



Archaeological Evaluation

Chamberlains Barn, Leighton Buzzard, Bedfordshire

Planning Applications- CB/11/01863/MW & CB/11/01937/OUT

PHASE 1 Evaluation Report

Client: Arnold White Estates Ltd.

Archaeological Evaluation

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Client: Arnold White Estates Ltd.

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Grid Reference: SP 931268

Address: Chamberlains Barn, Leighton Buzzard

Parish: Leighton-Linslade

Council: Bedfordshire

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LAND AT CHAMBERLAINS BARN, LEIGHTON BUZZARD, BEDFORDSHIRE

EVALUATION

1.1 Summary

Headland Archaeology (UK) Ltd undertook an archaeological evaluation of the land at Chamberlains Barn, Leighton Buzzard in Bedfordshire between 25th January and 31st of August 2016. The work was commissioned by Arnold White Estates in response to archaeological conditions placed on planning permissions CB/11/01863/MW and CB/11/01937/OUT and was undertaken in two phases. In this phase of work fifteen trenches were excavated, seven of which contained archaeological remains. Four areas of archaeological activity were identified. These consisted of medieval enclosure ditches, medieval and post-medieval agricultural plough furrows, modern large waste pits and undated ditch and pit.

2. INTRODUCTION

2.1 Planning Background

Headland Archaeology Ltd was commissioned by Arnold White Ltd to undertake a programme of archaeological evaluation in connection with the restoration of a former quarry (CB/11/01863/MW) and the construction of residential dwellings (CB/11/01937/OUT) at Chamberlains Barn, Leighton Buzzard, Bedfordshire (Illus 1). Both planning applications were granted by Central Bedfordshire Council.

Planning application (CB/11/01863/MW) Condition 14 specifies:

'No preparatory works or extraction shall take place in Areas 4 and 5 indicated on plan no. BC/CM/97/034-1, until the operator has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted to and approved in writing by the local Planning Authority to enable the recording of any archaeological remains before destruction'

Planning application (CB/11/01937/OUT) Condition 16 specifies;

"No development shall take place, in any area or sub-area as defined by the areas plan required by condition 3 of this permission, until a written scheme of archaeological resource management has been submitted to and approved in writing by the local Planning Authority. The said development shall only be implemented in full accordance with the approved scheme and its subsequent amendments, to record and advance understanding of the heritage assets with archaeological interest which will be unavoidably affected as a consequence of the development or to secure the protection and management of any archaeological remains which may be preserved in situ within the development site in accordance with Policy 45 of the Development Strategy for Central Bedfordshire (Revised Pre-submission Version June 2014)."

The WSI was prepared by Headland Archaeology Ltd (January 2016, Version 4) and approved by the planning authority on the advice of Hannah Firth, Archaeologist at Central Bedfordshire Council.

Between 25th January and 31st August 2016 Headland Archaeology Ltd was commissioned to undertake field evaluation in accordance with the agreed WSI.

This report details the results of phase one of the archaeological evaluation, the results of phase two of the evaluation can be found in document RLAI/15.1.

2.2 Site Description

The Chamberlains Barn Quarry development area (DA) is located to the north-east of Leighton Buzzard (Illus 1), between Heath Road to the west, Vandyke Road to the east, and Shenley Hill Road to the north. The DA covers an area of c.95ha, centred on SP 931268 at an average of 95m AOD.

The site comprises a soon to be restored sand quarry, rough grasslands, agricultural land; arable and pasture, and small areas of scrub and woodland (Areas 1-5).

Two main geological groups are present within the development area. To the north and north-east, the bedrock geology consists of mudstone of the Gault Formation; a sedimentary Bedrock formed approximately 100 to 112 million years ago, in the Cretaceous Period.

To the south and south-east, the bedrock geology is predominantly sandstone of the Woburn Sands Formation; a sedimentary Bedrock formed approximately 100 to 125 million years ago, in the Cretaceous Period. (www.bgs.ac.uk accessed 30.9.16)

2.3 Archaeological Background

2.3.1 The archaeological background was covered in detail in the 'Heritage Assessment' as part of the Environmental Impact Assessment (Albion Archaeology 2011) that accompanied the planning applications. This document was supported by the results of a geophysical survey (Stratascan 2008) and an earlier phase of trial trenching (Albion Archaeology 2012). The following section has been synthesised from those documents and updated with information derived from the Central Bedfordshire Historic Environment Record (CBCHER search reference 201516/237).

2.3.2 There is limited evidence of earlier prehistoric activity within the DA and its immediate vicinity. A Palaeolithic handaxe is recorded to the south-west of the DA (HER10723), and a Neolithic arrowhead to the west (HER19616). Work at Chamberlains Barn Quarry recovered a Bronze Age urn and features with Iron Age pottery, indicating that there was some prehistoric activity in this area. The geophysical survey also identified two concentric ring ditches, 65m in diameter, in the north-eastern part of the DA which may represent a prehistoric 'hengiform' monument (HER19594). This was investigated in the 2012 trial trenching and early Iron Age pottery was recovered from its fills. A series of undated square and circular cropmarks in the eastern part of the DA (HER14689) may also represent prehistoric enclosures.

2.3.3 Two findspots of Romano-British pottery are recorded on the HER just to the north of the DA (HER6; HER11295), and several Roman vessels recorded at Leighton Heath (HER2772). This may indicate the presence of a nearby farmstead. An archaeological field evaluation on the Leighton Buzzard Flood Alleviation Scheme, to the north of the Clipstone Brook, east of the DA, also uncovered a late Iron Age – Romano-British enclosed rural settlement (HER11123). The positioning of the DA on the Greensand Ridge would also indicate that Romano-British remains could be present here, as Romano-British remains are commonly found on similar higher land in north-western Bedfordshire (Simco 1984, 21).

2.3.4 Two Anglo-Saxon cemeteries were discovered in the 1930's during extraction work at Chamberlains Barn Quarry, in the southern part of the PDA (HER3; Hyslop 1963). The first dated to the late 6th / early 7th century, and the second to the 7th century. Burials were accompanied by glass beads, pottery, and bronze and iron implements. Unfortunately, their precise location within the quarry was not recorded. A 6th century cremation cemetery was also uncovered just to the west of the DA in the 1880's (HER1), and an Anglo-Saxon spearhead was found to the north-west (HER2820).

2.3.5 Leighton Buzzard is recorded in the Domesday Book as "Lestone" and settlement is thought to have originated in the Saxon period. The medieval core of the town was concentrated along the roads leading to the High Street. Another medieval settlement was focused around Heath, to the north-west of the DA. Earthworks in the vicinity of the DA represent former field boundaries, thought to be medieval in date (HER11180), along with ridge and furrow cultivation both within the DA and in its vicinity (HER5079, HER5462, and HER2589). Ridge and furrow was also identified in the geophysical survey, the LiDAR data, and in the 2012 trial trenching, and appears to cover the majority of the

un-quarried parts of the DA. This suggests that the DA lay within the agricultural hinterland of the medieval settlements.

2.3.6 Several former sand and stone quarry pits and brickworks exist within the DA and surrounding area, including HER11146 and HER11085 within the northern part of the DA. These are 19th century in date. Historic mapping can provide a further indication of land use within the DA during the post-medieval period. The 1840 Leighton Buzzard Tithe Map shows a dense concentration of small strip fields within the DA, indicative of the medieval agricultural system. This was changed considerably by the process of Enclosure in the mid-19th century, as is shown on the 1848 Leighton Buzzard Enclosure Map which depicts larger rectangular fields, similar to the current field layout. The 1880 and 1901 OS Maps show the DA in a similar way to the Enclosure Map, with a sand pit in the northern part. The 1926 OS Map shows the construction of Chamberlains Quarry.

3. OBJECTIVES

3.1 General

The methodology followed was outlined in the WSI (Headland Archaeology (UK) Ltd. January 2016. Version 4) and designed to meet the requirements of the planning application conditions (refs: CB/11/01937/OUT and CB/11/01863/MW).

Generally, the archaeological investigations were undertaken in order to:

- Assess the extent, layout, structure and date of features and deposits of archaeological interest;
- Place, where possible, the identified features within their local and regional context;
- Establish the relationship of any remains found to the surrounding contemporary landscapes;
- Recover paleo-environmental remains to determine local environmental conditions.

3.2 Specific

The local and regional research contexts are provided by Bedfordshire Archaeology: Research and Archaeology: Resource Assessment, Research Agenda and Strategy (Oake et al, 2007). These are supported by Research and Archaeology Revisited: a Revised Framework for the East of England, East Anglian Archaeology Occasional Paper 24 (Medlycott, M. 2011, ed.); Research and Archaeology; A Framework for the Eastern Counties (Glazebrook 1997; Brown & Glazebrook 2000), Exploring Our Past (English Heritage 1991), and English Heritage Archaeology Division Research Agenda (English Heritage 1997). The evidence retrieved during the evaluation was analysed in light of the objectives contained in these frameworks.

More specifically, the Research Framework: Research and Archaeology: Resource Assessment, Research Agenda and Strategy (Oake et al, 2007) includes the following research questions and topics that were incorporated into the WSI:

- **Iron Age / Romano-British:** “Little detailed work has been carried out on the characterization of rural settlements in either the Iron Age or Roman period. And for both periods patterns of settlement nucleation or dispersal are areas of considerable significance but little understood.... Priority should be given to those projects which offer the chance to determine the relationship between settlement and enclosure in both the Roman and Iron Age” (Oake 2007, 11)
- **Anglo-Saxon:** “The investigation of early cemeteries under modern conditions would also be very valuable” (Oake 2007, 13)
- **Medieval:** “The origins and development of field systems require research as does the position of the county between the midland system and the different systems in the rest of the eastern region” (Oake 2007, 14)

The resulting archive (finds and records) will be organised and with the agreement of the landowner deposited with Luton Culture (Entry Number 1171) to facilitate access for future research and interpretation for public benefit. An online OASIS form has been completed and will be ultimately submitted with the approved version of the report (OASIS ID: headland4-235440).

4. METHODOLOGY

Trial trenching was carried out between the 25th January and 31st August 2016. In phase one, 15 trenches were excavated (Illus 1. and 2.). The majority of trenches measured c 30m long and 2.1m wide. Trenches 3, 24, 26 and 27 were split or formed cross patterns to target large anomalies highlighted by the geophysical survey (Stratascan 2008). Trench 3 was a T-shape formed by two trenches both measuring 30m long. Trench 24 was also split and was formed by two trenches 52m aligned north to south and 7.3m orientated east to west. Trenches 3 and 24 were both 1.90m wide. Trench 26 was split into four sections from south-east to north-west measuring a: 6m, b: 15m, c: 16m and d: 5m respectively; and split in two sections from north-east to south-west (e: 14 and f: 17m). The trenches were set out in accordance with the agreed trench layout plan in the WSI using a Trimble GNSS device.

A mechanical excavator equipped with a toothless ditching bucket was used to remove the overburden under direct archaeological supervision. Potential archaeological features were excavated by hand.

Investigation of archaeological remains was undertaken through hand excavation. A representative sample, sufficient to meet the objectives of the evaluation, of identified archaeological or potentially archaeological remains were investigated and recorded. The stratigraphy of each trench was recorded in full.

4.1 Recording

All recording followed the guidance laid down by the Chartered Institute for Archaeologists (CIfA 2014b) and was in line with the approved WSI (Headland Archaeology (UK) Ltd- Archaeological Evaluation, Chamberlains Barn, near Leighton Buzzard, Bedfordshire, January 2016. Version 4). All trenches and contexts were given a unique number. All recording was undertaken on *pro forma* recording sheets which conform to archaeological standards. All stratigraphic relationships were recorded.

A plan of the trenches and features across the entire site was recorded digitally using a Trimble survey grade GNSS device. Sections through features with multiple fills were drawn by hand at a 1:10 scale while sections through single fill features were recorded digitally using a Trimble survey grade GNSS device.

A full photographic record was taken using digital photography and incorporating black and white print photographs where appropriate. A metric scale was clearly visible in record photographs.

5. RESULTS

5.1 Introduction

Full context descriptions and trench descriptions, including dimensions, depths and orientations, are presented in the Appendix I. Contexts are identified numerically by trench (i.e. Trench 1: (101), Trench 2: (201)) with cuts indicated by square brackets and deposits by rounded brackets. Selected technical detail is utilised below in order to describe the remains found and to inform the interpretation and dating we have completed and presented in this report. This structure reflects our adherence to the CIfA guidance on report production, which states that “*descriptive material should be clearly separated from interpretative statements*” (CIfA 2014b, 14, Section 5). Drawing upon the same document, we feel it is imperative to create a narrative which uses the evidence we gather to assign significance to heritage assets (remains) we encounter:

“If archaeological remains are present field evaluation defines their character, extent, quality and preservation, and enables an assessment of their significance in a local, regional, national or international context as appropriate” (ClfA 2014b, 14, Section 5).

We always utilise multiple data-sources when phasing and interpreting remains. This includes feature morphology (recognisable and datable feature types), datable artefactual material, stratigraphic position of feature (in heavily ploughed areas the presence of an intact subsoil sealing remains is given particular emphasis), the relative stratigraphic position of features (cutting or cut by). A range of other considerations also come into play. The limitation of datable artefactual material is recognised and we reflect on the possibility of intrusive material and the presence of residual material. We also recognise that most archaeological features are ‘filled’ by disuse fills and disused artefacts.

Archaeological remains were found in eight of the fifteen trenches and they were generally focused in the western part of the site. The majority of the features were dated to the late medieval and early post-medieval periods, and represent the remains of enclosure ditches, a pit and furrows supporting an agricultural use of the landscape.

5.2 Trench Results

Archaeological remains were found in trenches 8, 9, 11, 12, 24, 25, 26 and 27 (Illus. 2). These were generally focused in the west and north-west parts of the DA. The most significant features on site were a banked enclosure (1211) and its related ditches [1106], [1110] and [1116] recorded in trench 11 and again in trench 12 [1208], [1207] and [1214]. These remains do not tally with the geophysical survey results.

Remnants of eighteen plough furrows were exposed in trenches 9, 24, 25, 26 and 27, concentrated in the north-west part of the site which confirmed the agricultural marks found during the geophysical survey. The furrows were mostly oriented north-west to south-east. Trenches 24 and 26, targeting large discrete geophysical anomalies, revealed large patches of ironstone instead of the suggested meteor impacts. Furrows [0904] [2402] were investigated and fully recorded as a representative sample.

The majority of the features were dated to the medieval and post-medieval period, and represented the remains of farming activities. An undated shallow pit [0804] may represent possible refuse disposal and agricultural exploitation in the area.

Two natural geologies were present on site. Across most of the site, the natural substrate consisted of brown grey or grey brown clay with occasional concentrations of gravelly clay reach at between 0.31m and 1.1m below ground level. This was overlain by grey brown or brown grey silty clay subsoil, generally between 0.3m and 0.5m deep. No subsoil was observed in trenches 24, 25, 26 or 27 which were concentrated at the north-western edge of the site. The topsoil was dark grey brown loam, between 0.2m and 0.3m deep. In the south-western part of the site, in trenches 11-13, the natural substrate consisted of red or orange brown sand. This was overlain by red or orange brown silty sand subsoil, between 0.15m and 0.25m deep.

5.2.1 Banked enclosure and associated ditches

An enclosure defined by three ditches and a bank was revealed in trench 12. Bank (1211) was revealed near the centre of the trench, to the west and downslope of which were three ditches [1207], [1208] and [1214].

It seemed that the ditches also appeared in trench 11 [1106], [1110] and [1116], but the bank was absent. There was also an apparently unrelated ditch in trench 11 [1118] which had been cut by [1116].

The bank material (1211) was located close to the eastern edge of ditch [1207]. Deposit (1211) was 2.05m wide and 0.4m deep and was composed of grey brown silty sand (1211). Late medieval sherds dating from 14th-15th century and intrusive sherds of 18th to 19th-century creamware were collected from bank material (1211) (Illus 5 & 7).

The ditch [1207]/[1116] immediately adjacent to the bank in trench 12 was 2.55m wide and 0.85m deep and in trench 11 it was 4m wide and 1.05m deep. Its profile and dimensions were different across the two trenches. It was filled by a brown grey silty loam accumulation deposit (1115)/(1206), overlain by a sandy loam backfill deposit (1114)/(1205), then finally a grey brown silty sand (1111)/(1204), which may have represented subsided bank material (1211) in trench 12. Fill (1204) contained a residual frost shattered flake retouched as a scraper and possibly intrusive 18th to 19th century sherd of yellow ware with horizontal white banded decoration. Ditch [1116] truncated an earlier ditch [1118] in trench 11.

Ditch [1110]/[1214] was exposed immediately west of ditch [1116]/[1207] and seemed contemporary to ditch [1116]/[1207]. It was not excavated in trench 12 but measured 2.9m wide. In Trench 11 it had irregular steep sides with a sharper western edge, it had a concave base. Ditch [1110] ran in a similar north-south orientation and was 3.10m wide and 0.70m deep, it was filled by light brown grey sand clay and a hill washed mid brown orange silt sand, (1108) and (1109) respectively and both 0.45m thick (Illus 5).

Segments of a third parallel ditch were revealed in both trenches 11 and 12, [1106] and [1208] respectively and was oriented approximately north-south. In Trench 11, it was located to the west of ditch [1110], had slightly stepped (gently sloped to vertical) sides, a flat, uneven base, and sharp breaks of slope (Illus 4 & 6). Its lower profile appeared to have been determined by the shape of ironstone outcropping. It was 4.9m wide and 0.55m deep. It was filled initially by a grey brown silty sand deposit (1105), followed by a grey brown sandy loam backfill deposit (1104). It was cut by ditch [1110] and truncated by a modern drain and sealed by subsoil.

In Trench 12, ditch [1208]/ ([1106]) was located to the west of ditch [1214] and (Illus 9). It had uneven gently sloped to vertical sides, a flat slightly uneven base. Its profile appeared to have also been determined by the shape of the local ironstone outcrop. It was 1.54m wide and 0.45m deep and was filled by orange brown silty sand (1209) which contained sherds of pottery datable to the 14th-15th centuries. It was sealed by subsoil.

A further ditch [1118] was also recovered at east of ditch [1116] in trench 11 but does not appear in trench 12. Ditch [1118] was orientated north-east to south-west and the surviving remains measured 0.5m wide for a depth of 0.22m. It was filled by mid-orange brown silt sand (1117).

All of these features were oriented approximately north-south and did not appear to correspond with the anomalies picked up by the geophysical survey, despite the fact that the trenches were deliberately excavated at this location to test geophysical anomalies.

5.2.1 *Agricultural furrows*

A total of eighteen furrows were identified in trenches 9, 24, 25, 26 and 27 which appeared to confirm the geophysical survey showing agricultural marks. [0904] and [2402] were investigated as a representative sample.

A wide furrow was located near the centre of Trench 9, oriented approximately northeast, southwest [0904]. It had steep sides, a flat base, and gradual breaks of slope and measured 3.11m wide to 0.18m deep on average. Finds from the subsoil (0902) included two 17th-century glazed red earthenware sherds as well as a prehistoric broken flint tool.

Several alignments of plough furrows were identified at the northwest of the DA in trenches 24, 25, 26 and 27 (Illus 3).

Four parallel furrows orientated east-west were exposed in trench 24. They were approximately 5-6m apart and measured c1.70 wide. Furrow [2402] was excavated as a representative sample of these features; it was 1.62m wide and 0.16m deep and contained medium grey brown silty clay.

Two parallel furrows orientated northwest-southeast were exposed in trench 25 they measured an average of 2m wide and were surveyed on plan.

A total of nine furrows were exposed in the six segments of trench 26 (Illus 3) including six orientated north northwest to south southeast and three running northwest to southeast. They measured 1.5m wide in average. They were surveyed in plan.

A further two furrows were found in trench 27 which both ran north northeast to south southwest and measured an average width of 2m, they were surveyed in plan.

5.2.2 Undated and features

Ditch [1118] was located immediately to the east of ditch [1116] and was oriented approximately northeast-southwest. It had an asymmetrical profile; the south-eastern side was gently sloped and its north-western side was steep because it had been cut by [1116], it had a concave base. It measured 1.1m wide and 0.47m deep and was filled by orange brown silty sand (1117). It was sealed by subsoil.

Pit [804] was located at the northwest end of trench 8. It was 0.93m wide by 0.14m deep and was filled by light grey brown silty clay (805), similar to that of the surrounding subsoil.

5.3 Finds

by Julie Franklin, Jackie Wells, Julie Lochrie

The finds assemblage numbered nine sherds (201g) of pottery, 83 sherds (1.694kg) of ceramic building material, a handful of iron, glass and stone finds and a small collection (39g) of industrial waste. Finds were found in four trenches (Trenches 9-13) and range in date from the medieval to modern periods. A summary of the assemblage is given below (Table 1), and a complete catalogue is given in the Appendix V.

Trench	Feature	Pottery (Medi) Count	Pottery (Medi) Wgt	Pottery (PM-Mod) Count	Pottery (PM-Mod) Wgt	Iron Count	Glass Count	Lithics Count	Stone Count	CBM Count	CBM Wgt	Ind Waste Wgt	Dating
9	Subsoil			2	22g			1		8	210g	16g	Medi-PM
11	Ditch 1110									5	1g	<0.5g	?
11	Ditch 1116									5	28g	15g	?
11	Ditch 1106	1	1g							3	48g		Medi?
11	Subsoil									1	109g		Mod
11	Subsoil 1107 in ditches									13	483g		Medi?
12	Bank material 1211	1	3g	1	1g		1	2		10	50g	<0.5g	Medi-Mod
12	Ditch 1207			1	2g	1		2	2	35	746g	7g	Medi-Mod
12	Ditch 1208	2	3g							3	19g		14 th -15 th
13	Subsoil			1	169g	1							Mod
Total		4	7g	5	194g	2	1	5	2	83	1694g	39g	

Table 1 Assemblage summary by feature

5.3.1 Pottery

Nine pottery sherds (201g), ranging in date from late medieval and post-medieval to the present day were collected. With the exception of a modern earthenware moulded rim found in the Trench 13 subsoil, all sherds are abraded, small (mean sherd weight 4g) and undiagnostic in terms of vessel form.

Two oxidised sandy sherds datable to the 14th-15th centuries (E02, E03) were found in ditch [1208] (1209) and bank material (1211). Both are small abraded and clearly residual, though ditch [1208] lacks any demonstrably later material.

Two 17th-century glazed red earthenware sherds (P01, P06) derived from subsoil (902). Single sherds of 18th to 19th-century creamware (P38) and yellow ware (P39), the latter with horizontal white banded decoration, were collected from bank material (1211) and the upper fill of ditch [1207] (1204), respectively. Ditches [1106] and [1208] contained two reduced sandy ware crumbs of uncertain date, though both are associated with medieval material.

Fabric Code	Fabric Name	Dating	Sherds	Wgt
E02	Late medieval oxidised ware	14 th -15 th	1	2g

E03	Late medieval smooth ware	14 th -15 th	1	3g
UNID	Unidentified crumbs	Medi?	2	2g
P01	Glazed red earthenware	17 th	1	8g
P06	Glazed red earthenware (slip decorated)	17 th	1	14g
P38	Creamware	M18 th -19 th	1	1g
P39	Yellow ware	18 th -19 th	1	2g
P100	Misc modern	19 th -present	1	169g
Total			9	201g

Table 2 Pottery type series (fabric types identified in accordance with the Bedfordshire Ceramic Type Series)

5.3.2 Iron

A possible hinge strip found in the Trench 13 subsoil (1302) and unidentified T-shaped object from ditch [1207] (1204) are of probable recent date.

5.3.3 Glass

A single sherd of green bottle glass was found in bank material (1211). It is most likely of 18th or 19th century date.

5.3.4 Lithics

The lithics comprise two tools, a chip and two burnt fragments. One tool was retrieved from Trench 9 subsoil (902) while the remainder were found in the Trench 12 features. None of the pieces are chronologically diagnostic.

The tool from Trench 9 has a broken left distal corner with retouch to either side. The other tool and a chip from Trench 12 were found in ditch [1207] (1204, 1205). This tool is a frost shattered flake retouched into a scraper. Scrapers appear throughout most of prehistory and as the flake is frost shattered there are no chronological indicators. The two burnt pieces are indeterminate and may even be natural, they were found within the bank material (1211).

5.3.5 Ceramic building material

The ceramic building materials are typically sand tempered brick and tile sherds. Pieces are generally abraded and well fragmented.

Thirty fragments derive from flat roof tiles, probably of peg type, although only one retains an identifying nail hole. Such tiles are broadly datable from the 13th to 16th centuries. A sherd found in subsoil (1107) was flanged and thus can be dated to the 13th century or earlier.

There were also 28 brick sherds, too fragmentary to be of diagnostic value and a number of small fragments which may derive from either brick or tile. A piece of amorphous fired clay was found in the apparently medieval fill of ditch [1208] (1209). There was also a sherd of modern plain red quarry tile found in subsoil (1102).

Type	Sherds	Wgt	Dating
Roof Tile	20	512g	13 th -16 th
Fired Clay	1	7g	?
Brick	27	904g	?
Floor Tile	1	109g	Mod
Fragments	34	162g	?
Total	83	1694g	

Table 3 Ceramic building material summary

5.3.6 Stone

Two small fragments of slate were recovered from ditch [1207] (1204). They may be fragments of roofing slate. They were associated with modern pottery and medieval roof tiles.

5.3.7 Industrial Waste

The industrial waste comprises 39g of slag with a very small amount (<0.5g) of magnetic residues. None of the slag appears to be related to ironworking and may be the result of other pyrotechnic processes. Similarly, the magnetic residues are not necessarily the result of smithing and may be magnetised natural from the same pyrotechnic processes. Associated finds are mixed in terms of dating so these pieces cannot be dated.

5.3.8 Discussion

Residual prehistoric activity in the area is represented by a handful of lithic finds. The earliest archaeology on the site may be of medieval date, though it is unclear if any features actually date from that period. The medieval pottery is scarce and represented by small and abraded sherds. The flat roof tile is more numerous but has a broad date range and may also have been of some age when deposited. It is possible that many of the features were actually backfilled during the post-medieval or modern periods.

5.4 Environmental Report

By Laura Bailey and Tim Holden

Introduction

Two 40 litre samples and animal bone were collected. The samples were from the fill (1109) of a ditch [1110] and bank material (1211). The aims of the assessment were to assess the presence, preservation and abundance of environmental remains in the sample and to characterize the assemblage as far as possible.

Methodology

Bulk samples were subjected to flotation and wet sieving in a Siraf-style flotation machine. The floating debris (the flot) was collected in a 250 µm sieve and, once dry, scanned using a binocular microscope. Any material remaining in the flotation tank (retent) was wet-sieved through a 1mm mesh and air-dried. All samples were scanned using a stereomicroscope at magnifications up to x45. Identifications, where provided, were confirmed using seed atlases including Cappers *et al.* (2006) and Zohary *et al.* (2012). Animal bone was hand collected in the field and identifications were made with reference to Schmid (1972).

Results

Results of the processing are presented in appendix VI (Flot and Retent samples) and appendix VII (Animal bone). None of the samples contained material of a suitable size for AMS (Accelerated Mass Spectrometry) radiocarbon dating. Modern roots were present in both samples.

Wood charcoal

A small amount of heavily fragmented wood charcoal was present in both samples. Where preservation allowed, the charcoal from the flots was categorized as oak or non-oak. A single heather (*Calluna vulgaris*) stem was present in the fill (1109) of ditch [1110].

Cereal grain

A single oat (*Avena sativa*) grain was present in deposit (1211).

Oyster shell

Heavily fragmented, abraded oyster shell fragments were hand collected from deposit (1204).

Animal Bone

A small amount of animal bone was recovered from four deposits (Appendix VII), from subsoil (802) and (1202) and (1114) of ditch [1116] respectively. The bone was generally heavily fragmented and abraded. The surface condition was poor.

Identifiable elements included a cattle distal radius, in deposit (802), a horse mandible, in ditch [1114] and a sheep metatarsal shaft in deposit (1202).

Burnt bone

Deposit (1211) contained two tiny (<1g) indeterminate fragments of burnt bone.

Discussion

The environmental assemblage offers little insight into site economy. The single oat grain was broken and abraded and is likely to represent material incidentally incorporated into the backfill of the feature. The animal bone assemblage comprised elements of the main domesticates. The combination of bone together with pottery suggests that the material probably had a domestic origin. Due to the small size of the assemblage it is unlikely that analysis would provide significant further information.

6. DISCUSSION**6.1 Quality of preservation**

Quarrying and agricultural truncation was apparent at this site, which is typical for the area. The topsoil at the site varied from 0.15m to 0.32m in depth over a subsoil between 0.2m and 0.5m thick. In the northeast parts of the site the topsoil was however extensively mixed with natural substrate as a result of extensive ploughing. The overburden in the south-west area was disturbed by modern quarrying activities (appendix 1).

6.2 Summary of remains**6.2.1 Prehistoric Activity**

But for two tools, a chip and some sherds which are common throughout all prehistory no other surviving remains of prehistoric activity was exposed within the development area.

6.2.2 Medieval Activity

The earliest identified activity seems to be related to the banked enclosure. Three ditches [1106]/[1208], [1110]/[1214] and [1116]/[1207] were observed running parallel and may date to the medieval period. Those features were located in trenches 11 and 12. There is little to characterise these periods, but a few pottery sherds and typology of the features. The ceramic building material fragments are not suggestive enough to inform on the style of possible buildings associated with the enclosure.

6.2.3 Post-medieval Activity

Many trenches of the DA showed evidence of agricultural activity. These very probably related to ploughing which have continued to this day. The post-medieval to modern finds are generally ceramic building material with some glass and slate fragments.

7. CONCLUSION

The evaluation successfully characterised the archaeological potential of the development area. Archaeological features were investigated and recorded in seven of the nineteen trial trenches excavated during this phase of work. These comprised a possible medieval banked enclosure and ditches and post-medieval agricultural plough furrows and undated ditch and pit.

The amount of material recovered is consistent with a relatively low density of archaeology; however, there are one or two features some of which did not appear in the geophysical survey; the banked enclosure and its associated ditches that may be of interest. It is likely that there were other features but that have been destroyed by the quarrying activity or are on the periphery of the banked enclosure and associated ditches.

The evaluation confirmed the presence of agricultural marks as suggested by the geophysical results. The presence of such material in the evaluation adds to the regional record.

8. BIBLIOGRAPHY

Albion Archaeology 2011, *Eastern Leighton Linslade, Bedfordshire: Heritage Assessment*.

Albion Archaeology 2012, *Eastern Leighton Linslade, Chamberlains Barn, Bedfordshire: Archaeological Trial Trenching Evaluation*.

Archaeological Archives Forum, *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (published by the ClfA 2007).

Brickley M & McKinley J 2004 *Guidelines to the standards for recording human remains* (IfA Paper No 7).

British Geological Survey (Website) <<http://bgs.ac.uk/>> accessed 22.12.2015

Brown N & Glazebrook J 2000 *Research & Archaeology: A framework for the eastern counties – 2 Research Agenda and Strategy Norwich: Scole Archaeological Committee* (East Anglian Archaeology Occ. Pap 8)

Cappers RTJ, Bekker, RM and Jans, JEA 2006 *Digital seed atlas of the Netherlands* Barkhuis Publishing and Groningen University Library, Groningen.

ClfA 2014a Code of Conduct

ClfA 2014b *Standards and Guidance for archaeological field evaluation. English Heritage 1991, Exploring Our Past English Heritage 1997, Archaeology Division Research Agenda*

Glazebrook J 1997 *Research and Archaeology: A framework for the eastern counties – 1 Resource assessment*.

Gurney, D 2003 *Standards for the Field Archaeology in the East of England* East Anglian Archaeology Occasional Paper 14.

Headland Archaeology Ltd. 2016 –Version 4 - *Archaeological Evaluation Chamberlains Barn, near Leighton Buzzard, Bedfordshire- Stage One Written Scheme on Investigation and Stage One Written Scheme of Archaeological Resource Management*.

Historic England 2011, *Environmental Archaeology: a guide to the theory and practice of methods, from sampling and recovery to post-excavation*

Hyslop, M 1963 "Two Anglo-Saxon Cemeteries at Chamberlains Barn, Leighton Buzzard, Bedfordshire", *Archaeological Journal* 120

Medlycott, M. 2011 (ed.) *Research and Archaeology Revisited: a Revised Framework for the East of England*, East Anglian Archaeology Occasional Paper 24.

Oake, M, Luke, M Dawson, M Edgeworth, M and Murphy, P. 2007. *Research and Archaeology: Resource Assessment, Research Agenda and Strategy* (Bedfordshire Archaeology Monograph 9)

Schmid, E 1972 *Atlas of animal bones for prehistorians, archaeologists and Quaternary geologists*. Amsterdam.

Stratascan 2008, *Eastern Leighton Linslade: Geophysical Survey Report*.

Watkinson D & Neal V *First aid for finds*, (Third Edition 1998).

Zohary, D, Hopf, M, and Weiss, E 2012 *Domestication of Plants in the Old World* (Oxford; Oxford University Press)

Appendix I – Trench and Context Summary

TR01			
L (m)	W (m)	Min. D (m)	Max. D (m)
30	2.2	0.6	0.95
Context	Description	*D BGL (m)	
0101	Topsoil- Dark grey brown silty loam with frequent sub-angular gravel flint and chalk (0-0.05m).	0.15	
0102	Void	N/A	
0103	Subsoil- Medium grey brown silty clay	0.35	
0104	Natural- Light grey brown silty clay. 'Boulder clay'	N/A	
Summary			
No archaeological features encountered.			

TR02			
L (m)	W (m)	Min. D (m)	Max. D (m)
30	2.2	0.6	0.85
Context	Description	*D BGL (m)	
0201	Topsoil- Dark grey brown silty loam with frequent sub-angular gravel flint and chalk (0-0.05m).	0.30	
0202	Subsoil- Medium grey brown silty clay	0.55m	
0203	Natural- Medium grey blue silty clay. 'Boulder' clay.	N/A	
Summary			
No archaeological features encountered.			

TR03			
L (m)	W (m)	Min. D (m)	Max. D (m)
30	2.2	0.75	1.1
Context	Description	*D BGL (m)	
0300	Topsoil- Dark grey brown silty loam with frequent sub-angular gravel flint and chalk (0-0.05m).	0.30	
0301	Subsoil- Medium grey brown silty clay	0.80	
0302	Natural- Medium grey blue silty clay. 'Boulder' clay	N/A	
Summary			
No archaeological features encountered.			

TR04			
L (m)	W (m)	Min. D (m)	Max. D (m)
30	2.2	0.70	0.90
Context	Description	*D BGL (m)	
0401	Topsoil- Dark grey brown silty loam with frequent sub-angular gravel flint and chalk (0-0.05m).	0.35	
0402	Subsoil- Medium grey brown silty clay	0.60	

0403	Natural- Medium grey blue silty clay. 'Boulder' clay.	N/A
Summary		
No archaeological features encountered.		

TR05			
L (m)	W (m)	Min. D (m)	Max. D (m)
24.30	2.2	0.28	0.31
Context	Description	*D BGL (m)	
0501	Topsoil- Dark grey brown silty loam with frequent sub-angular gravel flint and chalk (0-0.05m).	0.28	
0502	Subsoil- Medium grey brown silty clay	0.35	
0503	Natural- Medium grey blue silty clay. 'Boulder' clay.	N/A	
Summary			
No archaeological features encountered.			

TR08			
L (m)	W (m)	Min. D (m)	Max. D (m)
30	2.2	0.50	0.60
Context	Description	*D BGL (m)	
0801	Topsoil- Dark grey brown silty loam with frequent sub-angular gravel flint and chalk (0-0.05m).	0.28	
0802	Subsoil- Medium grey brown silty clay		
0803	Natural- Medium grey blue silty clay. 'Boulder' clay.	N/A	
0804	Cut of pit- Sub-circular in plan. Shallow, concave edges and concave base.	0.14	
0805	Fill of pit [0804]; Secondary deposit- Light grey brown silty clay	0.14	
Summary			
1x shallow pit. No artefactual materials recovered, date inconclusive.			

TR09			
L (m)	W (m)	Min. D (m)	Max. D (m)
30	2.2	0.4	0.5
Context	Description	*D BGL (m)	
0901	Topsoil- Dark grey brown silty loam with frequent sub-angular gravel flint and chalk (0-0.05m).	0.25	
0902	Subsoil- Medium grey brown silty clay	0.25	
0903	Natural- Medium yellow brown silty clay	N/A	
0904	Cut of furrow- Aligned north-east to south-west, shallow concave edges with undulating concave base.	0.08	
0905	Fill of furrow; Secondary deposit- Medium grey brown	0.08	

	silty clay.	
Summary		
1x furrow exposed, aligned north-east to south-west. Furrow excavated and recorded depth of preservation at 0.08m.		

TR11			
L (m)	W (m)	Min. D (m)	Max. D (m)
24.30	1.70	0.28	0.31
Context	Description	*D BGL (m)	
1101	Topsoil- Dark grey brown silty loam with frequent sub-angular gravel flint and chalk (0-0.05m).	0.28	
1102	Void	N/A	
1103	Natural- Medium yellow brown 'orange' sand.	N/A	
1104	Fill of ditch [1106]; Secondary deposit- Medium grey brown silty sand	0.32	
1105	Fill of ditch [1106]; Secondary deposit- medium grey brown silty sand	0.23	
1106	Cut of ditch- Aligned north to south, gradual edges and uneven base.	0.55	
1107	Void	N/A	
1108	Fill of ditch [1110]; Secondary deposit- Medium yellow brown silty sand	0.4	
1109	Fill of ditch [1110], Primary deposit- light grey brown clayed silt	0.28	
1110	Cut of ditch- Aligned north to south, gradual concave edges with concave base.	0.68	
1111	Fill of ditch [1116]; Secondary deposit- Medium yellow brown silty sand.	0.23	
1112	Fill of ditch [1116]; Secondary deposit- medium yellow brown silty sand	0.26	
1113	Fill of ditch; Secondary deposit- light yellow brown grey sand.	0.27	
1114	Fill of ditch; Secondary deposit- light brown grey sand	0.2	
1115	Fill of ditch; Primary deposit- medium yellow brown silty sand.	0.09	
1116	Re-cut of ditch- Aligned north to south, gradual concave edges with concave base	0.97	
1117	Fill of ditch [1118]; Secondary deposit- medium yellow brown silty sand	0.47	
1118	Cut of ditch- Aligned north to south, gradual concave edges with concave base	0.47	
Summary			

4x ditches exposed, aligned north to south, forming potential enclosure. Continues in Tr12. Correlates with geophysical survey results.

TR12

L (m)	W (m)	Min. D (m)	Max. D (m)
30	2.2	0.2	0.5
Context	Description	*D BGL (m)	
1201	Topsoil- Dark grey brown silty loam with frequent sub-angular gravel flint and chalk (0-0.05m).	0.25	
1202	Subsoil- Medium yellow brown silty sand	0.25	
1203	Natural- Medium grey blue silty clay. 'Boulder' clay.	N/A	
1204	Fill of ditch [1207]; Secondary deposit- Light to medium grey brown silty sand	0.40	
1205	Fill of ditch [1207]; Secondary deposit- Light grey brown silty loam	0.13	
1206	Fill of ditch [1207]; Primary deposit- Light to medium grey brown silty loam.	0.17	
1207	Cut of ditch- Aligned north to south, gradual concave edges with concave base.	0.85	
1208	Cut of ditch- Aligned North to south, gradual concave edges and concave almost flat base.	0.38	
1209	Fill of ditch [1208]; Secondary deposit- Medium yellow brown silty sand	0.38	
1210	Fill of ditch [1208]; Secondary deposit- Medium yellow brown silty sand	0.18	
1211	Bank material - Light to medium grey brown silty sand	0.35	
1212	Void	N/A	
1213	Fill of ditch [1214]; Secondary deposit- Medium grey brown silty sand	N/A	
1214	Cut of ditch- Aligned north to south. Unexcavated	N/A	
Summary			
3x ditches exposed, aligned north to south, forming potential enclosure. Continues into Tr11, located to the north. Correlates with geophysical survey results.			

TR13

L (m)	W (m)	Min. D (m)	Max. D (m)
30	2.2	0.2	0.35
Context	Description	*D BGL (m)	
1301	Topsoil- Dark grey brown silty loam with frequent sub-angular gravel flint and chalk (0-0.05m).	0.10	
1302	Subsoil- Medium yellow brown silty sand	0.15	

1303	Natural- Medium yellow brown 'orange' sand with outcrops of ironstone.	N/A
Summary		
No archaeological features encountered.		

TR24			
L (m)	W (m)	Min. D (m)	Max. D (m)
52	1.90	0.40	0.45
Context	Description	*D BGL (m)	
2400	Topsoil- Dark grey brown clayed loam with few sub-rounded gravel flint. Poor plough soil.	0.30	
2401	Natural- Medium yellow brown silty clay.	N/A	
2402	Cut of furrow. Aligned east to west, shallow concave edges and base	0.16	
2403	Fill of [2402]; Secondary deposit- Medium grey brown silty clay with few sub-rounded and sub-angular gravel flint (0-0.03).	0.16	
Summary			
4x furrows exposed, aligned east to west. 1x furrow excavated and full record representative of features. Trench split into two due to tram lines.			

TR25			
L (m)	W (m)	Min. D (m)	Max. D (m)
28	1.9	0.32	0.38
Context	Description	*D BGL (m)	
2500	Topsoil- Dark grey brown clayed loam with few sub-rounded gravel flint. Poor plough soil.	0.14	
2501	Natural- Medium yellow brown silty clay with outcrops of concentrated gravel flint.	N/A	
Summary			
2x furrows exposed, aligned north-east to south-west.			

TR26			
L (m)	W (m)	Min. D (m)	Max. D (m)
73 (total)	1.9	0.28	0.31
Context	Description	*D BGL (m)	
2600	Topsoil- Dark grey brown clayed loam with few sub-rounded gravel flint. Poor plough soil.	0.18	
2601	Natural- Medium yellow brown silty clay with outcrops of concentrated gravel flint.	N/A	
Summary			
9x furrows exposed, aligned north-east to south-west.			

Trench split into six due to tram lines.
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TR27

L (m)	W (m)	Min. D (m)	Max. D (m)
28.2	2	0.33	0.38
Context	Description	*D BGL (m)	
2700	Topsoil- Dark grey brown clayed loam with few sub-rounded gravel flint. Poor plough soil.	0.30	
2701	Natural- Medium yellow brown silty clay with outcrops of concentrated gravel flint.	N/A	
Summary			
2x furrows exposed, aligned north-east to south west. Trench split into two due to tram lines.			

TR28

L (m)	W (m)	Min. D (m)	Max. D (m)
30	2.2	0.70	0.70
Context	Description	*D BGL (m)	
1801	Topsoil- Dark grey brown sandy loam.	0.30	
1802	Subsoil- Light to medium grey brown silty clay	0.40	
1803	Natural- Medium yellow brown silty clay	N/A	
Summary			
No archaeological features encountered.			

Appendix II – Photographic Register

Photo number	Digital	Black and White print	Direction Facing	Description
1013	23013		W	Trench 5
1014	23014		W	Trench 5
1015	23015		W	Trench 28
1016	23016		W	Trench 28
1017	23017		S	Section of trench 28
1018	23018		S	Section of trench 28
1019	23019		SSW	Trench 4
1020	23020		WNW	Trench 1
1021	23021		WNW	Trench 1
1022	23022		SSW	Section of trench 1
1023	23023		S	Section of trench 2
1024	23024		S	Section of trench 2
1025	23025		W	Trench 2
1031	23031		SW	Section of trench 9
1032	23032		SE	Trench 9
1033	23033		SW	Section of trench 8
1034	23034		NW	Trench 8
1035	23035		NW	Trench 8
1038	23038		S	Section of trench 3
1039	23039		NE	Iron deposit (0304)
1040	23040		NW	Iron deposit (0304)
1041	23041		NW	Trench 3
1042	23042		NE	Trench 3

1043	23044		S	Section of trench 11
1044	23045		E	Trench 11
1045	23046		S	Section of trench 12
1046	23047		E	Trench 12
1047	23048		SE	Section of trench 13
1048	23049		SW	Trench 13
1051	22101	36	NE	SW facing section through possible pit [0804]
1052	22102	35		ID SHOT
1053	22103		WSW	ENE facing section through furrows [0904], [0905], and [0906]
1054	22104		WSW	ENE facing section through furrows [0904], [0905], and [0906]
1055	22105		WSW	ENE facing section through furrows [0904], [0905], and [0906]
1056	22106		WSW	ENE facing section through furrows [0904], [0905], and [0906]
1072	22122	32	N	S facing section through ditch [1207]
1073	22123	31	S	N facing section through ditch [1207]
1074	22124		S	N facing section through ditch [1106]
1075	22125		S	N facing section through ditch pit [1106]
1076	22126	30	S	N facing section through ditch pit [1106]
1077	22127		S	Mandible in ditch [1116]
1078	22128		W	Mandible in ditch [1116]
1079	22129		S	Mandible in ditch [1116]
1080	22130	29	SSE	NNW facing section through ditch [1208]
1081	22131	28	S	N facing section through ditches [1116] and [1118]
1082	22132	27	S	N facing section through ditches [1116] and [1110]
1083	22133	26	S	N facing section through ditch [1110]
1084	22134		NW	Shot of ditches [1110] and [1116]
1085	22135	25	SE	NW facing section through bank [1212]
1086	22136	24	S	N facing section through ditch [1207] and bank [1212]
1087	22137	23	SSE	Shot of ditch [1207] and bank [1212]
1088	22138		SSE	Shot of ditch [1207] and bank [1212]
1089	22139	22	E	Shot of features in trench 12
1090	22140		E	Shot of features in trench 12
1091	22141		E	Shot of features in trench 12
1092	22142		S	N facing section through quarry pit [1209]
1093	22143		S	N facing section through quarry pit [1209]
1094	22144		S	N facing section through ditch [1207]
1095	22145		S	N facing section through ditch [1207]
1096	22146		S	N facing section through bank [1212]
1097	22147		S	N facing section through bank [1212]
1098	22148		S	N facing section through ditches [1116] and [1118]
1099	22149		SW	Shot of ditch [1118]
1100	22150		W	Shot of features in trench 11
1101	22151		W	Shot of features in trench 11
1112	0001		/	General shot (tr 24/27)
1113	0002		/	General shot (tr 24/27)
1114	0003		/	General shot (tr 24/27)
1115	0004		/	General shot (tr 24/27)
1116	0005		S	North facing shot of trench 24
1117	0006		N	South facing shot of trench 24
1118	0007			void
1119	0008		NE	Southwest facing shot of trench 27
1120	0009		NE	Southwest facing shot of trench 27

1121	0010		NE	Southwest facing shot of trench 27
1122	0011		E	West facing shot of trench 25
1123	0012		N	South facing representative section of trench 25
1124	0013		W	East facing representative shot of trench 26 section A
1125	0014		E	West facing representative shot of trench 26 section B
1126	0015		E	West facing representative shot of trench 26 section C
1127	0016		E	West facing representative shot of trench 26 section D
1128	0017		N	South facing representative shot of trench 26 section E
1129	0018		N	South facing representative shot of trench 26 section F
1130	0019		W	East facing representative shot of trench 26 section F
1131	0020		NW	SE representative shot of trench 27 section B
1132	0021		W	East representative shot of trench 24
1133	0022		W	East facing shot of furrow [2402] in trench 24
1151	0040		E	West facing shot of trench 24 (extension e/w)
1152	0041		N	South facing representative section of trench 24 (extension e/w)

Appendix III—Drawing Register

Drawing Number	Type	Scale	Description
1	1:10	Section	SW facing section through pit [0804]
2	1:10	Section	ENE facing section through furrows [0904], [0905], and [0906]
5	1:10	Section	N facing section through ditch [1207]
7	1:10	Section	N facing section through ditches [1110], [1116], and [1118]
8	1:10	Section	NNW facing section through quarry pit [1208]
9	1:10	Section	N facing section through quarry pit [1106]
10	1:10	Section	N facing section through bank [1212]
11	1:10	Section	NW facing section through trench 12 baulk showing ditch [1207]
12	1:10	Section	East facing section of furrow [2402]

Appendix IV – Sample Register

Sample number	Context number	Description
1001	1211	Bank material
1002	1109	Fill of Ditch [1110]

Appendix V – Finds Catalogue

Trench	Context	Context Notes	Sample	Quantity	Weight (g)	Material	Object	Description	Spot Date
09	902	Subsoil		1	127	CBM	Brick	Abr. brick frag	
09	902	Subsoil	1	2	35	CBM	Roof Tile	hard fired roof tile	13th-16th
09	902	Subsoil		5	48	CBM	Fragments	Misc. frags	
09	902	Subsoil		1	16	Industrial Waste	slag	amorphous vitrified fragment, mottled orange/grey/brown	
09	902	Subsoil		1	1	Lithic	Tool	Flint, translucent yellow brown. Secondary hard hammer/platform flake. Cortical platform and right lateral. Retouch to the left distal corner and left lateral, either side of a break	
09	902	Subsoil		1	8	Pottery (PM)	P01		17th
09	902	Subsoil		1	14	Pottery (PM)	P06	v abr.	17th
11	1102	Subsoil		1	109	CBM	Floor Tile	modern plain red quarry tile T10mm	Mod
11	1104	Quarry pit 1106	1	2	41	CBM	Roof Tile	flat roof tile	13th-16th
11	1104	Quarry pit 1106		1	1	Pottery (Med)	UNID	Abr. reduced sandy crumb	
11	1105	Quarry pit 1106	1	1	7	CBM	Roof Tile	Abr. flat roof tile	13th-16th
11	1107	Subsoil in ditches		3	201	CBM	Brick	Abr. brick frags	
11	1107	Subsoil in ditches		9	67	CBM	Fragments	Abr. frags	
11	1107	Subsoil in ditches	1	1	215	CBM	Roof Tile	flanged roof tile	L11th-13th
11	1109	Ditch 1110		5	1	CBM	Fragments	soil sample 1002; tiny abr. crumbs	
11	1109	Ditch 1110	1002		0	Industrial Waste	Mag Res	possible hammerscale	
11	1111	Ditch 1116		5	28	CBM	Fragments	Abr. frags	
11	1111	Ditch 1116		1	15	Industrial Waste	slag	amorphous, light vitrified fragment	
12	1204	Ditch 1207		22	563	CBM	Brick	Abr. brick frags; powdery fabric	
12	1204	Ditch 1207	1	6	143	CBM	Roof Tile	Abr. flat roof tile	13th-16th
12	1204	Ditch 1207		1	7	Industrial Waste	slag	amorphous, light vitrified fragment	
12	1204	Ditch 1207		1	28	Iron	Object	T-shaped object	
12	1204	Ditch 1207		1	3	Lithic	Tool	Flint, lightly patinated, mottled grey. Primary frost shattered flake with semi-abrupt retouch to two sides, probably used as a scraper	
12	1204	Ditch 1207		1	2	Pottery (Mod)	P39	yellow + white bands	18th-19th
12	1204	Ditch 1207		2	13	Stone	Slate	slate fragments, possibly roofing	

Trench	Context	Context Notes	Sample	Quantity	Weight (g)	Material	Object	Description	Spot Date
								material, possibly natural	
12	1205	Ditch 1207		1	13	CBM	Brick	Abr. brick frag; part vitrified/gl	
12	1205	Ditch 1207	1	2	21	CBM	Roof Tile	Abr. flat roof tile	13th-16th
12	1205	Ditch 1207		4	6	CBM	Fragments	Abr. frags	
12	1205	Ditch 1207		1	0	Lithic	Debitage	Flint, translucent light brown. Inner, hard hammer/platform chip	
12	1209	Ditch 1208	1	2	12	CBM	Roof Tile	Abr. flat roof tile	13th-16th
12	1209	Ditch 1208		1	7	CBM	Fired Clay	fired clay, amorphous sand & org	
12	1209	Ditch 1208		1	1	Pottery (Med)	UNID	Abr. reduced sandy crumb	
12	1209	Ditch 1208		1	2	Pottery (Med)	E02	v abr.	14th-15th
12	1211	Bank material	1	4	38	CBM	Roof Tile	Abr. flat roof tile	13th-16th
12	1211	Bank material		1	9	CBM	Fragments	Abr. frag	
12	1211	Bank material		5	3	CBM	Fragments	soil sample 1001; abr. crumbs	
12	1211	Bank material		1	15	Glass	Bottle	green bottle sherd	18th-20th
12	1211	Bank material	1001		0	Industrial Waste	Mag Res	possible hammerscale	
12	1211	Bank material	1001	2	2	Lithic	Fragment	flint, two burnt fragments	
12	1211	Bank material		1	3	Pottery (Med)	E03	v abr.	14th-15th
12	1211	Bank material		1	1	Pottery (Mod)	P38	Abr.	M18th-19th
13	1302	Subsoil		1	70	Iron	Strap	Long strap with plano-convex section, S-curve, possibly rolled at one end, broken at nail hole at other, part of hinge strap?	
13	1302	Subsoil		1	169	Pottery (Mod)	P100	moulded rim from large vessel	19th-present

Appendix VI – Environmental Flotation and Residue Catalogue

Context	Sample Number	Sample Vol. (l)	Ceramic		Stone				Mammal	Char coal Quantity	Char coal Max size (mm)	Material available for AMS	Comments
			Pottery	Daub	Lithic	Mag. Res	Other						
1211	1001	40	+	+++	+	+++	+++	+					Identified by RM as coke, may be coal

1109	1002	40		++		+++	++			++	50x50	Identified by RM as coke, may be coal
<p>Key: + = rare (1-5), ++ = occasional (6-15), +++ = common (16-50) and ++++ = abundant (>50) NB charcoal over 1cm is suitable for identification and AMS dating</p>												

Appendix VII– Animal Bone Catalogue

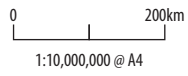
Context	Trench	Description	Condition	Weight (g)	Cattle	sheep/goat	Horse	Notes	Total
802	8	Subsoil	Fair	78	1			Distal radius	1
1114	11	Fill of ditch [1116]	Poor	461			1	Mandible	1
1202	12	Subsoil	Poor	17		1		metatarsal	1

Appendix VII- OASIS Form

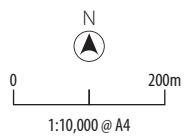
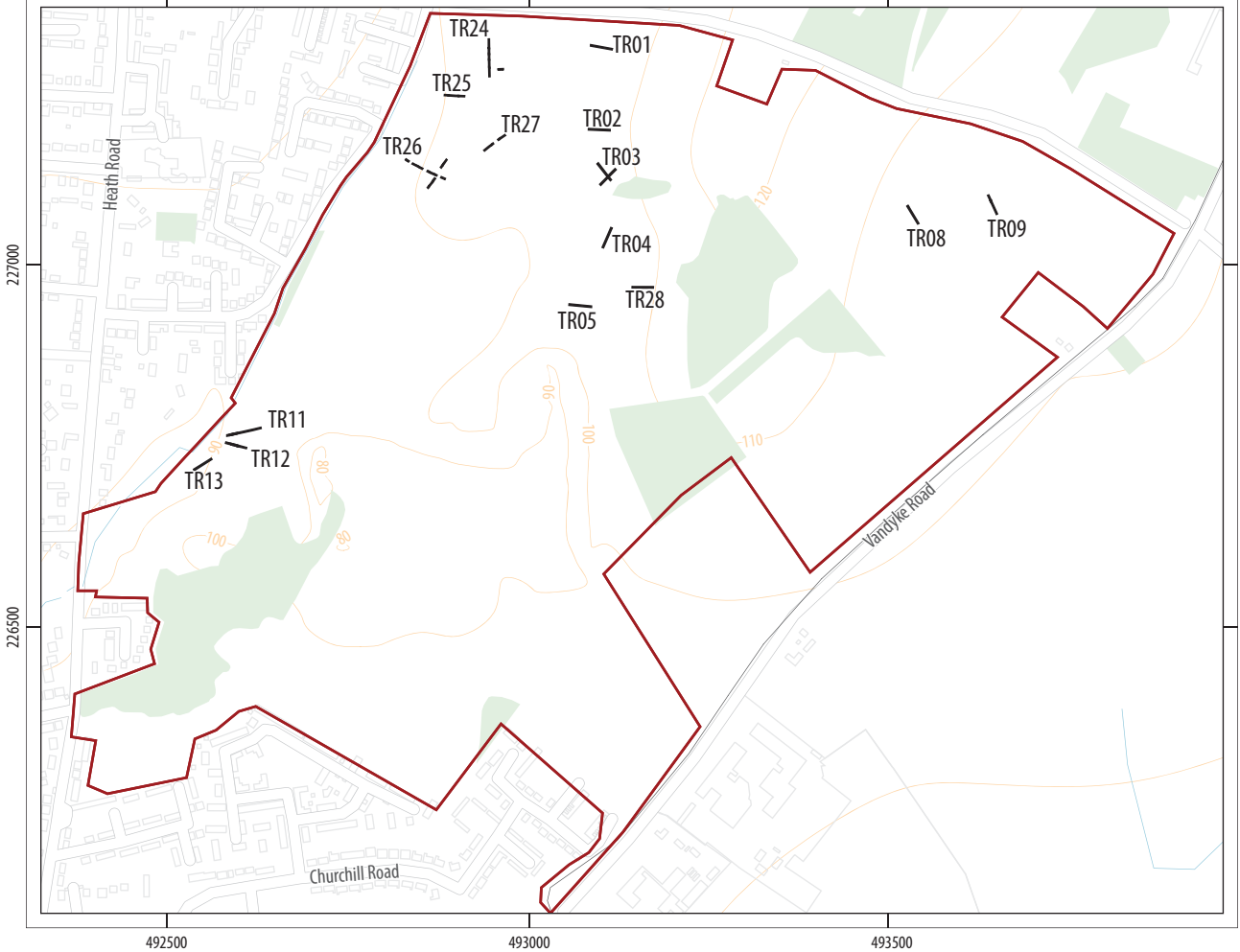
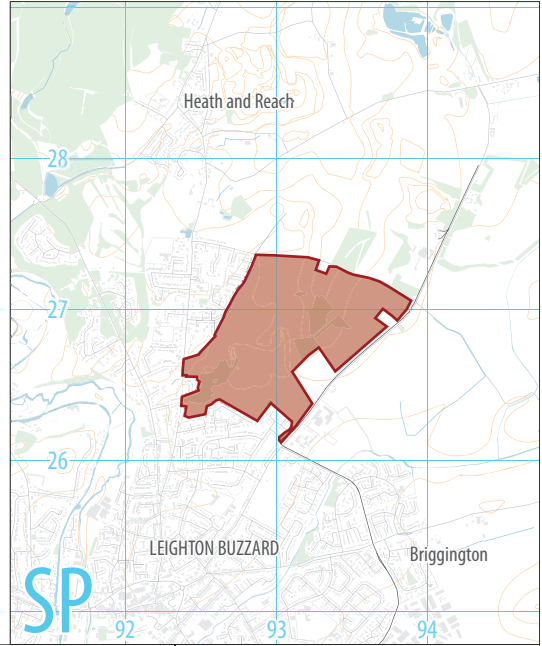
OASIS ID: headland 4-235440	
Project details	
Project name	Chamberlains Barn, Leighton Buzzard
Short description of the project	Trial trenching evaluation-Headland Archaeology (UK) Ltd undertook an archaeological evaluation for Arnold White Estate Ltd on land on Chamberlains Barn, Leighton Buzzard, Bedfordshire. Between 25th January and 31st of August 2016; 28 trenches were excavated in the proposed Development Areas- 13 trenches and 15 trenches- A total 13 contained archaeological remains. 3 areas of interest were identified. These consisted of medieval ditch and pit, post medieval furrows. The project was subjected to two planning applications CB/11/01863/MW and CB/11/01937/OUT and thus was subjected to two archaeological reports.
Project dates	25-01-2016 End: 31-08-2016
Previous/future work	No / No
Type of project	Field evaluation
Site status	None
Current Land use	Other 7 - Mineral extraction
Monument type	DITCHES Medieval
Monument type	PIT Medieval
Monument type	FORROWS Post Medieval
Significant Finds	POTTERY Medieval
Significant Finds	CBM Medieval
Significant Finds	CBM Post Medieval
Significant Finds	PEG NAIL Medieval
Significant Finds	LITHIC Prehistoric
Project location	
Country	England
Site location	BEDFORDSHIRE SOUTH BEDFORDSHIRE LEIGHTON LINSLADE Chamberlains Barn
Postcode	LU7 3DS
Study area	95 Hectares
Site coordinates	NGR - SP 493149 226927 LL - 51.900156362398 -1.28317333676 (decimal) LL - 51 54 00 N 001 16 59 W (degrees) point
Lat/Long Datum (other)	
Project creators	
Name of Organisation	Headland Archaeology Ltd
Project brief	Local Authority Archaeologist and/or Planning Authority/advisory body

originator	
Project design originator	Headland Archaeology Ltd
Project director/manager	Antony Walsh
Project supervisor	Joe Berry, Peter James
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Arnold White Estates Ltd.
Project archives	
Physical Archive recipient	Luton Culture
Physical Contents	"Animal Bones", "Ceramics", "Industrial", "Metal", "Survey"
Digital Archive recipient	Luton Culture
Digital Contents	"Animal Bones", "Ceramics", "Industrial", "Metal", "Survey"
Digital Media available	"Survey"
Paper Archive recipient	Luton Culture
Paper Contents	"Animal Bones", "Ceramics", "Industrial", "Metal", "Survey"
Paper Media available	"Context sheet", "Drawing", "Map", "Miscellaneous Material", "Photograph", "Plan", "Report", "Section", "Survey 2"
Entered by	Astrid Lesley Nathan (astrid.nathan@headlandarchaeology.com)
Entered on	14 November 2016

RLAI
land east of Heath Road
Leighton Buzzard
Bedfordshire



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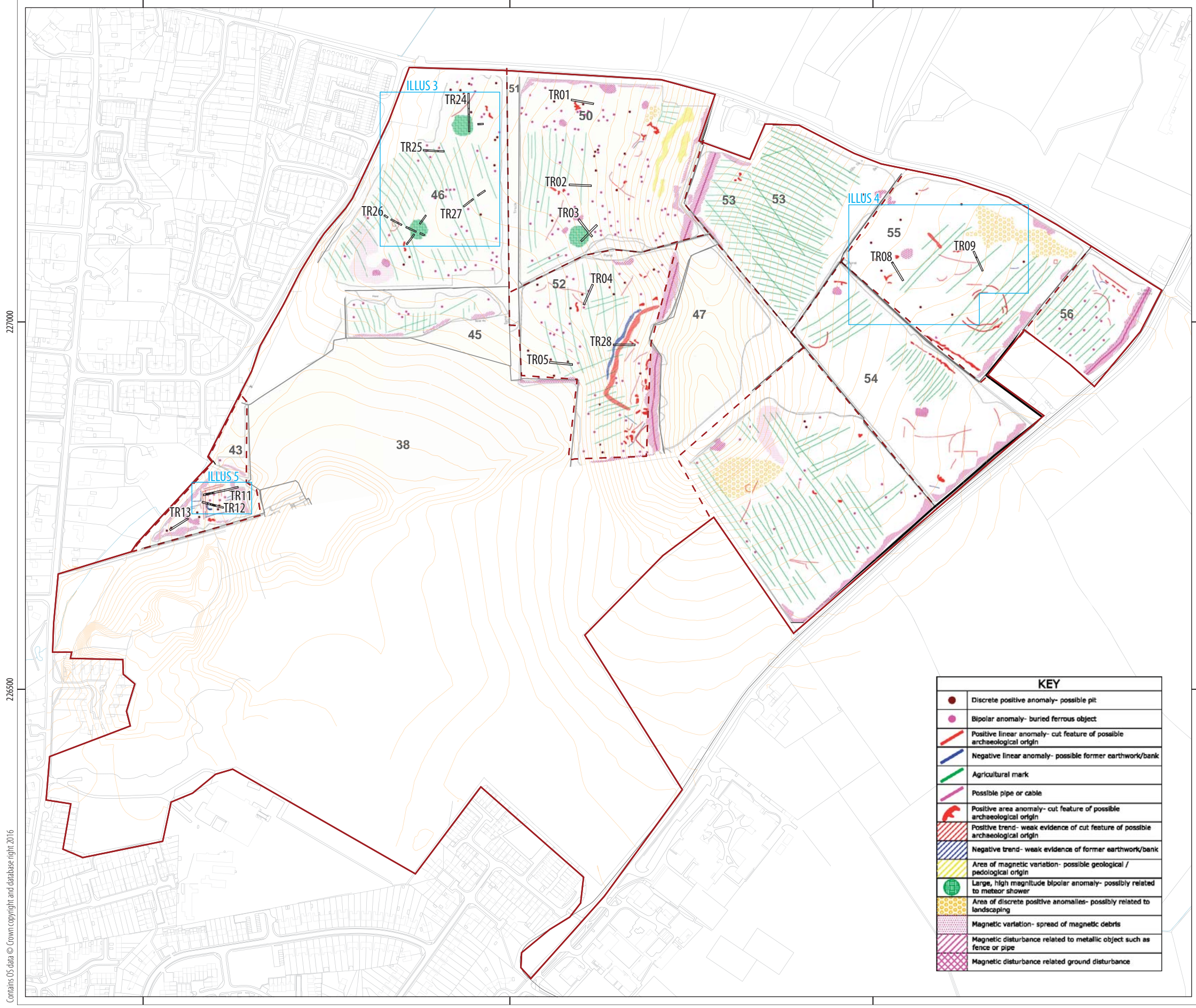
KEY
 development boundary
 trench location



SOUTH & EAST

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ILLUS 1 Site location



227000

226500

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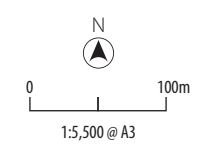
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493000

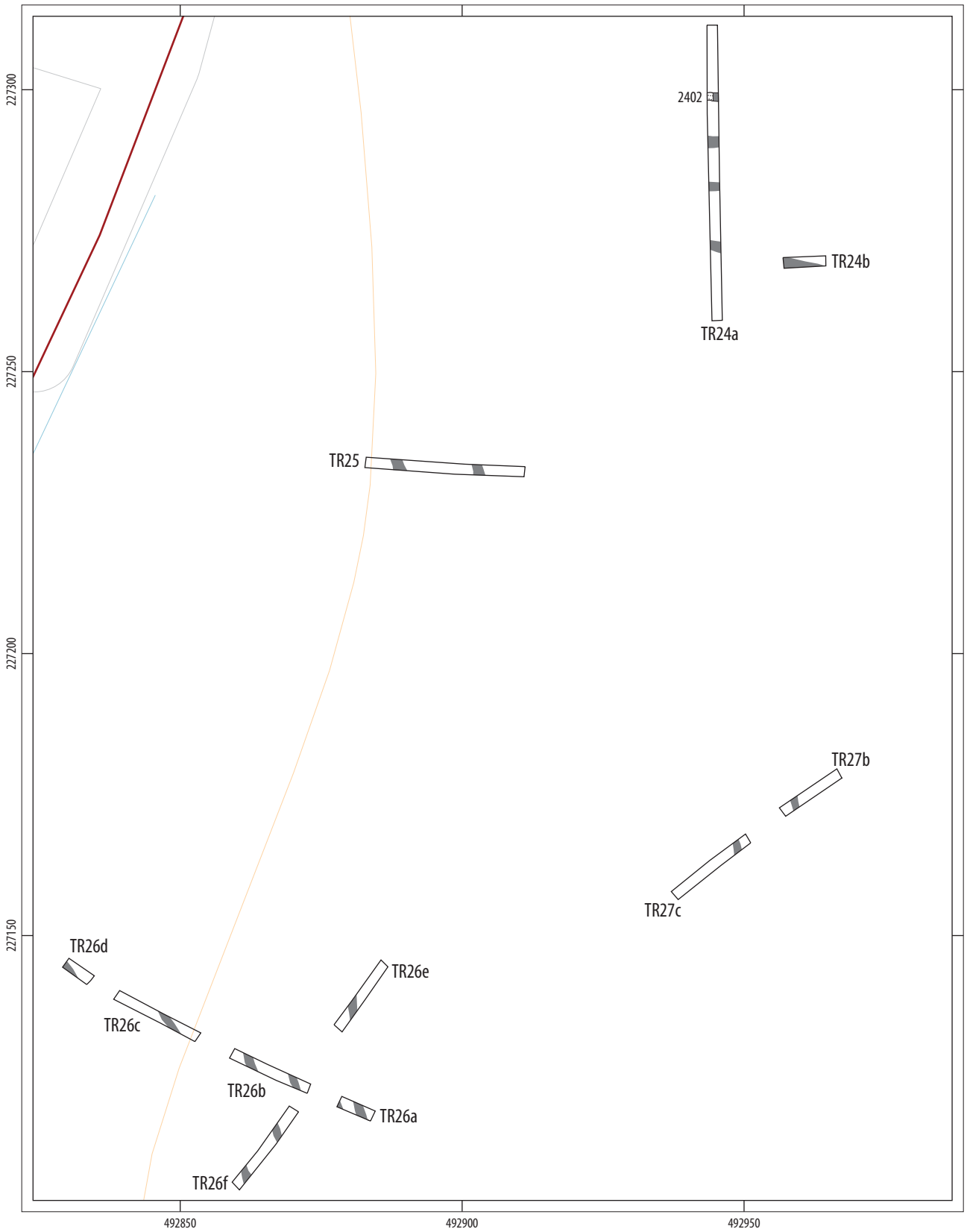
493500

KEY	
	Discrete positive anomaly- possible pit
	Bipolar anomaly- buried ferrous object
	Positive linear anomaly- cut feature of possible archaeological origin
	Negative linear anomaly- possible former earthwork/bank
	Agricultural mark
	Possible pipe or cable
	Positive area anomaly- cut feature of possible archaeological origin
	Positive trend- weak evidence of cut feature of possible archaeological origin
	Negative trend- weak evidence of former earthwork/bank
	Area of magnetic variation- possible geological / pedological origin
	Large, high magnitude bipolar anomaly- possibly related to meteor shower
	Area of discrete positive anomalies- possibly related to landscaping
	Magnetic variation- spread of magnetic debris
	Magnetic disturbance related to metallic object such as fence or pipe
	Magnetic disturbance related ground disturbance

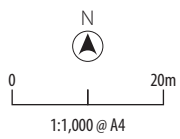
KEY
 development boundary
 trench location
 furrows



ILLUS 2 Trench location plan

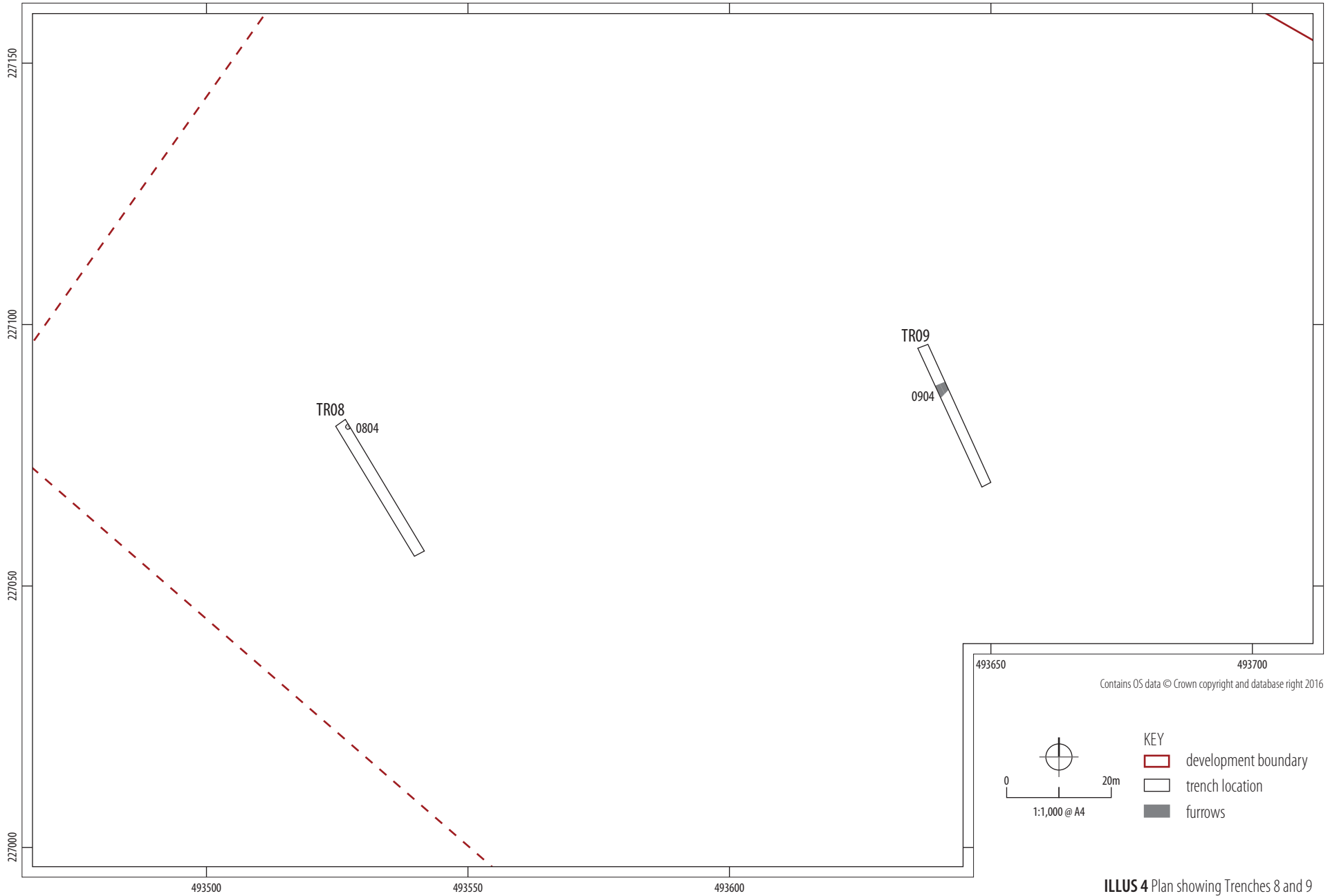


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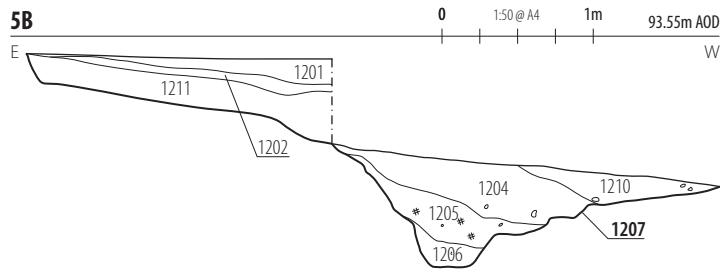
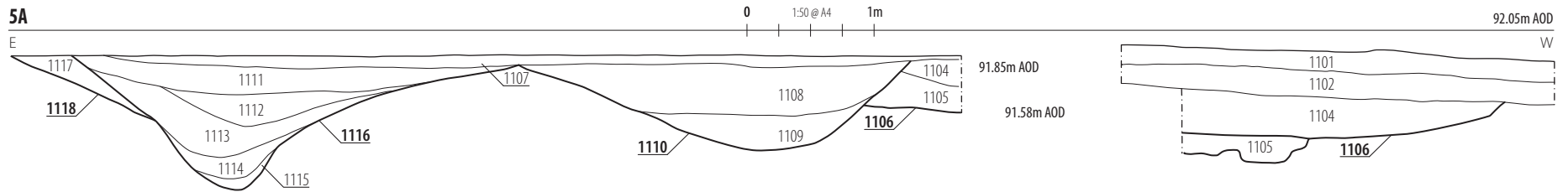
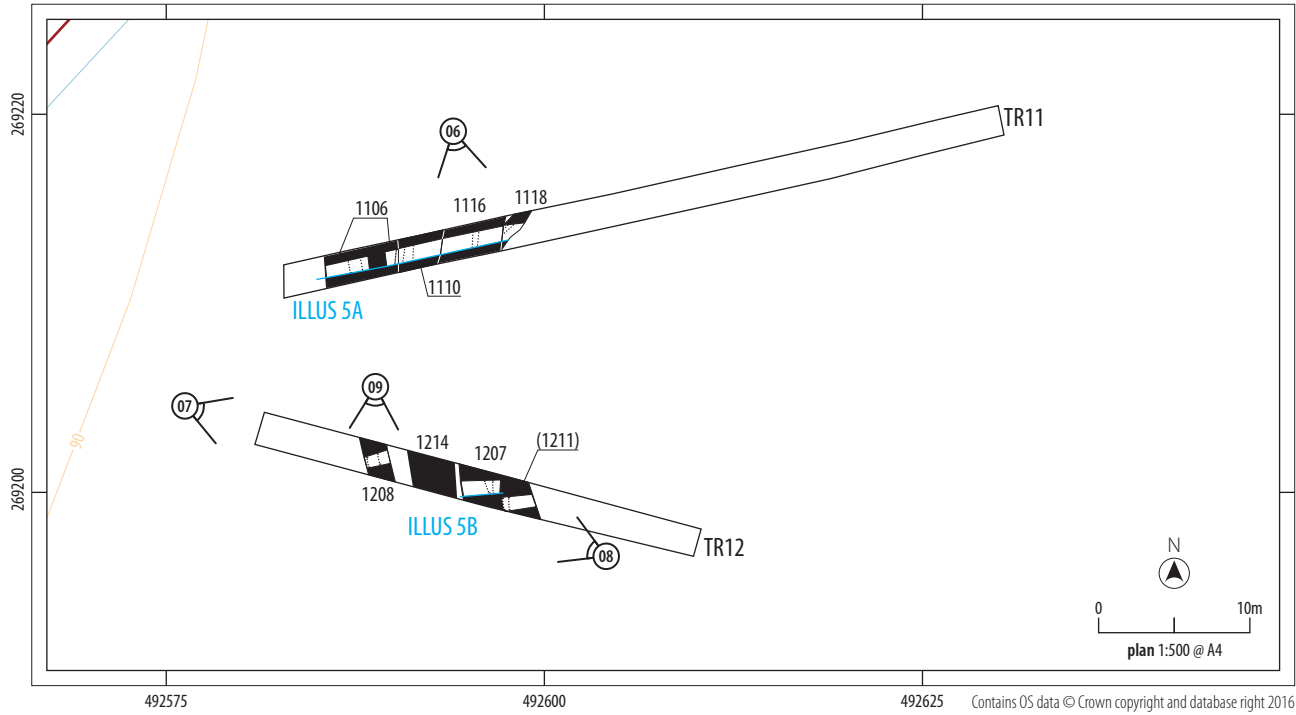


- KEY
- development boundary
 - trench location
 - furrows

ILLUS 3 Plan showing northern end of site



ILLUS 4 Plan showing Trenches 8 and 9



- KEY
- development boundary
 - trench location
 - archaeological features
 - 01 photo direction
 - * * * charcoal

ILLUS 5 Detail plan of HA1. Trenches 11 and 12 A) N facing section through ditches [1110, 1116 and 1118] and ditch [1106]; B) N facing section through ditch [1207] and enclosure bank [1211]



ILLUS 6 N facing section of ditch [1110] in Trench 11 **ILLUS 7** N facing section of ditch [1116] in Trench 11
ILLUS 8 Oblique shot of enclosure bank (1211) and ditch [1207] in Trench 12 looking WNW **ILLUS 9** S facing section of ditch [1208] in Trench 12



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