Plots FOS3, COS and DC1, Hanwood Park, Kettering

Archaeological Evaluation Report

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Plots FOS3, COS and DC1, Hanwood Park, Kettering

Archaeological Evaluation Report

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Summary

Between 4th–18th August 2022 Oxford Archaeology East conducted an evaluation on three plots of land (FOS3, COS and DC1) within the Hanwood Park development, east of Kettering. A total of fifteen trenches targeted anomalies identified by previous geophysical survey close to areas already investigated through evaluation and excavation. The evaluation has confirmed the presence of Late Iron Age to Early Roman settlement remains in plot FOS3 and remains associated with the previously identified Roman brewing site at the pond in COS. There were no significant archaeological remains in plot DC1.

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1 INTRODUCTION

1.1 Scope of work

1.1.1 Oxford Archaeology East (OA East) was commissioned by RPS on behalf of Hanwood Park LLP to undertake trial trench evaluation work on three plots of land within the 350ha Hanwood Park development, east of Kettering (Fig. 1). This is a mixed-use development containing up to 5,500 dwellings, a secondary school, up to four primary schools, open space, employment areas, local centre facilities and associated infrastructure. The development has been the subject of archaeological evaluation and mitigation work by OA East between 2012 and 2022. A gazetteer of previous work at Hanwood Park and adjacent Cranford Business Park is presented in Appendix D, Table 8 with site locations shown on Figure 2.

1.1.2 The present evaluation work was undertaken as a condition of Planning Permission (planning ref. KET/2020/0239). A total of fifteen trenches targeted anomalies identified by previous geophysical survey. The trenches in Formal Open Space (FOS) 3 (NGR SP 9032 7672) were originally scheduled to be opened as part of the Phase 2 evaluation work in 2020 but could not be accessed (Lewis 2020). The trenches in plot DC1 (NGR SP 9002 7748) and Central Open Space (COS) North (NGR SP 9014 7723) comprise an additional phase of evaluation work required nearby significant Iron Age and Romano-British remains excavated in 2016 (Gilmour 2018).

1.1.3 The FOS3 evaluation was governed by the Written Scheme of Investigation (WSI) produced by OA East on behalf of RPS for the Client for the Phase 2 evaluation (Gilmour 2020). Separate WSIs were prepared detailing the Local Authority's requirements for evaluation work necessary on plots COS and DC1 to inform the planning process/discharge the planning condition (Gilmour 2022a-b).

1.2 Location, topography and geology

1.2.1 Plot FOS3 lay on broadly level fields to the north of Cranford Road at a height of *c*.80m OD.

1.2.2 Located *c*.600m north of plot FOS3, plot COS mostly comprises a pond. The trenches lay west of the pond at a height of *c*.75m OD. West of the trenches, the land was fallow and occupied by soil storage bunds with the remaining surrounding fields under cultivation.

1.2.3 The trenches in plot DC1 extended north from the pond towards Poplar's Farm Road on land gently rising to *c*.85m OD.

The underlying bedrock geology of the site comprises Jurassic Stamford and Wellingborough Member Sandstone and Limestone, and Rutland Mudstone (www.bgs.ac.uk/discoveringGeology/geologyOfBritain/viewer.html, accessed 18th August 2022).

1.3 Archaeological background and previous work

1.3.1 A full archaeological background has previously been presented in a Desk-Based Assessment of the site (Chadwick and Dicks 2005) and updated by an Environmental Statement (Dicks 2021), with the findings not repeated here.

1.3.2 Plot FOS3 lay within Field 10 which could not be accessed during the Phase 2 evaluation (Lewis 2020, fig. 3). Geophysical survey had identified a complex of features in this field probably associated with Iron Age and/or Romano-British settlement (Butler 2011). Roman remains associated with iron smelting was uncovered nearby by trenches in Field 8 and Field 9 contained a low density of Mid-Late Iron Age features.

1.3.3 Plots COS and DC1 lay adjacent to the 2016 Balancing Pond excavation which revealed extensive and significant Romano-British remains and part of an Iron Age settlement. Alongside with a possible high-status Roman building was a large area dedicated to crop processing which included stone and clay lined tanks along with corn driers. Charred plant remains from this area include germinated spelt to suggest this was a beer brewing site (Gilmour 2018; Fig. 2).

2 AIMS AND METHODOLOGY

2.1 Aims

2.1.1 The evaluation sought to establish the character, date and state of preservation of archaeological remains within the proposed development area. The scheme of works aimed to:

i. ground truth geophysical results, by testing a range of anomalies of likely archaeological origin, and areas where no anomalies registered;
ii. Establish the presence or absence of archaeological remains on the site, characterize where they are found (location, depth and extent), and establish the quality of preservation of any archaeological and environmental remains;
iii. Provide sufficient coverage to establish the character, condition, date and purpose of any archaeological deposits;
iv. provide sufficient coverage to evaluate the likely impact of past land uses, and the possible presence of masking deposits;
v. Set results in the local, regional and national archaeological context – and, in particular, its wider cultural landscape and past environmental conditions; and
vi. Provide - in the event that archaeological remains are found – sufficient information to construct an archaeological mitigation strategy, dealing with preservation, the recording of archaeological deposits, working practices, timetables and orders of cost.

2.2 Research Frameworks

2.2.1 This evaluation takes place within, and will contribute to the goals of Regional Research Frameworks relevant to this area:

Cooper, N.J., 2006, *The Archaeology of the East Midlands: An Archaeological Resource Assessment and Research Agenda*. Leicester Archaeology Monograph No. 13; and

Knight, D., Vyner, B. and Allen, C., 2012, *East Midlands Heritage: An Updated Research Agenda and Strategy for the Historic Environment of the East Midlands*. Nottingham Archaeological Monographs 6.

2.3 Methodology

2.3.1 In accordance with the WSIs (FOS3, Gilmour 2020; COS and DC1, Gilmour 2022a-b), a total of 15 trenches were excavated. Seven trenches (Trenches 469-475, 6 measuring 50 x 1.8m and 1 measuring 30 x 1.8m) were excavated in plot FOS3, three trenches (Trenches 555-7, measuring 50 x 1.8m) were opened in plot DC1 and five trenches (Trenches 550-4, measuring 25 x 1.8m) were excavated in plot COS. In plot FOS3, Trenches471 and 475 had to be excavated in sections to avoid fences.

2.3.2 The trenches were excavated using a 14-tonne tracked 360°-type excavator with a 1.8m wide toothless ditching bucker. Trenches were excavated to a depth where natural geology or archaeological deposits were encountered.

2.3.3 The site survey was carried out using a Leica GPS GS08 with SmartNET.

2.3.4 Spoil, exposed surfaces and features were scanned with a metal detector. All metal-detected and hand-collected finds were retained for inspection, other than those which were obviously modern.

2.3.5 Fifty percent of discrete features and 1m wide interventions in linear features were excavated. With features exceeded a safe working depth of 1m, precautions were taken, whereby the remaining basal deposits were augured to assess their depth and interventions were immediately backfilled after recording.

2.3.6 All archaeological features and deposits were recorded using OA's pro-forma sheets. Trench locations, plans and sections were recorded at appropriate scales and high-resolution digital photographs were taken of all relevant features and deposits.

2.3.7 No masking deposits or buried soils were recorded which required tested pitting or bucket sampling.

2.3.8 Three bulk environmental samples were taken from plot FOS3 to be processed at OA East's facility at Bourn.

2.3.9 Site conditions were good.

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, supplemented by artefact and environmental reports, included as Appendices B and C. Figure 3 provides a plan of the results of the trenches excavated in plot FOS3 overlain on the geophysical survey with detail plans given as Figures 4 and 5. Detail plans of trenches in plot COS are shown on Figures 6 and 7. Sections are presented in Figure 8. Photographs of trenches and features are provided in Plates 1-7.

3.2 General soils and ground conditions

3.2.1 The soil sequence in the trenches was fairly uniform. The natural geology of chalk, sand and ironstone was overlain by a *c*.0.23-0.29m thickness of sandy silt subsoil beneath a *c*.0.3m thick topsoil.

3.2.2 Ground conditions throughout the evaluation were 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 In plot FOS3, archaeological features of Late Iron Age to Early Roman origin were present in all but one of the trenches (Trench 470). No features were revealed by the trenches in plot DC1. The trenches in plot COS uncovered a group of Romano-British remains west of the previous Balancing Pond excavation with a lower density of features south of the pond.

3.4 Trench descriptions

FOS3 (Figs 3-5)

3.4.1 A total of seven trenches (Trenches 469-475) were excavated in plot FOS3 which revealed a series of enclosure ditches and associated ring ditches and pits yielding transitional Late Iron Age to Early Roman pottery which correlated with the results of the geophysical survey (Fig. 3). Therefore, these features probably represent a group of Late Iron Age/Early Romano-British settlement remains. In the eastern part of this area, Trench 474 revealed evidence of a possible silted up hollow way. Agricultural furrows of medieval/post-medieval origin were also excavated in Trench 473. Trenches 471 and 475 were excavated in separate sections to avoid fences.

Trench 469 (Fig. 3)

3.4.2 In the south-western part of the field, Trench 469 was oriented north-east to south-west and contained one ditch (**17503**). This ditch was aligned north-west to south-east, it measured 0.8m wide by 0.2m deep and filled by light brown sandy clay (17504).

Trench 470 (Fig. 3)

3.4.3 Situated in the western part of the field, Trench 470 contained no archaeological features.

Trench 471 (Fig. 4)

3.4.4 South-east of Trench 470, Trench 471 was in the south-east of the site on a north-west to south-east alignment. It contained six ditches and a gully. Scarce fragments of spelt/emmer wheat chaff were identified from bulk soil samples taken from ditches **17515** and **17559**.

3.4.5 At the north-western end of the trench was a large, north-south aligned ditch (**17515**) which measured 2.4m wide and 1.16m deep (Fig. 8, Section 8603; Plate 1). Its basal fill (17516) was a light grey sandy silt overlain by a dark grey sandy clay with frequent charcoal inclusions. The upper fills (17517 and 17518) consisted of mid to light brownish grey sandy clays. Combined, the fills produced a total of 16 sherds (125g) of Late Iron Age to Early Roman pottery, two fragments (6g) of fired clay and five fragments of animal bone (cattle and sheep/goat).

3.4.6 Ditch **17515** was cut by the northern terminus of ditch **17563** which measured 0.9m wide by 0.35m deep and was filled by mid orange brown silty sand (17564). To the south-east, gully **17548** measured 0.6m wide by 0.17m deep (Fig. 8, Section 8611). It was filled by a mid brownish grey silty sand (17549).

3.4.7 Further south-east was ditch **17556** on a north to south alignment which measured 0.8m wide and 0.85m deep. This feature was heavily recut by ditch **17559** on the same alignment (Plate 2). Both ditches contained mid-dark orangey brown silty sand fills (17557, 17560 and 17561) with ditch **17556** containing an upper fill of light yellowish brown silty sand (17558). The fills of both ditches produced a combined total of six sherds (90g) of Late Iron Age to Early Roman pottery, fragments (18g) of fired clay and eight fragments of animal bone (cattle, sheep/goat and pig).

3.4.8 Two unexcavated ditch alignments at the south-eastern end of the trench correspond with features identified in the geophysical survey.

Trench 472 (Fig. 4)

3.4.9 North of Trench 471, Trench 472 lay on a north to south alignment and contained one ditch and three sub-circular pits.

3.4.10 The northernmost pit (**17505**) measured 1.9m long, 1.2m wide and 0.5m deep (Plate 3). It contained two fills. A dark greyish brown sandy silt (17506) was overlain by a mid greyish brown sandy silt (17508). Immediately to the south, pit **17520** measured 1.3m wide and 0.3m deep with a single fill of mid greyish brown sandy silt (17521). These features produced a combined total of eight sherds (89g) of Late Iron Age to Early Roman pottery.

3.4.11 Further to the south, shallow pit **17522** measured 0.6m wide by 0.09m deep and was filled by a dark greyish brown sandy silt with frequent charcoal inclusions (17523).

3.4.12 Towards the southern end of the trench, east to west aligned ditch **17538** measured 0.8m wide and 0.2m deep. It was filled with a light greyish brown sandy silt (17539). A Neolithic or Bronze Age flint flake was found in the trench subsoil (17531).

Trench 473 (Fig. 4)

3.4.13 East of Trench 472, Trench 473 was oriented north-east to south-west and contained six ditches, four pits, a posthole and two furrows. A 0.7m wide, unexcavated ditch was revealed at the northern trench end. To the south, interventions were excavated into two agricultural furrows on north-west to south-east alignments.

3.4.14 In the central part of the trench, posthole **17542** measured 0.14m wide by 0.13m deep and was filled by light greyish brown silty clay (17543). It was cut by pit **17540** that measured 0.33m wide by 0.1m deep which was filled by light greyish brown silty clay (17541).

3.4.15 Towards the southern trench end were intercutting ditches **17550** and **17553**. Ditch **17550** was aligned north-west to south-east and measured at least 0.5m wide by 0.5m deep. It contained a basal fill of mid yellowish brown sandy silt (17551) overlain by light orange brown sandy silt with frequent ironstone inclusions (17552). Ditch **17550** was cut on its southern side by east-west ditch **17553** which measured at least 0.9m wide and 0.5m deep. It contained a lower fill of mid yellowish brown silty sand (17554) overlain by mid orange brown silty sand (17555).

3.4.16 Immediately south-west lay two smaller north-west to south-east aligned ditches. Ditch **17524** measured 0.53m wide and 0.4m deep with a V-shaped profile. It was filled by light greyish brown sandy clay (17525). This ditch alignment was recut by a 0.61m wide and 0.11m deep ditch (**17526**) filled with light greyish brown sandy silt (17527).

3.4.17 Further south-west, partly exposed pit **17513** measured 1.43m wide and 0.63m deep with almost vertical sides (Fig. 8, Section 8602). It contained light greyish brown silty clay fill (17514) which was overlain by the natural fill of a small hollow (**17511**).

3.4.18 To the south-west were two pits (**17529** and **17546**) which measured between 0.6-1.15m wide by 0.11-0.38m deep and filled by light brown sandy silt (17537 and 17547). The pits were cut by east-west aligned ditch **17528** which measured 2.72m wide and 1.3m deep. It contained five fills of light to dark brown silty sands with rare to moderate amounts of ironstone inclusions (17532-17536). These fills yielded a combined total of 20 sherds (73g) of Late Iron Age to Early Roman pottery and 11 fragments of animal bone (cattle, sheep/goat and pig).

Trench 474 (Fig. 5)

3.4.19 East of Trench 473, north-west to south-east aligned Trench 474 contained two north-south aligned furrows, of which one was excavated. The eastern half of the trench contained a 0.5m deep natural hollow which measured at least 12m wide.

Trench 475 (Fig. 5)

3.4.20 Lying on a broadly east to west alignment in the north of the evaluated area, the eastern part of Trench 475 revealed the northern arc of two intercutting curvilinear ditches and (Fig. 8, Section 8614; Plate 4). The inner ditch (**17568**) measured at least 0.4m wide and 0.33m deep. This ditch was recut by an outer ditch (**17570**) measuring

2.9m wide by 0.72m deep. Both ditches were filled by mid orange brown sandy silt (17569 and 17571 respectively) with the outer ditch also containing an upper fill of mid greyish brown sandy silt (17572). The fills of ditch **17570** produced 21 sherds (135g) of Late Iron Age to Early Roman pottery and 14 fragments of animal bone (cattle, sheep/goat and dog).

DC1 (Fig. 1)

3.4.21 Trenches 555-7 did not encounter any features or recover any artefacts (Plate 5).

COS (Figs 6 and 7)

3.4.22 A total of five trenches (Trenches 550-4) were excavated in plot COS which revealed a group of linear ditches and a metalled/stone surface close to the previous Balancing Pond excavation and a lower density of linear features south of the pond.

Trench 550 (Fig. 6)

3.4.23 West of the pond, Trench 550 contained three ditches. Towards the western trench end, ditch **16008** was aligned west-north-west to east-south-east (Fig. 8, Section 8002). It measured 0.4m wide by 0.1m deep and contained mid brown sandy clay (15709).

3.4.24 At the north-eastern end of the trench, the eastern terminus of ditch **16010** measured 0.4m wide by 0.14m deep and was filled by mid brown sandy clay (16011). Immediately east of the terminus, broadly perpendicular ditch **16012** measured 0.5m wide and 0.14m deep with a fill of mid greyish brown sandy clay (16014). No finds were recovered from the features.

Trench 551 (Fig. 6)

3.4.25 South of Trench 550, north-west to south-east orientated Trench 551 contained a ditch, a possible agricultural furrow, and a metalled/stone surface.

3.4.26 At the south-eastern trench end, the profile of north-south aligned ditch **16018** was partially excavated (Fig. 8, Section 8006; Plate 6). It measured at least 1.9m wide by 0.8m deep and was filled by mid-brownish grey silty sand (16019) overlain by a mid brown sandy clay (16020). Ten sherds (71g) of Roman pottery dating to between the 1st to 2nd century AD were recovered from fill 16020 along with a shard (11g) of Roman vessel glass. Overlying this feature on its western side was metalled/stone surface 16014 (Plate 7). This surface consisted of a layer of mid greyish brown clay containing small, subrounded stones and some larger cobbles. It was cut by possible furrow **16015** measuring 2.4m wide by 0.22m deep and filled by light brown sandy clay (16016) beneath a mid grey clay tertiary fill with charcoal inclusions (16017). The fills of the furrow yielded a sherd (4g) of post-medieval pottery and fragments (94g) of post-medieval ceramic building material (CBM).

Trench 552 (Fig. 7)

3.4.27 This north-west to south-east orientated trench lay south-west of the pond. It revealed a north-south aligned ditch (**16006**) which measured 0.6m wide by 0.08m deep and was filled by mid grey sandy clay (16007). It contained no finds. A layer of mid orange

brown colluvium was observed in section at the north-eastern end measuring 0.2m deep.

Trench 553 (Fig. 1)

3.4.28 Trench 553 was situated south of the attenuation pond, *c*.100m north-east of Trench 552. It contained no archaeological features. A layer of mid orange brown colluvium was observed in section at the north-eastern end measuring 0.2m deep.

Trench 554 (Fig. 7)

3.4.29 This trench was located east of Trench 553 on a west-north-west to east-south east orientation. It contained an east-west aligned ditch (**16004**; Fig. 8, Section 8000) at its western end which measured 0.8m wide by 0.14m deep and was filled by a mid grey clay (16005). A mid orange brown silty clay colluvium was also observed in section at the western trench end, measuring up to 0.4m deep.

3.5 Finds and environmental summary

3.5.1 The evaluation produced: one residual Neolithic or Bronze Age flint flake; 71 sherds (512g) of Late Iron Age to Early Roman pottery and a shard (11g) of Roman vessel glass; one sherd (4g) of post-medieval pottery and fragments (94g) of post-medieval CBM. The transitional Late Iron Age to Early Roman features in plot FOS3 also produced 27 identifiable fragments of animal bone (cattle, dog, pig, and sheep/goat). Three bulk soil samples taken from feature fills in plot FOS3 only yielded sparse quantities of carbonised cereal grain, chaff, weed seeds and charcoal.

4 DISCUSSION

4.1 Reliability of field investigation

4.1.1 The horizon between the topsoil or subsoil was clearly visible within all trenches. The fills of the features contrasted strongly with the natural chalk, clay and ironstone geology and the natural silted hollows. Therefore, the results of the evaluation are considered to have a good level of reliability.

4.2 Evaluation objectives and results

4.2.1 The objectives laid out in Section 2.1 of this report have been achieved by the evaluation. The evaluation has confirmed the presence of Late Iron Age to Early Roman settlement remains in plot FOS3 and remains associated with the previously identified Roman brewing site at the pond in plot COS.

4.2.2 The features in plot FOS3 largely correspond with the results of the prior geophysical survey (Fig. 3). However, smaller anomalies interpreted as ring gullies of roundhouses were not present in the trenches. Conversely, some additional discrete features were identified in Trenches 472 and 473. Although one linear feature in plot COS trenches was identified as corresponding with the geophysical survey, there were additional identified features probably due to their shallow nature and similarity of fills with the natural geology. The possible surface uncovered in Trench 551 was also not identified by the survey which probably relates to similar surfaces recorded in the 2016 excavations (Gilmour 2016).

4.3 Interpretation

Late Iron Age to Early Roman settlement remains in plot FOS3

4.3.1 The evaluations work in plot FOS3 has revealed linear ditches, curvilinear ditches and discrete features associated with Late Iron Age to Early Roman settlement. The linear ditches uncovered in Trenches 471-3 formed part of at least two rectilinear enclosures with some evidence for smaller, internal subdivisions. The enclosure ditches measured between 0.9 and 2.4m wide and at least 1.3m deep. There was evidence for the recutting of silted up ditch alignments with ditch **17559** heavily truncating ditch **17556**. The intercutting curvilinear ditches in Trench 475 possibly represent the northern arc of a roundhouse gully. The near vertical sided pit (**17513**) excavated in Trench 472 is characteristic of a Mid-Late Iron Age type of storage pit. This group of sub-rectangular enclosures containing possible roundhouses and storage pits is characteristic of the layout of Late Iron Age settlement in the east midlands. A comparable site was found nearby at Area F2 of the Cranford Business Park site (Fig. 2; Clarke 2021, fig. 16).

Peripheral remains of the possible Roman beer brewing site in plot COS

4.3.2 The 1st to 2nd century AD pottery from the metalled/stone surface and ditches revealed in Trenches 550 and 551 suggest they form part of the western fringe of the possible Roman beer brewing site excavated in 2016 at the Balancing Pond site (Gilmour 2018). That excavation identified a road surface orientated south-west to

north-east. The surface in Trench 551 possibly represents its westward continuation. The ditches in Trench 550 probably formed part of an enclosure network on a similar east-west alignment to those in the Balancing Pond excavation.

Former field boundaries in plot COS

4.3.3 The linear ditches revealed by Trenches 552 and 554 were undated. However, both features lay near to former field boundaries shown on 1888-1913 Ordnance Survey maps and the ditch in Trench 552 was observed to cut the subsoil. Therefore, these features probably represent relatively recent field boundaries.

4.4 Significance

4.4.1 The evaluation has determined the group of geophysical anomalies in plot FOS3 represent the layout of a Late Iron Age to Early Roman settlement. A small area of remains west of the pond in plot COS is probably associated with the previously excavated Roman brewing site. There are no significant archaeological remains present south of the Balancing Pond site or in plot DC1.

APPENDIX A TRENCH DESCRIPTIONS AND CONTEXT INVENTORY

Trench 469						
General description					**Orientation**	NE-SW
The trench contained one ditch. Consists of topsoil and subsoil overlying natural geology of sandy clay and ironstone.					**Length (m)**	50
					Width (m)	2
					Avg. depth (m)	0.6
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
17500	Layer	-	-	Natural	-	-
17501	Layer	-	0.4	Subsoil	-	-
17502	Layer	-	0.2	Topsoil	-	-
17503	Cut	0.8	0.2	Ditch	-	-
17504	Fill	-	0.2	Secondary fill		

Trench 470						
General description					**Orientation**	NNE-SSW
Trench devoid of archaeology. Consists of topsoil and subsoil overlying natural geology of chalky sand and ironstone					**Length (m)**	50
					Width (m)	2
					Avg. depth (m)	0.54
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
-	-	-	-	-	-	-

Trench 471						
General description					**Orientation**	NW-SE
The trench contained six ditches (of which five were excavated) and a gully. Consists of topsoil and subsoil overlying natural geology of ironstone and chalk.					**Length (m)**	50
					Width (m)	2
					Avg. depth (m)	0.46
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
17515	Cut	2.4	1.16	Ditch	-	-
17516	Fill	-	0.16	Secondary fill	-	-
17517	Fill	-	0.22	Secondary fill	-	-
17518	Fill	-	0.36	Secondary fill	-	-
17519	Fill	-	0.42	Secondary fill	-	-
17548	Cut	0.6	0.17	Gully	-	-
17549	Fill	-	0.17	Secondary fill	-	-
17556	Cut	0.8	0.85	Ditch	-	-
17557	Fill	-	0.4	Secondary fill	-	-
17558	Fill	-	0.25	Secondary fill	-	-
17559	Cut	1.8	1.35	Ditch	-	-
17560	Fill	-	0.15	Secondary fill	-	-
17561	Fill	-	0.2	Secondary fill	-	-
17562	Fill	-	0.4	Secondary fill	-	-
17564	Cut	0.9	0.35	Ditch	-	-
17564	Fill	-	0.35	Secondary		

Trench 472						
General description					**Orientation**	N-S
The trench contained a ditch and three pits. Consists of topsoil and subsoil overlying natural geology of chalky sand.					**Length (m)**	50
					Width (m)	2
					Avg. depth (m)	0.55
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
17505	Cut	1.2	0.5	Pit	-	-
17506	Fill	-	0.2	Secondary fill	-	-
17507	Fill	-	0.3	Secondary fill	-	-

Trench 472						
General description					**Orientation**	N-S
The trench contained a ditch and three pits. Consists of topsoil and subsoil overlying natural geology of chalky sand.					**Length (m)**	50
					Width (m)	2
					Avg. depth (m)	0.55
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
17520	Cut	0.8	0.3	Pit	-	-
17521	Fill	-	0.3	Secondary fill	-	-
17522	Cut	0.6	0.09	Pit	-	-
17523	Fill	-	0.09	Disuse	-	-
17538	Cut	0.8	0.2	Ditch	-	-
17539	Fill	-	0.2	Disuse		

Trench 473						
General description					**Orientation**	NE-SW
The trench contained 5 ditches/gullies, two pits and a post hole. There were two furrows. Consists of topsoil and subsoil overlying natural geology of chalk and sand.					**Length (m)**	50
					Width (m)	2
					Avg. depth (m)	0.49
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
17508	Layer	-	0.2	Topsoil	-	-
17509	Layer	-	0.49	Subsoil	-	-
17510	Layer	-	-	Natural	-	-
17511	Cut	2	0.03	Natural hollow	-	-
17512	Fill	-	0.03	Silting	-	-
17513	Cut	1.43	0.63	Pit	-	-
17514	Fill	-	0.63	Secondary	-	-
17524	Cut	0.53	0.4	Gully	-	-
17525	Fill	-	0.4	Secondary	-	-
17526	Cut	0.61	0.11	Furrow?	-	-
17527	Fill	-	0.11	Secondary	-	-
17528	Cut	2.72	1	Ditch		
17529	Cut	0.6	0.38	Pit	-	-
17532	Fill	-	0.29	Secondary	-	-
17533	Fill	-	0.2	Secondary	-	-
17534	Fill	-	0.3	Secondary	-	-
17535	Fill	-	0.32	Secondary	-	-
17536	Fill	-	0.33	Secondary	-	-
17537	Fill	-	0.38	Secondary	-	-
17540	Cut	0.33	0.1	Pit	-	-
17541	Fill	-	0.1	Secondary	-	-
17542	Cut	0.14	0.13	Posthole	-	-
17543	Fill	-	0.13	Disuse	-	-
17544	Cut	1.4	0.02	Furrow	-	-
17545	Fill	-	0.02	Disuse	-	-
17546	Cut	1.15	0.11	Pit	-	-
17547	Fill	-	0.11	Disuse	-	-
17550	Cut	0.6	0.5	Ditch	-	-
17551	Fill	-	0.2	Disuse	-	-
17552	Fill	-	0.14	Disuse	-	-
17553	Cut	0.9	0.5	Ditch	-	-
17554	Fill	-	0.3	Disuse	-	-
17555	Fill	-	0.21	Disuse		

Trench 474						
General description					**Orientation**	SE-NW
The trench contained 2 furrows which were not recorded and natural hollow to the east. Consists of topsoil and subsoil overlying natural geology of ironstone.					**Length (m)**	50
					Width (m)	2
					Avg. depth (m)	0.43
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
-	-	-	-	-	-	-

Trench 475						
General description					**Orientation**	ENE-WSW
The trench contained two curvilinear ditches. Consists of topsoil and subsoil overlying natural geology of ironstone.					**Length (m)**	50
					Width (m)	2
					Avg. depth (m)	0.45
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
17565	Layer	-	0.17	Topsoil	-	-
17566	Layer	-	0.33	Subsoil	-	-
17567	Layer	-	-	Natural	-	-
17568	Cut	0.2	0.33	Curvilinear ditch	-	-
17569	Fill	-	0.33	Secondary	-	-
17570	Cut	2.9	0.72	Curvilinear ditch	-	-
17571	Fill	-	0.38	Secondary	-	-
17572	Fill	-	0.38	Secondary	-	-

Trench 550						
General description					**Orientation**	NE-SW
Trench contained three ditches. Consists of topsoil and subsoil overlying natural geology of blue clay and ironstone.					**Length (m)**	25
					Width (m)	2
					Avg. depth (m)	0.52
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
16008	Cut	0.4	0.1	Ditch	-	-
16009	Fill	-	0.1	Secondary fill	-	-
16010	Cut	0.4	0.14	Ditch	-	-
16011	Fill	-	0.14	Secondary fill	-	-
16012	Cut	0.5	0.14	Ditch	-	-
16013	Fill	-	0.14	Secondary fill		

Trench 551						
General description					**Orientation**	NW-SE
Trench contained a ditch, possible metalled surface and a furrow. Consists of topsoil and subsoil overlying natural geology of chalk and sand.					**Length (m)**	25
					Width (m)	2
					Avg. depth (m)	0.0.38
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
16014	Layer	7	0.15	Surface	-	-
16015	Cut	2.4	0.15	Furrow?	-	-
16016	Fill	-	0.22	Disuse	-	-
16017	Fill	-	0.2	Tertiary fill	-	-
16018	Cut	1.9	0.8	Ditch	-	-
16019	Fill	-	0.12	Secondary	-	-
16020	Fill	-	0.52	Secondary		

Trench 552						
General description					**Orientation**	NE-SW
Trench contained done ditch. Consists of topsoil and subsoil overlying natural geology of chalk and ironstone.					**Length (m)**	25
					Width (m)	2
					Avg. depth (m)	0.57
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
16006	Cut	0.6	0.08	Ditch	-	-
16007	Fill	-	0.08	Secondary	-	-

Trench 553						
General description					**Orientation**	SW-NE
Trench devoid of archaeology. Consists of topsoil, subsoil and colluvium overlying natural geology of sandy and chalk.					**Length (m)**	25
					Width (m)	2
					Avg. depth (m)	0.68
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
-	-	-	-	-	-	

Trench 554						
General description					**Orientation**	NW-SE
Trench contained one ditch. Consists of topsoil, subsoil and colluvium overlying natural geology of sand and ironstone.					**Length (m)**	25
					Width (m)	2
					Avg. depth (m)	0.67
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
16000	Layer	-	0.3	Topsoil	-	-
16001	Layer	-	0.1	Subsoil	-	-
16002	Layer	-	-	Natural	-	-

Trench 555						
General description					**Orientation**	NE-SW
Trench devoid of archaeology. Consists of topsoil and subsoil overlying natural geology of chalk.					**Length (m)**	50
					Width (m)	2
					Avg. depth (m)	0.33
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
-	-	-	-	-	-	-

Trench 556						
General description					**Orientation**	E-W
Trench devoid of archaeology. Consists of topsoil and subsoil overlying natural geology of chalk and sand.					**Length (m)**	50
					Width (m)	2
					Avg. depth (m)	0.45
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
-	-	-	-	-	-	-

Trench 557						
General description					**Orientation**	NE-SW
Trench devoid of archaeology. Consists of topsoil and subsoil overlying natural geology of chalk and sand.					**Length (m)**	50
					Width (m)	2
					Avg. depth (m)	0.45
Context No.	**Type**	**Width (m)**	**Depth (m)**	**Description**	**Finds**	**Date**
-	-	-	-	-	-	-

APPENDIX B FINDS REPORTS

B.1 Glass

By Carole Fletcher

Introduction and Methodology

B.1.1 Archaeological works in plot COS produced a single shard of Roman vessel glass, weighing 11g from Trench 551. The glass was scanned and recorded by form, colour, count and weight, dated where possible, and recorded in the text. *Romano-British Glass Vessels: A Handbook* (Price and Cottam 1998) was used as a general guide for this report.

Assemblage and Discussion

B.1.2 Trench 551 ditch **16018** produced a shard of glass that is part of a ribbon handle from a prismatic vessel. Handle forms on cylindrical, square and hexagonal bottles are similar.

B.1.3 The ribbon handle fragment is pale blue green in colour with small faults and bubbles, the fragment is splayed with part of a rounded outer left edge surviving (43mm long and greater than 32mm wide, 4.5-7.5mm thick, Outer rib 5mm high) having broken at the join with the vessels shoulder and with seven surviving vertical ribs (reeding) that extend approximately 27mm from the break. Internally there is the start of a return suggesting the handle is relatively short and from a bottle. On 1st and 2nd century bottles handles are nearly always finished with fine vertical ribs, pulled into points onto the shoulder and upper body (Cool and Price 1994, 25). The points of the reeding on the fragment are suggested but absent.

B.1.4 Roman vessel glass is not uncommon, the handle form suggests a 1st and 2nd century date for the vessel which was most probably a bottle and may have been a domestic item. However, the assemblage is fragmentary and its significance uncertain, other than to indicate occupational debris. The glass does, however, indicate the ability of the occupants of the settlement associated with the excavated area to access glass vessels, presumably by trade.

Retention, dispersal or display

B.1.5 If further work is undertaken, more glass may be recovered but only at low levels. The glass report should be incorporated into any later archive. If no further work is undertaken, this statement acts as a full record, however, the glass should be retained for archive deposition.

B.2 Flint

By Lawrence Billington

B.2.1 A single, hard hammer struck non-cortical flake (2g) was recovered from the subsoil (17531) from Trench 472 in plot FOS3. The flint is not diagnostic but presumably Neolithic or Bronze Age. If further work is undertaken, more flint will very probably be recovered although only at low levels.

B.3 Roman pottery

By Kathryn Blackbourn

Introduction

B.3.1 A total of 81 sherds (weighing 584g) of Late Iron Age to Mid Roman pottery was recovered from five trenches across two areas, with a mean sherd weight of 7.2g. The sherds were moderately to heavily abraded and the assemblage dates from 50BC to the 2nd century AD, comprising a mix of hand and wheel made vessels. The pottery was recovered from ditches and pits and largely comprised locally produced coarse wares.

Methodology

B.3.1 The pottery was analysed following the national guidelines (Barclay *et al.* 2016) and with reference to the national fabric series (Tomber and Dore 1998) and Tyers (1996). Forms were identified using the Roman Pottery Vessel Type Series Constructed for the A14 MoLA Headland Project (Lyons 2020). The total assemblage was studied, and a full catalogue was prepared (summarised in Table 3). The sherds were examined using a hand lens (x10 magnification) and were divided into fabric groups defined on the basis of inclusion types present. Vessel forms were recorded, and vessel types cross-referenced and compared to other examples. The sherds were counted and weighed to the nearest whole gram and recorded by context. Decoration, residues and abrasion were also noted. OA East curates the pottery and archive.

The Pottery

B.3.2 Pottery was recovered from two feature types, with ditches producing most of the assemblage by count and weight (Table 1).

Feature Type	No of sherds	Weight (g)
Ditch	73	495
Pit	8	89
Total	*81*	*584*

Table 1: The Roman pottery by feature

B.3.3 A total of thirteen pottery fabric types were identified (Table 2). The assemblage comprises a large proportion of locally produced coarse ware jars dating from the Late Iron Age to Early Roman period. A single sherd of heavily abraded imported Samian

ware was recovered however there was no evidence for specialist wares. The assemblage comprises both handmade and wheel made vessels.

Fabric Type	Form	No of sherds	Weight (g)	Weight (%)
BCWF Black Coarse Ware with flint inclusions	Jar	12	52	8.9
BCWFG Black Coarse Ware with flint and grog inclusions	Jar	19	70	11.9
BCWFG (OX) Black Coarse Ware with flint and grog inclusions (Oxidised surface)	Jar	26	202	34.6
BCWG Black Coarse Ware with grog inclusions	Jar	7	82	14.0
BFWG Black Fine Ware with grog inclusions	Jar	1	10	1.7
GCWF Grey Coarse Ware with flint inclusions	Jar	3	72	12.3
GROG Grog tempered ware	Jar	1	7	1.2
SAM Samian Ware (Tyers 1996, 112)	?	1	2	0.3
SCW Sandy Coarse Ware	Jar	1	14	2.4
SCWF Sandy Coarse Ware with flint inclusions	Jar	1	14	2.4
SGW Sandy Grey Ware	Jar	2	7	1.2
SGW (OX) Sandy Grey Ware (Oxidised surface)	?	1	3	0.5
SHEL Shelly Ware	Jar	3	31	5.3
Total		*81*	*584*	*100*

Table 2: Pottery by fabric type

Results

B.3.4 Late Iron Age to Early Roman pottery was recovered from six features across four trenches. The pottery will be discussed below by area and trench.

Plot FOS3

Trench 471

B.3.5 Trench 471 contained two ditches yielding Roman pottery. Ditch **17515** contained two fills, fill 17516 contained a single sherd (3g) of Early Roman sandy grey ware with an oxidised surface. Fill 17517 contained 15 sherds (122g) of Late Iron Age to Early Roman pottery including handmade and wheel made black coarse ware jars with flint and grog temper.

B.3.6 Ditch **17559** also contained two fills, fill 17561 yielded a single sherd (12g) of handmade grey coarse ware with flint inclusions. Fill 17562 contained 5 sherds (78g) of wheel made coarse ware with flint inclusions and scored decoration dating to the Late Iron Age to Early Roman period.

Trench 472

B.3.7 Late Iron Age to Early Roman pottery was recovered from two pits within Trench 472, pit **17505** yielded 7 sherds (79g) of handmade and wheel made coarse ware jars. A single sherd (10g) of handmade black coarse ware was recovered from fill 17521 of pit **17520**.

Trench 473

B.3.8 Three fills of ditch **17528** contained handmade pottery with some scored decoration. Fill 17532 contained 15 sherds (54g) of black coarse ware jar with flint and grog inclusions. Four sherds (16g) of a similar vessel was also recovered from fill 17533. Fill 17534 yielded a single sherd (3g) of grey coarse ware with flint inclusions.

Trench 475

B.3.9 Ditch **17570** contained 21 sherds (135g) of a handmade black coarse ware jar with flint and grog inclusions, an oxidised surface and scored decoration.

Plot COS

Trench 551

B.3.10 Fill 16020 of ditch **16018** yielded 10 sherds (weighing 71g) of pottery dating to the 1st to 2nd century AD, comprising locally produced coarse wares and a heavily abraded sherd of Samian ware.

Conclusion

B.3.11 The two areas produced differing assemblages. Only a single feature within plot COS produced Roman pottery, all locally produced coarsewares, except a single sherd of imported Samian ware. This pottery has been dated to the 1st to 2nd century AD.

B.3.12 Although as a group this assemblage from plot FOS3 is relatively small, the individual features yielding Late Iron Age to Early Roman pottery contained sufficient quantities to accurately date the features to this phase. The pottery itself is all locally made and the majority of the assemblage appears to form coarse ware jars, likely associated with domestic activities. The presence of both handmade and wheel made sherds alongside the dearth of 'Romanised' vessels and fabrics suggest the assemblage dates to 50BC to 75AD.

B.3.13 This small assemblage is small it has provided dating evidence for a small area of activity concentrated around Trenches 471 to 475. Any further work in this area would expect to recover a similar pottery assemblage which may help to further understand changes in pottery production during the Late Iron Age to Early Roman period in this part of Northamptonshire.

Catalogue

Area	Trench	Fill	Cut	Feature Type	Era	HM/WM	Fabric Family	No of sherds	Weight (g)	Context Date
FOS3	471	17516	17515	Ditch	ER	WM	SGW (OX)	1	3	C1
	471	17517	17515	Ditch	LIA/ER	HM	BCWFG (OX)	5	67	C1
	471	17517	17515	Ditch	LIA/ER	WM	BCWF	9	45	C1
	471	17517	17515	Ditch	LIA/ER	WM	BFWG	1	10	C1
	471	17561	17599	Ditch	LIA/ER	HM	GCWF	1	12	C1
	471	17562	17599	Ditch	LIA/ER	WM	BCWF	3	7	C1
	471	17562	17599	Ditch	LIA/ER	WM	SCWF	1	14	C1
	471	17562	17599	Ditch	LIA/ER	WM	GCWF	1	57	C1
	472	17507	17505	Pit	LIA/ER	WM	BCWG	6	72	C1
	472	17507	17505	Pit	LIA/ER	HM	GROG	1	7	C1
	472	17521	17520	Pit	LIA/ER	HM	BCWG	1	10	C1
	473	17532	17528	Ditch	LIA/ER	HM	BCWFG	13	35	C1
	473	17532	17528	Ditch	LIA/ER	HM	BCWFG	2	19	C1
	473	17533	17528	Ditch	LIA/ER	HM	BCWFG	4	16	C1
	473	17534	17528	Ditch	LIA/ER	HM	GCWF	1	3	C1
	475	17572	17570	Ditch	LIA/ER	HM	BCWFG (OX)	21	135	C1
COS	551	16020	**16018**	Ditch	RB	WM	SGW	2	7	C1-C2
	551	16020	**16018**	Ditch	RB	WM	SHEL	3	31	C1-C2
	551	16020	**16018**	Ditch	RB	WM	SCW	1	14	C1-C2
	551	16020	**16018**	Ditch	RB	WM	BCWQ (White)	2	7	C1-C2
	551	16020	**16018**	Ditch	RB	WM	BCWQ (White)	1	11	C1-C2
	551	16020	**16018**	Ditch	RB	WM	SAM	1	2	C1-C2

Table 3: Roman pottery summary catalogue

B.4 Post-medieval pottery

By Carole Fletcher

Introduction and Methodology

B.4.1 Archaeological works produced a single sherd of post-medieval pottery from plot COS weighing 0.004kg from Trench 551.

B.4.2 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. A simplified method of recording has been undertaken, with fabric, basic description, weight, and count recorded in the text. Fabric codes used are based on the Northamptonshire County type-series (Blinkhorn 1996). The excavation was carried out by hand and selection made through standard sampling strategies on a feature-by-feature basis. There are not expected to

be any inherent biases. The pottery and archive are curated by OA East until formal deposition or dispersal.

Assemblage and Discussion

B.4.3 Trench 551: ditch **16018** produced a single abraded sherd (0.004kg) from a Fabric 409 (Staffordshire Slipware *c*.1680-1750) vessel, with flakes of glaze surviving on the internal surface.

B.4.4 The assemblage is fragmentary and indicates extremely low levels of pottery distribution. It represents background noise, indicating some level of post-medieval activity in the vicinity of the site.

Retention, dispersal or display

B.4.5 Should further work be undertaken, additional pottery may be recovered, although only at low levels. This statement acts as a full record and, if no further work is undertaken, the pottery may be dispersed or deselected prior to archival deposition.

B.5 Ceramic building material

By Ted Levermore

Factual data

B.5.1 A fragment of a black glazed pantile (92g) was recovered from plot COS, Trench 551, ditch **16015**, fill 16016. It is made in a compact pink-orange clay with occasional yellow clay pellets and retains a 15mm thickness. Associated with it are two small pieces (2g) of a gritty mid orange redware type fabric; it is unclear if these are from a pottery or CBM object. These fragments are of a broad post-medieval date. They are of little archaeological significance due to their size and likely represent the effects of ploughing and manuring in the modern agricultural landscape.

B.6 Fired clay

By Ted Levermore

Factual data

B.6.1 Small fragments of ceramic were recovered from plot FOS3, Trench 471. Ditch **17515**, fill 17518, produced two small nuggets of a fine sandy clay fired to an orange-brown with dark reduced cores (6g). These fragments are not closely dateable. Ditch **17559**, fill 17562, produced fragments of a coarse shelly fabric, each with a smoothed greyish face (18g). These may derive from locally produced Roman brick, tile or pottery.

B.6.2 This assemblage is of little archaeological significance, representing the detrital remains of prehistoric and Roman activity.

APPENDIX C ENVIRONMENTAL REPORTS

C.1 Faunal remains

By Zoë Uì Choileàin

Introduction and methodology

C.1.1 A small collection of animal bone was collected from features excavated during trial trenching at plot FOS3. A total of 39 fragments are recordable, of which 27 are identifiable to taxon (Table 6). Four taxa were identified: cattle, dog, pig, and sheep/goat. Features containing animal bone were ditches primarily dated to the Late Iron Age/Early Roman transitional period.

C.1.2 The method used to quantify this assemblage was a modified version of that devised by Albarella and Davis (1996). Identification of all bone was attempted but only those that could be clearly narrowed to species were used for NISP (number of identifiable specimens) and MNI (minimum number of individuals) counts. Both epiphyses and shaft fragments were identified where possible. Fragmented elements are not counted multiple times which narrows down the assemblage and produces more accurate NISP and MNI results. MNI (minimum number of individuals) represents the smallest number of animals that could be represented by the elements recovered.

C.1.3 All bone was identified using Schmid (1972). Surface preservation was evaluated using the 0-5 scale devised by Brickley and McKinley (2004 14-15). Fusion of epiphyses was recorded using Silver (1970). and tooth wear stages were recorded based on Grant (1982) and Higham (1967).

Results of analysis

C.1.4 The preservation of bone is moderately poor best representing a 3 on the McKinley scale. This means that all the surface is masked by erosion, primarily soil acidity and root activity.

C.1.5 Number of specimens identifiable to taxon and minimum number of individuals are recorded in Table 4.

Taxon	NISP	NISP%	MNI	MNI%
Cattle (*Bos taurus*)	6	22.22	2	33.33
Dog (*Canis familiaris*)	4	14.81	1	16.67
Pig (*Sus sus*)	3	11.11	1	16.67
Sheep/goat (*Ovis/Capra*)	14	51.85	2	33.33
Total	*27*	*100*	*6*	*100*

Table 4: Number of specimens identifiable to taxon (NISP) and Minimum number of individuals (MNI)

C.1.6 Very few epiphyses survive. In Trench 471, ditch **17559** contains an unfused pig ulna suggesting an age of 36-42 months. The remaining surviving epiphyses are confined to proximal metapodials which fuse by birth for most domestic mammals.

C.1.7 Tooth wear analysis on cattle and sheep/goat is confined to five specimens. These suggest an older age for cattle more indicative of a reliance on secondary products such as milk. Sheep/goat tooth wear gives evidence of considerably younger animals and suggests that the primary usage of these mammals was consumption.

Trench	Cut	Context	Feature	Taxon	Element	Higham MWS	Age in Months
471	15715	17518	Ditch	Cattle	Loose mand cheek tooth	23	50+
471	17559	17562	Ditch	Cattle	Mandible	22	50+
473	17528	17532	Ditch	Sheep/ Goat	Mandible	17	Adult
475	17570	17572	Ditch	Sheep/ Goat	Mandible	7	5-7
475	17570	17572	Ditch	Sheep/ Goat	Mandible	7	5-7

Table 5: MWS (Mandibular Wear Stage) and age in months

Trench	Cut	Context	Type	Taxon	Element	Erosion	Count
471	17515	17517	Ditch	Sheep/Goat	Radius	2	1
471	17515	17518	Ditch	Large mammal	Long bone	3	1
471	17515	17518	Ditch	Large mammal	Radius	2	1
471	17515	17518	Ditch	Cattle	Loose mand cheek tooth	2	1
471	17515	17518	Ditch	Sheep/Goat	Loose mand cheek tooth	1	1
471	17556	17558	Ditch	Sheep/Goat	Loose mand cheek tooth	2	1
471	17559	17562	Ditch	Cattle	Mandible	3	1
471	17559	17562	Ditch	Cattle	MCondyle	3	1
471	17559	17562	Ditch	Pig	Ulna	2	1
471	17559	17562	Ditch	Pig	Ulna	2	1
471	17559	17562	Ditch	Medium mammal	Metacarpus	1	1
471	17559	17562	Ditch	Sheep/Goat	Loose mand cheek tooth	2	1
471	17559	17562	Ditch	Sheep/Goat	Loose max cheek tooth	2	1

Trench	Cut	Context	Type	Taxon	Element	Erosion	Count
473	17528	17532	Ditch	Large mammal	Tibia	3	1
473	17528	17532	Ditch	Large mammal	Scapula	3	1
473	17528	17532	Ditch	Sheep/Goat	Mandible	3	1
473	17528	17532	Ditch	Medium mammal	Tibia	3	1
473	17528	17532	Ditch	Medium mammal	Metacarpus	3	1
473	17528	17533	Ditch	Cattle	Maxilla	3	1
473	17528	17533	Ditch	Cattle	Metatarsus	3	1
473	17528	17533	Ditch	Pig	Loose mand cheek tooth	2	1
473	17528	17533	Ditch	Sheep/Goat	Loose mand cheek tooth	2	1
473	17528	17534	Ditch	Large mammal	Long bone	2	2
475	17570	17572	Ditch	Sheep/Goat	Metatarsus	3	1
475	17570	17572	Ditch	dog	Tibia	3	1
475	17570	17572	Ditch	dog	Metacarpus V	2	1
475	17570	17572	Ditch	Sheep/Goat	Mandible	2	1
475	17570	17572	Ditch	Sheep/Goat	Mandible	2	1
475	17570	17572	Ditch	Large mammal	Metapodial	3	1
475	17570	17572	Ditch	Cattle	Mandible	2	1
475	17570	17572	Ditch	Medium mammal	Tibia	3	1
475	17570	17572	Ditch	Medium mammal	Tibia	3	1
475	17570	17572	Ditch	Sheep/Goat	Metacarpus	3	1
475	17570	17572	Ditch	dog	Metacarpus IV	2	1
475	17570	17572	Ditch	dog	Metacarpus	2	1
475	17570	17572	Ditch	Sheep/Goat	Loose mand cheek tooth	2	2
741	17559	17562	Ditch	Sheep	Radius	3	1

Trench	Cut	Context	Type	Taxon	Element	Erosion	Count
Total							*39*

Table 6: A catalogue of recordable bone by feature

Statement of potential

C.1.8 The assemblage is very small and poorly preserved. All bone represents domestic mammals and is reflective of small-scale rural occupation. The tooth wear analysis could tentatively suggest a reliance on cattle for secondary products such as milk while sheep/goat and pig are primarily used for meat. There is little further information to be gleaned from this assemblage.

Recommendations for further work

C.1.9 No further work is required unless further excavations take place on the site.

Retention, dispersal and display

C.1.10 This assemblage should be retained for the archaeological record.

C.2 Environmental Remains

By Martha Craven

Introduction

C.2.1 Three bulk samples were taken from features within plot FOS3 to assess the quality of preservation of plant remains and their potential to provide useful data as part of further archaeological investigations. Samples were taken from features encountered within Trenches 471 and 473 from deposits that are unknown in date.

Methodology

C.2.2 The total volume (up to 16L) of each of the samples was processed by tank flotation using modified Siraff-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 7. Identification of plant remains is with reference to the Digital Seed Atlas of the Netherlands (Cappers *et al*. 2006) and the OA East's own reference collection. Nomenclature is according to Zohary and Hopf (2000) for cereals and Stace (1997) 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 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

Results

C.2.5 Preservation of plant remains is by carbonisation and the material is in quite a poor state. Many of the flots contain rootlets which may have caused movement of material between contexts. Snail shells were not present within any of the samples.

C.2.6 Occasional cereal grains consisting of wheat (*Triticum sp.*) and grains too poorly preserved to identify were recovered from the samples. Chaff was scarce consisting of a few spelt/emmer (*Triticum spelta/dicoccum*) glume bases within ditches **17515** and **17559**. Weed seeds present in the samples include cleavers (*Galium aparine*), docks (Rumex sp.) and possible oats/bromes (*Avena/ Bromus sp.*). The samples all contain small quantities of charcoal.

C.2.7 Artefacts recovered from the samples are extremely scarce; consisting of only occasional burnt and unburnt large mammal bones.

Sample Number	Context Number	Cut number	Trench /area number	Feature type	Volume processed (L)	Flot Volume (ml)	Cereals	Chaff	Weed Seeds	Large mammal bones	Burnt mammal bones
4600	17517	17515	471	Ditch	15	30	#	#	#	#	#
4601	17536	17528	473	Ditch	16	10	0	0	0	0	0
4602	17561	17559	471	Ditch	16	30	#	#	#	0	0

Table 7: Environmental samples

Discussion

C.2.8 The recovery of sparse quantities of carbonised grain, chaff, weed seeds and charcoal indicates that there is limited potential for the preservation of plant remains at this site. The plant material recovered is consistent with scatters of domestic refuse that has likely been swept into or blown into the features by the wind. The presence of spelt/emmer glume bases within ditches **17515** and **17559** could suggest that these features may be Roman or earlier in date as hulled wheats were predominantly grown during these periods. The weed taxa are typical of arable environments and are likely to have been accidentally harvest alongside the crops.

C.2.9 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 GAZETTEER OF PREVIOUS WORK AT HANWOOD PARK AND CRANFORD BUSINESS PARK

OA Site Code	Report Title	Stage	Author
XNNEKE12	Land East of Kettering, Phase A, Archaeological Evaluation Report. Report No.1408	Evaluation	Gilmour, N. 2012
XNNEKE13	Iron Age Structures and Associated activity on Land East of Kettering Areas R7 and R8. Report No. 1530	Excavation – PXA	Gilmour, N. 2013
XNNEKE14	Field 15, South of Cranford Road, Land East of Kettering. Report No. 1595	Evaluation	Gilmour, N. 2014
XNNAWK14	Romano-British double burial at Kettering Sewerage Routing, Northamptonshire. Report No. 2169	Rescue Excavation	Haskins, A. 2018
XNNAWK15	Archaeological evaluation of Kettering Sewerage Routing, Northamptonshire. Report No. 1867	Evaluation	Gilmour, N. 2018
XNNCAB15	Cranford Business Park, Kettering, Archaeological Evaluation Report. Report No. 1859	Evaluation	Bush, L. 2016
XNNCAB16	Cranford Business Park, Kettering, Post-Excavation assessment and updated project design. Report No. 2062	Excavation – PXA	Gilmour, N. 2017
	Later Prehistoric and Romano-British Remains at Cranford Business Park, Kettering, Northamptonshire. Excavation Report. Report No. 2405	Excavation – Grey Lit	Clarke, G. 2021
	The Bronze Age, Iron Age and Romano-British Archaeology of Cranford Business Park, Burton Latimer, Kettering. *Northamptonshire Archaeology*	Excavation – Publication	Clarke, G. *forthcoming*
XNNEKE15	Iron Age and Roman Activity on land East of Kettering, the Balancing Pond site, Post-Excavation assessment and updated project design. Report No. 2121	Excavation – PXA	Gilmour, N. 2018
XNNEKE20	Land East of Kettering, Phase 2, Archaeological Evaluation Report. Report No. 2465	Evaluation	Lewis, T. 2020
XNNEKE20a	Plots R20 and R21, Land East of Kettering, Northamptonshire. Post-Excavation Assessment and Updated Project Design. OA East Report No. 2483	Excavation PXA	Lewis, T. 2021
XNNEKE20b	Hanwood Park Plot R25. Post-Excavation Assessment and Updated Project Design. OA East Report No. 2494	Excavation – PXA	Clarke, G. 2021
XNNEKE20c	East Kettering Plot R11. Report No. 2450	Excavation – PXA	Cole, E. 2020

Table 8: Gazetteer of previous work at Hanwood Park and Cranford Business Park

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APPENDIX F OASIS REPORT FORM

Project Details

OASIS Number	oxfordar3-509750
Project Name	Plots FOS3, COS and DC1, Hanwood Park, Kettering

Start of Fieldwork	4/7/22	End of Fieldwork	12/8/22
Previous Work	Yes	Future Work	Unknown

Project Reference Codes

Site Code	XNNEKE22	Planning App. No.	KET/2020/0239
HER Number	ENN110767 (FOS3) ENN110710 (COS and DC1)	Related Numbers	ENN109788 ENN109789 ENN109857 ENN109948

Prompt	NPPF
Development Type	Mixed use
Place in Planning Process	After full determination (eg. As a condition)

Techniques used (tick all that apply)

☐ Aerial Photography – interpretation	☐ Grab-sampling	☐ Remote Operated Vehicle Survey
☐ Aerial Photography - new	☐ Gravity-core	☒ Sample Trenches
☐ Annotated Sketch	☐ Laser Scanning	☐ Survey/Recording of Fabric/Structure
☐ Augering	☐ Measured Survey	☒ Targeted Trenches
☐ Dendrochonological Survey	☐ Metal Detectors	☐ Test Pits
☐ Documentary Search	☐ Phosphate Survey	☐ Topographic Survey
☐ Environmental Sampling	☐ Photogrammetric Survey	☐ Vibro-core
☐ Fieldwalking	☐ Photographic Survey	☐ Visual Inspection (Initial Site Visit)
☐ Geophysical Survey	☐ Rectified Photography	

Monument	Period
Ditch	Roman (43 to 410)
Pit	Roman (43 to 410)
Gully	Roman (43 to 410)
Posthole	Roman (43 to 410)
Surface	Roman (43 to 410)
Surface	Roman (43 to 410)
Furrow	Post Medieval (1540 to 1901)

Object	Period
Pottery	Roman (43 to 410)
Pottery	Post Medieval (1540 to 1901)
Glass	Roman (43 to 410)
Flint	Late Prehistoric (- 4000 to 43)
CBM	Post Medieval (1540 to 1901)
Fired clay	Roman (43 to 410)
Animal bone	Roman (43 to 410)

Project Location

County	Northamptonshire	Address (including Postcode)
District	Kettering	Land East of Kettering Cranford Road, Kettering Northamptonshire NN15 5JH (FOS3) NN15 5AG (DC1) NN15 5FJ (COS)
Parish	Barton Seagrave	
HER office	Northampton	
Size of Study Area	8.4ha	
National Grid Ref	SP 9032 7672 (FOS03), SP 9002 7748 (DC1), SP 9014 7723 (COS)	

Project Originators

Organisation	OAE
Project Brief Originator	Liz Mordue
Project Design Originator	Nick Gilmour
Project Manager	Nick Gilmour/Andy Greef
Project Supervisor	Kelly Sinclair

Project Archives

	Location	ID
Physical Archive (Finds)	NARC	ENN110767 (FOS3) ENN110710 (COS and DC1)
Digital Archive	ADS	ENN110767 (FOS3) ENN110710 (COS and DC1)
Paper Archive	NARC	ENN110767 (FOS3) ENN110710 (COS and DC1)

Physical Contents	Present?	Digital files associated with Finds	Paperwork associated with Finds
Animal Bones	☒	☒	☒
Ceramics	☒	☒	☒
Environmental	☐	☐	☐
Glass	☒	☒	☒
Human Remains	☐	☐	☐
Industrial	☐	☐	☐
Leather	☐	☐	☐
Metal	☐	☐	☐
Stratigraphic		☐	☐
Survey		☐	☐
Textiles	☐	☐	☐
Wood	☐	☐	☐
Worked Bone	☐	☐	☐
Worked Stone/Lithic	☒	☒	☒
None	☐	☐	☐
Other	☐	☐	☐

Digital Media		Paper Media	
Database	☒	Aerial Photos	☐
GIS	☒	Context Sheets	☒

Geophysics	☐	Correspondence	☐
Images (Digital photos)	☒	Diary	☐
Illustrations (Figures/Plates)	☒	Drawing	☒
Moving Image	☐	Manuscript	☐
Spreadsheets	☒	Map	☐
Survey	☒	Matrices	☐
Text	☒	Microfiche	☐
Virtual Reality	☐	Miscellaneous	☐
		Research/Notes	☐
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		Plans	☒
		Report	☒
		Sections	☒
		Survey	☒

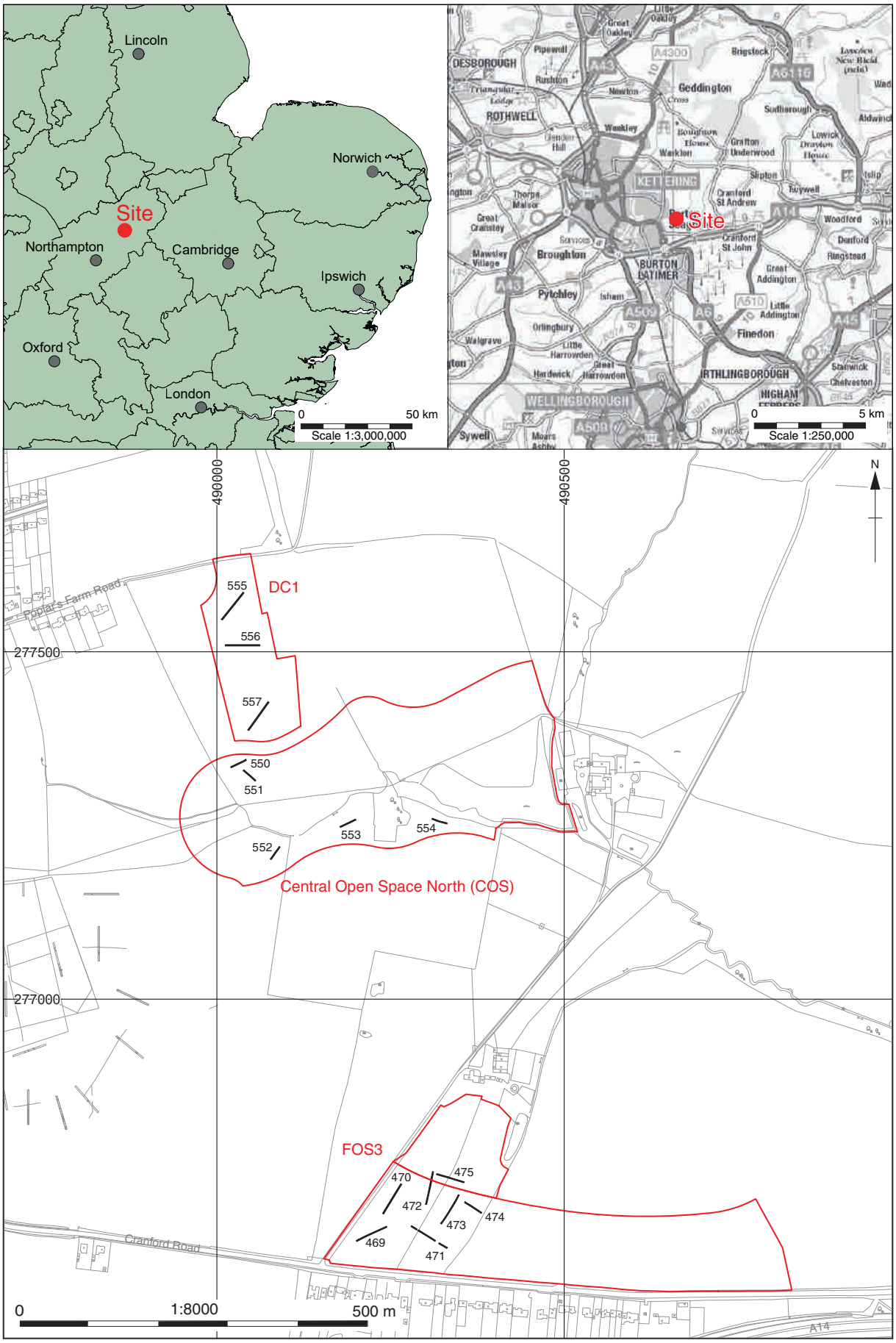

Figure 1: Site location, showing evaluation trenches (black) within development areas (red)

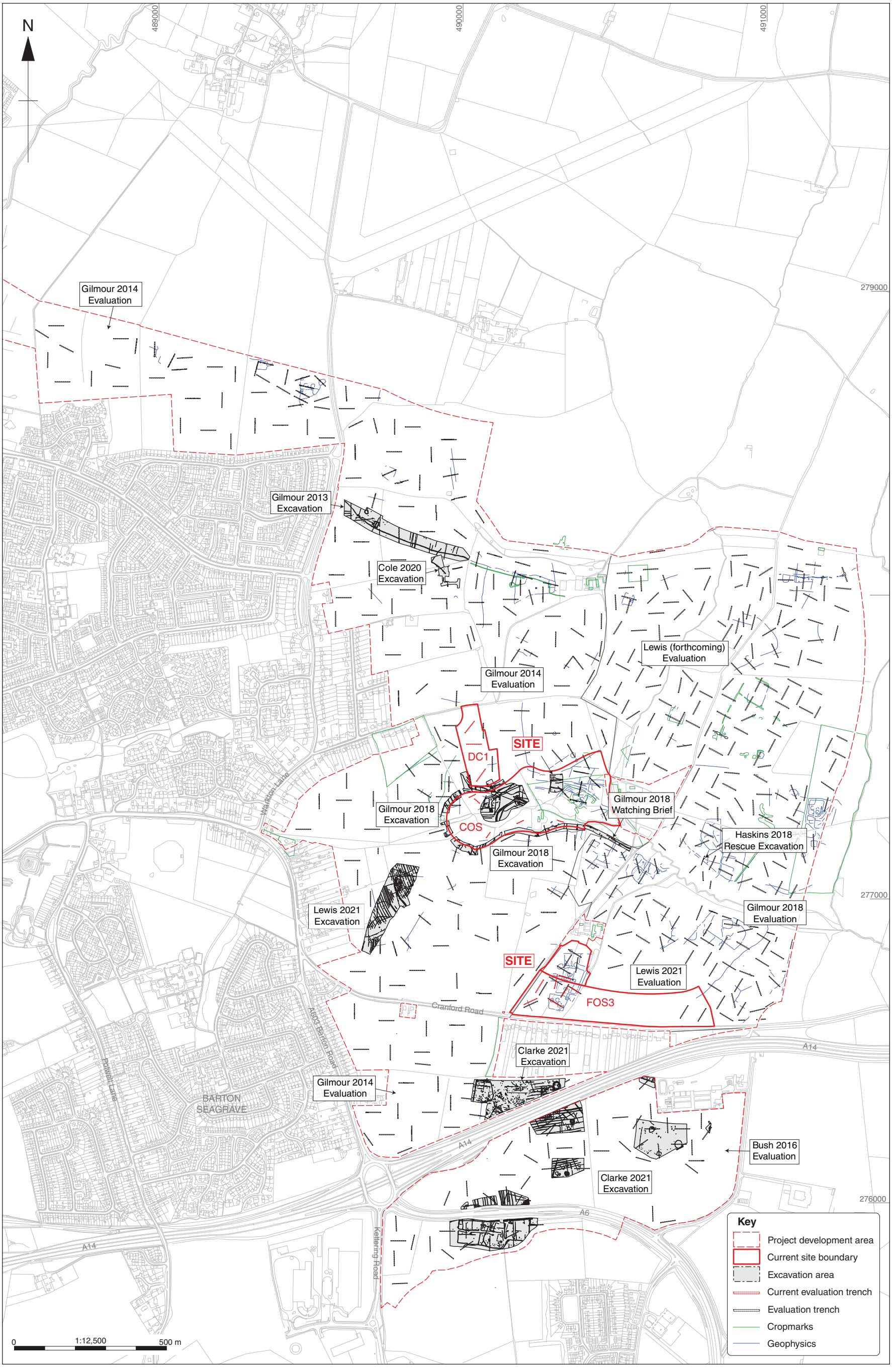

Figure 2: Location with relation to previous works

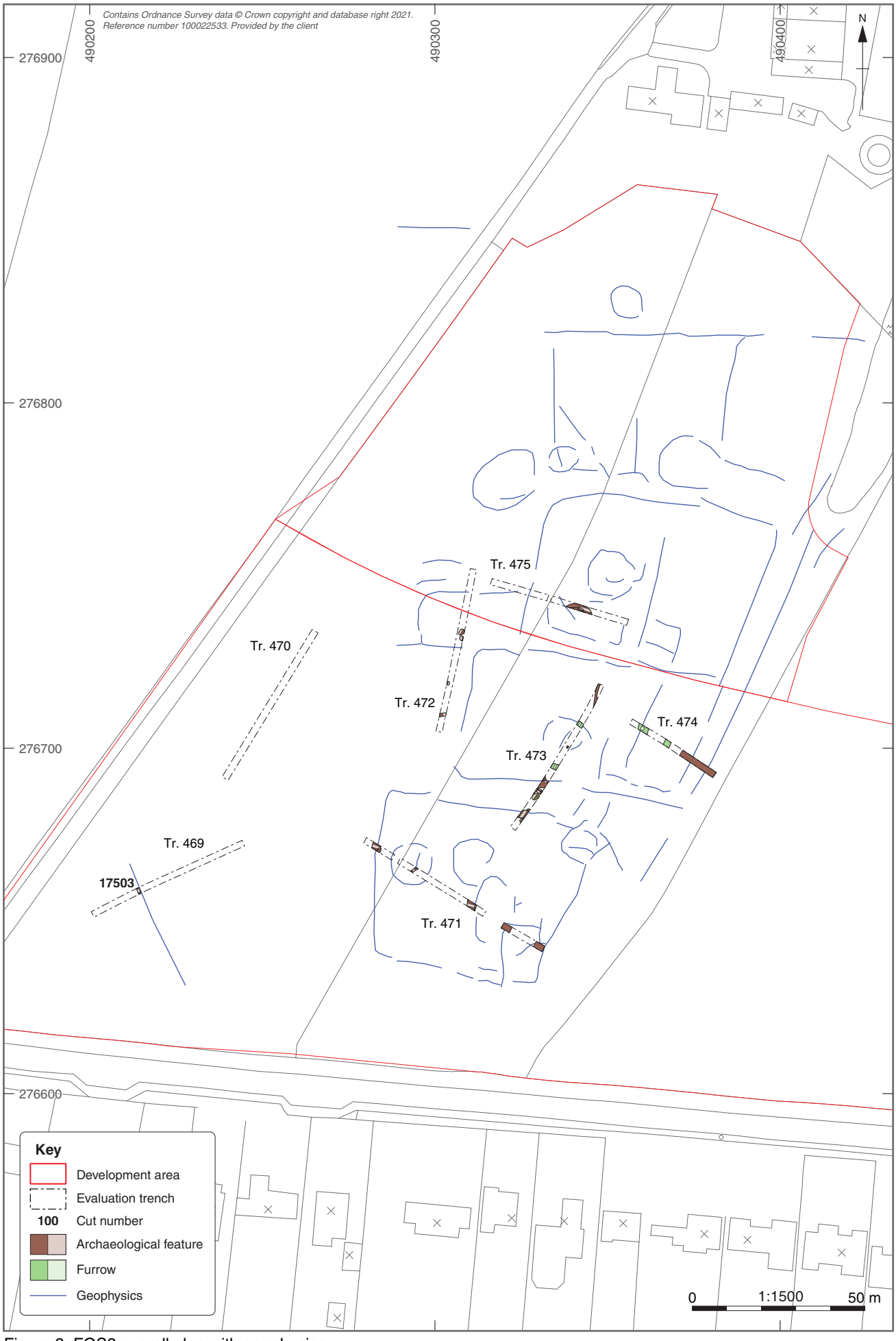

Figure 3: FOS3 overall plan with geophysics

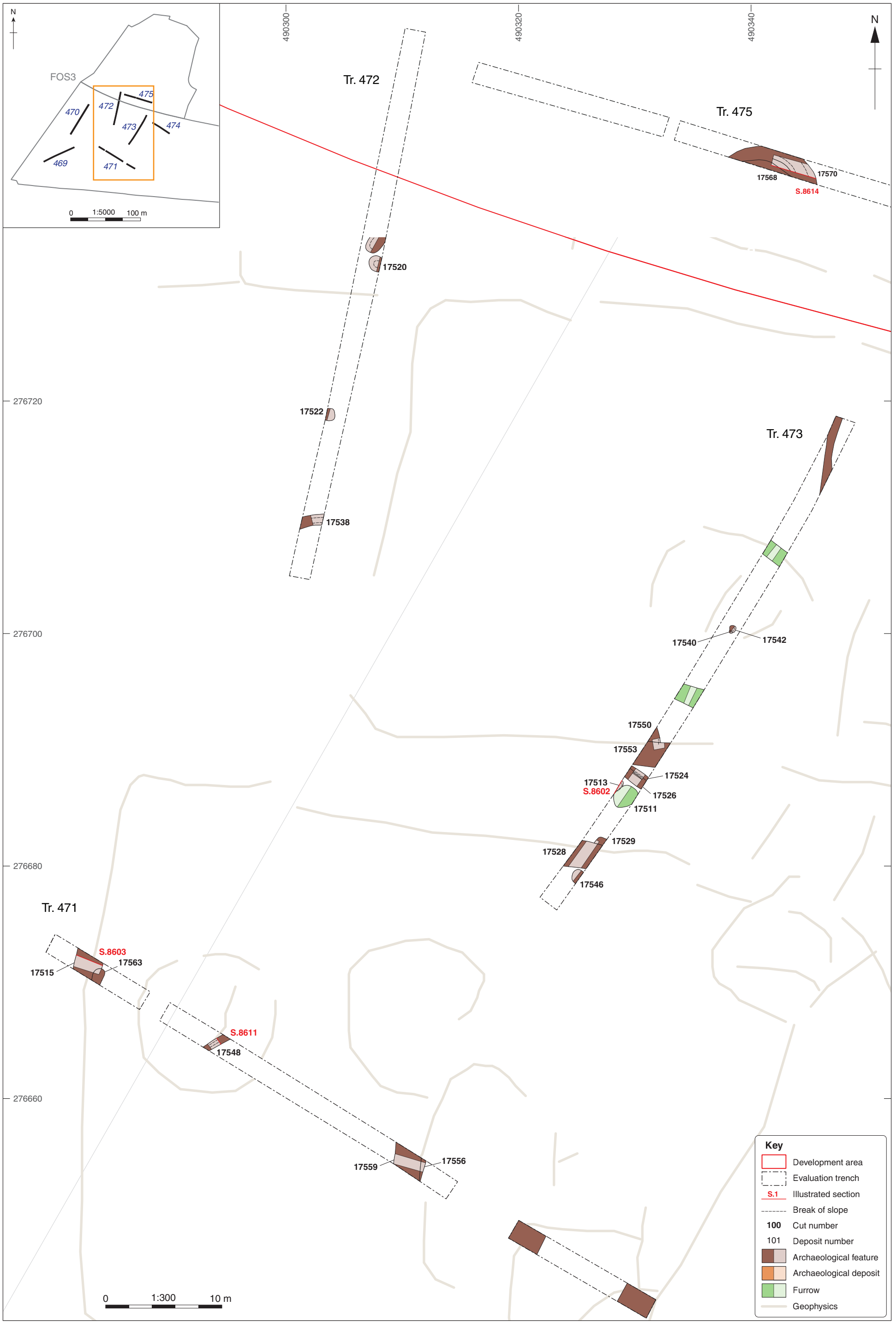

Figure 4: Trenches 471, 472 and 473

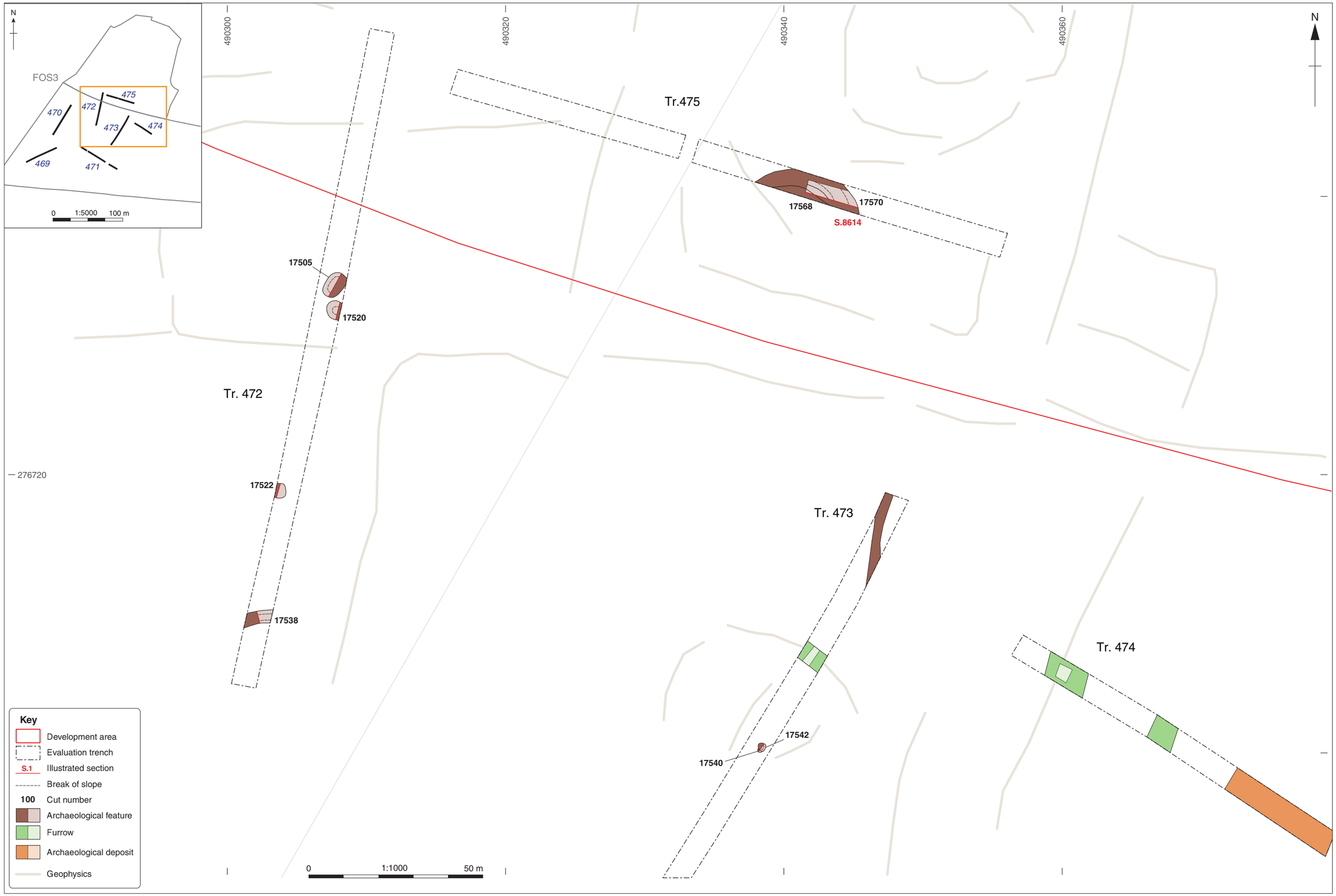

Figure 5: Trenches 472 and 475

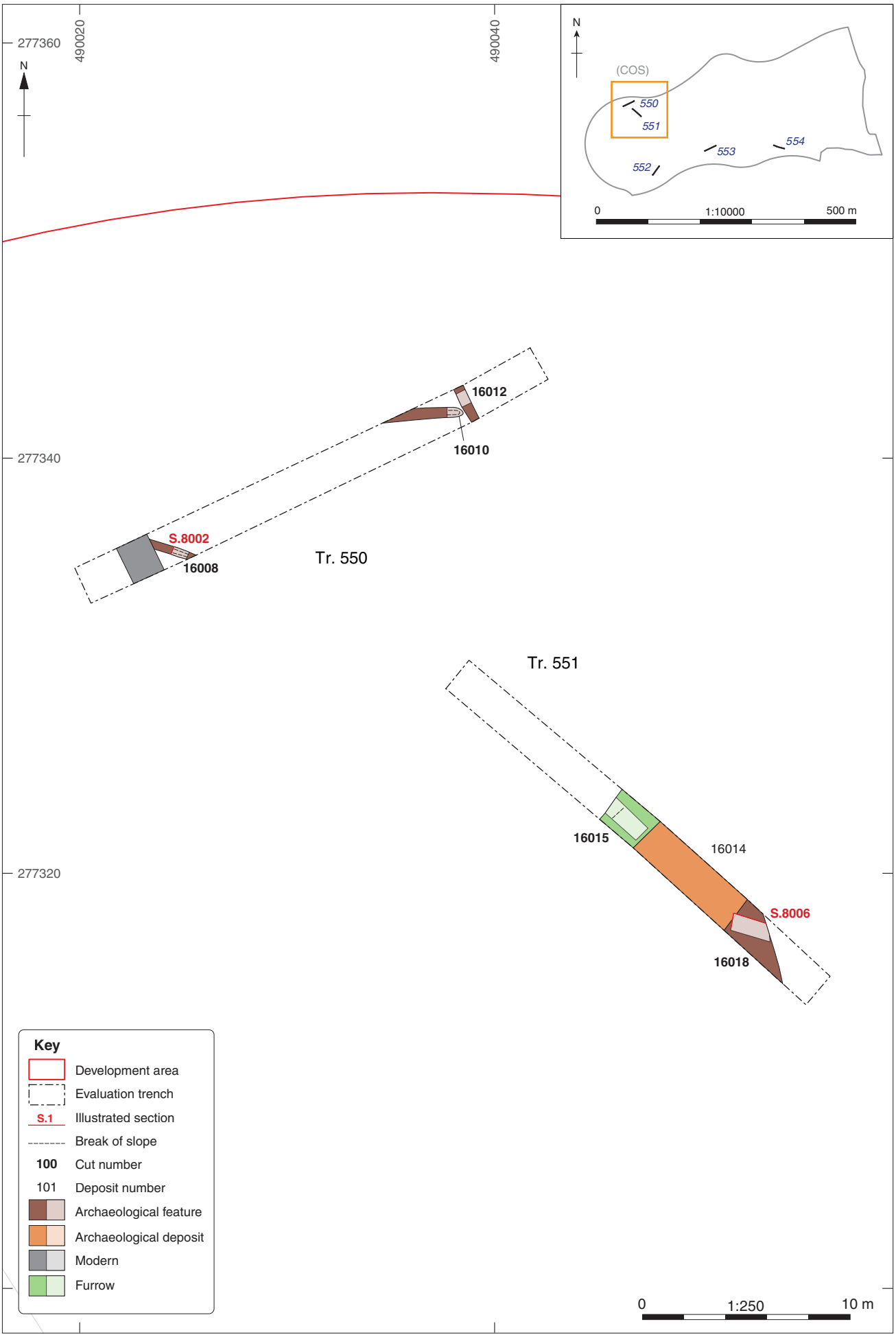

Figure 6: Central Open Space -Trenches 550 and 551

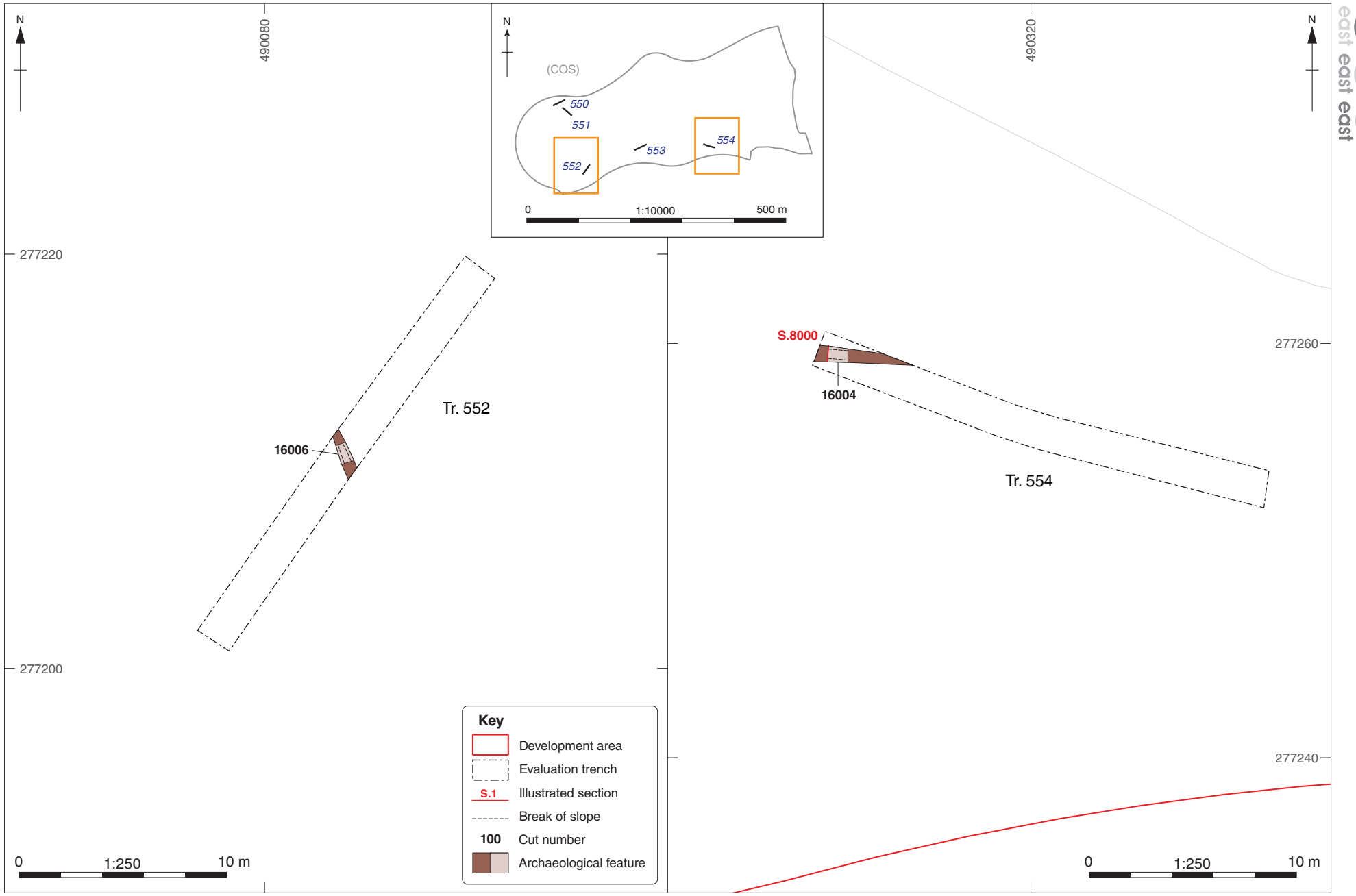

Figure 7: Central Open Space - Trenches 552 and 554

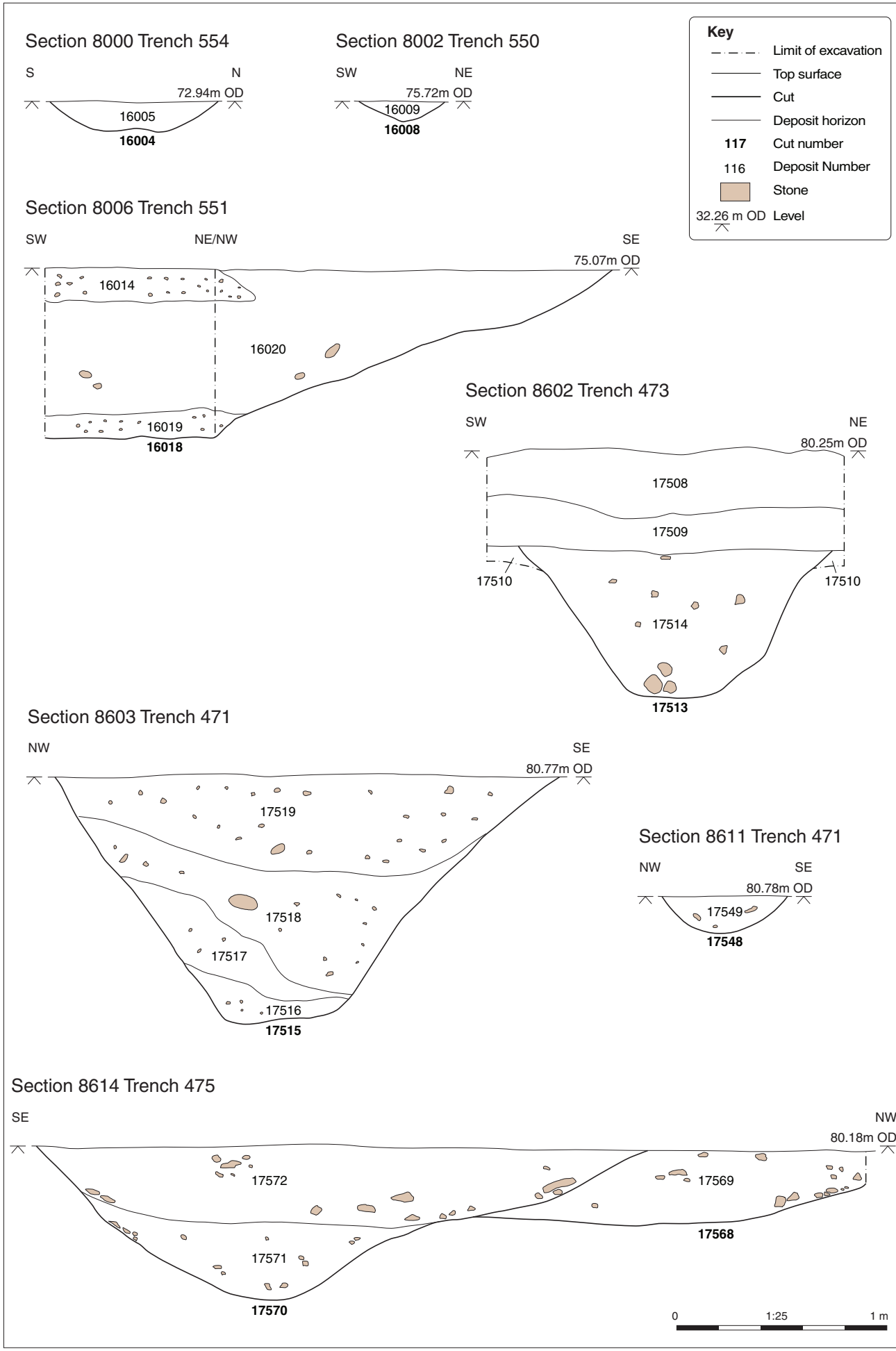

Figure 8: Selected sections

Plate 1: Trench 471, Ditch **17515**, from the north-east

Plate 2: Trench 475, Ditches **17568** and **17570**, from the north

Plate 3: Trench 472, Pit **17505**, from the north-west

Plate 4: Trench 475, Ditches **17568** and **17570**, from the north-east

Plate 5: Trench 556, from the east

Plate 6: Trench 551, Ditch **16018**, from the south

Plate 7: Trench 551, Layer 16014, from the south-west

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