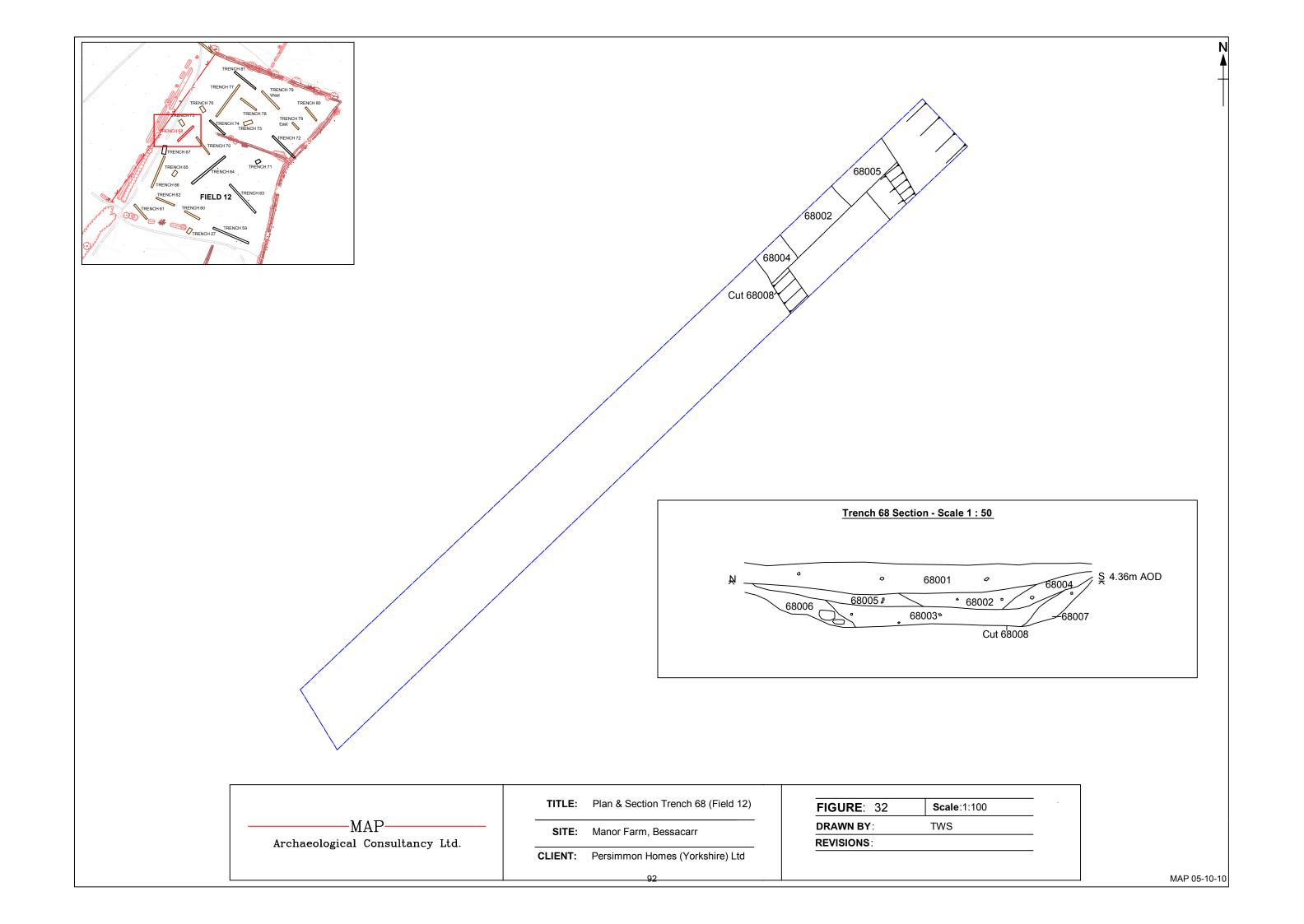
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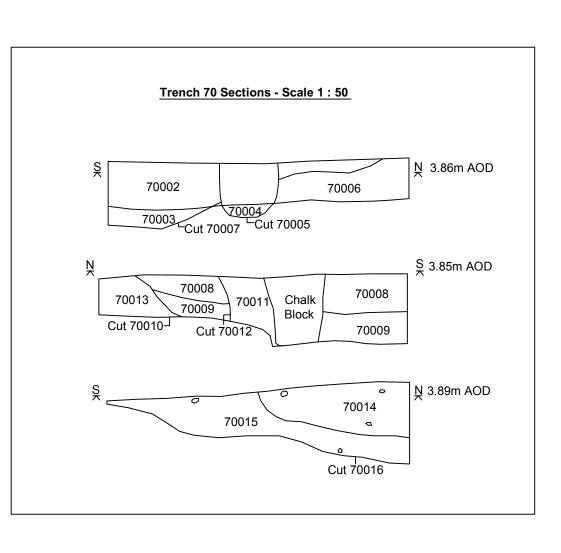
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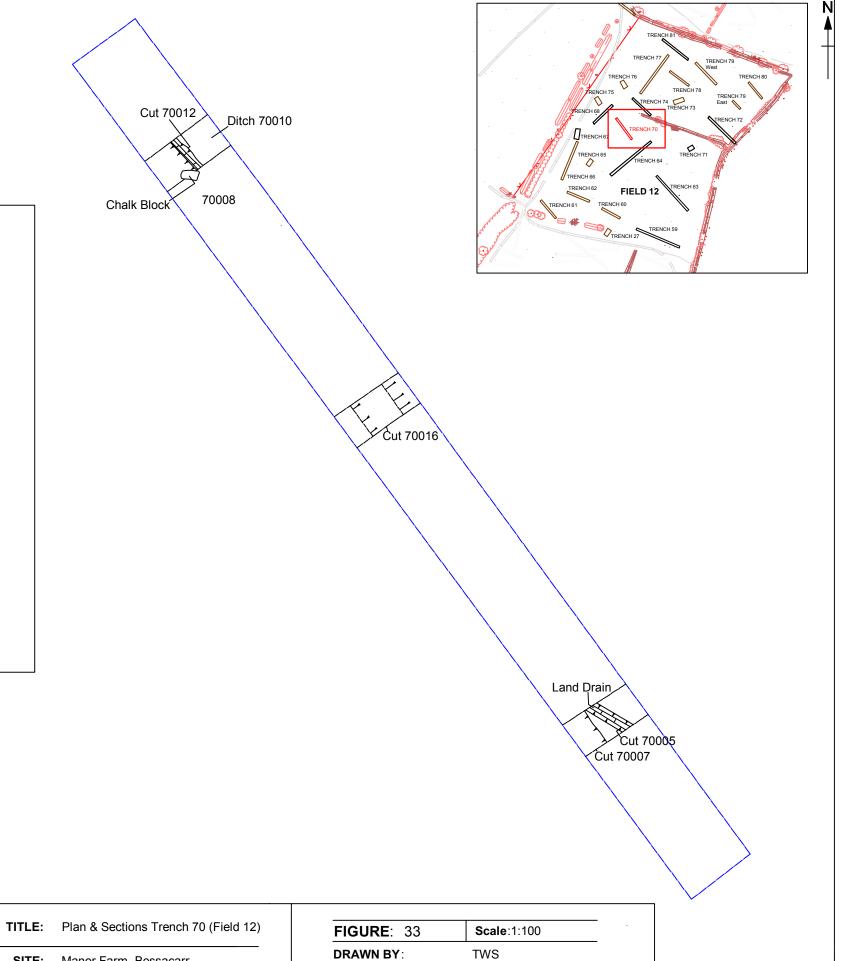
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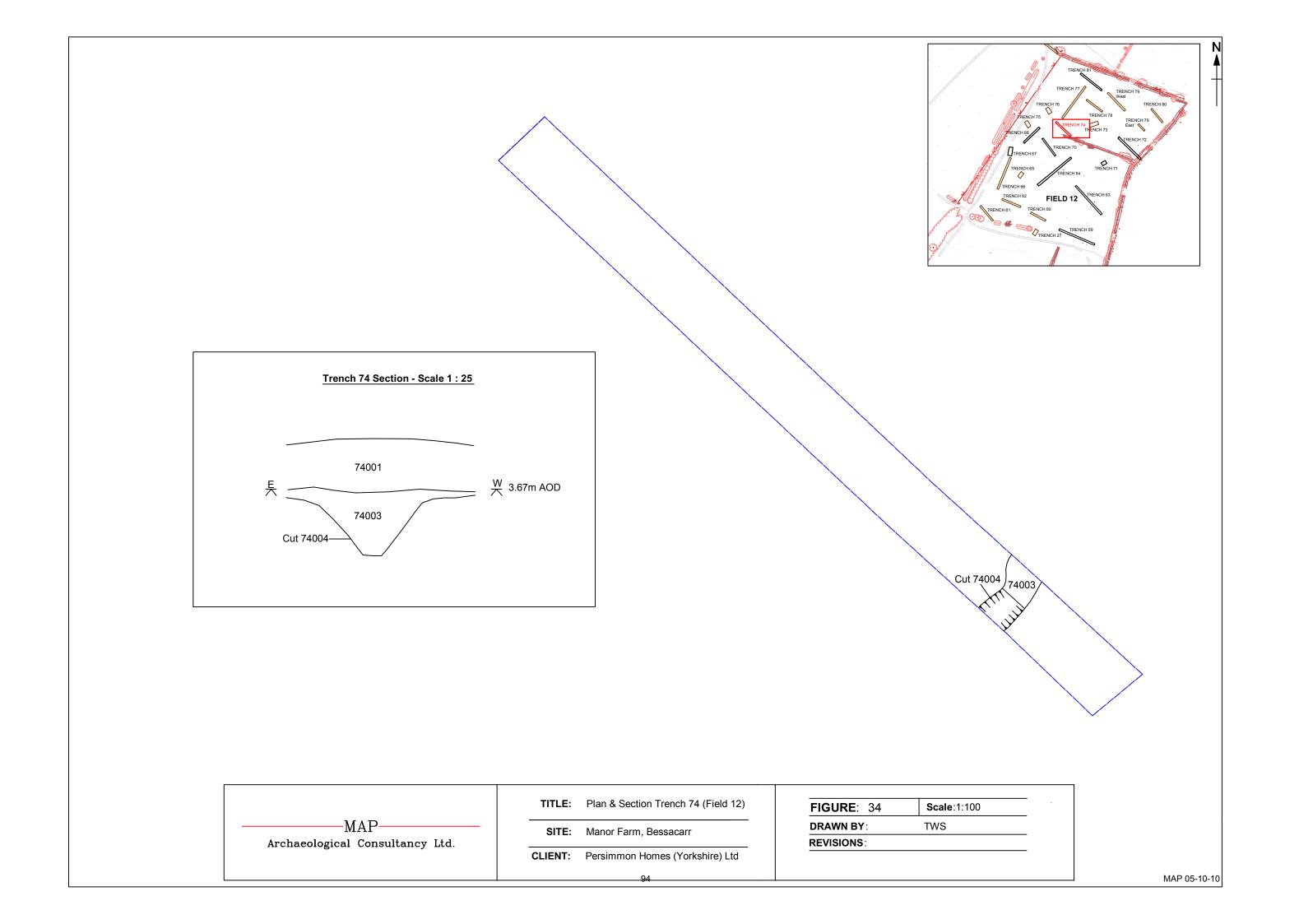


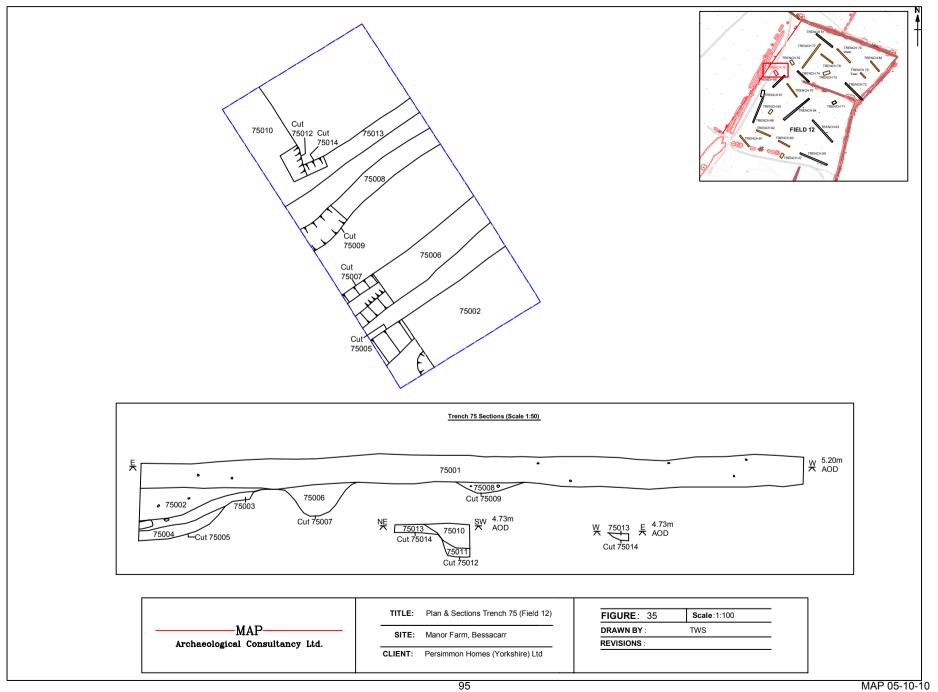


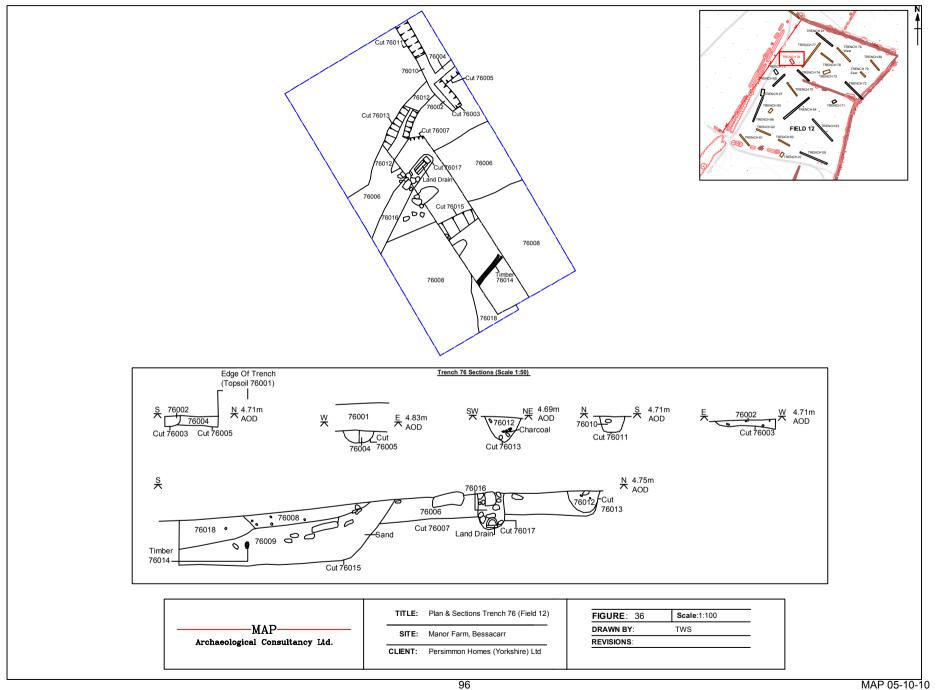


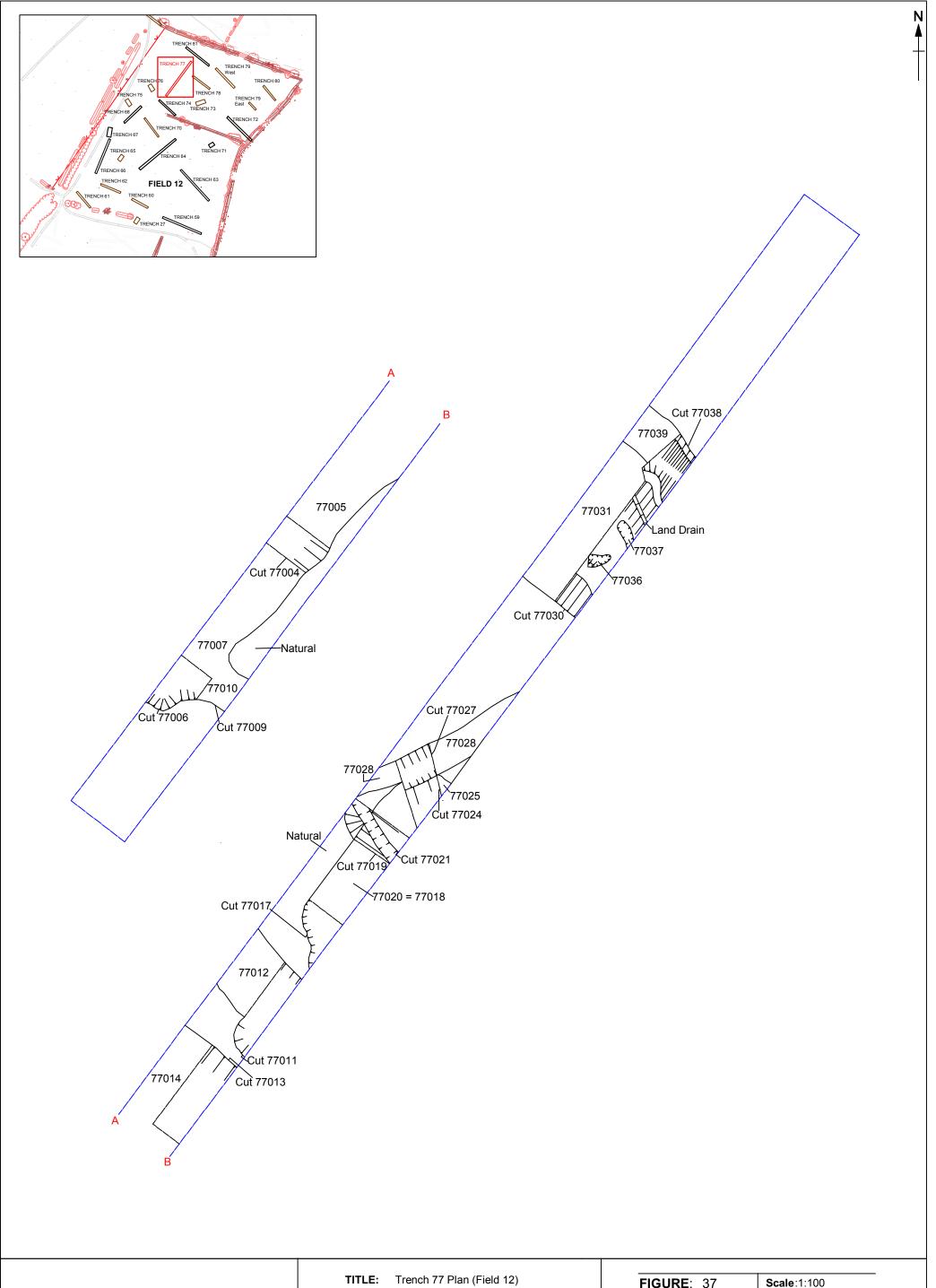
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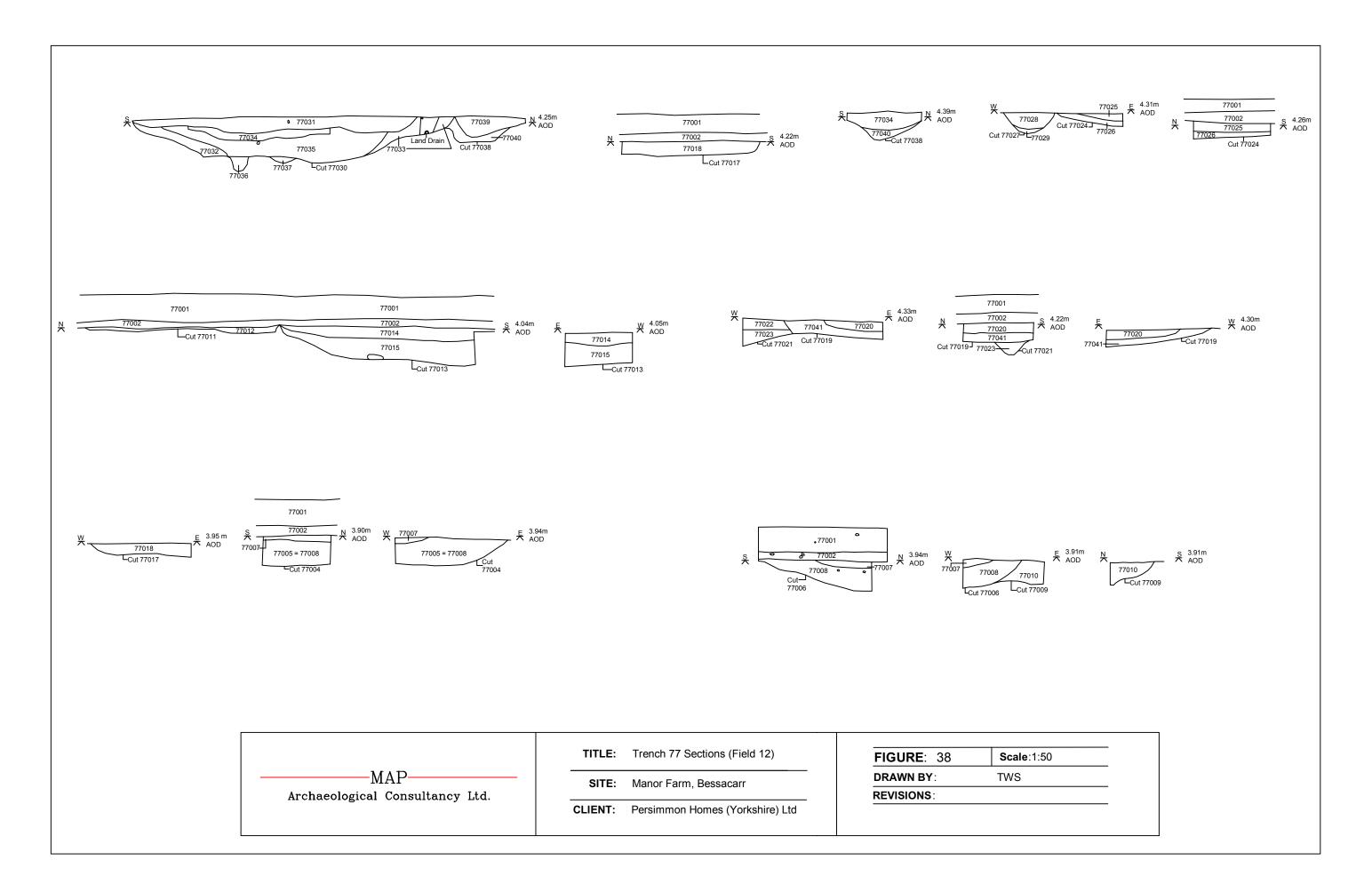


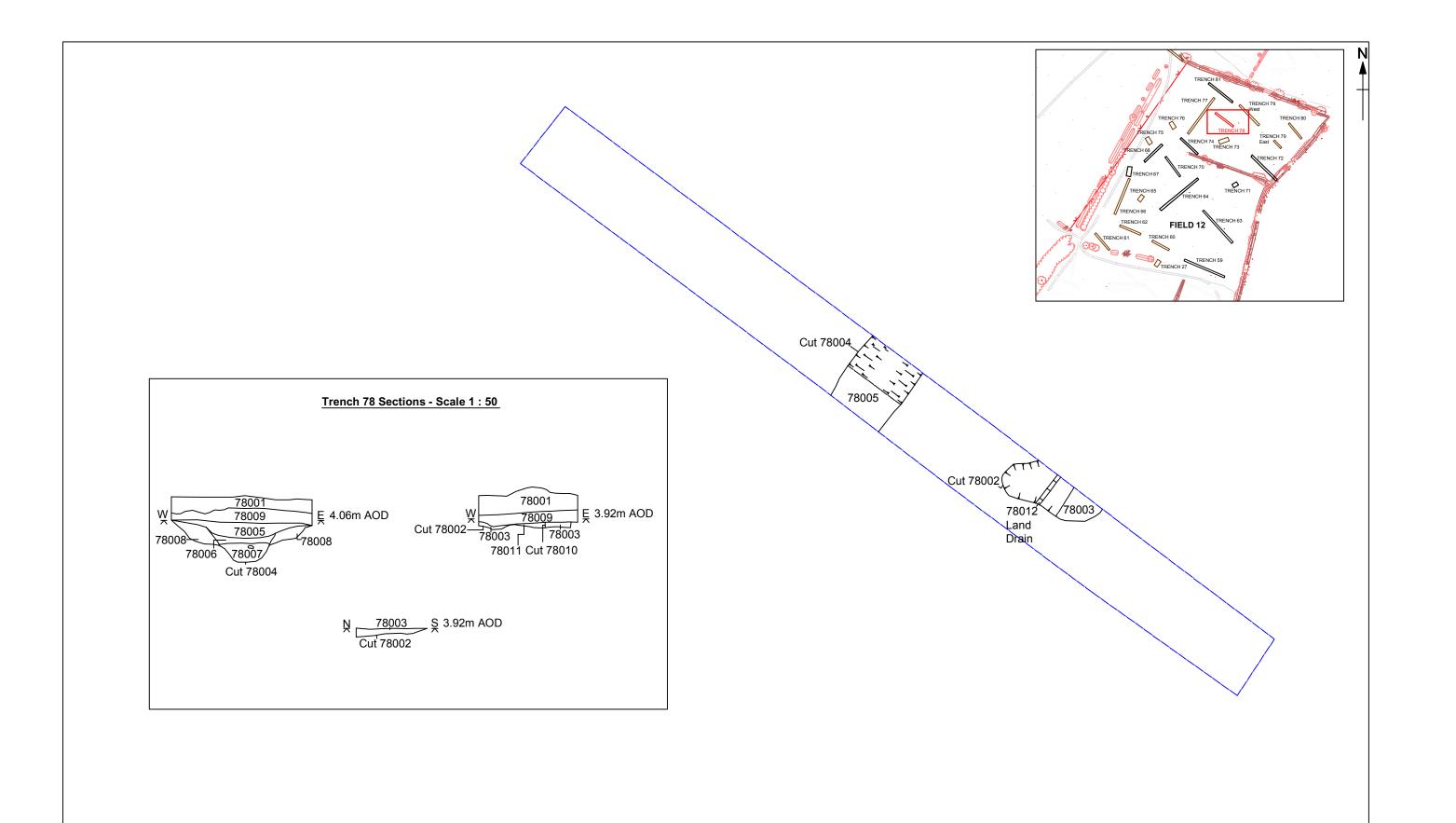
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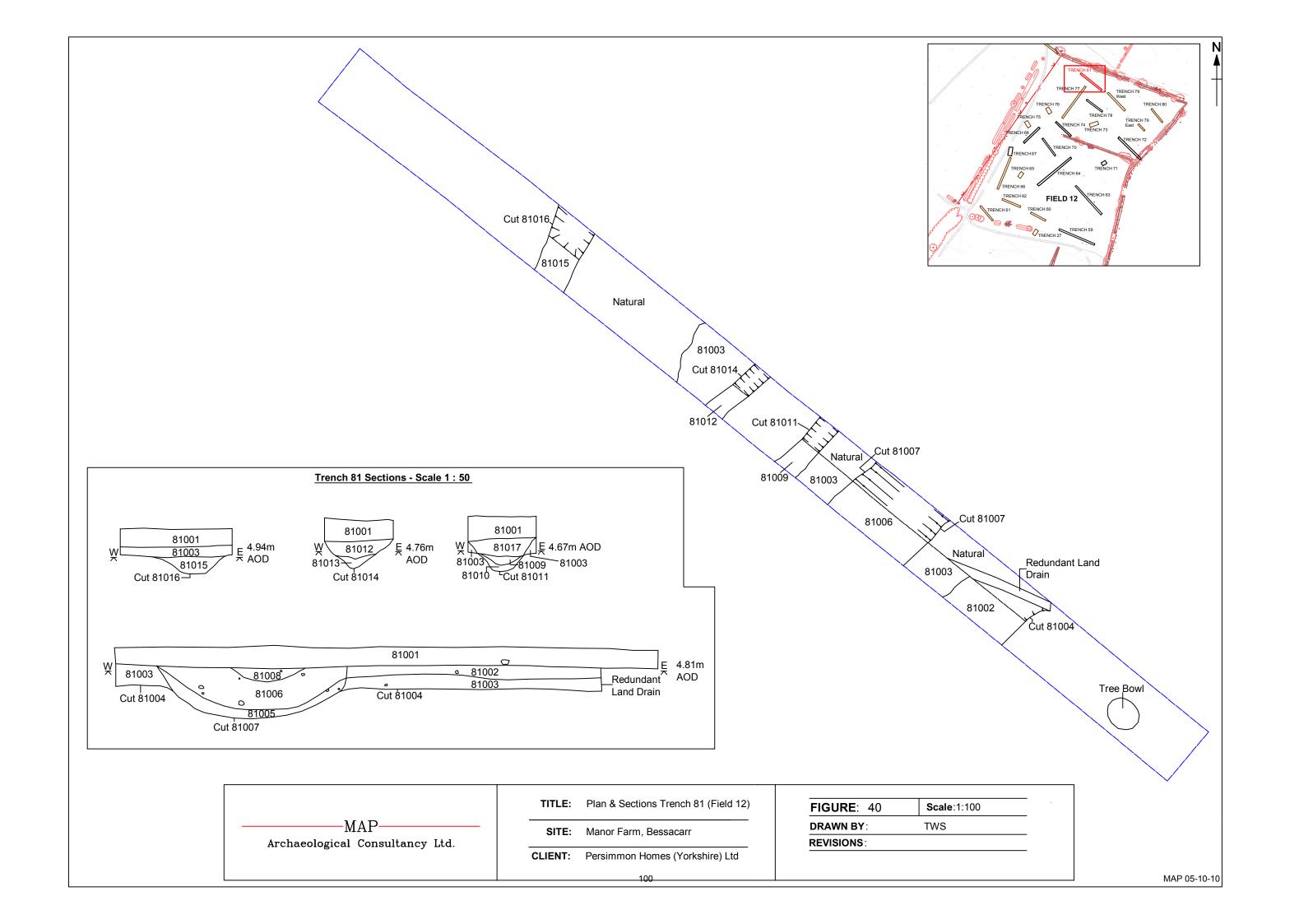




Plate 1. Field 6. General View. Facing South-east.



Plate 2. Field 9. General View. Facing West.



Plate 3. Trench 8. Linears 8003 and 8005. Facing North-west.



Plate 4. Trench 8. Linear 8006. Facing South-east.



Plate 5. Trench 14. Ditch 14006. Facing South.



Plate 6. Trench 21. Linear 21003. Facing North.



Plate 7. Trench 22. Linear 22004. Facing East.



Plate 8. Trench 23. Ditch 23010. Facing South.



Plate 9. Trench 24. Ditch 24008. Facing South.



Plate 10. Trench 27. Ditch 27005. Facing West.



Plate 11. Trench 9. Ditch 9003. Facing South-east.



Plate 12. Trench 10. Linear 10003. Facing South-west.



Plate 13. Trench 10. Linear 10005. Facing South.



Plate 14. Trench 13. Gully 13005 and Pit 13003. Facing South.



Plate 15. Trench 13. Pit 13010. Facing South.



Plate 16. Trench 18. Ditch 18006. Facing South-west.



Plate 17. Trench 18. Pit 18008. Facing South-west.



Plate 18. Trench 26. Post-excavation view. Facing East.



Plate 19. Trench 26. Ditches 26030, 26036 and 26038. Facing South.



Plate 20. Trench 26. Ditches 26023, 26026 and 26028. Facing South-east.



Plate 21. Trench 26. Ditch 26064. Facing North-east.



Plate 22. Trench 26. Pit 26008 and Gully 26005. Facing South-west.



Plate 23. Trench 26. Pit26019, Gully 26010 and Land drain 26011. Facing South.



Plate 24. Trench 34. Gully 34003. Facing South-west.



Plate 25. Trench 34. Gully 35005. Facing South-west.



Plate 26. Trench 34. Ditch 34007. Facing South-east.



Plate 27. Trench 37. Ditch 37008. Facing South-east.



Plate 28. Trench 38. Feature 38006. Facing South.



Plate 29. Trench 40. Ditch 40005. Facing South-east.



Plate 30. Trench 38. Gully 38003. Facing North.



Plate 31. Trench 40. Ditch 40009. Facing South-west.



Plate 32. Trench 41. Gully 41002. Facing South-east.



Plate 33. Trench 57. Posthole 13013. Facing South.



Plate 34. Trench 57. Linear 57005. Facing North.



Plate 35. Trench 59. Cut 59023. Facing South.



Plate 36. Trench 59. Gully 59013 and Ditch 59011. Facing South.



Plate 37. Trench 59. Ditch 58018. Facing South.



Plate 38. Trench 59. Ditch 59003 and Gully 59005. Facing South-east



Plate 39. Trench 63. Ditch 63007/11. Facing North-east.



Plate 40. Trench 64. Gullies 64006 and 64008. Facing West.



Plate 41. Trench 66. Furrow 66003. Facing East.



Plate 42. Trench 67. Ditch 67009. Facing South-west.



Plate 43. Trench 67. Gully 67011. Facing South-east.



Plate 44. Trench 68. Ditch 68008. Facing East.



Plate 45. Trench 70. Ditch 70016. Facing East.



Plate 46. Trench 75. Ditches 75005, 75007 and 75012, and Gullies 75009 and 75014. Facing South-west.



Plate 47. Trench 76. Ditch 76015. Facing South-east.



Plate 48. Trench 77. Ditch 77030. Facing East.



Plate 49. Trench 77. Ditch 77038. Facing North-west.



Plate 50. Trench 77. Ditch 77027 and Cut 77024. Facing South-west.



Plate 51. Trench 77. Gully 77021 and Cut 77019. Facing East.



Plate 52. Trench 77. Pit 77013. Facing West.



Plate 53. Trench 78. Ditch 78004. Facing North-east.



Plate 54. Trench 81. Ditch 81007 and Gully 81011. Facing North-west.



Plate 55. Trench 81. Gully 81011. Facing South.



Plate 56. Trench 81. Gully 81014. Facing South.

## **APPENDIX 1**

#### **Context Listing**

#### Manor Farm, Bessacarr 05-08-10

Context 1001 1002 1003 1004	Type Deposit Deposit Cut Deposit	Description Brown Sandy Silt. Topsoil Black Clay. Fill of Paelo - Channel 1003 Possible Paelo - Channel Grey/Brown Silty Sand. Modern debris
2001	Deposit	Brown Silty Clay. Topsoil
3001	Deposit	Brown Silty Sandy Clay. Topsoil
4001	Deposit	Brown Silty Sandy Clay. Topsoil
5001	Deposit	Brown Silty Sandy Clay. Topsoil
6001 6002 6003 6004 6005	Deposit Deposit Cut Deposit Deposit	Brown, Slightly Clay Sandy Silt. Topsoil Dark Brown, Humic Peaty Silty Sand. Fill of Linear 6003 Linear Feature Dark Brown, Humic Peaty Silty Sand. Peat Deposit Dark Brown, Humic Peaty Silty Sand. Peat Deposit
7001 7002	Deposit Deposit	Very Dark Brown, Very Soft Peaty Loam. Topsoil Very Dark Brown, Very Soft Peaty Loam. Peat Deposit
8001 8002 8003 8004 8005 8006 8007 8008 8009 8010 8011	Deposit Deposit Deposit Cut Cut Deposit Deposit Cut Cut Cut Cut Cut Cut Cut	Very Dark Brown, Very Soft Peaty Loam. Topsoil Dark Brown, Humic Peaty Sandy Silt. Fill of Very Shallow Linear 8003 Cut. Very Shallow Linear Feature Very Dark Brown. Very Soft Peaty Sandy Silt. Fill of Linear Gully 8005 Linear Gully Cut. North - South Linear Undated Plough Furrow Brown Very Silty Friable Sand. Fill of Plough Furrow 8006 Mid Brown, Very Silty Sand. Fill of Terminal 8009 Terminal Modern Plough Scar Modern Plough Scar
9001 9002 9003 9004	Deposit Deposit Cut Deposit	Dark Brown Silty Sand. Topsoil Dark Brown and Grey, Friable Clay Sand. Fill of Ditch 9003 Cut of Ditch Segment Dark Brown Sandy Peat. Subsoil
10001 10002 10003 10004 10005	Deposit Deposit Cut Deposit Cut	Black Peat. Topsoil Grey Brown, Soft Peaty Sand. Fill of Linear Terminal 10003 Linear Terminal Very Dark Grey Peat. Fill of Linear Gully 10005 Linear Gully
11001 11002 11003	Deposit Deposit Cut	Black Loose Peaty Sand. Topsoil Black Loose Very Wet Peaty Sand. Fill of Pit 11003 Pit (Roman)

11004 11005	Deposit Cut	Black Sand. Fill of Pit 11005 Pit (Roman)
12001	Deposit	Topsoil
13001	Deposit	Dark Brown Friable Sand. Topsoil
13002	Deposit	Dark Brown Friable Sand. Subsoil
13003	Cut	Cut of Pit
13004	Deposit	Dark Brown Friable Sandy Peat. Fill of Pit 13003
13005	Cut	Ditch Gully Segment
13006	Deposit	Light Brown Grey, Plastic Sandy Clay. Fill of Ditch/Gully 13005
13007	Cut	Half Section of Possible Pit
13008	Deposit	Dark Brown Friable Sandy Loam. Fill of Pit 13007
13009	Deposit	Light Brown/Yellow, Plastic Silty Sand. Primary Fill of Pit 13007
13010	Cut	Cut of Pit
13011	Deposit	Dark Brown Grey, Friable Sandy Loamy Peat. Fill of Pit 13010
13012 13013	Deposit Cut	Light Brown, Plastic Silty Sand. Fill of Pit 13010 Cut of Ditch
13013	Deposit	Plastic Silty Sand. Fill of Ditch 13013
13014	Берозіі	Trastic dity dand. Till of bitch 100 to
14001	Deposit	Dark Brown, Peaty Loam. Topsoil
14002	Cut	Cut of Ditch Segment
14003	Deposit	Grey Brown Peat. Fill of Ditch Segment 14002
14004	Deposit	Natural Deposit
14005	Cut	Cut of Ditch Segment
14006	Cut	Cut of Gully
14007	Deposit	Brown Peaty Loam. Fill of Linear 14008
14008	Cut	Cut of Linear
14009	Cut	Tree Bowl
14010	Deposit	Brown Peaty Loam. Fill of Ditch 14005
14011	Deposit	Greyey Brown, Friable Sandy Loam. Fill of Ditch 14014
14012	Deposit	Brown Friable Peat. Fill of Gully 14006
14013 14014	Deposit Cut	Dark Brown, Compact Peat. Fill of Gully 14006 Cut of Ditch
14014	Cut	Cut of Diteri
15001	Deposit	Dark Brown Humic Sandy Loam. Topsoil
16001	Deposit	Vegetation
16002	Deposit	Fine Silty Sand. Topsoil
17001	Deposit	Fine Silty Sand. Topsoil
18001	Deposit	Dark Brown Friable Fine Silty Sand. Topsoil
18002	Deposit	Re-deposited Natural in Ditch 18006
18003	Deposit	Dark Brown, Friable Clay. Secondary Fill in Ditch Segment 18006
18004	Deposit	Brown Friable Sand. Silted up Deposit in Ditch segment 18006
18005	Deposit	Dark greyish brown, modern plastic clay. Primary fill of Ditch Segment 18006
18006	Cut	Cut of Ditch Segment
18007	Deposit	Brown Clayey Plastic Sand. Fill of Pit 18008
18008	Cut	Cut of Pit
18009	Deposit	Light Grey Plastic Sandy Clay. Fill of Ditch 18006
18010	Deposit	Dark Brown Sandy Clay. Fill of Ditch Segment 18006
18011	Deposit	Yellow Friable Sand. Band of Natural in Ditch Segment 18006

19001 19002 19003 19004 19005	Deposit Deposit Cut Deposit Cut	Dark Brown Soft Peaty Humic Sandy Loam. Topsoil Dark Brown Soft Peaty Humic Sandy Loam. Fill of Linear 19003 Cut of Linear Feature Grey Brown, Soft Silty Sand. Fill of Terminal 19005 Cut of Terminal
20001	Deposit	Dark Brown, Soft Very Humic Sandy Loam. Topsoil
21001 21002 21003 21004 21005	Deposit Deposit Cut Deposit	Very Dark Brown, Soft Loamy Sandy Silt. Topsoil Dark Brown, Loose Loamy Sand. Fill of Linear Feature 21003 Cut of Linear Dark Brown, Loose Loamy Sandy Silt. Fill of Very Shallow Linear Feature 21005 Cut of Very Shallow Linear Feature
22001 22002 22003 22004 22005 22006	Deposit Deposit Deposit Cut Deposit Cut	Dark Grey Sandy Silty Loam. Topsoil Brown, Firm Silty Sand. Subsoil Brown, Firm Silty Sand. Fill of Field Boundary 22004 Field/Enclosure Boundary Brown Firm Silty Sand. Fill of Land Drain 22006 Cut of Land Drain
23001 23002 23003 23004 23005 23006 23007 23008 23009 23010 23011 23012	Deposit Deposit Cut Deposit Deposit Deposit Deposit Deposit Cut Deposit Cut Deposit Cut Cut	Dark Grey Soft Silty Sand. Topsoil Brown Gravely Sandy Silt. Fill of Land Drain 23003 Modern Land Drain Brown, Soft Sandy Clay. Fill of Possible Land Drain 23005 Cut of Possible Land Drain Grey Soft Sandy Silt. Fill of Ditch 23010 Orangey Soft Sandy Silt. Silting up of Ditch 23010 Orangey Brown Soft Silty Sand. Silting of Ditch edge 23010 Grey Sandy Clay. Primary Fill of Ditch 23010 Ditch Brown Coarse Silty Sand. Fill of Land Drain 23012 Modern Gravel Filled Land Drain
24001 24002 24003 24004 24005 24006	Deposit Deposit Cut Deposit Deposit Deposit	Grey Brown Soft Silty Loam. Topsoil Grey Brown Soft Silty Loam. Fill of Land Drain 24003 Probable Land Drain Grey Brown, Soft Silty Sand. Fill of Ditch 24008 Orangey Brown, Soft Sandy Silt. Silting Up Deposit in Ditch 24008 Orangey Brown, Soft Silty Sand. Silting Up along the Edge of Ditch 24008
24007 24008 24009 24010 24011 24012 24013 24014 24015 24016	Deposit Cut Deposit Cut Deposit Cut Deposit Cut Deposit Cut Deposit Cut Cut Cut	Grey Soft Silty Sandy Clay. Primary Fill of Ditch 24008 Ditch Brown, Soft Silty Sand. Fill of Pit 24010 Possible medieval Pit Brown Soft Silty Sand. Fill of Possible Tree Bowl Possible Tree Bowl Brown Soft Silty Sand. Fill of Modern Gravel Land Drain 24014 Modern Gravel Land Drain Brown Soft Silty Sand. Fill of Modern Land Drain 24016 Modern Land Drain
25001 25002	Deposit Deposit	Turf Fine Silty Sand. Topsoil

26001	Deposit	Dark Grey Brown. Fairly Loose Sandy Loam. Topsoil
26002	Deposit	Dark Grey Brown. Friable Silty Sand. Single Fill of Gully 26003
26003	Cut	Cut of Curvlinear Gully Located in South East end of Trench
26004	Deposit	Dark Grey Friable Silty Sand. Single Fill of Shallow Gully 26005.
26005	Cut	Cut of Shallow Gully
26006	Deposit	Dark Grey Brown, Friable Silty Sand. Top Fill of Pit 26008
	•	
26007	Deposit	Grey Brown, Friable Silty Sand. Primary Fill of Pit 26008
26008	Cut	Cut of Pit
26009	Deposit	Dark Grey Brown, Friable Silty Sand. Fill of Gully 26010
26010	Cut	Cut of Gully Segment
26011	Cut	Land Drain Cut
26012	Deposit	Mixed Deposit, Friable Sandy Clay. Fill of Land Drain 26011
26013	Cut	Cut of Feature Located in North East Corner
26014	Deposit	Fill of Feature 26013
26015	Deposit	Friable Silty Sand. Fill of Feature 26013
26016	Cut	Land Drains x2
26018	Deposit	Pale Yellow Brown, Fairly Compact Silty Sand. Fill of Pit 26019
26019	Cut	Cut of Pit
26021	Deposit	Light Brown Firm Clay Sand. Sealing Deposit in Ditch 26023
26022	Deposit	Dark Grey Brown, Firm Peaty Loamy Clay. Primary Fill of Ditch 26023
26023	Cut	Ditch Segment
26024	Deposit	Yellow Brown, Peaty Clay. Fill of Ditch Segment 26026
26025	Deposit	Brown/Black Peaty Sandy Clay. Primary Fill of Ditch 26026
26026	Cut	North-South Linear Ditch
26027	Deposit	Black Mixed Peaty Sand & Silt. Mixed Backfill of 26028
26028	Cut	North-South Aligned Linear Feature
26029	Deposit	Dark Greyish Brown, Friable Clay. Fill of Ditch 26030
26030	Cut	Cut of Ditch Segment
26031	Cut	Cut of Segment in Curvlinear Ditch
26032	Deposit	Brown, Friable Silty Sand. Fill of Pit 26066
26032	Deposit	Dark Brown, Slightly Plastic Silty Clay. Upper Fill of Segment 26031
		· · · · · · · · · · · · · · · · · · ·
26034	Deposit	Brownish, Slightly Plastic Silty Clay. Fill of Ditch 26031
26035	Deposit	Dark Brown, Plastic Silty Clay. Sterile Fill of Ditch Segment 26036
26036	Cut	Cut of Ditch Segment
26037	Deposit	Pale Grey, Plastic Silty Sandy Clay. Primary Fill of Ditch Segment 26038
26038	Cut	Cut of Ditch Segment
26039	Deposit	Brown, Friable Silty Sand. Primary Fill of Segment 26031
26040	Deposit	Pale Mid Grey. Plastic Silty Sandy Clay. Secondary Fill of Ditch Segment
	- 1	26038
26041	Deposit	Dark Brown, Friable Humic Peat. Top Fill of Ditch Segment 26038
26042	Deposit	Pale Brown, Friable Sand. Slumped Fill in Ditch 26038
26043	Deposit	Dark Brown, Friable Silty Sand. Fill of Post-medieval Land Drain 26044
26044	Cut	Post Medieval Land Drain
26045	Cut	
		Curvilinear Ditch Segment
26046	Deposit	Dark Brown, Slightly Plastic Silty Clay. Natural Accumulation Deposit in Ditch 26045
26047	Deposit	Mid Brown, Slightly Plastic Silty Clayey Sand. Primary Silt of Segment 26045
26048	Deposit	Mid Brown and Yellow, Slightly Plastic Silty Clayey Sand. Fill of Feature 26049
26049	Cut	Cut Feature
26050	Deposit	Mid Brown, Slightly Plastic Silty Clayey Sand. Fill of Pit Terminal 26057
26051	Cut	Pit/Terminal
20031	Cut	i ių i Gillilliai

26052 26053	Deposit Deposit	Mid Brown, Slightly Plastic Silty Clayey Sand. Fill of Pit/Terminal 26051 Mid Brown, Slightly Plastic Silty Clayey Sand. Backfill of Curvilinear 26045
26054	Deposit	Mid Brown, Slightly Plastic Silty Clayey Sand. Remnant of Primary Fill in 26045
26055 26056 26057 26058	Deposit Cut Cut Deposit	Mid Brown, Slightly Plastic Silty Clayey Sand. Fill of Pit/Terminal 26056 Pit/Terminal Pit/Terminal Dark Brown Friable Silty Clay Sand. Fill of Ditch 26045
26059 26060	Deposit Deposit	Mid Brown, Slightly Friable. Fill of Ditch 26045 Yellow Brown, Friable Silty Sand. Fill of Ditch 26061
26061 26062 26063 26064	Cut Deposit Deposit Cut	N-S Linear Ditch Terminal Brown Silty Sand. Fill of Pit/Terminal 26051 Brown Silty Clay Sand. Fill of Ditch 26045 Curvilinear Feature
26065 26066	Deposit Cut	Yellow Brown, Plastic Sandy Clay. Contaminated Natural Cut of Pit
27001 27002 27003 27004 27005 27006 27007	Deposit Deposit Deposit Cut Deposit Cut	Mid Brown, Friable Silty Sandy Loam. Topsoil Brown Silty Sand. Subsoil Dark Brown, Friable Silty Sand. Tree Bowl Dark Brown, Friable Silty Sand. Tree Bowl Field Ditch Brown, Friable Silty Sand. Fill of Land Drain 27007 Land Drain Cut
28001 28002	Deposit Cut	Mid Brown Friable Sandy Loam. Topsoil Plough Scars
29001 29002 29003 29004	Deposit Cut Cut Cut	Mid Brown Friable Sandy Loam. Topsoil Plough Scars Tree Bowl Modern Land Drain
30001 30002	Deposit Cut	Mid Brown Friable Sandy Loam. Topsoil Tree Bowl
31001 31002 31003	Deposit Cut Cut	Mid Brown, Friable Sandy Loam. Topsoil Land Drain Land Drain
32001	Deposit	Topsoil
33001 33002	Deposit Cut	Mid Brown Sandy Loam. Topsoil Plough Scars
34001 34002 34003 34004 34005 34006 34007 34008	Deposit Cut Deposit Cut Deposit Cut Deposit Cut Deposit	Dark Grey Silty Sand. Topsoil Very Dark Grey Sand. Fill of Gully Segment 34003 Cut of Gully Segment Dark Greyish Brown. Friable Silty Sand. Fill of Linear 34005 Cut of Linear Dark Greyish Black Sand. Fill of Gully Terminal 34007 Cut of Gully Terminal Light Greyish Brown Compacted Sand. Fill of Ditch Terminal 34009
34009	Cut	Cut of Ditch Terminal

35001	Deposit	Dark Grey Brown Silty Sand. Topsoil
36001	Deposit	Dark Grey Brown Silty Sand. Topsoil
37001 37002 37003 37004 37005 37006 37007 37008 37009	Deposit Deposit Deposit Deposit Timber Structure Cut Cut	Dark Grey Brown Very Soft Silty Sand. Topsoil Brown Soft Sand. Upper Fill of Ditch 37008 Grey Brown, Firm Silty Sand. Fill of Ditch 37008 Grey Firm Silty Sand. Fill of Re-cut 37009 Grey Firm Silty Sand. Fill of Re-cut 37009 Timber Line of Old Hand Made Land Drain Cut of Wide Ditch Re-Cut
38001 38002 38003 38004 38005 38006	Deposit Deposit Cut Deposit Deposit Cut	Dark Brown, Friable Sandy Loam. Topsoil Yellowish Brown Sand. Fill of Gully 38003 Possible Gully Yellowish Brown Compact Sand. Fill of Ditch 38006 Greyish Brown Compact Sand. Primary Fill of Ditch Segment 38006 Cut of Ditch Segment
39001	Deposit	Dark Brown Silty Sand. Topsoil
40001 40002 40003 40004 40005 40006 40007 40008 40009	Deposit Deposit Deposit Cut Deposit Cut Deposit Cut Deposit Cut Cut Cut	Dark Greyish Brown Silty Sandy Loam. Topsoil Brown Silty Sandy Clay. Upper Fill of Ditch 40005 Mixed Brown and Dark Grey, Friable Silty Sandy Clay. Secondary Fill of Ditch 40005 Dark Grey, Friable Silty Sand. Basal/Primary Fill of Ditch 40005 Cut of Ditch Segment Dark Grey Friable Silty Sand. Fill of Land Drain 40006 Cut of Land Drain Brown Friable Silty Sand. Fill of Ditch 40009 Cut of Drainage Ditch
41001 41002 41003 41004 41005	Deposit Deposit Cut Deposit Cut	Dark Grey Brown Soft Sandy Silt. Topsoil Yellow Brown Compact Sandy Silt. Fill of Land Drain 41003 Land Drains Fill of Land Drain 41005 Land Drain
42001	Deposit	Dark Grey Brown Soft Silty Sand. Topsoil
43001	Deposit	Dark Grey Brown Soft Silty Loam. Topsoil
44001	Deposit	Dark Brown Soft Moist Silty Sand. Topsoil
45001 45002 45003	Deposit Deposit Cut	Dark Grey Brown Silty Sandy Loam. Topsoil Red Brown Sand. Modern engineering Test Pit Modern Testpit
46001	Deposit	Dark Grey Brown Slightly Moist Clay. Topsoil
47001	Deposit	Dark Grey Brown Silty Sandy Loam. Topsoil
48001	Deposit	Dark Brown, Soft Moist Silty Sandy Loam. Topsoil

49001	Deposit	Dark Grey Brown Soft Silty Sand. Topsoil
50001	Deposit	Dark Grey Brown Soft Slightly Silty Sand. Topsoil
51001	Deposit	Topsoil
52001	Deposit	Grey Brown Soft Silty Sandy Clay. Topsoil
53001	Deposit	Dark Grey Brown Soft Silty Sandy Clay. Topsoil
54001	Deposit	Topsoil
55001	Deposit	Dark Grey Brown Silty Sandy Loam. Topsoil
57001 57002 57003 57004 57005 57006 57007 57008 57009 57010 57011 57012 57013	Deposit Deposit Cut Cut Cut Cut	Brown Friable Sandy Loam. Topsoil Grey Brown, Friable Sand. Demolition Material Plough Furrow Yellow Brown, Friable Silty Sand. Fill of Plough Furrow 57003 Modern Linear Dark Brown, Friable Silty Sand. Fill of Modern Linear 57005 Furrow Brown, Friable Silty Sand. Fill of Furrow 57007 NW-SE aligned Linear Brown, Friable Silty Sand. Silting in Linear 57009 Posthole in Terminal 57013 Brown, Friable Silty Sand. Fill of Posthole 57011 ?Modern Terminal
57014 58001	Deposit Deposit	Brown Friable Silty Sand. Fill of Terminal 57013  Topsoil
59001 59002 59003 59004 59005 59006 59007 59008	Deposit Deposit Cut Deposit Cut Deposit Cut Deposit Cut Deposit	Dark Grey Brown Friable Silty Loam. Topsoil Dark Brown, Friable Silty Sandy Loam. Fill of Ditch 59003 Cut of Ditch Segment Dark Grey Friable Silty Sand. Fill of Gully 59005 Cut of Gully Segment Brown, Friable Silty Sand. Fill of Ditch 59007 Cut of Ditch Segment Pale Grey Brown, Friable Silty Sand. Deposit overlying Slag Dump 59009
59009 59010	Deposit Deposit	Dark Grey, Friable Silty Sand. Dump of Slag Fragments Dark Brownish Grey, Friable Silty Sand. Fill of Shallow Ditch Segment 59011
59011 59012 59013 59014 59015 59016 59017 59018 59019 59020 59021	Cut Deposit Cut Deposit Deposit Deposit Cut Deposit Deposit Cut Deposit Cut Cut Cut Cut Cut Cut Cut Cut Cut Cu	Cut of Ditch Segment Mid Brown, Friable Silty Sand. Fill of Gully Segment 59013 Cut of Gully Segment Dark Grey, Friable Silty Sand. Slag Deposit in Ditch 59023 Grey, Friable Silty Sand. Burnt Deposit below Slag Deposit 59009 Mid Grey, Friable Silty Sandy Clay. Burnt Deposit in Ditch 59023 Dark Grey/Brown, Friable Sandy Loam. Fill of Ditch 59018 Cut of Ditch Darkish Grey, Friable Silty Sand. Single Fill of 59021 Grey, Friable Sandy Clay. Fill of Ditch 59023 Cut of Ditch

59022	Deposit	Mid Grey, Plastic Sandy Clay. Basal Fill of Ditch 59023
59023	Cut	Cut of Industrial Waste Ditch
59025	Deposit	Dark Greyish Friable Cinder. Burnt Cinder Deposit
59026	Deposit	Dark Grey, Friable Sandy Clay. Fill of Posthole 59027
59027	Cut	Cut of Posthole
59028	Deposit	Dark Grey, Friable Sandy Clay. Fill of Posthole 59029
59029	Cut	Cut of Posthole
59030	Deposit	Yellow Plastic Clay. Fill of Ditch 59023
59031	Deposit	Reddish Brown, Friable Cindery Sand. Fill of Ditch 59023
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60001	Deposit	Dark Greyish Brown, Friable Sandy Loam, Topsoil
61001	Deposit	Dark Brown, Friable Sandy Loam. Topsoil
62001	Deposit	Dark Greyish Brown, Friable Sandy Loam. Topsoil
63001	Deposit	Dark Grey Brown, Silty Sandy Loam. Topsoil
63002	Deposit	Grey Brown, Soft Silty Sand. Fill of Land Drain 63004
63003	Structure	Post-med Land Drain
63004	Cut	Modern Land Drain
63005	Deposit	Dark Grey, Loose Silty Sand. Upper Fill of Ditch Segment 63007
63006	Deposit	Brown Grey Brown, Peaty Clay. Primary Fill of Ditch 63007
63007	Cut	Ditch Segment
63008	Deposit	Dark Grey Silty Sand. Fill of Ditch Segment 63011
63009	Deposit	Brown, Firm Peaty Clay. Fill of Ditch Segment 63011
63010	Deposit	Deposit, Yellow Brown Sand. Primary Fill of Ditch Segment 63011
63011	Cut	Cut of Ditch Segment
63012	Deposit	Grey Brown, Soft Silty Sand. Fill of Land Drain 63013
63013	Cut	Land Drain
03013	Cut	Land Diain
64001	Deposit	Dark Grey Brown, Friable Sandy Loam. Topsoil
64002	Deposit	Dark Brown Peaty Silty Sand. Upper Fill of Ditch 64004
64003	Deposit	Dark Grey Brown, Firm Silty Sandy Clay. Primary Fill of Ditch Segment 64004
64004	Cut	Ditch
64005	Deposit	Dark Brown, Very Soft Silty Sand. Fill of Shallow Linear Feature
64006	Cut	Shallow Linear Feature
64007	Deposit	Grey Brown, Soft Silty Sand. Fill of Very Shallow Feature 64008
64008	Cut	Very Shallow Feature
65001	Deposit	Dark Grey Brown, Friable Silty Sandy Loam. Topsoil
66001	Deposit	Dark Brown Grey, Friable Silty Sand. Topsoil
66002	Deposit	Dark Brown, Friable Silty Sand. Fill of Ditch 66003
66003	Cut	Cut of Ditch
67001	Deposit	Dark Grey Brown, Friable Sandy Loam. Topsoil
67002	Deposit	Dark Brown, Slightly Silty Sand. Subsoil
67003	Deposit	Grey Brown, Friable Silty Sand. Fill of Late Post medieval -Modern Land Drain
		67004
67004	Cut	Cut of Late Post medieval- Modern Land Drain
67005	Deposit	Pale Brown, Friable Fine Silty Sand. Top Fill of Very Large Dyke/Ditch 67009
67006	Deposit	Fill of Ditch (Palaeochannel) 67009
67007	Deposit	Pale Grey Friable Silty Sand. Fill of Ditch 67009

67008 67009 67010 67011 67012 67013	Deposit Cut Deposit Cut Deposit Deposit	Dark Brown, Compacted Humic Peat. Lower Fill of 67009 Very Large Ditch/Dyke Possible Large Drainage Feature Grey Friable Fine Silty Sand. Fill of Shallow Gully 67011 Cut of Gully Very Pale Brown, Friable Sand. Fill of Ditch 67009 Pale Grey Fairly Compact Silty Sandy Clay. Lower Fill of Ditch/Palaeochannel 67009
68001 68002 68003 68004 68005 68006 68007	Deposit Deposit Deposit Deposit Deposit Deposit	Dark Greyish Brown, Friable Silty Sand. Topsoil Yellow Brown, Friable Silty Sand. Fill of Ditch 68008 Dark Grey, Plastic with Timber Frags. Basal Fill of Ditch 68008 Mid Brown, Friable Silty Sand. Subsoil Mid Brown, Friable Silty Sand. Subsoil Friable Light Grey Sand. Slumped Deposit in Ditch 68008 Mixed Light Grey and Black, Friable Sand. Slumped Deposit in Ditch 68008
68008	Cut	Cut of Ditch Segment
69001		Trench Number Not Assigned
70001 70002 70003 70004 70005 70006 70007 70008 70009 70010 70011	Deposit Deposit Deposit Cut Deposit Cut Deposit Cut Deposit Cut Deposit Cut Deposit Cut	Dark Grey Brown, Friable Sandy Loam. Topsoil Dark Brownish Grey Silty Sand. Upper Fill of Ditch 70007 Dark Grey Brown, Friable Sandy Clay. Basal Fill of Ditch 70007 Mid Grey Plastic Clay. Fill of Land Drain 70005 Cut of Land Drain Mixed Grey and Black, Friable Silty Sandy Clay. Heavily disturbed by Land Drain Cut of Ditch Segment Brown, Friable Silty Sand. Top fill of Ditch 70010 Dark Brown, Friable Humic Peat. Primary Peaty Fill of Ditch 70010 Cut of Ditch Segment - only part visible in Trench 70. Dark Brown, Friable Silty Sandy Silt. Fill of Land Drain 70012
70012 70013	Cut Deposit	Cut of Land Drain Dark Brown, Friable Humic Peat. Fill of Ditch 70010
70014 70015 70016	Deposit Deposit Cut	Dark Grey Brown. Friable Silty Sand. Secondary Fill of Ditch 70016 Dark Greyish Black, Moderate Peaty Clay. Primary Fill of Ditch 70016 Cut of Ditch Segment
71001	Deposit	Dark Grey Brown, Friable Sandy Loam. Topsoil
72001 72002 72003 72004 72005 72006	Deposit Deposit Cut Cut Cut Cut Cut	Mid Brown, Friable Sandy Loam. Topsoil Deposit. Slightly Plastic Loam. Subsoil Plough Scars Land Drain Land Drain Land Drain
73001 73002 73003	Deposit Deposit Cut	Medium Brown, Friable Sandy Loam. Topsoil Dark Brown, Friable Sandy Loam. Subsoil Test Pit
74001 74002 74003	Deposit Cut Deposit	Dark Grey Brown, Soft Silty Sandy Loam. Topsoil Land Drain Dark Brown, Soft Sandy Silt. Fill of Linear Gully 74004

74004	Cut	Linear Gully
74004	Cut	Linear Guny
75001	Deposit	Dark Grey Brown, Silty Sandy Loam. Topsoil
75002	Deposit	Dark Brown, Friable Silty Sand. Tertiary Ditch Fill Segment 75005
75003	Deposit	Light Grey, Friable Sand. Secondary Fill of Ditch Segment 75005
75004	Deposit	Dark Greyish Black. Friable Clayey Loam. Primary Fill of Ditch Segment
	•	75005
75005	Cut	Cut of Ditch Segment
75006	Deposit	Darkish Brown, Friable Silty Sand. Fill of Ditch 75007.
75007	Cut	Ditch Segment
75008	Deposit	Mid Grey, Friable Silty Sand. Fill of Gully 75009
75009	Cut	Cut of Gully Segment
75010	Deposit	Fill of Ditch 75012
75011	Deposit	Primary fill of Ditch Segment 75012
75012	Cut	Cut of Probable Ditch
75013	Deposit	Brown Sand. Fill of Gully 75014
75014	Cut	Gully
70014	Out	Guny
76001	Deposit	Grey Brown, Soft Silty Loam. Topsoil
76001	Deposit	Grey Silty Sand. Fill of Gully 76003
76002	Cut	E-W Aligned Gully
76003	Deposit	Grey Brown, Silty Clay. Fill of Curvilinear Gully 76005
7600 <del>4</del> 76005	Cut	Gully
76005		Very Dark Grey Brown, Silty Sand. Fill of Linear 76007
	Deposit Cut	Linear Feature
76007		
76008	Deposit	Brown, Sandy Gravel. Fill of Ditch 76015
76009	Deposit	Brown, Soft Silty Clay. Primary Fill of Ditch 76015
76010	Deposit	Grey Silty Loam. Fill of Gully Segment 76011
76011	Cut	Gully Segment Cut
76012	Deposit	Grey Silty Sand. Fill of Gully 76013
76013	Cut	Gully Segment
76014	Cut	Timber
76015	Cut	Ditch Cut
76016	Deposit	Dark Grey Brown, Soft Silty Sand. Fill of Land Drain 76017
76017	Cut	Land Drain
76018	Deposit	Reddish Brown. Soft Sand Clay. Upper Fill of Ditch 76015
77001	Deposit	Brown, Friable Silty Sand. Topsoil
77002	Deposit	Brown, Friable Silty Sand. Subsoil
77003	Cut	NW - NE aligned ditch or large circular feature (modern)
77004	Cut	excavated segment
77005	Deposit	Fine Silty Sand. Fill of Segment 77004
77006	Deposit	Post medieval Field Boundary
77007	Deposit	Friable Silty Sand. Fill of 77006
77008	Deposit	Compact Silty Clay. Fill of 77006
77009	Cut	East-West Gully/Ditch Hedge Boundary
77010	Deposit	Compact Silty Sand. Fill of East - West aligned Ditch Segment 77009
77011	Cut	Natural Feature
77012	Deposit	Friable Brown Silty Sandy Loam. Fill of 77011
77013	Cut	Segment in 77003
77014	Deposit	Mid Brown Silty Sand. Fill of 77013
77015	Deposit	Brown, Compact Sandy Clay. Primary Fill of Feature 77013
77016	Deposit	Curvilinear Feature, Pit??
77017	Cut	Segment in Feature 77016
77018	Deposit	Dark Brown Silty Sand. Fill of 77017

77019	Cut	Segment excavated in Feature 77016
77020	Deposit	Friable Fine Silty Loam. Fill of 77019
77021	Cut	Gully Post medieval Drainage??
77022	Deposit	Dark Brown, Friable Silty Sand. Fill of Gully 77021
77023	Deposit	Primary Fill of Gully 77021
77024	Cut	Northern end of curvilinear 77016
77025	Deposit	Dark Brown, Friable Silty Sand. Fill of 77024
77026	Deposit	Brown Silty Sand. Primary Fill of 77024
77027	Cut	SW - NE Gully - Modern
		Brown Friable Silty sand. Fill of modern Gully 77027
77028	Deposit	
77029	Deposit	Mid Brown, Friable Silty Sand. Primary Fill of Gully 77027
77030	Cut	Ditch segment
77031	Deposit	Brown Friable Sandy Loam. Fill of Ditch Segment 77030
77032	Deposit	Greyish Brown. Friable Sand. Fill of Ditch Segment 77030
77033	Deposit	Grey Friable Sand. Fill of Ditch Segment 77030
77034	Deposit	Reddy Brown, Slightly Plastic. Fill of Ditch Segment 77030
77035	Deposit	Reddy Brown, Compact Plastic Clay. Primary Fill of Ditch Segment 77030
77036	Deposit	Grey, Friable Sand. Fill of Ditch 77030
77037	Deposit	Grey, Friable Sand. Fill of Ditch 77030
77038	Cut	Cut of Gully
77039	Deposit	Yellowy Brown, Friable Silty Sand. Fill of Gully 77038
	•	Dark Brown, Friable Silty Sand. Fill of Gully 77038
77040	Deposit	·
77041	Deposit	Brown Friable Silty Sand. Primary Fill of Segment 77019
78001	Deposit	Mid Brown, Friable Sandy Loam. Topsoil
78002	Cut	Cut of Natural Feature
78003	Deposit	Yellow Brown, Friable Sandy Loam. Fill of Feature 78002
78004	Cut	Cut of Ditch Segment
78005	Deposit	Dark Brown Friable Sandy Loams. Fill of Ditch Segment 78004
78006	Deposit	Mixed Yellow Brown. Friable Sandy Loam. Fill of Ditch Segment 78004
78007	Deposit	Dark Brown Slightly Plastic Clayey Loam. Primary Fill of Ditch Segment 78004
78008	Deposit	Yellow Brown, Friable Sand. Fill of Ditch Segment 78004
78009	Deposit	Dark Brown, Friable Sandy Loam. Subsoil
78010	Cut	Land Drain
78011	Deposit	Light Brown Silty Sand. Fill of Land Drain 78010
70011	Бороон	Eight Brown City Canal Film of Land Brain Foote
79001	Deposit	Mid Brown, Friable Loam. Topsoil
79002	Deposit	Dark Brown, Friable Compact Loam. Subsoil
79003	Cut	French Land Drain
79004	Cut	Land Drain
79005	Cut	Plough Scars
Trench 79E		
79007	Deposit	Mid Brown, Friable Sandy Loam. Topsoil
79008	Deposit	Dark Brown, Friable Sandy Loam. Subsoil
79009	Cut	Plough Scars
79010	Cut	Land Drain
90001	Donasit	Dark Proug Frights Silty Loom Tongo!
80001	Deposit	Dark Brown, Friable Silty Loam. Topsoil
80002	Deposit	Light Brown, Friable Sand. Subsoil
80003	Cut	Plough Scars
80004	Cut	Land Drain
81001	Deposit	Brown, Friable Sandy Loam. Topsoil

Deposit	Brown, Plastic Sandy Clay. Backfill in 81004
Deposit	Brown Silty Sand. Natural Accumulation Deposit in 81004
Cut	Natural Depression
Deposit	Brown, Friable Silty Sand. Primary Fill of Ditch 81007
Deposit	Brown, Compact Sandy Clay. Backfill in Ditch 81007
Cut	North - South aligned Ditch
Deposit	Pale Brown, Friable Silty Sand. Fill in Ditch 81007
Deposit	Mid Brown, Friable Silty Sand. Fill of Gully 81011
Deposit	Dark Brown, Silty Loamy Sand. Fill of Gully 81011
Cut	Gully
Deposit	Mid Brown, Friable Silty Sand. Fill of Gully 81014
Deposit	Brown, Friable Silty Sand. Fill of Gully 81014
Cut	Gully
Deposit	Dark Brown, Silt and Sand. Fill of Hedgerow 81016
Cut	Hedgerow
Deposit	Brown, Friable Silty Sand. Fill of Gully 81011
	Deposit Cut Deposit Cut Deposit Deposit Deposit Deposit Deposit Cut Deposit Cut Deposit Cut Deposit Cut Deposit Cut Deposit Cut Cut Cut Cut Cut Cut Cut Cut Cut Cu

## **APPENDIX 2**

# **Finds Catalogue**

## Manor Farm, Bessacarr 05-08-10

Context	Туре	Total	Description	Weight (g)	Spot Date
1002	СВМ	6	6 Land Drain Fragments	274	18th C
10002	Pottery	4	2 Body Sherds 2 Rim Sherds	8	2nd C
11002	Pottery	17	11 Body Sherds 6 Rim Sherds	390	2nd C
11004	Pottery	3	2 Body Sherd 1 Rim Sherd	274	2nd C
18001	Pottery CBM	1 1	1 Body Sherd 1 Land Drain Fragment	2 66	2nd C 18th C
24004	Animal Bone	4	4 Horse Teeth	148	
26006	Pottery Slag Daub CBM	1 23 1 1	1 Body Sherd 23 Fragments 1 Fragment 1 Brick Fragment	14 1295 14 285	2nd C
26021	Pottery Slag	2 1	2 Body Sherds 1 Fragment	42 192	Iron Age
26025	Slag	1	1 Fragment	30	
26027	Slag	1	1 Fragment	1130	
26032	Pottery	140	125 Body Sherds 9 Rim Sherds 5 Base, 1 handle Sherds	816	2nd C
	Slag	1	1 Slag Fragment	124	
26033	Pottery	48	35 Body Sherds 9 Rim Sherds 4 Base Sherds	528	2nd C
26034	Pottery	6	4 Body Sherds 1 Rim Sherd 1 Base Sherd	40	2nd C
	Slag	3	3 Slag Fragments	420	
26046	Pottery Slag	1 6	1 Body Sherd 6 Fragments	24 3200	2nd C
27006	CBM Slag	1 2	1 Brick fragment 2 Fragments	140 2590	

34002	Pottery	4	2 Body Sherds 1 Rim Sherd 1 Base Sherd	12	2nd C
	Fe Object	2	2 Fe Nail Fragments	18	
34004	Clay Pipe CBM	1 1	1 Stem Fragment 1 Brick Fragment	1 1.5	
37002	Pottery	1	1 Body Sherd	44	Late 17th/Early 18th C
	CBM	2	2 Brick Fragments	380	18th C
37007	CBM	2	1 Tile Fragment 1 Land Drain Fragment	2788	17th C
38005	CBM	2	1 Brick Fragment 1 Land Drain Fragment	494	19th C 19th C +
38006	СВМ	2	2 Land Drain Fragments	3255	Mid 18th C
40001	Pottery	2	2 Body Sherds	28	2nd C
40004	СВМ	13	13 Land Drain Fragments	1455	18th C
40006	СВМ	2	2 Land Drain Fragments	1731	Late 18th/19th C
40008	Pottery	3	2 Body Sherds 1 Base Sherd	28	Late 17th/18th C
57006	Pottery	35	11 Rim Sherds 3 Base Sherds 21 Body Sherds	884	1st Half 19th C
	Glass CBM	3 10	3 Fragments 6 Land Drain Fragments 4 Brick Fragments	82 3062	18th/19th C 18th C Early 19th C
59008	Pottery Slag	1 24	1 Body Sherd 24 Fragments	10 430	2nd C
59009	Pottery Slag	2 47	2 Body Sherds 47 Fragments	135 51220	2nd C
59010	Slag	2	2 Fragments	64	
59012	Slag	8	8 Fragments	260	
59014	Slag	24	24 Fragments	13120	
59015	Slag	21	21 Fragments	1312	
59016	Pottery	19	10 Body Sherd 6 Rim Sherds 3 Base Sherds	1090	2nd C
	Slag	50	50 Fragments	73917	

	Daub Animal Bone	3 4	3 Fragments 4 Phalanx Fragments	210 35	
59017	Slag CBM	8 1	8 Fragments 1 Fragment	3989 111	
59020	Slag	5	5 Fragments	246	
59022	Slag	33	33 Fragments	9676	
59025	Slag	12	12 Fragments	876	
63002	СВМ	8	8 Tile Fragments	2191	Pre 19th C
64004	СВМ	1	1 Land Drain Fragment	1580	Mid 18th C
67005	СВМ	1	1 Brick Fragment	280	
68001	Pottery CBM	2 2	2 Body Sherds 2 Brick Fragments	12 178	2nd C
68003	Pottery Animal Bone Cu Object	1 1 1	1 Rim Sherd 1 Horse Tooth Token	20 10	2nd C
70015	Pottery CBM Animal Bone Shale	1 2 1 9	1 Body Sherd 2 Brick Fragment 1 Tooth 9 Fragments	6 60 3 32	2nd C
71012	Pottery	1	1 Rim Sherd	38	12th/13th C
74003	Pottery	1	1 Body Sherd	7	2nd C
75004	Animal Bone	6	6 Teeth	153	
75008	Pottery	1	1 Body Sherd	6	2nd C
76002	Fe Object	1	1 Nail Shank Fragment	8	
76006	Pottery	6	4 Body Sherds 2 Rim Sherd	102	12th/13th C
	Animal Bone CBM	3 5	3 Fragments 1 Tile Fragment 4 Land drain Fragments	259 1225	
76009	Pottery	4	2 Body Sherds 2 Base Sherds	144	11th/12th C
76010	Pottery	2	1 Rim Sherd 1 Handle Sherd	280	12th/13th C
	Lead	1	1 Lead Shot	0.5	
76012	Pottery	1	1 Body Sherd	10	2nd C

76017	CBM	1	1 Land Drain Fragment	1725	Late 18th/19th C
77005	Pottery	3	1 Body Sherd 1 Rim Sherd 1 Base Sherd	234	12th/13th C 2nd C 2nd C
	CBM	1	1 Land Drain Fragment	202	19th C
77007	Pottery CBM	1 1	1 Body Sherd 1 Brick Fragment	24 184	15th/16th C
77015	Pottery	2	1 Body Sherd 1 Rim Sherd	71	15th/16th C
77018	CBM	1	1 Brick Fragment	54	
77029	Glass	1	1 Fragment	2	
77031	Pottery CBM	2 23	2 Body Sherds 5 Land Drain Fragments 18 Brick Fragments	432 2939	Late 12th C 18th C + Early/Mid 18th C
77033	Pottery	1	1 Handle Sherd	38	16th C
77035	Pottery Animal Bone	1 2	1 Base Sherd 2 Teeth	36 9	2nd C
77039	Pottery	2	1 Body Sherd 1 Rim Sherd	126	2nd C
81002	Pottery	1	1 Body Sherd	2	12th/13th C

## **APPENDIX 3**

## **Drawing Archive Listing**

## Manor Farm, Bessacarr 05-08-10

Drawing No	Scale	Туре	Description
1	1:20	Plan	Plan of Trench 41 (South 0-10m)
2	1:20	Plan	Plan of Trench 41 (South 10-15m)
3	1:10	Section	North facing section Land Drain 41003
4	1:10	Section	South facing section Land Drain 41005
5	1:20	Plan	Plan of Trench 34 (West 0-10m)
6	1:10	Section	North-east facing section Linear 34003
7	1:10	Section	West facing section Linear 34005
8	1:10	Section	North-west facing section Linear Terminal 34007
9	1:20	Plan	Plan of Trench 34 (20-30m from West)
10	1:20	Plan	Plan of Trench 34 (30-40m from West)
11	1:10	Section	North-west facing section Terminal 34009
12	1:20	Plan	Plan of Trench 10 (North-eastern end)
13	1:10	Section	West facing section Linear 10005
14	1:10	Section	South-west facing section Linear Terminal 10003
15	1:10	Section	North facing section Segment 1003
16	1:20	Plan	Plan of Segment 1003
17	1:10	Section	North-east facing section Ditch 18006
18	1:10	Section	North-east facing section Pit 18008
19	1:20	Plan	Post ex plan of Trench 18
20	1:20	Plan	Plan of Pits 11003 & 11005
21	1:10	Section	East facing section Pit 11003
22	1:10	Section	North facing section Pit 11005
23	1:20	Plan	Post ex plan of Ditch segment 9003
24	1:10	Section	North-west facing section Ditch segment 9003
25	1:10	Section	West facing section Ditch 26031
26	1:10	Section	East facing section Ditch 26031
27	1:20	Plan	Plan of Ditch segments 26023, 26026 & 26028
28	1:10	Section	North facing section Ditch segments 26023, 26026 & 26028
29	1:20	Plan	Plan of Gully 26005 & Pit 26008
30	1:20	Plan	Plan of Gully 26003, Drain 26011 & Feature 26013
31	1:10	Section	North facing section Gully 26005 & Pit 26008
32	1:10	Section	West facing section Deposit 26010
33	1:10	Section	South facing section Gully 26003
34	1:10	Section	North facing section Ditches 26030, 26036, 26038 & 26044
35	1:20	Plan	Post ex plan of Ditches 26030, 26036, 26038 & 26044
36	1:20	Plan	Plan of Pit 13008
37	1:20	Plan	Plan of Features 13004-13006 & 13010/13011
38	1:20	Plan	Plan of Trench 13 West end (Terminal 13013/13014)
39 40	1:10	Section	South facing section Terminal 13014
40 41	1:10 1:10	Section Section	East facing section Pit 13007 East facing section Pit 13010
			· · · · · · · · · · · · · · · · · · ·
42 43	1:10 1:20	Section Plan	North facing section Pit 13003 & Terminal 13006
43 44	1:20	Plan Plan	Pre ex plan of Trench 26 (0-20m) Pre ex plan of Trench 26 (20-40m)
44 45	1:20	Plan	Pre ex plan of Trench 26 (20-40m)  Pre ex plan of Trench 26 (40-50m)
45 46	1:10	Section	South facing section Ditch segment 26031
46 47	1:10	Plan	Post ex plan of Ditch segment 26031
71	1.20	ı ıaıı	1 Oot On plan of Diton beginnent 2000 I

48	1:20	Plan	Post ex plan of Ditch segment 26045
49	1:10	Section	North facing section Ditch 26045
50	1:10	Section	South facing section Ditch 26045
51	1:20	Plan	Post ex plan of Trench 27
52	1:20	Plan	Plan of Trench 21 (5-10m)
53	1:20	Plan	Plan of Trench 21 (15-20m)
54	1:10	Section	South facing section Linear 21003
55	1:10	Section	South facing section Linear 21005
56	1:20	Plan	Plan of Trench 19 (15-25m)
57	1:10	Section	South facing section Terminal 19005
58	1:10	Section	South facing section Linear 19003
59	1:10	Section	West facing section 66003
60	1:20	Plan	Post ex plan of 66003
61	1:20	Plan	Plan of Trench 6 (8-15m)
62	1:20	Plan	Plan of Trench 6 (10-15m)
63	1:20	Plan	Plan of Trench 6 (15-25m)
64	1:10	Section	North-east facing section Linear 6003
65	1:10	Section	North facing section Deposit 6004
66	1:10	Section	North facing section Deposit 6005
67	1:10	Section	West facing section Ditch segment 68008
68	1:20	Plan	Post ex plan of Trench 68 (0-10m)
69	1:20	Plan	Post ex plan of Trench 67 (North)
70	1:20	Plan	Post ex plan of Trench 67 (South)
71	1:10	Section	South facing section Gully 26003, Drain 26011 & 26013
72	1:10	Section	West facing section Feature 26013
73	1:10	Section	West facing section Ditch 67009 & Drain 67004
74	1:10	Section	North-west facing section Gully 67011
75	1:10	Section	West facing section Ditch 27007
76	1:10	Section	South facing section Ditch 78004
77	1:10	Section	South facing section 78002 & 78010
78	1:10	Section	West facing section 78002
79	1:20	Plan	Plan of Trench 81 (West)
80	1:20	Plan	Plan of Trench 81 (East)
81	1:10	Section	South facing section Feature 81016
82	1:10	Section	South facing section Gully 81014
83	1:10	Section	South facing section Gully 81011
84	1:20	Plan	Plan of Trench 23 (West)
85	1:10	Section	North facing section Ditch 23010
86	1:10	Section	North facing section Land Drain 23005
87	1:20	Plan	Plan of Trench 24 (from West 15-20m)
88	1:20	Plan	Plan of Trench 24 (from West 22-27m)
89	1:10	Section	North facing section Ditch 24008
90	1:10	Section	North facing section Land Drain 24003
91	1:10	Section	South-east facing section Pit 24010
92	1:10	Section	East facing section Pit 24012
93	1:10	Section	South facing section Ditch 81007
94	1:20	Plan	Post ex plan Trench 70 Ditch segments 70007 & 70016
95	1:20	Plan	Post ex plan Trench 70 (West) Ditch segment 70010
96	1:10	Section	East facing section Ditch 70007 & Drain 70005
97	1:10	Section	West facing section Ditch 70007 & Drain 70003  West facing section Ditch 70010 & Drain 70012
98	1:10	Section	West facing section Ditch 70016 & Drain 70012
99	1:20	Plan	Post ex plan Hedge/field boundary 22004/22006
100	1:10	Section	West facing section Hedge/field boundary 22004
101	1:20	Plan	Plan of Trench 8 (Southern end)
101	1:10	Section	South-east facing section Linears 8003 & 8005
102	1.10	000001	Court dust lasting socialit Ellicars 5000 & 0000

103	1:20	Plan	Plan of Trench 78 (10-20m) 78004 & 78002
104	1:20	Plan	Plan of Linear Ditch 74004
105	1:10	Section	Linear Ditch section 74004
106	1:20	Plan	Post ex plan of Trench 75 (East)
107	1:20	Plan	Post ex plan of Trench 75 (West)
108	1:10	Section	South-west facing section Gully 75014
109	1:10	Section	North-east facing section Trench 75
110	1:10	Section	North-west facing section Gully 75014 & Linear 75012
111	1:20	Plan	Plan of Trench 63 (East 0-10m)
112	1:20	Plan	Plan of Trench 63 (15-20m)
113	1:10	Section	North-west facing section Linear 63013
114	1:10	Section	South facing section Ditch 63011
115	1:20	Plan	Plan of Trench 64 (10-15m)
116	1:20	Plan	Plan of Trench 64 (39-44.5m)
117	1:10	Section	East facing section Ditch 64004
118	1:10	Section	South facing section Feature 64008
119	1:10	Section	East facing section Feature 64006
120	1:10	Section	West facing section Features 77030/77038
121	1:10	Section	South facing section segment 77004
122	1:10	Section	East facing section segment 77004
123	1:10	Section	South facing section segment 77017
124	1:10	Section	East facing section segment 77006
125	1:10	Section	South facing section segment 77006/9
126	1:10	Section	West facing section Gully 77009
127	1:20	Plan	Plan of Trench 77 (0-20m)
128	1:20	Plan	Plan of Trench 77 (20-40m)
129	1:20	Plan	Plan of Trench 77 (40-48m)
130	1:10	Section	West facing section segment 77013
131	1:10	Section	North facing section segment 77013
132	1:10	Section	West facing section segment 77011
133	1:10	Section	East facing section Gully 77038
134	1:10	Section	West facing section segment 77017
135	1:10	Section	North facing section segment 77019
136	1:10	Section	West facing section segments 77019 & 77021
137	1:10	Section	South facing section segments 77019 & 77021
138	1:10	Section	South-west facing section segment 77027
139	1:10	Section	West facing section segment 77024
140	1:20	Plan	Plan of Trench 76 (West)
141	1:20	Plan	Plan of Trench 76 (East)
142	1:10	Section	South facing section Ditch 76017
143	1:10	Section	North-west facing section Gully 76013
144	1:10	Section	North-west facing section Gully 76011
145	1:10	Section	North facing section Gully 76003
146	1:10	Section	East facing section Cuts 76003/76005
147	1:10	Section	South facing section Gully 76005
148	1:10	Section	North facing section Linear 14008
149	1:10	Section	North facing section Ditch 14005, Gully 14006 & Linear 14014
150	1:10	Section	North-east facing section Ditch 14002
151	1:10	Section	North facing section Natural Feature 14004
152	1:10	Section	North facing section Tree Bowl 14009
153	1:20	Plan	Post ex plan of Trench 14
154	1:20	Plan	Post ex plan of Trench 8 (0-5m)
155	1:20	Plan	Post ex plan of Trench 59 (20-40m)
156	1:20	Plan	Post ex plan of Trench 59 (0-20m)
157	1:20	Plan	Post ex plan of Trench 59 (40-49m)

1:10	Section	North facing section Ditch 59023
1:20	Plan	Post ex plan Posthole 59029
1:20	Plan	Plan Deposit 59019
1:10	Section	North facing section Ditch 59018
1:10	Section	North-west facing section Ditch 59003
1:10	Section	West facing section Gully 59005
1:10	Section	North-west facing section Ditch 59007
1:10	Section	East facing section Posthole 59027
1:10	Section	West facing section Ditch 59010 & Gully 59013
1:10	Section	East facing section Ditch segment 59021
1:10	Section	North facing section Ditch 59023 1st Edition
1:20	Plan	Plan of Deposits 59008 & 59009
1:20	Plan	Plan of Deposit 59015
1:10	Section	South facing section Ditch 59023
1:10	Section	North facing section Gully 38003
1:20	Plan	Plan of Trench 37 (0-10m)
1:20	Plan	Plan of Trench 37 (10-20m)
1:10	Section	North facing section Ditch 37009 (1 of 3)
1:10	Section	North facing section Ditch 37009 (2 of 3)
1:10	Section	North facing section Ditch 37009 (3 of 3)
1:20	Plan	Post ex plan Trench 38 (Part 1)
1:20	Plan	Post ex plan Trench 38 (Part 2)
	Plan	Plan Trench 57
1:10	Section	North facing section 57008, 57007 & 57009
1:10	Section	North facing section 57003
	Plan	Plan Trench 40
	Plan	Plan Trench 40
	Section	North facing section Ditch 40007
1:10	Section	North facing section Ditch 40009
1:10	Section	North facing section Ditch segment 38006
	1:20 1:10 1:10 1:10 1:10 1:10 1:10 1:10	1:20         Plan           1:20         Plan           1:10         Section           1:10         Section           1:10         Section           1:10         Section           1:10         Section           1:10         Section           1:20         Plan           1:10         Section           1:20         Plan           1:10         Section           1:20         Plan           1:10         Section           1:20         Plan           1:20         Plan           1:20         Plan           1:10         Section           1:20         Plan           1:10         Section

## **APPENDIX 4**

## **Photographic Listings**

## Manor Farm, Bessacarr 05-08-10

Film Number N/A Film Type Digital						
Number	Jpeg No	Context	Scale	Facing	Identifier	
21	HPIM2330	Trench 12	2x2m	South	Pre ex shot	
22	HPIM2331	Trench 12	2x2m	South	Pre ex shot	
23	HPIM2332	Trench 12	2x2m	North	Pre ex shot	
24	HPIM2333	Trench 12	2x2m	North	Pre ex shot	
25	HPIM2334	Trench 18	2x2m	North-west	Pre ex shot	
26	HPIM2335	Trench 18	2x2m	South-east	Pre ex shot	
27	HPIM2336	Trench 13	2x2m	South-west	Pre ex shot	
28	HPIM2337	Trench 13	2x2m	North-east	Pre ex shot	
29	HPIM2338	Trench 9	2x2m	East north east	Pre ex shot	
30	HPIM2339	Trench 9	2x2m	East north east	Pre ex shot	
31	HPIM2340	Trench 9	2x2m	West south west	Pre ex shot	
32	HPIM2341	Trench 10	2x2m	South-west	Pre ex shot	
33	HPIM2342	Trench 10	2x2m	North-east	Pre ex shot	
34	HPIM2343	Trench 1	2x2m	North-east	Pre ex shot	
35	HPIM2344	Trench 1	2x2m	South-west	Pre ex shot	
36	HPIM2345	Trench 2	2x2m	South-west	Pre ex shot	
37	HPIM2346	Trench 2	2x2m	North-east	Pre ex shot	
38	HPIM2347	Trench 5	2x2m	South-west	Pre ex shot	
39	HPIM2348	Trench 5	2x2m	North-east	Pre ex shot	
40	HPIM2349	Trench 4	2x2m	South-west	Pre ex shot	
41	HPIM2350	Trench 4	2x2m	North-east	Pre ex shot	
42	HPIM2351	Trench 3	2x2m	North	Pre ex shot	
43	HPIM2352	Trench 3	2x2m	South	Pre ex shot	
44	HPIM2354	Trench 10	1m	South-west	Terminal 10003	
45	HPIM2355	Trench 10	1m	South	Linear segment 10005	
46	HPIM2356	Trench 10	1m	South-west	Terminal Linears 10003/5	
47	HPIM2357	26005 & 26008	1x2m	South-west	Pit 26008 & Gully 26005	
48	HPIM2358	26005 & 26008	1x2m	South-west	Pit 26008 & Gully 26005	
49	HPIM2359	26003	1x0.4m	South-west	Gully 26003	
50	HPIM2360	26003	1x0.4m	South-west	Gully 26003	
51	HPIM2361	1002/1003	2x1m	North	Segment 1003	
52	HPIM2362	1002/1003	2x1m	West	Segment 1003	
53	HPIM2363	26003/26010	1x0.4m	South-west	Gully segments	
54	HPIM2364	26003/26010	1x0.4m	South-west	Gully segments	
55	HPIM2368	18001-6	2x2m	South-west	Ditch segment	
56	HPIM2369	18001-6	2x2m	South-west	Oblique shot- close up	
57	HPIM2370	18001-6	2x2m	South-west	Close up- water levels	
58	HPIM2371	18001-6	2x2m	South-west	Close up- sections	
59	HPIM2372	Trench 59	2x2m	North-east	Trench 59 after pulled	
60	HPIM2373	Trench 59	2x2m	South-west	Trench 59 after pulled	
61	HPIM2374	Trench 26	2x2m	West	Post ex shot (Eastern end)	
62	HPIM2375	Trench 26	2x2m	West	Post ex shot	
63	HPIM2376	Trench 26	2x2m	West	Post ex shot	
64	HPIM2377	Trench 26	1x1m	North	Drains at eastern end	
65	HPIM2378	Trench 26	1x1m	North	Pit/Ditch	
66	HPIM2379	Trench 18	1x1m	South-west	Pit 18008	

67	HPIM2380	Trench 18	1x1m	South-west	Pit 18008
68	HPIM2382	Trench 18	1x1m	South-west	Pit 18008
69	HPIM2384	Trench 18	1x1m	North-west	Ditch 18006
70	HPIM2385	Trench 18	1x1m	North-west	Ditch 18006
71	HPIM2386	Trench 11	2x2m	South-west	Pre ex shot
72	HPIM2387	Trench 11	2x2m	North-east	Pre ex shot
73	RIMG0358	Trench 11	0.4m	South-west	Pit 11003
74	RIMG0359	Trench 11	0.4m	North-east	Pit 11005
7 <del>5</del>	HPIM2388	Trench 9	1x1m	South	Pre ex shot Ditch
73 77	HPIM2390	Trench 26	1x1m	South	
					Pit 26018 & Gully 26003
78 70	HPIM2391	Trench 9	1x0.5m	South-east	Ditch segment
79	HPIM2392	Trench 9	1x0.5m	North-west	Ditch segment
81	HPIM2396	Trench 26	2x2m, 2x1m		Ditch segments 26023,26026
82	HPIM2397	Trench 26	2x2m, 2x1m		Ditch segments 26023,26026
83	HPIM2398	Trench 26	2x2m, 2x1m		Ditch segment 26028
84	HPIM2399	Trench 26	2x2m, 2x1m	North	Ditch segment 26028
85	HPIM2400	13005	1x1m	South	Ditch segment
86	HPIM2401	13005	1x1m	North	Ditch segment
87	HPIM2402	13013	1x1m	North-east	Ditch segment
88	HPIM2403	26029/30	1x1m	South	Ditch segment 26030
89	HPIM2404	13007	1x1m	South-east	Half sectioned Pit
91	HPIM2406	Trench 26	1x1m	East	Linear segment 26031
92	HPIM2407	Trench 26	1x1m	East	Linear segment 26031
93	HPIM2408	Trench 26	1x1m	West	Linear segment 26031
94	HPIM2409	Trench 26	1x1m	West	Linear segment 26031
95	HPIM2410	26035/36	1m	South	Gully segment
96	HPIM2411	26035/36	1m	North	
					Gully segment
97	HPIM2414	13010	1x1m	South	Half sectioned Pit
98	HPIM2415	Trench 26	2x2m	South-west	Ditch segments 26045/51
99	HPIM2416	Trench 26	2x2m	South-east	Ditch segments 26045/51
100	RIMG0361	Trench 26	2x2m	North-east	Ditch 26045-51
101	RIMG0362	Trench 26	2x2m	North-west	Ditch 26045-51
102	RIMG0363	Trench 26	2x2m	North-west	Detailed shot Ditch 26051
103	HPIM2418	Trench 26	2x2m	East	Post ex shot
104	HPIM2419	Trench 26	2x2m	West	Post ex shot
105	HPIM2421	Trench 27	2x2m	North	Pre ex shot
106	HPIM2422	Trench 27	2x2m	North	Pre ex shot
107	HPIM2423	Trench 27	2x2m	South	Pre ex shot
108	HPIM2424	Trench 27	2x2m	South	Pre ex shot
109	HPIM2425	Trench 76	2x2m	West	Pre ex shot
110	HPIM2426	Trench 76	2x2m	West	Pre ex shot
111	HPIM2427	Trench 76	2x2m	East	Pre ex shot
112	HPIM2428	Trench 76	2x2m	East	Pre ex shot
113	HPIM2429	Trench 74	2x2m	East	Pre ex shot
114	HPIM2430	Trench 74	2x2m	West	Pre ex shot
115	HPIM2431	Trench 77	2x2m	North	Pre ex shot
116	HPIM2432		2x2m		
		Trench 77		North	Pre ex shot
117	HPIM2433	Trench 77	2x2m	South	Pre ex shot
118	HPIM2434	Trench 77	2x2m	South	Pre ex shot
119	HPIM2435	Trench 73	2x2m	North	Pre ex shot
120	HPIM2436	Trench 73	2x2m	South	Pre ex shot
121	HPIM2437	Trench 70	2x2m	West	Pre ex shot
122	HPIM2438	Trench 70	2x2m	West	Pre ex shot
123	HPIM2439	Trench 70	2x2m	East	Pre ex shot
124	HPIM2440	Trench 70	2x2m	East	Pre ex shot

125	HPIM2441	Trench 68	2x2m	South	Pre ex shot
126	HPIM2442	Trench 68	2x2m	South	Pre ex shot
127	HPIM2443	Trench 68	2x2m		
127	HPIM2444	Trench 68		North	Pre ex shot
			2x2m	North	Pre ex shot
129	HPIM2446	Trench 75	2x2m	West	Pre ex shot
130	HPIM2447	Trench 75	2x2m	West	Pre ex shot
131	HPIM2448	Trench 75	2x2m	East	Pre ex shot
133	HPIM2450	Trench 67	2x2m	South-east	Pre ex shot
134	HPIM2451	Trench 67	2x2m	North	Pre ex shot
135	HPIM2452	Trench 67	2x2m	North	Pre ex shot
136	HPIM2453	Trench 81	2x2m	East	Pre ex shot
137	HPIM2454	Trench 81	2x2m	East	Pre ex shot
138	HPIM2455	Trench 81	2x2m	West	Pre ex shot
139	HPIM2456	Trench 81	2x2m	West	Pre ex shot
140	HPIM2457	Trench 66	2x2m	South	Pre ex shot
141	HPIM2458	Trench 66	2x2m	South	Pre ex shot
142	HPIM2459	Trench 66	2x2m	North	Pre ex shot
143	HPIM2460	Trench 66	2x2m	North	Pre ex shot
144	HPIM2462	Trench 65	2x2m	North	Pre ex shot
145	HPIM2463	Trench 65	2x2m	North	Pre ex shot
146	HPIM2464	Trench 65	2x2m	South	Pre ex shot
147	HPIM2465	Trench 65	2x2m	South	Pre ex shot
148	HPIM2466	Trench 61	2x2m	West	Pre ex shot
149	HPIM2467	Trench 61	2x2m	West	Pre ex shot
150	HPIM2468	Trench 61	2x2m	South-east	Pre ex shot
150	HPIM2469		2x2m		
		Trench 61		South-east	Pre ex shot
152	HPIM2470	Trench 21	2x2m	West	Pre ex shot
153	HPIM2471	Trench 21	2x2m	West	Pre ex shot
154	HPIM2472	Trench 21	2x2m	South-east	Pre ex shot
155	HPIM2473	Trench 21	2x2m	South-east	Pre ex shot
156	HPIM2474	Trench 7	2x2m	South	Pre ex shot
157	HPIM2475	Trench 7	2x2m	South	Pre ex shot
158	HPIM2476	Trench 7	2x2m	North	Pre ex shot
159	HPIM2477	Trench 7	2x2m	North	Pre ex shot
160	HPIM2478	Trench 6	2x2m	East	Pre ex shot
161	HPIM2479	Trench 6	2x2m	East	Pre ex shot
162	HPIM2480	Trench 6	2x2m	West	Pre ex shot
163	HPIM2481	Trench 6	2x2m	West	Pre ex shot
164	HPIM2482	Trench 6	2x2m	North	Linear Ditch Trench 6
165	HPIM2483	Trench 6	2x2m	North	Linear Ditch Trench 6
166	HPIM2484	Trench 19	2x2m	West	Pre ex shot
167	HPIM2485	Trench 19	2x2m	West	Pre ex shot
168	HPIM2486	Trench 19	2x2m	East	Pre ex shot
169	HPIM2487	Trench 19	2x2m	East	Pre ex shot
170	HPIM2488	Trench 15	2x2m	South-east	Pre ex shot
171	HPIM2489	Trench 15	2x2m	South-east	Pre ex shot
172	HPIM2490	Trench 15	2x2m	North-west	Pre ex shot
173	HPIM2491	Trench 15	2x2m	North-west	Pre ex shot
174	HPIM2492	Trench 14	2x2m	West	Pre ex shot
175	HPIM2493	Trench 14	2x2m	West	Pre ex shot
175	HPIM2494	Trench 14	2x2m	East	Pre ex shot
177	HPIM2494	Trench 14	2x2m	East	Pre ex shot
178 170	HPIM2498	Trench 20	2x2m	East	Pre ex shot
179	HPIM2499	Trench 20	2x2m	East	Pre ex shot
180	HPIM2500	Trench 20	2x2m	West	Pre ex shot

181	HPIM2501	Trench 20	2x2m	West	Pre ex shot
182	HPIM2502	Trench 20	2x2m	West	Pre ex shot
183	HPIM2503	Trench 8	2x2m	South	Pre ex shot
184	HPIM2504	Trench 8	2x2m	North	Pre ex shot
185	HPIM2505	Trench 22	2x2m	North-west	Pre ex shot
186	HPIM2506	Trench 22	2x2m	South-east	Pre ex shot
187	HPIM2507	Trench 24	2x2m	East	Pre ex shot
188	HPIM2508	Trench 24	2x2m	West	Pre ex shot
189	HPIM2509	Trench 23	2x2m	South-west	Pre ex shot
	HPIM2510				
190		Trench 23	2x2m	North-east	Pre ex shot
191	HPIM2511	Trench 78	2x2m	West	Pre ex shot
192	HPIM2512	Trench 78	2x2m	East	Pre ex shot
193	HPIM2513	Trench 79	2x2m	West	Pre ex shot
194	HPIM2514	Trench 79	2x2m	East	Pre ex shot
195	HPIM2515	Trench 64	2x2m	North	Pre ex shot
196	HPIM2516	Trench 64	2x2m	South	Pre ex shot
197	HPIM2517	Trench 62	2x2m	East	Pre ex shot
198	HPIM2518	Trench 62	2x2m	West	Pre ex shot
199	HPIM2519	Trench 60	2x2m	East	Pre ex shot
200	HPIM2520	Trench 60	2x2m	West	Pre ex shot
201	HPIM2521	Trench 43	2x2m	South-east	Pre ex shot
202	HPIM2522	Trench 43	2x2m	North-west	Pre ex shot
203	HPIM2523	Trench 45	2x2m	North-west	Pre ex shot
204	HPIM2524	Trench 45	2x2m	South-east	Pre ex shot
205	HPIM2525	Trench 47	2x2m	North-east	Pre ex shot
206	HPIM2526	Trench 47	2x2m	South-west	Pre ex shot
207	HPIM2527	Trench 50	2x2m	South	Pre ex shot
208	HPIM2528	Trench 52	2x2m	West	Pre ex shot
209	HPIM2529	Trench 52	2x2m	East	Pre ex shot
210	HPIM2531	21002/21003	2x1m	North	Linear 21003
211	HPIM2532	21004/21005	2x1m	North	Linear 21005
212	HPIM2533	Trench 63	2x2m	East	Pre ex shot
213	HPIM2534	Trench 63	2x2m	West	Pre ex shot
214	HPIM2535	Trench 59	2x2m	West	Pre ex shot
215	HPIM2536	Trench 59	2x2m	East	Pre ex shot
216	HPIM2537	19002/3	1x1m	West	Linear 19003
217	HPIM2538	19004/5	2x1m	North	Terminal 19004/5
218	HPIM2539	66002/3	2x1m	East	Ditch segment 66003
219	HPIM2540	66002/3	2x1m	East	Ditch segment 66003
220	HPIM2541	6002/3	2x1m	South-west	Ditch segment 6003
221	HPIM2542	6004	2x1m	South	Ditch
222	HPIM2543	6005	2x1m	South	Natural Peat
223	HPIM2544	78002	1x1m	North-east	Natural feature/ Land drain
224	HPIM2545	78002	1x1m	East	Natural feature/ Land drain
225	HPIM2546	78004	1x1m	North-east	Ditch segment 78004
226	HPIM2547	78004	1x1m	South-west	Ditch segment 78004
227	HPIM2548	67009	2x2m, 1x1m		Dyke 67009
228	HPIM2549	67009	2x2m, 1x1m		Dyke 67009
229	HPIM2550	67009	2x2m, 1x1m		Dyke 67009
230	HPIM2551	67009	2x2m, 1x1m	North-east	Dyke 67009
231	HPIM2552	67011	1x1m	South-east	Gully segment 67011
232	HPIM2554	24008/10	2m	South	Ditch segment
233	HPIM2555	24008/10	2m	South	Ditch segment
234	HPIM2556	68009	2x2m, 1x1m		Ditch segment 68009
235	HPIM2557	68009	2x2m, 1x1m		Ditch segment 68009
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236	HPIM2558	Trench 67	2x2m	South	Post ex shot
237	HPIM2559	Trench 67	2x2m	North	Post ex shot
238	HPIM2560	27007	1x1m, 1x2m		Hedge Boundary 27007
239	HPIM2561	27002	1x1m, 1x2m		Hedge Boundary 27007
240	HPIM2562	23010	2x1m	South	Ditch segment 23010
242	HPIM2563	81011	1x1m	North	Gully 81011
243	HPIM2564	81011	1x1m	North	Gully 81011
244	HPIM2565	81005/6/8	1x1m	North	Linear 81007
245	HPIM2566	81005/6/8	1x1m	North	Linear 81007
246	HPIM2570	81003/2	1x1m	North-west	Gully/Linear
247	HPIM2571	81003/2	1x1m	North-west	Gully/Linear
248	HPIM2573	81004/7/11	2x1x1m	North-west	Oblique/Gully/Linear
249	HPIM2576	81004/7/11	2x1x1m	East	Oblique/Gully/Linear
250	HPIM2578	81007	1x1m	South	Linear 81007
251	HPIM2579	81007	1x1m	South	Linear 81007
252	HPIM2582	81011	1x1m	South	Gully 81011
253	HPIM2583	81011	1x1m	South	Gully 81011
254	HPIM2580	81014	1x0.4m	North	Gully 81014
255	HPIM2581	81014	1x0.4m	North	Gully 81014
256	HPIM2584	27010	1m	North-west	Pit 27010
257	HPIM2585	27012	1m	West	Pit 27012
258	HPIM2586	81016	1m	North	Linear 81016
260	HPIM2589	81016	1x1m	South	Linear 81016
261	HPIM2590	81016	1x1m	South	Linear 81016
262	HPIM2587	81014	1x0.4m	South	Linear 81014
263	HPIM2588	81014	1x0.4m	South	Linear 81014
264	HPIM2591	70002-7	1x0.4111	East	Ditch segment
265	HPIM2592	70002-7	1m	West	Ditch segment
266	HPIM2593	70002-7	1x1m	East	Ditch and Drain
267	HPIM2594	23005	0.5m	South	Land drain 23005
268	HPIM2595	22004/6	1x1m, 1x2m	East	Field/ Hedge boundary
269	HPIM2596	70016	1x1111, 1x2111	East	Ditch segment 70016
270	HPIM2598	8003/8005	2x1m	North-west	Ditch segments
271	HPIM2599	75005 & 75007	2x1x1m	South-west	_
272	HPIM2600	75005 & 75007 75005	1x1m	South-west	Ditch segments Ditch segment 75005
273	HPIM2601	75007	1x1m	South-west	_
274	HPIM2603	75007 75009	1m	South-west	Ditch segment 75007 Ditch segment 75009
275	HPIM2605	Trench 75	2x2m	South-west	Post ex shot
276	HPIM2606	75012 & 14	1m		Intersection Linear & Gully
277	HPIM2607	74004	2x1m	East South	-
278		Trench 59			Ditch segment 74004 Pre ex shot
	HPIM2608		2x2m	East	
279	HPIM2609	Trench 59	2x2m	East	Pre ex shot
280	HPIM2610	Trench 59	2x2m	East	Pre ex shot
281	HPIM2611	59002-5	0.5x1x2m	South-east	Ditch and Gully
282	HPIM2612	59002/3	1x0.5m	South-east	Ditch segment 77004
283	HPIM2613	77004	0.5x1x2m	West	Ditch segment 77004
284	HPIM2614	77004	0.5x1x2m	South	Ditch segment 77004
285	HPIM2615	63007/11	2x1m	North-west	Ditch segment 63007/11
286	HPIM2616	63007/11	2x1m	North-east	Ditch segment 63007/11
287	HPIM2617	59007	1x1m	South-east	Ditch segment 59007
288	HPIM2619	63013	0.5m	South-east	Linear Gully segment
289	HPIM2620	77013	1x2m	West	Linear segment 77013
290	HPIM2621	77013	1x2m	West	Linear segment 77013
291	HPIM2622	77013	1x2m	East	Linear segment 77013
292	HPIM2623	77013	1x2m	East	Linear segment 77013

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293	HPIM2624	77011	1x2m	West	Shallow depression 77011
294	HPIM2625	77011	1x2m	East	Shallow depression 77011
295	HPIM2626	59009	1x2m	West	Slag deposit 59009
296	HPIM2627	59010-13	2m	West	Gully and Ditch segment
297	HPIM2628	Trench 59	2m	West	Pre ex shot feature
298	HPIM2632	77006	2x1m	West	Terminal in segment 77003
299	HPIM2633	77009	1x1x0.5m	North	Gully cutting 77006
300	HPIM2634	77017	2x1m	North	segment in 77016
301	HPIM2635	77019	2x1m	North	segment in 77019
302	HPIM2636	77019	2x1m	South	_
					Ditch segment
303	HPIM2637	59014	1x1m	South	Slag deposit 59014
304	HPIM2638	59014	1x1m	South	Slag deposit 59014
305	HPIM2639	59008/9	1x1m	South	Post removal of 59008
306	HPIM2640	59008/9	1x1m	South	Post removal of 59008
307	HPIM2641	77024/27	1x2m	South-west	segment from 77016
308	HPIM2642	77024/27	1x2m	North-east	segment from 77016
309	HPIM2643	77012/19	1x1m	East	segment in 77017/18
310	HPIM2644	77012/19	1x1m	West	segment in 77017/18
311	HPIM2645	64002-4	2x1m	West	Ditch segment 64004
312	HPIM2646	64002-4	2x1m	West	Ditch segment 64004
313	HPIM2647	64005-8	2x1m	West	Intersecting Linear feature
314	HPIM2648	77030/40	2x1m	East	segment in 77016
315	HPIM2649	77038	1x1m	East	Gully 77038
				West	-
316	HPIM2650	77030/40	1m		Ditch 77030
317	HPIM2655	Trench 59	2x2m	East	Pre ex shot
318	HPIM2654	Trench 59	2x2m	West	Pre ex shot
319	HPIM2656	76009	0.5x1m	South	Terminal 76009
320	HPIM2657	76003/5/9/11	0.5x1m	West	Segments
321	HPIM2658	76003/5/9/11	0.5x1m	West	Segments
322	HPIM2659	77038	1m	North-west	Gully 77038
323	HPIM2660	59019	2x2m	South	Post removal of deposit
324	HPIM2661	59019	2x2m	South	Post removal of deposit
325	HPIM2662	59017/18	2x1m	South	Ditch segment
366	HPIM2663	59021	1x2m	South	Ditch segment
367	HPIM2664	59023	2x1m	South	Slag Ditch
368	HPIM2665	59023	2x1m	South-east	Slag Ditch
369	HPIM2666	59023	2x1m	South	Slag Ditch
370	HPIM2668	14002	1m	South-west	Possible Ditch
371	HPIM2669	8006/7	1m	South-east	Linear 8006
372	HPIM2670	8006/7	1m	South-east	Linear 8006
373	HPIM2671	8008	1x1m	South-east	Linear 8008
374	HPIM2672	8008	1x1m	South-east	Linear 8008
375	HPIM2674	76008-15	2x1m	South-east	
					Ditch segment
376	HPIM2675	76008-15	2x1m	South-west	Ditch segment
377	HPIM2676	76008-15	2x1m	South	Ditch segment
378	HPIM2677	76008-15	2x1m	East	Ditch segment
379	HPIM2679	14004	1x2m	South	Deposit 14004
380	HPIM2680	14004	1x2m	South	Deposit 14004
381	HPIM2681	14005/6	0.4m	South	Cut 14005
382	HPIM2682	14005/6	0.4m	South	Cut 14005
383	HPIM2683	14006	1m	South	Cut 14006
384	HPIM2684	14006	1m	South	Cut 14006
385	HPIM2685	59021	1m	South	Ditch segment
386	HPIM2686	59021	1m	South	Ditch segment
387	HPIM2687	59021	1m	South	Ditch segment
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388	HPIM2688	59026/27	0.5m	West	Posthole
389	HPIM2689	59026/27	0.5m	West	Posthole
390	HPIM2690	14008	1m	South	N-S Linear
391	HPIM2691	14009	1x1m	South	Tree Bowl
392	HPIM2693	59028/29	0.5m	South	Posthole
393	HPIM2694	59028/29	0.5m	South	Posthole
394	HPIM2695	59023	2x2m	South	Ditch segment
395	HPIM2696	59023	2x2m	South	Oblique
396	HPIM2697	59023	2x2m	South	Oblique
397	HPIM2698	59023	2x2m	South	Close up
398	HPIM2699	Trench 37	2x2m	North-east	Pre ex shot
399	HPIM2700	Trench 37	2x2m	South-west	Pre ex shot
400	HPIM2701	Trench 38	2x2m	South-west	Pre ex shot

## Film Number N/A Film Type Digital

Number		Context	Scale	Facing	Identifier
1	RIMG0443	Trench 39	1x1m	South-west	Pre ex shot
2	RIMG0444	Trench 39	1x1m	North-east	Pre ex shot
3	RIMG0445	Trench 48	1x1m	North	Pre ex shot
4	RIMG0446	Trench 48	1x1m	South	Pre ex shot
5	RIMG0447	Trench 44	1x1m	West	Pre ex shot
6	RIMG0448	Trench 44	1x1m	East	Pre ex shot
7	RIMG0449	Trench 40	1x1m	East	Pre ex shot
8	RIMG0450	Trench 40	1x1m	West	Pre ex shot
9	RIMG0451	Trench 57	2x2m	West	Pre ex shot
10	RIMG0452	Trench 57	2x2m	West	Pre ex shot
11	RIMG0453	Trench 57	2x2m	East	Pre ex shot
12	RIMG0454	Trench 57	2x2m	East	Pre ex shot
13	RIMG0455	57003	1x2m	South	Furrow 57003
14	RIMG0456	57003	1x2m	South	Furrow 57003
15	RIMG0457	57003	1x2m	North	Furrow 57003
16	RIMG0458	57003	1x2m	North	Furrow 57003
17	RIMG0459	57004,5,9,11,13	1x2m	South	Feature sections
18	RIMG0460	57004,5,9,11,13	1x2m	South	Feature sections
19	RIMG0461	57006,7,9,11,13	1x2m	North	Feature sections
20	RIMG0462	57006,7,9,11,13	1x2m	North	Feature sections
21	RIMG0463	57011 & 57013	1x0.4m	West	Posthole & Terminal
22	RIMG0464	57011 & 57013	1x0.4m	West	Posthole & Terminal
23	RIMG0465	57011 & 57013	1x0.4m	West	Posthole & Terminal
24	RIMG0466	57011 & 57013	1x0.4m	West	Posthole & Terminal
25	HPIM2703	40002-5	2x2x1m	South	Ditch segment 40005
26	HPIM2702	40002-5	2x2x1m	South-east	Oblique shot
27	HPIM2704	Trench 38	2x2x1m	South	Ditch segment
28	HPIM2705	Trench 38	2x2x1m	South	Ditch segment
29	RIMG071	Trench 38	2x2x1m	North	Ditch segment
30	RIMG072	Trench 38	2x2x1m	North	Ditch segment
31	RIMG073	38003	1m	South	Gully 38003
32	RIMG074	38003	1m	North	Gully 38003
33	RIMG075	37008	2x2m	South-east	Ditch segment 37008
34	RIMG076	37008	2x2m	South-east	Ditch segment 37008
35	RIMG077	37008	2x2m	East	Ditch segment 37008
36	RIMG078	37008	2x2m	South-west	Ditch segment 37008
37	RIMG079	40009	2x2m, 1x1m	South-west	Ditch 40009

Film Num	nber N/A Filn	n Type Digital			
Number		Context	Scale	Facing	Identifier
1	RIMG0332	Trench 41	2x1m	North-west	Pre ex shot
2	RIMG0334	Trench 41	2x1m	South-east	Pre ex shot
3	RIMG0335	Trench 42	2x1m	West	Pre ex shot
4	RIMG0336	Trench 42	2x1m	East	Pre ex shot
5	RIMG0337	Trench 36	2x1m	East	Pre ex shot
6	RIMG0338	Trench 36	2x1m	West	Pre ex shot
7	RIMG0340	Trench 35	2x1m	South	Pre ex shot
8	RIMG0342	Trench 35	2x1m	North	Pre ex shot
9	RIMG0344	Trench 34	2x1m	South-east	Pre ex shot
10	RIMG0345	Trench 34	2x1m	North-west	Pre ex shot
11	RIMG0348	Trench 51	2x1m	West	Pre ex shot
12	RIMG0349	Trench 51	2x1m	East	Pre ex shot
13	RIMG0347	Trench 49	2x1m	East	Pre ex shot
14	RIMG0346	Trench 49	2x1m	West	Pre ex shot
15	HPIM2310	Trench 26	2x2m	North-west	Pre ex shot
16	HPIM2311	Trench 26	2x2m	North-west	Pre ex shot
17	HPIM2312	Trench 26	2x2m	South-east	Pre ex shot
18	HPIM2313	Trench 26	2x2m	South-east	Pre ex shot
19	HPIM2314	Trench 17	2x2m	South-west	Pre ex shot
20	HPIM2315	Trench 17	2x2m	South-west	Pre ex shot
21	HPIM2316	Trench 17	2x2m	North-east	Pre ex shot
22	HPIM2317	Trench 17	2x2m	North-east	Pre ex shot
23	HPIM2318	Trench 16	2x2m	South-west	Pre ex shot
24	HPIM2319	Trench 16	2x2m	South-west	Pre ex shot
27	HPIM2320	Trench 25	2x2m	North-west	Pre ex shot
28	HPIM2321	Trench 25	2x2m	North-west	Pre ex shot
29	HPIM2322	Trench 25	2x2m	South-east	Pre ex shot
30	HPIM2323	Trench 25	2x2m	South-east	Pre ex shot
31	HPIM2325	34002/3	1x0.5m	South-west	Gully segment
32	HPIM2326	34004/5	1x0.5m	West	Linear segment
33	HPIM2327	34006/7	1m	South-east	Gully Terminal segment
34	HPIM2328	34008/9	1m	South-east	Ditch Terminal segment
Film Num Number	nber N/A Filn	n Type Digital Context	Scale	Facing	Identifier
Hamber				_	
1	RIMG0369	Trench 80	2x1m	East	Pre ex shot
2	RIMG0370	Trench 80	2x1m	South	Land drain
3	RIMG0371	Trench 80	2x1m	South	Land drain
4	RIMG0372	Trench 80	2x1m	West	Pre ex shot
5	RIMG0373	Trench 79	2x1m	East	Pre ex shot
6	RIMG0374	Trench 79	2x1m	West	Pre ex shot
7	RIMG0375	Trench 72	2x1m	East	Pre ex shot
8	RIMG0376	Trench 72	2x1m	West	Pre ex shot
9	RIMG0377	Trench 71	2x1m	North	Pre ex shot
10	RIMG0378	Trench 71	2x1m	South	Pre ex shot
19	RIMG0379	N/A	N/A	N/A	Snake in Trench 28
20	RIMG0380	N/A	N/A	N/A	Snake in Trench 28
21	RIMG0381	N/A	N/A	N/A	Snake in Trench 28
22	RIMG0382	N/A	N/A	N/A	Snake in Trench 28
25	RIMG0383	Trench 28	2x1m	West	Pre ex shot

26	RIMG0384	Trench 28	2x1m	West	Pre ex shot
27	RIMG0385	Trench 28	2x1m	East	Pre ex shot
28	RIMG0386	Trench 28	2x1m	East	Pre ex shot
29	RIMG0387	Trench 29	2x1m	North-west	Pre ex shot
30	RIMG0388	Trench 29	2x1m	North-west	Pre ex shot
31	RIMG0389	Trench 29	2x1m	South-east	Pre ex shot
32	RIMG0390	Trench 29	2x1m	South-east	Pre ex shot
33	RIMG0391	Trench 30	2x1m	North-west	Pre ex shot
34	RIMG0392	Trench 30	2x1m	North-west	Pre ex shot
35	RIMG0393	Trench 30	2x1m	South-east	Pre ex shot
36	RIMG0394	Trench 30	2x1m	South-east	Pre ex shot
37	RIMG0395	Trench 31	2x1m	North-west	Pre ex shot
38	RIMG0396	Trench 31	2x1m	North-west	Pre ex shot
39	RIMG0397	Trench 31	2x1m	South-east	Pre ex shot
40	RIMG0398	Trench 31	2x1m	South-east	Pre ex shot
41	RIMG0399	Trench 32	2x1m	South	Pre ex shot
42	RIMG0400	Trench 32	2x1m	South	Pre ex shot
43	RIMG0401	Trench 32	2x1m	North	Pre ex shot
44	RIMG0402	Trench 32	2x1m	North	Pre ex shot
45	RIMG0403	Trench 33	2x1m	East	Pre ex shot
46	RIMG0404	Trench 33	2x1m	East	Pre ex shot
47	RIMG0405	Trench 33	2x1m	West	Pre ex shot
48	RIMG0406	Trench 33	2x1m	West	Pre ex shot

## Film Number 1181 Film Type Colour Slide

Number	Context	Scale	Facing	Identifier
23	Trench 41	2x1m	North-west	Trench 41 Pre ex shot
24	Trench 41	2x1m	South-east	Trench 41 Pre ex shot
25	Trench 42	2x1m	West	Trench 42 Pre ex shot
26	Trench 42	2x1m	East	Trench 42 Pre ex shot
27	Trench 36	2x1m	East	Trench 36 Pre ex shot
28	Trench 36	2x1m	West	Trench 36 Pre ex shot
29	Trench 36	2x1m	West	Trench 36 Pre ex shot
30	Trench 36	2x1m	West	Trench 36 Pre ex shot
31	Trench 35	2x1m	South	Trench 35 Pre ex shot
32	Trench 35	2x1m	South	Trench 35 Pre ex shot
33	Trench 35	2x1m	North	Trench 35 Pre ex shot
34	Trench 34	2x1m	South-east	Trench 34 Pre ex shot
35	Trench 34	2x1m	North-west	Trench 34 Pre ex shot
36	Trench 50	2x1m	West	Trench 50 Pre ex shot
37	Trench 50	2x1m	East	Trench 50 Pre ex shot

## Film Number 1182 Film Type Colour Slide

Number	Context	Scale	Facing	Identifier
1	Trench 49	2x1m	East	Trench 49 Pre ex shot
2	Trench 49	2x1m	West	Trench 49 Pre ex shot
3	Trench 26	2x2m	North-west	Trench 26 Pre ex shot
4	Trench 26	2x2m	North-west	Trench 26 Pre ex shot
5	Trench 26	2x2m	South-east	Trench 26 Pre ex shot
6	Trench 26	2x2m	South-east	Trench 26 Pre ex shot
7	Trench 17	2x2m	South-west	Trench 17 Pre ex shot

8	Trench 17	2x2m	South-west	Trench 17 Pre ex shot
9	Trench 17	2x2m	North-east	Trench 17 Pre ex shot
10	Trench 17	2x2m	North-east	Trench 17 Pre ex shot
11	Trench 16	2x2m	South-west	Trench 16 Pre ex shot
12	Trench 16	2x2m	South-west	Trench 16 Pre ex shot
13	Trench 16	2x2m	North-east	Trench 16 Pre ex shot
14	Trench 16	2x2m	North-east	Trench 16 Pre ex shot
15	Trench 25	2x2m	North-west	Trench 25 Pre ex shot
16	Trench 25	2x2m	North-west	Trench 25 Pre ex shot
17	Trench 25	2x2m	South-east	Trench 25 Pre ex shot
18	Trench 25	2x2m	South-east	Trench 25 Pre ex shot

## Film Number 1183 Film Type Colour Slide

Number	Context	Scale	Facing	Identifier
1	34008/9	1m	South-east	Ditch Terminal
2	Trench 12	2x2m	South	Trench 12 Pre ex shot
3	Trench 12	2x2m	North	Trench 12 Pre ex shot
4	Trench 18	2x2m	North-west	Trench 18 Pre ex shot
5	Trench 18	2x2m	South-east	Trench 18 Pre ex shot
6	Trench 13	2x2m	South-west	Trench 13 Pre ex shot
7	Trench 13	2x2m	North-east	Trench 13 Pre ex shot
8	Trench 9	2x2m	East north east	Trench 9 Pre ex shot
9	Trench 9	2x2m	West south west	Trench 9 Pre ex shot
10	Trench 10	2x2m	South-west	Trench 10 Pre ex shot
11	Trench 10	2x2m	North-east	Trench 10 Pre ex shot
12	Trench 1	2x2m	North-east	Trench 1 Pre ex shot
13	Trench 1	2x2m	South-west	Trench 1 Pre ex shot
14	Trench 2	2x2m	South-west	Trench 2 Pre ex shot
15	Trench 2	2x2m	North-east	Trench 2 Pre ex shot
16	Trench 5	2x2m	North-east	Trench 5 Pre ex shot
17	Trench 5	2x2m	South-west	Trench 5 Pre ex shot
18	Trench 4	2x2m	South-west	Trench 4 Pre ex shot
19	Trench 3	2x2m	North	Trench 3 Pre ex shot
20	Trench 3	2x2m	South	Trench 3 Pre ex shot
21	10002/10003	1m	South-west	Terminal 10003
22	10004/10005	1m	South	Linear segment 10005
23	26005 & 26008	1x2m	South-west	Pit 26008 & Gully 26005
24	26005 & 26008	1x2m	South-west	Pit 26008 & Gully 26005
25	26003	1x0.4m	South-west	Gully 26003
26	1002/1003	2x1m	North	Segment 1003
27	1002/1003	2x1m	North	Segment 1003
28	18001-6	2x2m	South-west	Ditch segment
29	18001-6	2x2m	South-west	Ditch segment
30	Trench 59	2x2m	North-east	Trench 59 Pre ex shot
31	Trench 59	2x2m	South-west	Trench 59 Pre ex shot
32	Trench 26	2x2m	West	Trench 26 Post ex (east end)
33	Trench 26	1x1m	North	Drain, pit, ditch (east end)
34	Trench 18	1x1m	West	Pit 18006
35	Trench 18	1x1m	West	Pit 18006
36	Trench 11	2x2m	South-west	Trench 11 Pre ex shot
37	Trench 11	2x2m	North-east	Trench 11 Pre ex shot

Film Number 1184 Fi	Film Number 1184 Film Type Colour Slide					
Number	Context	Scale	Facing	Identifier		
4	11000/11000	0.4	N (1	D'' 44000		
1	11002/11003	0.4m	North-west	Pit 11003		
2	11004/11005	0.4m	East	Pit 11005		
3	1002/1003	0.5m	South-east	Ditch segment		
4	1002/1003	0.5m	South-east	Ditch segment		
5	26020	1x1m	South	Pit 26020 & Gully 26010		
6	26023/28	2x2m	South-west	Ditch segments		
7	26023/28	2x2m	South-east	Ditch segments		
8	26028	2x2m	South	Ditch segment		
9	26028/3/5	2x2m	South-east	Ditch segments		
10	13003	1x1m	South	Linear segment		
11	13003	1x1m	North	Linear segment		
12	13013	1x1m	North-east	Linear feature		
13	26029/30	1x1m	South	Ditch segment 26030		
14	26029/30	1x1m	South	Ditch segment 26030		
15	Trench 26	1x1m	East	Linear segment 26031		
16	Trench 26	1x1m	East	Linear segment 26031		
17	26035/26036	1m	North	Gully segment		
18	26035/26036	1m	North	Gully segment		
19	26030/36/38	2x2m, 2x1m	South-west	Ditches 26030/36/38 & Drain		
20	26030/36/38	2x2m, 2x1m	South-east	Ditches 26030/36/38 & Drain		
21	Trench 13	1x1m	South	Half sectioned Pit		
22	26045-51	2x2m	South-west	Ditch segment 26045-51		
23	26045-51	2x2m	South-east	Ditch segment 26045-51		
24	Trench 26	2x2m	East	Trench 26 Final shot		
25	Trench 26	2x2m	West	Trench 26 Final shot		
26	Trench 27	2x2m	North	Pre ex shot		
27	Trench 27	2x2m	South	Pre ex shot		
28	Trench 76	2x2m	West	Pre ex shot		
29	Trench 76	2x2m	East	Pre ex shot		
30	Trench 74	2x2m	East	Pre ex shot		
31	Trench 74	2x2m	West	Pre ex shot		
32	Trench 77	2x2m	North	Pre ex shot		
33	Trench 77	2x2m	South	Pre ex shot		
34	Trench 73	2x2m	North	Pre ex shot		
35	Trench 73	2x2m	South	Pre ex shot		
36	Trench 70	2x2m	West	Pre ex shot		
37	Trench 70	2x2m	East	Pre ex shot		

#### Film Number 1185 Film Type Colour Slide Number Context Scale **Facing** Identifier 1 Trench 68 2x2m South Pre ex shot 2 Trench 68 Pre ex shot 2x2m North 3 Trench 75 West Pre ex shot 2x2m 4 Trench 75 East Pre ex shot 2x2m 5 Trench 67 2x2m South-east Pre ex shot 6 Trench 67 2x2m North Pre ex shot 7 Trench 81 2x2m East Pre ex shot 8 Trench 81 2x2m West Pre ex shot 9 Trench 66 2x2m Pre ex shot South 10 Trench 66 2x2m North Pre ex shot

11	Trench 65	2x2m	North	Pre ex shot
12	Trench 65	2x2m	South	Pre ex shot
13	Trench 61	2x2m	West	Pre ex shot
14	Trench 61	2x2m	South-east	Pre ex shot
15	Trench 21	2x2m	West	Pre ex shot
16	Trench 21	2x2m	South-east	Pre ex shot
17	Trench 7	2x2m	South	Pre ex shot
18	Trench 7	2x2m	North	Pre ex shot
19	Trench 6	2x2m	East	Pre ex shot
20	Trench 6	2x2m	West	Pre ex shot
21	Trench 19	2x2m	West	Pre ex shot
22	Trench 19	2x2m	East	Pre ex shot
23	Trench 15	2x2m	South-east	Pre ex shot
24	Trench 15	2x2m	North-west	Pre ex shot
25	Trench 14	2x2m	West	Pre ex shot
26	Trench 14	2x2m	East	Pre ex shot
27	Trench 20	2x2m	East	Pre ex shot
28	Trench 20	2x2m	West	Pre ex shot
29	Trench 8	2x2m	South	Pre ex shot
30	Trench 8	2x2m	North	Pre ex shot
31	Trench 22	2x2m	North-west	Pre ex shot
32	Trench 22	2x2m	South-east	Pre ex shot
33	Trench 24	2x2m	East	Pre ex shot
34	Trench 24	2x2m	West	Pre ex shot
35	Trench 23	2x2m	South-west	Pre ex shot
36	Trench 23	2x2m	North-east	Pre ex shot
37	Trench 78	2x2m	West	Pre ex shot

## Film Number 1186 Film Type Colour Slide

Number	Context	Scale	Facing	Identifier
1	Trench 78	2x2m	East	Pre ex shot
2	Trench 79	2x2m	West	Pre ex shot
3	Trench 79	2x2m	East	Pre ex shot
4	Trench 80	2x2m	East	Pre ex shot
5	Trench 80	2x2m	West	Pre ex shot
6	Trench 79	2x2m	East	Pre ex shot
7	Trench 72	2x2m	East	Pre ex shot
8	Trench 72	2x2m	West	Pre ex shot
9	Trench 71	2x2m	North	Pre ex shot
10	Trench 64	2x2m	North	Pre ex shot
11	Trench 64	2x2m	South	Pre ex shot
12	Trench 62	2x2m	East	Pre ex shot
13	Trench 62	2x2m	West	Pre ex shot
14	Trench 60	2x2m	East	Pre ex shot
15	Trench 60	2x2m	West	Pre ex shot
16	Trench 43	2x2m	South-east	Pre ex shot
17	Trench 43	2x2m	North-west	Pre ex shot
18	Trench 45	2x2m	North-west	Pre ex shot
19	Trench 45	2x2m	South-east	Pre ex shot
20	Trench 47	2x2m	North-east	Pre ex shot
21	Trench 47	2x2m	South-west	Pre ex shot
22	Trench 50	2x2m	South	Pre ex shot
23	Trench 52	2x2m	West	Pre ex shot

24	Trench 52	2x2m	East	Pre ex shot
25	Trench 53	2x2m	North	Pre ex shot
26	21002/21003	2x1m	North	Linear 21003
27	21004/21005	2x1m	North	Linear 21005
28	Trench 63	2x2m	East	Pre ex shot
29	Trench 63	2x2m	West	Pre ex shot
30	Trench 59	2x2m	West	Pre ex shot
31	Trench 59	2x2m	East	Pre ex shot
32	19002/19003	1x1m	North	Linear 19002/19003
33	19004/19005	2x1m	North	Linear Terminal 19004/5
34	66002/3	2x1m	East	Ditch segment 66003
35	66002/3	2x1m	East	Ditch segment 66003
36	6002/3	2x1m	South-west	Ditch segment 6003
37	6004	2x1m	South	Ditch

Film Number 1187 Film Type Colour Slide

Number	Context	Scale	Facing	Identifier
1	6005	1x1m	South	Natural Peat
2	78002	1x1m	South	Natural feature/ land drain
3	78002	1x1m	East	Natural feature/ land drain
4	78004	1x1m	North-east	Ditch segment 78004
5	78004	1x1m	South-west	Ditch segment 78004
6	67009	2x2m, 1m	North-west	Dyke 67009
7	67009	2x2m, 1m	South-east	Dyke 67009
8	67011	1x1m	South-east	Gully 67011
9	24008	2x1m	South	Linear Ditch 24008
10	24003	2x1m	South	Land Drain 24004
11	68009	2x2m, 1x1m	North-east	Ditch segment 68008
12	Trench 67	2x2m	South	Post ex shot Trench 67
13	Trench 67	2x2m	North	Post ex shot Trench 67
14	27007	1x1m, 1x2m	West	Hedge boundary 27007
15	23010	2x1m	South	Ditch segment 23010
16	81009/10	1x1m	North	Gully 81011
17	81005/6/8	1x1m	North	Linear 81007
18	81004	1x1m	North	Linear 81004
19	81014	1x0.4m	North	Gully 81014
20	27010	1m	North-west	Pit 27010
21	27012	1m	West	Pit 27012
22	81016	1m	North	Linear feature 81016
23	70002-7	1m	East	Ditch segment
24	70002-7	1m	West	Ditch segment
25	70009 & 70012	1x1m	East	Ditch 70009 & Drain 70012
26	23005	0.5m	South	Land Drain 23005
27	22004/6	1x1m, 1x2m	East	Field/ hedge boundary
28	70016	1x2m	East	Ditch segment 70016
29	8003 & 8005	2x1m	North-west	Ditch segments
30	75005 & 75007	2x1x1m	South-west	Ditch segments
31	75009	1m	South-west	Gully segment 75009
32	75012 & 75014	2x1m	South-west	Intersection Linear & Gully
33	Trench 75	2x2m	South-west	Post ex shot
34	75012 & 75014	1m	East	Intersection Linear & Gully
35	74004	2x1m	South	Linear Ditch 74004
36	59002-5	0.5x1x2m	South-east	Ditch & Gully

71004

Film Number 1188 Fi Number	lm Type Colour Slid Context	e Scale	Facing	Identifier
1	63007/63011	2x1m	North-west	Ditch segment 63007/11
2	63007/63011	2x1m	North-east	Ditch segment 63007/11
3	59007	1m	South-east	Ditch segment 59007
4	63013	0.5m	South-east	Linear Gully 63013
5	71013	1x2m	West	Segment 71013
6	59009	1x2m	West	Slag Deposit 59009
7	59010-13	2m	East	Gully Ditch segments
8	Trench 59	2m	West	Pre ex shot ?flue feature
9	77006	2x1m	West	Terminal in Ditch 77003
10	77009	1x1x0.5m	North	Gully cutting terminal 77006
11	77017	2x1m	North	Segment in 77016
12	77019	2x1m	North	Segment in 77016
13	77019	1x1m	South	Segment in 77016
14	77024/27	1x2m	North-west	segment from 77016
15	64002-64004	2x1m	West	Ditch segment 64004
16	64005-64008	2x1m	West	Intersecting Linear feature
17	77030/40	1x1m, 1x2m	East	Segment in 77016
18	77038	1x1m	East	Gully 77038
19	Trench 59	2x2m	East	Pre ex shot
20	Trench 59	2x2m	West	Pre ex shot
21	76008/9	1x0.5m	South	Terminal 76009
22	76002/5/9-11	1x0.5m	West	Segments
23	76002/5/9-11	1x0.5m	North	Segments
24	77038	1m	North-west	Gully segment 77038
25	59017/18	2x1m	South	Ditch segment 59018
26	59023	2x1m	South	Slag Ditch 59023
27	Trench 14	1m	South-west	Possible Ditch
28	8006/7	1x1m	South-east	Linear 8006
29	76008/5	2x1m	South-east	Ditch segment
30	76008/5	2x1m	South-west	Ditch segment
31	14006	1m	South	Gully 14006
32	59021	1m	South	Ditch segment
33	59026/27	0.5m	West	Posthole
34	14008	1m	South	N-S Linear
35	59028/29	0.5m	South	Posthole
36	59023	2x2m	South	Ditch segment
37	59023	2x2m	South	Ditch segment

Film Number 11	189 Film Type Colour	Slide		
Number	Context	Scale	Facing	Identifier
1	Trench 37	2x2m	North-east	Pre ex shot
2	Trench 37	2x2m	South-west	Pre ex shot
3	Trench 38	2x2m	East	Pre ex shot
4	Trench 39	2x2m	North-east	Pre ex shot
5	Trench 39	1x1m	South-west	Pre ex shot
6	Trench 48	1x1m	North	Pre ex shot
7	Trench 48	1x1m	South	Pre ex shot

8	Trench 44	1x1m	West	Pre ex shot
9	Trench 44	1x1m	East	Pre ex shot
10	Trench 40	1x1m	East	Pre ex shot
11	Trench 40	1x1m	West	Pre ex shot
12	Trench 57	2x2m	West	Pre ex shot
13	Trench 57	2x2m	East	Pre ex shot
14	57003	1x2m	South	57003
15	Trench 57	1x2m	South	Features 57005/7/9/11/13
16	Trench 57	0.4m	West	Features 57011 & 57013
17	40002-5	2x2x1m	South	Ditch segment 40005
18	38006	2x2x1m	South	Ditch segment 38006
19	38006	2x2x1m	North	Ditch segment 38006
20	38003	1m	South	Gully 38003
21	38003	1m	North	Gully 38003
22	37008	2x2m	South-east	Ditch 37008
23	37008	2x2m	South-west	Ditch 37008
24	40009	2x2x1m	South-west	Ditch 40009

# Film Number 1190 Film Type Black and White

Number	Context	Scale	Facing	Identifier
				T 1445
23	Trench 41	2x1m	North-west	Trench 41 Pre ex shot
24	Trench 41	2x1m	South-east	Trench 41 Pre ex shot
25	Trench 42	2x1m	West	Trench 42 Pre ex shot
26	Trench 42	2x1m	East	Trench 42 Pre ex shot
27	Trench 36	2x1m	East	Trench 36 Pre ex shot
28	Trench 36	2x1m	West	Trench 36 Pre ex shot
29	Trench 36	2x1m	West	Trench 36 Pre ex shot
30	Trench 36	2x1m	West	Trench 36 Pre ex shot
31	Trench 35	2x1m	South	Trench 35 Pre ex shot
32	Trench 35	2x1m	South	Trench 35 Pre ex shot
33	Trench 35	2x1m	North	Trench 35 Pre ex shot
34	Trench 34	2x1m	South-east	Trench 34 Pre ex shot
35	Trench 34	2x1m	South-east	Trench 34 Pre ex shot
36	Trench 50	2x1m	West	Trench 50 Pre ex shot
37	Trench 50	2x1m	East	Trench 50 Pre ex shot

## Film Number 1191 Film Type Black and White

Number	Context	Scale	Facing	Identifier
1	Trench 49	2x1m	East	Pre ex shot
2	Trench 49	2x1m	West	Pre ex shot
3	Trench 26	2x2m	North-west	Pre ex shot
4	Trench 26	2x2m	North-west	Pre ex shot
5	Trench 26	2x2m	South-east	Pre ex shot
6	Trench 26	2x2m	South-east	Pre ex shot
7	Trench 17	2x2m	South-west	Pre ex shot
8	Trench 17	2x2m	South-west	Pre ex shot
9	Trench 17	2x2m	North-east	Pre ex shot
10	Trench 17	2x2m	North-east	Pre ex shot
11	Trench 16	2x2m	South-west	Pre ex shot
12	Trench 16	2x2m	South-west	Pre ex shot
13	Trench 16	2x2m	North-east	Pre ex shot

14	Trench 16	2x2m	North-east	Pre ex shot
15	Trench 25	2x2m	North-west	Pre ex shot
16	Trench 25	2x2m	North-west	Pre ex shot
17	Trench 25	2x2m	South-east	Pre ex shot
18	Trench 25	2x2m	South-east	Pre ex shot
19	34002/3	1x0.5m	South-west	Gully segment
20	34002/3	1x0.5m	South-west	Gully segment
21	34004/5	1x1x0.5m	West	Linear segment
22	34004/5	1x1x0.5m	West	Linear segment
23	34006/7	1x1m	South-east	Gully terminal
24	34006/7	1x1m	South-east	Gully terminal
25	34008/9	1m	South-east	Ditch terminal
26	Trench 12	2x2m	South	Pre ex shot
27	Trench 12	2x2m	North	Pre ex shot
28	Trench 18	2x2m	North-west	Pre ex shot
29	Trench 18	2x2m	South-east	Pre ex shot
30	Trench 13	2x2m	South-west	Pre ex shot
31	Trench 13	2x2m	North-east	Pre ex shot
32	Trench 9	2x2m	East north east	Pre ex shot
33	Trench 9	2x2m	West south west	Pre ex shot
34	Trench 10	2x2m	South-west	Pre ex shot
35	Trench 10	2x2m	North-east	Pre ex shot
36	Trench 1	2x1m	North-east	Pre ex shot
37	Trench 1	2x1m	South-west	Pre ex shot

## Film Number 1192 Film Type Black and White

Number	Context	Scale	Facing	Identifier
1	Trench 2	2x2m	South-west	Pre ex shot
2	Trench 2	2x2m	North-east	Pre ex shot
3	Trench 5	2x2m	North-east	Pre ex shot
4	Trench 5	2x2m	South-west	Pre ex shot
5	Trench 4	2x2m	North-east	Pre ex shot
6	Trench 4	2x2m	South-west	Pre ex shot
7	Trench 3	2x2m	North	Pre ex shot
8	Trench 3	2x2m	South	Pre ex shot
9	10002/10003	1m	South-west	Terminal 10003
10	10004/10005	1m	South	Linear segment 10005
11	26005 & 26008	2x1m	South-west	Pit 26008 & Gully 26005
12	26005 & 26008	2x1m	South-west	Pit 26008 & Gully 26005
13	26003	1x0.4m	South-west	Gully 26003
14	26003	1x0.4m	South-west	Gully 26003
15	1002/1003	2x1m	North	Segment 1003
16	1002/1003	2x1m	North	Segment 1003
17	18001-6	2x2m	South-west	Ditch segment
18	18001-6	2x2m	South-west	Ditch segment
19	Trench 59	2x2m	North-east	Trench 59 after pulled
20	Trench 59	2x2m	South-west	Trench 59 after pulled
21	Trench 26	2x2m	West	Post ex shot
22	Trench 26	1x1m	North	Drain and Ditch eastern end
23	Trench 18	1x1m	West	Pit 18006
24	Trench 11	2x2m	South-west	Trench 11 after cleaning
25	Trench 11	2x2m	North-east	Trench 11 after cleaning
26	11002/11003	0.4m	South-west	Pit 11003

27	11004/11005	0.4m	East	Pit 11005
28	9002/3	1x0.5m	South-east	Ditch segment
29	9002/3	1x0.5m	South-east	Ditch segment
30	26010 & 26020	1x1m	South	Pit 26020 & Gully 26010
31	26023, 26026	2x2m, 1x1m	South-west	Ditch segments
32	26023, 26026	2x2m, 1x1m	South-east	Ditch segments
33	26028	2x2m, 1x1m	South	Ditch segment 26028
34	Trench 13	1x1m	North-east	Ditch segment
35	26029/30	1x1m	South	Ditch segment
36	26029/30	1x1m	South	Ditch segment

# Film Number 1193 Film Type Black and White Number Context Scale Facing Identifier

Number	Context	Scale	Facing	Identifier
1	13007	1x1m	South-east	Half sectioned Pit 13007
2	26031	1m	East	West facing section
3	26031	1m	West	East facing section
4	26035/36	1m	North	Gully segment
5	26035/36	1m	North	Gully segment
6	26030/36/38	2x2m, 2x1m	South-west	Ditches
7	26030/36/38	2x2m, 2x1m	South-east	Ditches
8	13010	1x1m	South	Half sectioned Pit
9	26045-51	2x2m	South-west	Ditch segment
10	26045-51	2x2m	South-east	Ditch segment
11	Trench 26	2x2m	East	Post ex shot
12	Trench 26	2x2m	West	Post ex shot
13	Trench 27	2x2m	North	Pre ex shot
14	Trench 27	2x2m	South	Pre ex shot
16	Trench 76	2x2m	West	Pre ex shot
17	Trench 76	2x2m	East	Pre ex shot
18	Trench 74	2x2m	East	Pre ex shot
19	Trench 74	2x2m	West	Pre ex shot
20	Trench 77	2x2m	North	Pre ex shot
21	Trench 77	2x2m	South	Pre ex shot
22	Trench 73	2x2m	North	Pre ex shot
23	Trench 73	2x2m	South	Pre ex shot
24	Trench 70	2x2m	West	Pre ex shot
25	Trench 70	2x2m	East	Pre ex shot
26	Trench 68	2x2m	South	Pre ex shot
27	Trench 68	2x2m	North	Pre ex shot
28	Trench 75	2x2m	West	Pre ex shot
29	Trench 75	2x2m	East	Pre ex shot
30	Trench 67	2x2m	South-east	Pre ex shot
31	Trench 67	2x2m	North	Pre ex shot
32	Trench 81	2x2m	East	Pre ex shot
33	Trench 81	2x2m	West	Pre ex shot
34	Trench 66	2x2m	South	Pre ex shot
35	Trench 66	2x2m	North	Pre ex shot
36	Trench 65	2x2m	North	Pre ex shot
37	Trench 65	2x2m	South	Pre ex shot
38	Trench 61	2x2m	West	Pre ex shot

Film Number 1194 Film Type Black and White

Number	Context	Scale	Facing	Identifier
1	Trench 60	2x2m	East	Pre ex shot
2	Trench 60	2x2m	West	Pre ex shot
3	Trench 43	2x2m	South-east	Pre ex shot
4	Trench 43	2x2m	North-west	Pre ex shot
5	Trench 45	2x2m	North-west	Pre ex shot
6	Trench 45	2x2m	South-east	Pre ex shot
7	Trench 47	2x2m	North-east	Pre ex shot
8	Trench 47	2x2m	South-west	Pre ex shot
9	Trench 50	2x2m	South	Pre ex shot
10	Trench 52	2x2m	West	Pre ex shot
11	Trench 52	2x2m	East	Pre ex shot
12	Trench 53	2x2m	North	Pre ex shot
13	21002/21003	2x1m	North	Linear 21003
14	21004/21005	2x1m	North	Linear 21005
15	Trench 63	2x2m	East	Pre ex shot
16	Trench 63	2x2m	West	Pre ex shot
17	Trench 59	2x2m	West	Pre ex shot
18	Trench 59	2x2m	East	Pre ex shot
19	19002/3	1x1m	North	Linear 19002/3
20	19004/5	1x1m	North	Linear 19004/5
21	66002/66003	2x1m	East	Ditch segment 66003
22	66002/66003	2x1m	East	Ditch segment 66003
23	6002/6003	2x1m	South-west	Ditch segment 6003
24	6004	2x1m	South	Ditch segment
25	6005	2x1m	South	Natural Peat
26	78002	1x1m	North-east	Natural Feature/ Land drain
27	78002	1x1m	East	Natural Feature/ Land drain
28	78004	1x1m	North-east	Ditch segment 78004
29	78004	1x1m	South-west	Ditch segment 78004
30	67009	2x2m, 1x1m		Dyke segment 67009
31	67009	2x2m, 1x1m		Dyke segment 67009
32	67011	1x1m	South-east	Gully segment 67011
33	24008	2x1m	South	Linear Ditch segment
34	24003	2x1m	South	Land Drain
35	68009	2x2m, 1x1m		Ditch 68008
36	Trench 67	2x2m	South	Post ex shot
37	Trench 67	2x2m	North	Post ex shot

#### Film Number 1195 Film Type Black and White Number Context **Identifier** Scale **Facing** 1 Trench 61 2x2m West Pre ex shot 2 Trench 61 Pre ex shot 2x2m South-east 3 Trench 21 2x2m West Pre ex shot 4 Trench 21 Pre ex shot 2x2m South-east 5 Trench 7 Pre ex shot 2x2m South 6 Trench 7 2x2m North Pre ex shot 7 Trench 6 2x2m East Pre ex shot 8 Trench 6 2x2m West Pre ex shot 9 Trench 19 2x2m West Pre ex shot 10 Trench 19 2x2m Pre ex shot East 11 Trench 15 2x2m South-east Pre ex shot

Trench 14 2x2m West Pre ex s  Trench 14 2x2m East Pre ex s	shot shot shot
	shot shot
45 Transh 20 Over Foot Dec	shot
Trench 20 2x2m East Pre ex s	
Trench 20 2x2m West Pre ex s	shot
17 Trench 8 2x2m South Pre ex s	
Trench 8 2x2m North Pre ex s	shot
19 Trench 22 2x2m North-west Pre ex s	shot
20 Trench 22 2x2m South-east Pre ex s	shot
21 Trench 24 2x2m East Pre ex s	shot
22 Trench 24 2x2m West Pre ex s	shot
23 Trench 23 2x2m South-west Pre ex s	shot
24 Trench 23 2x2m North-east Pre ex s	shot
25 Trench 78 2x2m West Pre ex s	shot
26 Trench 78 2x2m East Pre ex s	shot
27 Trench 79 2x2m West Pre ex s	shot
28 Trench 79 2x2m East Pre ex s	shot
29 Trench 72 2x2m East Pre ex s	shot
Trench 72 2x2m West Pre ex s	shot
31 Trench 71 2x2m North Pre ex s	shot
32 Trench 64 2x2m North Pre ex s	shot
Trench 64 2x2m South Pre ex s	shot
34 Trench 62 2x2m East Pre ex s	shot
Trench 62 2x2m West Pre ex s	shot

## Film Number 1196 Film Type Black and White

1 27007 1x1m, 1x2m West Hedge boundary 270	07
2 23010 2x1m South Ditch 23010	
3 81010/09 1x1m North Gully 81011	
4 81005/6/8 1x1m North Linear 81007	
5 81004 1x1m North Linear 81004	
6 81014 1x0.4m North Gully 81014	
7 27010 1m North-west Pit 27010	
8 27012 1m West Pit 27012	
9 81016 1m North Linear 81016	
10 70002-7 1m East Ditch segment	
11 70002-7 1m West Ditch segment	
12 70009 & 70012 1x1m East Ditch 70009 & Drain	70012
13 23005 0.5m South Land drain 23005	
14 22004/6 1x1m, 1x2m East Field/ Hedge bounda	ry
15 70016 1x2m East Ditch segment 70016	3
16 8003/8004 2x1m North-west Ditch segments	
17 75005 & 75007 2x1x1m South-west Ditch segments	
18 75009 1m South-west Gully segment 75009	9
19 75012 & 75014 2x1m South-west Intersection Linear &	Gully
20 Trench 75 2x2m South-west Post ex shot	
21 75012 & 75014 1m East Intersection Linear &	Gully
22 74004 2x1m South Linear Ditch 74004	
23 59002-5 0.5x1x2m South-east Ditch & Gully	
Trench 77 0.5x2x1m South Ditch segment 77004	1
25 63007/63011 2x1m North-west Ditch segments	
26 63007/63011 2x1m North-east Ditch segments	

27	59007	1x1m	South-east	Ditch segment 59007
28	63013	0.5m	South-east	Linear Gully segment 63013
29	77013	1x2m	West	Segment 77013
30	59009	1x2m	West	Slag Deposit 59009
31	59010-59013	2m	West	Gully & Ditch segment
32	Trench 59	2m	West	Pre ex shot
33	77006	2x1m	West	Terminal in Ditch 77003
34	77009	1x1x0.4m	North	Gully in Ditch 77003
35	77017	2x1m	West	Segment in 77016
36	77019	1x2m	North	Segment in 77016
37	77019	1x1m	South	Segment in 77016

Film Number 1197 Film Type Black and White							
Number	Context	Scale	Facing	Identifier			
1	77024/27	1x2m	South-west	Segment in 77016			
2	64002-64004	2x1m	West	Ditch segment 64004			
3	64005-8	2x1m	West	Intersecting cut feature			
4	77030	1x1m, 1x2m		Segment in 77016			
5	77032	1x1m, 1x2m	East	Gully 77032			
6	Trench 59	2x2m	East	Pre ex shot			
7	Trench 59	2x2m	West	Pre ex shot			
8	76008-9	2x2m	South	Terminal 76009			
9	76002-5&76009-11	1x0.5m	West	Segments			
10	76012/13&76009-11		North	Segments			
11	77038	1x0.5111	North-west	Gully segment 77038			
12	59017/18	2x1m	South	Ditch segment 59018			
13	59017/18	2x1m	South	Slag Ditch			
14	14002	1m	South-west	Possible Ditch			
15	8006	1m	South-east	Linear 8006			
16	76008-15	2x1m	South-east	Ditch segment 76015			
17	76008-15 76008-15	2x1m	South-west	Ditch segment 76015			
18	14006	1m	South	Gully 14006			
19	59021	1m	South	Ditch segment			
20	59021	0.5m	West	Posthole			
21	14008	1m	South	N-S Linear			
22	59028/29	0.5m	South	Posthole			
23	59028/29	2x2m	South	Ditch segment			
24	59023	2x2m	South	Ditch segment			
25	Trench 38	2x2m	North-east	Pre ex shot			
26	Trench 38	2x2m	South-west	Pre ex shot			
28	Trench 39	1x1m	South-west	Pre ex shot			
29	Trench 39	1x1m	North-east	Pre ex shot			
30	Trench 48	1x1m	North	Pre ex shot			
31	Trench 48	1x1m	South	Pre ex shot			
32	Trench 44	1x1m	West	Pre ex shot			
33	Trench 44	1x1m	East				
34	Trench 40	1x1m 1x1m	East	Pre ex shot Pre ex shot			
35 35	Trench 40	1x1m 1x1m	West	Pre ex shot			
36		2x2m	West				
37	Trench 57			Pre ex shot			
<i>31</i>	Trench 57	2x2m	East	Pre ex shot			

Film Number 1198 Film Type Black and White

Number	Context	Scale	Facing	ldentifier
1	57003	1x2m	South	Furrow 57003
2	Trench 57	1x2m	South	Features 57005,7,9,11&13
3	Trench 57	1x0.4m	West	Features 57011&13
4	40002-5	2x2x1m	South	Ditch segment 40005
5	38006	2x2x1m	South	Ditch segment 38006
6	38006	2x2x1m	North	Ditch segment 38006
7	38003	1m	South	Gully 38003
8	38003	1m	North	Gully 38003
9	37008	2x2m	South-east	Ditch segment 37008
10	37008	2x2m	South-west	Ditch segment 37008
11	40009	2x2m, 1x1m	South-west	Ditch 40009
11	40009	2x2m, 1x1m	South-west	Ditch 40009

#### **APPENDIX 5**

Manor Farm, Bessacarr, South Yorkshire (MAP 05-08-10)
Carbonised Plant Macrofossils and Charcoal
Diane Alldritt

#### 1: Introduction

A total of ninety-two environmental sample flots from excavations at Manor Farm, Bessacarr (MAP 05-08-10) were examined for carbonised plant macrofossils and charcoal. Samples were taken from a total of thirty evaluation trenches, with finds suggesting material relating to Roman, Medieval and Post-Medieval activity. Features sampled consisted of ditches, linear features, pits and other remains.

## 2: Methodology

Bulk environmental samples were processed by MAP using a Siraf style water flotation system (French 1971). The resultant flots were dried prior to examination under a low powered binocular microscope. Presence of charred material varied greatly across the trenches from <2.5ml up to 25ml of charred detritus per flot, whilst some samples were sterile of carbonised remains. One rare sample produced up to 120ml of wood charcoal, most likely a dump of hearth material. All identified plant remains including charcoal were removed and bagged separately by type.

Three samples of metallurgical slag were examined for any adherent charcoal. Where possible slivers of charcoal were removed with a razor blade and identified using high power microscopy. This was not always successful, given the ephemeral nature of the charcoal remains, and in the case of (59016) it was not possible to remove the charcoal to fully identify the fragments.

Modern root fragments were present throughout the samples in amounts from <2.5ml to 30ml along with occasional modern seeds and earthworm egg capsules. A few samples

produced large amounts of modern straw indicating a degree of mixing and modern contamination in the deposits.

Some of the samples, particularly the lower ditch deposits, contained possible waterlogged material, mainly wood, although it was not always possible to distinguish modern material from ancient waterlogged remains given that the samples had been processed by flotation. In some deposits however, the wood appeared fairly modern, and may be contamination.

Wood charcoal was examined using a high powered Vickers M10 metallurgical microscope at magnifications up to x200. The reference photographs of Schweingruber (1990) were consulted for charcoal identification. Plant nomenclature utilised in the text follows Stace (1997) for all vascular plants apart from cereals, which follow Zohary and Hopf (2000).

#### 3: Results

The results for Trenches 1, 6, 8, 9, 10, 11, 13, 14, 18, 19, 21, 23, and 24 are given in table 1, for Trenches 26, 34, 37 and 40 in table 2, for Trenches 59, 63 and 64 in table 3, and for Trenches 66, 67, 68, 70, 74, 75, 76, 77, 78 and 81 in table 4. All results are discussed by trench in the following.

#### 4: Discussion

The environmental samples from Manor Farm, Bessacarr produced generally quite low amounts of carbonised plant remains, consisting mostly of wood charcoal, with very scarce finds of cereal grain, weed seeds and rhizomes. A large concentration of wood charcoal in Trench 76, gully sample (76012) is most likely a dumped deposit of hearth fuel waste, and represented the largest amount of charcoal recovered from the whole site. Occasionally a few of the pit and other contexts in trenches 26 and 59 also produced concentrations of wood charcoal, but in generally lower amounts. In Trench 26, pit contexts (26006), (26007), and (26018), and ditch contexts (26022) and (26048), may contain waste fuel remains from domestic or industrial hearths. Similarly contexts

(59020), (59022) and (59025) from trench 59 are worth noting as the charcoal recorded here may represent waste from fire-pits or hearths used in industrial activity.

#### Trench 1

A single sample from possible palaeo-channel context (1002) was sterile of charred pant material. It did however produce a large chunk of potentially waterlogged wood, but very little evidence can be attained from this fragment.

#### Trench 6

Sample 38 (6002) taken from a linear feature, produced a small amount of quite modern looking wood, which may well be intrusive in the deposit. It was sterile of charred remains.

#### Trench 8

Three samples from Trench 8 were sterile of carbonised remains. Modern straw was present in (8002), whilst (8004) and (8008) contained slivers of wood and other material resembling modern leaf litter. These features may hold a degree of waterlogging, but the material suggests mixing with probably fairly modern remains.

#### Trench 9

A single sample from Trench 9 was sterile of charred material, but indicating potential waterlogging of the ditch feature (9002) by the presence of a small amount of wood.

#### Trench 10

Two samples were taken from Trench 10, with linear terminal (10002) containing a single fragment of *Quercus* (oak) charcoal and abundant modern contamination in the form of straw. Pebble area (10004) contained one fragment of highly degraded and glassy charcoal, which was not identifiable. These remains suggested some burning occurring nearby, but with a lot of modern contamination present, the material should be considered trace evidence only.

#### Trench 11

Sample 13 (11002) was sterile of carbonised remains. Occasional slivers of wood indicated a degree of waterlogged preservation in this pit fill.

#### Trench 13

Three samples from Trench 13 suggested waterlogged or wet pit fills, with (13004) and (13012) containing small amounts of wood. Context (13004) produced a single small fragment of *Betula* (birch) charcoal, a trace indication of burning activity. Pit (13009) was sterile of any plant material.

#### Trench 14

Ditch fill (14003) was completely barren of any environmental material.

#### Trench 18

Ditch fill (18005) contained a few modern looking twigs, whilst pit (18007) was completely sterile.

#### Trench 19

Both samples from this trench, contexts (19002) and (19004) were sterile of all remains.

#### Trench 21

Linear feature (21002) produced a single *Hordeum vulgare* sl. (barley) cereal grain, together with some modern contamination. This grain provides tentative indication of cereal related activity occurring nearby, but is very trace evidence.

#### Trench 23

Primary ditch fill (23009) was sterile of charred material, containing a few slivers of modern or waterlogged wood.

#### Trench 24

Ditch feature (24004) produced a few small fragments of wood suggesting possible waterlogging, although nothing else was recovered. Pit-like feature (24009) contained a single fragment of *Corylus* (hazel) charcoal, perhaps indicative of fire-waste in the pit, or intrusive material. Context (24011) interpreted as a tree-bowl produced one fragment of *Betula* (birch), which given the context is probably intrusive, and sampling of this 'feature' unnecessary.

#### Trench 26

Sixteen samples were taken from Trench 26, with an additional slag sample examined for charcoal content.

Samples from contexts (26029), (26032), (26035), (26037), (26047) and (26050) were sterile of charred remains, or contained only small trace quantities.

Small amounts of wood charcoal, including oak, birch and hazel, were recovered from (26002), (26004), (26007), (26022), (26025), (26039) and (26048), probably representing trace and residual scatters of burnt material from activities occurring in the vicinity of these features, with perhaps some deliberate dumping of fuel waste in Roman ditch 26048.

More significant deposits of wood charcoal were recovered from the various pit features in Trench 26, indicating these may have been in use as industrial fire-pits or used to dump burnt waste. Upper pit fill (26006) produced a concentration of oak charcoal together with slag remains, whilst pit (26018) also contained exclusively oak charcoal although recovered in smaller amounts. Mixed backfill deposit (26027) produced large 'chunks' of oak from 2-3cm in size, and may represent the raking over or re-distribution of waste fuel material.

One sample of slag from (26006) was inspected for adherent wood charcoal, and it was possible to remove four small fragments without too much destruction to the pieces. Three of these were identified as oak, whilst a fourth was found to be birch. It may be

possible to radiocarbon date the birch charcoal, although the fragment recovered was extremely small.

#### Trench 34

Four samples from this trench produced scarce charred material, with gully (34006) and ditch (34008) barren of any environmental material. Gully (34002) contained a heavily degraded glassy indeterminate charcoal fragment, together with one indeterminate cereal grain, suggestive of trace burning in the area. Similarly (34004) produced a single rhizome, probably a remnant of burning peat.

#### Trench 37

Ditch re-cut (37005) produced rooty fresh looking leaf litter and is most likely contaminated by modern material.

#### Trench 40

Both ditch fills (40004) and (40008) were sterile of any environmental material, charred or otherwise preserved.

#### Trench 59

Fifteen samples were taken from Trench 59, with two additional samples of slag also examined. Samples from contexts (59002), (59006), (59010), (59012), (59014), (59017), (59019) and (59028) were sterile of charred material, producing mostly modern detritus and other contamination.

Small amounts of oak charcoal were recorded in (59008), amongst slag in (59009) and in burnt deposits (59015), (59016) and (59025), possibly representing dumped waste material from industrial hearths or burning activity occurring nearby. Larger and probably more significant deposits of oak charcoal were recorded from possible industrial waste pit fill (59020) and from basal pit deposit (59022), with these features perhaps used as fire-pits or for dumping of large amounts of waste from industrial activity.

Interestingly the charcoal found in Trench 59 is exclusively oak, generally the most preferred fuel type for use in industrial activity due to its long lasting and high heat properties.

Two samples of slag were examined from Trench 59 for the presence of identifiable wood charcoal. The burnt material adherent to slag in (59009) was not identifiable, and contained no 'fragments' as such, instead the blackened areas were decayed staining and smears from fuel ash and charcoal, with nothing large enough to remove. One piece of slag from (59016) contained three 'shadows' of charcoal embedded in its surface, these most closely resembled oak but could not be removed without complete destruction of the fragments and the slag.

#### Trench 63

Three samples from Trench 63 were examined. Land drain feature (63012) was sterile, whilst ditch fill (63006) produced some fairly fresh-looking wood. Upper ditch fill (63005) contained two fragments of *Corylus* (hazel) charcoal, perhaps waste from burning activity close to the ditch or a dumped deposit of burnt material.

#### Trench 64

Upper ditch (64002) contained no identifiable charred material, whilst primary ditch fill (64003) produced one fragment of *Corylus* (hazel) charcoal, probably representing a trace deposit of waste from burning.

#### Trench 66

A single sample from Trench 66, ditch fill (66002) contained a small but interesting deposit of burnt vesicular, probably industrial waste, residue, indicating a dumping of waste fuel material from industrial activity in the area.

#### Trench 67

Ditch or drainage feature (67009) produced some fresh modern looking wood fragments, and is possibly a fairly modern feature on the landscape. No charred material was present.

#### Trench 68

Ditch sample (68002) contained a single large fragment of wood resembling a fragment of fence-post or similar and is probably modern? No charred material was present.

#### Trench 70

Two primary ditch fill samples (70009) and (70015) produced scarce charred material. Ditch (70009) contained non-carbonised material resembling leaf litter, which may suggest waterlogging. Ditch (70015) produced the most interesting carbonised remain of the site, with a single *Avena sativa* (cultivated / common oat) grain preserved within its chaff. A very unusual and rare find given the generally poor carbonised preservation across the rest of the site, this provides trace evidence for processing of cereal grain occurring in the vicinity.

#### Trench 74

Linear feature (74003) was sterile of all environmental material.

#### Trench 75

Five samples from Trench 75 contained scarce remains. Ditch (75005) was sterile of charred material, with only a few fragments of 'fresh' wood amongst modern detritus. Gully (75013) was sterile apart from a single piece of industrial hammerscale. Gully (75008) contained two fragments of *Betula* (birch) charcoal, whilst ditch (75011) contained *Quercus* (oak) charcoal, probably remnant fuel from nearby burning. Feature (75006) was sterile.

#### Trench 76

Three samples from Trench 76 produced nicely preserved concentrations of wood charcoal whilst a further sample proved sterile. Ditch (76008) and gully fills (76010) and (76012) all contained *Betula* (birch) charcoal, with (76012) in particular producing a significant quantity of dumped fuel waste material. The birch in (76012) was found in

large 'chunks' typically 5-10cm square, and this may have had a fuel role in any metalworking activity in the area. Ditch fill (76009) was sterile of charred remains.

#### Trench 77

Six samples were examined from Trench 77. Ditch or modern feature (77015) contained modern material plus a single piece of birch charcoal, which may have been intrusive. Similarly with the birch recovered from post-Med / modern pit (77018). Gully features (77023) and (77040) 'trapped' some residual charred material in their fills, with a single distorted *Triticum spelta* (spelt wheat) grain in (77023) together with a few pieces of wood charcoal, including oak, hazel and birch. Ditch sample (77010) produced some modern straw and turf-like concreted material, probably all modern in origin.

#### Trench 78

One sample from ditch fill (78007) produced two pieces of oak charcoal, probably dumped or intrusive fuel waste from nearby burning.

#### Trench 81

Trench 81 produced some small concentrations of oak charcoal located in three samples. A fourth sample (81003) produced lots of modern material as well as poorly preserved indeterminate charcoal, and can probably be discounted as too highly contaminated. Gully feature (81010), and sand deposit (81013) produced small amounts of oak charcoal, whilst ditch (81005) had oak and also hazel and birch charcoal. Some of this material, particularly in ditch fill (81005) may be dumped fuel waste, whilst the other samples probably contain trace or intrusive material given the contexts.

#### 5: Conclusion

The environmental samples from Manor Farm, Bessacarr produced a narrow range of carbonised plant material, consisting mainly of wood charcoal and concentrated in three of the excavation trenches, 26, 59 and 76. Overall, the recovery of carbonised material was quite poor, with a number of samples barren of charred material, and preservation

(with a few notable exceptions) was overall also poor for both charcoal and other charred macrofossils.

Carbonised cereal grain was extremely scarce and identified as barley, wheat and oat, often only found as single specimens. The grain is probably mostly residual and not particularly significant to the activities occurring in the vicinity, with no concentrations of cereal produce recorded in any of the deposits.

Wood charcoal was identified as mainly oak in Trenches 26 and 59 with lesser amounts of hazel and birch present in Trench 26. Wood charcoal identified from Trench 59 was exclusively oak, which strongly indicated an industrial fuel use for this charcoal. Birch charcoal was recorded in significant amounts from Trench 76, and could have been used as industrial or other hearth fuel.

It may be possible to obtain radiocarbon dates from some of the birch and hazel charcoal in Trench 26, the birch from Trench 76, and perhaps also from the small fragment of birch recovered from the slag from (26006). No dates can be done from Trench 59 as it is all oak. Caution should be advised when attempting to date material from the remaining trenches, due to the presence of modern contamination and the potential post-Medieval nature of some of the features.

#### References

French, D. H. 1971 An Experiment in Water Sieving. Anatolian Studies 21 59-64.

Schweingruber, F. H. 1990 *Anatomy of European Woods*. Paul Haupt Publishers Berne and Stuttgart.

Stace, C. 1997 New Flora of the British Isles. 2<sup>nd</sup> Edition Cambridge University Press.

Zohary, D. and Hopf, M. 2000 *Domestication of Plants in the Old World*. 3<sup>rd</sup> Edition Oxford University Press.

Table 1: Manor Farm, Bessacarr (MAP05-08-10): Carbonised Plants, Charcoal and Other Remains from Trenches 1, 6, 8, 9, 10, 11, 13, 14, 18, 19, 21, 23, 24:

Manor Farm, Bessacarr, South Yorkshire	Sample	11	38	55	56	93	17	5
MAP 05-08-10	Context	1002	6002	8002	8004	8008	9002	10002
	Trench	Tr.1	Tr.6	Tr.8	Tr.8	Tr.8	Tr.9	Tr.10
	Feature Type	pal-chan	linear	sand	gully	terminal	ditch	linear
	Total CV	0		0	0	0	0	5ml
	Modern	0	<2.5ml	2.5ml	10ml	10ml	<2.5ml	20ml
Carbonised Cereal Grain and Chaff	Common Name							
Avena sativa grain in floret	common / cultivated oat in chaff							
Triticum spelta	spelt wheat							
Hordeum vulgare sl.	barley							
Indeterminate cereal grain (+embryo)								
Charcoal								
Quercus	oak							1 (0.52g)
Corylus	hazel							
Betula	birch							
Indeterminate								
Carbonised Wild Resources								
Rhizomes								
Carbonised Weeds								
Galium aparine	cleavers							
Other Remains								
Waterlogged or Modern wood (dried)		1	10+		20+	10+	10+	
Waterlogged seeds (dried)					20+			
Coal								
Burnt vesicular industrial residue								
Industrial hammerscale								
Modern Contamination								
Modern (non-carbonised) seeds				5+				
Earthworm egg capsules								
Modern straw				10+				30+
Modern fly pupae								

Table 1: Manor Farm, Bessacarr (MAP05-08-10): Carbonised Plants, Charcoal and Other Remains from Trenches 1, 6, 8, 9, 10, 11, 13, 14, 18, 19, 21, 23, 24:

13			30	94	12	15			34				
11002													
		Tr.13			Tr.18	Tr.18			Tr.21		Tr.24		Tr.24
		pit		ditch	ditch	pit	topsoil	feature	linear		ditch		tree bowl
										_	_		2.5ml
<2.5ml	<2.5ml	2.5ml	<2.5ml	15ml	10ml	5ml	20ml	<2.5ml	5ml	5ml	20ml	5ml	5ml
									1				
												. (2.22.)	
	4 ( 0 0 4 )											1 (0.02g)	4 (0.00.)
	1 (<0.01g)												1 (0.23g)
5.4	10+		5.4		10+					5.4	3UT		
J1	101				101					31	301		
			10.					10+					
								10.					
													2
		2			1		6		3				_
		_											
	11002 Tr.11 pit 0	11002 13004 Tr.11 Tr.13 pit pit 0 <2.5ml <2.5ml  1 (<0.01g)	11002 13004 13009 Tr.11 Tr.13 Tr.13 pit pit pit 0 <2.5ml 0 <2.5ml 2.5ml 2.5ml 1 (<0.01g)	11002 13004 13009 13012 Tr.11 Tr.13 Tr.13 Tr.13 pit pit pit pit pit 0 <2.5ml 0 0 <2.5ml <2.5ml <2.5ml <2.5ml  1 (<0.01g)  5+ 10+ 5+ 10+	11002 13004 13009 13012 14003 Tr.11 Tr.13 Tr.13 Tr.13 Tr.14 pit pit pit pit pit ditch 0 <2.5ml	11002	11002         13004         13009         13012         14003         18005         18007           Tr.11         Tr.13         Tr.13         Tr.13         Tr.14         Tr.18         Tr.18           pit         pit         pit         ditch         ditch         pit           0 < 2.5ml	11002         13004         13009         13012         14003         18005         18007         19002           Tr.11         Tr.13         Tr.13         Tr.14         Tr.18         Tr.18         Tr.19           pit         pit         pit         ditch         ditch         pit         topsoil           0         <2.5ml	11002         13004         13009         13012         14003         18005         18007         19002         19004           Tr.11         Tr.13         Tr.13         Tr.13         Tr.14         Tr.18         Tr.18         Tr.19         Tr.	11002	11002	11002	11002

YORK ARCHAEOLOGICAL TRUST CONSERVA	Sheet 1	Of 1							
Site name: Manor Farm, Bessacarr	Site code:								
Material: Copper alloy	X-ray no: X7662, X7663								
Small find no: 1	Context number: 68003								
Simple name: jetton									
Work required: X-ray and investigate to aid identific	Work required: X-ray and investigate to aid identification								
Conservator: K. Kenward Conservation report number:									

**Condition:** The surface of the jetton is covered by gritty soil, roots and green corrosion products, although this crust has been partly rubbed off from one side. Beneath the patches of gritty soil is a hard black corrosion product and beneath this, and under the green powdery corrosion product which is elsewhere, is red copper cuprite. The coin is very thin and worn with no surface detail apparent on visual examination. However the X-ray shows that although the core is very thin there is still some detail present.





**Treatment:** The overlying soil and corrosion products were removed mechanically under magnification. Although the coin is in a stable condition the underlying surface is quite powdery in places. It was therefore decided to surface coat the coin with a layer of Incralac, diluted in toluene with added Santocel fumed silica, as a matting agent.

During cleaning some surface detail was revealed. The detail is very worn and is damaged and missing in places. It is best seen in a strongly raking light. On one side there appears to be a shield within a decorated circle with fleur-de-lis on the shield. The other side has a central cross with either a cross or a fleur-de-lis at the terminals of the arms. The cross is within a trefoil which has triangular points at its junctions with a circle either side of the point.



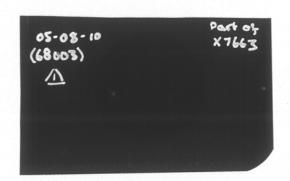


**Recommendation:** Objects treated with Incralac (which contains some Benzotriazole, BTA) should be handled with gloves as some limited studies have shown BTA to be a potential carcinogen

The jetton is largely illegible 'Rose Orb' Jetton, Nurenberg, mid-late 16th century. Diameter 31mm. Thickness 0.61mm.

Ext. rep 1			Ext. rep 2	
Date sent			Date sent	
To whom			To whom	
Results attached Care Guide:	RH:35%	Max	Results attached imum Lux:300	Temperature: Stable





# **APPENDIX 7**

# The Iron Age and Romano British Pottery

# Kelly Hunter and P A Ware

A total of 278 sherds of Iron Age and Romano British pottery were collected from 25 contexts with over 90% of the pottery coming from two trenches, Trench 26 and Trench 59, which included the two sherds of Iron Age pottery.

Quantification is by sherd count and weight, estimated vessel equivalents (Eves – using rim % values) and minimum vessel count.

Most of the sherds were abraded having lost their original surface and was most likely due to the soil conditions and possible deposition of the assemblage in ditches. However, some of the isolated sherds were in very good condition and included large jars and bowls in several fabrics of the South Yorkshire Kilns (Context 11004 and 77039).

2 body sherds of Iron Age Pottery (context 26021) light grey exterior with dark grey laminate interior buff core, relatively soft fabric with fine quartzs and with rare limestone? Inclusions. Vesicles on both surfaces not abundant.



Only four fabric types were represented in the Romano British pottery; South Yorkshire Kilns grey wares and oxidized wares, Rossington Bridge Burnished Ware fabric 1 and Rossington Bridge Mortaria fabric MO2.

The pottery can be dated to the late 1<sup>st</sup> to 2<sup>nd</sup> centuries.

The majority of sherds come from different vessels and are small undiagnostic body sherds. The exceptions being context 11002 and context 59016.

Context 11002: contained a near complete bead rimmed dish with a dark grey burnished surface and lattice decoration with a light grey fabric core with red to reddish brown beneath the burnished surface.



Contest 59016: consisted of 19 sherds representing 7 vessels including three joining rim sherds of a Rossington Bridge fabric MO2 with cream slip mortaria with a largely illegible very abraded stamp (possible Sarius ??) and 4 sherds of an oxidised carinated bowl OAB1 and rim sherds of Rossington grey ware fabric GRC6.







All sherds from this deposit are heavily iron stained, it is highly likely the staining is due to being deposited within the slag deposits rather than occurring from some industrial process as many of the sherds have no evidence of heating through secondary burning.

Context 26032 contained the single largest deposit of 140 pottery sherds over 50% of the entire assemblage. Only 9 rims were represented and all were greywares, predominantly Rossington Bridge fabric GRC6 – hard gritty fabric.

There are no finewares represented in the assemblage and jars and bowls represent the majority of forms. The assemblage can be dated to the late first and second centuries and does not appear to represent a domestic assemblage. There does not appear to be any similar parallels in the South Yorkshire Region.

		Prehistoric	Roiman Coarse	wares					1	
Context	Total	Iron Age	Grey ware	Oxidised ware	ROS GRC6	ROS BB1	Mortaria	 Description	Weight	Date
10002	4	IIOII Age	2 body sherds	Oxidised wate	100 ONCO	INOO DD I	Wortana	Abraded Greyware	0.008kg	2nd century
10002	7		1 rim sherd,					Bowl rim, in hard grey gritty fabric	0.000kg	Zna centary
			bowl					bowi filiti, ili filata grey gritty labilic		
			1 rim sherd,					Dark grey gritty rim beaker		
			beaker					Dark grey gritty first beaker		
			beaker							
11002	17					6 rim sherds 11 body sherds		Bead rimmed dish - light grey fabric, core with red and reddish brown toi dark grey burnished surface with lattice decoration	0.390kg	2nd century
						i i body sileids		tor dark grey burnished surface with lattice decoration		
11004	3				2 body sherds 1 rim sherd			Lipped bowl in light grey hard fabric	0.274kg	2nd century
18001	1		1 body sherd		T TITT OFFICE			<b>–</b>	0.002kg	2nd century
26006	1		1 body onord		1 body sherd			—— Dark gritty fabric	0.014kg	2nd century
26021	2	2 body sherds			1 body onlord			Light greyexterior with dark grey laminate interior buff core	0.042kg	Iron Age
26032	140	2 body sherds			125 body sherds			4 jar rims in gritty light grey fabric	0.816kg	2nd century
20002	140				9 rim sherds			1 rim lid seated jar in hard grey fabric	0.0 Tokg	Zna ocmary
					5 base sherds			1 handle in hard gritty fabric		
					1 handle fragment			Thanale in hard gritty labilo		
26033	48		35 body sherds		Thanaic iraginent			All sandy fabric, all iron stained	0.528kg	2nd century
2000	.0		9 rim sherds					8 jar rim sherds from 8 different pots	0.020.19	ziia comary
			4 base sherds					1 bowl rim sherds		
			1 5000 0110100					4 base sherds, all same vessel		
26034	6		4 body sherds					1 rim sherd, greyware jar in gritty light grey fabric		2nd century
2000 :			1 rim sherd					Thin onoru, groymaro jar in gridy light groy labilo		ziia comary
			1 base sherd							
26046	1		. 2000 0		1 body sherd			Dark gritty fabric	0.024kg	2nd century
34002	4		2 body sherds						0.012kg	2nd century
			1 rim sherd						J	1
			1 base sherd							
40001	2		2 body sherds						0.028kg	2nd century
59008	1		,		1 body sherd				0.010kg	2nd century
59009	2				2 body sherds				0.135kg	2nd century
59016	19			4 rim sherds	2 rim sherds		3 rim sherds	7 vessels represented	1.090kg	1st-early
					10 body sherds			3 joining rim sherds from a Mortaria MO2 vessel in Rossington Bridge Fabric 1, cream slip. Illedible, very abraded stamp (Sarius?) 4 rim sherds from an Oxidised Ware carinated bowl (military: OAB1) 2 joining rim sherds greyware jar		2nd century
68001	2		2 body sherds						0.012kg	2nd century
68003	1		1 rim sherd						0.020kg	2nd century
70015	1		1 body sherd						0.006kg	2nd century
74003	1		1 body sherd					<b>-</b>	0.007kg	2nd century
75008	1		1 body sherd					Greyware with large quartz grit	0.006kg	2nd century
76012	1		1 body sherd						0.010kg	2nd century
77005	2		1 rim sherd						0.071kg	2nd century
			1 body sherd						0.005	
77035	1		1 base sherd					<b>_l</b>	0.036kg	2nd century
77039	2		1 body sherd					Large jar	0.126kg	2nd century
			1 rim sherd							
TOTAL	263	3	80	<u> </u>	4 159	9 17	1	3		

## **APPENDIX 8**

# **Medieval and Post-medieval Pottery Assessment**

#### Methods

The assemblage consists of 68 sherds, all of which were examined under a hand lens and compared to MAP's type collection of medieval and post-medieval pottery.

#### **Fabrics**

## Medieval

Seven fabrics are represented: Hallgate A, Hallgate B, Hallgate C, Shelly ware, Humber ware, Staxton Ware, Purple-glazed ware and Cologne/Freschen stoneware.

There are 2 sherds of Hallgate A: a glazed rod handle (76010) and two glazed body sherd (77005 and 81002) all from glazed jugs and dating to the 12/13<sup>th</sup> century. There is a Hallgate B strap handle (71012) and two body sherds from glazed jugs, one with applied strip decoration (76006). There is also Hallgate B cooking pot rim from 76002. The three Hallgate C sherds (76009) will be early 12<sup>th</sup> century in date; one of these sherds is an apparent waster (although still usable), over-fired and with a crack, from a jug with splashed glaze and decoration in the form of an applied strip.

The Shelly ware sherd (76009) is from a cooking pot with a kicked-up base, and is probably of 12<sup>th</sup> century date.

The late medieval material consists of Humber ware (77015), Purple-glazed ware (77015) and Cologne/Freschen stoneware (77033). One of the Humber ware sherds is from a bung-hole cistern. The Cologne/Freschen stoneware sherd is from the rim of drinking jug or mug and has a ring-handle.

# Post-medieval

The 17<sup>th</sup> / 18<sup>th</sup> century is represented by two sherds of Staffordshire slipware (37002 and 4008) and post-medieval red ware (40008).

Late 18<sup>th</sup> century, 19<sup>th</sup> century and later material is represented by Pearl ware, Black ware, Nottingham-type stoneware, porcelain, blue and white transferwares and salt-glazed stoneware.

#### **Conclusions**

This is a small assemblage, of no statistical value, but useful for dating purposes. The picture gained from the medieval material is an assemblage of essentially local or regional origins, apart from the late medieval stoneware import. The generally abraded state of the medieval sherds suggests that it could have been deposited at the site during agricultural manuring. The exceptions are the Hallgate C sherd and perhaps the Rhenish stoneware rim whose size hints at medieval occupation and/or general rubbish disposal close to the site.

#### Recommendations

The pottery should be retained as it is a scientifically recovered that is part of a potentially larger assemblage from the site as a whole.

# **APPENDIX 9**

# Manor Farm, Bessacarr

# Assessment of Ceramic Building Materials Assemblage Anne Finney

## Introduction

A small sample of material was submitted for investigation from 20 contexts. (1002, 18001, 27006, 37002, 37007, 38005, 38006, 40004, 40006, 57006, 63002, 64004, 67005, 68001, 70015, 76006, 76017, 77005, 77007 & 77031). This material comprised of fragmentary bricks and tiles and land drains (Tables 1, 2 & 4).

#### Comments

**Brick:** The bricks were predominantly hand made with only a single example of machine manufacture from Context 38005. All, except one piece from Context 77031, were fragmentary and a high proportion were un-diagnostic. Fabric was in the main medium to coarse in manufacture and the bricks had generally been produced using sanded moulds (37002 & 77031). Vegetation impressions on the base of the bricks (context 77031) indicated that the moulds had been placed directly on the ground during the manufacturing process suggesting a pre 19th century date. Arises were, in the main, poor to fair and the presence of a pale yellow slip on the bricks (57006 & 77031) indicated over firing and an attempt to hide the fact. Two examples from 27006 and 77031 had thumb impressions.

The brick assemblage recovered from the archaeological evaluation of Manor Farm, Bessacarr covers a period from possibly the 17<sup>th</sup> through to the late 19th century.

**Pantile**: There were two fabrics present in this sample. There was a fine pink/red fabric and a fine orange fabric. Pan tile began to be used in Britain during the 17<sup>th</sup> century and came into common usage by the 18<sup>th</sup> century. The examples in the sample from Contexts 38005 and 77005 seem to show evidence of mechanisation, in both the method of manufacture and refining of the clay, so are likely to be 19<sup>th</sup> century onwards in date.

**Land Drains**: This assemblage consisted of 38 fragments and 6 whole examples. The fabric was predominantly fine and the recovered material was well made, in direct contrast to the standard of the brick manufacture.

Four distinct forms were noted, which included pipe tiles and horseshoe tiles.

The pipe tile collection can be subdivided into three distinct forms based on their quality of manufacture and size. The earliest pipe tile was recovered from Trench 37, context 37007 (Pls. 1 & 2), with examples from Trench 38 (38005) and Trench 64 (64004) being slightly later in date (Pls. 3 & 4 and 5 &

6 respectively). These examples exhibited slightly 'squashed' internal diameter. This is a consequence of the manufacturing method. The second example from Trench 38 (38006.1) although smaller in size has the quality of manufacture and evidence for the use of a wire cutter, which marks it as the latest pipe tile in the assemblage (Pls. 7 & 8).

The horseshoe examples came from Trench 40 (40006: Pls. 9 & 10) and Trench 76 (76016: Pls. 11 & 12). Horseshoe pipes were used in conjunction with a tile and such examples were recovered from Trench 37 (37007) and Trench 63 (63002).

The recovered pipe tiles date from the 17<sup>th</sup> to the mid 18<sup>th</sup> centuries with the horseshoe examples from the late 18<sup>th</sup> century onwards.

#### Recommendations

No further work is required on brick and tile assemblage. After matching with the MAP ceramic building materials fabric collection, the assemblage could be discarded.

However, it has been requested that the complete sections of land drains are retained and deposited with Doncaster Museum

# **Bibliography**

Bourry E & Searle A	1911	A Treatise On Ceramic Industries : A Complete Manual For Pottery, Tile, And Brick Manufacturers. Scott, Greenwood & Son, London
Davis C T	1884	A Practical Treatise On the Manufacture of Bricks Tiles Terracotta Etc. Henry Carey Baird & Co. London

TABLE 1
Brick Catalogue

Context	Quantity	Weight grams	Item	Size inches	<b>Colour</b> munsell	Fabric	Inclusions	Comments	Date
27006	1	285	1	4 x 21/2 x 13/8	10R 5/6	М	black lithic	Hand made, poor worn arrises, thumb impression	?
34004	1	1.5	1			M - C	white lithic	Hand made, non diagnostic fragment	?
37002	2	380	1	2 x 2 x <b>2</b>	2.5YR 6/6	M - C	black lithic	Hand made, sand mould, laminated clay, dissolved grits	? 17th
			2		2.5YR 6/6	M - C	white lithic	Hand made, non diagnostic fragment, laminated clay, inclusions up to 10mm	
38005	1	302	1	4 x 23/4 x <b>11/2</b>	10R 4/8	М	black and white lithics	Machine made, heavy, sharp arris	late 19th+
57006	4	2584	1	51/2 x 33/4 x <b>23/4</b>	2.5YR 4/8	С	black lithics	Hand made, under fired, mould impressions, slip	early 19th
			2	3 x <b>41/4</b> x <b>23/4</b>	2.5YR 4/8	С	pebbles	Hand made, fair arrises, slip, laminated clay, ?sooting	
			3	41/4 x 21/2 x <b>21/2</b>	2.5YR 4/8	M - C	none	Hand made, laminated clay, fair and worn arisses, slip	
			4	41/2 x 3 x 11/2	2.5YR 5/6 - 10R 4/1	С	voids	Hand made, ususual piece, partial vitrification - ? Core of a bloater	
67005	1	280	1		10R 5/6	С	white lithic	Hand made, non diagnostic fragment	?
68001	2	178	1		10R 4/6	С	none	Hand made, non diagnostic fragment, poorly fired, laminated clay, fair arris	?
			2		10R 4/6	С	none	Hand made, non diagnostic fragment, poorly fired, laminated clay	
70015	2	60	1		2.5YR 5/6	М	none	Hand made, non diagnostic fragment	?
			2		10R 5/6	M	none	Hand made, non diagnostic fragment	?
77007	1	184	1	21/2 x 21/4 x 13/4	2.5YR 5/6	F - M	voids	Hand made, arris poor, vegetation impressions	Pre 19th
77031	18	2550	1	91/4 x 43/4 x 21/2	2.5YR 5/8	M - C	black lithic	Hand made, large inclusions, bowed/warped, poor arrises, uneven thickness, sand moulded, stock board impressions, Hand made, sand moulded, porr arrises,	early/mid 18th
			2	41/2 x <b>43/8</b> x <b>21/2</b>	2.5YR 5/6	M - C	none	mould impressions, laminated clay, differential firing	
			3	3 x 23/4 x 21/8	2.5YR 5/8	M - C	none	Hand made, over fired, sharp arisses, thumb impression	
			4	41/8 x 3 x <b>21/4</b>	2.5YR 5/6	С	none	Hand made, differential firing, cracked, uneven arris, vegetation impessions, slip present	
			5	21/2 x 21/4 x <b>21/2</b>	10R 5/6	M - C	white lithic	Hand made, laminated clay, neavy, tair arrises, vegetation impressions, thumb	
			6	33/4 x 2 x 2	10R 4/1 - 5/6	М	white lithic	Hand made, laminated clay, heavy, fair arrises,	
			7 - 18		10R 5/6	M - C	white lithic	Hand made, non diagnostic fragments	

TABLE 2 Tile Catalogue

Context	Quantity	<b>Weight It</b> grams	em	Size inches	Colour munsell	Fabric	Inclusions	Comments	Date
38005	1	192	1	53/4 x 4 x <b>1/2</b>	10R 5/6	F		Pantile. Hand made. Laminated clay, poor arris	19th
77005	1	202	1	41/2 x 31/4 x <b>3/4</b>	2.5YR 6/6	F - M	white lithic	Pantile fragment. 1 side rough, 1 side smooth, laminated clay, 1 edge, poor arris	19th
77031	1	16	1		2.5YR 5/6	F	none	Fragment, undiagnostic	?

# TABLE 3

# Daub Catalogue

Context	Quantity	Weight Ite	em	Size	Colour	Fabric	Inclusions	Comments	Date
26006	1	14	1	11/2 x 3/4 x 3/4	2.5YR 6/4	F - M	none	Differential firing	?
26032	1	2.45	1	3/4 x 3/4 x 3/8	2.5YR 6/6	F	none	Fragment	?
59016	1	210	1	31/2 x 2 x 2	5YR 6/4	M - C	pebble	Fired clay, laminated, large pebble grit (15mm) 1 smooth face, 1 possible wattle impression	?

# **TABLE 4**

Land Drain	n Catalog	jue							
1002	6	274	1 - 4 5 - 6		2.5YR 5/8	F	none	4 base fragments 2 wall fragments	?18th
18001	1	66	1		2.5YR 5/6	F	none	1 wall/base fragment	18th
37005	1	1970	1	123/4 × 31/2 × 31/4	5YR 6/6	F	none	Complete. Internal diameter 21/8 - 21/4 - not truely circular, 1/2 inch circular indent at one end on top surface of pipe. Thickness 5/8	/ 17th
	1	818	1	6 × 53/4 × 3/4	5YR 5/8	М	mica, white lithic	Land drain tile.	late 18th/19th
38006	2	1935 1320	1	121/2 x 31/2 x 3	2.5YR 5/6 2.5YR 5/6	F	none	Complete. Internal diameter 21/4, thickness 5/8 Fragment. Internal diameter 21/4, thickness 1/2	mid 18th
		1320	2	101/2 x <b>33/4</b> x 31/2	2.51R 5/6	Г	none	rragment. Internal diameter 21/4, thickness 1/2	18th
40004	13	1455	1 - 7		2.5YR 5/6	F	none		
			8 - 13		2.5YR 5/6	F	none	Pipe tile. 7 base fragments, no complete widths  Pipe tile. 6 wall/arch fragments, no complete circui	?18th late 18th/19th t
40006	2	1731	1 - 2	131/4 x 43/8 x 31/2	2.5YR 6/6	F - M	black lithic	Horseshoe. Internal width 33/4, internal height 3, thickness 1/2	late 18th/19th

57006	7	478	1 - 5		2.5YR 5/8	F	none	Pipe tile. 5 base fragments	18th
			6 - 7		2.5YR 5/8	F	none	Pipe tile. 2 wall fragments	
63002	8	2191	1	81/2 x 4 x <b>1</b>	2.5YR 5/6	F - M	black lithic	Land drain tile . Hand made. 1 side, 1 corner, differential firing, bow mark, sand mould, vegetation impressions, laminated clay, poor arrises	late 18th/19th
			2	5 x 31/4 x <b>1</b>	2.5YR 5/6	F - M	lithic	Land drain tile .Hand made. 1 corner, differential firing, bow mark, sand mould, vegetation impressions, laminated clay, poor arrises, horizontal stacking mark	
			3	41/2 x 53/4 x <b>1</b>	2.5YR 5/6	F - M	black lithic	Land drain tile .Hand made, 1 corner, poor arrises, differnetial firing, samd moulded, bow mark, vegetation impressions	
			4	41/2 x 31/2 x <b>1</b>	2.5YR 5/6	F - M	black lithic	Land drain tile .Hand made, 1 side, poor arrises, differnetial firing, samd moulded, bow mark, vegetation impressions	
			5	51/2 x 2 x <b>1</b>	2.5YR 5/6	F - M	black lithic	Land drain tile .Hand made, sand moulded, vegetation impressons, worn arris	
			6	21/2 x 21/2 x <b>1</b>	2.5YR 5/6	F - M	black lithic	Land drain tile .Hand made, 1 corner, poor arrises, laminated clay	
			7	3 x 21/2 x <b>1</b>	2.5YR 5/6	F - M	black lithic	Land drain tile .Hand made, 1 corner, poor arrises, laminated clay	
			8	3 x 11/2 x <b>1</b>	2.5YR 5/6	F - M	black lithic	Land drain tile .Hand made, poor firing, sand moulded, laminated clay	
64004	1	1580	1	121/2 x 31/2 x 31/2	5YR 6/6	F	none	Pipe tile . Internal diameter 21/4, thickness 1/2. Example bowed	mid 18th
76006	5	1225	1	4 x 4 x <b>1</b>	2.5YR 4/8	F - M	white & black lithic	Hand made. Land drain tile.Cracked, thumb print, poor arris, slop moulded	late 18th/19th
			2 - 5		2.5YR 5/6	F	none	Horseshoe fragments	
76016	1	1725	1	131/4 × 4 × 33/4	2.5YR 5/8	F - M	none	Horseshoe. Internal width 3, internal height 31/4, thickness 1/2. Example in two pieces.	late 18th/19th
77031	7	389	1 - 2 3 - 5 6 - 7		2.5YR 5/6 2.5YR 5/6 2.5YR 5/6	F F F	none none none	Pipe tile. 2 wall fragments Pipe tile. 3 base fragment Pipe tile. 2 fragments	18th +



Plate 1. Context 37007. Pipe Tile. Longitudinal View.



Plate 2. Context 37007. Pipe Tile. Cross Section.



Plate 3. Context 38005.2. Pipe Tile. Longitudinal View



Plate 4. Context 38005.2. Pipe Tile. Cross Section



Plate 7. Context 38006.1. Longitudinal View.



Plate 8. Context 38006.1. Cross Section.



Plate 5. Context 64004. Pipe Tile. Longitudinal View.



Plate 6. Context 64004. Pipe Tile. Cross Section.



Plate 9. Context 40006. Horseshoe. Longitudinal View.



Plate 10. Context 40006. Horseshoe. Cross Section.



Plate 11. Context 76016. Horseshoe. Longitudinal View



Plate 12. Context 76016. Horseshoe. Cross Section

## **APPENDIX 10**

# **Animal bones** by Jane Richardson

In total, seventeen animal bone fragments were recovered during the evaluation. The data are tabulated by context and by period (Table 1) based on the provision of spot dates. Bone from features containing no dateable material are currently recorded as 'UP' (unphased). Bones were identified to taxon wherever possible, although lower-order categories were also used (e.g. sheep/goat).

The bone fragments are typically well preserved, with no evidence for gnawing or butchery, although the horse phalanx from a Roman ?ditch (fill 59016) was heavily eroded with a porous surface. The assemblage, however, is highly fragmented, and this may explain the dominance of the more robust teeth in this small assemblage.

Horse, cattle and sheep/goat bones are present, but the prevalence of horse bones is unusual. As so few bone fragments were recovered from dateable deposits, however, no meaningful interpretation is currently possible. Unless additional archaeological investigations are undertaken at the site, no further analysis is recommended.

Table 1. A summary of the animal bones

Context	Phase	Taxon	Element	Quantity
24004	UP	Horse	Maxillary tooth	4
59016	Roman	Horse	First phalanx (fused, fragmented)	1
68003	Roman	Horse	Incisor	1
70015	Medieval	Sheep/goat	Third mandibular molar (wear stage g)	1
75004	Medieval	Horse	Mandibular tooth	6
76006	Medieval	Cattle	Metacarpal (fused, fragmented)	1
		Cattle	Tibia barrel	1
77035	Medieval	Sheep/goat	Maxillary tooth	2

# **APPENDIX 11**

# Interim assessment of slag recovered during archaeological fieldwork at Bessacarr, Doncaster, South Yorkshire.

# by Roderick Mackenzie BSc PhD MIFA

#### Introduction

The following report covers the archaeometallurgical assessment of slag recovered during a recent archaeological evaluation carried out at Bessacarr, Doncaster.

The bulk of the assemblage was recovered from archaeological contexts that are thought to date from the Iron Age to early Roman/Romano-British period. One of the main aims of this assessment has been to determine whether there is enough evidence to suggest the presence of metal working or smelting at, or close to the site. The results of the assessment are summarised in Table 1 below. It should be noted that at this stage, no microscopic or chemical analysis has been carried out and the results should, therefore, be regarded as provisional.

# Methodology

A basic identification of the slag has been carried out and individual pieces have been assessed to determine their archaeological potential. As this is an interim report for the evaluation phase of fieldwork, the slag has not been divided and quantified by sub-types as, at this stage, it was felt that it would be more relevant for the report to give an overview of the assemblage and highlight any archaeological significance and potential.

Context No.	Number of pieces	Weight of pieces (g)	Description	
26004	4	435	Probable iron smelting furnace slag.	
26006	26	4880	Probable iron smelting furnace slag, including 2 fragments with charcoal inclusions.	
26021	1	188	Probable iron smelting slag	
26023	1	28	Undiagnostic/possible iron smelting slag	
26027	1	1140	Probable iron smelting furnace slag, likely to be very iron rich.	
26032	1	120	Undiagnostic/possible iron smelting slag	
26034	4	434	Undiagnostic/possible iron smelting slag	
26046	6	2575	One fragment possible furnace slag with	
34002	1	12	Undiagnostic/possible iron smelting slag	
59009	5	394	Four fragments possible vitrified furnace/hearth lining, one fragment of possible furnace slag/part reduced ore.*	
59010	2	62	Undiagnostic slag.	
59012	8	252	Seven fragments of undiagnostic/possible iron smelting slag, one small fragment of	

			vitrified furnace/hearth lining.	
59015	5	1180	Three fragments probable iron smelting slag, two fragments possible mix of fuel ash slag/partially reduced ore/hearth lining.	
59016	2	252	Low viscosity furnace slag?	
59017	8	3885	Five fragments of undiagnostic/possible iron smelting slag. Three fragments possible partially reduced ore.	
59009	21	44620	Two fragments possible vitrified hearth/furnace lining. Nineteen fragments of possible furnace slag, some with charcoal inclusions.	
59014	13	11450	Twelve fragments of possible furnace slag and one fragment of possible hearth/furnace lining material.	
59016	14	5280	Fragments of possible furnace slags, one with charcoal inclusion(s).	
59022	17	920	Undiagnostic/possible iron smelting slag.	
59024	?	?	Five fragments of possible compacted floor material from iron working/smelting area.	
59008	Sample 71	<2g	Possible spheroidal hammerslag.	
59009	Sample 72	<2g	Possible spheroidal hammerslag.	
59014	Sample 82	<2g	Possible ore fines.	

Table 1: Results of assessment of production process residues recovered from archaeological field evaluation at Bessacarr, Doncaster

# **Summary of Assemblage**

In addition to the material listed in Table 1, some additional pieces of slag/residue were inspected on site; this material consisted of large and heavy (>20kg) lumps of iron smelting furnace slag.

The assemblage contains a high abundance of what appear to be iron smelting slags. The morphology of much of the slag suggests that it was produced by one of the earliest types of iron smelting furnaces. The technology of these early 'non-tapping' furnaces pre-dates that of 'tapping' bloomery/shaft furnaces, which appear to have become more common from the Romano-British period onward. The pottery recovered during the evaluation suggest that a significant amount of the slag dates from the first to second century AD.

The soil samples recovered from the site have only produced very small amounts of possible spheroidal hammerslag. At this stage, it is not possible to confirm the presence or location of iron smithing at the site.

#### Statement of Potential

The combination of the slag types found, the size and weight of some pieces, together with their archaeological contexts, suggests the presence of early 'pre-industrial' iron smelting in the immediate vicinity of the excavated trenches. A recent geophysical survey also appears to suggest the presence of a significant area of iron smelting or

smithing very close to one of the evaluation trenches. It is worth noting that several pieces of slag have intact pieces of charcoal embedded in their surface, it is possible that these may be able to provide a radiocarbon date(s) for the smelting activity at the site.

Compared to later 'tapping' furnace types, the physical structure and operation of early 'non-tapping' furnaces in Britain is still open to debate. As Paynter (2007, 202) mentions, although non-tapping furnaces of different periods have been extensively researched in continental Europe, the evidence from England is comparatively poorly understood and is not fully published. If remnants of the furnace structure survive on the site it could provide important information on the design and operation of the furnace and provide valuable material for the comparison of regional and chronological differences in furnace design (Paynter, 2007, 209).

The site also offers a rare opportunity to meet National research agenda to investigate and date the beginning of iron technology in Britain (Historical Metallurgy Society, 2008).

Several questions about the site and its surrounding environment could also be investigated:

- What type of iron ore was used?
- Is there any evidence of trade in iron ore or was it locally sourced?
- Is there any evidence for trade in iron produced at the site? e.g. with the nearby Roman vexillation fort?
- Which came first the Roman vexillation fort or the ironworking site?

#### Recommendations

At this stage, no metallurgical analysis of any of the slag is recommended. However, radiocarbon dating of the charcoal inclusions within some of the slag could be useful for refining dating evidence for smelting activities at the site. To enable accurate dating, specimens of charcoal from short lived tree species will need to be analysed. If this dating method is to be used, it is strongly recommended that the charcoal fragments in the slag are inspected by a relevant specialist who can identify and remove the relevant charcoal for radiocarbon analysis.

As mentioned above, at this stage, the individual pieces of slag in the assemblage have not been separated and quantified by sub-type. It is recommended that the assemblage covered by this initial assessment is retained until the results of any further excavation are known.

If further excavation at the site is carried out, the slag from the evaluation phase (covered in this assessment) should be combined with, assessed and quantified in detail as one assemblage. If no further excavation work is carried out, the material covered by this interim report will need to be fully assessed by an archaeometallurgist, the slag characterised, and a report on the findings produced.

The value of this site lies in its ability to provide accurately dated and identified evidence for early ironworking in Britain and so would benefit from full and detailed excavation rather than preservation in situ. It is therefore recommended that if the site is fully

excavated, and that an archaeometallurgist should be commissioned to supervise/advise the excavation of the areas provisionally identified as metal working sites.

# **Bibliography**

Paynter S. in La Niece S., Hook D. and Craddock P. Eds.	2007	pp 202–210 in 'Metals and Mines: studies in archaeometallurgy'. London: Archetype Publications in association with the British Museum
Historical Metallurgy Society	2008	'Metals and Metalworking. A research framework for archaeometallurgy.' HMS Occasional Publication no.6

# MANOR FARM BESSACARR DONCASTER SOUTH YORKSHIRE

# SE 6160 0000 APP/F4410/A/09/2100409

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# MANOR FARM BESSACARR DONCASTER SOUTH YORKSHIRE

# SE 6160 0000 APP/F4410/A/09/2100409

# WRITTEN SCHEME OF INVESTIGATION FOR ARCHAEOLOGICAL TRIAL TRENCHING

#### 1.0 INTRODUCTION

- 1.1 This document presents a Written Scheme of Investigation (WSI) for undertaking archaeological trial trenching as part of a programme of evaluation in relation to Condition 22 APP/F4410/A/09/2100409 for residential development and associated infrastructure of c. 67 Ha at Manor Farm, Bessacarr, Donacster, South Yorkshire (centred at SE 6160 0000). This WSI is for 21 Ha (Fields 6, 7, 8, 9, 10 and 12) and the results of this stage of the evaluation will be incorporated and developed into an archaeological strategy for the site.
- 1.2 The results of the archaeological desk-based assessment and the programme of geophysical survey indicate that the development site is located within an area of significant archaeological potential. Further evaluation of the site by means of trial trenching is proposed in order to further characterise the nature of the archaeological remains, identify any significant effects of the development upon these remains and design an appropriate mitigation strategy. The evaluation is based upon the excavation of 72 trenches totalling some 4,740m<sup>2</sup>
- 1.3 The Written Scheme of Investigation has been prepared by MAP Archaeological Consultancy Ltd at the request of Persimmon Homes Yorkshire Ltd. The WSI is to be submitted to both the planning authority and English Heritage in order that the document constitutes an agreed scheme of works.
- 1.4 The results of this trial trenching will assist in identifying options for minimising or avoiding damage to, or recording, any archaeological remains to be affected by the development, in accordance with the guidance in PPS5 on *Archaeology and Planning* (1990) and develop an overall strategy to deal with the archaeology for the remainder of the site

# 2.0 LOCATION, TOPOGRAPHY AND GEOLOGY

- 2.1 The proposed development site is an area of land located between two railway lines, the East Coast main line to the west and the Doncaster to Lincoln line to the north, and the M18 motorway to the east. Modern housing development encroaches as far as the railway line to the north. The site stands between 4m and 10m AOD.
- 2.2 The site lies mainly in the Parish of Cantley with Branton, with the south-western corner in the Parish of Loversall. The area is currently covered by a combination of overgrown scrub, formerly pasture, and mature woodland. Access to the land at the moment is from Warren Lane on the eastern side of the site which cross the railway lines from the north and south, and footpaths from Bessacarr Junction and Bessacarr Lane.
- 2.3 Woodland still exists east of Warren Lane, in the area of Green Busks and Back Wood. The Proposed Development Area is split into fourteen fields, all with drainage and some overgrown hawthorn hedges surviving.
- 2.4 The WSI covers the eastern part of the Proposed Development Area (Fig, 2 & 4) Fields 6, 7, 8, 9, 10 and 12. Field 6 is approximately 5Ha, Field 7 is approximately 3.6 Ha, Field 8 is approximately 2.4 Ha, Field 9 is approximately 4.2 Ha, Field 10 is approximately 1.1Ha and Field 12 is approximately 4.4 Ha.
- 2.5 The site stands on soils of the Adventurers' 1 (1024a) and Newport 1 (551d) Soil Associations. Adventurers' 1 Association are located to the western half of the area and are "deep peat soils on flat land with groundwater often controlled by ditches or pumps and a risk of wind erosion" over geology of fen peat. Newport 1 Association, on the eastern half of the site, are "deep well drained sandy and coarse loamy soils with risk of wind and water erosion over geology of glaciofluvial drift" (Mackney et al 1983).

# 3.0 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

3.1 Archaeological sites and finds recorded up to 1km from the proposed development are listed in Table 1 and their location indicated on Figure 2. Sites and findspots within the study area have been allocated an individual number (their relevant South Yorkshire Sites and Monument Record Reference is included within Table 1 where applicable).

Table 1 Archaeological sites within the 1km study area

Site	SMR Ref.	Classification	Period
1	1763	Aerial Photographic Cropmarks - two adjacent sub-rectangular enclosures and field boundaries	Iron Age/ Romano- British
2	2664	Aerial Photographic Cropmark - Field	Iron Age/ Romano-

Site	SMR Ref.	Classification	Period
		System	British
3	3365	Aerial Photographic Cropmark - Field System	Iron Age/ Romano- British
4	2677	Aerial Photographic Cropmark - Field System	Iron Age/ Romano- British
5	2678	Aerial Photographic Cropmark - Field	Iron Age/ Romano-
6	2896	System ( Aerial Photographic Cropmark Field	British Iron Age/ Romano-
7	2470	System  Aerial Photographic Cropmark - Field	British Iron Age/ Romano-
8	2487	System Aerial Photographic Cropmark - Field	British Iron Age/ Romano-
9	1288	System Aerial Photographic Cropmark - Field	British Iron Age/ Romano-
40	0004	System	British
10	2621	Aerial Photographic Cropmark	Romano-British
11	2134	Aerial Photographic Cropmark	Romano-British
12	2135	Aerial Photographic Cropmark	Romano-British
13	2663	Aerial Photographic Cropmark	Iron Age/ Romano- British
14	67	Aerial Photographic Cropmark	Iron Age/ Romano- British
15	68	Aerial Photographic Cropmark	Iron Age/ Romano- British
16	1972	Flint Scatter	Mesolithic/Neolithi
17	937	Axe Head	Neolithic
18	1278	Arrowhead	Bronze Age
19	1071	Arrowhead	Bronze Age
20	969	Palstave	Bronze Age
21	1812	Polished Stone Axw	Bronze Age
22	1275	2 Querns	Prehistoric
23	4302	Querns	Prehistoric
24	4509	Iron Age Settlement/Enclosure	Prehistoric
25	387	Ancient Woodland	Prehistoric/ Roman/ Medieval
26	1280	Five Roman Kiln Sites at Bessacarr	Roman
27	970 SY1108	Seven kilns sites at Rossington Scheduled Ancient Monument	Roman
28	1277	Roman Pottery within the Proposed Development Area	Roman
29	1276	Roman Pottery Scatter	Roman
30	1870	Roman Pottery Scatter	Roman
31	140	Roman Fort	Roman
٥.	SY1044	Scheduled Ancient Monument	
32	707	Roman Road	Roman
33	230	Roman Bridge	Roman
34	966	Roman Camp	Roman
35	1876	Roman Coin	Roman
36	956	Roman Coin	Roman
37	3454	Two Anglo-Saxon Pendants	Anglo-Saxon
38	965	Earthwork	Medieval
39	3642	Watermill	Medieval
40	231	Manor of Rossington	Medieval

Site	SMR Ref.	Classification	Period
41	474	Medieval Coin	Medieval
42	4495	Ploughmarks	Medieval
43	4346	Rossington Colliery	Post-medieval
44	3564	Building	Post-medieval

# **Historical Background**

- 3.2 The name Bessacarr has medieval origins and means "plot of land amongst the Bent Grasses" from the Anglo-Saxon "beos æcer" (Smith 1973, p. 40).
- 3.3 Bessacarr is first mentioned in charters in 1155 as "Besacla". Margaret Gelling notes "æcer" meaning a "piece of marginal land cultivable of limited extent" (Gelling 1984, p. 205).
- 3.4 Bessacarr is a small hamlet within the Township of Cantley and the Manor of Branton and Cantley, and is situated on the eastern border of Potteric Carr. The name Cantley derives from the Anglian personal name and means Canta's glade or grove (*leah*). Cantley is mentioned twice in the Domesday Book (Faull and Stinson 1986), and the first entry states:-

"In Branton and Cantley Toki had 14 carucates and 1½ bovates of land taxable. Land for 15 ploughs. Now Geoffrey Alselin has there 2 ploughs and 6 villages, 2 freemen and 5 smallholders who have 6 ploughs. There a priest and a church.

In the same village Alselin had 1 carucate of land taxable. Land for ½ plough. Woodland pasture 1 league long and 1 wide. The whole manor 2 leagues long and 2 wide. Value before 1066 £8, now 30s"..

- 3.5 The second entry adds: "Roger de Busli, 1 carucate of land in Cantley of Alsiges's land".
- 3.6 A gift of land was made by Henry II to Kirkstall Priory and included "a carucate of land in Bessacle with common pasture for one thousand sheep and forty mares and foals and as many cows and hogs as please the monks" (Hunter 1974, p. 84). The land at Bessacarr was described as "one of several morasses of about four thousand acres in extent lying south of Doncaster and extending toward the villages of Loversall and Rossington" (*ibid*, p. 85).
- 3.7 The Religious Houses of Yorkshire states "The returns for this part of Yorkshire in the *Valor Ecclesiasticus* of Henry VIII are defective, and the portion relating to Kirkstall is missing". In 1557, after the Dissolution, the Crown granted the land to Avery Rawson. The Wolstenholm family owned Cantley and Loversall in the Eighteenth century.

- 3.8 The Enclosure Act (1774) and Award (1778) for Cantley, Branton and Bessacarr is held in Doncaster Archives (DRO: P12/9/A1), but does not include the land associated with Bessacarr Carr or Common Areas. Unfortunately the Enclosure map no longer exists.
- 3.9 Historical documents are limited specific to the site until the Twentieth century.

# **Cartographic Evidence**

- 3.10 The first map of the area is a 1782 Plan of the Parishes, Townships and Hamlets of Doncaster, Balby, Carhouse, High Ellars, Bessicarr, Loversall, Wadworth, Rossington, Wollingley and Stanfall (Doncaster Archives D2 MD 22). The site lies between Bessacarr Common and Bessacarr Carr, north of Mother Drain, south of The Great North Road and south-east of Carr Lane. An area of woodland on this plan probably relates to Backwood which is of similar shape to the woodland on the 1854 First Edition Ordnance Survey Map. The Lane "to Bessacarr" is shown west of Back Wood and relates to the lane south of Manor Farm. Only three fields are shown and probably relate to the pre-Enclosure field systems.
- 3.11 By the mid-Nineteenth century the land on Bessacarr Carr and Bessacarr Common had been enclosed by agreement, as no Act of Parliament for this enclosure exists. The First Edition Ordnance Survey Map shows Manor House Farm south of Bessacarr Lane and the Great Northern Railway Line (Sheet 285). The Proposed Development Area had been sub-divided into twenty-three fields. A large area of woodland "the Warren" now dominated Bessacarr Common with Back Wood still extent west of Warren Lane and a small area of woodland plantation called Green Busks". The Tithe map of 1847, (BIHR TA/5145) does not locate the site.
- 3.12 By 1904, the Great Northern and Great Eastern Joint Railway Line made up the northern boundary of the Proposed Development Area. A field division had been removed from a field south-west of Manor Farm and another field boundary added in the field south-west of Back Wood. An additional railway line had been constructed on the north-western boundary of the area by the 1930's (Dearne Valley Railway), and residential development had enveloped the Great North Road to the north-east of the Proposed Development Area.
- 3.13 In the 1950's the area north of Bolton Hill, Bessacarr had become a residential estate. The infilling of the residential developments between Cantley and Bessacarr continued and by 1982 the area north of the railway lines was completely covered by housing on either side of Bawtry Road. The M18 had been constructed acting as the eastern boundary of the site between Bawtry Road and Seven Arches Bridge.

# **Aerial Photographic Anomalies**

- 3.14 Fifteen aerial photographic anomalies are listed on South Yorkshire Archaeology Service's Sites and Monuments Record, and include several cropmarks which have been interpreted as Iron Age/Romano-British Field systems or "brick work" field systems, and are located south of Branton and Littleworth, near Rossington (SMR Refs.: 1289, 1793, 2470, 2487, 2664, 2677, 2678, 2896, 3365). Further to the west on Potteric Carr in Loversall Parish, oval enclosures and field systems were noted in 1976 (Riley 1976, p. 21).
- 3.15 Several of the Aerial Photographic Anomaly Sites have been evaluated between 1990 and 1998, by either Geophysical Survey and Trial Trench Excavation and included the cropmarks at Hunster Grange, Rossington (Sykes 1991, p.22), Stripe Road, Rossington (Chadwick 1993, p. 65), Hayfield Farm, Rossington (Atkinson 1993, p. 65), Warning Tongue Lane, Bessacarr (Atkinson & Merrony 1994, p. 23-27), St. Catherine's Hospital, Balby (Atkinson 1995, p. 40), Church Field, Rossington (Atkinson 1998, p. 15-19), Northern Racing School, Rossington (Webb 1998, p. 49), Junction 3, M18, Loversall (Belford 1999, p. 109-110) and Carr Lodge Farm, Loversall (Slatcher et al. 1999, p. 110-112).
- 3.16 The excavations at Church Field and Stripe Road, Rossington uncovered evidence of "single phase" agricultural activity relating to the brick work field systems, which could not be dated, finds included a single sherd of pottery of indeterminate type from Church Field. Remains of a Romano-British brick work field system at Warning Tonge Lane Bessacarr were excavated and could be dated to the Second and Third centuries AD by the thirty-one sherds of pottery. The majority of the evaluations showed that the aerial photographic anomalies related to surviving archaeological deposits.
- 3.17 The Geophysical Report had mapped the Aerial Photographic Cropmarks noted on the National Mapping Programme within the Development Area (Smalley 2008: Fig. 3)

## **Archaeological Sites**

3.18 The area around Manor Farm Bessacarr includes sites and spot finds from the Prehistoric to the Post-medieval period. Thirty-five sites and spot finds have been noted around the proposed Development Area. Several other sites, further afield have also been noted in the text.

#### Prehistoric

3.19 The earliest artefacts recovered from the vicinity of Bessacarr are a Mesolithic and Neolithic period flint scatter and a Neolithic flint Axe Head (SMR Refs.: 1972 & 937); other Prehistoric finds include two arrowheads, a Middle Bronze Age Spearhead, a Bronze Age Palstave and a Polished Stone Axe (SMR Refs: 1278, 1071, 969 and 1812). A Beaker was found during grave digging

- in July 1948. Three querns were found at Ellers Carr, Bessacarr and a Quern at Wadworth Carr.
- 3.20 An Iron Age settlement/enclosure has been listed at Wheatcroft Farm, Rossington (SMR Ref: 4509).
- 3.21 The woodland on the site, Back Wood, is possible remnants of Ancient Woodland (SMR Ref: 3837).

#### Roman

- 3.22 To the east and south of the Roman town of Danum (Doncaster), there is a concentration of Roman Pottery Industry production sites, and includes thirty-nine kiln sites at Cantley, five kiln sites at Bessacarr (SMR Ref.: 1280) and seven excavated kiln sites at Rossington, with a further ten kilns located by Geophysical Survey (SMR Ref: 970: National Monument No. SY1108). Kilns and possible kiln sites are known slightly further afield at Kilham Farm, east of Branton, Blaxton Quarry, south of Branton, south of Auckley waste vessels were found at Templeborough, near Rotherham and at Croft Road, Finningley (MAP 1999).
- 3.23 Several different types of kiln type have been excavated, with the kiln chamber and flue at Bessacarr, Cantley and Rossington being "dug into the ground" (Buckland et al. 1981, p.147), where at Blaxton and Branton the kilns were constructed at ground level. The kilns produced a variety of vessels in several different forms and fabrics including Parisian ware, Black Burnished ware, Greyware and Mortaria, and were dated to the Second and Third centuries AD, with continuous production at Rossington into the Fourth century AD.
- 3.24 Roman Pottery sherds have been found within the proposed development area (Site 1277), 100m north of the Manor Farm across the railway line (Doncaster Museum), 400m north of the proposed development area (Site 1276) and further west on Loversall Ings (SMR Ref: 1870). Roman Pottery scatters were noted to the east of Bessacarr at Branton (SE 655 029, SE 6485 0204, SE 653 033, SE 653 024 and SE 659 029).
- 3.25 Within one kilometre of Manor Farm are several sites of National and Regional Importance, including a Roman Fort (SMR Ref:140: National Monument No. SY1044), a Roman Road (SMR Ref: 707), a possible Roman Bridge (SMR Ref.: 230) and possible Roman Camp (SMR Ref.: 966). Two Roman coins spot finds were also listed (SMR Refs: 1876 and 956).
- 3.26 The Roman Fortress at Rossington and the Roman Road are also visible on aerial photographs (Riley 1976, p.15). A cropmark site at Ling's Farm, Dunsville, Hatfield, was excavated and dated to the Romano-British period.

Anglo-Saxon

3.27 Two Anglo-Saxon pendants were found by metal-detecting (SMR Ref.: 3454)

Medieval

- 3.28 Castle Hills is a earthwork with a low mound and possible ditches on the eastern side still visible, which could date to the Medieval period (SMR Ref: 965). Earthworks at Loversall are probably remains of a Medieval watermill (SMR Ref: 3642)
- 3.29 Draw Dykes is listed on the Sites and Monuments record as "possibly part of the early manor of Rossington" (SMR Ref: 231). A single Medieval Spot Find of a Half penny Coin dating to the reign of ?Edward III is also recorded (SMR Ref: 474).
- 3.30 Signs of agricultural activity, including plough marks, were found at St. Catherine's Hospital (SMR Ref.: 4495).

Post-medieval

3.31 The Colliery at Rossington (SMR Ref.: 4346), a Roofed Structure (SMR Ref: 3564) and several farm buildings in Bessacarr are the only monuments from this period of note.

# 4.0 GEOPHYSICAL SURVEY

4.1 The survey identified numerous magnetic anomalies indicative of infilled ditches forming enclosures, trackways and field systems across most of the survey area. The survey recorded additional features as well as discrete anomalies such as pits, hearths or kilns. There were large areas of magnetic disturbance in fields 6, 7 and 9 indicating disturbed or made ground and the gas main crossing the site. (Stratascan 2008).

# 5. TRIAL TRENCHING OBJECTIVES

5.1 The construction of the residential development will have an impact on significant archaeological remains as the desk-based assessment, the National Mapping Programme, geophysical survey and soil auger survey have indicated areas of prehistoric/Roman-British ditch systems, the Roman Pottery scatter and possible Roman Pottery kilns. Clarification of these features by means of archaeological trial trenching is considered necessary in order to finalise an appropriate mitigation strategy either by means of avoiding any significant impacts and/or for the investigation of any remains affected either in advance of, or during, construction.

- 5.2 The aims of the trial trenching would be to establish the nature, extent, degree of preservation and significance of archaeological features and deposits recorded within the area of proposed developments and associated infrastructure, and also evaluate further the potential for previously unrecorded remains in these areas. Specific objectives of the trenching would be to:
  - clarify the aerial photographic cropmarks
  - clarify the results of the geophysical surveys
  - indicate the potential for further archaeological features to be located within the area of the development
  - to establish the presence, nature and sequence of any areas of occupation and, where present, to investigate such areas to determine their form, and record any evidence for domestic, agricultural or industrial structures and any associated activities
  - to establish where possible absolute and relative chronologies for the various activities and features recorded
  - to investigate the nature and pattern of the landuse and environment within the wider landscape through an appropriate sampling strategy
  - to establish the nature and extent of any other archaeological remains identified, and carry out appropriate investigation and recording
  - to produce a report on the results of the work for deposition within both the South Yorkshire Sites and Monument Record and the National Monuments Record
  - to undertake a scheme of works that meets with the professional standards for archaeological work both nationally and within the area of the South Yorkshire Sites and Monument Record.
- 5.3 General guidance relating to evaluation, recording, report preparation and archiving include that prepared by English Heritage (1991; 2006) and the Institute for Archaeologists (2008). More specific guidance is referenced in the relevant sections below.

## 6. TRIAL TRENCHING METHODOLOGY

6.1 The trial trenching would consist of the excavation and recording of sample trenches within Fields 6, 7, 8, 9, 10 and 12 as described above and indicated on Figure 3. A total of 72 trenches would be investigated (a total of some 4,740m²) as indicated on Figure 4. The position or extent of trenches may be

subject to variation should any specific obstructions (such as services) be identified within the proposed locations and subject to the agreement of South Yorkshire Archaeology Service

#### Field 6

- 6.2 Trench 1: This trench will be aligned from north-east to south-west and will measure 50m in length by 2m wide (80m²). The trench is located within an area of disturbed or made ground.
- 6.3 Trench 2: This trench will be aligned from north-west to south-east and will measure 50m in length by 2m wide (100m²). The trench is located within an area of disturbed or made ground.
- 6.4 Trench 3: This trench will be aligned from north-west to south-east and will measure 50m in length by 2m wide (100m²). The trench is located within an area of disturbed or made ground.
- 6.5 Trench 4: This trench will be aligned from north-west to south-east and will measure 50m in length by 2m wide (80m²). The trench is located within an area of disturbed or made ground.
- 6.6 Trench 5: This trench will be aligned from north-west to south-east and will measure 50m in length by 2m wide (100m²). The trench is located within an area of disturbed or made ground.
- 6.7 Trench 5: This trench will be aligned from north-east to south-west and will measure 50m in length by 2m wide (100m²). The trench is located within an area of disturbed or made ground.

#### Field 7

- 6.8 Trench 7: This trench will be aligned from north-west to south-east and will measure 10m by 4m (40m²). The trench is located across two pit-like anomalies.
- 6.9 Trench 8: This trench will be aligned from north-east to south-west and will measure 10m by 4m (40m²). The trench is located across two pit-like anomalies.
- 6.10 Trench 9: This trench will be aligned from north-east to south-west and will measure 10m by 4m (40m²). The trench is located across two pit-like anomalies.
- 6.11 Trench 10: This trench will be aligned from north-east to south-west and will measure 10m by 4m (100m<sup>2</sup>). The trench is located across a pit-like anomaly.

- 6.12 Trench 11: This trench will be aligned from north-east to south-west and will measure 10m by 4m (40m²). The trench is located across two pit-like anomalies.
- 6.13 Trench 12: This trench will be aligned from north-east to south-west and will measure 50m in length by 2m wide (100m²). The trench is located in an area without cropmark or geophysical anomalies.
- 6.14 Trench 13: This trench will be aligned from north-east to south-west and will measure 50m in length by 2m wide (100m²). The trench is located in an area without cropmark or geophysical anomalies.
- 6.15 Trench 14: This trench will be aligned from north-east to south-west and will measure 10m by 4m (40m<sup>2</sup>). The trench is located across two pit-like anomalies.
- 6.16 Trench 15: This trench will be aligned from north-east to south-west and will measure 50m in length by 2m wide (100m²). The trench is located across an aerial photographic cropmark/possible enclosure ditch.
- 6.17 Trench 16: This trench will be aligned from east to west and will measure 40m in length by 2m wide (80m²). The trench is located across a positive linear anomaly (ditch, boundary or enclosure).
- 6.18 Tench 17: This trench will be aligned from north-east to south-west and will measure 10m by 4m (40m²). The trench is located across two pit-like anomalies.
- 6.19 Trench 18: This trench will be aligned from north-east to south-west and will measure 10m by 4m (40m²). The trench is located across two pit-like anomalies.
- 6.20 Trench 19: This trench will be aligned from north-east to south-west and will measure 10m by 4m (40m²). The trench is located across two pit-like anomalies.
- 6.21 Trench 20: This trench will be aligned from north-east to south-west and will measure 10m by 4m (40m<sup>2</sup>). The trench is located across two pit-like anomalies.
- 6.22 Trench 21: This trench will be aligned from north-north-east to south-south-west and measuring 10m in length by 2m wide (20m²). The trench is located a positive curvilinear anomaly.

#### Field 8

6.23 Trench 22: This trench will be aligned from east to west and will be 50m in length by 2m wide (100m²). The trench is located across negative anomaly

- (bank or earthwork), a negative anomaly and cropmark (boundary ditch or enclosure) and magnetic debris.
- 6.24 Trench 23: This trench will be aligned from north-east to south-west and will be 10m by 4m (40m<sup>2</sup>). The trench is located over a pit-like anomaly.
- 6.25 Trench 24: This trench will be aligned from north-east to south-west and will be 10m by 4m (40m²). The trench is located over a pit-like anomaly.
- 6.26 Trench 25: This trench will be aligned from north-east to south-west and will be 10m by 4m (40m²). The trench is located over a pit-like anomaly.
- 6.27 Trench 26: This trench will be aligned from north-east to south-west and will be 10m by 4m (40m²). The trench is located over a pit-like anomaly.
- 6.28 Trench 27: This trench will be aligned from north-east to south-west and will be 50m in length by 2m wide (100m²). The trench is located over an area of magnetic disturbance and a cropmark (boundary ditch or enclosure).
- 6.29 rench 28: This trench will be aligned from north-east to south-west and will be 10m by 4m (40m²). The trench is located over a pit-like anomaly.
- 6.30 Trench 29: This trench will be aligned from north-east to south-west and will be 10m by 4m (40m<sup>2</sup>). The trench is located over a pit-like anomaly.
- 6.31 Trench 30: This trench will be aligned from north-east to south-west and will be 50m in length by 2m wide (100m²). The trench is located over an area of magnetic disturbance and a cropmark (boundary ditch or enclosure).

#### Field 12

- 6.32 Trench 31: This trench will be aligned from north to south and will be 50m in length by 2m wide (100m²). The trench is located in an area not evaluated by geophysical survey. The trench is located on an area of aerial photographic cropmarks (enclosure ditches).
- 6.33 Trench 32: This trench will be aligned from east to west and will be 50m in length by 2m wide (100m²). The trench is located in an area not evaluated by geophysical survey. The trench is located in an area south of the aerial photographic cropmarks.
- 6.34 Trench 33: This trench will be aligned from north to south and will be 50m in length by 2m wide (100m²). The trench is located in an area not evaluated by geophysical survey. The trench is located on an area of aerial photographic cropmarks (enclosure ditches).

- 6.35 Trench 34: This trench will be aligned from north-east to south-west and will be 10m by 4m (40m²). The trench is located in an area not evaluated by geophysical survey. The trench is located inside a probable enclosure interior.
- 6.36 Trench 35: This trench will be aligned from north-east to south-west and will be 10m by 4m (40m²). The trench is located in an area not evaluated by geophysical survey. The trench is located inside a probable enclosure interior.
- 6.37 Trench 36: This trench will be aligned from north-east to south-west and will be 10m by 4m (40m<sup>2</sup>). The trench is located in an area not evaluated by geophysical survey. The trench is located inside a probable enclosure interior.
- 6.38 Trench 37: This trench will be aligned from north-east to south-west and will be 10m by 4m (40m<sup>2</sup>). The trench is located in an area not evaluated by geophysical survey. The trench is located inside a probable enclosure interior.
- 6.39 Trench 38: This trench will be aligned from north-east to south-west and will be 10m by 4m (40m<sup>2</sup>). The trench is located in an area not evaluated by geophysical survey. The trench is located inside a probable enclosure interior.
- 6.40 Trench 39: This trench will be aligned from north-east to south-west and will be 10m by 4m (40m²). The trench is located in an area not evaluated by geophysical survey. The trench is located inside a probable enclosure interior.
- 6.41 Trench 40: This trench will be aligned from north-east to south-west and will be 10m by 4m (40m²). The trench is located in an area not evaluated by geophysical survey. The trench is located inside a probable enclosure interior.
- 6.42 Trench 41: This trench will be aligned from north-east to south-west and will be 10m by 4m (40m²). The trench is located in an area not evaluated by geophysical survey. The trench is located inside a probable enclosure interior.
- 6.43 Trench 42: This trench will be aligned from north-east to south-west and will be 50m in length by 2m wide (100m²). The trench is located in an area not evaluated by geophysical survey. The trench is located in an area with no aerial photographic cropmarks features.
- 6.44 Trench 43: This trench will be aligned from north-west to south-east and will be 50m in length by 2m wide (100m²). The trench is located in an area not evaluated by geophysical survey. The trench is located across three aerial photographic cropmark features (enclosure ditches/ trackways).

- 6.45 Trench 44: This trench will be aligned from north to south and will be 50m in length by 2m wide (100m²). The trench is located in an area not evaluated by geophysical survey. The trench is located in an area apparently devoid of aerial photographic cropmarks.
- 6.46 Trench 45: This trench will be aligned from north-east to south-west and will be 10m by 4m (40m<sup>2</sup>). The trench is located in an area not evaluated by geophysical survey. The trench is located inside a probable enclosure interior.
- 6.47 Trench 46: This trench will be aligned from north-east to south-west and will be 10m by 4m (40m<sup>2</sup>). The trench is located in an area not evaluated by geophysical survey. The trench is located inside a probable enclosure interior.
- 6.48 Trench 47: This trench will be aligned from north-east to south-west and will be 10m by 4m (40m<sup>2</sup>). The trench is located in an area not evaluated by geophysical survey. The trench is located inside a probable enclosure interior.
- 6.49 Trench 48: This trench will be aligned from north-east to south-west and will be 10m by 4m (40m<sup>2</sup>). The trench is located in an area not evaluated by geophysical survey. The trench is located inside a probable enclosure interior.
- 6.50 Trench 49: This trench will be aligned from north-east to south-west and will be 50m in length by 2m wide (100m²). The trench is located in an area not evaluated by geophysical survey. The trench is located across a probable aerial photographic cropmarks (enclosure ditches).

#### Field 9

- 6.51 Trench 50: This trench will be aligned from east-north-east to west-south-west and will be 30m in length by 2m wide (60m<sup>2</sup>). The trench is located in an area not evaluated by geophysical survey and has been placed to establish whether there are any archaeological features in this area.
- 6.52 Trench 51: This trench will be aligned from north to south and will be 10m by 4m (40m²). The trench is located in an area not evaluated by geophysical survey and has been placed to establish whether there are any archaeological features in this area.
- 6.53 Trench 52: This trench will be aligned from north to south and will be 10m by 4m (40m²). The trench is located in an area not evaluated by geophysical survey and has been placed to establish whether there are any archaeological features in this area.
- 6.54 Trench 53: This trench will be aligned from north to south and will be 10m by 4m (40m²). The trench is located in an area not evaluated by geophysical

- survey and has been placed to establish whether there are any archaeological features in this area.
- 6.55 Trench 54: This trench will be aligned from north to south and will be 10m by 4m (40m²). The trench is located in an area not evaluated by geophysical survey and has been placed to establish whether there are any archaeological features in this area.
- 6.56 Trench 55: This trench will be aligned from east to west and will be 40m in length by 2m wide (80m²). The trench is located in an area not evaluated by geophysical survey and has been placed to establish whether there are any archaeological features in this area.
- 6.57 Trench 56: This trench will be aligned from north to south and will be 10m by 4m (40m<sup>2</sup>). The trench is located in an area not evaluated by geophysical survey and has been placed to establish whether there are any archaeological features in this area.
- 6.58 Trench 57: This trench will be aligned from north to south and will be 10m by 4m (40m²). The trench is located in an area not evaluated by geophysical survey and has been placed to establish whether there are any archaeological features in this area.
- 6.59 Trench 58: This trench will be aligned from north-west to south-east and will be 50m in length by 2m wide (100m²). The trench is located across an aerial photographic cropmark (Boundary or enclosure ditch).
- 6.60 Trench 59: This trench will be aligned from east-north-east to west-south-west and will be 50m in length by 2m wide (100m<sup>2</sup>). The trench is located across an aerial photographic cropmark (enclosure boundary).
- 6.61 Trench 60: This trench will be aligned from north-west to south-east and will be 40m in length by 2m wide (80m²). The trench is located in an area apparently devoid of possible archaeological features.
- 6.62 Trench 61: This trench will be aligned from east to west and will be 50m in length by 2m wide (100m²). The trench is located in an area apparently devoid of possible archaeological features.
- 6.63 Trench 62: This trench will be aligned from west to east and will be 50m in length by 2m wide (100m²). The trench is located in an area of magnetic debris and positive anomalies (ferrous objects).
- 6.64 Trench 63: This trench will be aligned from west to east and will be 50m in length by 2m wide (100m²). The trench is located in an area of magnetic debris and positive anomalies (ferrous objects).

- 6.65 Trench 64: This trench will be aligned from west to east and will be 40m in length by 2m wide (80m<sup>2</sup>). The trench is located in an area of magnetic debris and positive anomalies (ferrous objects).
- 6.66 Trench 65: This trench will be aligned from west to east and will be 10m in length by 4m wide (40m²). The trench is located in an area of magnetic debris and positive anomalies (ferrous objects).
- 6.67 Trench 66: This trench will be aligned from west to east and will be 40m in length by 4m wide (40m<sup>2</sup>). The trench is located in an area of magnetic debris and positive anomalies (ferrous objects).

#### Field 10

- 6.68 Trench 67: This trench will be aligned from east to west and will be 50m in length by 2m wide (100m²). The trench is located in an area not evaluated by geophysical survey and has been placed to establish whether there are any archaeological features in this area.
- 6.69 Trench 68: This trench will be aligned from north-east to south-west and will be 10m by 4m (40m<sup>2</sup>). The trench is located in an area not evaluated by geophysical survey and has been placed to establish whether there are any archaeological features in this area.
- 6.70 Trench 69: This trench will be aligned from north-east to south-west and will be 10m by 4m (40m<sup>2</sup>). The trench is located in an area not evaluated by geophysical survey and has been placed to establish whether there are any archaeological features in this area.
- 6.71 Trench 70: This trench will be aligned from north-east to south-west and will be 50m in length by 2m wide (100m²). The trench is located in an area not evaluated by geophysical survey and has been placed to establish whether there are any archaeological features in this area.
- 6.72 Trench 71: This trench will be aligned from north-north-east to south-south-west and will be 50m in length by 2m wide (100m²). The trench is located in an area not evaluated by geophysical survey and has been placed to establish whether there are any archaeological features in this area.
- 6.73 Trench 72: This trench will be aligned from north-east to south-west and will be 50m in length by 2m wide (100m²). The trench is located in an area not evaluated by geophysical survey and has been placed to establish whether there are any archaeological features in this area.

#### **Excavation methodology**

- 6.74 The location of each trench would be surveyed in order that they could be located in relation to existing features and located within the Ordnance Survey National Grid. Archaeological deposits will need to be explicitly related to depths below existing surface levels and actual heights in relation to Ordnance Datum.
- 6.75 The trenches will be stripped of topsoil using a mechanical excavator with a wide, toothless bucket, which will operate under archaeological supervision at all times. Topsoil will be removed to the edge of each trench and kept separate from subsoil should this need to be removed. The trenches will be backfilled upon the conclusion of the work and agreement of South Yorkshire Archaeological Service.
- 6.76 The machine will remove topsoil down to a level at which any significant archaeological deposits are first identified or down to natural subsoil, whichever is first. All subsequent excavation will be carried out by hand unless agreed otherwise.
- 6.77 Archaeological investigation will be carried out over the full area of the trench and all surfaces will be cleaned sufficiently by hand to establish the presence or absence of archaeological deposits. Features shall then be planned and photographed. All features exposed will be sample excavated, unless deemed of sufficient importance to require total preservation in situ. Hand excavation will be undertaken to evaluate depth, dimension and preservation of archaeology, and to ensure recovery of sufficient artefactual and environmental evidence to enable dating and assessment of the archaeology to be achieved. It would be anticipated that excavated sample sections would constitute 50% of discrete features and 20% of linear or curvilinear features (to a minimum of 1m in length) and a sufficient sample sectioned to establish whether they had been recut. If discrete features or deposits greater than 1.5m in diameter are encountered then a minimum of 25% will be excavated. Sample sections will ideally be located at the junction of features where these are encountered in order that their stratigraphic relationships are established, or where evidence of localised refuse dumping or industrial residues are present.

#### Variations to methodology

6.78 A period of time or contingency will be allowed within each area to cover both the extension of any specific trenches in order to establish the nature and extent of any significant archaeological features, or for time lost to bad weather. Any such variations to the excavation methodology arising from the presence of structures or archaeological remains not anticipated by the Written Scheme of Investigation would be subject to consultation with South Yorkshire Archaeology Service, English Heritage and Persimmon Homes, and put into effect as soon as possible with the written agreement of the parties involved.

#### 7.0 ARCHAEOLOGICAL RECORDING

- 7.1 The location of all areas investigated will be surveyed in order that these (and all archaeological features and deposits within them) can both be relocated in relation to existing landscape features and located within the Ordnance Survey National Grid. Archaeological deposits will need to be explicitly related both to depths below existing surface levels and actual heights in relation to Ordnance Datum.
- 7.2 All archaeological features will be photographed and recorded at an appropriate scale. Sections will normally be drawn at a scale of 1:10, identifying individual contexts and the underlying natural subsoil. Representative sections of areas largely devoid of archaeological features will be drawn. Archaeological plans will normally be drawn at a scale of 1:20 although areas largely devoid of archaeological features would be recorded at a scale of 1:50.
- 7.3 A written description of features will be recorded on pro-forma sheets using an appropriate context recording system.
- 7.4 Digital photography may be used for general photographic purposes. For archive purposes at least a selection of the photographic record of the site will be taken using monochrome prints and colour slide at a minimum format of 35mm.
- 7.5 The trial trenching will include a metal detector survey of all cleaned trench surfaces and spoil heaps after stripping.
- 7.6 All scientific investigations both on site and as part of the subsequent report preparation should be undertaken in a manner consistent with the English Heritage (2003) best-practice guidelines.
- 7.7 Any human remains (inhumations) encountered during the trial trenching will be exposed and recorded, but left *in situ* unless removal is necessary or otherwise agreed. If an remains (and specifically cremations) are lifted then these will be recorded, recovered and processed in accordance with English Heritage (2002a) and IFA (Brickley and McKinley 2004) guidelines. A *Licence for the Removal of Human Remains* will be obtained from the Ministry of Justice.
- 7.8 Forty- to sixty-litre bulk palaeoenvironmental samples will be taken from appropriate representative deposits (such as occupation and midden deposits or ditch and pit fills) and submitted for assessment. If particularly rich deposits of bone are encountered then a minimum of 100 litre coarse-sieved samples would be taken. Particular attention will be paid to the recovery of samples from any waterlogged deposits present. Recovery and sampling of environmental remains would be in accordance with guidelines prepared by English Heritage (2002b) and the sampling strategy provided by the specialist and agreed with English Heritage. Samples will also be taken for pollen

- analysis from appropriate deposits in order to establish preservation and identify the past use of the area.
- 7.9 Secure contexts will be sampled for dating purposes as appropriate (whether on site or as sub-samples of processed bulk samples). This will include C-14 dating, archaeomagnetic dating and dendrochronological dating. Any concentrations of charcoal or other carbonised material recovered on site will usually be retained. Samples for archaeomagnetic dates will be taken on site by the relevant specialist. Samples for dendrochronological dates would be taken either on site or from recovered timbers by the relevant specialist in accordance with published guidelines (English Heritage 1998). Samples would be processed subsequent to initial post-excavation assessment.
- 7.10 Buried soils or sediment sequences will be inspected and recorded on site, and samples for laboratory assessment collected where appropriate in collaboration with a geoarchaeologist. The guidance of English Heritage (2007) will be followed.
- 7.11 Pottery and animal bone will be collected as bulk samples whilst significant artefacts will be three-dimensionally recorded prior to processing. Finds will be recorded, processed and submitted to specialists for post-excavation assessment in a manner consistent with best professional practice (Watkinson and Neal 1998).
- 7.12 All finds recovered will be washed, marked, appropriately packaged and stored under optimum conditions. Finds recovery and storage strategies will be in accordance with published guidelines (English Heritage 1995; Watkinson and Neal 1998; IFA 2006). Provision will be made for site visits from both specialists and a conservator as necessary.
- 7.13 In accordance with English Heritage guidance (1991), all iron objects, a selection of non-ferrous artefacts (including all coins) and a sample of any industrial debris relating to metallurgy will be X-radiographed before assessment in accordance with the guidance provided by Jones (2006). Where there is evidence for industrial activity, large technological residues would be collected by hand, with separate samples collected for micro-slags. In these instances, the guidance of Bayley *et al* (2001) would be followed.
- 7.14 Any artefacts of gold or silver recovered during the trial trenching which are considered to be treasure will be dealt with in accordance with the Treasure Act 1996 Code of Practice (Revised) 2002 (DCMS 2002).

#### 8.0 MONITORING

8.1 Monitoring of the archaeological works will be made available at all reasonable times to the representatives of the South Yorkshire Archaeology Service and English Heritage for the purposes of monitoring the archaeological trial trenching, and a site meeting(s) held to review the results

- of the trenching. Should any significant or unexpected results be identified during the course of the trial trenching then the above organisations would be notified.
- 8.2 Access to the site will be arranged through the archaeological consultant to Persimmon Homes on the basis of prior notification and subject to any necessary health and safety requirements.

#### 9.0 POST-EXCAVATION ASSESSMENT

- 9.1 On completion of the evaluation an assessment of the site records and finds will be undertaken in accordance with both national and local guidance (English Heritage 1991; 2006).
- 9.2 A post-excavation assessment report on the results of the trial trenching will be prepared and submitted to the South Yorkshire Archaeology Service (and the English Heritage Regional Science Advisor) within six months of the completion of the 2009 fieldwork. The report will be used to identify the need for any further works, including further analysis and report preparation, the requirements of which would be detailed in an updated Written Scheme of Investigation.
- 9.3 The post-excavation assessment report will include:
  - a cover page, title page, or introduction containing the site name, the site code, the planning application number, the dates that fieldwork was undertaken, museum accession number, an Ordnance Survey grid reference and the name of the originating body
  - a list of contents, figures and tables;
  - a non-technical summary;
  - an introduction;
  - the planning background;
  - the archaeological and historical background;
  - a methodology;
  - a summary of the project's results;
  - an interpretation of the results in appropriate context;
  - a post-excavation assessment of the stratigraphic and other written, drawn or photographic records;

- a catalogue and post-excavation assessment of each category of artefact recovered during the evaluation (including a conservation assessment);
- a catalogue and post-excavation assessment of any faunal remains recovered during the evaluation;
- a catalogue of soil or other samples collected and post-excavation assessment of the results of the soil-sampling programme;
- catalogues and post-excavation assessments and summary reports of all scientific dating procedures or other analyses carried out;
- a discussion of the significance of the results of the post-excavation assessment;
- a discussion of the potential for further analysis of the site archive;
- a conclusion;
- an appendix containing a list and summary description of all contexts recorded;
- a summary of the contents of the project archive and its location;
- a location plan of the site at an appropriate scale of at least 1:5,000;
- a site plan showing trial trench locations within the site at a recognised planning scale (and not less than 1:500), and located with reference to the Ordnance Survey National Grid;
- plans and sections of archaeological features at a recognised scale; and
- general photographs of the evaluation in progress and selected photographs of archaeological features investigated. The evaluation and assessment of the site records and finds will be undertaken in accordance with national guidance (English Heritage 1991; 2006).

#### 10.0 SITE ARCHIVE

- 10.1 The site archive shall contain all the data collected during the investigative archaeological trial trenching (as well as previous desk-based studies and surveys undertaken in relation to the site). The archive would include all records, finds and environmental samples that merit retention. It will be quantified, ordered, indexed and internally consistent.
- 10.2 Adequate resources shall be provided during fieldwork to ensure that records are checked and internally consistent.

- 10.3 Archive consolidation will be undertaken immediately following the conclusion of fieldwork:
  - the site record will be checked, cross-referenced and indexed as necessary
  - all retained finds will be cleaned, conserved, marked and packaged in accordance with the requirements of the recipient museum
  - all retained finds will be assessed and recorded using pro-forma recording sheets, by suitably qualified and experienced staff and initial artefact dating will be integrated with the site matrix
  - all retained environmental samples will be processed by suitably experienced and qualified staff and recorded using pro-forma recording sheets
- 10.4 The archive will be assembled in accordance with the specification set out by English Heritage (1991). In addition to the site records, artefacts, environmental remains and other sample residues, the archive shall contain:
  - site matrices where appropriate
  - a summary report synthesising the context record
  - a summary of the artefact record
  - a summary of the environmental record
- 10.5 The integrity of the primary field record will be preserved. Security copies in digital or fiche format will be maintained where appropriate.
- 10.6 An online OASIS form (http://ads.adhs.ac.uk/project/oasis/) will be completed on the results of the trial trenching within three months of the completion of the work. This will be validated by South Yorkshire Archaeology Service once the report has become a public document by submission or incorporation into the Historic Environment Record.
- 10.7 If no further fieldwork is to be undertaken, a copy of the site report and the full site archive would be deposited at an appropriate museum (such as Doncaster Museum), subject to the agreement of Persimmon Homes. Deposition shall be in accordance with written guidelines on archive standards and procedures (Walker 1990; Society of Museum Archaeologists 1995; Brown 2007). The archaeological contractor will liaise with the museum curator regarding their requirements in ordering, boxing and labelling the site archive. Should further fieldwork be undertaken at the site, the archive from the trial trenching would be incorporated within the overall site archive.

- 10.8 Archiving of digital data from the project should be undertaken in a manner consistent with professional standards and guidance (Richards and Robinson 2000).
- 10.9 In addition to the deposition of the archive copies of all relevant reports would also be deposited with South Yorkshire Sites and Monument Record, including in PDF or other format, as well as the English Heritage Regional Science Advisor, the National Monuments Record (NMR) and OASIS.
- 10.10 Should no further fieldwork be undertaken but the results of the trial trenching are considered to merit publication, a report on the results of the work would be prepared for publication within a suitable archaeological journal (such as the *Yorkshire Archaeological Journal*).

#### 11.0 PROGRAMME

- 11.1 Although the proposed programme for the trial trenching may be subject to variation, an indicative timescale for the work is set out below. The South Yorkshire Archaeology Service would be informed a minimum of one week in advance of work commencing.
- 11.2 It is anticipated that the trial trenching would commence on 13<sup>th</sup> September 2010 and would take approximately eight weeks to complete.
- 11.3 A report on the results of the trial trenching would be completed within six weeks of the end of the fieldwork although it may be necessary to complete an interim report in advance of that date.

## 12.0 CONFIDENTIALITY, COPYRIGHT AND PUBLICITY

- 12.1 The results of the work will remain confidential initially being distributed only to Persimmon, their agents, the South Yorkshire Archaeology Service and English Heritage and will remain so until such time as it is deemed to have entered the public domain.
- 12.2 The copyright of any written, graphic or photographic records and reports will rest with the archaeological organisation undertaking the fieldwork and analysis. Aspects of copyright may however transfer to the relevant journal or museum upon publication and deposition respectively, as required.
- 12.3 No publicity will be entered into with respect to the trial trenching without the consent of the Persimmon Homes or their agents. Any such publicity would acknowledge the co-operation of the South Yorkshire Archaeology Service and English Heritage. It is proposed that this stage of the evaluation will have a Public Open day.

#### 13.0 HEALTH AND SAFETY

13.1 It is the responsibility of the archaeological contractor to ensure that health and safety requirements are fulfilled, and the organisation should therefore comply with the 1974 Health and Safety Act and its subsequent amendments in all its operations. In this respect the SCAUM manual on archaeological health and safety would be followed for site works, and as normal practice, first aid boxes, an accident book and a telephone would be provided on site. Where required, safety helmets and reflective jackets would be worn and site staff would be appropriately equipped in terms of bad weather clothing. Information on service locations is to be obtained prior to the commencement of any excavation works and a Risk Assessment to HSE requirements should be prepared in advance of undertaking the site works.

#### 14. REFERENCES

- Bayley, J, Dungworth, D and Paynter, S 2001: *Archaeometallurgy*. Centre for Archaeology Guidelines 2001/01. English Heritage
- Brickley M and McKinley J I 2004: *Guidelines to the Standards for Recording Human Remains* Institute of Field Archaeologists Paper No. **7**
- Brown D H 2007: Archaeological Archives A Guide to Best Practice in Creation, Compilation, Transfer and Curation Archaeological Archives Forum
- Department for Culture, Media and Sport 2002: *Treasure Act 1996 Code of Practice (Revised) England and Wales*
- English Heritage 1991: Management of Archaeological Projects (MAP2)
- English Heritage 1995: A Strategy for the Care and Investigation of Finds. Ancient Monuments Laboratory
- English Heritage 1998: Dendrochronology Guidelines on Producing and Interpreting Dendrochronological Dates
- English Heritage 2001: Archaeometallurgy Centre for Archaeology Guidelines 2001/01
- English Heritage 2002a: Human Bones from Archaeological Sites Guidelines for Producing Assessment Documents and Analytical Reports. Centre for Archaeology Guidelines
- English Heritage 2002b: Environmental Archaeology A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-Excavation Centre for Archaeology Guidelines 2002/01
- English Heritage 2003: Archaeological Science at PPG16 Interventions: Best Practice Guidance for Curators and Commissioning Archaeologists
- English Heritage 2006: Management of Research Projects in the Historic Environment – The MoRPHE Project Managers' Guide
- English Heritage 2007: Geoarchaeology: Using Earth Sciences to Understand the Archaeological Record
- Faull M L and Stinson M (eds) 1986: Domesday Book: Yorkshire
- Institute for Archaeologists 2008: Standard and Guidance for Archaeological Field Evaluation

- Jarvis et al 1984: Soils and Their Use in Northern England Soils Survey of England and Wales Bulletin No. 10
- Jones D M (ed) 2006: Guidelines on the X-radiography of Archaeological Metalwork English Heritage
- MAP Archaeological Consultancy Ltd 2000: Manor Farm, Bessacarr, Doncaster, South Yorkshire Desk Based Assessment
- PPS 5 2010: Planning Policy Guidance No. 5 Planning and the Historic Environment.
- Richards J D and Robinson D (eds) 2000: Digital Archives from Excavation and Fieldwork Good Practice (2nd edition) AHDS
- Smalley R 2008: Manor Farm, Bessacarr, Doncaster Geophysical Survey Report. Stratascan.
- Society of Museum Archaeologists 1995: Selection, Retention and Dispersal of Archaeological Collections Guidelines for Use in England, Northern Ireland, Scotland and Wales
- Walker K 1990: Guidelines for the Preparation of Excavation Archives for Long-Term Storage Archaeology Section of the United Kingdom Institute for Conservation
- Watkinson D and Neal V 1998: First Aid for Finds (3rd edition) RESCUE and the Archaeological Section of the United Kingdom Institute for Conservation



Manor Farm
Bessacarr
Doncaster

Geophysical Survey

November 2010

Report No. 2145

MAP Archaeological Consultancy Ltd

# Manor Farm Bessacarr South Yorkshire

# **Geophysical Survey**

#### **Summary**

A geophysical (magnetometer) survey covering approximately 0.5 hectares was carried out at the proposed location of a housing development near Manor Farm, Bessacarr, south-east of Doncaster. The survey was undertaken to determine the full extent of a probable area of Iron Age/Romano-British metal-working, partially defined by a previous geophysical survey and subsequently revealed by trial trenching. The current survey has clearly defined a broad area of intense magnetic disturbance, measuring approximately 25m by 30m, which is assumed to define the main area of metalworking. Less intense readings around the periphery of this disturbance probably define the limits of the industrial activity. Discrete low magnitude anomalies to the east and north are considered to have some archaeological potential given the activity in the immediate area.



# **Report Information**

Client: MAP Archaeological Consultancy Ltd

Address: Showfield Lane, Malton, North Yorkshire YO17 6BT

Report Type: Geophysical Survey

Location: Bessacarr

County: South Yorkshire Grid Reference: SK 6165 9988

Period(s) of activity

represented: Iron Age/Romano-British?

Report Number: 2145
Project Number: 3667
Site Code: MFB10

Planning Application No.: n/a Museum Accession No.: n/a

Date of fieldwork: November 2010
Date of report: November 2010

Project Management: Sam Harrison BSc MSc AIfA

Fieldwork: Alex Harrison BSc

David Harrison BA MSc

Report: Alistair Webb BA MIfA

Illustrations: Alex Harrison

Sam Harrison

Photography: Alex Harrison

Research: n/a

Authorisation for

distribution: ------



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Plate 2 General shot of survey area, looking north

#### 1 Introduction

Archaeological Services WYAS (ASWYAS) was commissioned by Sophie Langford at MAP Archaeological Consultancy Ltd on behalf of their client, Persimmon Homes Yorkshire, to undertake a geophysical (magnetometer) survey on land at Manor Farm, Bessacarr, South Yorkshire (see Fig. 1) in advance of the determination of a planning application for a housing development. This survey extends an earlier magnetometer survey carried out by Stratascan (Smalley 2008) on behalf of Archaeological Research Services and encompasses an area recently evaluated through trial trenching (MAP Archaeological Consultancy, forthcoming).

## Site location, topography and land use

The site is located approximately 5km south-east of Doncaster at Bessacarr, centred at SK 6165 9988 (see Fig. 2), and is situated within a large tract of derelict agricultural land that is bound to the south and east by the M18 motorway and by railway lines to the north and west (see Figs 1 and 2). The ground cover was predominantly short grass interspersed with occasional young trees and patches of light woodland (see plates). Patches of bare earth indicate the location of the recently completed scheme of trial trenching.

The site lies at approximately 5m above Ordnance Datum (aOD) with the land rising gradually to the north, south and west.

#### Geology and soils

The solid geology of the area comprises sandstone of the Nottingham Castle sandstone formation (BGS 1969). The soils in the area are classified in the Newport 1 association being characterised as deep, well-drained, sands and loams that can be affected by groundwater (SSEW 1983).

# 2 Archaeological background

A desk-based assessment undertaken as part of a previous phase of work (Archaeological Research Services 2008?) identified 'sites and spot finds from the prehistoric to the post-medieval period' in the area around Manor Farm. Cropmarks indicative of possible infilled ditches forming fields, enclosures and trackways were also noted, particularly just to the immediate north-west of the area currently under evaluation.

A geophysical survey undertaken in 2008 subsequently identified 'a number of anomalies of a possible archaeological origin' although there was little obvious correlation with the identified cropmarks; this survey did not extend into the area currently under evaluation. Large areas of magnetic disturbance were also noted, including to the immediate south of the current survey area. A programme of trial trenching (MAP Archaeological Consultancy Ltd forthcoming) following on from the 2008 survey has recently been completed. The results of

this evaluation are not yet available but it is understood that several features of archaeological potential have been identified, including evidence of metal-working (see below).

# 3 Aims, Methodology and Presentation

The main aim of the survey was to determine the extent of features/metal-working activity identified during the trial trenching in an area that was not evaluated by the previous (2008) geophysical survey. The secondary aim was to clarify the potential for archaeological features within the defined survey area as a whole.

Specifically the survey sought to provide information about the nature and possible interpretations of any identified magnetic anomalies and thereby determine the likely extent, presence or absence of any buried archaeological remains in the defined survey area. These aims were to be achieved by undertaking detailed (recorded) magnetometer survey over a broadly rectangular area covering approximately 0.5 hectares located between Trench 63 in the north and Trench 26 to the south (see Fig. 2).

The survey area was set-out with a Trimble 5800 VRS differential GPS to the national grid. Temporary reference objects (wooden survey marker stakes) were established and left in place following completion of the fieldwork for accurate geo-referencing. The locations of the temporary reference objects are shown on Figure 2 and their Ordnance Survey coordinates tabulated in Appendix 2.

#### Magnetometer survey

Bartington Grad601 instruments were used to take readings at 0.25m intervals on zigzag traverses 1m apart within 30m by 30m grids so that 3600 readings were recorded in each grid. These readings were stored in the memory of the instrument and later downloaded to computer for processing and interpretation. Geoplot 3 (Geoscan Research) software was used to process and present the data. Further details are given in Appendix 1. Detailed survey allows the visualisation of weaker anomalies that may not have been readily identifiable by magnetometer (magnetic) scanning.

#### Reporting

A general site location plan, incorporating the 1:50000 Ordnance Survey mapping is shown in Figure 1. Figure 2 is a more detailed site location showing the magnetometer data on the Ordnance Survey map base at a scale of 1:2500. The processed greyscale data, the 'raw' XY trace plot data and interpretation figures are presented at a scale of 1:500 in Figures 3 to 6 inclusive.

Further technical information on the equipment used, data processing and survey methodologies are given in Appendix 1 and Appendix 2. Appendix 3 describes the composition and location of the site archive.

The survey methodology, report and any recommendations comply with the Methodology and with guidelines outlined by English Heritage (David *et al* 2008) and by the IfA (Gaffney, Gater and Ovenden 2002). All figures reproduced from Ordnance Survey mapping are with the permission of the controller of Her Majesty's Stationery Office (© Crown copyright).

The figures in this report have been produced following analysis of the data in 'raw' and processed formats and over a range of different display levels. All figures are presented to most suitably display and interpret the data from this site based on the experience and knowledge of Archaeological Services staff.

#### 4 Results and Discussion

A clearly defined area of intense magnetic disturbance has been identified to the south-western corner of the survey area. This area of disturbance extends north and south of T59, overlapping the northern edge of the 2008 survey. No detailed information on the findings from T59 have been provided but the results of the current geophysical survey certainly indicate the presence of intensely magnetic material, perhaps a spread of slag or iron waste, and potentially indicating that metal working was being carried out either here or in the immediate vicinity.

Around the periphery of the area of intense disturbance, and to the south-eastern corner of the survey area, less well defined areas of magnetic variation have been identified. The anomalies comprising these areas are probably associated with the activity/processes that resulted in the main area of disturbance and on this basis can also be deemed to be of archaeological potential.

To the north and east of the survey area several low magnitude anomalies, identified as small areas of magnetic enhancement, have been identified. These anomalies may be indicative of small pits but could also be due to geological variation or to modern ground disturbance. The more extensive low magnitude areas of magnetic enhancement are considered more likely to be geological in origin but an archaeological cause cannot be ruled out given the context.

Two trends can be seen in the data to the northern end of the survey area. The very weak low magnitude linear anomaly locates the backfilled T63. There is no obvious cause for the curvilinear trend immediately north-east of the trench.

#### **5** Conclusions

An area of intense magnetic disturbance has been clearly defined fulfilling the primary aim of the survey. It would now seem clear that the magnitude of these responses is indicative of metal working either in situ or in the immediate vicinity. The responses may be due to the presence of slag or iron waste or to the remains of structures associated with the metalworking processes. Less well defined areas of magnetic variation around the presumed periphery of the industrial activity are also interpreted as being due to the processing of iron.

The results and subsequent interpretation of data from geophysical surveys should not be treated as an absolute representation of the underlying archaeological and non-archaeological remains. Confirmation of the presence or absence of archaeological remains can only be achieved by direct investigation of sub-surface deposits.

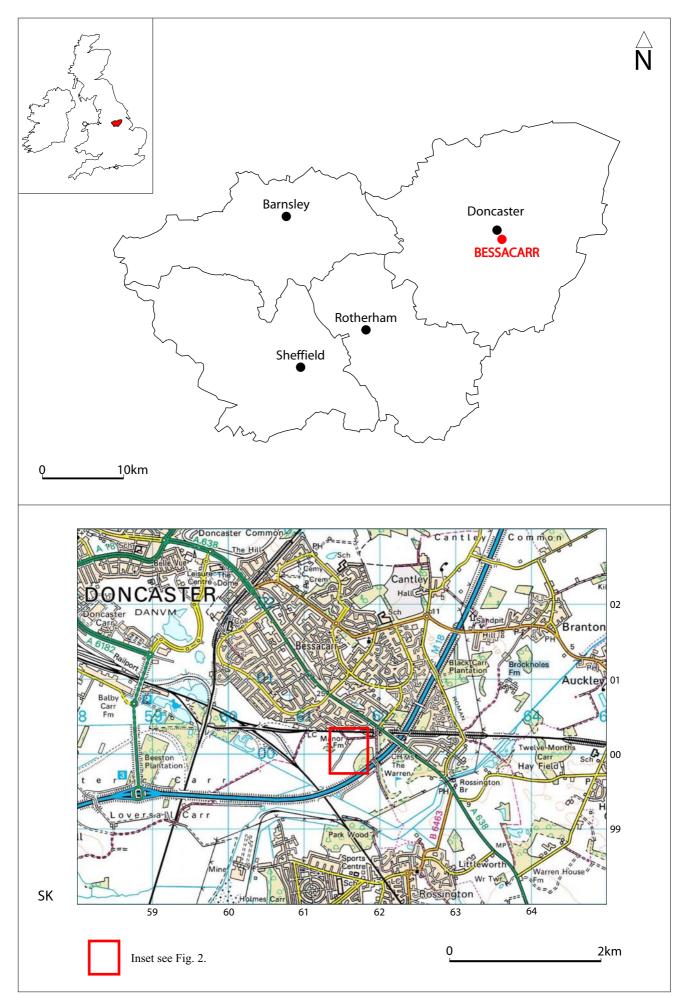


Fig. 1. Site location



Fig. 2. Site location showing greyscale magnetometer data (1:2500 @ A4)

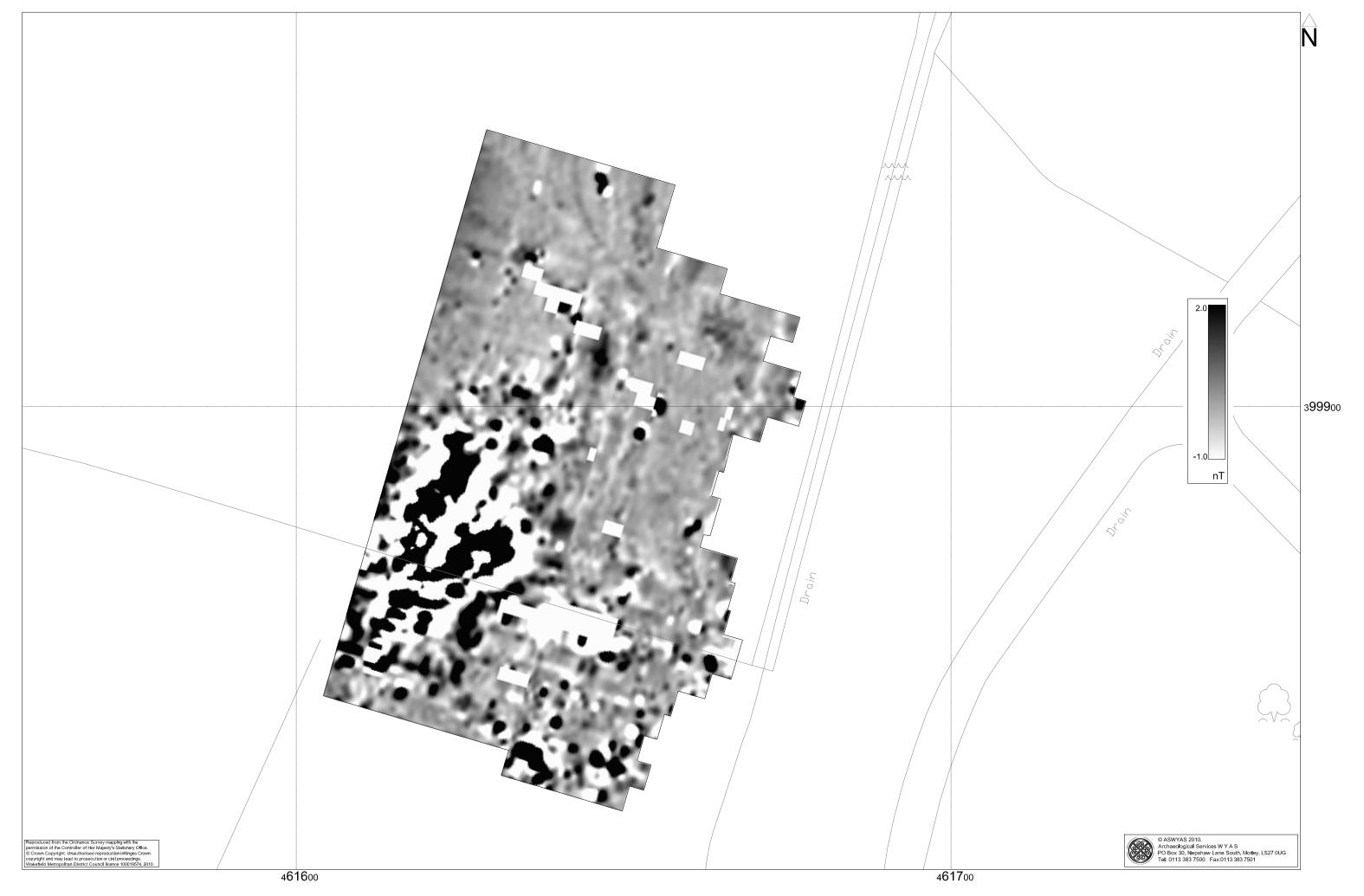


Fig. 3. Processed greyscale magnetometer data (1:500 @ A3)

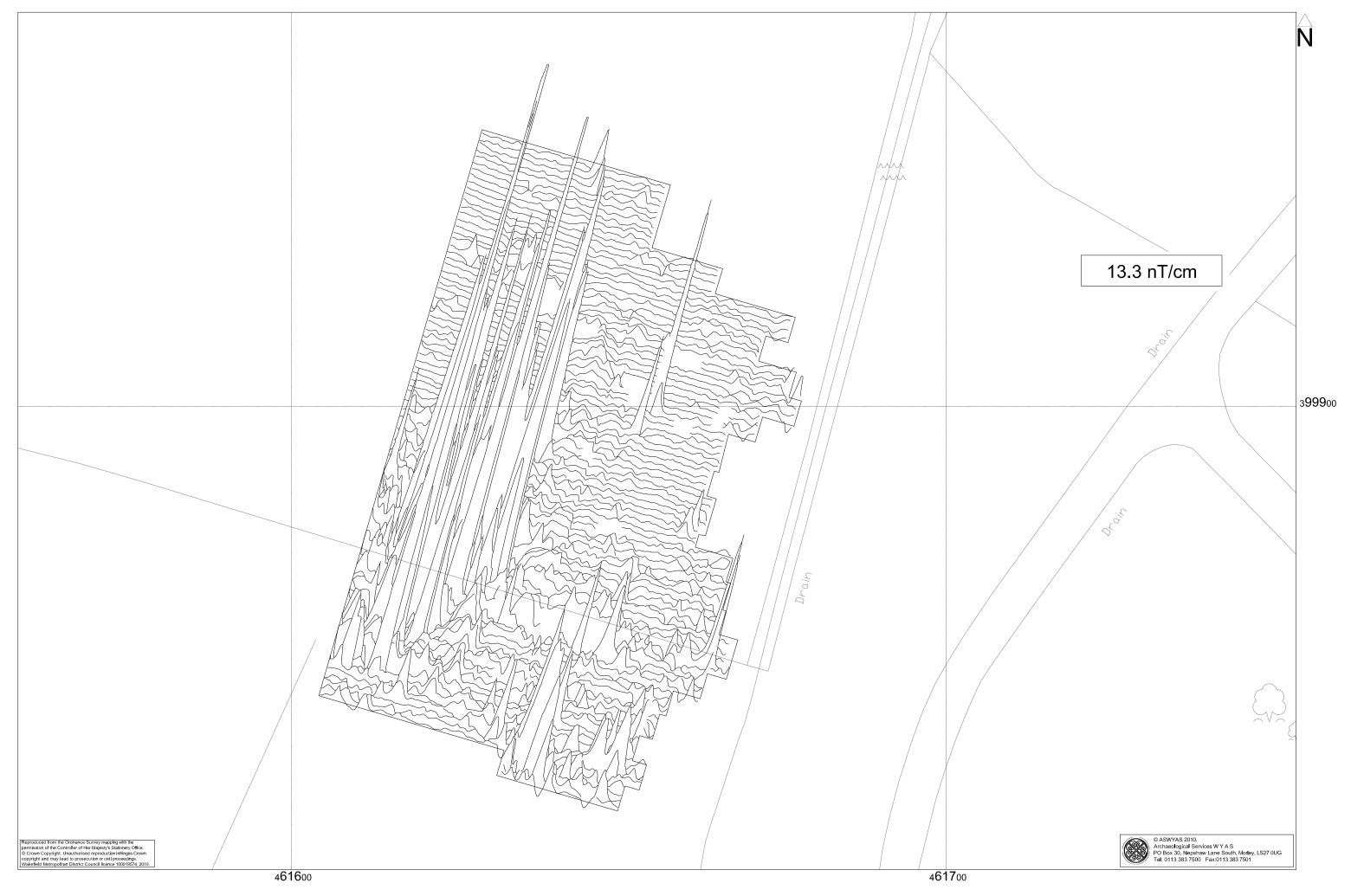


Fig. 4. XY trace plot of unprocessed magnetometer data (1:500 @ A3)

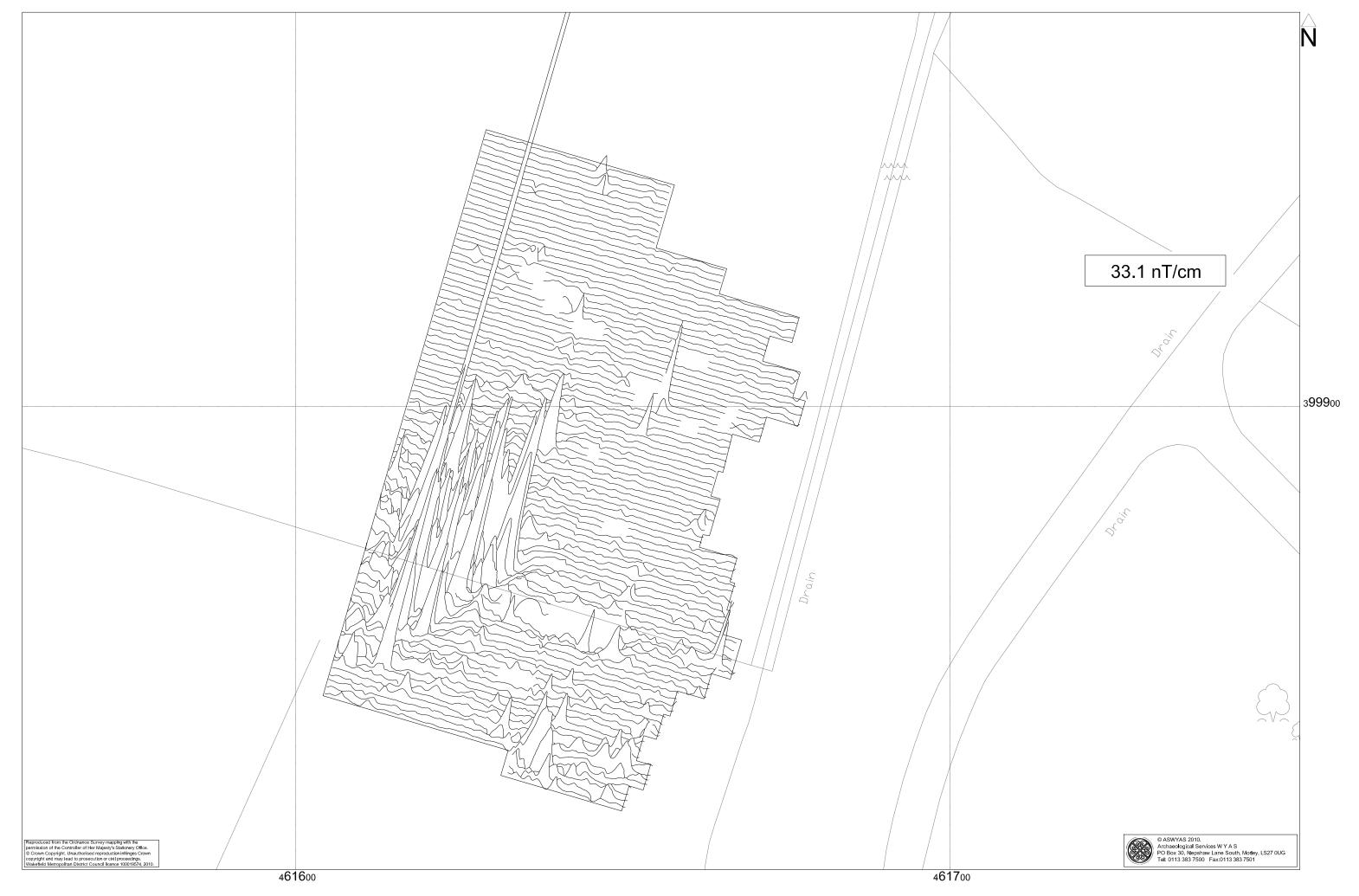


Fig. 5. XY trace plot of unprocessed magnetometer data (1:500 @ A3)

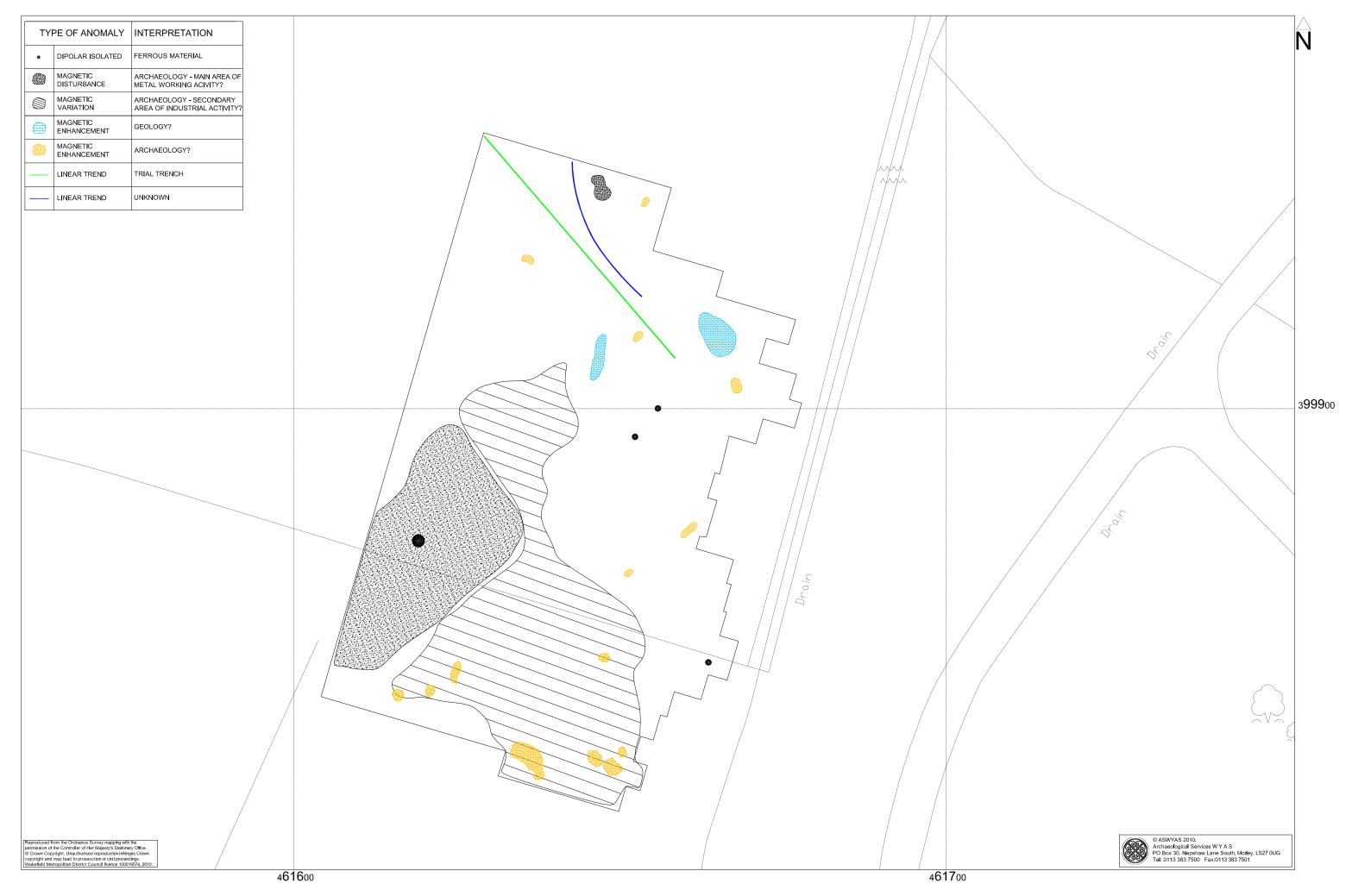




Plate 1. General shot of survey area, looking south



Plate 2. General shot of survey area, looking north

# Appendix 1: Magnetic survey - technical information

## Magnetic Susceptibility and Soil Magnetism

Iron makes up about 6% of the Earth's crust and is mostly present in soils and rocks as minerals such as maghaemite and haemetite. These minerals have a weak, measurable magnetic property termed magnetic susceptibility. Human activities can redistribute these minerals and change (enhance) others into more magnetic forms so that by measuring the magnetic susceptibility of the topsoil, areas where human occupation or settlement has occurred can be identified by virtue of the attendant increase (enhancement) in magnetic susceptibility. If the enhanced material subsequently comes to fill features, such as ditches or pits, localised isolated and linear magnetic anomalies can result whose presence can be detected by a magnetometer (fluxgate gradiometer).

In general, it is the contrast between the magnetic susceptibility of deposits filling cut features, such as ditches or pits, and the magnetic susceptibility of topsoil's, subsoil's and rocks into which these features have been cut, which causes the most recognisable responses. This is primarily because there is a tendency for magnetic ferrous compounds to become concentrated in the topsoil, thereby making it more magnetic than the subsoil or the bedrock. Linear features cut into the subsoil or geology, such as ditches, that have been silted up or have been backfilled with topsoil will therefore usually produce a positive magnetic response relative to the background soil levels. Discrete feature, such as pits, can also be detected. The magnetic susceptibility of a soil can also be enhanced by the application of heat and the fermentation and bacterial effects associated with rubbish decomposition. The area of enhancement is usually quite large, mainly due to the tendency of discard areas to extend beyond the limit of the occupation site itself, and spreading by the plough. An advantage of magnetic susceptibility over magnetometry is that a certain amount of occupational activity will cause the same proportional change in susceptibility, however weakly magnetic is the soil, and so does not depend on the magnetic contrast between the topsoil and deeper layers. Susceptibility survey is therefore able to detect areas of occupation even in the absence of cut features. On the other hand susceptibility survey is more vulnerable to the masking effects of layers of colluvium and alluvium as the technique, using the Bartington system, can generally only measure variation in the first 0.15m of plough-soil.

#### **Types of Magnetic Anomaly**

In the majority of instances anomalies are termed 'positive'. This means that they have a positive magnetic value relative to the magnetic background on any given site. However some features can manifest themselves as 'negative' anomalies that, conversely, means that the response is negative relative to the mean magnetic background.

Where it is not possible to give a probable cause of an observed anomaly a "?" is appended. It should be noted that anomalies interpreted as modern in origin might be caused by features that are present in the topsoil or upper layers of the subsoil. Removal of soil to an archaeological or natural layer can therefore remove the feature causing the anomaly.

The types of response mentioned above can be divided into five main categories that are used in the graphical interpretation of the magnetic data:

#### Isolated dipolar anomalies (iron spikes)

These responses are typically caused by ferrous material either on the surface or in the topsoil. They cause a rapid variation in the magnetic response giving a characteristic 'spiky' trace. Although ferrous archaeological artefacts could produce this type of response, unless there is supporting evidence for an archaeological interpretation, little emphasis is normally given to such anomalies, as modern ferrous objects are common on rural sites, often being present as a consequence of manuring.

#### Areas of magnetic disturbance

These responses can have several causes often being associated with burnt material, such as slag waste or brick rubble or other strongly magnetised/fired material. Ferrous structures such as pylons, mesh or barbed wire fencing and buried pipes can also cause the same disturbed response. A modern origin is usually assumed unless there is other supporting information.

#### Linear trend

This is usually a weak or broad linear anomaly of unknown cause or date. These anomalies are often caused by agricultural activity, either ploughing or land drains being a common cause.

## Areas of magnetic enhancement/positive isolated anomalies

Areas of enhanced response are characterised by a general increase in the magnetic background over a localised area whilst discrete anomalies are manifest by an increased response (sometimes only visible on an XY trace plot) on two or three successive traverses. In neither instance is there the intense dipolar response characteristic exhibited by an area of magnetic disturbance or of an 'iron spike' anomaly (see above). These anomalies can be caused by infilled discrete archaeological features such as pits or post-holes or by kilns. They can also be caused by pedological variations or by natural infilled features on certain geologies. Ferrous material in the subsoil can also give a similar response. It can often therefore be very difficult to establish an anthropogenic origin without intrusive investigation or other supporting information.

#### Linear and curvilinear anomalies

Such anomalies have a variety of origins. They may be caused by agricultural practice (recent ploughing trends, earlier ridge and furrow regimes or land drains); natural geomorphological features such as palaeochannels or by infilled archaeological ditches.

## Methodology: Magnetic Susceptibility Survey

There are two methods of measuring the magnetic susceptibility of a soil sample. The first involves the measurement of a given volume of soil, which will include any air and moisture that lies within the sample, and is termed volume specific susceptibility. This method results in a bulk value that it not necessarily fully representative of the constituent components of the sample. For field surveys a Bartington MS2 meter with MS2D field loop is used due to its speed and simplicity. The second technique overcomes this potential problem by taking into account both the volume and mass of a sample and is termed mass specific susceptibility. However, mass specific readings cannot be taken in the field where the bulk properties of a soil are usually unknown and so volume specific readings must be taken. Whilst these values are not fully representative they do allow general comparisons across a site and give a broad indication of susceptibility changes. This is usually enough to assess the susceptibility of a site and evaluate whether enhancement has occurred.

#### **Methodology: Gradiometer Survey**

There are two main methods of using the fluxgate gradiometer for commercial evaluations. The first of these is referred to as *magnetic scanning* and requires the operator to visually identify anomalous responses on the instrument display panel whilst covering the site in widely spaced traverses, typically 10m apart. The instrument logger is not used and there is therefore no data collection. Once anomalous responses are identified they are marked in the field with bamboo canes and located on a base plan. This method is usually employed as a means of selecting areas for detailed survey when only a percentage sample of the whole site is to be subject to detailed survey.

The disadvantages of magnetic scanning are that features that produce weak anomalies (less than 2nT) are unlikely to stand out from the magnetic background and so will be difficult to detect. The coarse sampling interval means that discrete features or linear features that are parallel or broadly oblique to the direction of traverse may not be detected. If linear features are suspected in a site then the traverse direction should be perpendicular (or as close as is possible within the physical constraints of the site) to the orientation of the suspected features. The possible drawbacks mentioned above mean that a 'negative' scanning result should be validated by sample detailed magnetic survey (see below).

The second method is referred to as *detailed survey* and employs the use of a sample trigger to automatically take readings at predetermined points, typically at 0.25m intervals, on zigzag traverses 1m apart. These readings are stored in the memory of the instrument and are later

dumped to computer for processing and interpretation. Detailed survey allows the visualisation of weaker anomalies that may not have been detected by magnetic scanning.

During this survey a Bartington Grad601 magnetic gradiometer was used taking readings on the 0.1nT range, at 0.25m intervals on zigzag traverses 1m apart within 30m by 30m square grids. The instrument was checked for electronic and mechanical drift at a common point and calibrated as necessary. The drift from zero was not logged.

#### **Data Processing and Presentation**

The detailed gradiometer data has been presented in this report in XY trace and greyscale formats. In the former format the data shown is 'raw' with no processing other than grid biasing having been done. The data in the greyscale images has been interpolated and selectively filtered to remove the effects of drift in instrument calibration and other artificial data constructs and to maximise the clarity and interpretability of the archaeological anomalies.

An XY plot presents the data logged on each traverse as a single line with each successive traverse incremented on the Y-axis to produce a 'stacked' plot. A hidden line algorithm has been employed to block out lines behind major 'spikes' and the data has been clipped. The main advantage of this display option is that the full range of data can be viewed, dependent on the clip, so that the 'shape' of individual anomalies can be discerned and potentially archaeological anomalies differentiated from 'iron spikes'. Geoplot 3 software was used to create the XY trace plots. The same program was used to produce the greyscale images. All greyscale plots are displayed using a linear incremental scale.

# **Appendix 2: Survey location information**

The site grid was laid out using a Trimble VRS differential Global Positioning System (Trimble 5800 model). The accuracy of this equipment is better then 0.01m. The locations of the temporary reference points left on site are shown on Figure 2 and the Ordnance Survey grid co-ordinates tabulated below. The internal accuracy of the survey grid relative to these markers is better than 0.05m. The survey grids were then superimposed onto a map base provided by the client as a 'best fit' to produce the displayed block locations. Overall there was a good correlation between the local survey and the digital map base and it is estimated that the average 'best fit' error is better than  $\pm 1.5$ m. However, it should be noted that Ordnance Survey co-ordinates for 1:2500 map data have an error of  $\pm 1.9$ m at 95% confidence. This potential error must be considered if co-ordinates are measured off for relocation purposes.

Station	Easting	Northing	Elevation (aOD)
A	461670.5350	399986.0110	5.2600m
В	461604.2590	399930.3000	5.6720m
С	461603.8570	399864.4870	4.7220m

Archaeological Services WYAS cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party.

# **Appendix 3: Geophysical archive**

The geophysical archive comprises:-

- an archive disk containing compressed (WinZip 8) files of the raw data, report text (Microsoft Word 2000), and graphics files (Adobe Illustrator CS2 and AutoCAD 2008) files.
- a full copy of the report

At present the archive is held by Archaeological Services WYAS although it is anticipated that it may eventually be lodged with the Archaeology Data Service (ADS). Brief details may also be forwarded for inclusion on the English Heritage Geophysical Survey Database after the contents of the report are deemed to be in the public domain (i.e. available for consultation in the relevant Sites and Monument Record Office).

# **Bibliography**

- David, A., N. Linford, P. Linford and L. Martin, 2008. *Geophysical Survey in Archaeological Field Evaluation: Research and Professional Services Guidelines (2<sup>nd</sup> edition)* English Heritage
- Gaffney, C., Gater, J. and Ovenden, S. 2002. *The Use of Geophysical Techniques in Archaeological Evaluations*. IFA Technical Paper No. 6
- Smalley, R., 2008. Manor Farm, Bessacarr, Doncaster: Geophysical Survey Report, Unpubl. Client Report Stratascan J2517