



# Thickthorn Park and Ride Extension, Norwich, Norfolk

## Archaeological Evaluation Report

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# Thickthorn Park and Ride Extension, Norwich, Norfolk

## *Archaeological Evaluation Report*

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## Summary

Between the 23rd and 27th January 2023, Oxford Archaeology conducted an archaeological evaluation at land adjacent to Thickthorn Park and Ride, Norwich, Norfolk (TG 18047 05277). A total of eighteen 30m long trenches, which represented a 3.5% sample of the c.4.7ha site, were excavated within a proposed extension of the existing Thickthorn Park and Ride.

Trenches were placed to investigate possible archaeological features identified as anomalies by geophysics, LiDAR, and National Mapping Programme (NMP) data. In most cases where geophysical anomalies and cropmarks occurred, features were not uncovered. However, the geophysical survey and NMP data did detect some of the archaeological features encountered on site.

Ten of the trenches were devoid of archaeology (Trenches 1, 2, 3, 5, 9, 10, 15, 16, 17, and 18), although a natural palaeochannel was observed and recorded in Trenches 2, 5, 10, and 17. The features uncovered elsewhere largely comprised ditches, although possible pits and gullies were also identified. A ditch encountered in Trenches 8 and 11 probably represents a post-medieval field boundary.

Most features encountered within the site were undated due to a lack of artefacts or clear spatial relationships between features. Two sherds of late 12th-14th century pottery were recovered from the site. A single shard of glass recovered from a ditch was dated to the 17th century. These finds are suggestive of medieval to post-medieval activity on the site. Two flint flakes of probable Neolithic date recovered from the palaeochannel, and topsoil is indicative of prehistoric activity in the wider area.

Overall, the archaeological works have revealed a low density of poorly dated archaeological remains across the site which probably represent post-medieval, agricultural activity with no evidence of associated settlement.

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The project was managed for Oxford Archaeology by Louise Moan. The fieldwork was directed by Matthew Edwards, who was supported by Will Kinchin and Cain Redmayne. Survey and digitising were carried out by Daria Adams. Thanks are also extended to the various finds and environmental processors, specialists, illustrator and editor for their contributions.

## 1 INTRODUCTION

### 1.1 Scope of work

- 1.1.1 Oxford Archaeology (OA) was commissioned by WSP on behalf of Norfolk County Council to undertake a trial trench evaluation on an arable field to the west of Thickthorn Park and Ride, Norwich, Norfolk (TG 18047 05277, Fig. 1). The c.4.7ha site will encompass a proposed extension to the Park and Ride, including parking, a bus shelter, cycle storage, Amazon hub facilities and associated drainage infrastructure and landscaping.
- 1.1.2 In 2021, the site was subject to a desk-based assessment (WSP 2021) and geophysical survey by SUMO Geophysics (Cockcroft 2021) which determined there was a high archaeological potential for the presence of prehistoric, later medieval and/or post-medieval and palaeoenvironmental remains.
- 1.1.3 In consultation with the Local Planning Authority, a scope of archaeological evaluation work on the site was agreed and set out within a Written Scheme of Investigation (WSI) produced by WSP (2022). This document outlines how OA implemented the specified requirements detailed in the WSI.

### 1.2 Location, topography and geology

#### *Site Location*

- 1.2.1 The site is located immediately west of Thickthorn Park and Ride, to the south-west of Norwich, within the historic parish of Hethersett. The main part of the site lies within an arable field, bounded by Ward's Wood along its eastern edge, with woodland also extending into the south-eastern corner of the site. A narrow southward projection of the site extends to scrubland and Cantley Stream.
- 1.2.2 The site is situated within the shallow valley of Cantley Stream. The valley bottom, adjacent to the southern end of the site, lies at 16m OD with the land rising to 30m OD at the northern end of the site.
- 1.2.3 According to British Geological Survey digital data, bedrock geology comprises Lewes Nodular, Seaford, Newhaven, Culver and Portsdown chalk formations. The majority of the site is overlain by superficial deposits of glacial sand and gravels (Lowestoft Formation), while the southernmost edge of the area contains superficial sand and gravel deposits (Sherringham Cliffs Formation). There is also a small area of alluvium at the far southern end of the site, adjacent to Cantley Stream (<https://geologyviewer.bgs.ac.uk/>).
- 1.2.4 A Ground Investigation was conducted within the northern part of the site in May 2020 by Norfolk Partnership Laboratory (2020) to provide geotechnical information for the site. This comprised five trial pits, one borehole and four window samples. The northern part of the site was directly underlain by topsoil to a depth of 0.3-0.5m (with one exception, where topsoil extended to a depth of 0.7m). The topsoil was underlain by 'Cover Silt' (Boulder Clay) in most locations. This extended to a depth of 0.8–1.6m below ground level, where glacial sands and gravels were encountered. In three locations, towards the north-eastern corner of site and further south, the topsoil was

directly underlain by glacial sands and gravels. Only one borehole extended into the underlying chalk bedrock, which lay at 9.5m below ground level.

### 1.3 Archaeological and historical background

1.3.1 Numerous archaeological investigations have taken place in the vicinity of the site in recent years which have revealed extensive evidence of past human activity. A full search of the Norfolk Historic Environment Record (NHER) of a 1km radius centred on the evaluation site was commissioned from Norfolk County Council Historic Environment Service (NCCHEs) on 13<sup>th</sup> February 2023. This search identified a high potential for prehistoric and medieval remains to survive within the bounds of the site. The location of pertinent NHER sites is shown on Figure 2.

#### *Prehistoric*

1.3.2 Evidence of prehistoric activity within the site and its environs is well represented in the NHER. An evaluation and excavation directly to the east of the site revealed evidence of Neolithic and Bronze Age settlement activity represented by postholes and pits. Evidence for Early to Middle Iron Age settlement activity was also recovered in the form of pits and ditches, possibly representing enclosures and trackway fragments. Numerous features contained worked flint and prehistoric pottery (NHER 39823; Watkins 2006).

1.3.3 To the south-west of the site, trial trenching revealed a shallow hollow that produced an assemblage of worked flint, including flakes, a blade, and a core, dating from the Mesolithic to the Bronze Age (NHER 65057).

1.3.4 A fieldwalking survey which included the area within the boundary of the proposed development identified a wide range of finds dating to the Neolithic, medieval, and post-medieval periods. A flint assemblage consisting of cores, flakes, blades, and a hammerstone has been dated to the Neolithic/Early Bronze Age (NHER 58845).

1.3.5 Findspots include Mesolithic and Neolithic flint tools and flint flakes found to the south of the site along the route of the A11 prior to its construction (NHERs 22812, 22813, 22814 and 22758). Neolithic worked flints have also been recorded to the northwest, northeast, and east (NHERs 45397, 28021 and 22828).

1.3.6 Two Bronze Age round barrows situated to the southeast have been designated a Scheduled Monument (National Heritage List for England List Entry No. 1003977) and survive as earthworks (NHERs 9463 and 9464). They are surrounded by an area of former plantation known as Big Wood that was felled in the 1920s. A further possible barrow to the northeast survives only as a cropmark (NHER 9395).

#### *Medieval and post-medieval*

1.3.7 A fieldwalking survey which included the subject site identified a small quantity of medieval pottery and ceramic building material from the northern portion of the field. A moderate quantity of post-medieval pottery, pantile, brick, and fragments of clay pipe was also recovered (NHER 58845).

- 1.3.8 An evaluation directly west of the site revealed evidence of medieval and post-medieval activity in the form of pits and ditches. A small quantity of medieval pottery was recovered. A group of features associated with a later phase of activity produced assemblages of Late Medieval Transitional (LMT) pottery, along with post-medieval objects, animal bone, and an Elizabethan coin. The alignment of the ditches suggests they were associated with medieval and post-medieval field systems (NHER 65020; Cotswold Archaeology 2020).
- 1.3.9 Thickthorn Hall, located to the west, stands within a medieval moat that was later turned into an ornamental lake and was incorporated into part of the post-medieval landscape park laid out when the hall was built in 1812 (NHERs 33732 and 9352).
- 1.3.10 The wider post-medieval evidence suggests an agricultural landscape interspersed with supporting industry. Field boundaries have been identified to the east (NHER 36138). A possible pottery kiln site has been recorded to the north (NHER 9406, not illustrated) and, to the southeast, lay the site of a limekiln and tramway (NHER 16685).

### *Previous archaeological work*

- 1.3.11 In 2020, Cotswold Archaeology carried out a trial trench evaluation of land surrounding the A11/A47 Thickthorn Junction. Five trenches lay completely or partially within the boundary of the current site. The trenches revealed numerous linear and discrete features. Most features produced little or no dating evidence with the finds recovered suggesting medieval to post-medieval phases of activity. There was limited evidence for prehistoric activity, which included an assemblage of worked flint and a polished stone axehead. An area of possible medieval activity was identified in the south-west corner of the current site, where a couple of ditches produced medieval pottery (Cotswold Archaeology 2020, 57, fig. 6; ENF149240).
- 1.3.12 A programme of archaeological work (ENF95985 and ENF96370) on land now occupied by Thickthorn Park and Ride was undertaken by Norfolk Archaeological Unit in 2003 and 2004. Trial trenching and sample excavation revealed a range of linear and discrete features. Evidence of prehistoric activity was represented by postholes and pits dating to the Neolithic and Bronze Age periods and many features produced pottery and worked flint. Ditches, possibly representing enclosures and trackway fragments, were dated to the Iron Age, demonstrating a developed and organised landscape in the immediate vicinity of the site at this time.
- 1.3.13 In 2021, a desk-based assessment of the current site concluded that the archaeological potential is high for prehistoric (particularly late prehistoric) remains, later medieval and/or post-medieval agricultural remains and palaeoenvironmental remains (WSP 2021). A geophysical survey of the site was undertaken in October 2021 which detected two weak linear trends that may represent archaeological features and the route of a former field boundary (Fig. 3; Cockcroft 2021; ENF151967).



## 2 AIMS AND METHODOLOGY

### 2.1 Aims and objectives

- 2.1.1 The aim of the evaluation is to clarify the presence, nature, date and extent of any archaeological remains that might be present within the areas of impact, where archaeological survival is expected to be high. This is for the purposes of informing an appropriate mitigation strategy for any significant archaeological remains. If the evaluation reveals little of archaeological significance, then no further work may be necessary.
- 2.1.2 Based on the archaeological potential of the site, the project objectives defined in the WSI (WSP 2022) were as follows:
- i. Are the ditches previously identified in the geophysical survey archaeological in nature?
  - ii. Do any of the archaeological features/finds that have been identified previously in intrusive and non-intrusive works adjacent to the site extend within the Site?
  - iii. What can worked flints tell us about the scale, distribution and character of activity in the Palaeolithic and Mesolithic periods? Can this site contribute to our understanding of the Upper Palaeolithic and Mesolithic periods nationally?
  - iv. Can finds assemblages help to better characterise the use of Bronze Age and Iron Age sites?
  - v. What evidence can this site provide of medieval agricultural practices?
  - vi. How would this medieval rural site have related to the urban centre of Norwich?
  - vii. What can trial trenching tell us about the use of the post-medieval rectangular enclosure in the north-western part of the site?
  - viii. What are the nature and levels of natural deposits, and has there been any modern disturbance?

### 2.2 Methodology

- 2.2.1 The archaeological evaluation and analysis were conducted in accordance with the approved WSI (WSP 2022) and in line with current best archaeological practice and the appropriate national and regional standards and guidelines. All work was conducted in accordance with the Chartered Institute for Archaeologists' *Code of Conduct and Standard* (CIfA 2014a) and *Standard and Guidance for Archaeological Field Evaluations* (CIfA 2014b) and to Norfolk County Council's *Standards for Development-led Archaeological Projects in Norfolk* (Robertson *et al.* 2018).
- 2.2.2 A total of 18 trenches measuring 30m long and 1.8m wide were excavated across the development area which represents a 3.5% sample of the c.4.7ha site.
- 2.2.3 The trenches were set out by a Leica survey-grade GPS fitted with "smartnet" technology with an accuracy of 5mm horizontal and 10mm vertical. The footprint of each trench was metal detected prior to machining and also scanned using a CAT and Genny with a valid calibration certificate.
- 2.2.4 All trenches were excavated by a 20 tonne, 360° tracked mechanical excavator using a 2m wide toothless ditching bucket to the depth of geological horizons, or to the

upper interface of archaeological features or deposits, whichever was encountered first.

- 2.2.5 Topsoil, subsoil, and archaeological deposits were kept separate during excavation, to allow for sequential backfilling of excavations. The trenches were not backfilled until approved by the NCCHEs.
- 2.2.6 All machine excavation took place under constant supervision of a suitably qualified and experienced archaeologist. The top of the first archaeological deposit was exposed by machine and then investigated by hand. Any archaeological deposits present were excavated stratigraphically to the level of the geological horizon, where safe to do so. All trench and feature spoil were scanned visually and with a metal detector to aid recovery of artefacts.
- 2.2.7 A total of five bulk samples were taken from a range of features across the evaluation trenches and processed at OA's processing facility at Bourn.
- 2.2.8 The rationale for the location of these trenches (as laid out in the WSI) is presented in Table 1 below:

Trench	Dimensions (m)	Rationale
1	30 x 1.8	Located to investigate two linear features identified as being of possible archaeological origin
2	30 x 1.8	Located across features identified in the HEDBA as a cropmark of unknown date
3	30 x 1.8	Located across a linear feature identified as being of possible archaeological origin, as well as a LiDAR feature
4	30 x 1.8	Located across a linear feature identified as being of possible archaeological origin
5	30 x 1.8	Located across features identified in the HEDBA as a cropmark of unknown date, as well as a ferrous area on geophysics
6	30 x 1.8	Located across a ferrous area on geophysics
7	30 x 1.8	Located across a linear feature identified as being of possible archaeological origin
8	30 x 1.8	Located across a linear boundary that correlates to a field boundary that is represented on historic Ordnance Survey mapping
9	30 x 1.8	Located across a feature identified on LiDAR analysis
10	30 x 1.8	Located across features identified in the HEDBA as a cropmark of unknown date
11	30 x 1.8	Located across a linear boundary that correlates to a field boundary that is represented on historic Ordnance Survey mapping
12	30 x 1.8	Located across features identified in the National Mapping Programme as cropmarks of unknown date
13	30 x 1.8	Located in a 'blank' area, where no archaeological features have been identified
14	30 x 1.8	Located in a 'blank' area, where no archaeological features have been identified
15	30 x 1.8	Located in a 'blank' area, where no archaeological features have been identified
16	30 x 1.8	Located in a 'blank' area, where no archaeological features have been identified
17	30 x 1.8	Located in a 'blank' area, where no archaeological features have been identified
18	30 x 1.8	Located in a 'blank' area, where no archaeological features have been identified

*Table 1: Targeted trench rationale*

## 3 RESULTS

### 3.1 Introduction and presentation of results

3.1.1 The results of the evaluation are presented below and include a stratigraphic description of the trenches that contained archaeological remains. The full details of all trenches with dimensions and depths of all deposits can be found in Appendix A. Finds and environmental reports are located in Appendices B and C. Figures 4-7 provide plans of the results of the evaluation and Figure 8 provides sections of all the features encountered. Plates 1-25 contain a photograph of every trench, along with selected photographs of features.

### 3.2 General soils and ground conditions

3.2.1 The soil sequence in the trenches was fairly uniform. The natural geology of sands and gravels was overlain by a mid yellowish brown silty sand subsoil (0.05m to 0.40m thick), which in turn was overlain by a mid greyish brown sandy silt topsoil (0.12m to 0.80m thick).

3.2.2 Ground conditions throughout the evaluation were generally good, and the site remained dry throughout. Archaeological features, where present, were easy to identify against the underlying natural geology.

### 3.3 General distribution of archaeological deposits

3.3.1 There were 18 trenches in total (Fig. 3). Archaeological features were recorded in Trenches 4, 6, 7, 8, 11, 12, 13, and 14. Trenches 1, 3, 15, and 16 did not contain any archaeological remains.

### 3.4 Trench descriptions

#### *Trench 1*

3.4.1 Trench 1 (Plate 1) was devoid of archaeology.

#### *Trench 2*

3.4.2 Trench 2 (Fig. 4; Plate 2) was located in the north-western part of the site and aligned north to south. National Mapping Programme data shows several cropmarks interpreted as potential features, but these were not identified within the trench (Fig. 3).

3.4.3 The course of a palaeochannel (**59**) was recorded which continued through Trenches 5, 10, and 17. It extended across most of the trench and was excavated by the machine. It measured at least 22.43m wide and 0.83m deep (Fig 8, Section 17).

3.4.4 The palaeochannel was truncated by a modern pit, which contained post-medieval ceramic building material (CBM) and metalwork. The pit (**62**; Fig. 8, Section 20; Plate 3) may relate to an area of ferrous spread detected by the geophysical survey (Fig. 3). It was excavated by machine and found to be at least 7m wide and at least 1.4m deep. It contained three fills (109, 110, 111).

### *Trench 3*

3.4.5 Trench 3 (Plate 4) did not contain any archaeological remains.

### *Trench 4*

3.4.6 Trench 4 (Figs 5 and 7; Plate 5) lay in the southern part of the site on a north-east to south-west alignment. National Mapping Programme (Fig. 3) data shows several cropmarks interpreted as potential features, but these were not identified within the trench.

3.4.7 The trench contained a pit (**52**) located at its north-eastern end and measured 0.66m wide and at least 0.86m deep with near vertical sides (Fig. 8, Section 8). It was not fully excavated due to its depth and proximity to the trench baulk. Its fill (53) was a mid yellowish brown silty sand. An environmental sample was taken from this fill which contained frequent roots and occasional fragments of charcoal.

### *Trench 5*

3.4.8 Trench 5 (Fig. 4, Plate 6) was located in the north-western part of the site and aligned west to east. It contained a palaeochannel (58) which was a northern continuation of the channel recorded in Trenches 2, 10, and 17. It was excavated by machine and found to be 18.25m wide and at least 0.8m deep (Fig. 8, Section 18; Plate 7). It produced 96g of post-medieval tile and a blade-like flint flake of probable Neolithic date.

3.4.9 Geophysical survey (Fig. 3) detected a ferrous spread in this area, but this did not correspond with any deposits recorded within the trench. National Mapping Programme data (Fig. 3) delineates a linear cropmark interpreted as a potential feature, but this was not identified during the trenching.

### *Trench 6*

3.4.10 Trench 6 (Fig. 5; Plate 8) was in the south-eastern part of the site and aligned west to east. It contained one ditch (**25**), aligned north-east to south-west, which measured 0.70m wide and 0.07m deep with gentle sides and a concave base (Fig. 8, Section 1). It cut through the subsoil (28) and was filled with a dark greyish brown silty sand (26) which contained 28g of freshwater mussel shell and 28g of post-medieval brick. An environmental sample was taken from this fill which produced abundant quantities of modern seeds, moderate quantities of snail shells and occasional fragments of vitrified charcoal. A further 6g of freshwater mussel shell was also recovered from the sample.

### *Trench 7*

3.4.11 Trench 7 (Figs 5 and 7; Plate 9) was located in the southern part of the site and aligned north-west to south-east. National Mapping Programme data shows several cropmarks interpreted as potential features, but these were not identified within the trench. A possible linear archaeological feature, detected by the geophysical survey was also found not to be present (Fig. 3). The trench revealed a pit (**50**; Fig. 8, Section 7; Plate 10) which measured 0.56m wide and 0.18m deep with gentle sides and a concave base. Its fill (51) was a mid yellowish brown silty sand.

### *Trench 8*

3.4.12 Trench 8 (Fig. 4; Plate 11) was located in the centre of the site and aligned north to south. It contained one ditch. Ditch **56** (Fig. 8, Section 15) was located at the northern end of the trench and is probably the same as ditch **31** observed in Trench 11 to the west. This ditch alignment corresponds to a linear anomaly detected by the geophysical survey (Fig. 3). It was aligned east to west and measured 1.64m wide by 0.66m deep with steep sides and a concave base. It was filled with a mid yellowish brown silty sand (57).

3.4.13 NMP data shows a possible cropmark to the south of ditch **56** on the same alignment but was not identified within the trench (Fig. 3).

### *Trench 9*

3.4.14 Trench 9 (Fig. 5; Plate 12) was located in the centre of the site and aligned north-west to south-east. It contained no archaeology, but three successive colluvial layers were recorded and machine excavated (Plate 13) at the north-western trench end. Colluvial layers 87, 88, and 89 (Fig. 8, Section 16) were excavated by machine and found to be (cumulatively) 0.68m deep. These layers extended for 16.75m and continued to the south, west and north of the trench.

3.4.15 LiDAR data shows a linear anomaly on an approximately east-west trajectory across the middle of the trench, but no corresponding feature was identified within the trench.

### *Trench 10*

3.4.16 Trench 10 (Fig. 4; Plate 14) was located in the north-western part of the site and aligned north-west to south-east. It contained no archaeology, but a palaeochannel (66) ran through the centre of the trench which was a continuation of the channels recorded in Trenches 2, 5, and 17. It was excavated by machine to an arbitrary level (Fig. 8, Section 19) and then hand augered. The palaeochannel, which measured 17.73m wide, was augered to a depth of 1.8m (Fig. 8, Section 22). It was also excavated by a test pit (**60**) on its south-eastern edge. A flint flake of probable Neolithic date was recovered from topsoil (67).

### *Trench 11*

3.4.17 Trench 11 (Fig. 4; Plate 15) was located in the north-western part of the site and aligned north to south. It contained one ditch (**31**; Fig. 8, Section 5; Plate 16) situated centrally within the trench which was a continuation of ditch **56** recorded in Trench 8 to the east. It corresponds to a linear anomaly detected by geophysical survey (Fig. 3). It was aligned east to west and measured 1.2m wide and 0.5m deep with steep sides and a flat base. Its fill (32) was a dark greyish brown sandy silt which produced a small amount of burnt and struck flint and a fragment of 17th century glass (5g). An environmental sample of its fill contained modern seeds, fragmented cereal grains, snail shells, and charcoal (2ml). The sample also yielded a small non-cortical flake/spall and four very small fragments of burnt unworked flint.

### *Trench 12*

- 3.4.18 Trench 12 (Figs 5 and 7; Plate 17) was in the south-eastern part of the site and aligned north to south. It contained four ditches and a pit.
- 3.4.19 Ditch terminus **13** was situated at the southern end of the trench. It was aligned north-west to south-east and measured 1.24m wide by 0.36m deep with gentle sides and a concave base (Fig. 8, Section 3). It was filled with a dark yellowish brown silty sand (14). It was truncated by pit **11** which measured 1.2m wide by 0.58m deep with steep sides and a concave base (Fig. 8, Section 4; Plate 18). Its fill (12) was a dark yellowish brown silty sand.
- 3.4.20 Ditch terminus **42** was situated at the southern end of the trench and may relate to a cropmark identified by the National Mapping Programme (Fig. 3). It was aligned north-west to south-east and measured 0.9m wide by 25m deep with gentle sides and a concave base (Fig. 8, Section 14). It was filled with a dark reddish brown silty sand (43) from which two large fragments of unworked burnt flint weighing 211g were recovered. An environmental sample was taken which contained cereal grains, including wheat and barley, weed seeds, and a single legume. It also produced moderate quantities of snail shells and occasional fragments of charcoal (3ml).
- 3.4.21 Ditch **15** (Fig. 8, Section 2) was located centrally within the trench and corresponds with a cropmark identified by the National Mapping Programme (Fig. 3). It was aligned north-west to south-east and measured at least 2.75m wide and 0.62m deep. It had gentle sides and a concave base. Its fill (16) was a mid yellowish brown silty sand. An environmental sample was taken from this fill which produced moderate quantities of roots and occasional fragments of charcoal (<1ml).
- 3.4.22 Located at the northern end of the trench, ditch **72** (Fig. 8, Section 21) correlates with a cropmark identified by the National Mapping Programme (Fig. 3). It was aligned north-north-east to south-south-west. It measured 3m wide and 0.18m deep with gentle sides and an irregular base (Fig. 8, Section 21). Its fill (73) was a mid reddish brown sandy silt.

### *Trench 13*

- 3.4.23 Trench 13 (Figs 4 and 7; Plate 19) was in the eastern part of the site and aligned west to east. It contained one ditch terminus.
- 3.4.24 Gully terminus **46** was located at the eastern end of the trench and was aligned north-west to south-east. It measured 0.34m wide and 0.05m deep with gentle sides and a concave base (Fig. 8, Section 6). It was filled with a mid brownish grey silty sand (47).

### *Trench 14*

- 3.4.25 Trench 14 (Figs 4 and 6; Plate 20) was located in the northern part of the site and aligned north-west to south-east. It contained a ditch, two pits, and two gullies.
- 3.4.26 Gully **54** was located at the southern end of the trench and aligned north-east to south-west. It measured 0.45m wide and 0.09m deep. Its fill (55) was a mid yellowish brown silty sand (Fig. 8, Section 13).

- 3.4.27 Pit **44** was located at the southern end of the trench and measured 0.49m wide by 0.2m deep (Fig. 8, Section 12). It had steep sides and a concave base and was filled with a mid yellowish brown silty sand (45).
- 3.4.28 Gully **37** lay to the north of pit **44** on a north-west to south-east alignment. It measured 0.35m wide and 0.08m deep with gentle sides and an irregular base. Its fill (38) was a mid yellowish brown silty sand (Fig. 8, Section 11).
- 3.4.29 On the northern side of gully **37**, pit **35** measured 0.6m wide and 0.18m deep with gentle sides and a concave base (Fig. 8, Section 10). It was filled with a mid yellowish brown silty sand (36).
- 3.4.30 Ditch **33** (Fig. 8, Section 9; Plate 21) was situated at the north-western end of the trench and was aligned north-east to south-west. It measured 0.97m wide and 0.42m deep with steep sides and a concave base. Its fill (34) was a mid yellowish brown silty sand.

#### *Trench 15*

- 3.4.31 This trench (Plate 22) did not contain any archaeological remains.

#### *Trench 16*

- 3.4.32 Trench 16 (Plate 23) was devoid of archaeology.

#### *Trench 17*

- 3.4.33 Trench 17 (Fig. 5; Plate 24) was located in the western part of the site and aligned east to west. It contained no archaeology, although part of a palaeochannel (112) was recorded at its western end. This palaeochannel is a continuation of the one recorded in Trenches 2, 5, and 10. It was excavated by machine and found to be at least 4.41m wide (but continued westward beyond the limits of the trench) and at least 0.46m deep. Test pit **20** was augered to a depth of 1m. It produced 68g of medieval pottery dating to the late 12th-14th centuries.

#### *Trench 18*

- 3.4.34 Trench 18 (Plate 25) was devoid of archaeological remains.

### **3.5 Finds summary**

#### *Flint*

- 3.5.1 A small assemblage of three worked flints and 216g (six fragments) of unworked burnt flint were recovered by the trial trenching. A single large, robust, blade-like flake of probable Neolithic date was recovered from palaeochannel 58, Trench 5. A second relatively large, fine flake of probable Neolithic date came from topsoil of Trench 10 (67). A sample taken of the fill of ditch **31**, Trench 11 produced a small non-cortical flake/spall and four very small fragments of burnt unworked flint. A sample from the fill of ditch **42**, Trench 12 produced two larger fragments of unworked burnt flint (211g).



### *Glass*

- 3.5.2 A single shard of glass (5g) from a utility bottle was recovered from Trench 11, ditch **31**. The glass is completely opaque and iridescent, with some external surface loss. A more recent break shows the glass to be in poor condition; the discolouration and poor condition of the glass suggest that the piece is early, possibly 17th century. The assemblage is fragmentary and its significance uncertain, other than to indicate 17th century occupational debris.

### *Pottery*

- 3.5.3 Medieval pottery was recovered from test pit **20**, excavated into palaeochannel deposit 112 in Trench 17, which produced a moderately abraded fragment (25g) from a Grimston-type ware jug strap handle (late 12th-14th century), externally green-glazed (mostly restricted to the upper surface), with rounded, slightly thickened edges and a central groove. The second piece of pottery is a body sherd (44g) from an unglazed vessel in a pale grey-buff sandy fabric, having a mid-grey core where the sherd is thickest, tentatively identified as Medieval sandy coarseware (12th-14th century). The pottery present is moderately abraded, and the significance of the medieval pottery is uncertain, as the sherds were recovered from a test pit into a palaeochannel which may have been disturbed by later activity.

### *Ceramic building material*

- 3.5.4 Three fragments of post-medieval brick (28g) were recovered from ditch **25**, Trench 6. They are small, severely abraded pieces of a red-orange coarse sandy brick, with patches of fine mortar accretions on the surviving faces. Three fragments of post-medieval tile (96g) were recovered from the surface of palaeochannel deposit 58 in Trench 5. These comprise two fragments of a neatly formed, dull orange fine sandy tile containing occasional dark red grog pellets. The other piece is from a thicker tile made in a light orange fine micaceous sandy clay. It is slightly abraded and not as neatly finished. These pieces on their own are of little archaeological significance and are likely to be intrusive. They probably relate to ploughing and manuring activity in the agricultural landscape which has worked its way into the palaeochannel deposit.

### *Mollusca*

- 3.5.5 Trench 6, ditch **25** contained 12 fragments of freshwater mussel shell (28g), with a further four pieces recovered from sample <5> (6g). The shell is moderately well-preserved but has suffered post-depositional damage and no valves are complete. It is probable that the shell is from a Duck mussel (*Anodonta anatine*) rather than a Swan mussel (*Anodonta cygnea*). Both are edible, so the shell could represent general discarded food waste and may have originated from Cantley Stream.

### *Environmental remains*

- 3.5.6 Five bulk samples were taken from excavated features at the site to assess the quality of preservation of plant remains and their potential to provide useful data as part of further archaeological investigations. Preservation of plant remains is poor which

reflects the findings of previous evaluation work in the vicinity (Cotswold Archaeology 2020). It is likely that the small to moderate quantities of carbonised plant remains found within ditches **31** (Trench 11) and **42** (Trench 12) are related to a background scatter of domestic waste or perhaps manuring practices.

## 4 DISCUSSION

### 4.1 Reliability of field investigation

- 4.1.1 The results of the evaluation are considered reliable. Archaeological features were clearly visible, where present within the trenches, against the natural geology.

### 4.2 Interpretation and conclusions

- 4.2.1 Twelve of the 18 trenches were placed to investigate possible archaeological features identified as anomalies or cropmarks by geophysics, LiDAR, and National Mapping Programme data (Fig. 3). In nine of the trenches, these anomalies and cropmarks did not correspond with the archaeological remains encountered. However, cropmarks identified by the NMP did correspond to ditches **15** and **72** uncovered in Trench 12. A former field boundary recorded on OS maps as far back as 1881 and identified by geophysical survey corresponds to an east to west ditch alignment excavated in Trench 8 and Trench 11 (Cockcroft 2021, fig. 6). The relatively recent date of this field boundary was confirmed by the recovery of a shard of 17th century glass from its fill.
- 4.2.2 Linear ditches and gullies, which probably represent further former field or enclosure boundaries, were identified in Trenches 6, 12, 13 and 14, that do not correspond with the findings of the geophysical and LiDAR survey, nor the NMP data. Although undated, the ditch excavated in Trench 6 was observed to cut the subsoil horizon, and the other boundaries contained similar mid yellowish brown or dark greyish brown fills as the confirmed field boundary in Trenches 8 and 11. Small, undated, sub-circular pits of unknown function were also uncovered by Trenches 4, 7, 12 and 14 which contained similar, sterile fills. Therefore, all these features are probably of post-medieval or later origin; perhaps relating to agricultural activity that ceased when the park associated with Thickthorn Hall was laid out on this site in 1812 (see Section 1.3.9).
- 4.2.3 Two flint flakes of probable Neolithic date that were recovered from the palaeochannel investigated by Trench 5 and the topsoil of Trench 10 reflect the site's rich prehistoric setting within an area of previous flintwork findspots and evidence for Neolithic settlement excavated immediately to the east (see Sections 1.3.2-6).
- 4.2.4 Ditch **72**, excavated in Trench 12 probably equates to a linear feature identified in a trench to the south during the earlier evaluation, from which medieval pottery was recovered (Cotswold Archaeology 2020, 25-26).
- 4.2.5 Except for ditch **72** in Trench 12, none of the features uncovered during the trenching correspond to the findings of the previous evaluation undertaken by Cotswold Archaeology (see 1.3.11). This is significant, as it suggests that the possible medieval activity encountered in that evaluation in the south-west corner of the site is confined to that area.

## APPENDIX A TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

Trench 1						
General description					Orientation	NW-SE
Trench devoid of archaeology. Consists of topsoil and subsoil overlying natural geology of gravelly sand, which varied in colour from mid reddish brown to light yellowish brown.					Length (m)	30
					Width (m)	1.8
					Avg. depth (m)	0.65
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
90	Layer	-	-	Natural	-	-
91	Layer	-	0.40	Subsoil	-	-
92	Layer	-	0.34	Topsoil	-	-

Trench 2						
General description					Orientation	N-S
Trench contained one modern pit and part of a palaeochannel. Consists of topsoil and subsoil overlying natural geology of mid reddish brown sand.					Length (m)	30
					Width (m)	1.8
					Avg. depth (m)	1.10
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
59	Layer	22.43	0.9+	Palaeochannel		
62	Cut	7.0+	1.4+	Modern pit	-	-
93	Layer	-	-	Natural	-	-
94	Layer	-	0.32	Subsoil	-	-
95	Layer	-	0.52	Topsoil	-	-
109	Fill	-	0.45+	Fill of modern pit 62	-	-
110	Fill	-	0.40	Fill of modern pit 62	-	-
111	Fill	-	0.20	Fill of modern pit 62	-	-

Trench 3						
General description					Orientation	N-S
Trench devoid of archaeology. Consists of topsoil and subsoil overlying natural geology of mid yellowish brown sand with patches of mid reddish brown sandy clay.					Length (m)	30
					Width (m)	1.8
					Avg. depth (m)	0.50
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
96	Layer	-	-	Natural	-	-
97	Layer	-	0.19	Subsoil	-	-
98	Layer	-	0.40	Topsoil	-	-

Trench 4						
General description					Orientation	NE-SW
Trench contained one pit. Consists of topsoil and subsoil overlying natural geology of mid reddish brown sandy gravel with patches of mid yellowish brown gravelly sand.					Length (m)	30
					Width (m)	1.8
					Avg. depth (m)	0.51
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
52	Cut	0.66	0.86+	Pit	-	-
53	Fill	-	0.86+	Fill of pit 52	-	-
74	Layer	-	0.40	Topsoil	-	-
75	Layer	-	0.33	Subsoil	-	-
76	Layer	-	-	Natural	-	-

Trench 5						
General description					Orientation	E-W
Trench devoid of archaeology. Contains part of a palaeochannel. Consists of topsoil overlying natural geology of mid reddish brown sandy clay.					Length (m)	30
					Width (m)	1.8
					Avg. depth (m)	0.94
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
58	Layer	18.25	0.75+	Palaeochannel	Tile, flint	Post-med
99	Layer	-	-	Natural	-	-
100	Layer	-	-	Subsoil	-	-
101	Layer	-	0.75	Topsoil	-	-

Trench 6						
General description					Orientation	E-W
Trench contained one ditch. Consists of topsoil and subsoil overlying natural geology of mid yellowish brown silty sand and mid reddish brown sandy clay.					Length (m)	30
					Width (m)	1.8
					Avg. depth (m)	0.54
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
25	Cut	0.70	0.07	Ditch	-	-
26	Fill	-	0.07	Fill of ditch 25	Brick, shell	Post-med
27	Layer	-	0.38	Topsoil	-	-
28	Layer	-	0.23	Subsoil	-	-
83	Layer	-	-	Natural	-	-

Trench 7						
General description					Orientation	NW-SE
Trench contains one pit. Consists of topsoil and subsoil overlying natural geology of light yellowish brown gravelly sand with patches of mid reddish brown sandy gravel.					Length (m)	30
					Width (m)	1.8
					Avg. depth (m)	0.40
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
50	Cut	0.56	0.18	Pit	-	-
51	Fill	-	0.18	Fill of pit 50	-	-
77	Layer	-	0.38	Topsoil	-	-
78	Layer	-	0.07	Subsoil	-	-
79	Layer	-	-	Natural	-	-

Trench 8						
General description					Orientation	N-S
Trench contains one ditch. Consists of topsoil and subsoil overlying natural geology of mid reddish brown silty sand.					Length (m)	30
					Width (m)	1.8
					Avg. depth (m)	0.61
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
56	Cut	1.64	0.66	Ditch	-	-
57	Fill	-	0.66	Fill of ditch 56	-	-
63	Layer	-	0.42	Topsoil	-	-
64	Layer	-	0.35	Subsoil	-	-
65	Layer	-	-	Natural	-	-

Trench 9						
General description					Orientation	NW-SE
Trench devoid of archaeology. Consists of topsoil, subsoil, and three colluvial layers overlying natural geology of light yellowish brown silty sand and mid reddish brown silty clay.					Length (m)	30
					Width (m)	1.8
					Avg. depth (m)	0.90
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
84	Layer	-	-	Natural	-	-
85	Layer	-	0.07	Subsoil	-	-
86	Layer	-	0.66	Topsoil	-	-
87	Layer	-	0.24	Colluvial layer	-	-
88	Layer	-	0.14	Colluvial layer	-	-
89	Layer	-	0.20	Colluvial layer	-	-

Trench 10						
General description					Orientation	NW-SE
Trench devoid of archaeology. Contains part of a palaeochannel. Consists of topsoil overlying natural geology of mid reddish brown sandy clay.					Length (m)	30
					Width (m)	1.8
					Avg. depth (m)	0.73
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
60	Cut	-	1.0	Test pit	-	-
61	Fill	-	0.81+	Fill of test pit 60	-	-
66	Layer	17.73	1.8+	Palaeochannel	-	-
67	Layer	-	0.46	Topsoil	Flint	-
68	Layer	-	-	Natural	-	-

Trench 11						
General description					Orientation	N-S
Trench contains one ditch. Consists of topsoil and subsoil overlying natural geology of mid yellowish brown sandy clay.					Length (m)	30
					Width (m)	1.8
					Avg. depth (m)	0.55
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
31	Cut	1.40	0.50	Ditch	-	-
32	Fill	-	0.50	Fill of ditch 31	Glass, flint	Post-med
39	Layer	-	0.45	Topsoil	-	-
40	Layer	-	0.33	Subsoil	-	-
41	Layer	-	-	Natural	-	-

Trench 12						
General description					Orientation	N-S
Trench contains one pit, two ditch terminuses, a ditch, and a cropmark. Consists of topsoil and subsoil overlying natural geology of mid yellowish brown gravelly sand.					Length (m)	30
					Width (m)	1.8
					Avg. depth (m)	0.70
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
8	Layer	-	0.43	Topsoil	-	-
9	Layer	-	0.36	Subsoil	-	-
10	Layer	-	-	Natural	-	-
11	Cut	1.20	0.58	Pit	-	-
12	Fill	-	0.58	Fill of pit 11	-	-
13	Cut	1.24	0.36	Ditch terminus	-	-
14	Fill	-	0.36	Fill of ditch terminus 13	-	-
15	Cut	2.75	0.62	Ditch	-	-
16	Fill	-	0.62	Fill of ditch 15	-	-
42	Cut	0.90	0.25	Ditch terminus	-	-
43	Fill	-	0.25	Fill of ditch terminus 42	Burnt flint	-
72	Cut	3.0	0.18	Cropmark	-	-

Trench 12						
General description					Orientation	N-S
Trench contains one pit, two ditch terminuses, a ditch, and a cropmark. Consists of topsoil and subsoil overlying natural geology of mid yellowish brown gravelly sand.					Length (m)	30
					Width (m)	1.8
					Avg. depth (m)	0.70
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
72	Cut	3	0.18	Ditch	-	-
73	Fill	-	0.18	Fill of ditch 72	-	-

Trench 13						
General description					Orientation	E-W
Trench contains one ditch. Consists of topsoil and subsoil overlying natural geology of mid yellowish brown sandy clay.					Length (m)	30
					Width (m)	1.8
					Avg. depth (m)	0.64
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
46	Cut	0.34	0.05	Gully terminus	-	-
47	Fill	-	0.05	Fill of gully terminus 46	-	-
80	Layer	-	0.38	Topsoil	-	-
81	Layer	-	0.24	Subsoil	-	-
82	Layer	-	-	Natural	-	-

Trench 14						
General description					Orientation	NW-SE
Trench contains a ditch, two pits, and two gullies. Consists of topsoil and subsoil overlying natural geology of silty sand, which varied in colour from mid yellowish brown to mid reddish brown.					Length (m)	30
					Width (m)	1.8
					Avg. depth (m)	0.66
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
33	Cut	0.97	0.42	Ditch	-	-
34	Fill	-	0.42	Fill of ditch 33	-	-
35	Cut	0.60	0.18	Pit	-	-
36	Fill	-	0.18	Fill of pit 35	-	-
37	Cut	0.35	0.08	Gully	-	-
38	Fill	-	0.08	Fill of gully 37	-	-
44	Cut	0.49	0.20	Pit	-	-
45	Fill	-	0.20	Fill of pit 44	-	-
54	Cut	0.45	0.09	Gully	-	-
55	Fill	-	0.09	Fill of gully 54	-	-
69	Layer	-	0.40	Topsoil	-	-
70	Layer	-	0.36	Subsoil	-	-
71	Layer	-	-	Natural	-	-

Trench 15						
General description					Orientation	NE-SW
Trench devoid of archaeology. Consists of topsoil and subsoil overlying natural geology of light yellowish brown gravelly sand.					Length (m)	30
					Width (m)	1.8
					Avg. depth (m)	0.50
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
103	Layer	-	-	Natural	-	-
104	Layer	-	0.21	Subsoil	-	-
105	Layer	-	0.33	Topsoil	-	-



Trench 16						
General description					Orientation	E-W
Trench devoid of archaeology. Consists of topsoil and subsoil overlying natural geology of silty sand, which varied in colour from light yellowish brown to mid reddish brown.					Length (m)	30
					Width (m)	1.8
					Avg. depth (m)	0.51
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
106	Layer	-	-	Natural	-	-
107	Layer	-	0.15	Subsoil	-	-
108	Layer	-	0.34	Topsoil	-	-

Trench 17						
General description					Orientation	E-W
Trench devoid of archaeology. Contains part of a palaeochannel. Consists of topsoil and subsoil overlying natural geology of silty sand.					Length (m)	30
					Width (m)	1.8
					Avg. depth (m)	0.70
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
17	Layer	-	0.35	Topsoil	-	-
18	Layer	-	0.05	Subsoil	-	-
19	Layer	-	-	Natural	-	-
20	Cut	1.0	0.75	Test pit	-	-
21	Fill	-	0.75	Fill of test pit 20	Pottery	Medieval
112	Layer	-	1.0	Palaeochannel	-	-

Trench 18						
General description					Orientation	E-W
Trench devoid of archaeology. Consists of topsoil and subsoil overlying natural geology of silty sand.					Length (m)	30
					Width (m)	1.8
					Avg. depth (m)	0.30
Context No.	Type	Width (m)	Depth (m)	Description	Finds	Date
1	Layer	-	0.15	Topsoil	-	-
2	Layer	-	0.15	Subsoil	-	-
3	Layer	-	-	Natural	-	-
4	Cut	1.0	0.82	Test pit	-	-
5	Fill	-	0.82	Fill of test pit 4	-	-
6	Cut	1.0	0.65	Test pit	-	-
7	Fill	-	0.65	Fill of test pit 6	-	-
113	Layer	-	0.82	Colluvial layer	-	-

## APPENDIX B FINDS REPORTS

### B.1 Flint

*By Lawrence Billington*

#### *Assemblage and discussion*

B.1.1 A small assemblage of three worked flints and 216g (six fragments) of unworked burnt flint were recovered by the trial trenching (Table 2).

B.1.2 A single large, robust, blade-like flake of probable Neolithic date was recovered from palaeochannel 58, Trench 5. A second relatively large, fine flake of probable Neolithic date came from the topsoil (67) of Trench 10. A sample taken of the fill of ditch **31**, Trench 11 produced a small non-cortical flake/spall and four very small fragments of burnt unworked flint. A sample from the fill of ditch **42**, Trench 11 produced two large fragments of unworked burnt flint (211g).

Cxt.	Cut	Tr.	Feature/ context type	Sample	Flake	Blade- like flake	Total worked		Unworked burnt flint count	Unworked burnt flint weight (g)
58		5	Palaeochannel			1	1			
67		10	Topsoil		1		1			
32	31	11	Ditch	1	1		1	4	5	
43	42	12	Ditch	2				2	211	
Totals					2	1	3	6	216	

Table 2: Quantification of the flint assemblage

### B.2 Glass

*By Carole Fletcher*

#### *Introduction and methodology*

B.2.1 A single shard of glass was recovered from Trench 11. The glass was scanned and recorded by form, colour when held to a strong light, count and weight, dated as far as possible, and recorded in the text. Any glass that is not closely datable may be dated by association with the pottery and other material with which it was found. The terminology used in the report and the catalogue, for the various glass forms, is taken from *Glass Bottles Their History and Evolution (1500-1850)* (Van den Bossche 2001) and *The Parks Canada Glass Glossary* (Jones & Sullivan 1989).

#### *Assemblage and discussion*

B.2.2 A single shard of glass (5g) was recovered from Trench 11, ditch **31**. The shard is from the rounded kick of a utility bottle. The glass is completely opaque and iridescent, with some external surface loss. A more recent break shows the glass to be in poor condition; the discolouration and poor condition of the glass suggest that the fragment is early, possibly 17th century.

B.2.3 The assemblage is fragmentary and its significance uncertain, other than to indicate 17th occupational debris.

### ***Retention, dispersal or display***

- B.2.4 If further work is undertaken, more glass may be recovered, and this report should be incorporated into any later archive. If no further work is undertaken, this statement acts as a full record and the glass shards may be dispersed prior to archival deposition.

## **B.3 Pottery**

*By Carole Fletcher*

### ***Introduction and methodology***

- B.3.1 Archaeological works produced a small assemblage of pottery (two sherds weighing 68g), recovered from Trench 17. The condition of the overall assemblage is moderately abraded to abraded.
- B.3.2 The Prehistoric Ceramics Research Group (PCRG), Study Group for Roman Pottery (SGRP), and The Medieval Pottery Research Group (MPRG), 2016 *A Standard for Pottery Studies in Archaeology* and the MPRG *A guide to the classification of medieval ceramic forms* (MPRG 1998) act as standards. However, a simplified method of recording has been undertaken, with fabric codes assigned from Sue Anderson's unpublished post-Roman fabric series, based on Jennings (1981). The medieval fabric identifications are, by necessity, tentative, with basic description, weight and count recorded in Table 1. The pottery and archive are curated by OA until formal deposition or dispersal.

### ***Assemblage and discussion***

- B.3.3 A test pit **20** excavated through a palaeochannel in Trench 17 produced a moderately abraded fragment (25g) from a Grimston-type ware jug strap handle (GRIM, late 12th-14th century), externally green-glazed (mostly restricted to the upper surface), with rounded, slightly thickened edges and a central groove. The second piece of pottery is a body sherd (44g) from an unglazed vessel in a pale grey-buff sandy fabric, having a mid-grey core where the sherd is thickest, tentatively identified as medieval sandy coarseware (MCW, 12th-14th century).
- B.3.4 The pottery present is moderately abraded, and the significance of the medieval pottery is uncertain, as the sherds were recovered from a test pit and may have been disturbed by later activity.

### ***Retention, dispersal or display***

- B.3.5 Should further work be undertaken, the pottery should be incorporated into any later catalogue. Further work is likely to produce additional pottery, although the sherds would probably be sparsely distributed. The medieval sherds may be retained for archive deposition.

## B.4 Ceramic Building Material

*By Ted Levermore*

### *Assemblage and Discussion*

- B.4.1 Three fragments of post-medieval brick (28g) were recovered from context 26 (ditch 25), Trench 6. They are small severely abraded pieces of a red-orange coarse sandy brick, with patches of fine mortar accretions on the surviving faces. Three fragments of post-medieval tile (96g) were recovered from palaeochannel 58, Trench 5. These comprise two fragments of a neatly formed, dull orange fine sandy tile (Th 11mm) containing occasional dark red grog pellets. The other piece is from a thicker tile (15mm) made in a light orange fine micaceous sandy clay. It is slightly abraded and not as neatly finished.
- B.4.2 These pieces on their own are of little archaeological significance and are likely to be intrusive. They probably relate to ploughing and manuring activity in the agricultural landscape.

## APPENDIX C ENVIRONMENTAL REPORTS

### C.1 Mollusca

*By Carole Fletcher*

#### *Introduction and Methodology*

C.1.1 Shell fragments were collected by hand from ditch **25** in Trench 6, with further fragments recovered from sample <5>. The shell fragments recovered are *Unionidae* freshwater mussels (<https://www.naturespot.org.uk/snails/unionidae> and Killeen, Aldridge and Oliver (2004)). The shell was weighed, with right or left valves noted when identification could be made. The minimum number of individuals (MNI) was not established, due to the small size of the assemblage.

#### *Assemblage and Discussion*

C.1.2 Trench 6, ditch **25** contained 12 fragments of freshwater mussel shell (28g), with a further four pieces recovered from sample 5 (6g). The shell is moderately well-preserved but has suffered post-depositional damage and no valves are complete.

C.1.3 The assemblage consists of fragments of valve, damaged along the margins to varying degrees, however, with the umbo surviving on the two most extensively damaged valves, there was still enough surviving to identify at least two left and two right valves.

C.1.4 Although identified as freshwater mussel shell, the particular species identification is more problematic. It is probable that the shell is from a Duck mussel (*Anodonta anatine*) rather than a Swan mussel (*Anodonta cygnea*). The absence of diagnostic features makes this identification tentative.

C.1.5 Duck mussels can be found in small streams to large rivers, lakes, ponds and canals while Swan mussels are found in rivers and lakes. Both are edible, so the shell could represent general discarded food waste and may have originated in the stream that lies approximately 300m to the south of the site and feeds into the River Yare. Although not closely datable in itself, the shell may be dated by its association with pottery or other material also recovered from the feature.

#### *Retention, dispersal and display*

C.1.6 The shell may be deselected prior to archive deposition.

### C.2 Environmental Samples

*By Martha Craven*

#### *Introduction*

C.2.1 Five bulk samples were taken from features within the evaluated area at the site to assess the quality of preservation of plant remains and their potential to provide useful data as part of further archaeological investigations (Table 3). Samples were

taken from a range of features encountered across the breadth of the site from deposits that are undated. Finds were not recovered in large quantities from the evaluation but the few pottery fragments recovered indicate some medieval activity at the site.

### Methodology

- C.2.2 The total volume (up to 9L) of each of the samples was processed by tank flotation using modified Siraf-type equipment for the recovery of preserved plant remains, dating evidence and any other artefactual evidence that might be present. The floating component (flot) of the samples was collected in a 0.3mm nylon mesh and the residue was washed through 10mm, 5mm, 2mm and a 0.5mm sieve.
- C.2.3 The dried flots were scanned using a binocular microscope at magnifications up to x 60 and an abbreviated list of the recorded remains are presented in Table 3. Identification of plant remains is with reference to the Digital Seed Atlas of the Netherlands (Cappers *et al.* 2006) and OAE's reference collection. Nomenclature is according to Zohary and Hopf (2000) for cereals and Stace (2010) for other plants. Plant remains have been identified to species where possible. The identification of cereals has been based on the characteristic morphology of the grains and chaff as described by Jacomet (2006).

### Quantification

- C.2.4 For the purpose of this initial assessment, items such as seeds and cereal grains have been scanned and recorded qualitatively according to the following categories:  
# = 1-5, ## = 6-25, ### = 26-100, #### = 100+ specimens
- C.2.5 Items that cannot be easily quantified such as charcoal and molluscs have been scored for abundance  
+ = occasional, ++ = moderate, +++ = frequent, ++++ = abundant

### Results

- C.2.6 The site's archaeobotanical assemblage consists of carbonised (charred) material and the remains are preserved in a poor state. It should be noted that many of the flots contain rootlets which may have caused movement of material between contexts. Abundant modern seeds were noted in samples taken from ditches **25** (Trench 6) and **31** (Trench 11).
- C.2.7 Sample 2, fill 43 of ditch **42** in Trench 12, contains a moderate quantity of cereal grains; consisting of wheat (*Triticum sp.*), barley (*Hordeum vulgare*) and grains too poorly preserved to identify. Weed seeds within the sample are sparse and include goosefoots/orache (*Chenopodium/Atriplex sp.*) and large grasses (Poaceae). A single small (<2mm) legume (Fabaceae) was also recovered. A small quantity of fragmented cereal grains was noted in Sample 1, fill 32 of ditch **31** (Trench 11).
- C.2.8 Occasional fragments of charcoal were present in most of the samples taken and vitrified charcoal was recorded in ditches **31** (Trench 11) and **25** (Trench 6). Vitrified charcoal refers to charcoal with a glassy appearance; it is uncertain what exactly

causes this transformation (McParland *et al.* 2010) but may possibly be a waste by-product of steam locomotives.

C.2.9 Moderate quantities of relatively well-preserved snail shells were present in ditches **25**, **31** and **42**, from Trenches 6, 11 and 12 respectively.

Trench No.	Sample Number	Context Number	Cut Number	Feature Type	Volume Processed (L)	Flot Volume (ml)	Cereals	Legumes	Weed Seeds	Roots	Modern Seeds	Snail Shells	Charcoal Volume(ml)	Burnt Flint	Struck Flint	Glass
4	4	53	52	Pit	8	6	0	0	0	+++	0	0	<1	0	0	0
6	5	26	25	Ditch	7	20	0	0	0	+++	##	++	0	0	0	0
11	1	32	31	Ditch	8	20	#	0	0	+++	##	++	2	#	#	#
12	2	43	42	Ditch	8	5	##	#	#	+++	0	++	3	0	0	0
12	3	16	15	Ditch	9	5	0	0	0	++	0	0	<1	0	0	0

Table 3: Environmental samples

## Discussion

C.2.10 The recovery relatively small quantities of carbonised plant remains suggests that there is some potential for the preservation of plant remains at this site although the material seems to be in a poor condition.

C.2.11 There does not appear to be any obvious concentration of archaeobotanical material which could suggest areas of activity. It is likely that the small to moderate quantities of carbonised plant remains found within ditches **31** and **42** in Trenches 11 and 12 are related to a background scatter of domestic waste or perhaps manuring practices.

C.2.12 An evaluation was conducted in the wider area of A11/A47 Thickthorn Junction in 2020 (Cotswold Archaeology 2020). Thirteen bulk samples were taken from features and the material was in a poor state of preservation. Prehistoric features were found to contain sparse plant remains including hazelnut (*Corylus avellana*) fragments whilst samples from medieval features contain frequent plant remains including cereal grains, legumes and arable/ruderal weed seeds.

C.2.13 If further excavation is planned for this area, it is recommended that environmental sampling is carried out in accordance with Historic England guidelines (2011).



## APPENDIX D      BIBLIOGRAPHY

- Cappers, R.T.J., Bekker R.M., & Jans, J.E.A. 2006. *Digital Seed Atlas of the Netherlands*. Groningen Archaeological Studies 4, Barkhuis Publishing, Eelde, The Netherlands. [www.seedatlas.nl](http://www.seedatlas.nl)
- Chartered Institute for Archaeologists. 2014b. *Code of Conduct*.
- Chartered Institute for Archaeologists. 2014b. *Standard and guidance for archaeological field evaluation*.
- Cockcroft, T. 2021. *Thickthorn Park and Ride Extension, Norwich. Geophysical Survey Report*. SUMO Geophysics Ltd Report No.: SUMO-03956
- Cotswold Archaeology, S. 2020. *A11/A47 Thickthorn Junction, Norwich, Norfolk. Archaeological Evaluation*. Cotswold Archaeology Report No.: SUO151\_2, updated 2021
- Historic England. 2011. *Environmental Archaeology. A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation (2nd edition)*, Centre for Archaeology Guidelines
- Jacomet, S. 2006. *Identification of cereal remains from archaeological sites*. IPNA, Universität Basel / Published by the IPAS, Basel University.
- Jennings, S. 1981. 'Eighteen Centuries of Pottery from Norwich'. *East Anglian Archaeology* 13.
- Jones, O.R. & Sullivan, C. 1989 *The Parks Canada Glass Glossary for the Description of Containers, Tableware, Flat Glass and Closures*. Canadian Parks Service.
- Kileen, I., Aldridge, D. & Oliver, G. 2004, *Freshwater Bivalves of Britain and Ireland* Field Studies Council AIDGAP Guide.
- McParland, L., Collinson, M., Scott, A., Campbell, G. & Veal, R. 2010. Is vitrification in charcoal a result of high temperature burning of wood?. *Journal of Archaeological Science - J ARCHAEOLOGICAL SCI.* 37. 2679-2687.
- MPRG, 1998. *A Guide to the Classification of Medieval Ceramic Forms*, Medieval Pottery Research Group Occasional Paper I.
- PCRG SGRP MPRG, 2016. *A Standard for Pottery Studies in Archaeology*.
- Robertson, D., Albone, J., Watkins, P., Percival, J.W., Hickling, S., Hamilton, H., Heywood, S., Shoemark, J., Tremlett, S. & Jarvis, C. 2018. *Standards for Development-led Archaeological Projects in Norfolk*. Norfolk County Council.
- Stace, C., 1997. *New Flora of the British Isles*. Second edition. Cambridge University Press
- Van den Bossche, W. 2001. *Antique Glass Bottles Their History and Evolution (1500-1850)*.
- WSP. 2021. *Thickthorn Park and Ride Extension: Historic Environment Desk-based Assessment*.
- WSP. 2022. *Thickthorn Park and Ride Extension, Norwich, Norfolk. Written Scheme of Investigation for an archaeological trial trench evaluation*.
- Zohary, D. & Hopf, M. 2000. *Domestication of Plants in the Old World – The origin and spread of cultivated plants in West Asia, Europe, and the Nile Valley*. Oxford University Press

### *Electronic sources*

<https://www.naturespot.org.uk/snails/unionidae> consulted 27/02/2023

## APPENDIX E OASIS REPORT FORM

### Project Details

OASIS Number	oxfordar3-513763		
Project Name	Thickthorn Park and Ride Extension		
Start of Fieldwork	23/01/23	End of Fieldwork	27/01/23
Previous Work	No	Future Work	Unknown

### Project Reference Codes

Site Code	XNFTPR23	Planning App. No.	FUL/2021/0064
HER Number	ENF153186	Related Numbers	ENF151967
Prompt	NPPF		
Development Type	Car park		
Place in Planning Process	Between application and determination		

### Techniques used (tick all that apply)

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Aerial Photography – interpretation | <input type="checkbox"/> Grab-sampling          | <input type="checkbox"/> Remote Operated Vehicle Survey         |
| <input type="checkbox"/> Aerial Photography - new            | <input type="checkbox"/> Gravity-core           | <input type="checkbox"/> Sample Trenches                        |
| <input type="checkbox"/> Annotated Sketch                    | <input type="checkbox"/> Laser Scanning         | <input type="checkbox"/> Survey/Recording of Fabric/Structure   |
| <input type="checkbox"/> Augering                            | <input type="checkbox"/> Measured Survey        | <input checked="" type="checkbox"/> Targeted Trenches           |
| <input type="checkbox"/> Dendrochronological Survey          | <input type="checkbox"/> Metal Detectors        | <input type="checkbox"/> Test Pits                              |
| <input type="checkbox"/> Documentary Search                  | <input type="checkbox"/> Phosphate Survey       | <input type="checkbox"/> Topographic Survey                     |
| <input checked="" type="checkbox"/> Environmental Sampling   | <input type="checkbox"/> Photogrammetric Survey | <input type="checkbox"/> Vibro-core                             |
| <input type="checkbox"/> Fieldwalking                        | <input type="checkbox"/> Photographic Survey    | <input type="checkbox"/> Visual Inspection (Initial Site Visit) |
| <input type="checkbox"/> Geophysical Survey                  | <input type="checkbox"/> Rectified Photography  |   |

Monument	Period	Object	Period
Ditch	Undated	Pottery	Medieval
Gully	Undated	Glass	Post-medieval
Pit	Undated	Flint	Neolithic

### Project Location

County	Norfolk	Address (including Postcode) Land adjacent to Thickthorn Park and Ride Norwich Rd, Hethersett, Norwich NR9 3AU
District	South Norfolk	
Parish	Hethersett	
HER office	Norfolk	
Size of Study Area	4.7ha	
National Grid Ref	TG 18047 05277	

### Project Originators

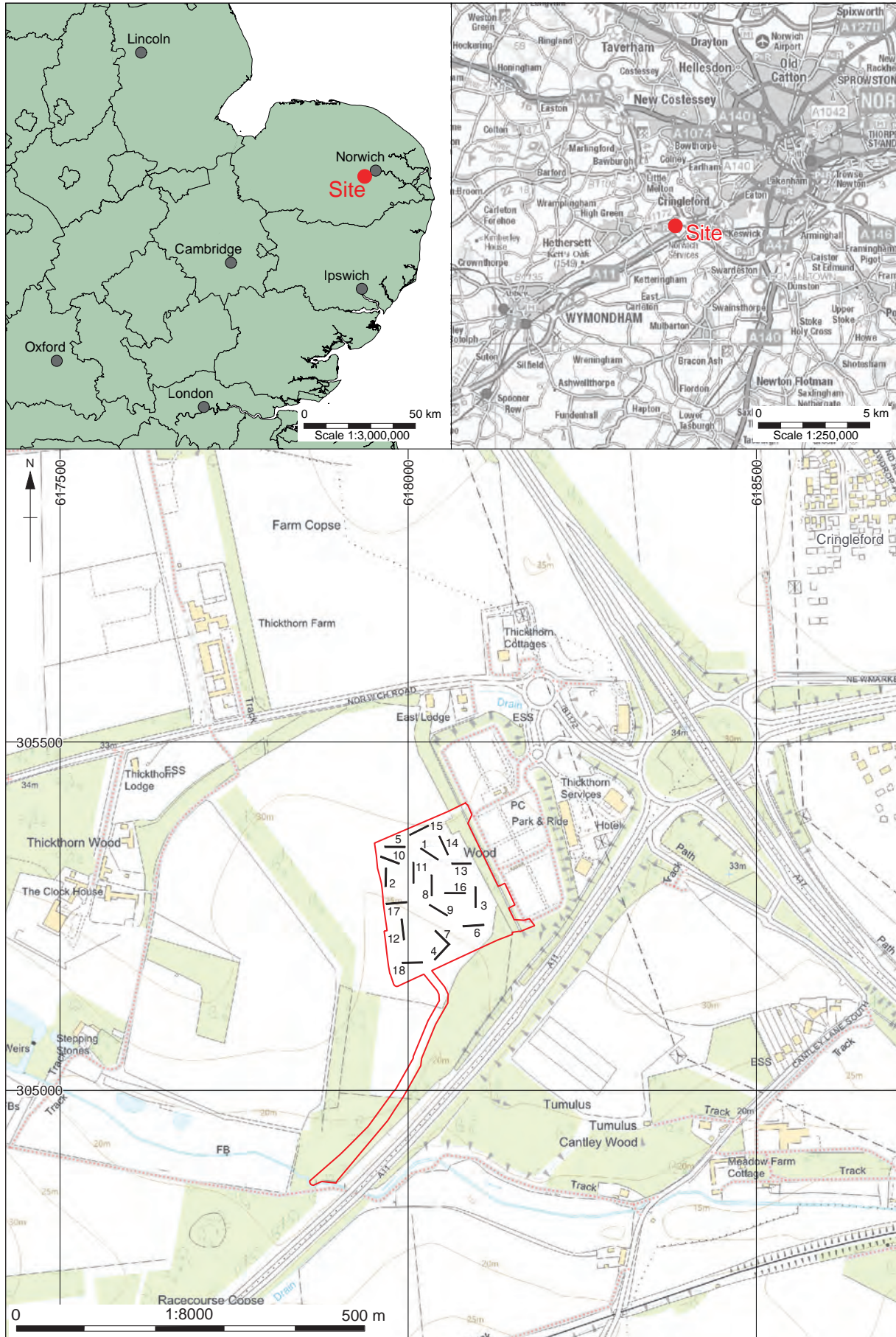
Organisation	OAE
Project Brief Originator	Norfolk County Council
Project Design Originator	WSP
Project Manager	Louise Moan
Project Supervisor	Matthew Edwards

### Project Archives

	Location	ID
Physical Archive (Finds)	Norwich Castle Museum	NWHCM:2023.92

Digital Archive	Norwich Castle Museum	NWHCM:2023.92
Paper Archive	Norwich Castle Museum	NWHCM:2023.92

Physical Contents	Present?	Digital files associated with Finds	Paperwork associated with Finds
Animal Bones	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ceramics	X	X	X
Environmental	X	X	X
Glass	X	X	X
Human Remains	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Industrial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Leather	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Metal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stratigraphic		X	X
Survey		X	X
Textiles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Virtual Reality	<input type="checkbox"/>	Miscellaneous	<input type="checkbox"/>
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		Photos (negatives/prints/slides)	<input type="checkbox"/>
		Plans	X
		Report	X
		Sections	X
		Survey	X



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Figure 1: Site location map showing archaeological trenches (black) within development area (red)



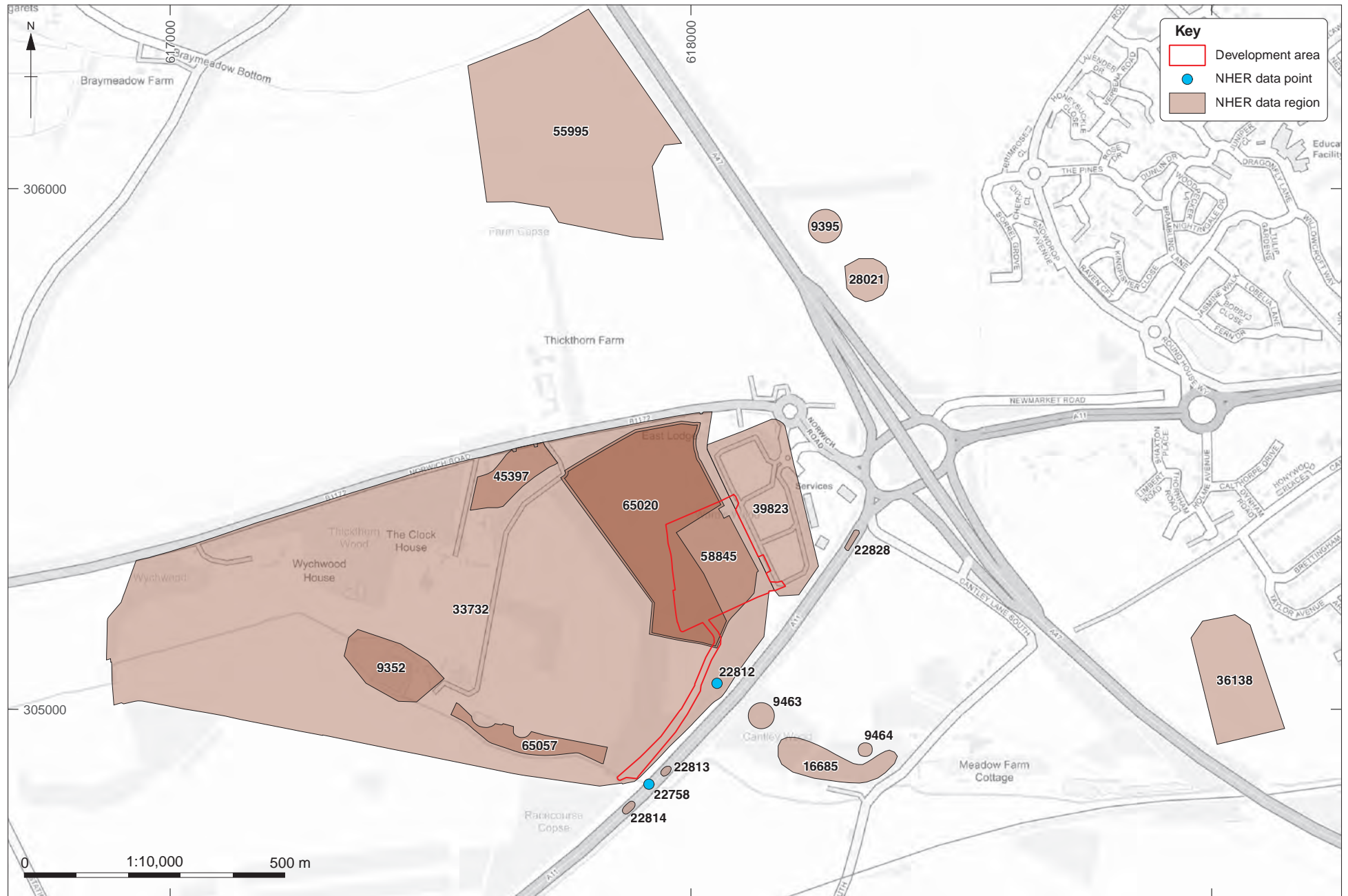


Figure 2: HER plot

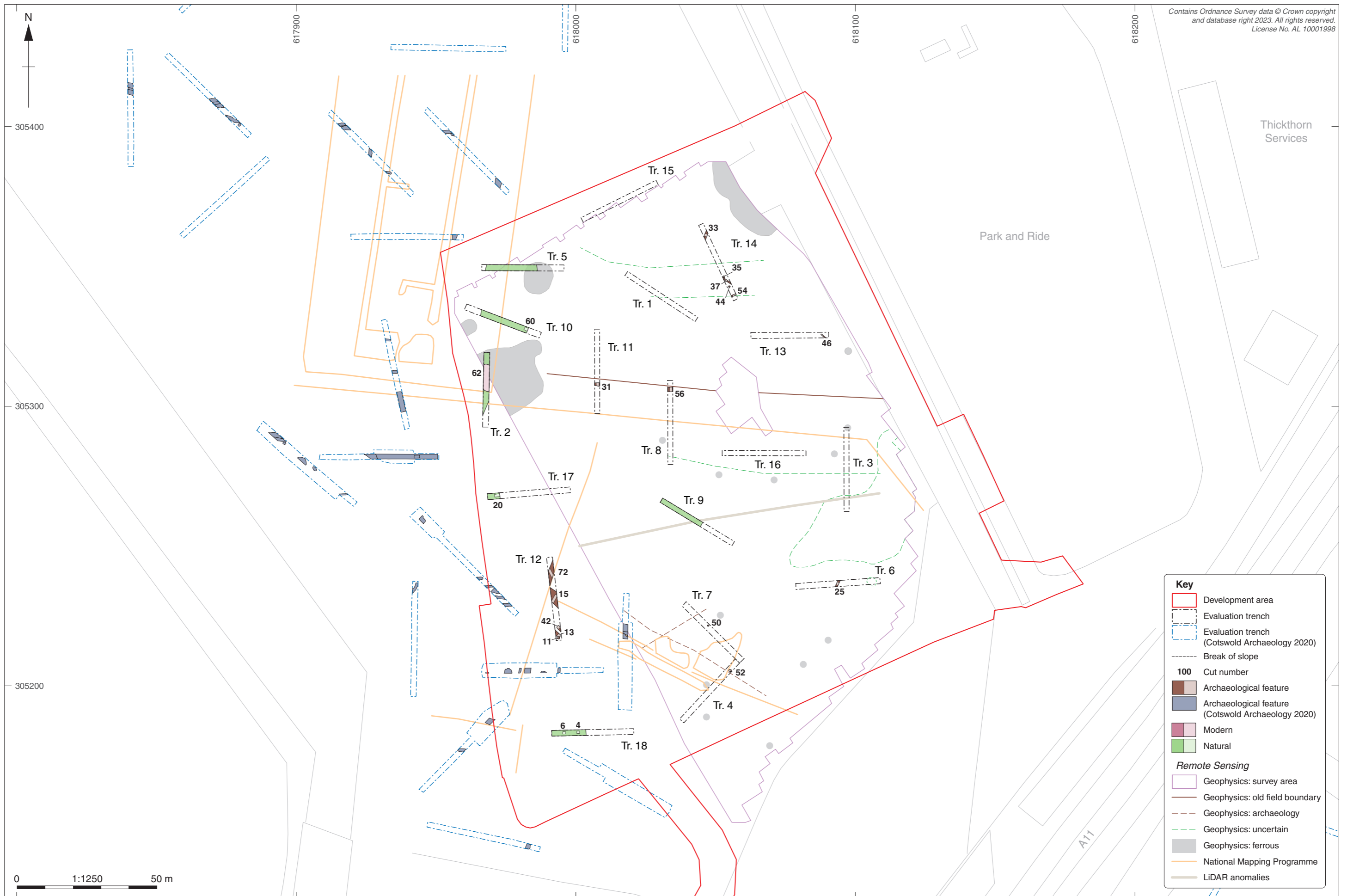


Figure 3: Trench plan showing cropmarks (copyright Historic England National Mapping Programme, licensed to Norfolk County Council), geophysical survey interpretation (Cockcorft 2021), and previous archaeological evaluation (Cotswold Archaeology 2020)

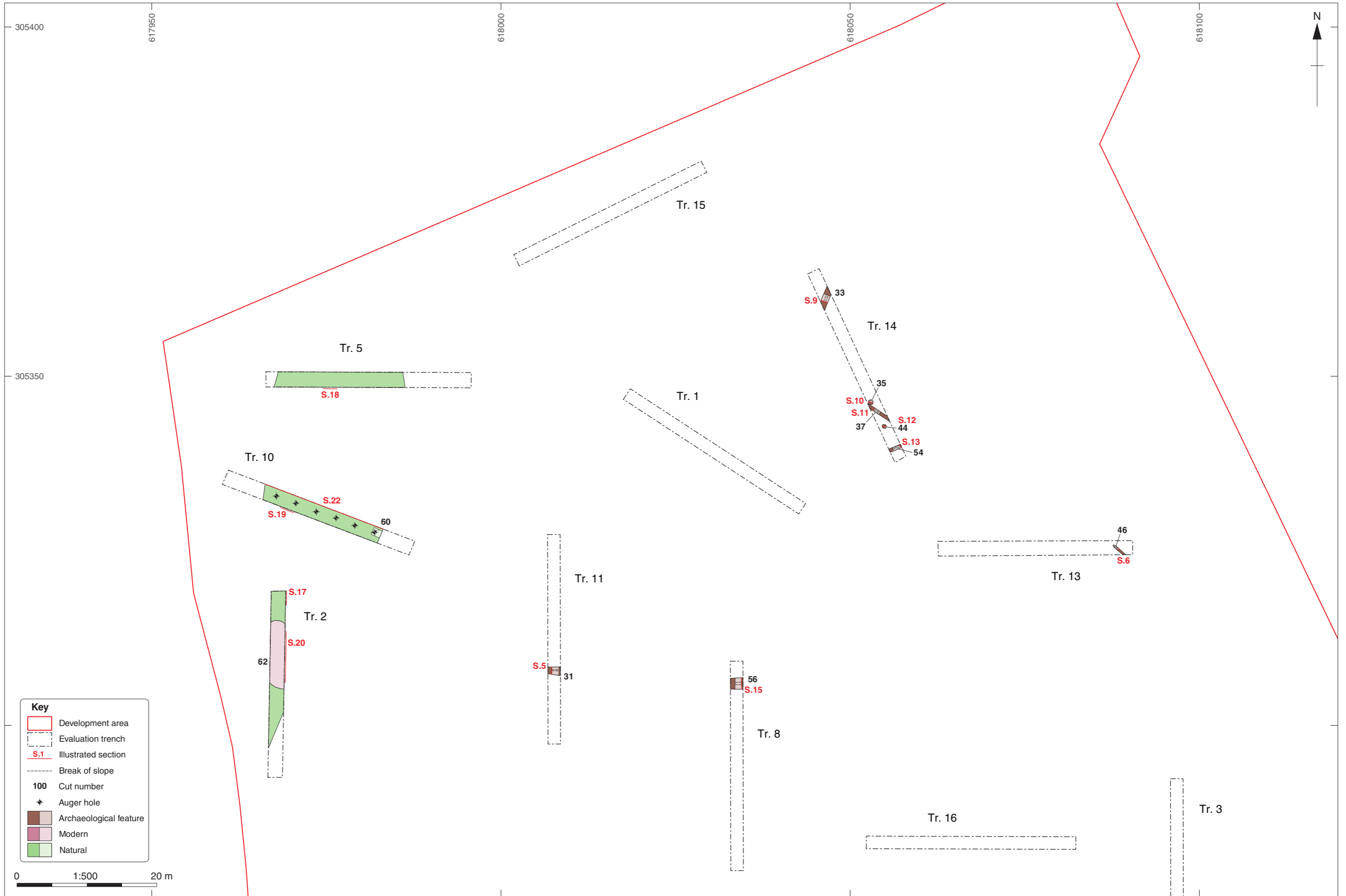


Figure 4: Detailed plan of Trenches 1, 2, 5, 8, 10, 11, 13, 14 and 15

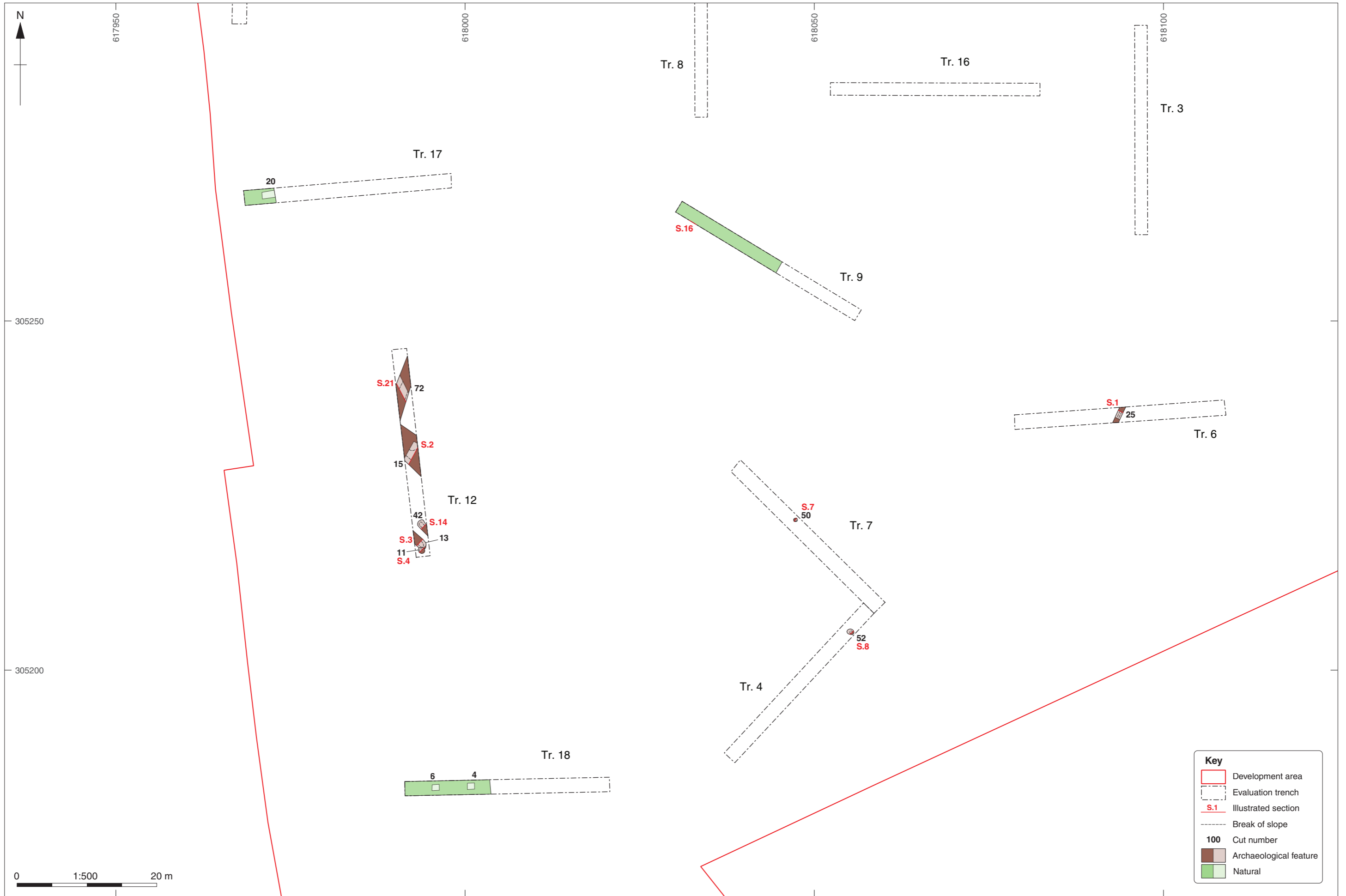


Figure 5: Detailed plan of Trenches 3, 4, 6, 7, 9, 12, 16, 17 and 18



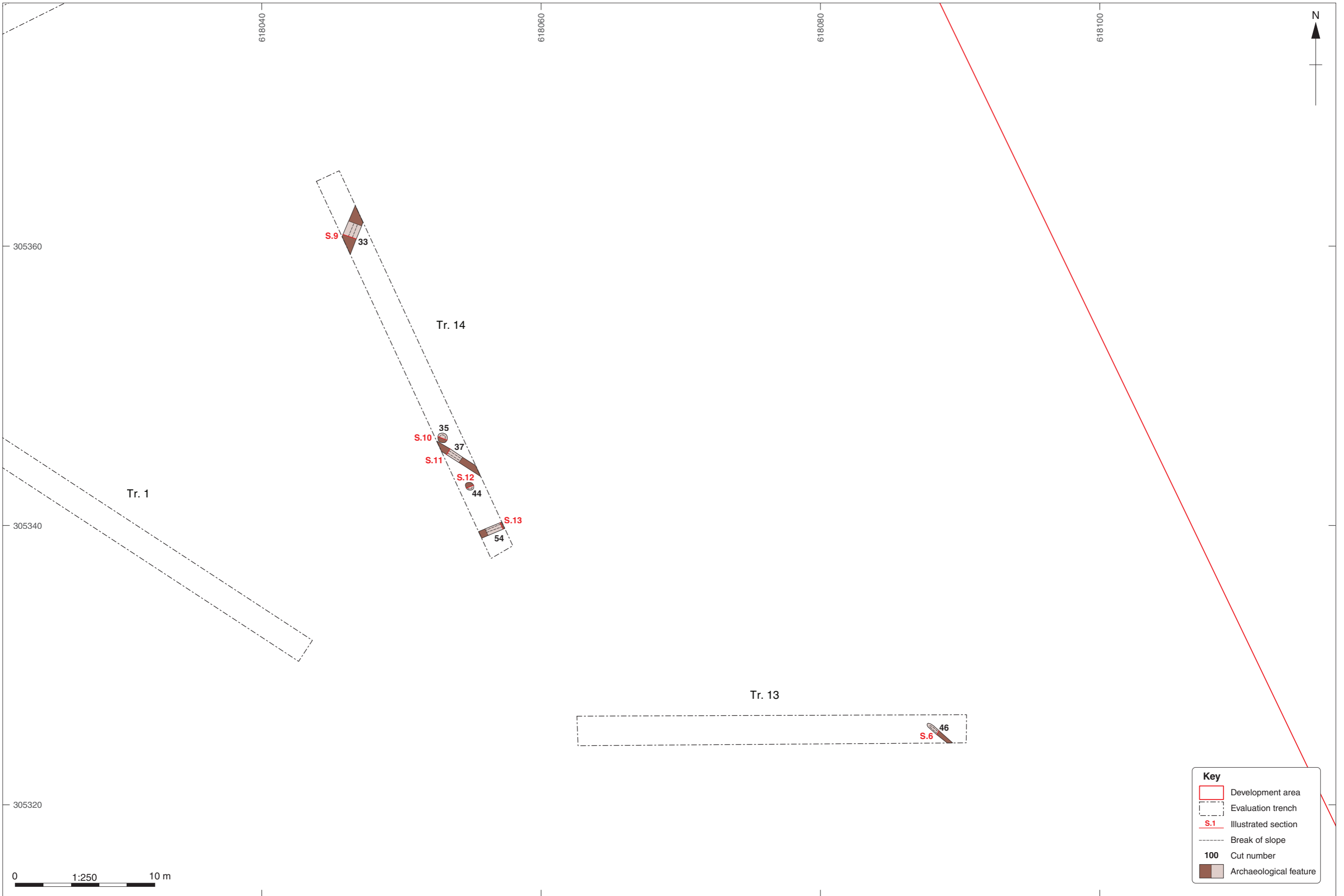


Figure 6: Detailed plan of Trenches 13 and 14

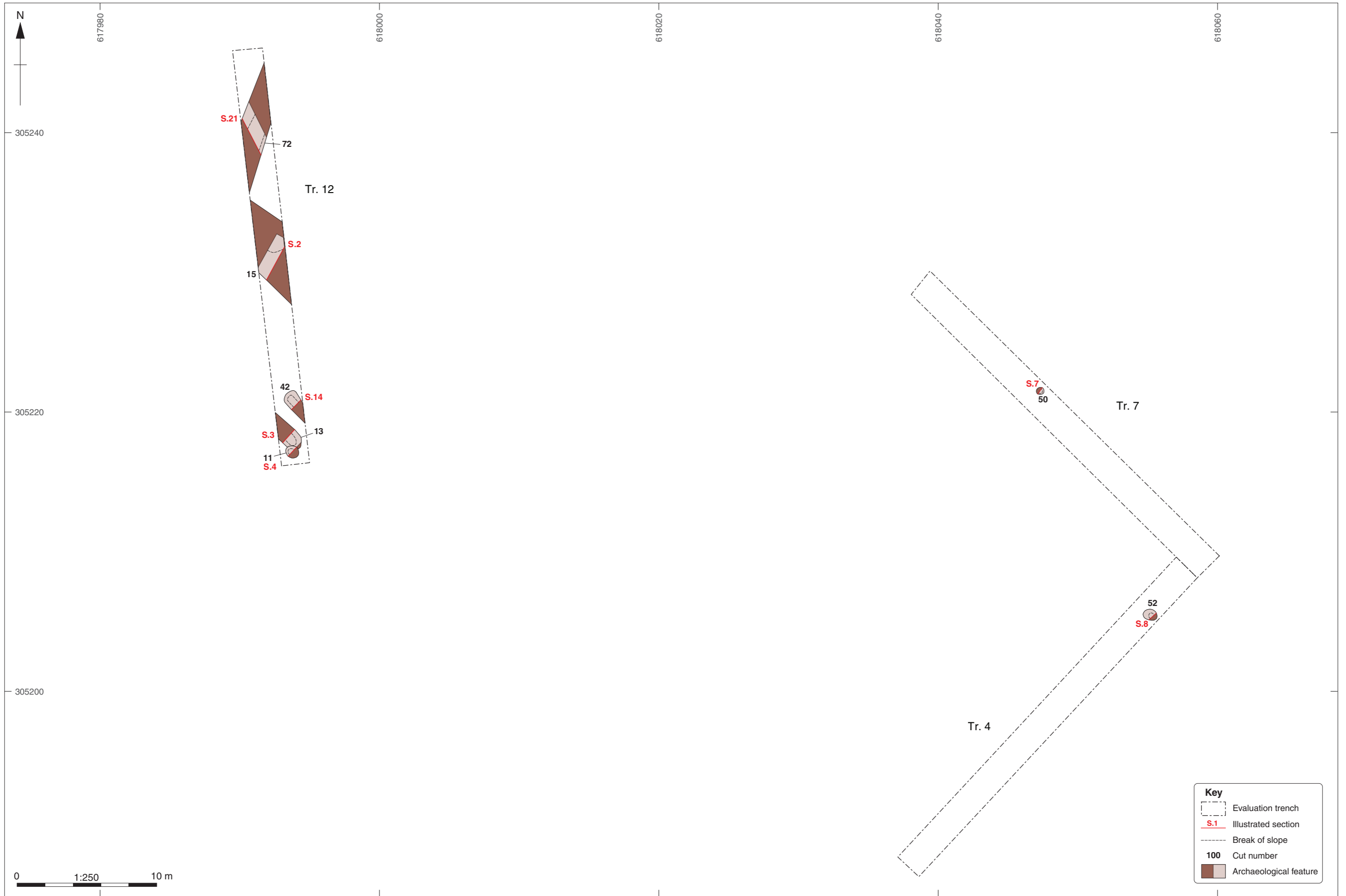


Figure 7: Detailed plan of Trenches 4, 7 and 12

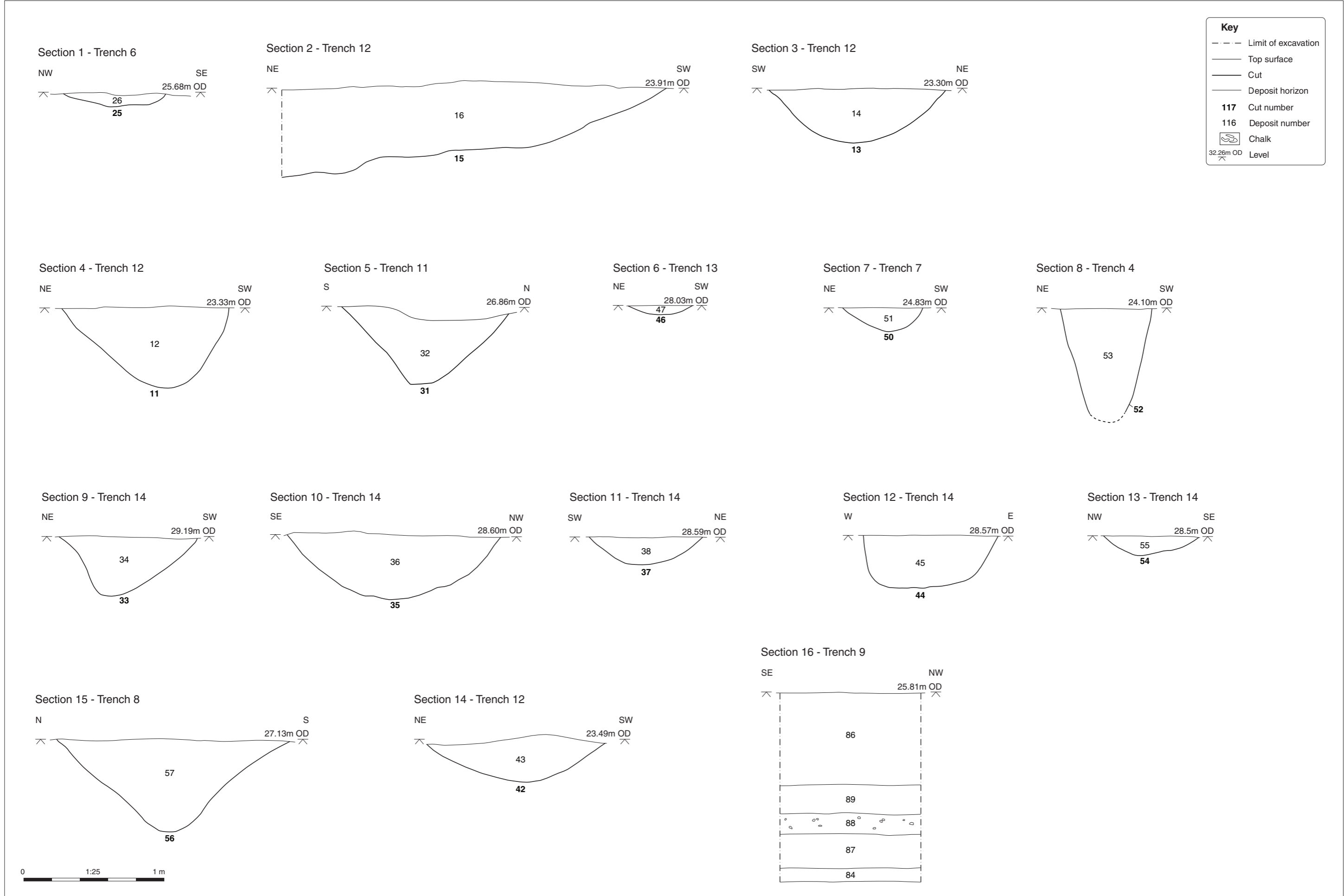


Figure 8a: Sections (sheet 1 of 1)

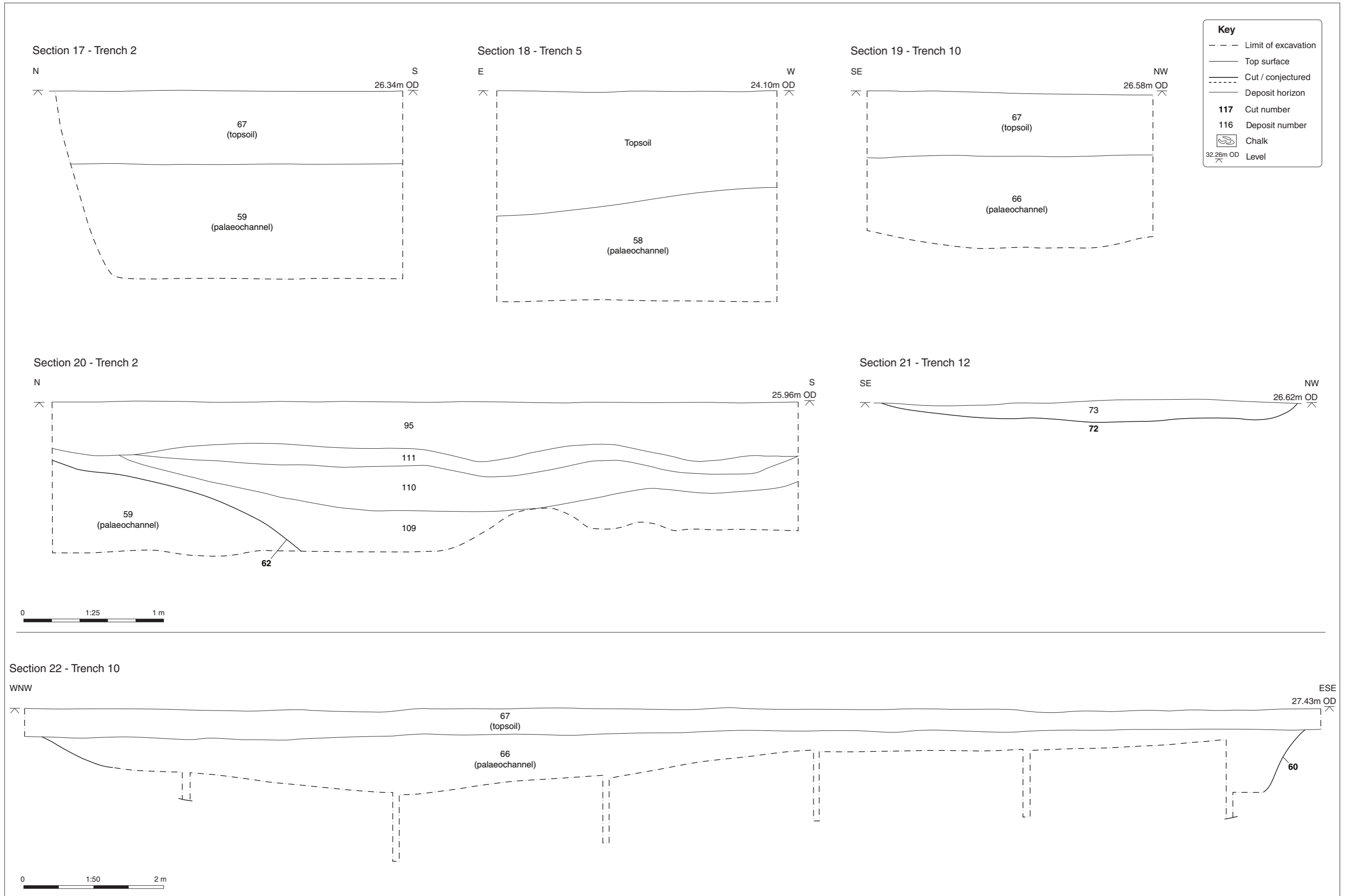


Figure 8b: Sections (sheet 2 of 2)





Plate 1: Trench 1, from the north-west



Plate 2: Trench 2, from the north





Plate 3: Modern pit 62, Trench 2, from the west



Plate 4: Trench 3, from the north





Plate 5: Trench 4, from the south-west



Plate 6: Trench 5, from the west





Plate 7: Palaeochannel 58, Trench 5, from the north



Plate 8: Trench 6, from the east





Plate 9: Trench 7, from the north-west



Plate 10: Pit 50, Trench 7, from the south-east





Plate 11: Trench 8, from the north



Plate 12: Trench 9, from the north-west



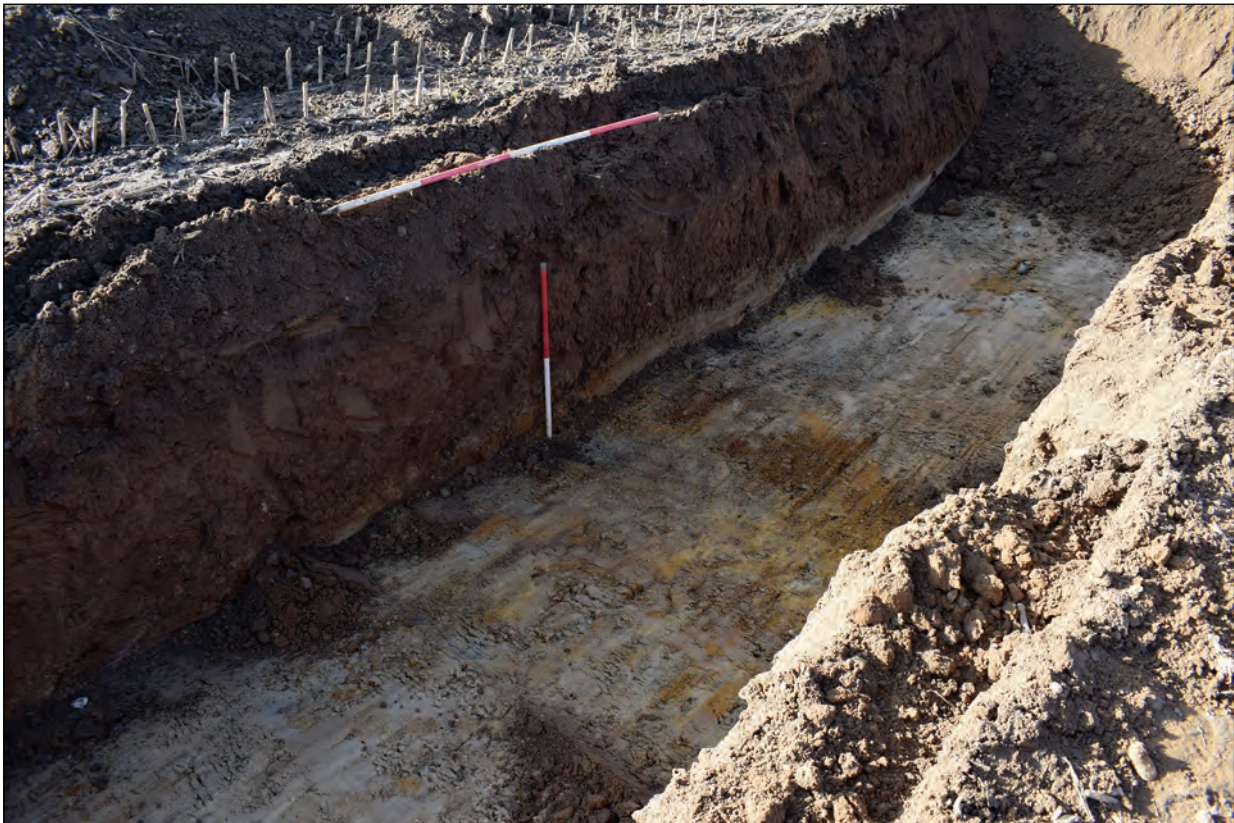


Plate 13: Machine sondage, Trench 9, from the east



Plate 14: Trench 10, from the north-west





Plate 15: Trench 11, from the north



Plate 16: Ditch 31, Trench 11, from the east





Plate 17: Trench 12, from the south



Plate 18: Pit 11, Trench 12, from the north-west





Plate 19: Trench 13, from the west



Plate 20: Trench 14, from the north





Plate 21: Ditch 33, Trench 14, from the north-east



Plate 22: Trench 15, from the east





Plate 23: Trench 16, from the east



Plate 24: Trench 17, from the west





Plate 25: Trench 18, from the west



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