



A14 CAMBRIDGE TO HUNTINGDON IMPROVEMENT SCHEME, CAMBRIDGESHIRE

ARCHAEOLOGICAL INVESTIGATIONS Volume 1: Post-Excavation Assessment

SUBCONTRACT ORDER 3310100/1028/001

commissioned by A14 Integrated Delivery Team (IDT)
on behalf of Highways England

October 2019

MOLA HEADLAND
INFRASTRUCTURE



with



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Post-Excavation Assessment Vol. 1

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SUMMARY

MOLA Headland Infrastructure (MHI) undertook the archaeological mitigation for the A14 Cambridge to Huntingdon Improvement Scheme in advance of the improvements to the A14 trunk road between Ellington and Milton Junction in Cambridgeshire. The work was commissioned by the A14 Integrated Delivery Team (IDT) on behalf of Highways England.

Archaeological mitigation took place in 26 areas, labelled 'Targeted Excavation Areas' (TEAs), along the route (Figures 1-2). The archaeological mitigation that forms the basis of this assessment took place between October 2016 and June 2018 and covered 228ha. Table 1.1 contains information about each of these excavation areas, with details of location, size, dates of excavation, Cambridgeshire County Council Event Numbers, and archaeological remains.

The discussion below summarises the archaeological remains identified, by period.

Prehistoric

The earliest archaeological remains identified across the scheme comprised individual Palaeolithic flint finds, such as the hand-axe from TEA 14, and the Pleistocene vertebrate remains (mammoth, woolly rhinoceros) from the ongoing watching brief during gravel extraction at TEA 28 (detailed in a separate report). Currently only a single Palaeolithic artefact, that of a single abraded worked flint flake, has been recovered during this watching brief.

Evidence for Mesolithic activity was identified across the scheme, in the form of Mesolithic flints (recovered from later features or as unstratified finds). In particular, Mesolithic flints were identified on TEA 19 (within a buried soil in the floodplain of the River Great Ouse); and on TEA 16 (predating the Neolithic and Bronze Age monuments).

Neolithic remains were concentrated on the gravels in the western part of the scheme. Three large monuments were uncovered - two ring ditch monuments in TEAs 2 and 12, and an earlier oval-shaped monument underlying the Bronze Age barrow in TEA 16. The function of these monuments is unclear, but they may have had ritual or ceremonial purposes or acted as community meeting points. Scattered evidence for other Neolithic activity included pits in TEAs 7C, 15, 31, and 32/33.

Bronze Age remains were identified in 10 sites across the scheme. This included evidence for agriculture, settlement, burials and burial monuments, and pit alignments. Limited evidence for definite Bronze Age settlement was found generally across the scheme. The most likely contender was at TEA 15, where an enclosure, a 4-post structure, a series of pits, a burial, and associated field systems were identified. Evidence for Bronze Age agriculture was more common. This comprised co-axial field systems in TEAs 7A and 12, but likely extending across other sites. In TEA 32/33, a larger Bronze Age agricultural landscape was revealed with two enclosures, wells, and field systems. There was also the suggestion of Bronze Age 'light industry' at TEA 10, with the discovery of flint pits possibly used for quarrying and heating activities.

Bronze Age burial monuments were identified in TEA 16 (an early Bronze Age barrow with a middle Bronze Age cremation cemetery inserted into it); TEA 10 (2 'ring ditches' which may have been barrows with an inhumation burial and cremation burials close by); and TEAs 32/33 (3 'ring ditches' which may have been barrows). There was also a Bronze Age cremation cemetery in TEA 28 (55 cremation burials and 4 inhumation burials) on the edge of a paleochannel; and a smaller cluster of 6 Bronze Age cremation burials in TEA 12 with associated post-holes. Individual Bronze Age burials were also found in TEA 7A (2 inhumations) and TEA 12 (2 inhumation burials inserted into the Neolithic ring ditch). Further evidence for Bronze Age activity included pit alignments at TEAs 13, 15, and 16 (those at TEA 15 and 16 respect the Bronze Age barrow); and a circular structure made up of groups of 5 post-holes at TEA 20.

Iron Age

Iron Age activity was widely identified across the scheme, on 22 sites. This mainly comprised rural farmsteads (of different types and sizes), predominantly dating to the middle and/or late Iron Age. There was also some evidence for other (non-agricultural) activities. Evidence for early Iron Age activity was only identified on three sites – TEA 27 (pits and buildings); TEA 29 (six large wells); and TEA 32/33 (pits, wells, and structures). It is possible that further evidence for early Iron Age activity will be identified once the finds assessments have been completed and integrated into the stratigraphic accounts.

Much more evidence for middle and late Iron Age activity, and particularly settlement, was identified across the scheme. These settlements varied in types and size, from very small farmsteads for single families (TEAs 10B East, 21, 46); to larger farmsteads for more than one family group (TEAs 5, 7C, 29, 31, 38, 41); to even larger and more organised settlements (TEAs 10 and 28). There was a mixture of unenclosed and enclosed farmsteads with an apparent move towards enclosed over time, as is reflected at TEAs 13, 28, and 41. There was also a variety of settlement enclosure morphology, including rectilinear enclosures (TEA 13), curvilinear enclosures (TEA 10), and a banjo enclosure (TEA 28). The types of settlement features mainly comprised roundhouses, pits, wells, and other structures.

Evidence for agricultural activity was identified on many sites, particularly associated with the middle – late Iron Age farmsteads. This mainly comprised enclosures and field systems, with the enclosures likely used for livestock and the field systems for both arable and pastoral farming. Clearer evidence for arable farming was identified on some sites, such as the three possible corn-dryers on TEA 10, the granary/storage building on TEA 21, and the strip fields and fourteen 4-post granary/storage structures on TEA 29. Clear evidence for pastoral agriculture was identified at TEAs 7C, 10, 12, and 13, where the layout of enclosures and droveways demonstrates that animals were moved through the landscape and kept within the enclosures. It seems likely that most farmsteads would have pursued both arable and pastoral agriculture.

There was some evidence for other (non-agricultural) Iron Age industry. This includes two early Iron Age iron metalworking tools from TEA 27 (some of the earliest iron metalworking tools uncovered in the country), and six large early Iron Age wells in TEA 29 with evidence for wood-working. In TEA 10 there was a possible Iron Age kiln, roasting pit, and other burnt features (likely later Iron Age); and in TEA 13 there was a middle Iron Age work area with burnt deposits suggestive of small-scale domestic industry.

Thirteen Iron Age burials were identified across the scheme – 8 cremation burials and 5 inhumation burials. These were uncovered in TEAs 7C, 10, 14, 28, and 29, and were generally dated to the middle – late Iron Age. They were either positioned on their own or in very small groups (2-3 individuals). Fragments of human bone was also uncovered in other Iron Age features, possibly relating to excarnation rituals or placed as part of structured deposits.

Roman

Evidence for Roman activity was identified on 20 sites, mostly settlement and agricultural remains, alongside evidence for industry (particularly pottery kilns), trackways, and burials. Eighteen sites contained evidence for Roman settlement, these revealing what appears to be 15 different settlements (some were spread across TEAs; eg TEAs 11 and 12). These comprised small rural farmsteads (TEAs 41 and 46); larger rural settlements for bigger communities (TEAs 10 and 38); and even larger well organized, or potentially 'high status' settlement sites. These included small elements of an extensive 'village' settlement at TEA 2-4 (mostly revealed by geophysical survey); the corner of a large settlement at TEA 5; a large long-lived enclosure with evidence for higher-status activity at TEA 7A; settlement activity on the outskirts of a likely Roman villa at TEA 20; the formal settlement at TEA 28 which has been interpreted as a 'rich' complex farmstead and may have functioned as a 'supply depot'; and the highly speculative 'mansio' off the Via Devana at TEA 32/33. Most of these settlements comprised systems of conjoined enclosures in varying forms – the 'complex' farmsteads that are typical of this region.

Some of the settlements spanned the entire early – late Roman period (TEAs 5, 20, and 28); whereas others were in operation for shorter periods (eg TEA 41 which was only occupied in the early Roman period). The vast majority had preceding Iron Age settlement activity (only TEA 11 lacked this), though there was not always evidence for direct continuity. On some of the sites the impact of the Roman Conquest appears to have been minimal, with the Iron Age farmsteads simply being developed (TEAs 27, 28, 38, and 41). On other sites, however, there was a complete reorganisation of the landscape (TEAs 5, 7A, 14, 20, and 32/33). One site, TEA 10, demonstrated both of these situations, with the southern area of Roman activity incorporating the late Iron Age boundary ditch and simply adding to it, whereas the northern area of Roman activity comprised a completely new rectilinear enclosure which ignored the late Iron Age enclosures. Some of these changes may have happened slightly later in the Roman period, such as at TEA 14, where it has been suggested that the landscape was reorganised at some point during the second century. Nine settlements also had some evidence for early Saxon activity, though here there are fewer indications of continuity in terms of the organisation of the landscape; as noted below, definitive evidence for 5th century activity remains elusive at present.

Agricultural activity, both arable and pastoral, was identified in association with many of these settlements. This is reflected in the systems of fields, enclosures, and droveways laid out across the landscape (TEAs 11, 14, 31, and 46), the animal bone and charred grain assemblages, and individual 'agricultural' features such as the corn-dryers at TEAs 12 and 37/38, hayrick at TEA 41, and the large pond at TEA 28. More widely, a series of early Roman regular closely-spaced cultivation trenches were identified across the central part of the scheme, many lying upon the clayland areas (TEAs 21, 26, 27, and 32/33). It is not clear what was being grown in these, however it has been suggested that they were

used for horticultural crops. Many other examples of this agricultural system have been found in this region.

Forty pottery kilns were identified across the scheme, in TEAs 7A, 10, 11, 14, 15, 16, 20, 32/33, and 38. These were mainly concentrated around Brampton and dated to the first to second centuries AD. On some sites they were in groups of 6-10 kilns (TEAs 7A, 11, 16) suggesting a (semi?) organised industry. There was also the suggestion of a 'potters' workshop' (extraction pits, work surfaces, storage buildings) at TEA 14. Aside from the pottery kilns around Brampton, single kilns used for local production were excavated at TEAs 20, 32/33, and 38.

Evidence for other industrial activities (not pottery production) was identified on three Roman sites. At TEA 4 there was evidence for bone or antler working; at TEA 20 there was a possible blacksmiths' workshop, ovens, working areas, and extraction pits; and at TEA 32/33 there was an 'industrial' area of ovens, metalworking slag, and burnt and fired clay dumps.

Seventy-two Roman burials were identified across the scheme – 56 inhumation burials and 16 cremation burials. Considering the scale of the excavations and the number of Roman settlements revealed, this is remarkably few. Some of these were in small cemeteries, such as the late Roman cemeteries within the enclosures at TEAs 28 and TEA 38, whereas others were on their own or in small groups. One cremation burial in TEA 16, was positioned adjacent to the Bronze Age barrow and may have been deliberately placed there as a way of 'association' with the ancestors. Other unusual burials included an inhumation burial from TEA 7A which was placed within a well without his legs and lower torso; two other inhumation burials from TEA 7A who had been buried in a 'T'-shape but with their lower legs next to their upper body; two inhumation burials from TEA 28 had been decapitated; another inhumation burial from this site had an offering of 32 coins placed over the body.

There was some evidence for the network of roads and trackways which developed in the Roman period. The most obvious of these was the road in TEA 21, which has been identified as Margary's Road 22 which connected Braughing to Godmanchester. Elsewhere, a system of trackways was identified within the Roman settlement at TEA 28 which connected to the surrounding Roman settlements (TEAs 26, 27, and 29); and a number of trackways around the A1 (TEAs 10, 11, 14). The existence of the trackways in the area around the A1, alongside the presence of the Roman settlements here, suggests that there was a Roman road along the line of the current A1 in this location. No direct evidence for the *Via Devana* was found anywhere on the scheme.

Saxon

Saxon remains were identified in ten sites across the scheme and mainly comprised evidence for settlement. This was concentrated around Brampton at the western end of the scheme and at Conington (TEA 32/33) towards the eastern end of the scheme.

There was no clear evidence for fifth century activity on any of the sites. It is possible that there may be some evidence for this in the 'dark earth deposit' at TEA 5, and this will be revealed through the pottery analysis. It is also possible that the latest Roman field system in TEA 20 may have continued into the

early post-Roman period. Furthermore, Early Saxon pottery was identified in contexts alongside Late Roman pottery in TEA 32/33. Further radiocarbon dating may help to identify a 5th century occupation.

Around Brampton, 34 sunken-featured buildings (SFBs) were identified, thought to be early – middle Saxon in date. Some were isolated individual buildings (TEAs 2, 14, and 15); whereas others were in larger groups (TEAs 7C, 10/11/12, and 16). There was a correlation between some of these Saxon buildings and prehistoric monuments: at TEA 2 (1 SFB adjacent to the henge), TEA 10 (5 SFBs close to the ring ditch monuments), TEA 12 (10 SFBs and 14 post-built buildings adjacent to the ring ditch monument), and TEA 16 (3 SFBs adjacent to the barrow). In contrast, there appeared to be a desire to position the SFBs away from Roman features, reflected in their positioning outside the Roman enclosures at TEAs 10, 11, 12, 15 and 16. They ranged in size and included a particularly large example from TEA 10 (SFB 10.5, measuring 10 x 8 x 1m deep). Other evidence related to settlement included pits and wells, including a possible 'latrine' pit at TEA 10.

The early – middle Saxon dispersed settlement developed into a more consolidated unenclosed middle Saxon settlement at TEA 7C, where 38 post-built buildings and 19 pits/wells were identified within an area of 3.4ha. This site also contained evidence for a smaller area of potential later Saxon settlement and agriculture.

At Conington (TEAs 32/33), an early Saxon unenclosed settlement was identified, comprising 24 SFBs, 3 post-built structures, and 40-50 pits and wells. This was replaced by a middle Saxon enclosed settlement with two gated entrances. This may have been designed to control newly-conquered land as it was on the boundary between two minor middle Anglian kingdoms, and the name 'Conington' is a form of Kingston ('Kings Enclosure').

There was limited evidence for other types of Saxon activity. Possible Saxon field boundaries were identified in TEAs 10 and 15, and late Saxon fields in TEA 7C. One Saxon burial was found in TEA 31 during the trenching, and another from TEA 32.

Medieval and post-medieval

Evidence for medieval and post-medieval agriculture was identified on most sites, and mainly comprised ridge-and-furrow cultivation and previous field boundaries (not listed in Table 1.1 as they are considered to hold limited archaeological potential).

Two sites contained evidence for other medieval activity – TEA 7C (the deserted medieval village of Houghton), and TEA 29 (a fifteenth to sixteenth century agricultural enclosure). The remains of Houghton included a trackway, plot boundaries, buildings, and industry (metal-smithing and retting) and are thought to date to the eleventh to thirteenth centuries, with a possible resurgence in the late fourteenth/fifteenth centuries.

Evidence for other post-medieval activity includes two 19th century brick kilns in TEA 7C; post-medieval quarrying in TEAs 8/9, 12, 13, and 32/33; a trackway in TEA 29; a well in TEA 26; a brick culvert in TEA 16; and the foundations of nineteenth to twentieth century buildings in TEAs 27 and 37/38. These are all associated with the agricultural use of the area in the post-medieval period.

Table 1.1 Summary of excavation areas (TEAs) and their archaeology.

TEA	Grid Ref	Area (ha)	Dates of excavation	No. of contexts	ECB Number	Prehistoric	Iron Age	Roman	Saxon	Medieval/Post-medieval
2-4	TL 1973 3273	3.73	Oct-Nov 2016	656	ECB 4844 (TEA 2); ECB 4845 (TEA 3); ECB 4846 (TEA 4)	Henge (Neolithic), cremations (Neolithic).	Agriculture	Settlement, industry (bone/antler-working), 1 cremation.	Settlement (1 SFB, 5 pits).	Agricultural building (post-med).
5	TL 1903 7356	3.47	June 2017 – Jan 2018	4,251	ECB 5160		Settlement ; agriculture (M-LIA).	Settlement, agriculture, 4 burials, dark earth.		
7A	TL 1923 7086	3	Jan-June 2018	4,276	ECB 5046	Field system (BA); 2 burials (BA).	Settlement (M-LIA).	Settlement, 10 kilns, 3 burials.		
7B/7 C	TL 1971 0914	20.9	Oct 2016 – Sept 2018	17,275	ECB 5046	2 pits (Neolithic).	Settlement , agriculture , 5 cremations , 1 burial (LIA).		Settlement (ESax dispersed; MSax village; LSax smaller area); agriculture (LSax fields).	Deserted village (medieval) Brick kilns (post-med).
8/9	TL 1967 7097	7.43	Oct-Nov 2017	37	ECB 5253 (TEA 8); ECB 5254 (TEA 9)					Quarrying (post-med).
10	TL 1943 7043	28	Jan 2017 – May 2018	12,175	ECB 5047	2 ring ditch barrows (BA), cremations (BA), 1 burial (BA), flint pits (BA).	Settlement , agriculture , trackways, burials, 1 kiln, 3 'corn-dryers' (MIA-LIA).	Settlement, agriculture, burials, 7 kilns.	Settlement (5 SFBs, 8 post-built structures, pits).	
10B East	TL 2011 7020	3.63	March-June 2017	587	ECB 5047		Settlement , agriculture , trackways (M-LIA).			Trackway (post-med).
11	TL 1970 6003	8.2	Nov 2016 – May 2018	1,718	ECB 5048			Settlement, agriculture, 11 kilns, 5 burials, 6 cremations, trackway.	Settlement (7 SFBs, pits)	
12	TL 1968 6962	7.79	Nov 2016 – June 2018	3,950	ECB 5049	Ring ditch monument (Neolithic); burials (BA); cremation	Settlement , agriculture (M-LIA).	Settlement (part of that on TEA 11), agriculture.	Settlement (14 post-built buildings, 10 SFBs).	Quarrying (post-med).

						cemetery (BA); field system (BA).				
13	TL 2025 6985	2.2	March-August 2017	955	ECB 5156	Pit alignment (LBA).	Settlement , agriculture (MIA -LIA).			Quarrying (post-med).
14	TL 2005 6930	9.5	Oct 2016 – Jan 2018	3,633	ECB 5050		Settlement , agriculture , 1 cremation (LIA).	Settlement, agriculture, 2 kilns, trackway, 2 burials.	Settlement (1 SFB).	
15	TL 2046 6880	4.4	Oct 2016 – March 2018	807	ECB 5051	Pits (Neolithic); enclosure (BA), burial (BA), structure, pits, and field systems (BA), pit alignment (LBA).	Trackway.	Settlement (southern part of that in TEA 14), Industry (oven, and building associated with yarn production), 1 kiln.	Settlement (1 SFB), agriculture (field system).	
16	TL 2092 6854	5.64	Nov 2016 – June 2018	1,774	ECB 5052	Oval-shaped monument (Neolithic), barrow (EBA), cremation cemetery inserted into barrow (MBA), 2 pit alignments (LBA).	Agriculture .	Settlement periphery, Industry, 6 kilns, 1 cremation, agriculture.	Settlement (3 SFBs).	Brick culvert (post-med).
19	TL 2199 6833	3.75	Feb-July 2017	193	ECB 5157	River bank, buried soil (Mesolithic).	Agriculture .	Settlement (peripheral boundary of TEA 20 settlement), burial, trackway.		
20	TL 2267 6839	11.22	Oct 2016 – June 2018	8,842	ECB 5053	Circular structure (undated).	Settlement , agriculture , trackways (M-LIA).	Settlement (edge of villa), agriculture, 2 burials, 1 cremation, industry (including blacksmiths), 1 kiln, 7 ovens, trackways, dark earth.		
21	TL 2381 6794	4.5	Oct 2016 – March 2018	789	ECB 5054		Settlement , agriculture (M-LIA).	Road, agriculture (cultivation trenches).		
26	TL 2834 6771	3.7	Jan-April 2017	455	ECB 5055		Agriculture .	Agriculture (cultivation trenches,		Well (post-med).

								enclosures), trackways.		
27	TL 2945 6790	6.6	March- July 2017	1,363	ECB 5155	Cremations, 1 inhumation, 1 pit (BA).	Settlement (EIA pits and buildings, LIA full settlement) , agriculture , trackways.	Settlement, agriculture (cultivation trenches), 3 burials, trackway.		19 th century building foundations.
28	TL 3019 6783	40.3	Jan 2017 – May 2018	8,655	ECB 5056	Cemetery (BA).	Settlement , agriculture , 2 burials, banjo enclosure (M-LIA).	Settlement (distribution centre?), agriculture, trackways, 10 burials, 3 cremations, pond.		
29	TL 3055 6744	4	Jan- August 2017	954	ECB 5057		Wells (EIA); settlement, agriculture , cremations (MIA-LIA).			Medieval enclosure. Track (post- med).
31	TL 3177 6755	1.2	March- June 2018	1,434	ECB 5257	1 pit (Neolithic or BA).	Settlement , agriculture (LIA).	Agriculture, trackway.	1 burial and 1 pit (trenching) .	
32/33	TL 3320 6711	21.43	Feb 2017 – May 2018	9,362	ECB 5058 (TEA 32); ECB 5059 (TEA 33)	Pits (Neolithic); agriculture (BA); ring ditches (BA).	Settlement , agriculture (EIA, MIA, and LIA).	Settlement, agriculture (cultivation trenches), 4 burials, 2 cremations industry, trackways, 1 kiln.	Settlement (ESax dispersed SFBs, pits, post-built structures; MSax enclosed settlement).	
34	TL 3488 6623	0.7	Jan-Feb 2017	63	ECB 5060		Agriculture (MIA).			
37/38	TL 3845 6426	12.15	Sept 2016 – Nov 2017	6,173	ECB 5061 (TEA 37); ECB 5062 (TEA 38)		Settlement , agriculture (MIA and LIA).	Settlement, agriculture, trackways, 17 burials, 1 cremation, 1 kiln.		20 th century building foundations.
41	TL 4039 6259	4	April-July 2017	1,224	ECB 5159		Settlement (MIA and LIA).	Settlement, burial.		
46	TL 4091 6169	6.5	Dec 2016 – Sept 2017	597	ECB 5063		Settlement , agriculture (LIA).	Settlement, agriculture.		

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INTRODUCTION

GENERAL BACKGROUND TO THE PROJECT

MOLA–Headland Infrastructure (MHI) were commissioned by the A14 Integrated Delivery Team (IDT), on behalf of Highways England, to undertake the archaeological mitigation for the A14 Cambridge to Huntingdon Improvement Scheme. The A14 Improvement Scheme will improve the A14 trunk road in Cambridgeshire between Ellington (on the western outskirts of Huntingdon, TL 189 747) and Milton Junction (on the Cambridge Northern Bypass, TL 409 612). This includes widening the A1 between Alconbury and Brampton, a new southern bypass across countryside to the south of the existing A14 between Brampton and Swavesey, and widening the existing A14 between Swavesey and Girton. This scheme was subject to a Development Consent Order (DCO) made by the Secretary of State.

This archaeological mitigation followed a programme of geophysical survey and trial trenching across the whole scheme. Areas of archaeological interest were defined as either 'Targeted Excavation Areas' (TEAs; expectation of dense archaeological remains) or 'Strip Map and Sample Areas' (SMS; expectation of less dense archaeological remains). For this Assessment, all areas have been labelled as 'TEAs'.

Twenty-six areas along the route were subject to archaeological mitigation (either as TEAs or SMS), covering a total 228ha (Figure 1). This included areas along the proposed road line itself, new local access roads, borrow pits, flood compensation areas, compound areas, and soil storage areas. Some of the TEAs in the WSIs were not excavated, due to changes made following the results from the final evaluation trenching and changes in construction design – these were TEAs 1, 6, 17, 22, 23, 24, 25, 35, 39, 40, 42, 43, 44, and 45.

Archaeological investigation was carried out across these sites between October 2016 and June 2018. Some archaeological work, in areas which were not accessible, continued past this date (eg TEA 7C, TEA 10, TEA 15, TEA 30, TEA 49, and Section 6 (TEA 48)).

All work was undertaken in accordance with the overarching DCO Written Scheme of Investigation for the Archaeological Investigations (Highways England 2015), and the individual Written Schemes of Investigation (WSIs) which covered the excavations within the different landscape blocks (Atkins CH2M 2016 a-k). It was monitored by Kasia Gdaniec, Senior Archaeologist Cambridgeshire Historic Environment Team (the curator), who signed off and handed areas over for construction on completion.

SCOPE AND PURPOSE OF DOCUMENT

This document is the 'Post Excavation Assessment' (PXA) and 'Updated Project Design' (UPD) for the archaeological mitigation work undertaken on the A14 Cambridge to Huntingdon Road Improvement Scheme to June 2018. As noted above, some archaeological work, in areas which were not accessible, continued past this date (eg TEA 7C, TEA 10, TEA 15, TEA 30, TEA 49, and Section 6 (TEA 48)), and the results of these will be included in an addendum to this document.

Other work carried out as part of the A14 mitigation is detailed in separate documents. This includes Historic Building Recording of Grafham Road Cottages, six milestones along the A1 and A14, and a WWII pillbox (Bassir 2018a-c); extra trial trenching carried out in new areas across the scheme (Jeffery 2019); and the Palaeolithic watching brief carried out during gravel extraction in TEA 28 (Boismier forthcoming).

This document fulfils the requirements for post-excavation assessment set out in the overarching DCO WSI (Highways England 2015; Section 11). It also meets the requirements outlined in the *'MoRPHE Project Planning Note 3'* (Historic England 2008) and ALGAO's *'Note for Post-Excavation Assessment'* (ALGAO 2015).

The purpose of this document is to assess what was found during the A14 excavations (including stratigraphic, artefactual, and environmental evidence); the potential of this to contribute to archaeological knowledge and answer specific research questions; and to identify the work required in analysis to produce the final 'outputs'.

This has involved a critical audit of the recovered evidence, to gain an initial account and understanding of the sites. For the stratigraphic work, the major features from each phase have been grouped and highlighted, to assess how they relate to the overall development of the site. For the specialist work, an assessment of the character, range, date, nature, condition, and significance of artefact groups and environmental samples has been made. The results from the A14 excavations have been placed in context, to gain an understanding of their research potential and significance. This has considered the local, regional, and national research agendas (including the draft revised research frameworks for the East of England which are currently being produced) and takes account of discussions with a range of academics and other specialists.

The UPD element of this document includes an outline of the work required in analysis to answer these research questions, and information about how this will be disseminated (the 'project outputs' – books, articles, monographs, interactive GIS, public events, archive deposition, etc). This includes details of the project team, task list, and programme.

The scale and timescale of this project (with work on the post-excavation assessment starting before the archaeological mitigation finished and the entire PXA and UPD process being completed within a year) has meant that elements, particularly of the specialist work, have been targeted towards gaining an initial understanding of the chronology and broad nature of activity. It has also meant that most of the stratigraphic work has taken place without the benefit of information from the artefactual and environmental data.

This document is divided into three volumes. The outline structure of each of the volumes is as follows:

Volume 1 – Post-Excavation Assessment

- Summary
- Acknowledgements
- Introduction
- Stratigraphic Assessments (for every site)

- Statement of Potential
- Bibliography
- Appendices
 - Copy of Written Schemes of Investigation
 - OASIS Data Collection Forms

Volume 2 – Updated Project Design

- Introduction
- Landscape blocks
- Revised Research Questions
- Project Outputs
- Method Statements
- Project Team
- Task List
- Programme for Analysis

Volume 3 – Specialist Assessments

- 3.1: Finds Reports (non-pottery)
- 3.2: Pottery
- 3.3: Human remains
- 3.4: Animal bone and molluscs
- 3.5: Plant and insect remains
- 3.6: Geoarchaeology

TOPOGRAPHY AND GEOLOGY OF THE SCHEME

The scheme is located on the edge of the Cambridgeshire Fens. It crosses a variety of landscapes, including River Terrace Gravels towards the western end of the scheme, the Great Ouse Valley through the centre, and claylands to the east.

The archaeological excavations along the scheme were originally divided into eleven 'landscape blocks', based on their location, geology, and topography. A separate WSI was written for each of them (Atkins CH2M 2016a-k). These were:

- Alconbury South (TEAs 1-4) – river terrace gravels to the west of Alconbury Brook.
- Ellington North (TEAs 5-6) – river terrace gravels to the north of Brampton.
- Brampton River Gravels (TEAs 7-16) – river terrace gravels descending into the valley of the River Great Ouse, west and south of Brampton.
- Great Ouse Crossing (TEAs 17-20) – either side of the River Great Ouse.
- Ermine Street West (TEAs 21-23) – between the River Great Ouse and Ermine Street.
- Ermine Street East (TEAs 24-26) – Diamicton till soils east of Ermine Street.
- Potton Road Gravels (TEAs 27-29) – between Mere Way and Hilton Road.
- A14 Roman Road South (TEAs 30/31-35) – between Conington Way and Clare College Farm.
- Swavesey South – Borrow Pit 5 and Swavesey Compound.
- Bar Hill North (TEAs 37-38) – between Bar Hill and Dry Drayton junctions.
- Bar Hill East (TEAs 39-46) – between Bar Hill and the Avenue.

The topography of this area is a result of the pattern of rivers and other watercourses which flow northwards into the Fens, creating shallow valleys through the low hills to the south of Cambridge and around Huntingdon. These low hills rise to around 60m-80m AOD, whereas the Fenland landscape is at around 2-5m AOD.

The route of the scheme itself is gently undulating (Figure 1.3), from c 15m AOD at the western end (with a slight hill in the western part of TEA 7C, up to 20m AOD), descending to c 10m AOD around the River Great Ouse. The land rises steeply beyond this, to 24m AOD in the western part of TEA 20, continuing to c 39m AOD in TEA 21, and crossing Ermine Street at around 40m AOD. Beyond that, the land descends to around 15m AOD, and continues at this lower ground-level (between 13m and 18m AOD) into Cambridge.

The River Great Ouse is the major watercourse which crosses this area (Figure 3). It flows on a broadly north-south alignment between Buckden and the Offords, crosses the scheme between TEA 16 and TEA 19, then turns to the east between Huntingdon and Godmanchester and continues on a northwest to southeast alignment to the north of the A14, before turning to the northeast past St Ives. The river has a wide and flat floodplain, much of which has been quarried for aggregates creating lakes and landfill sites.

Smaller tributaries run off the River Great Ouse (Figure 3). Those within the scheme are Alconbury Brook (which flows from the west between Brampton and Huntingdon, to the east of TEAs 2-4), and West

Brook/Hall Green Brook to the south (which flows east-west to the north of TEA 28). Palaeochannels were also recorded in many of the excavation areas (TEAs 5, 7C, 8/9, 10, 16, 19, 28, 31, 32/33, and 34).

The bedrock geology of the scheme (Figure 4) mainly comprises clay - the Oxford Clay Formation (formed in the Upper Jurassic era) in the western part of the scheme; the mudstone of the West Walton Formation/Amphill Clay Formation and Kimmeridge Clay Formation (Upper Jurassic) towards the central part of the scheme; and the Gault Formation (Upper Cretaceous) in the eastern part.

Superficial deposits (Figure 1.4) of alluvium, river terrace deposits and glacial deposits are present in the western part of the scheme (between Ellington and Offord Cluny; TEAs 2 – 19). The alluvium was recorded close to rivers and streams (TEAs 2-4, 5, 16, and 19). Glacial Diamicton (gravels and till, the Oadby Member) are present between Brampton and Ermine Street (TEAs 20 and 21). Superficial deposits are not generally present in the eastern part of the scheme, with the exception of the area of alluvium/river terrace deposits/glacial deposits around Fenstanton (TEAs 27 – 29), and another small area around Conington (TEA 32/33).

Table 1.2 Published geology of the study area

Geological Unit			Geological Period
Superficial (Drift)	Alluvium		Recent and Pleistocene
	River Terrace Deposits	Fourth Terrace	
		Third Terrace	
		Second Terrace	
		First Terrace	
	Glacial Deposits	Oadby Member	
		Diamicton	
Head Deposits			
Bedrock (Solid)		Gault Clay	Upper Cretaceous
		Woburn Sands (Lower Greensand Group)	Lower Cretaceous
		Kimmeridge Clay	Upper Jurassic
		Amphill	
		Oxford Clay	

The majority of the scheme crosses arable agricultural land, comprising fields with small farms. An oil pipeline crosses the sites to the west of the A1, the East Coast Mainline runs between TEA 19 and 20, and existing roads cross some of the TEAs (the B1040 in TEA 27 and New Barns Lane in TEA 32/33).

A summary of the geology, topography, watercourses, and land use of each of the TEAs is included in Table 1.3 below.

Table 1.3 Landscape (geology, topography, watercourses, land use) of each TEA

TEA	Geology	Topography	Watercourses	Land Use
2-4	Oxford Clay Formation, overlain by River Terrace Deposits and alluvial deposits (close to streams).	Flat land: 13-15m AOD. Slopes down slightly from north-south, and down towards streams.	Alconbury Brook (east of site) NE-SW stream between TEAs 3 and 4.	Three arable fields.
5	Oxford Clay Formation, overlain by alluvium (southern and western fields) and River Terrace Deposits (adjacent to A1).	Flat land: 15m AOD. Slopes down slightly from north to south.	Brook 150m to south. Alconbury Brook 500m to north and east. Stream crosses site E-W.	Two arable fields. Oil pipeline crosses site.
7A	Oxford Clay Formation, overlain by River Terrace Deposits.	Slight slope down in western part of site (18mAOD - 15mAOD). Rest of site relatively flat, 15mAOD.	Pond to northwest.	One arable field.
7B/7C	Oxford Clay Formation, overlain by River Terrace Deposits (none recorded in western part of site).	Slope down in western part of site (20mAOD - 15mAOD). Rest of site relatively flat, 15mAOD.	Pond to southwest. Alconbury Brook 750m to the north. Palaeochannels within site.	Four arable fields. Oil pipeline crosses site.
8/9	Oxford Clay Formation, overlain by River Terrace Deposits.	Flat land: 15m AOD.	Lenton Fishing Lakes 400m to the south. Alconbury Brook 750m to the north. Palaeochannels within southern part of site.	Four arable fields.
10	Oxford Clay Formation, overlain by River Terrace Deposits	Gentle slope down towards east. Around 15mAOD.		One arable field. Oil pipeline crosses site.
10B East	Oxford Clay Formation, overlain by River Terrace Deposits.	Flat land: 15m AOD.	Lenton Fishing Lakes 100m to the north.	One arable field.
11	Oxford Clay Formation, overlain by River Terrace Deposits.	Flat land: 15m AOD.	Lenton Fishing Lakes 100m to the east.	One arable field.
12	Oxford Clay Formation, overlain by River Terrace Deposits.	Gently rises to the west. Undulating slopes in western part of the site (partly formed by	Small watercourse runs E-W through the site.	Two arable fields.

		quarrying?). 15m AOD.		
13	Oxford Clay Formation, overlain by River Terrace Deposits.	Flat land: 15m AOD.		One arable field.
14	Oxford Clay Formation, overlain by River Terrace Deposits.	Flat land: 15m AOD.		One arable field.
15	Oxford Clay Formation, overlain by River Terrace Deposits.	Flat land: 14m AOD.		One arable field. Previously fuel depot in western part.
16	Oxford Clay Formation, overlain by River Terrace Deposits. To the east was alluvium (the edge of the floodplain).	Flat land: 15m AOD. Slopes down to east.	River Great Ouse c 300m to east. Infilled quarries between.	Two pasture fields.
19	Oxford Clay Formation, overlain by alluvium (adjacent to the river – within floodplain of River Great Ouse); River Terrace Deposits (central band); and Oadby Member (adjacent to the East Coast Main Line).	Flat land: 10 - 15m AOD.	Adjacent to River Great Ouse. Palaeochannels cross site.	Three fields. East Coast Mainline to east.
20	Oxford Clay Formation overlain by Diamicton Till Deposits (Oadby Member).	Sloping down to south and west, from 24m AOD to 12 - 14m AOD.	River Great Ouse 400m to the west.	One arable field. East Coast Mainline to west.
21	Oxford Clay Formation overlain by Diamicton Till Deposits (Oadby Member).	Relatively flat hilltop, at c 39m AOD.		Two arable fields.
26	Oxford Clay Formation. No superficial deposits.	Flat land: 15m AOD.		Five arable fields.
27	Oxford Clay Formation, overlain by River Terrace Deposits.	Flat land: 15m AOD.		Three arable fields. B1040 crosses site (N-S).
28	Oxford Clay Formation, overlain by River Terrace Deposits.	Flat land: 13m AOD.	West Brook (and backfilled quarry pits) to north.	Two arable fields.
29	Oxford Clay Formation, overlain by River Terrace Deposits.	Flat land: 10m AOD.		Two arable fields.
31	Oxford Clay Formation. No superficial deposits.	Sloped gently from east to west, 13m AOD to 11m AOD.	Palaeochannel within site.	One arable field.

32/33	West Walton and Ampthill Clay formations, overlain by River Terrace Deposits and alluvium.	c 10mAOD. Higher gravel ridge runs N-S.		Three arable fields. New Barns Lane crosses site (N-S).
34	West Walton Formation and Ampthill Clay. No superficial deposits.	Flat land: 15m AOD.		One arable field.
37/38	Kimmeridge Clay, and Greensands. No superficial deposits. Locally there was a gravel island located in the northern part of TEA 38.	Flat land: 18m AOD.		Two arable fields.
41	Gault Clay Formation. No superficial deposits.	Flat land: 17m AOD.		One arable field.
46	Gault Clay Formation. No superficial deposits.	Flat land: 15m AOD.		One arable field.

ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

A large amount of archaeological work has been undertaken in this part of Cambridgeshire. This includes large developments, such as the Northstowe project (Cambridge Archaeology Unit), the North West Cambridgeshire project, and the work along the A428 (Abrams and Ingham 2008). Other work, particularly in the central and western parts of the scheme, has been related to individual smaller-scale developments.

This section discusses the archaeological and historical background of this area (before any A14-related work), primarily using information from the Cambridgeshire Historic Environment Record (CHER). This was supplemented with the revised regional research frameworks for the East of England and other accessible sources.

The CHER search area was 1km around the edge of the DCO boundary (excluding the work in Section 6, Huntingdon). For the purposes of this discussion, entries relating to medieval ridge and furrow cultivation, post-medieval buildings (standing and demolished), undated features, and any of the A14 Scheme work (geophysics, trial trenching, and excavation) have not been included.

The results of this are shown on Figures 5 - 9 and discussed, chronologically, below.

Prehistoric (Figure 5)

Evidence for Palaeolithic activity comprises discoveries of flint flakes, tools, and mammoth remains. These are concentrated around Buckden and Fenstanton and have mainly been found during gravel quarrying. This includes flint flakes, a scraper, and mammoth remains from the Cresswell/Midland Railway Pit in Buckden (CHER 02532); and flint flakes, a hand axe, and mammoth remains from the Cambridge Road Gravel Pits near Fenstanton (CHER 01692). Palaeolithic finds have also been uncovered more widely in the gravel workings around Fenstanton, Hemingford Grey and St Ives (Boismier pers comm).

Evidence for Mesolithic activity mainly comprises flint finds. These are seemingly concentrated in two areas, around Buckden and towards the eastern end of the scheme. This includes those from Buckden Gravel Pits (CHER 02530, 02531), and the flint scatter identified during CAU's evaluation at Longstanton (CHER 16860). A possible Mesolithic flint working site (chipping floor) was also identified during fieldwalking at Slate Hall Farm in Oakington (CHER 07796).

More evidence for Neolithic activity has been identified across this area, including settlement, agriculture, and funerary and 'ritual' monuments. Evidence for Neolithic settlement and agriculture comprises Neolithic tree clearance at Huntingdon Racecourse (CHER 11135); two ditches found in excavations near Thrapston Road in Brampton (CHER 10704a); pits identified during excavations at Buckden gravel pits (CHER 00861a); and a middle Neolithic ditch in an evaluation in Fen Drayton (CHER 25138). Neolithic monuments are relatively common within the Great Ouse valley (Malim 2000). Examples in this specific area include the cursus and mortuary enclosure excavated during the A1-M1 Link Road project (CHER 02117c; SAM DCB55), and monuments identified via cropmarks such as the causewayed enclosure at Brampton Lodge (Bartlett 2009).

Bronze Age activity is represented across the area and includes settlement, agricultural features, monuments, and burial features. Evidence for Bronze Age settlement and agriculture includes an area of early Bronze Age settlement at Huntingdon Racecourse (ECB882 and ECB31512); three ditches identified at Offord Cluny High Street (CHER 15038); two ditches on Boxworth windfarm (CHER 15933); and a late Bronze Age settlement at Longstanton (CHER 16857). Evidence for Bronze Age monuments includes a Bronze Age round barrow excavated at Brampton in the 1960s (CHER 02117); a possible barrow at Huntingdon Racecourse (ECB882 and ECB3152); cropmarks of ring ditches at Van Diemens Lane in Buckden (CHER 08158); four possible barrows in Fen Drayton (CHER 08825); and a ring ditch in Madingley (CHER 08879). The work of the North West Cambridgeshire Project has also revealed a landscape of middle Bronze Age burials, monuments, fields, and settlement features (Evans and Cessford 2015).

Iron Age (Figure 6)

Evidence for Iron Age activity is present across the area. This mainly comprises different types of settlements (ephemeral settlement features for early Iron Age settlement, farmsteads for individual families, larger settlements for larger groups of people, and 'banjo' enclosures) alongside field systems, trackways, and boundaries. These were concentrated on the gravels in the western part of the area, however there is also some evidence for Iron Age settlement on the clay to the east (a trend supported by the middle Iron Age settlements uncovered on the clays along the A421). More widely, Iron Age settlements have been uncovered in large-scale excavations at Clay Farm (Phillips forthcoming) and Trumpington Meadows (Evans et al 2018) outside Cambridge, and Bears Croft Farm near Godmanchester.

There is a lot of evidence for Iron Age activity in the western part of the area, on the gravels around Brampton and Buckden. This includes excavations of middle-late Iron Age settlement enclosures at Thrapston Road in Brampton (CHER 08360, 10704); two phases of Iron Age settlement at Margetts Farm in Buckden (CHER 02484c, 03429); and Iron Age pits in the Buckden Gravel Pit excavations (CHER 00861b, 02060, 02498a). Cropmarks of Iron Age enclosures have also been identified in the Scheduled Ancient Monument to the north of Brampton (DCB55), and to the west and south of Brampton.

Towards the centre of the scheme, numerous cropmarks of enclosures, trackways, boundaries, and field systems, thought to date to the Iron Age, have been identified around Fenstanton, Fen Drayton and Hilton (CHER 08221, 09903, 23528, 25791, 09164, 096666, 23125, APS 2014) and around Conington (APS 2014). Archaeological evidence for Iron Age activity in this area is more limited, but includes ditches uncovered at Middleton Way in Fen Drayton (CHER 24384) and an Iron Age burial at Fenstanton (CHER 03331).

In the eastern part of the area, excavations as part of the Northstowe development uncovered middle and late Iron Age farmsteads, which appear to have been spaced c 300-500m apart (CHER 16343, 16861, 16862, Revised Research Framework for East of England: late Bronze Age to middle Iron Age, p.6). Evidence for late Iron settlement was also uncovered as part of the North West Cambridge project (Evans and Cessford 2015). Aside from these large-scale excavations, an Iron Age banjo enclosure was

excavated at Trafalgar Way in Bar Hill (CHER 19609), and Iron Age enclosures at Girton Road (CHER 09527).

Roman (Figure 7)

Following the Roman invasion, there was an increase in settlement density in the East of England (eg Smith et al 2016, 148). Godmanchester and Cambridge developed as Roman towns and a network of roads were created. Roman activity in the surrounding countryside mostly comprised farmsteads of varying sizes and forms, and field systems. Most of the farmsteads were characterised by groups of conjoined enclosures ('complex' farmsteads; Smith et al 2016, 195). There was a concentration of activity on the gravels, particularly towards the western end, but also on smaller 'gravel islands' within the claylands to the east.

Godmanchester (*Durovigutum*) was the main Roman town in this area and the scheme passes through its hinterland. It lay on a gravel spur along the line of Ermine Street just south of where the road crossed the River Ouse and has seen significant archaeological investigation since the mid-twentieth century (Green 2017). Godmanchester was one of a number of nucleated Roman settlements in eastern and central Britain that seem to have developed on the site of a fort (though this remains debated), though scatters of Iron Age finds suggest there may have been some pre-conquest activity. It developed fairly rapidly in the 2nd century AD when a range of substantial masonry buildings was established, including a *mansio* and bathhouse. Godmanchester's key location on crucial agricultural supply networks was probably the reason for the erection of its walled defenses, thought to date to the later third century AD. Overall, the evidence from both the settlement core and suburbs suggests a contraction of the area occupied during the fourth century.

Two major Roman roads crossed this area – Akeman Street (connecting Cambridge to Cirencester and Brancaster) in the eastern part of the area; and Ermine Street (CHER 15045 which connected London to York) in the central part. Other smaller Roman roads and tracks have also been identified in this area, including the Sandy–Godmanchester road (CHER 17569); the road often termed the *via Devana* (purported to run along the line of the A14 between Cambridge and Godmanchester); and, in all likelihood, a road along the line of the current A1.

Roman activity in the western part of the scheme includes pottery kilns at RAF Brampton (CHER 20638); a settlement at Meadowview Farm (CHER 10172); a settlement at Buckden Gravel Pits (CHER 00861); and settlement identified in an evaluation adjacent to the B1014 (Burrow and Foard-Colby 2006). Further evidence for Roman settlements comprises extensive crop mark complexes, particularly to the west and south of Brampton.

Less evidence for Roman activity has been identified in the central part of the area, with the exception of the excavations at Spring Close in Boxworth, which uncovered ladder enclosures, pits, post-holes, and a pottery kiln (CHER 15635, 17880, 18143). However, it is likely that the cropmark complexes around Fenstanton and Fen Drayton, thought to date to the Iron Age, also contain elements which continued into the Roman period (CHER 08221, 09903, 23528, 25791, 09164, 096666, 23125; APS 2014).

Towards the eastern part of the area, significant Roman activity has been identified in the Northstowe project (CHER 16859, 17672, 17673); and during the North West Cambridgeshire Project (CHER 19117). At Northstowe, this included a linear settlement set off a Roman road, with another larger settlement c 0.5km away with evidence for industry and ritual activities. The North West Cambridgeshire Project identified Roman settlements on the gravel ridge, including a small Roman villa (preserved *in situ*) and a large complex agricultural settlement with evidence for iron-working (Evans and Cesswell 2015).

Saxon (Figure 8)

There are known centres of Saxon activity within Huntingdon (eg the Danish Burgh and a cemetery at White Hill), however, outside of this, evidence for Saxon activity is relatively sparse. This may be partly because of the relative archaeological 'invisibility' of Saxon sites and their continuity into (and therefore under) modern villages.

The only place in this area with definite evidence for Anglo-Saxon settlement was Buckden Gravel Pits, where a building, pits, ditches, and post-holes were identified (CHER 00861c, CHER 02498, CHER 02498c). An extensive Saxon cemetery was excavated in the late nineteenth century at Girton College (CHER 05274), suggesting a nearby substantial settlement. Other evidence for Saxon activity is more limited in nature and comprises a late Roman/early Saxon field system and Saxo-Norman ditches at Spring Close Boxworth (CHER 10826; CHER 15635); and Saxo-Norman quarrying on the High Street in Offord Cluny (CHER 15038). More widely, Anglo-Saxon settlement remains have been uncovered at Stratton in Bedfordshire (McOmish et al 2009) and Cottenham in Cambridgeshire (Mortimer 2000).

Medieval (Figure 9)

During the medieval period, this area was characterised by large swathes of agricultural land with intermittent villages and farmsteads. Huntingdon was the major centre of medieval settlement, trade and industry. The medieval period was when many villages became nucleated, forming our modern villages. This is reflected in the medieval churches within existing villages (Boxworth CHER 00247; Lolworth CHER 01283; Offord Cluny CHER 02458; Fen Drayton CHER 14837). Medieval settlement remains are also regularly found within village cores (eg pits, gullies and ovens in Buckden (CHER 20274); ditches and pits on Offord Cluny High Street (CHER 15038); twelfth to fourteenth century ditches and pits at Wilderspin Garage in Fen Drayton (CHER 20414); and post-holes, ditches, and a cobbled surface on Girton High Street (CHER 19641).

There is evidence for five deserted or 'shrunken' medieval villages in this area: Boxworth (CHER 03528, 19346, 23144, 25512), Conington (CHER 25780, 25782, 25784), Fenstanton (CHER 25793, 25794), Lolworth (CHER 03500, 23129, 25514), and Brampton (CHER 11422). All of these, except Brampton, comprise earthwork remains and have not been excavated. There are no earthwork remains for the deserted medieval village at Brampton (Houghton), and this is only recorded on historic maps.

There is also evidence for five moated manorial complexes at Boxworth (CHER 01088, 01089), Alconbury (CHER 00793), Fenstanton (CHER 01083, 11972), Lolworth (CHER 01090), and Bar Hill (CHER 06127). Archaeological excavation at Fenstanton (Grove House) revealed two tenth to eleventh century pits

within the moated enclosure, evidence for the infilling of the moat, and a fifteenth to sixteenth century ploughsoil sealing the area (CHER 11972). The other examples have been identified through documentary and cartographic sources and earthwork remains.

The agricultural use of the land is reflected in the existence of ridge-and-furrow cultivation, identified across the whole area as earthworks, cropmarks, and in excavations (not plotted on Figure 9 due to the number of CHER entries) Other evidence for medieval agricultural practices comprises cropmarks, earthworks, and excavated evidence for field boundaries, drainage ditches, and trackways (CHER 19819, 23127, 25511, 25785, 25787, 25792, 25795, 25796, 19808, 20185, 25718, 25515, 25524, 25814, and 18875).

Post-medieval/Modern (Figure 10)

Much of this area remained agricultural throughout the post-medieval and modern periods. The evolution of farming practices and process of Enclosure saw a move away from the communal open field system to a more divided landscape, which is reflected both in the landscape today and in the archaeological record (field boundaries around Godmanchester CHER 20246; Girton CHER 25525/25716/25717; and Madingley CHER 25527).

The existing settlements developed over the post-medieval period, and many post-medieval buildings and other structures are recorded on the CHER within all of the settlements. These have not been plotted on Figure 9 (due to the number of entries) and will not be discussed here.

Larger houses, gardens, and parks were created within some of the settlements, namely Alconbury Park (CHER 12316), Brampton Park (CHER 15297), Buckden Little Park (CHER 12317), Conington Hall and Park (CHER 03510, 12279), Boxworth House (CHER 12029), Lolworth Grange (CHER 12156), and Girton College (CHER 12265). Archaeological evidence for earlier phases of some of these buildings and their gardens has been identified.

Some evidence for features associated with the two World Wars is recorded in this area, including pillboxes (Brampton Hut CHER 15210; Fen Drayton CHER 15203; Girton CHER 10397) and a Royal Observer Corps Post in Buckden (CHER 16436). RAF Brampton was a base from the First World War until relatively recently.

Archaeological evidence for other, more general, post-medieval activity has been identified in the area, including brickworks at Boxworth (CHER 25510); earlier farm buildings at Whitwell Farm in Offord Cluny (CHER 24112); and gravel pits in Conington (CHER 25788), Offord Cluny (CHER 15038), Girton (CHER 18274, 19899), and Fen Drayton (CHER 20969, 25812).

PREVIOUS ARCHAEOLOGICAL WORK

Previous archaeological work was undertaken for both the earlier A14 Ellington to Fen Ditton scheme and the current A14 Cambridge to Huntingdon scheme. The list below outlines the different phases of archaeological work undertaken (chronologically), with Table 1.4 outlining what work took place within each TEA. This preliminary work provided the necessary information to decide which areas should be archaeologically mitigated (as either 'Targeted Excavation Areas' or 'Strip Map Sample Areas').

Information from the previous phases of archaeological work is not discussed here as it is considered and discussed in the 'Stratigraphic Assessments' for each site (and in the 'Summary' above).

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Table 1.4 Previous archaeological work undertaken in each TEA

TEA	Trial Trenching	Geophysics	Other
2-4	COPA (Plot 1) MHI (S1-005)	Stratascan (S1-002; S1-003)	
5	MHI (S1-006)	Stratascan (S1-004)	
7A	COPA (Plot 24)	Stratascan (S2-002) Bartlett (R1 and Field 1)	Cox (cropmarks) Fieldwalking (Field 9)
7B/7C	Wessex (1139 and 1141) COPA (Plot 24)	Stratascan (S2-001) Bartlett (R1) Bunn (0226/4; 0226/5)	Cox (cropmarks) Fieldwalking (Fields 3, 4, 8)
8-9	Wessex (1140 and 1143)		Cox (cropmarks)
10	MHI (S2-003) CAU (Area B1) Wessex (1136 and 1137)	Stratascan (S2-004) Bartlett (Field 2) Bunn (0301/1)	Cox (cropmarks) Fieldwalking (Field 2)
10B East			Cox (cropmarks)
11	MHI (S2-003) CAU (Area B1) Wessex (1136)	Bartlett (Field 3) Bunn (0301/2)	Cox (cropmarks) Fieldwalking (Field 1)
12	CAU (Area B1) Wessex (1132)	Bartlett (Fields 7 and 8) Bunn (0218/1; 0218/2)	Cox (cropmarks) Fieldwalking (Fields 10, 11)
13	MHI (S2-006)	Stratascan (S2-005)	Cox (cropmarks)
14	MHI (S2-006) COPA (Plot 28) CAU (Area B2) Wessex (1131)	Stratascan (S2-006) Bartlett (GP1) Bunn (0299)	Cox (cropmarks) Fieldwalking (Field 12)
15	CAU (Area M1)	Bunn (0242/2)	Cox (cropmarks) Burrow & Foard-Colby 2006 (trenching evaluation to north) Fieldwalking (Fields 15, 16)
16	CAU (Area M1) MHI (S2-010)	Stratascan (S2-008) Bunn (0241/2)	Cox (cropmarks)
19	CAU (Area N1)	Bartlett (GP2)	Cox (cropmarks) Fieldwalking (Field 17)
20	CAU (Area C2)	Bunn (0267/1; 0267/2)	Cox (cropmarks) Fieldwalking (Field 18)
21	Wessex (1112 and 1113)	Bartlett (GP3) Bunn (0231)	Cox (cropmarks) Fieldwalking (Fields 20, 21, 22)
26	Wessex (1104) MHI (S3B-003)	Bartlett (GP5) Bunn (0215/2; 0215/2; 0274/1; 0274/2)	Cox (cropmarks) Fieldwalking (Fields 34, 35, 36, 37, 38)
27	Wessex (1099) COPA (Plot 73)	Bartlett (GP6) Bunn (0244)	Cox (cropmarks) Fieldwalking (Fields 39, 40)
28	Wessex (1094 and 1095) COPA (Plot 76) MHI (S3B-006)	Bunn (0189)	Cox (cropmarks) Fieldwalking (Field 40)
29	Wessex (1093)	Bunn (307/1)	Cox (cropmarks) Fieldwalking (Fields 41, 42)
31	Wessex (1086)		Cox (cropmarks)

	MHI (S3B-008)		Fieldwalking (Field 45)
32/33	Wessex (1082) CAU (Area G)	Bunn (0162/1; 0162/2; 0305/1)	Cox (cropmarks) Fieldwalking (Fields 48, 49, 50)
34	Wessex (1071)	Bunn (0305/3)	Fieldwalking (Field 53)
37/38		Stratascan (S4-011)	CAU, Longstanton trenching Fieldwalking (Field 69)
41	MHI (S4-012)	Bunn (0224)	Fieldwalking (Field 77)
46	CAU (Area K) MHI (S4-019)	Stratascan (S4-016) Bunn (0378/1)	Fieldwalking (Field 81)

EXCAVATION METHODOLOGY

The excavation areas were digitally set-out by the A14 IDT engineers, in accordance with the approved 'archaeological mitigation maps'. Wherever possible, excavation areas were stripped and archaeologically investigated in their entirety, however programme and construction pressures meant that some sites were stripped and investigated in a piecemeal fashion (excavating areas for haul roads, compounds, bridge platforms, before the rest of the site).

On sites where the initial stripping and investigation of parts of the site showed limited archaeological remains, it was decided, in consultation with the curator, to stop the archaeological mitigation (ie to not 'archaeologically' strip any more of the TEA/SMS area, and hand the whole area back to the A14 IDT). This happened in TEAs 8, 9, 26, 29, 35, and 37. No archaeological work was done in TEA 39 once it had been established that it had been disturbed by previous construction work. On sites where archaeological investigation showed archaeological features continuing beyond the boundaries of TEAs/SMS areas, the excavation areas were occasionally extended (in consultation with the curator and A14 IDT). This happened on TEAs 5 (Area 4), 14, 28, 29, 32, and 46.

Over the course of the archaeological investigations, construction plans changed and some areas within TEAs/SMS areas were no-longer needed for construction. This meant that certain areas were not archaeologically investigated – areas within TEAs 7A, 7B, 7C, 11, 14, 16, 27, and 28. In TEA 27, the area was stripped at risk by the A14IDT before the release of the final approved design, which meant that much of the area was not needed, and so the exposed archaeological remains were surveyed and surface finds collected before the area was carefully backfilled under archaeological supervision.

On other sites, new areas were needed for construction and so the TEA/SMS areas were occasionally extended. This happened on TEAs 20 (haul road), 21 (water pipe), and 31 (water pipe). Mechanical excavators, equipped with toothless ditching buckets, removed the overburden under direct and continuous archaeological supervision. Archaeological features were mapped using digital surveying equipment, and the stripped surface was metal-detected (NB, on 'Roman' sites, TEAs 5, 7A, and 46, the sites were also metal-detected before it was stripped).

Investigation of archaeological remains was undertaken through hand excavation. A representative sample, as set-out in the WSI (Atkins CH2m 2016a-k), of identified archaeological or potentially archaeological remains were investigated and recorded. Excavation by machine was used to help 'bottom' deep features, or for specific objectives (as discussed with the curator). The only change to this was for the Roman cultivation trenches (uncovered in TEAs 21, 26, 28, and 33) where a lower percentage was excavated due to these being a well-understood feature type known to have little potential.

All recording followed the guidance laid down by the Chartered Institute for Archaeologists (CIfA 2014) and was in line with the approved WSI (Atkins CH2M 2016a-k):

- Recording was undertaken on pro-forma recording sheets which conformed to archaeological standards. All stratigraphic relationships were recorded.

- The excavation areas, all excavated features and contexts, sections, small finds, and drawing points, were digitally recorded using Global Positioning Systems and Total Stations.
- Sections were hand-drawn where features contained more than one fill or where there were relationships.
- Plans were hand-drawn where there was particularly dense or complicated areas of archaeology.
- A full photographic record was taken using digital photography and incorporating black and white print photographs where appropriate.
- Drone photography was undertaken across all major sites.

Bulk environmental samples were taken of features, in line with the overarching sampling strategy. Other environmental sampling methods, including pollen samples, cores, kubiena tins, and phosphate samples, were taken where appropriate. This was through the on-site advice of geoarchaeologists and other specialists. The sampling strategy outlined in the WSI was changed for TEA 7C (following consultation with environmental specialists and the curator) – due to the number of post-holes, it was decided to only sample the corner posts and ‘door posts’ of any buildings.

Finds were retrieved from all contexts and were appropriately bagged and labelled. All small finds were given unique numbers and their locations digitally surveyed. Metal-detecting was carried out throughout excavation.

There were a few areas across the scheme where different archaeological methodologies were pursued:

- TEA 5. A large spread of Roman ‘dark earth’ deposit was identified following the initial phase of stripping. A surface walkover, collecting and surveying the location of all finds, was undertaken; followed by test-pits on a grid pattern (to collect finds and environmental samples). Following this, the ‘dark earth’ deposit was mechanically excavated under archaeological supervision.
- TEA 19, within the River Great Ouse’s floodplain. Here, the platform and haul road were excavated and stoned-up in stages (4 x 4m blocks), to depths of up to 4m. The archaeological strategy therefore comprised recording and photographic evidence of these excavations. A geoarchaeological investigation (25 Dando Terrior rig boreholes on a transect across the site) was also undertaken, to produce a deposit model of the floodplain.

TEA STRATIGRAPHIC ASSESSMENTS

TEAS 2-4

Emma Jeffery

TEAs 2-4 were archaeological sites at the north-western end of the A14 road scheme, within Section 1. They were located to the east of the A1 and south of Alconbury (NGR: TL 1973 3273) (Figures 2.1-2). The total excavated areas covered 37,261m². The areas were previously arable fields on relatively flat land (c 13-15m AOD). The land sloped slightly from north to south, and down towards the streams. Alconbury Brook was located to the east of TEAs 2-4, with another NE-SW aligned stream running between TEA 3 and 4.

The underlying geology of the site was Oxford Clay Formation, a mudstone (NERC 2019). This was overlain by sand and gravel river terrace deposits across most of the areas, with alluvial deposits closest to the streams in TEA 3 and in the eastern part of TEA 4.

Archaeological background

The geophysical survey identified the remains of a circular ring gully (the henge) in TEA 2, a concentrated area of Iron Age-Roman settlement in the centre of TEA 4, a Romano-British 'ladder' enclosure system in the southern part of TEA 4, and agricultural furrows across all three areas (Davis 2016) (Figure 2.3).

The areas were trenched by COPA (Clarke et al 2016; Plot 1) and Mola Headland Infrastructure (MHI 2016; S1-005). This identified ditches and furrows in TEA 2 and 3 (the trenching evaluation did not target the henge), and the 'ladder' enclosure system and activity to the north of the main settlement in TEA 4. The central area in TEA 4 was not trenched because it was removed from the scope of the mitigation works.

Methodology

The results of the geophysical survey and trenching evaluation were used to define the archaeological mitigation areas. TEAs 2 and 3 were designated as 'Strip, Map, and Sample' areas, with a smaller box of 'Targeted Excavation Area' in the centre of TEA 2 (around the henge). Three areas within TEA 4 were designated as 'Targeted Excavation Areas' (4a, 4b, and 4c) with a large 'exclusion zone' in the centre. This was removed from the scope of mitigation works because of the density of archaeological remains indicated by the geophysical survey. All archaeological remains in this area were preserved *in situ*.

TEAs 2-4 were stripped and hand excavated in October – November 2016. All works were undertaken in accordance with the Written Scheme of Investigation (Atkins CH2M, 2016a).

Summary of results

Neolithic / Early Bronze Age

Henge 2.1 was located in the north-eastern corner of TEA 2 (Figures 2.4 and 2.7). It was identified in the geophysical survey but was not investigated during the trenching evaluation. The henge was circular,

and measured 20m in diameter (internal diameter) with opposing entrances to the east and west. The eastern entrance was wider (2.7m) than the western entrance (1.2m). The henge ditch measured between 2.2m and 2.4m wide, by 0.55–0.6m deep. The ditch generally had moderately-sloping sides with a concave base, although in places the ditch sides were steeper (particularly along the internal part of the ditch).

Two or three fills were identified within the henge ditch. These were generally silty-sandy-clay, accumulated via natural silting. Some of the upper fills contained charcoal inclusions, suggesting there may have been human activity (burning) associated with the henge at a later date. In places, there was evidence for an outer gravelly bank – fills (020103; 020072; 020078; 020061; 020081). This was visible as more gravelly and stony fills, which slumped down from the outer edge.

A radiocarbon date was obtained from charcoal from the basal fill of the henge, which was dated to 1871-1659 cal BC (95.4% probability; SUERC-85531) (early Bronze Age).

No internal features were present within the henge.

Pit [020065] truncated the fills of the northern terminal of the eastern entrance [020066]. The pit measured 0.8m in diameter by 0.1m deep and had moderately sloping sides and an uneven base. It had a brown-grey sandy-silt fill with moderate charcoal inclusions. A radiocarbon date was obtained from charred cereal grain from this pit, which was dated to 1901-1695 cal BC (95.4% probability; SUERC-75283) (early Bronze Age).

Four cremation burials were identified in association with Henge 2.1 – two of these were located c 17m to the north-west of the henge (Cremation Burial 2.1 and Cremation Burial 2.2) and two c 1.5m to the south-east (Cremation Burial 2.3 and Cremation Burial 2.4). These cremation burials measured approximately 0.35m in diameter by 0.08–0.18m deep, with gentle sides and concave bases. They were filled with brown-grey sandy-silt with frequent charcoal and bone. The environmental samples also contained charred wood, grain, and seeds. No pottery or other finds were associated with the cremation burials. They are currently undated, although their position close to Henge 2.1 suggests that they were likely associated with the monument.

No other earlier prehistoric features were identified in this area during the excavations.

Iron Age

Enclosures 3.1 were located on the western side of TEA 3, extending beyond the limit of excavation (Figure 2.4). No datable evidence was retrieved from them, but their morphology suggests they were likely Iron Age in date. The northern-most ditch extended eastwards from the limit of excavation before curving around to the south and then back to the east, for a distance of 12m. The southern ditch extended eastwards out of the limit of excavation for 9m. No features were identified within these curving ditches, although they may have been enclosing something to the west (now under the ditch and stream). The ditches measured between 0.58 and 0.7m wide by c 0.5m deep. They had steep sides and a concave base and were filled with silty-clay fills with charcoal.

A single post-hole [030023] was cut into the western (internal) side of the northern-most ditch. The fill of this post-hole appeared burnt. The presence of this post-hole suggests that the enclosures may have incorporated a structural feature.

A drip gully [030015] was identified, on the northern side of the northern-most ditch. This measured 0.21m wide by 0.13m deep and was cut into the main ditch. It may have functioned as a drainage gully outside the enclosures.

Elsewhere in TEA 3 was a single post-hole [030030] located towards the centre of the area. It contained Iron Age (?) pottery. It was not associated with any other features and does not form part of any building.

Within TEA 4b were six stretches of ditch which pre-date the Roman 'ladder' enclosure system (Ditches 4.1, 4.2, 4.3, 4.4, 4.5, and 4.6), and one pit (Figure 2.4). These were all on slightly different alignments from the regular Roman system, were more curved, and some were truncated by the 'ladder' enclosure system. They may be the remnants of curving Iron Age enclosures, and have been discussed as such here.

Ditch 4.1 was located to the east of the 'ladder' enclosure system. It measured 22m north to south, and curved around to the west at its northern end for 9m. There was a terminus (possibly for an entrance) at its north-western end. The ditch itself measured 0.8–1.1m wide by 0.23–0.36m deep, and had moderately-sloping sides and a concave base. It was filled with brown gravel fills, caused by natural infilling, with animal bone and pottery.

Ditch 4.2 was located in the centre of the 'ladder' enclosure system, aligned broadly north to south for 16.8m in length. It slightly curved to the east at its southern end, marking it as different from the regular Roman ditches. The ditch was c 1.2m wide by 0.22–0.25m deep, with gently-sloping sides, a concave base, and a single brown silty-sand fill. There was a possible terminus at the northern end of this ditch.

Ditch 4.3 was aligned east to west in the northern part of the 'ladder' enclosure system, and measured 27m long. It curved to the south at its eastern end and was lost under a furrow. It was cut by the east to west 'ladder' enclosure system ditch in two places, [040197] and [040252]. The ditch was 0.7–0.85m wide by 0.2–0.37m deep, with moderately-sloping sides, a concave base, and sandy-silt fills. In places towards the eastern end of the ditch was a dark upper sandy-silt fill, with frequent pottery, bone, and charcoal. This may have been a dumped deposit, potentially when the 'ladder' enclosure system was established.

Ditch 4.4 was located in the northern part of the 'ladder' enclosure system, aligned broadly north to south, and 19m long. It measured 0.67–1.2m wide, by 0.11–0.49m deep. It shallowed towards the south and disappeared. It had moderately-sloping sides, a concave base, and silty-clay fills. It was cut by later ditches (likely associated with the 'ladder' enclosure system) at its northern end, [040256; 040267; 040271; and 040263], which were themselves cut by post-holes [040261 and 040269].

Ditch 4.5 curved on an east to west alignment along the northern limit of the 'ladder' enclosure system for a distance of 22m. It terminated at its western end and continued to the east beyond the limit of

excavation. The ditch measured 0.4m wide by 0.17m deep, had moderately-sloping sides and a flat base, and a grey-brown clayey fill with some fragments of tesserae. It may have been re-cut towards its eastern end, as east to west aligned ditch [040299] (which formed part of it) cut the north to south Roman 'ladder' enclosure system ditch [040302]. Perhaps the ditch was reused as part of the enclosure system, to drain water away from the main areas of activity.

Ditch 4.6 was located at the southern end of the 'ladder' enclosure system and comprised three short stretches of curving east to west ditches, c 6.8m long. These likely formed part of an enclosure, with the eastern side having been truncated by pit [040416], and terminuses on its western side. The ditch measured 0.38–0.65m wide by 0.29–0.45m deep, had moderately-sloping sides with a concave base, and dark brown-black clayey-silt fills. It was truncated by the north to south Roman 'ladder' enclosure system in two places.

There was one large pit [040415] towards the centre, which was clearly truncated by the Roman 'ladder' enclosure system ditch [040351]. It measured 2.4m in diameter by 0.3m+ deep, and was filled with a grey-brown silty-clay with CBM, pottery, and animal bone. This may have been associated with earlier (Iron Age) activity on the site.

Roman

Roman archaeological remains were identified in all three areas in TEA 4, supporting the evidence from the geophysical survey and trial trenching. This comprised two settlement enclosures (Settlement Enclosure 4.1 and 4.2) in TEA 4A, which represent the northern extent of the dense Roman activity identified on the geophysical survey; a linear 'ladder' enclosure system (Settlement Enclosure 4.3) in TEA 4B representing the southern-most extent of the Roman spread of occupation; and the western edge of a fourth settlement enclosure (Settlement Enclosure 4.4) in TEA 4C.

ENCLOSURE 4.1 (FIGURE 2.5)

Enclosure 4.1 comprised a sub-circular settlement enclosure. The northern part of this was uncovered in TEA 4A, and the rest of it was identified in the geophysical survey. The excavated part enclosed an area 17m east to west by 7.5m north to south (continuing south beyond the limit of excavation). The outer enclosure ditch measured between 2 and 2.8m wide by 0.5–0.8m deep, with moderately-sloping sides and a v-shaped base. It was filled with two/three silty-clay fills. One post-hole [040016] was cut into the enclosure ditch, suggesting there may have been a fence along the inside of the enclosure. Initial spot-dates from the enclosure ditch places it in the Roman period. Pottery from the lower fills was dated to the late 1st – early 2nd century AD and pottery from the upper fills to the 3rd– 4th century.

One later pit [040033] was cut into the enclosure ditch. This cut the upper fills of the ditch [040037], and so represents activity in this area once the main settlement enclosure ditch had been backfilled. There was also an earlier pit [040086] which was cut by the enclosure ditch. This may have been Iron Age in date, although no datable finds were retrieved to confirm this.

There were two north to south aligned divisions with Enclosure 4.1, [040009] and [040011]. Ditch [040009] was 2.6m long, continued beyond the southern limit of excavation and terminated at its northern end.

Ditch [040011] was 7.1m long, fed into the main enclosure ditch at its northern end and continued to the south beyond the southern limit of excavation. Both ditches were 0.7–1m wide by c 0.3m deep and filled with brown clayey-silt fills.

Within Enclosure 4.1 was a large shallow pit [040031]. This measured 1.85m by 1.6m by 0.27m deep, with sloping sides and a flat base. Substantial quantities of Roman pottery, animal bone, and part of a bow brooch were recovered from the fills of this pit. Also, within Enclosure 4.1 was a smaller pit [040007], which measured 0.8m in diameter by 0.16m deep, with a single grey-brown gravelly-clay fill with Iron Age–Roman pottery. There was another single post-hole [040059] to the east of one of the internal divisions within Enclosure 4.1.

ENCLOSURE 4.2 (FIGURE 2.5)

Enclosure 4.2 comprised another sub-circular enclosure. The northern part of this was uncovered in TEA 4A, and the rest of it identified in the geophysical survey. The excavated part enclosed an area c 11m east to west by 5m north to south (continuing south beyond the limit of excavation). The enclosure ditch measured 1.26–2.6m wide by 0.52–0.84m deep and had steep sides and a V-shaped base. It was filled with three/four silty-clay fills, with Roman pottery and animal bone. Pottery recovered from the fills of this enclosure ditch was broadly dated to the Romano-British period. Its position adjacent to Settlement Enclosure 4.1 suggests it was contemporary to it.

There was one NW-SE internal division with Enclosure 4.2 [040065]/[040020]. This was 3.2m long and continued beyond the southern limit of excavation, feeding into the main enclosure ditch at its northern end. It was 0.54–0.64m wide by 0.11–0.12m deep and filled with a brown-grey clayey-silt fill.

A single post-hole [040026] towards the centre of Enclosure 4.2. No other internal features were identified. A NE-SW shallow gully [040018]/[040063] projected out of the western side of this enclosure, and terminated after 6m. This may have been a drainage gully, draining water away from the enclosure.

The eastern side of the enclosure ditch was cut into a buried soil layer – reddish-grey silty-clay with occasional charcoal and pottery within it. It covered an area approximately 8.3m east to west by 5.9m north to south. There were no features beneath this layer. Cutting the enclosure ditch was a relatively large pit [040082], which measured 2.4m in diameter by 0.55m deep. This suggests that there was some later Roman activity in the area after the enclosure ditches had filled.

ENCLOSURE 4.3 (FIGURE 2.6)

Enclosure 4.3 comprised a Roman 'ladder' enclosure system, to the south of the concentrated centre of settlement shown on the geophysical survey. It was positioned on the gravel terrace, away from the alluvial deposits to the east of the excavation area. Initial spot-dating of the pottery recovered from Enclosure 4.3 was generally late 2nd – 4th century, with some sherds more closely dated to the late 3rd – 4th century. This may suggest a potential move in settlement focus to the south in the later Roman period.

Enclosure 4.3 was orientated NE-SW, and measured 115m long by 35m wide. The western side of the enclosure system continued north beyond the limit of excavation, where it likely connected with the

dense activity shown on the geophysics. There were two termini at the southern end of the enclosure system, apparently representing an entrance, although this was remarkably small (c 1m wide). The southern boundary of the enclosure continued to the east beyond the main enclosure and the limit of excavation.

The external ditch of Enclosure 4.3 measured 1.3m wide by 0.45m deep, had moderately-sloping sides and a concave base. It was filled with two/three gravelly-silt fills. Many of these were infilled via natural silting, although in places there were darker black silty fills with higher concentrations of pottery and animal bone, suggesting episodes of deliberate backfilling/dumping.

Internal divisions within the enclosure were identified, on east to west and north to south alignments. These typically measured 1.2m wide by c 0.2m deep. Four main east to west divisions were spaced approximately 25m apart.

- The southern-most projected out of the western side of the enclosure for 20m before terminating.
- The central east to west division projected out of the western side for 29m – the end of this ditch was lost under a furrow and it is possible that it connected up with the north to south division to the south of this. There was also a diagonal NE-SW aligned ditch at the western end of this division.
- The next east to west division continued across the entire width of the enclosure (31m) and truncated the Iron Age Ditch 4.3. This division was connected to two north to south divisions which came south off it.
- The northern-most east to west division also continued across the entire width of the enclosure (31m), truncating Iron Age Ditch 4.5. A north to south division, to the south of this ditch, and another, to the north, were connected to it.
- There was an additional shorter east to west 'spur' off the western side of the enclosure [040281]. This stretched for 6.3m and was equidistant between the two southern east to west divisions.
- There was one further east to west 'spur' off the eastern side of the enclosure [040219]/[040242]. This stretched for 4.5m and was connected to a small north to south division to form a "T"-shape.

There were six north to south internal divisions. Two of these were positioned approximately along the central spine of the settlement, one along the western edge, and the other three were shorter stretches in various locations:

- The main southern north to south division was located in the centre of the settlement and projected out of the southern boundary of the settlement for 12.5m before terminating.
- The other main north to south division which was located in the centre of the settlement projected out of one of the main east to west divisions and truncated Iron Age Ditch 4.3. It ran south for 16m before terminating.

- The northern-most north to south division extended for 16.5m, projecting out of the northern-most east to west division and terminating just before the next east to west division. This was located close to the western edge of the settlement, providing a c 2.5m wide partitioned area off the main settlement.
- The three shorter stretches of north to south ditch were all in the eastern part of the settlement enclosure: [040331]/[040333] measured 5.5m long and was not connected to any other internal divisions; [040220]/[040287] was connected to an east to west spur forming a 'T'-shape; and [040211] measured 10.7m long and projected off one of the main east to west divisions.

Few internal features were identified within the enclosure. There were four pits and five post-holes (comprising two probable buildings). Three post-holes, [040277], [040274], and [040286], were located just to the north of one of the east to west divisions in the centre of the settlement enclosure. They formed an L-shape and were spaced about 4.5m apart. They were circular with diameters of 0.7–0.9m. It is likely that these formed the remnants of a post-built structure. There were another two post-holes located towards the centre of the settlement enclosure: [040508] and [040305]. These had diameters of 0.65m–0.8m, were spaced 5.8m apart, and likely represented the remains of another structure.

Two oblong-shaped pits were identified towards the northern part of the settlement enclosure: [040208] and [040366]. These measured 1.5–1.65m long by 0.7–0.8m wide and c 0.1m deep. They were filled with dark black clayey-silt fills. Another pit [040145] was located at the far southern end of the settlement enclosure. This measured 1.5m in diameter by 0.28m deep, and contained pottery, animal bone, and ceramic building material.

One large pit [040381]/[040430] at the south-eastern corner of the enclosure system contained an assemblage of bone and antler-working waste (see discussion in 'Finds and Environmental' section below). The pit measured 3.3m by 2.7m by 0.47m deep and was filled with a grey-brown sandy-silt. The relationship of the pit with the enclosure system was unclear, as the pit appeared to truncate the external ditch on its southern side, whereas the east to west division appeared to truncate the pit. Nonetheless, it is likely that the pit is associated with the enclosure system itself.

OUTSIDE ENCLOSURE 4.3

There were a limited number of features outside Enclosure 4.3, associated with the activity in the enclosure. Lying 6.5m south of Enclosure 4.3 was Boundary Ditch 4.1, aligned east to west and continuing to the east and west beyond both limits of excavation. The ditch measured 1.27m wide by 0.61m deep. It was undated, although it seems likely that it was contemporary to the 'ladder' enclosure system and may have functioned as a boundary to the entire settlement area, perhaps also defining part of a trackway.

An area of buried soil was identified to the east of the 'ladder' enclosure system. It was a mid-brown gravelly-silt deposit, with bone and pot inclusions. No features were identified cutting through the buried soil or truncated by it, so it was likely contemporary with the settlement.

Cremation Burial 4.1 was located 19.5m to the north-west of the settlement enclosure. It was unurned, placed in a pit, with no associated finds (nb at present it remains unclear if the cremated bone was human or animal). Adjacent to the cremation was pit [040337], which measured 1.22m by 0.62m by 0.2m deep, and was filled with a grey-brown clayey-silt fill, but with no evidence of burning. Lying 5.6m to the west of the cremation burial was a single post-hole [040109]. This suggests there may have been some form of structure or fence-line external to the settlement enclosure.

A north-south aligned ditch [040441]/[040425] and a single post-hole [040419] were also investigated to the south of the 'ladder' enclosure system. The ditch measured 17m long, 0.75m wide, and 0.48m deep, and contained no datable finds. It may have functioned as a drainage gully draining water away from the settlement. The post-hole measured 0.32m in diameter by 0.15m deep and may have been part of a fence line alongside the drainage gully.

ENCLOSURE 4.4 (FIGURE 2.5)

Enclosure 4.4 comprised a boundary ditch with internal settlement activity. The geophysical survey shows that the focus of activity was located to the east of this. Initial spot-dates of pottery from this area were dated to the mid-2nd – 3rd century. This suggests, tentatively, that this settlement area may be slightly earlier in date than the 'ladder' enclosure system to the south. The boundary ditch was aligned north to south for 41m (continuing to the south beyond the limit of excavation). It was V-shaped, c 1.3m wide by 0.7m deep and had a single fill which contained Roman pottery (spot-dated to the mid-2nd – 3rd century).

Two smaller east-west gullies, [040475] and [040479], projected off the main boundary ditch. They were spaced 10m apart, and measured c 0.5m wide by 0.2m deep. The northern-most continued to the east beyond the limit of excavation, whereas the southern terminated after 2.5m. These were subdivisions within the settlement areas. There was one post-hole [040454] in the southern part of this area. It likely formed part of a structure or fence-line positioned to the south or east of this area.

Four small pits were identified in this area, all to the east of the main ditch. They were all relatively shallow (0.1–0.15m deep) and contained grey-brown silty-clay fills. No finds were recovered from any of these pits. These were associated with the adjacent Roman settlement activity.

Saxon

Sunken-Featured-Building 2.1 was located in the north-eastern corner of TEA 2, 25m to the north-west of Henge 2.1 (Figure 2.4 and 2.7). It was not identified in the geophysical survey or trenching evaluation. The building was sub-rectangular, with steep sides and an uneven base. It measured 4m long (north to south) by 3.2m wide (east to west) and was 0.58m deep. The northern part of the building was truncated by a medieval furrow [020142]. Three fills were identified – the main fill (020144) was loose brown-grey sandy-silt fill with frequent charcoal, bone, and pottery, which accumulated via natural silting. The other two fills (020143; 020145) were brown-grey sandy-silty-clay fills and were found on the edge of the structure. They were likely derived from initial weathering.

Five post-holes were identified within the structure – one on the northern side [020152], three on the eastern side [020146; 020154; 020156], and one on the southern side [020158]. All of these cut the base of the structure. The ones on the northern and southern sides of the structure were larger (c 0.5m in diameter and 0.22m deep) than those along the eastern side (c 0.35m diameter by 0.12m deep). This suggests that those on the northern and southern sides were the main supports for the roof, with the others being intermediary supports. This was the only Saxon building identified in this area.

Five small pits (Pit Group 2.1) were identified to the south-east of Sunken-Featured-Building 2.1. Although they contained no datable material, their proximity to the building makes it likely that they were associated with it. The pits varied in size, from 0.7 x 0.57m to 2m in diameter and 0.13–0.73m deep. Two of them [020113 and 020076] contained burnt cobbles and large quantities of charcoal, suggesting they may have been fire pits outside the building. Pit [020139] cut pit [020137].

Three post-holes (Occupation Features 2.1) were identified close to Sunken-Featured-Building 2.1 – [020019] was located 2.5m north of the building; [020101] was 18m to the east; and [020016] was 4.5m to the south. No other post-holes were identified, and so it is not possible to ascertain whether they formed part of fence-lines or other structures. No dating evidence was recovered from any of these post-holes, however their location close to Sunken-Featured-Building 2.1 makes it likely that they were associated with it.

Medieval

Medieval plough furrows were identified across all the excavation areas, demonstrating that these areas were in use as agricultural fields throughout the medieval period. Three different alignments of furrows were identified – north-west to south-east in the northern part of TEA 2; north-east to south-west across the remainder of TEA 2 and TEA 3; and east-west across TEA 4. This suggests that the area was divided into separate fields or furlongs.

Post-medieval

Archaeological remains associated with post-medieval agricultural activity were uncovered across the excavation areas. Field Boundary 2.1, on the western side of TEA 2 (Figure 2.4), comprised an east to west aligned ditch, two drainage gullies, a post-hole, and a pit. The ditch was identified extending out of the eastern section for 9.5m, with two narrower drainage gullies to the north. The post-hole was located between the two drainage gullies, and formed part of a fence-line. The pit was located to the north of the drainage gullies, and contained brick, stone, and wood, suggesting it was a relatively modern dump of material on the edge of the field. This boundary is not shown on any of the historic maps from the 1888 OS Map, although it is on the same alignment as the other post-medieval field boundaries. It must, therefore, pre-date the late 19th century.

Field Boundary 3.1 crossed the centre of TEA 3 on a north-east to south-west alignment (Figure 2.4). This is shown as a field boundary on the Ordnance Survey historic maps from at least 1888 up to 1974.

Pond 3.1 was identified in the south-western corner of TEA 3, continuing beyond the limit of excavation to the west, towards the stream (Figure 2.4). It was machine-cut and filled with a brown-grey silty-clay.

Two gullies, aligned NW-SE and spaced 5m apart, ran down the slope towards the pond. These functioned as drainage gullies into the pond. The gullies truncated the medieval furrows, so were of a later date, although were not shown on historic maps.

Building 2.1 was located towards the southern edge of TEA 2 (Figure 2.4). It comprised seven post-holes, which formed the south-western corner of a square or rectangular structure which measured 6m east to west by 3m north to south. One post-hole [020090] was offset from the others, to the south. Clay pipe and CBM fragments were retrieved from post-hole [020090], suggesting the structure was post-medieval in date. It was likely a field barn or outbuilding associated with the farm to the north.

Finds and environmental summary

Tables 2.1 - 2.3 provides a quantification of the finds, bone, and environmental samples from TEAs 2-4.

The prehistoric finds included early Neolithic to Bronze Age pottery, Mesolithic or early Neolithic lithics, and a middle - late Bronze Age loomweight. Hazelnut and barley were retrieved from the environmental samples from the henge and other prehistoric features, and the animal bone assemblage was predominantly cattle. One fish bone, a fish from the cod family, was also retrieved.

The Roman finds were focused on the later Roman period (4th century). The pottery assemblage was utilitarian in nature and mainly comprised jars, although the presence of flagons and samian ware indicates slightly higher status activity. Most of the pottery had local origins, although there were some regional imports and a few from the continent (eg the samian ware).

The finds assemblage from the Roman features included 41 coins, dress accessories, building materials including box-flue tile, tegula and imbrex roof tiles, fragments of rotary querns and millstone, and three sherds of Roman glass. The date range of these was from the 1st – 4th century, but with a concentration in the later Roman period (4th century).

Of particular interest was the assemblage of bone and antler-working waste. This was for the manufacture of strip veneer, designed to be glued to wooden boxes or furniture, and dates to the 4th century. It included a zoomorphic piece of carved antler and some fragments of jet veneer. One fragment of bone was also inscribed with a late form of Roman writing (Figure 2.8).

The plant remains recovered from the Roman features were mainly spelt wheat and hulled barley, supporting established evidence that arable farming in rural Roman Britain was based on the cultivation of these two crops. The animal bone assemblage included cattle, sheep/goat, and pig, with a higher percentage of major domesticated species than from the earlier periods. Interestingly, 22% of contexts contained worked bone (mainly red deer antler), likely linked to the bone and antler-working discussed above.

The Saxon finds were fewer but included some early - middle Saxon pottery (including 6th century stamped sherds), a knife, and a spindle whorl.

Table 2.1 Quantification of finds from TEAs 2-4

Type	Count	Weight (g)	Date/type
Pottery	74	244	earlier Prehistoric
	232	1346	Iron Age
	2169	24966	late Iron Age – Roman
	349	5156	Post-Roman
Coins	45		
Small Finds	85		
Iron Nails	18		
Lithics	118 (worked)		
	63 (burnt)		
Stone	19		
Glass	3	3.05	Roman
Clay Tobacco Pipe	1		Post-medieval
Wood	1		Post-medieval
Building Materials	291	13369	Roman
Metalwork Residues	20	346	

Table 2.2 Quantification of bone from TEAs 2-4

Type	Count	Weight	Date/type	% of bone assessed
Cremations	3		Neolithic	
Animal Bone	6,255	64,400		100

Table 2.3 Quantification of environmental samples from TEAs 2-4

Type	Count	Date/type
Bulk Environmental Samples	70	

Provisional interpretation and potential

Specific objectives and research aims relevant to TEAs 2-4 were detailed and discussed in the WSI (Atkins CH2M 2016a). The Research Framework for the East of England was also reviewed (Medlycott 2011). Archaeological evidence from TEAs 2-4 comprised a Neolithic / early Bronze Age henge, limited Iron Age activity probably relating to settlement, Roman enclosures lying on the periphery of a more substantial settlement (with evidence for bone and antler-working), and a single Saxon building. There is potential to answer research questions associated with each of these periods.

Prehistoric

A Neolithic cursus and associated ring ditches (one of which was interpreted as a henge) have been identified to the north of Brampton, c 2km to the south-east of this site (Pastscape Monument Numbers 366578, 1330699, 1330683, 1330689, 366715, 1330270, 1330272, 1330705, 1328070). There is therefore the potential to analyse this henge in its wider prehistoric landscape. This will include how the henge may have been associated with landscape features, other prehistoric sites in the area, and whether it

reflects exchange or pilgrimage routes. Analysis of this will also help gain an understanding of the potential interconnected-ness of these monuments.

There is also the potential to gain a greater understanding of the function of these types of monuments. This will involve further analysis of the finds and environmental evidence from the henge ditch, its morphology, and its location in the landscape and in association with other prehistoric monuments. The excavation of this henge has therefore tied into research questions focusing on 'employing a variety of methods to establish or confirm the date and character of a representative sample of sites mapped by the NMP projects' (Medlycott 2011, 14).

Iron Age

Limited evidence for Iron Age activity was uncovered in these excavations – parts of enclosures on the edge of TEA 3, and some ditches underlying the Roman 'ladder' enclosure system in TEA 4B. These are not considered to have any intrinsic potential for further work, though more detailed dating would allow greater assessment of continuity of activity (if any) with the much more expansive Roman settlement. Present evidence indicates the Iron Age landscape does not appear to have been used or incorporated into the later Roman settlement.

Roman

The four Roman enclosures (Enclosure 4.1, 4.3, 4.3 and 4.4) identified in these excavations lie on the periphery of a substantial, nucleated Roman 'village' settlement revealed by geophysics over at least 5 ha. Increasing numbers of such complex Roman rural settlements are known from this region (eg Smith et al 2016, 41-2, 192-206), seemingly tied in with various aspects of an integrated agrarian economy (see Roman research context in Volume 2). Only one element of the settlement here, the 'ladder' enclosure system 4.3, was excavated in its entirety (as the majority of the rest of them were preserved *in situ*), and this has the greatest potential to answer questions associated with Roman settlement.

The wider morphology of the settlement, and specific functional attributes of the excavated enclosures (especially Enclosure 4.3), will be compared with the others across the scheme and in the region, to gain an understanding of how such settlements were organised, functioned, connected to each other, and how they differed across different landscapes and developed over time. Of particular interest in the enclosure system was the evidence for bone and antler working, suggesting that there may have been a furniture workshop operating. The scale and organisation of this industry will be considered – it seems likely that it was at a relatively small-scale artisan level, with little evidence for official exploitation of the industry; this will be considered further in the analysis phase.

The scale of this bone-working has traditionally been difficult to assess, with suggestions that some specialist bone-workers may have been fairly mobile (Crummy 2001). Substantial deposits of bone and antler-working waste are less common on smaller rural sites (with boneworking waste only having been identified at less than 5% of farmsteads) but are more common in nucleated 'villages' (c 20% of sites identified as such; Allen et al 2017, 216) so this provides an opportunity to investigate this further.

These areas will add information to a number of the research questions identified by Medlycott – “Are there chronological/regional/landscape variations in settlement location, density, or type?”; “Understanding of the continuity of Iron Age into Roman settlement and the 2nd century ‘Romanisation’, identifying continuity as well as new settlement structure and land use”; “How does industry relate to topography and natural resource?” (Medlycott 2011, 47-48).

Saxon

Sunken Featured Building 2.1 is one of a number of Saxon buildings excavated along the A14 scheme. The collection of these structures, together, has great potential to increase our understanding of Saxon building techniques, their use, settlement, economy, and how they developed over time. Of particular interest with this building is its location adjacent to Henge 2.1. Other examples of Saxon buildings adjacent to prehistoric monuments have been uncovered in TEA 12 and TEA 16. A specific research question which could therefore be addressed is how the Saxon peoples viewed their prehistoric ancestors. This will tie into research questions focusing on Anglo-Saxon rural landscapes and settlements. Medlycott states that “The region would benefit from a detailed study of the changes in settlement types and forms over time” (Medlycott 2011, 58).

Further work

All contexts have been preliminary grouped at Entity and group level. Results of specialist pottery analysis may require some revision of the stratigraphic sequence discussed here.

It is recommended that a selection of radiocarbon dates is obtained, particularly to establish the relationship between the cremation burials and the ‘henge’ monument. The current date for the ‘henge’ monument is surprisingly late (1871-1659 cal BC), and so it will be necessary to confirm this and consider the implications of this on our understanding of the nature of the monument and its lifecycle. Ascertaining whether the nearby cremations are contemporary with the ‘henge’ will also form an important part of understanding the prehistoric landscape.

Further analysis on the worked bone and antler assemblage from the Roman settlement enclosure in TEA 4B is required. The assemblage of bone and antler off-cuts will be analysed to establish whether it was just being used for furniture, or whether other types of bone finds (personal items, recreational objects, household items, etc) were also being produced. Any evidence for what tools were used (saws/lathes) will also be sought; alongside evidence of where the bone came from. Comparative examples of Roman bone and antler working will be sought. This will include the bone assemblages at Higham Ferrers in Northamptonshire (Lawrence and Smith 2009), Frocester villa in Gloucestershire (Price 2000), and Reader’s Estate in Kent (Johnston 1972); and the late Roman antler workshop at the fort at South Shields (Greep 2015).

TEA 5

Sandy Pullen (PCA)

TEA 5 is located 1.2km west of Huntingdon Racecourse and 0.6km north of the A14, immediately to the west of the A1. The site is centred at NGR: TL 1903 7356 (Figure 5.1). The geology at the site is Oxford Clay Formation overlain by floodplain alluvium and gravel river terrace deposits. Well preserved argillic brown earth soils have formed in the river terrace sands and gravels (Macphail 2017). Situated 500m south of Alconbury Brook, the site is low lying at c 15m AOD. The ground slopes gently uphill from south to north. Higher ground is found nearby to the west and northeast associated with the Oadby Member Diamicton.

The results of trial trenching, the presence of services and a watercourse, together informed the extent and configuration of the targeted excavation areas. Five discrete areas (Area 1 North, Area 1 South, Area 2, Area 3 and Area 4) were excavated between June 2017 and January 2018 (Figure 5.2).

Our current understanding of TEA 5 suggests continuous occupation at the site from the Iron Age into the late Roman period, with some suggestion (from two registered finds) for activity into the early Saxon period. There is no confirmed dating evidence for cut features pre-dating the Iron Age on TEA 5, although a crouched burial has been putatively dated to the Bronze Age (Dixon 2018). No medieval activity was identified across the site.

This stratigraphic assessment describes the key archaeological features on TEA 5. In the field features were assigned to either the Iron Age or Roman period based on their morphology, relative stratigraphic position and some limited spot dating information. In this assessment, archaeological features have been preliminarily grouped (at entity and group level) and assigned to *stratigraphic* sub-periods within the Iron Age or Roman period. Prior to the results of specialist analysis, no attempt has been made to assign features to a transitional late Iron Age/early Roman Period.

Areas 1, 2 and 4, because of their proximity, are summarised together; Area 3, which is set apart from the other areas, is summarised separately. This assessment is focussed on those features whose stratigraphic position is well understood. Discrete features are discussed when they can reasonably (or in some cases speculatively) be assigned to a stratigraphic sub-period.

Summary of results (Areas 1, 2 and 4)

Iron Age

The Iron Age on TEA 5 is divided into three stratigraphic sub-periods (Figure 5.3). In Sub-period 1, Boundary Ditch 5.1 represents the earliest surviving major landscape division. This ditch appears to be maintained periodically and represents an important demarcation (eg of land ownership). The heavily truncated remnant of another early landscape boundary, possibly associated with Boundary Ditch 5.1, is represented by Boundary Ditch 5.2. In Sub-period 2 a series of largely contiguous farmstead enclosures (Enclosure 5.8 to 5.12) are established and these clearly truncate Boundary Ditch 5.1. On morphological and stratigraphic grounds Enclosure 5.13 is regarded as a possible contemporary outlier to the main settlement cluster (Enclosure 5.8 to 5.12). Satellite imagery shows similar enclosures comprising part of

this Iron Age settlement continuing to the south of the targeted excavated area all of which are laid out with respect to a paleochannel which has subsequently been truncated by a modern drainage ditch on the same alignment (Figure 5.4). Eight broad locations for roundhouses (Round Houses 5.1 to 5.8) have been identified. No attempt to group individual ring gullies at each location has yet been attempted but the various episodes of rebuilding are obvious in plan and likely attest to several generations of habitation. These roundhouses and associated domestic features are contained within Enclosures 5.8 to 5.12. By Sub-period 3, a rectilinear field system (Field System 5.2) had truncated the infilled ditches of Enclosures 5.8 to 5.11. Field System 5.2 aligns sympathetically with Enclosures 5.8 to 5.12 and may have formed land parcels attached to a late phase of occupation of these farmsteads.

STRATIGRAPHIC SUB-PERIOD 1

BOUNDARY DITCH 5.1 AND BOUNDARY DITCH 5.2

Boundary Ditch 5.1 is a discontinuous boundary ditch that runs WSW to ENE across Area 2 (Ditch Line 5.1 to 5.4) into Area 1 South where it turns to become aligned southwest to northeast (Ditch Line 5.5 to 5.7). The alignment and siting of Boundary 1 are determined by the underlying topography and given the presence of an earlier paleochannel at this location it is highly likely that this ditch was dug with a view to controlling drainage as well as defining boundaries.

In Area 2, Boundary Ditch 5.1 is composed of two c 1.30m wide ditches. The ditch lines that form Boundary Ditch 5.1 vary in their proximity to each other and inter-cut for much of their length suggesting the boundary was maintained for some time. The boundary may have been reinstated after the formation of a hedge line along the original ditch line. Boundary Ditch 5.1 runs approximately parallel to a modern drainage ditch nearby to the west. The presence of part of a paleochannel [51132] at the southern tip of Area 1 North, lends credence to the view that the modern drainage ditch is on the line of an ancient watercourse. Boundary Ditch 5.1 is truncated by a series of Iron Age enclosure features and Roundhouses (see Sub-period 2 below). Boundary Ditch 5.2, c 1.8m wide, may represent another early landscape boundary ditch, though this ditch is much obscured by later truncation.

STRATIGRAPHIC SUB-PERIOD 2

ENCLOSURES 5.8 TO 5.13

In Area 1 South and Area 2, a series of four enclosures (Enclosures 5.8 to 5.11) truncate Boundary Ditch 5.1. Enclosures 5.8 to 5.10 are contiguous as are Enclosure 5.11 and Enclosure 5.12. The enclosure ditches are c 3m wide and 1.5m deep. Within these enclosures eight roundhouses (Roundhouse 5.1 to Roundhouse 5.8) are associated with domestic features including pits, waterholes and post-built structures.

Enclosure 5.9 is the largest (50 x 40m) and is flanked by Enclosure 5.8 (22 x 17m) to the southwest and Enclosure 5.10 (30 x 22m) to the northeast. Enclosures 5.8, 5.9 and 5.10 are broadly rectangular, being formed of northeast to southwest and northwest to southeast orientated ditches. Enclosure 5.9 has been divided into three smaller rectangular sub-divisions formed from several short ditches. Enclosure 5.11 (40 x 36m) is approximately circular, which might hint that, on morphological grounds, this enclosure is perhaps earlier than the adjacent rectilinear enclosures. The western boundary of Enclosure 5.11 is

obscured by the southwest limit of excavation of Area 1 South. A small square enclosure (12 x 12m), with an entrance at the northeast corner is tacked on to the southern side of Enclosure 5.11. Small enclosures and sub enclosures such as this are often interpreted as animal pens or working areas within Iron Age farmsteads of this type. Enclosure 5.13, a roughly circular enclosure with a diameter of c 25m, was located on the eastern edge of Area 1 South. Though this feature appears early in the relative stratigraphic sequence its contemporaneity with Enclosures 5.8 to 5.12 is currently unknown.

ROUNDHOUSES 5.1 TO 5.8

Within Enclosures 5.8 to 5.11, circular and semi-circular drip gullies mark the former presence of up to eight roundhouses (Roundhouses 5.1 to 5.8). Three of these roundhouses truncate Boundary Ditch 5.1 (Stratigraphic Subperiod 3.1). The internal diameters of these drip gullies range from c 11 m (Roundhouse 5.4 and Roundhouse 5.6) to c 5m (Roundhouse 5.7). Roundhouses 5.4 and 5.6 contained centrally located pits (Pit Groups 5.5 and 5.6). The pit at the centre of Roundhouse 5.4 (c 0.90m diameter) contained a large Iron Age pot.

Roundhouse 5.6 appears to have undergone more than one phase of building. Drip Gullies 5.10 and 5.11 together form an annex or yard area associated with Roundhouse 5.6. Within the largest enclosure (Enclosure 5.9), the positions of some of the drip gullies (eg Roundhouse 5.3) conflict with some of the internal divisions of this enclosure suggesting that a reconfiguration of the enclosures involved re-positioning of dwellings within them.

FOUR-POST STRUCTURES 5.1 AND 5.2

Four-Post Structures 5.1 and 5.2 were excavated in Enclosure 5.10 near to Roundhouse 5.6. These structures were probably related to agricultural processing and storage (eg drying and storage of grain).

PIT GROUPS 5.1 TO 5.3 AND PIT GROUP 5.7

Pits of various sizes appear associated with the occupation of the Iron Age farmstead enclosures. Pit Group 5.1 is located on the southwestern side of Enclosure 5.10 and consists of four similar sized pits (c 0.90 m diameter). Pit Group 5.2, comprising nine pits, was located to the northeast of Roundhouse 5.7 within Enclosure 5.11. The size of circular and sub-circular features in Pit Group 5.2 varies from approximately 0.50m to 1.5m across. Pit-Group 5.3 is located 10m west of Enclosure 5.13. One of these pits [53526] contained an assemblage of Iron Age pottery and truncated Boundary Ditch 5.1. Pit Group 5.7 stands out in the site archive. Described as a 'Bronze Age fire bone pit', this pit contained abundant charcoal and burnt bone with evidence for in-situ burning of the pit edges. The sub-circular pit measured 5m in diameter and exceeded 1m deep. It may have been a large roasting pit. Micromorphological samples were taken from this feature.

WATERHOLES 5.1 TO 5.3

Waterholes 5.1 to 5.3 were large pits measuring between 3m and 4m across and more than 1m deep. Waterholes 5.1 and 5.2 were situated in Enclosure 5.8; Waterhole 5.3 in the northern corner of Enclosure 5.9. These features would have provided a readily available water supply for the occupants of the roundhouses and their livestock. Other large pit features (ungrouped) may also be waterholes.

STRATIGRAPHIC SUB-PERIOD 3

FIELD SYSTEM 5.2

A rectilinear network of ditches (Field System 5.2) forming plots c 34m by 22m truncated the southeast boundary ditches of Enclosures 5.8 to 5.12. The organisation of Field System 5.2 appears to respect the orientations of the enclosed farmsteads (Enclosures 5.8 to 5.12). Field System 5.2 may be associated with a later phase of occupation of Enclosures 5.8 to 5.12 (ie after the ditches had largely silted up) or perhaps after the settlement had relocated elsewhere. A slight change in the alignment of Field System 5.2 at the southern end of Area 1 South suggests that this network of ditches, as with other Iron Age features (eg Boundary Ditch 5.1), is configured with respect to the watercourse nearby to the west. This field system is on the same alignment as Roman enclosures 5.16 and 5.17. One of the northwest to southeast oriented subdivisions of Field System 5.2 (Field Boundary 5.10) was truncated by a non-urned cremation [50236]. This feature contained a black fill rich with large fragments of burnt bone and charcoal.

Roman

The Roman Period on TEA 5 has been divided into four stratigraphic sub-periods (Figure 5.5). Sub-period 1 is represented by stratigraphically early ditch features (Ditches 5.1 to 5.5) and two enclosures that may have operated conjointly (Enclosures 5.14 and 5.15). Enclosures 5.14 and 5.15 are located at the eastern side of Area 1 North and at northern end of Area 1 South respectively. In Sub-period 2, Enclosure 5.16 appears to be part of a rectilinearly organised agricultural settlement where enclosed habitation areas are flanked by peripheral infield plots or fields used for growing food and stock rearing. Enclosure 5.16 represents a significant remodelling of land at TEA 5, perhaps related to changes in land tenure. Pottery from this feature has been spot dated from the late third to fourth century. Waterholes 5.10, 5.11 and 5.12 appear to be associated with Enclosure 5.16. Inhumation burials 5.2, 5.3 and 5.4 may also be associated with this enclosure. During Sub-period 3, Enclosure 5.17 was perhaps a re-configuration of the boundary of the core of this agricultural settlement relative to the peripheral enclosure plots attached to Enclosure 5.16. Enclosure 5.17 partially truncated Enclosure 5.16. Waterhole 5.13 appears to be associated with Enclosure 5.17. A post-built structure (Structure 5.2, perhaps a Roman outbuilding) sits within the bounds of Enclosure 5.17 and may be associated with it and/or with the earlier Enclosure 5.16. An extensive, dark brown, finds-rich layer (Layer 5.1) was assigned to Sub-period 4. This layer, which was described in the field as a 'dark earth', is the latest Roman feature on TEA 5. It is indicative of a land-use change, perhaps relating to increasingly wet ground conditions; an idea supported by the presence of overlying alluvial soils. Alternatively, this layer might be the product of an intensification of agricultural production involving the enrichment of infield plots via manuring.

Aside from Structure 5.2 there is limited direct evidence for Roman buildings on TEA 5. We lack a complete view of any of the Roman enclosures; the northern and eastern extents of these enclosures are unknown. The CBM content of Layer 5.1 is certainly indicative of buildings locally – likely derived from a nucleated farming settlement (or a villa) further east.

STRATIGRAPHIC SUB-PERIOD 1

ENCLOSURES 5.14 AND 5.15

Enclosure 5.14, located at the eastern side of Area 1 North, was formed from a c 2m wide, c 0.60m deep, rectilinear enclosure ditch with a single visible internal division (Ditch 5.1). Enclosure 5.14 was truncated by Ditch 5.2 and Enclosure 5.16. At the northern tip of Area 1 South the corner of Enclosure 5.15 was recorded. This feature occupies a similar stratigraphic position to Enclosure 5.14 and is on the same alignment. Enclosure 5.15 might represent the corner of a domestic enclosure with associated in-field plots (ie Enclosure 5.14) arrayed along its perimeter. Both axes of Enclosure 5.15 are formed of two parallel intercutting ditches (each c 1.80m wide and 0.80m deep) indicating that the original enclosure was re-cut. Enclosure 5.15 was truncated by two post-holes (Structure 5.3), possibly associated with agricultural processing within Enclosure 5.16.

DITCHES 5.1 AND 5.2

Ditch 5.1. was a 1.6m wide, 0.4m deep northwest to southeast oriented ditch located at the northern end of Area 1 North. It was truncated by Enclosure 5.16 and Field System 5.3. Ditch 5.1 occupies a stratigraphic position equivalent to Enclosure 5.14. and judging by its similar alignment may be part of an associated ditch system. If this is the case, Ditch 5.1 is earlier than Ditch 5.2. Ditch 5.2 was a 2.5m wide and 0.50m deep, partly curving ditch at the northeast boundary of Area 1 North. It occupies a stratigraphic position between Enclosure 5.14 and Enclosure 5.16. Ditch 5.2 was truncated by Enclosure 5.16 and Inhumation Burial 5.4.

DITCHES 5.3-5.5

Three east-west oriented ditches of similar dimensions (c 3m wide, 0.80m deep) were excavated near the centre of Area 1 South. They have been tentatively assigned to the earliest Roman sub-phase because one of these features was reported to contain Roman pottery. Ditches 5.4 and 5.5 truncated the Iron Age Boundary Ditch 5.2. These ditches do not align with any other features on Area 1. The function of these ditches is unclear; they may have been excavated to overcome some localised drainage problem.

UNGROUPED DITCHES, AREA 1 NORTH

Several ungrouped curvilinear ditches in the southern third of Area 1 North (see Figure 5.5) are difficult to place stratigraphically with much confidence. On balance they seem stratigraphically to predate Enclosure 5.16 (discussed below). Roman pottery from ditches [50471] and [50466] has been spot dated to the late second to fourth centuries.

STRATIGRAPHIC SUB-PERIOD 2

ENCLOSURE 5.16

Enclosure 5.16 is the earliest and largest of the two main Roman enclosures excavated at TEA 05 (Enclosure 5.17 is the later one). Enclosing more than 9000 square metres, it signals an extensive re-organisation of the site, perhaps related to changes in land tenure (Green 2017). Three waterholes, three inhumation burials and a field system may be associated with this feature (see below). Four spot dates from Enclosure 5.16 (from Area 1 North) range from the late third to fourth centuries.

The external boundary of Enclosure 5.16 was generally c 2m wide and c 1.10m deep. The southern boundary of Enclosure 5.16 was re-cut at least three times. Because of this re-cutting, the south-eastern perimeter of Enclosure 5.16 was up to 4m wide. Along the inside edge of this enclosure were a series of rectangular sub-enclosures or plots (c 40 x 20m). The internal enclosure ditches that define the plot boundaries were c 1.1m wide. The northeast to southwest internal boundary of these plots (Enclosure Ditch 5.6) appears to have been episodically re-cut. These plots do not contain evidence for domestic settlement (ie houses) and probably represent the intensively cropped infields (Green, H. 2017) belonging to a nucleated(?) settlement whose centre lay beyond the eastern limit of excavation of TEA 5.

The central area of the enclosure was occupied by the stratigraphically later Enclosure 5.17. Internal partitions along the southern edge of Enclosure 5.16 (Enclosure Ditch 5.50 to 5.52) were truncated by the southern boundary of Enclosure 5.17.

STRUCTURE 5.1

Structure 5.1 was comprised of two post-holes set 4.7m apart and an equal distance from the centre of Waterhole 5.10. Structure 5.1 may have been designed to draw water from Waterhole 5.10 by means of buckets attached to a cantilevered beam.

WATERHOLES 5.10 TO 5.12

Three waterholes for people and livestock appear associated with Enclosure 5.16. Waterhole 5.10, a large circular pit c 5m in diameter and 0.98m deep, seems to have been deliberately located at the southwest corner of Enclosure 5.16. The apparent later stratigraphic position of this waterhole relative to Enclosure 5.16 suggests that if originally contemporary, it continued to be maintained for some time after the southwest corner of Enclosure 5.16 had silted up. Waterholes 5.11 and 5.12 are within plots belonging to Enclosure 5.16 and of very similar form and dimensions to Waterhole 5.10.

INHUMATION BURIALS

Four inhumation burials were recorded in Area 1 North. Three of these, located on the eastern side of Area 1 North, are within Enclosure 5.16 (Inhumation burials 5.2 to 5.4). The deepest and only well preserved of these burials (Inhumation 5.3) occupied a rectangular cut 2m long and 0.7m wide. The skeleton lay in a supine and extended position. It was oriented NNE to SSW. Eight coffin nails were recovered, three at the foot end of the burial and five at the head end.

An articulated lamb skeleton was found in a small (0.60m diameter) circular pit (Pit Group 5.8) 20m to the southeast of Inhumations 5.2 to 5.4. The dating of this presumed 'special deposit' remains to be established; it may be associated with Enclosure 5.16 or with the earlier Enclosure 5.15.

A crouched burial (Inhumation 5.1) c 30m to the west of Enclosure 5.16 may date to an earlier period (Dixon 2018) but similar burials are also known from the Roman period (Smith et al 2018, 229-30).

FIELD SYSTEM 5.3

Field System 5.3 overlay Ditch 5.1 stratigraphically and contained Roman pottery. Given its alignment and position, it was plausibly a field system associated with Enclosures 5.16 (and subsequently 5.17).

STRATIGRAPHIC SUB-PERIOD 3

ENCLOSURE 5.17

Enclosure 5.17 was a rectilinear enclosure with two internal ditches that occupied part of the area already encompassed by Enclosure 5.16. This enclosure was possibly a re-configuration of the boundary of the core of this agricultural settlement relative to the peripheral enclosure plots attached to Enclosure 5.16. Alternatively, Enclosure 5.17 may represent a north-eastward shift of the edge of infield plots attached to the settlement. The external enclosure ditch varies in width between 3m and 4m and is about 1.10m deep. The north-south oriented Ditch 5.7 was a later addition to Enclosure 5.17.

STRUCTURE 5.2

Structure 5.2 was located inside Enclosure 5.17 near its southern boundary and the eastern edge of Area 1 South. It comprised a group of up to eight post-holes that may have formed part of a c 7m+ x 3.5m rectangular building. As with all other features within the extent of Enclosure 5.17, Structure 5.2 was sealed by Layer 5.1. Apart from this feature there is a lack of direct evidence for buildings of the Romano-British farmers on TEA 5, contrasting with the plentiful evidence for domestic structures in the Iron Age on this site. As elsewhere, the relative paucity of archaeological evidence for structures in Roman period rural sites does not necessarily mean a lack of domestic occupation (cf Smith et al 2016, 50).

WATERHOLE 5.13

A large pit (Waterhole 5.13) measuring 8 x 7 x 1m+, truncated the western boundary of Enclosure 5.17. The waterhole seems to have been carefully located with respect to the western boundary of Enclosure 5.17. Its later stratigraphic position might result from the continued use and maintenance of this waterhole after the infilling of Enclosure 5.17.

STRATIGRAPHIC SUB-PERIOD 4

Layer 5.1 was an extensive, finds rich 0.20m to 0.40m thick silty layer covering an area of c 0.2ha. This layer was described in the field as a “dark earth” and was inspected by Richard Macphail (2017a, 2017b). Layer 5.1 was investigated through surface artefact collection, dry sieving and an extensive programme of test-pitting (Dixon 2018). In addition to frequent pottery and animal bone, significant quantities of CBM, derived from buildings on or near the site, and 183 coins were recovered from this deposit.

As surveyed, Layer 5.1 occupied an area north of the southern boundary of Enclosure 5.16 and east of the western boundary of Enclosure 5.17 – though on the drone photograph the darkest area of this deposit appears constrained within the perimeter of Enclosure 5.17 (Figure 5.6). The dark and finds rich upper fill of Enclosure Ditch 5.17 is tertiary infilling associated with the formation of the “dark earth” deposit (Layer 5.1). The “dark earth” itself was sealed by clay-rich alluvial deposits which Macphail (2017) suggested date to the Saxon or medieval periods; the modern sub-soil is formed in these alluvial deposits.

No Roman features were *observed* to be cut through Layer 5.1. Assuming this is not a visibility issue (pottery analysis should confirm this), the “dark earth” was formed when Enclosure 5.17 had perhaps become peripheral to the main settlement area and was used as a dumping ground for domestic waste (Dixon 2018) in combination with other activities (eg keeping livestock). This layer appeared to be

homogenous and much of the pottery content was heavily abraded which may indicate it was disturbed by trampling and/or later ploughing.

A somewhat different (though related) explanation is that the dark colour of the deposit represents a deliberate enrichment of the soil through manuring (with midden material and animal dung) reflecting an intensification of agricultural activity (eg in response to population pressure – see Taylor 2000; Lodwick 2017, 37-41). Manured and continuously cropped arable is the characteristic feature of the infield areas which tightly circled the Roman settlement at Godmanchester (Green & Malim 2017).

Two Saxon finds - a narrow annular brooch possibly dating to the 5th century, and a 7th-9th century fragment of a cast decorative fitting fragment with a zoomorphic head – suggest there may have been some activity here into the Saxon period.

Summary of results (Area 3)

Iron Age

In Sub-period 1, an extensive boundary ditch was recorded (Boundary Ditch 5.3) (Figure 5.3). The line of this ditch was periodically maintained indicating an important land division (perhaps formalising land ownership). The truncated remains of Field System 5.1 sit roughly perpendicularly to Boundary Ditch 5.3 and may be associated/contemporary with it. In Sub-period 2, Boundary Ditch 5.3 (which may have persisted as a hedge line) is truncated by a series of enclosures dispersed at intervals along its length (Enclosures 5.1 to 5.7). Evidence for structures within these enclosures is poor; they may have been livestock enclosures. A single drip-gully hints at the possible presence of a roundhouse in Enclosure 5.4 (Roundhouse 5.9). With the occasional exception (Pit Group 5.4), few of the pits apparently associated with this settlement are finds rich.

A better understanding of the chronology of Area 3 will assist with the interpretation of these enclosures; they may represent an earlier, more ephemeral, Iron Age settlement than the large contiguous enclosures recorded in Area 1 South and Area 2.

STRATIGRAPHIC SUB-PERIOD 1

BOUNDARY DITCH 5.3

Boundary Ditch 5.3 was a c 1m wide, discontinuous boundary ditch that ran approximately NNE to SSW across Area 3. It showed evidence of episodic re-cutting. This boundary ditch was truncated by series of enclosures located at intervals along its length (Enclosures 5.1 to 5.7). Boundary Ditch 5.3 continued being maintained during the occupation of the farmstead enclosures. Two pieces of stratigraphic information support this contention. Firstly Enclosure 5.4 is truncated by Ditch-Line 5.16, an apparent restatement of the line of Boundary Ditch 5.3. Secondly the stratigraphic position of Waterhole 5.9 (plausibly associated with the farmstead enclosures) between phases of Boundary Ditch 5.3.

FIELD SYSTEM 5.1

Field System 5.1 is formed of two roughly parallel ditch lines which run ESE to WNW across Area 3. These c 1m wide ditch lines are set out nearly perpendicularly to Boundary Ditch 5.3. This field system is

truncated by Waterhole 5.8 associated with the enclosed farmsteads described in Sub-period 3.2 (see below).

STRATIGRAPHIC SUB-PERIOD 2

ENCLOSURES 5.1 TO 5.7

Seven relatively small enclosures, measuring c 10m to 15m across, were disposed at intervals along the length of Boundary Ditch 5.3. These open enclosures were formed from both curved and straight ditch elements. A repeated component of this group of features are similarly oriented (open to the north) roughly C-shaped ditches (see Enclosures 5.1, 5.2 and 5.4; Figure 5.3).

DOMESTIC FEATURES

Within Enclosures 5.1 to 5.7 there is little evidence for dwelling structures. There is a drip-gully (Roundhouse 5.9) and an isolated post-hole [58309] in Enclosure 5.3. Another isolated post-hole [58330] was excavated within Enclosure 5.4. A few small pits hint at the domestic activity associated with these enclosures. On the northern side of Enclosure 5.4, an elongated pit (Pit Group 5.4) with a dark fill contained an abundance of animal bone and pot. Large pit features (up to 5m across with a maximum recorded depth of 1.6m) were probably watering holes for people and their livestock (Waterholes 5.4 to Waterhole 5.9). These pits vary in form from quite irregular (eg Waterhole 5.5) to circular (Waterhole 5.4). Some of these large pits seem to have been deliberately located along the line of Boundary Ditch 5.3 (eg Waterhole 5.8, Waterhole 5.9 and Waterhole 5.4).

Finds and environmental summary

Tables 5.1 - 5.3 provides a quantification of the finds, bone, and environmental samples from TEA 5.

There was limited evidence for activity predating the Iron Age. One Bronze Age awl was uncovered, associated with Inhumation 5.1; an unidentified prehistoric antler artefact; and 41 worked flints, possibly indicating Mesolithic or early Neolithic blade-production. There was no earlier prehistoric pottery.

The Iron Age pottery was mainly dated to the middle – late Iron Age and was focused on handmade small-medium ellipsoid vessels, with some globular jars, shouldered vessels, and storage jars. Textile-working equipment, including loomweights, a comb, and a bone needle, were also identified, along with a middle Iron Age sword hilt guard. The ceramic building material included daub, fired clay with wattle impressions, and kiln furniture.

The Roman pottery assemblage spanned the entire Roman period, although 65% of the assemblage was from the later Roman period (4th century onwards) and came from Layer 5.1. The pottery mainly comprised local wares from the Lower Nene Valley and Horningsea, with some regional imports. A variety of forms was represented (jars, beakers, bowls, dishes and mortaria). The Roman registered finds included 175 coins (mainly 4th century radiates), dress accessories, tools, a possible 'curse tablet', 16 fragments of stone (mainly quernstones), 11 pieces of Roman glass, Roman tile (imbrex, tegular and box-flue), and two smithing hearth bottoms.

Two registered finds may indicate Saxon activity on the site – a narrow annular brooch which may date to the 5th century, and a cast decorative fitting fragment with a zoomorphic head which could date to the 7th – 9th centuries.

The Iron Age plant remains were mainly hulled barley, with occasional bread wheat. There was very little chaff and few weed seeds, suggesting that cereals were processed elsewhere. The Roman plant remains comprised spelt, hulled barley, and occasional emmer, bread wheat, and oats.

The animal bone assemblage was focused on cattle, sheep/goat, pig, horse, and dog. More cattle, pig, and dog were identified in the Roman features. There was also some poultry (chicken and goose) and domestic fowl (moorhen, roe deer, mouse, etc). Little evidence for bone modification (including burning and butchery) was identified in the assemblage.

Table 5.1 Quantification of finds from TEA 5

Type	Count	Weight (g)	Date/type
Pottery	3,884	59,652	Iron Age
	15,280	151,092	Roman
Coins	175		
Small Finds	716		
Lithics	41 (worked)		
	535 (burnt)		
Stone	16		
Glass	15	36.7	
Building Materials	490	28,293	
Metalwork Residues	456	2,227	

Table 5.2 Quantification of bone from TEA 5

Type	Count	Weight (g)	Date/type	% of bone assessed
Cremations	2			
Inhumations	7			
Disarticulated bone contexts	1			
Animal Bone	11,670	117,750		41

Table 5.3 Quantification of environmental samples from TEA 5

Type	Count	Date/type
Bulk Environmental Samples	245	
Monoliths	8	
Kubiena tins	9	
Waterlogged	4	

Provisional interpretation and potential

Excavations at TEA 5 revealed features belonging to farmsteads and associated features that date from the Iron Age and Roman periods. It therefore represents a promising opportunity to further our understanding of Iron Age and Roman rural settlement distribution, density and dynamics (Medlycott 2011; Smith et al 2016; Allen et al 2017).

During the Iron Age there are two concentrations of enclosures on TEA 5; a linear arrangement of partial enclosures in Area 3 and a contiguous series of enclosures spanning Area 1 South and Area 2 (which continues southwards into the unexcavated area). Whilst the domestic nature of the settlement in Area 1 South and Area 2 is made clear by the presence of up to eight roundhouses, the nature of the enclosures in Area 3 is somewhat ambiguous. The Area 3 enclosures may have been primarily for livestock rather than a different type of domestic settlement. The chronological development and spatial organisation of Iron Age farmstead settlements will be better understood when the results of pottery analysis are available.

The archaeology in Area 1 South is particularly concentrated; primarily a result of the superimposition of archaeological features (ie rather than a density of contemporaneous features). TEA 5 has therefore a strong potential to inform our understanding of settlement and landscape development from the Iron Age into the Roman period

During the Roman period, developments at TEA 5 were likely to have had social and economic associations tied with Roman Godmanchester (*Durovigutum*), situated c 6km to the southeast, where Ermine Street crosses the River Great Ouse. It is one of a growing number of farming settlements excavated in the hinterlands of this 'small town'.

No doubt because of its strategic position, Godmanchester had become an increasingly important nucleated centre during the second and third centuries AD. The 183 coins recovered from "dark earth" Layer 5.1 demonstrate that the community at TEA 5 was by the later Roman period fully integrated into the Roman monetary economy. Green and Malim (2017) have recently emphasised that agriculture was the mainstay of the Roman economy at Godmanchester; study of TEA 5 will provide a more informed understanding of the economic basis of the rural hinterland (Allen et al 2017). The economic relationships of rural farming communities such as TEA 5 to other contemporary communities as well as to the local town and villa estates of the Godmanchester hinterlands and beyond will form a key theme in future research.

The rectilinearly organised enclosures (Enclosures 5.14, 5.15, 5.16 and 5.17) represent episodic largescale re-organisations of Roman activity on site, related to changes in agricultural practice which are known to be underway locally from the late Iron Age (Hinman pers. comm.) and possibly land tenure, including land consolidation. Actual areas under cultivation at any one time (both infields and outfields) would have varied considerably overtime due to such factors as pressure on land resources resulting from changing population levels (Green & Malim 2017; Scullard, 1979; Taylor 2000).

Environmental factors may also have put pressure on land resources; a conjectured increase in the wetness of the site over its period of occupation may have determined the changing suitability of certain activities across the site. This appears ultimately to have led to abandonment of parts of the site as a *settlement* area. It is notable that the lower (and wetter) southern part of the Area 1 South and Area 2, intensively occupied during the Iron Age, is not occupied in the Roman period. A rise in the water table, apparently occurring in the Fens starting in the late Bronze Age and persisting into the late Iron Age, may have led to relinquishing of some low-lying sites for new settlements on higher ground (Abrams, J & Ingham, D. 2008). The alluvium associated with the River Great Ouse overlying the so-called “dark earth” is good evidence that this area was subject to flooding in the past; though the date of this alluvial incursion has not been demonstrated.

Layer 5.1. was subject to special research interest during the excavation and was extensively test pitted and sampled (including micromorphologically). A good understanding of Layer 5.1's position in the stratigraphic sequence was established on site. The current understanding of ‘dark earth’ type deposits is still based largely on analysis of dark urban archaeological deposits; how useful this is in understanding deposits at TEA 5 (a rural settlement site) is debateable. Macphail (2003) highlighted a potential archaeological pitfall which we still must avoid:

“The specific use of ‘dark earth’, as both a description and a degraded and simplified concept has come about because of its contrasting character when compared with earlier and later better stratified deposits. This contrast presents a dangerous archaeological pitfall. It has to be accepted that the term ‘dark earth’ is only a provisional concept designed to be replaced after excavation and study by a more accurate description of deposits” (Macphail 2003, 356).

Analysis of Layer 5.1 has the potential to inform about the later stages of Roman occupation at TEA 5; however, this potential will only be unlocked when its depositional history is properly understood.

In sum, TEA 5 is one of several Iron Age and Roman sites excavated along the A14 scheme which together will make a major contribution to an up-to-date regional framework for Iron Age and Roman activity. Following on from the above discussion, useful questions which can be addressed by specialist analysis of material from TEA 5 will include:

1. Is there evidence for significant archaeological activity pre-dating the Iron Age (candidates for this include Boundary Ditches 5.1 to 5.3)?
2. Was TEA 5 continuously occupied from the Iron Age until its presumed abandonment in the later Roman period?
3. What is the relative chronology of Area 3 compared with the rest of the site?
4. Are there changes in the development and nature of the agrarian economy?
5. Is there specific evidence for wetter site conditions over the period of occupation?

Recommendations

Approximately 50% of contexts have been preliminarily grouped at Entity and Group level to produce this report. Further work is needed to refine feature interpretations before this information can be added to the MHI Oracle database. Errors and inconsistencies evident in the survey plans need to be resolved (particularly the context numbering of features). Full grouping and assignment to period of all contexts is required following results of specialist pottery analysis; this may require some revision of the stratigraphic sequence discussed here. Careful stratigraphic and context work will be required across the site. Radiocarbon samples from within the 'dark earth' spread over large part of site should help in understanding possible 5th century AD activity.

TEA 7A

Jon House (PCA)

TEA 7A (NGR: TL 1923 7086) was located within Section 2, towards the western end of the A14 road scheme to the west of the A1 and south of the A14-A1 junction at Brampton Hut (Figures 7A.1-2). The 'L'-shaped excavation area was located between TEA 7C to the north and TEA 10 to the south. It covered an area of 2.93ha. The underlying geology of the site is Oxford Clay Formation, overlain by superficial sand and gravel river terrace deposits. The site sits at the base of a slope, with the ground rising to the west. A natural spring emerges just beyond the northwest corner of the site. Although the ground rises gently to the south, the relief around the site and the site itself is essentially flat.

Archaeological background

The geophysical survey (Stratascan 2016) identified a large, rectangular double-ditched enclosure, further ditches and numerous discreet features (Figure 7A.3). Strong geomagnetic anomalies highlighted the location of pottery kilns on the site. Roman and Iron Age archaeological features were identified during the evaluation of TEA7A in 2016 (COPA 2016).

Methodology

The entirety of the designated TEA7A area was not excavated due to a change in the aggregate requirements of the road scheme. The A14 IDT have undertaken to protect the unexcavated portion of TEA7A for the duration of the A14 works and that subsequently its archaeological remains are to be preserved *in situ*.

This stratigraphic assessment describes the key archaeological features and deposits recorded during the excavation of TEA 7A (Figure 7A.2). Features were assigned to either the Iron Age or Roman period based on their morphology, relative stratigraphic position and some limited spot dating information. In this assessment some archaeological features have been preliminarily grouped and assigned to *stratigraphic* periods within the Iron Age or Roman period.

Summary of results

Natural features

Natural Feature 7A.1, was an area of disturbed geology located in the northern corner of the excavation. It was caused by a spring head emerging north of the site boundary. The presence of a spring would have made the site a favourable location for settlement activity and was probably utilised as a water source since the late prehistoric period.

Several tree throws, many containing artefacts, were excavated across the site. Some of the tree throws may have resulted from episodes of tree clearance. The presence of worked flints and the character of the infilling deposits suggests at least some of these tree features are prehistoric.

Early prehistoric to Bronze Age (Figure 7A.4)

The earliest prehistoric features on site consisted of Ditch 7A.2 and Inhumations Burials 7A.1 and 7A.5. The on-site designation of these features as prehistoric requires confirmation. A buried soil (Buried Soil 7A.1) was present on the southwest edge of the site, containing Bronze Age and earlier worked flints. Information from a series of test pits determined the extent, thickness and overall character of this deposit, which extended beyond the southwest limit of excavation. The survival of the buried soil was due to a localized depression in the surface of the natural geology. In addition to flintwork found within contemporary features or deposits, a significant quantity of worked flint was recorded as residual in later deposits or found unstratified.

MIDDLE BRONZE AGE FIELD SYSTEM

Ditch 7A.2, a long and narrow ditch aligned NNE-SSW, appears to be part of a middle Bronze Age field system and shows many of the characteristics of field systems of this date, good examples being those in Suffolk at Alnesbourn Crescent and Martlesham (Woolhouse 2014; 2016), or much more locally recognised in the Great Ouse valley (Malim 2000). Ditch 7A.1, aligned WNW-ESE, may represent another component of the same field system.

BURIALS

Two probable prehistoric burials were recorded. Inhumation Burial 7A.1 was found in the southeast corner of the excavation area. The configuration and character of the grave suggested a crouched burial, although the condition of the bone was poor and the burial had experienced a degree of truncation. Inhumation Burial 7A.5 was located on the northern side of the site adjacent to the Iron Age Enclosure 7A.1. The skeleton's condition and grave fill were very similar to Inhumation Burial 7A.1. The dating of Burial 7A.1 or Burial 7A.5 at this stage remains tentative as no associated finds or deliberate grave goods were recovered with either of these burials. These will be looked at in the analysis stage and radiocarbon dates obtained.

Iron Age

Three main zones of Iron Age activity were identified (Figure 7A.4).

MIDDLE IRON AGE - EAST

The earliest of these Iron Age features were concentrated at the end of the eastern leg of the main area. Preliminary dating of the pottery suggested a middle Iron Age date for these features which comprised some pits and a series of enclosures defined by Ditches 7A.4 and 7A.5 aligned roughly north to south; both appeared to curve eastwards, likely creating enclosures continuing beyond the site boundary. The ditches seem to have formed part of the northwest edges of successive enclosures; the majority of the settlement extending further to the east.

MIDDLE-LATE IRON AGE - NORTHWEST

A second concentration of Iron Age features was seen at the northwestern edge of site and continued beyond the limit of excavation. Enclosure 7A.1 was formed by a large ditch. In places the ditch had either been re-worked or re-cut and a second square enclosure (Enclosure 7A.2) appeared to have been tacked onto the southern side during the Roman period (see below). Within the area of the ditch, located

immediately north of Pit Group 7A.4, were structural remains with domestic features, such as pits containing pot boiler stones, ovens and post-holes. Dating from the evaluation (COPA 2016) originally suggested a middle Iron Age date for these features, though pottery from the fills of the enclosure ditch during the excavation provided a late Iron Age date. Occasional sherds of early Roman pottery were also present in the upper fills of the ditch, suggesting the enclosure was extant but out of use in the early Roman period.

MIDDLE-LATE IRON AGE - SOUTH

A third less defined concentration of Iron Age activity could be seen on the south side of the site. The archaeology consisted of ditches (including Boundary Ditch 7A.1) and some small rounded linear features (Ditch 7A.3), notably to the east of Roman Pit Group 7A.1. These features may represent a continuation of the middle or later Iron Age activity identified in the northern end of TEA 10.

Roman

Extensive Roman remains were recorded across the excavation area (Figure 7A.6). There appeared to be activity here throughout the Roman period, but with a concentration in the middle Roman period (2nd century) with the pottery kilns; and the later Roman period (4th century). The pottery assemblage suggests there was a hiatus in activity in the 3rd century.

The Roman remains appear to be bounded on the northern side by two large parallel ditches (7A.6 and 7A.7), c 12m apart, which were seen clearly in the geophysics (Stratascan 2016) as part of a large ditched rectangular enclosure, with double ditches, perhaps representing part of a trackway, around the perimeter of the northern and eastern sides (see Figure 7A.3). The ditches, which ranged from 4.6m wide and 1.32m deep to 2.04m wide and 0.76m deep, were initially assumed to belong to a large defensive enclosure, possibly associated with early Roman military activity. However, the lack of military related finds and features within this enclosure, and their relatively slight size, makes this seem unlikely. A rough projection of the overall size can be estimated to 8ha, including contemporary ditch-works in TEA 10, which together would form an approximately rectangular form. This would be large in the context of Roman forts, although examples of this size are known, eg 10ha at Red House, Corbridge (Hunter and Ralston 1999). Roman forts of significantly greater size are also known, eg the series of temporary camps seen at Ardoch, Perthshire (ibid.). It is likely that if these ditches were to relate to an early Roman military encampment, the works would have been temporary and their period of use transient. The ditches themselves appeared to be long-lived, as later features respect and are in alignment with them. Aside from the military suggestion, there are other possible parallels for this enclosure, including a substantial rectangular ditched enclosure encompassing 8-9ha at Coggeshall, Essex, immediately north of Stane Street Roman Road in the Blackwater Valley (Clarke 1988; Isserlin 1995). The enclosed area here does not seem to have been densely occupied but included a series of pits and sub-enclosures and hints suggesting the presence of a higher status building. This may even have held some 'semi'-official status as part of the *cursus publicus* along the Roman road system, perhaps a *mutatio*.

Pottery dating from Ditches 7A.6 and 7A.7, forming the northern section of the enclosure, was ambiguous and requires further analysis, in particular those finds from the earliest deposits. The north western side of Ditch 7A.6 clearly cut through the late Iron Age Enclosure 7A.1. The construction of Ditch 7A.6 represented a clear change and reorganisation of the site in the Roman period. Later features respect the alignment of Ditch 7A.6 suggesting that it may have still been an earthwork within the post-Roman landscape.

Square Enclosures 7A.2 (39.4 x 34.6m) and 7A.3 (33 x 32m) may have encompassed domestic areas within the larger enclosure. Both enclosures contained discreet features such as post-holes and small pits, indicating the positions of structures and domestic activity. Enclosure 7A.2 adjoined earlier Enclosure 7A.1, possibly utilising the later Iron Ditch on the northern side. In the northwest corner of Enclosure 7A.2 and the corner of 7A.1 was an articulated horse burial.

MID-ROMAN INDUSTRY

Mid-Roman industrial activity was indicated by kilns for pottery production and potentially an associated building (Building 7A.1). There was a total of 10 kilns excavated, while a number of burnt features and ovens may yet be shown to be kilns with further analysis. The kilns were distributed along two lines, one on the southern side of site and one on the northern side.

The kilns were generally key-hole shaped, varying in size between 4.9m to 1.35m in length and 2m to 0.43m wide. The better-preserved examples showed evidence for raised firing floors. Survival and preservation were variable in both groups. In most cases part of the combustion chamber and the stoking area or rake-out pit survived. Kiln 7A.6 was the largest example and showed excellent preservation. Wattle impressions, both vertical and horizontal, on the clay superstructure provided evidence for the methods of kiln construction. Much of this kiln's superstructure had fallen or been backfilled into the fire chamber and rake-out pit.

The northern kiln group of six kilns (7A.5-10) followed the line of Ditch 7A.6 on its southern side, suggesting utilisation of the remains of a bank associated with the ditch. The southern group, Kilns 7A.1-4, appeared to be associated with Building 7A.1, which may have been a workshop or warehouse. Buildings of the same type of construction have been attributed to a similar function, as seen at the nearby inland port and supply farm, Colne Fen, Earith (Evans et al 2013). The building was the split log, sill beam type; the floor plan of the overall structure was incomplete.

The archaeobotanical assemblage from these kilns comprised abundant remains of cereal grains, mainly spelt wheat and barley, with a high presence of glumes, sprouted grains and detached kernel embryos, suggesting waste from a brewing process (Vol. 2). This will be considered as part of the analysis stage, to see if a malting house can be identified.

PITS, WELLS, WATERHOLES AND BURIALS

Large, mostly mid-Roman pits were seen throughout the excavation area and are likely to have served multiple functions including quarrying (potentially for potting clay), as water sources and for waste disposal. Waterhole 7A.2 in the northwest corner of site comprised a series of intercutting pits and appears to have been an important source of water, capturing and storing water from the nearby spring.

When excavated these pits retained water, even during the prolonged spells of dry weather experienced during the summer of 2018. It is likely the spring was a key element in the occupation and prolonged settlement of the site. In the Roman period efforts appear to have been made to manage the water resource and facilitate access. A lens of metalling seen within Waterhole 7A.2 represents an attempt to consolidate the ground for access or ease of use.

Pit Group 7A.1, a series of large intercutting pits in the southern half of the site, represents dedicated quarrying for potting clay. These features later became receptacles for domestic rubbish. The dark organic fills were rich with finds predominantly dating from the early Roman period.

Well/waterhole 7A.1 was excavated in the southeast corner of the site and was 3.5m deep. Waterlogged conditions were encountered at the lower levels of this well. The surviving remains consisted of wooden planks forming a square shaft, with joints and iron fastening nails *in situ* (see Goodburn, Vol. 2). After the feature ceased to be used as a well it was used for waste disposal. During the deposition of refuse material, the upper half of a person (Inhumation Burial 7A.2) was placed or thrown into the partially filled well. The surviving skeletal remains of this individual were articulated but apparently cut off at the waist line; no evidence of the lower body was found anywhere within the feature. The bones which were present appeared to be complete and it is considered likely that the remains were at least partially fleshed at deposition in order to have held the bones in the correct positions as found. The torso was supine, with the head slightly raised and the arms by the sides. The burial was interred with a large amount of animal bone, much of which was also partially articulated, suggesting at least some of the animal bone carried flesh when deposited. The large assemblage of faunal material above and below the burial was consistent with butchery waste. No grave cut was present, the individual being interred during an ongoing period of waste disposal within the disused well.

Two more unusual burials (Inhumation Burials 7A.3 and 7A.4) were investigated cutting into Pit Group 7A.1. Two adult males were placed in graves, which together formed a T-shape; the grave cuts were separate and appeared to respect each other. The burials were supine, although the skeletal remains in both graves had been manipulated; in both cases the lower legs had been placed elsewhere in the grave. It was clear, however, that the repositioning of the lower leg bones had occurred while they were still fleshed or at least partly so. In Inhumation Burial 7A.3, a complete lower leg was placed alongside the right humerus. The other lower leg was placed beside the left hip, or coxal bone. The burials have been radiocarbon dated to the mid-3rd to 4th century A.D. (cal AD 253–396; 95.4% probability; SUERC-81194 and cal AD 257–410; 95.4% probability; SUERC-81195).

LATE ROMAN ACTIVITY

An area of dense late Roman activity was located in the centre of the site. The remains were characterised by ditches forming small enclosures. It is likely these represent domestic and livestock enclosures. These ditches appeared to be less regular than those recorded from earlier in the Roman period. Some of the enclosures contained possible buildings or structural elements.

A small feature in this area of site contained fragments of human bone (722991), including fragments of skull (784g). This material was considered to be later and unrelated to the other Inhumation burials on

the site. The feature represents some potential for small scale ritual activity. A small amount of human skeletal remains was also recovered from a large pit within Pit Group 7A.2. The material consisted of skull fragments (98g) close to the base of the pit.

Close to the northern boundary was a large rectangular structure, Building 7A.3. The date of the building is currently unclear, however many of the late Roman features appear to respect it, so it may at least have been standing in the late Roman period. Building 7A.3 was of wooden construction, with sill beams cut into the ground and two large post-holes positioned centrally at the short ends of the structure. Two entrances were indicated by clearly defined breaks in the beamslots. One entrance was on the northern side of the east end of the structure; the other was located on the south side of the building, slightly to the east of the centre. At the east entrance was a shallow post-hole which may be part of a door structure. A highly compacted underfloor layer or preparation layer survived within the beamslot walls indicating the construction of Building 7A.3 included some form of levelling or ground reduction within the floor plan. All excavated elements were negative features and located below the (truncated) Roman floor levels.

Building 7A.2, an undated building of presumed Roman date was seen on the western side of the excavation, northwest of Pit Group 7A.1. The building was rectangular, orientated east-west and of earth-fast post construction. It appears some of the post-holes had been truncated away (eg by furrows); few of the surviving post-holes were deeper than 0.15m. The surviving post-holes suggest the building was 6.2m long and 5.2m wide, with a small rectangular structure or 'add on' at the northern end of the building measuring 6.0m in length and 2.5m wide. A very small assemblage of pottery was recovered from the post-hole fills. The building will hopefully be dated by its association and alignment with well dated surrounding features.

Saxon

No Saxon features were identified during the excavation of TEA 7A. However, 105 sherds of early/middle Saxon pottery were recovered, including a stamped sherd which may be 6th century in date. This suggests that there may have been some continuation of activity into the early Saxon period.

Medieval/Post-medieval

The excavation area contained furrows aligned ENE to WSW across the site (Figure 7A.7). The proximity of some of the furrows indicates a re-establishment of furrows on the same alignment; a small number of highly truncated furrows were seen outside of the regular spacing. Although the furrows were extensive and masked archaeology in plan, they were generally shallow enough not to entirely remove archaeological features. Aside from furrows, a single ditched feature was recorded for the period. No datable material was retrieved from Ditch 7A.8, however the loose backfill and the close alignment to both the furrows and the modern field boundary on the northern side of the excavation suggested a medieval or later date. A small number of medieval and post-medieval finds were recovered by metal detecting, recovered from either the furrows or the overburden.

Finds and environmental summary

Tables 7A.1 – 7A.3 provides a quantification of the finds, bone, and environmental samples from TEA 7A.

Limited earlier prehistoric finds were identified within TEA 7A – only 17 sherds of early prehistoric pottery, mostly earlier Neolithic Plain Bowl and Mildenhall type.

A far larger Iron Age and Roman pottery assemblage was recovered, indicating intensive activity on the site from the late Iron Age through to the late Roman period, with a possible hiatus in the 3rd century. There was also a smaller collection of middle Iron Age pottery (416 sherds from 63 contexts). The late Iron Age pottery assemblage mainly comprised utilitarian wares from local sources, predominantly jars and bowls. Limited early Roman pottery was identified (potentially there was continuation of late Iron Age pottery traditions?). The larger mid-Roman assemblage comprised greywares, shelly wares, white wares, and white-slipped oxidized wares, including a bead-and-flange mortarium with two potters' stamps. The largest quantity of pottery was dated to the late Roman (4th century) period, and comprised local greywares and shelly wares, with some regional imports and samian ware.

The products from the Roman pottery kilns were sandy-coarsewares in lid-seated jars, necked jars, and Cam.30-derived platter forms, dated to the late 1st or 2nd century.

There was a smaller assemblage of post-Roman pottery (113 sherds), including 105 sherds of early/middle Saxon pottery and a stamped sherd which may be 6th century in date. This suggests that there was some continuation of activity into the early Saxon period, and is of particular interest in relation to the Saxon settlement to the north in TEA 7C.

Other finds from TEA 7A included 88 Roman coins, Roman dress accessories and toilet equipment (particularly brooches), fragments of quernstones, glass, and the wood from the planked box well/waterhole 7A.1. This planked box well was in a formal Roman-style of carpentry, common in urban centres and forts.

The plant remains from both the Iron Age and the Roman features included cereal grains (spelt wheat, hulled barley, oats) and some chaff, arable grasses, and weeds. Large concentrations of cereal grains (spelt and barley) were identified in the pottery kilns, possibly used for tinder or fuel. This included glumes, sprouted grains and detached kernel embryos, which are waste from the drying of malted cereals and may indicate the presence of a Roman malting house.

The animal bone assemblage from the Roman features mainly comprised cattle, followed by sheep/goat, and then horse and dog. 15% of the bone had evidence for butchery, with 5 worked fragments (including horn removal).

Table 7A.1 Quantification of finds from TEA 7A

Type	Count	Weight (g)	Date
Pottery	17	49	Earlier Prehistoric
	19,047	276,719	Iron Age - Roman
	113	1,485	Post-Roman
Coins	69		Roman
Small Finds	155		
Iron Nails	388		
Lithics	11 pieces worked		
Stone	24 pieces		
Glass	13 sherds		
Wood	14 pieces		
Building Materials (5–15% assessed)	236 pieces	46,519	
Metalwork Residues	75 pieces	1,897	

Table 7A.2 Quantification of bone from TEA 7A

Type	Count	Weight (g)	% of bone assessed
Inhumations	5		
Cremations	0		
Animal Bone	3,090	77,650	31

Table 7A.3 Quantification of environmental samples from TEA 7A

Type	Count	Date/type
Bulk Environmental Samples	281	
Kubiena tins	2	
Monoliths	2	

Provisional interpretation and potential

Early Prehistory and Bronze Age

Small elements of earlier prehistoric activity have been preserved within the site. These remains are likely to contribute to research objectives when understood in a wider context, eg tracking the survival of Bronze Age field systems through the surrounding TEA excavations and nearby sites. Though largely residual, a synthesis of the lithic material will provide evidence for prehistoric activity within the landscape. An analysis of prehistoric tree throw features has the potential to infer episodes of tree clearance (when combined with other data) across the wider landscape. Landscape scale studies utilising similar themes have enabled greater understanding of population movements and colonisation of the landscape, an excellent comparative example of such a study being the Framework excavations in and around Stansted Airport (Cooke et al 2008).

Iron Age

The site includes two phases of Iron Age land use and potential settlement. It is likely the site, along with adjacent sites (TEA 10 and TEA 7B&C), will make a significant contribution to the chronological understanding of the Iron Age period and the transition into the Roman period. As discussed, Enclosure Ditch 7A.1 was a late Iron Age enclosure with associated settlement features. The presence of early Roman finds in the upper fills may provide evidence for transition. Roman boundary Ditch 7A.6 clearly cuts through that enclosure, ignoring any previous alignments and suggesting a full reworking of settlement on the site and possibly a wholesale reorganisation of the landscape.

These sites have the potential to contribute to major research themes which relate to Iron Age economy, settlement dynamics, topographic preferences and communications (Medlycott 2011). Several recent large-scale excavations are available for analogy, including Clay Farm (Phillips forthcoming) and Trumpington Meadows (Evans et al 2018) outside Cambridge. Bears Croft Farm, Near Godmanchester represents a good example of middle and late Iron Age settlement activity closer to the A14 sites.

Roman

There was clearly a major transformation on the site during the early Roman period, with a ditched enclosure laid out encompassing c 8ha and overriding previous landscape alignments. Whether this enclosure had any military associations is doubtful, though more refined dating may help with its interpretation; there are many other settlements in the region that demonstrate considerable morphological change during the later 1st and early 2nd centuries AD (Smith et al 2016, 195).

The site demonstrates at least three phases of Roman occupation and evident variations in site economy over time. The high quantity of small finds and fine wares hints at the relative high status of the site during at least part of the Roman period. The key to understanding the Roman aspects of the site may lie in its location just over 5km west of Godmanchester, one of a growing number of settlements in the vicinity demonstrating variations in form and scale, but which were undoubtedly linked into wider social and economic networks.

The kilns at TEA7A would seem to represent local pottery production on a relatively small scale. Comparison of the products and date ranges of these kilns should be considered with kiln data from TEA 10, TEA16 and TEA 11; a similar linear arrangement of kilns was present on the latter site. At the regional scale, the kilns excavated on the A14 scheme will have far reaching implications for understanding pottery production in the early Roman period.

The settlement appeared to continue into the late Roman phase, and this may represent an opportunity to explore research themes relating to the end of the Roman period. This site is likely to be able to contribute to the understanding of the morphology and development of late Roman rural settlements. As well as factors relating to agriculture and economy, fragments of human skull from a late Roman context represent potential ritual activity, while the unusual burials need placing into a wider context.

Recommendations

Approximately 50% of contexts have been preliminarily grouped at Entity and Group level to produce this report. Further work is needed to refine feature interpretations before this information can be added to the MHI Oracle database. Errors and inconsistencies evident in the survey plans need to be resolved (particularly the context numbering of features). Full grouping and assignment to period of all contexts is required following results of specialist pottery analysis; this may require some revision of the stratigraphic sequence discussed here.

Further radiocarbon dating and modelling may help with chronological resolution of earliest Roman horizons and dating the prehistoric burials.

Further work will particularly focus on identifying the possible Roman malting house, and on understanding why there was an apparent concentration of disarticulated body parts on this site.

TEA 7B/C

Emma Jeffery

TEA 7B and 7C were archaeological sites located towards the western end of the A14 road scheme, within Section 2. They were located to the southwest of the A1(M) and A14 interchange at Brampton Hut Services (NGR: TL 1971 0914) (Figure 7BC.1). TEA 7C comprised the larger area to the west of the oil pipeline, and TEA 7B was the smaller area to the east of the pipeline. The construction of a farmers' track (Wood Lane Track) around the western side of TEA 7C was also archaeologically monitored. The total excavated areas covered 20.9 hectares (142,317m² for TEA 7C, 62,067m² for TEA 7B, and 4,750m² for Wood Lane Track). This area includes that investigated for the community excavation from July to September 2018.

The site was previously under arable cultivation and comprised one large field in the western part of the site and three smaller fields in the eastern part. A NW-SE concrete track crossed the centre of the site and two NE-SW tracks crossed the eastern parts (dividing the fields). The oil pipeline crossed the site on a north to south alignment. The western edge of the site was at 20m AOD and sloped down to 15m AOD within a distance of 100m. The rest of the site was relatively flat, at around 15m AOD. There was a small pond to the southwest of the site and drains running alongside the tracks. Otherwise, the nearest watercourse was Alconbury Brook, 750m to the north. There were two small copses of trees to the northwest and southwest of the site. Brampton Wood was located 500m to the southwest.

The underlying geology was Oxford Clay Formation, a mudstone (NERC 2019). This was overlain by sand and gravel river terrace deposits in the central and eastern parts of the site. No superficial deposits were recorded in the western part of the site, on the slope.

Archaeological background

A geophysical survey was carried out over TEA 7C (Davis 2016). This identified a series of curving enclosures in the eastern part of TEA 7C and ditches in the north-western part of TEA 7C. The site was trenched by Wessex Archaeology (Wessex Archaeology 2014; land parcel 1139), and COPA (Clarke et al 2016; Plot 24). This identified undated ditches, part of a ring ditch, a pit, and three post-holes in TEA 7B (Wessex Archaeology 2014); middle-late Iron Age curvilinear enclosures in the eastern part of TEA 7C; and a multi-period site (Iron Age, Roman, Saxon, and medieval) in the western part of TEA 7C (Clarke et al 2016).

Methodology

The results of the geophysical survey and trenching evaluation were used to define the archaeological mitigation areas - TEA 7C as a 'targeted excavation area', and TEA 7B as a 'strip map and sample' area (Figure 7BC.2). TEA 7B and 7C were stripped and hand excavated in various stages between October 2016 and September 2018. All works were undertaken in accordance with the Written Scheme of Investigation (Atkins CH2M, 2016c).

Summary of results

Natural geology

There were a series of palaeochannels in TEA 7B and the eastern part of TEA 7C (Figures 7BC.3-4). These were located on the flat land at the base of the slope. Palaeochannel 7B.1 was observed in the southern part of TEA 7B, on an east-west alignment, turning to the south. It measured c 15m wide by 2m deep and was filled with a series of clay and silt fills. This included a gravel deposit along the edge of the palaeochannel (possibly the remains of a bank) and a thin layer of black peat (potentially decayed wood). Ditches 7B.12 and 7B.14 cut the upper fills of the palaeochannel, demonstrating that it was infilled by the late Saxon period.

Palaeochannel 7C.51 and Palaeochannel 7C.52 were observed in the northern part of TEA 7C East. Palaeochannel 7C.51 crossed the northern part of the area for 200m on a NE-SW alignment before curving round to the southeast, and Palaeochannel 7C.52 crossed the area on an east-west alignment for 90m. Satellite imagery (Google Earth) shows that these two branches of palaeochannels joined outside the eastern limit of excavation and were in fact one palaeochannel. Three machine slots were excavated through Palaeochannel 7C.51 and revealed blue-grey silty-clay fills. The Iron Age enclosures respected the curves of the palaeochannels, demonstrating that the paleochannels were open and utilised at this time. In contrast, the medieval agricultural furrows cut across the upper fills of this palaeochannel.

Palaeochannels 7C.53 and 7C.54 were observed in the southern part of TEA 7C East. Palaeochannel 7C.53 crossed the area on a bending north-south alignment for 150m, splitting into two at its northern end. It continued beyond both the northern and southern limits of excavation and would have connected with Palaeochannel 7B.1 to the southeast. Only 30m of Palaeochannel 7C.54 was observed projecting out of the western section – the rest of this channel was under the modern track. As with the area to the north, the Iron Age remains respected the palaeochannels, whereas the late Saxon and later remains truncated the upper fills of the channels. Palaeochannel 7C.55 was observed in the north-western corner of TEA 7C, for 35m. A hand excavated slot was dug in the palaeochannel and recorded silty-clay fills.

There were also a series of streams running east-west down the slope in the main field of TEA 7. The most obvious example of this was Boundary 7C.1, which crossed the central part of TEA 7C for 115m on an east-west alignment (Figure 7BC.6). It varied between 2m and 4m wide and was deepest at the top of the slope (0.55m), shallowing to 0.12m towards the base of the slope. It was truncated by the Iron Age features (Boundary 7C.2) demonstrating its earlier (ie natural) origin. However, it was used in the Saxon period as one of the boundaries within the settlement (see discussion below).

Earlier prehistoric

A scatter of flints was identified and investigated on the northern bank of Palaeochannel 7C.51 (Figure 7BC.4). This comprised c 60 flints and 18 pieces of animal bone in an area measuring 25m NW-SE by 15m NE-SW. This shows that there was some earlier prehistoric activity in this area, with people settling and using the palaeochannels (which were presumably open at this time).

Two Neolithic pits were identified in the western part of TEA 7C (Pits 7C.1), at the base of the slope (Figure 7BC.5). The pits were 0.2-0.25m in diameter and 0.2m deep and contained late Neolithic grooved ware pottery. There was also a noticeable concentration of (unstratified) worked flints in this area. This is further evidence for general earlier prehistoric activity in the area.

Late Iron Age

The main focus of late Iron Age activity was in TEA 7C East, on the flat land at the bottom of the slope, where there were a series of sub-circular enclosures respecting the palaeochannels (Figures 7BC.3, .4 and .12). Further late Iron Age activity outside this area comprised scattered houses and cremation burials to the east, and field systems and three possible structures to the west (Figures 7BC.4 and .5).

The Iron Age enclosures were identified on satellite imagery (google earth), the geophysical survey (Davis 2016), and during the trenching evaluation (Clarke et al 2016). These sources of information were useful when the excavations did not expose the full extent of the Iron Age activity, particularly for Enclosure 7C.55 where the eastern side was traced via google earth.

The enclosures were adjacent to Palaeochannels 7C.51, 7C.52, and 7C.53. The enclosures fitted perfectly within the bends of the palaeochannels (eg the northern and eastern boundary of Enclosure 7C.57 mirrored the southern bend of Palaeochannel 7C.51), demonstrating that the palaeochannels were open and used during the Iron Age. The only exception to this was Ditch 7C.53, part of Enclosure 7C.54, which truncated the fills of the palaeochannel – this may suggest that parts of the palaeochannel (this edge) dried before other parts. Most of these enclosures may have functioned as animal enclosures, as there was limited evidence for domestic activity or structures within them. Instead, there were routes along which animals could have been moved and large open areas where they could be kept. The one exception to this was Enclosure 7C.58 which was very different in layout from the others (with numerous smaller areas and no entrances) and which contained internal structures. This may have been used for domestic occupation.

There was evidence for modifications made to these enclosures during the late Iron Age. For this assessment, these have been divided into three phases:

- 1) Curving ditches and other features underlying the main enclosures;
- 2) The main enclosures;
- 3) Later modifications and additions to the enclosures.

For this assessment, all late Iron Age activity outside the central area has been assigned to the main (second) phase of late Iron Age activity. Spot dating of pottery from these enclosures was dated to the late Iron Age – early Roman period (Enclosure 7C.54; Enclosure 7C.58).

LATE IRON AGE PHASE 1 – IRON AGE FEATURES UNDERLYING THE MAIN ENCLOSURES (FIGURE 7BC.4)

There was some evidence for late Iron Age activity underlying the main enclosures across TEA 7C East. These were generally relatively short and scrappy segments of ditch and do not appear to be full

enclosures or houses (except Enclosure 7C.51), although it is possible that this is only because they had been truncated by the later Iron Age activity. These demonstrate an Iron Age presence in this area before the establishment of the main enclosures. The exact date of this activity (and the length of time between this and the main phase of late Iron Age enclosures) is currently unclear, and the distinction has been based on stratigraphic relationships.

Enclosure 7C.51 formed the earliest of three small enclosures in the central part of TEA 7C East (truncated by Enclosures 7C.52 and 7C.53). This comprised a NW-SE aligned ditch observed for 28m – this continued beyond the limit of excavation to the south, but not seen in the excavation to the south of the track. Approximately halfway along its length, an east-west ditch connected with it (observed for 36m, continuing beyond the south-eastern limit of excavation). No internal features were identified within this enclosure.

To the north, underlying and truncated by Enclosure 7C.57, were five short curving stretches of ditch. Ditches 7C.62 and 7C.63 projected beyond the south-western limit of excavation on a north-south alignment, parallel to each-other, and may have formed part of an earlier trackway or parts of small enclosures. Ditches 7C.60 and 7C.61 were short curving stretches of ditch within (and truncated by) the enclosure. Ditch 7C.64 was not directly truncated by Enclosure 7C.57 but would not have worked as part of it (as it was on an entirely different alignment) so has been assigned to this earlier phase.

In the northern part of TEA 7C East were three segments of ditch which underlay and were truncated by Enclosure 7C.58. Ditch 7C.65 was aligned NE-SW for 20m and returned to the east as Ditch 7C.88, potentially forming the corner of a field. Ditch 7C.66 comprised a short curving ditch (truncated by Enclosure 7C.58) which may have formed part of an earlier enclosure. Ditch 7C.67 comprised three short segments of ditch which delineated a small rectangular area (7 x 2.75m).

LATE IRON AGE PHASE 2 – MAIN ENCLOSURES (FIGURE 7BC.4)

The main phase of late Iron Age activity comprised the establishment of the enclosures in TEA 7C East, on the low ground around the palaeochannels. These covered, in total, an area of c 6,000m². The position of these enclosures, close to the water and the water-table, indicates a need to manage the water, in a similar way to that observed on TEA 38.

Enclosure 7C.61 was the southern-most enclosure, located to the east of Palaeochannel 7C.53. It was sub-rectangular and measured 24m east-west (continuing to the east under the oil pipeline) by c 10m north-south. The enclosure was divided in two by an internal north-south division. A shorter curving ditch extended beyond the southern part of the enclosure. No internal features were identified and there was no obvious entrance into the enclosure.

Enclosure 7C.60 was located to the north of Enclosure 7C.61. Only the western half of this enclosure was exposed – the other half was within the oil pipeline area. This enclosure appeared to be sub-circular, measuring 23.5m north-south by at least 9m east-west. No internal features nor any entrances were identified. This enclosure joined the northern boundary of Enclosure 7C.61 and the north-south ditch of Enclosure 7C.52, demonstrating that they were all contemporary.

Enclosure 7C.52 was in the central part of TEA 7C East. This comprised a sub-rectangular enclosure, observed on both the northern and southern sides of the track. The enclosure measured 36m north-south by 15m east-west. The enclosure ditches truncated Enclosure 7C.51 but were truncated by Enclosure 7C.53. Structural Features 7C.51 were located within this enclosure – an east-west beam slot and a single post-hole 6m to the south.

Between Enclosure 7C.52 and Palaeochannel 7C.52 were six post-holes on a NE-SW alignment (Boundary 7C.51). This was the only boundary identified between the enclosures and suggests that there may have been some land division/ownership over the different enclosures. Two large post-holes, Structural Features 7C.52, were located on the southern bank of Palaeochannel 7C.52. These post-holes were large (1.5m in diameter by 0.6m deep) and spaced 2.5m apart. Their location adjacent to the palaeochannel suggests they were associated with it – perhaps they supported a platform for fishing, or formed part of a bridge structure (although nothing of this was noted on the other side of the palaeochannel).

Enclosure 7C.54 was a sub-circular enclosure to the north of Palaeochannel 7C.52. This measured 57m east-west by 50m north-south, with an entrance (16.66m wide) on its southern side. The ditch which defined the enclosure measured between 1.3m and 2.6m wide, by 0.3–0.55m deep. Its profile was varied, with moderately-sloping and steep sides, and flat and concave bases. In places there was evidence for re-cutting of the ditch, suggesting there was some maintenance over time. It was filled with a mixture of silty-clay, most of which would have accumulated via natural infilling. Pottery recovered from the main enclosure ditch was preliminary dated to the late Iron Age – early Roman period (731699). Two ditches, Ditches 7C.52 and 7C.53, projected off the southern part of the enclosure, before turning west (and continuing beyond the limit of excavation). They were parallel, 15–30m apart, and would have formed a trackway leading up to the entrance (potentially to lead animals through). Part of Ditch 7C.53 truncated the upper fills of Palaeochannel 7C.52, suggesting that part of the palaeochannel had dried and filled in by the Iron Age. There was one small internal division, formed by Ditch 7C.51, in the north-western part of the enclosure. This delineated a smaller area within the enclosure (c 16m by 10m), with access into it from the south. No other features were identified within the enclosure. There were later modifications to this enclosure, by the addition of two sub-rectangular enclosures (Enclosures 7C.55 and 7C.56) – see discussion below.

To the southeast of Enclosure 7C.54 were a cluster of four post-holes, Structural Features 7C.53. These did not form an obvious building, but nonetheless suggest that there were structures outwith the enclosures.

Enclosure 7C.57 was another sub-circular enclosure, to the south and west of Palaeochannel 7C.51 (positioned perfectly within the curve of the palaeochannel). This measured c 70m in diameter with an entrance (4.25m wide) on its eastern side. The ditch which defined the enclosure measured between 1.9m and 2.9m wide by 0.5–0.8m deep. It had moderately-sloping sides, a V-shaped base, and was filled with clayey-silt fills. There were three internal divisions within the enclosure, formed by Ditches 7C.55, 7C.56 and 7C.57, curving from the edge of the enclosure towards the centre. There were two parallel ditches, Ditches 7C.58 and 7C.59, to the southwest of the enclosure, 40m apart. Although these did not

lead to the entrance, they may have been used to control the movement of animals through the landscape. Three short stretches of ditch projected off the northern and eastern enclosure ditches into the palaeochannel. These would have drained water from the enclosure ditches. Within the interior of the enclosure was a ring ditch, Structural Features 7C.54, and a single pit, Pit 7C.54. The ring ditch was sub-circular, 5.6m in diameter, with no internal features, few finds, no entrance, and no obvious function! The pit was sub-circular, c 4.5m in diameter by 0.9m deep, and contained seven fills with animal bone and pottery. It was interpreted as a rubbish pit. To the south-west of Enclosure 7C.57 were two pits – Pit 7C.57 and 7C.58. The function of these pits is unclear.

Enclosure 7C.58 was the northern-most enclosure, to the north of Palaeochannel 7C.51. This was the most complicated of the Iron Age enclosures, comprising a series of concentric sub-circular spaces, somewhat similar to those at TEAs 38 and 41, and Black Horse Farm, Sawtry. They covered an area which measured 75m east-west by 70m north-south. The area of enclosures comprised a central (inner) sub-circular enclosure (28 x 20m), bounded by a continuous (middle) ditch on its north and eastern sides (c 7.5m away from the central enclosure), surrounded by more (outer) east-west and north-south ditches to the north and east (19m away from the middle ditch). Within these were various sub-divisions, eg Ditches 7C.71, 7C.72, 7C.69, and 7C.70. These formed various smaller enclosures of different sizes. The ditches which made up these enclosures measured around 2m wide by 0.5-1m deep. There was evidence for recuts in some places. The ditches were filled with brown-grey silty-clay fills. Pottery recovered from the enclosure ditches has been preliminary dated to the late Iron Age (731775). No entrances to this enclosure-system, or any of the individual areas, were identified. This suggests that there were bridges over the ditches.

Around the south-eastern part of the enclosure was a series of short curved enclosing ditches – Ditches 7C.73, 7C.74, and 7C.75 with gaps between them to allow access. Along the northwestern limit of excavation were a series of ditches, Ditches 7C.77, which projected from the enclosure-system and beyond the limits of excavation. These may have functioned as the main boundary to this area. The southern ditches of this enclosure system fed directly into the palaeochannel and would have drained water from the enclosures into the palaeochannel.

Enclosure 7C.59 was a separate later sub-circular enclosure added on to the southwestern side of the enclosure (see below). Within the enclosure were evidence for structures indicating settlement. Structural Features 7C.55 comprised a single north northwest-south southeast beam-slot, 4.9m long. Structural Features 7C.56 comprised a north-south aligned beam-slot (4.6m long) with three post-holes to the west. Structural Features 7C.57 comprised a single north-south aligned beam-slot, 3.75m long.

LATE IRON AGE PHASE 3 – LATER MODIFICATIONS TO ENCLOSURES (FIGURE 7BC.4)

There was some evidence for later (Iron Age) changes to the enclosures in TEA 7C East. This comprised modifications and additions to Enclosures 7C.54 and 7C.58, an entirely new enclosure system in the southern part of TEA 7C East (Enclosure 7C.53), and individual pits and ditches which truncated the enclosures across the site.

Enclosure 7C.53 truncated Enclosure 7C.52. This comprised part of a rectilinear enclosure (aligned north-south), observed on both the northern and southern sides of the track. This measured 36m north-south by at least 16m east-west (continuing beyond the eastern limit of excavation). A return within the enclosure, or potentially part of an internal division, was observed in the southern part. Two post-holes were identified within the southern part of this enclosure.

Two small sub-rectangular enclosures (Enclosures 7C.55 and 7C.56) were added onto Enclosure 7C.54. Enclosure 7C.55 was a sub-rectangular enclosure 'keyed' onto the eastern external edge of Enclosure 7C.54. This continued beyond the eastern limit of excavation and was traced on google earth. This enclosure measured 14.5m north to south by 17m east to west, with an entrance in its north-eastern corner and no internal features. Enclosure 7C.56 was a sub-rectangular enclosure tacked onto the internal southern boundary of Enclosure 7C.54. It measured 18m east-west by 14m north-south, with an entrance along its northern side, and no internal features.

Ditch 7C.54 was constructed across the original entrance into Enclosure 7C.54, apparently at the same time as the addition of Enclosures 7C.55 and 7C.56. This was a narrow shallow ditch (0.45m wide by 0.2m deep) which was excavated across the original entrance (for a length of 17m). There was no evidence for the construction of a new entrance into this enclosure – perhaps they bridged over the ditches. A small sub-circular enclosure (Enclosure 7C.59) was added onto Enclosure 7C.58. This comprised a sub-circular enclosure, c 14m in diameter, on the southwestern side of Enclosure 7C.58. No entrance into this enclosure was observed.

Elsewhere, there were ditches and pits which truncated the main Iron Age enclosures. For example – Ditch 7C.82 and 7C.83 truncated Enclosure 7C.58 and were on different alignments (NE-SW) from the rest of the enclosure; Pits 7C.55 and 7C.56 truncated Ditches 7C.55 and 7C.56; Pit 7C.61 truncated Ditch 7C.73; and Pit 7C.62 truncated the central division in Enclosure 7C.61.

LATE IRON AGE ACTIVITY SURROUNDING THE SUB-ROUNDED ENCLOSURES

There was evidence for late Iron Age activity outside the focus of activity in TEA 7C East, to both the east (TEA 7B) and west (TEA 7C Main field). This has all been assigned, in this assessment, to the main late Iron Age phase of activity (phase 2), however it is possible that some of the features related to earlier or later phases of Iron Age activity. To the east, there was scattered activity (roundhouses, cremation burials, fire pits, and curving ditches; Figure 7BC.4); and, to the west, a ladder-like pattern of rectilinear enclosures and three possible structures (Figure 7BC.5).

The Iron Age features identified to the east of the main Iron Age enclosures comprised at least three roundhouses, five cremation burials and an inhumation burial; ditches which formed parts of other enclosures; three fire pits, and two post-holes which may have formed part of a building (Figure 7BC.4).

Roundhouses 7B.1 and 7B.2 were located in the central part of TEA 7B, 8m apart. They were both circular, c 9.5m in diameter. Roundhouse 7B.2 had a south-facing entrance, 3.4m wide, whereas no entrance was observed in Roundhouse 7B.1 (it may have been removed by a furrow). The roundhouse drip gullies measured 0.8-1.4m wide by 0.3-0.45m deep, had moderately-sloping sides and concave bases, and were filled with grey-brown silty-clay which occasionally contained pottery (provisionally dated to the

late Iron Age) and lithics. No post-holes (internal or external) were associated with either roundhouse. To the east of the roundhouses was a north-south 'wiggly' ditch, Ditch 7B.2, which may have been a boundary to these. Although they have been classified as 'roundhouses' for this assessment, it is possible that they were in fact animal corrals or similar. There were suggestions of other possible roundhouses in the northern part of TEA 7B. Roundhouse 7B.3 comprised two curving ditches, projecting out of the northern section and forming half a circular structure with a south-facing entrance (1.3m wide). Ditch 7B.1, was observed for 2.5m, which may have formed part of another Iron Age structure.

Three cremation burials were uncovered close to Roundhouse 7B.1 and 7B.2 – one (Cremation 7B.1) 14m to the north; and two (Cremations 7B.2 and 7B.3) in a pair c 60m to the south. These were all unurned, in cuts approximately 0.35m in diameter by 0.1m deep, with frequent burnt bone and charcoal. The base of a buried pot [071095] was also uncovered to the south of Cremation 7B.3 and may be the remains of another disturbed cremation burial. One further unurned cremation burial, Cremation 7B.4, was identified to the south, cutting the upper fills of Palaeochannel 7B.1. Although this could suggest that the cremation burial was later in date than the others, it is also possible that part of this palaeochannel filled in earlier than the others. This cremation burial has therefore been provisionally assigned to the late Iron Age.

A cremation and inhumation burial were also investigated in the northeastern part of TEA 7C (Cremation 7C.51 and Burial 7C.51). The cut for Cremation 7C.51 was earliest. Burial 7C.51 was an adolescent laid in a supine position with legs bent. Although undated, it is likely that the cremation burial, and presumably the inhumation burial, were late Iron Age in date.

Other curving ditches, such as Ditches 7B.3, 7B.4, 7B.5, 7C.84, 7C.85, and 7C.91 may have formed parts of curving enclosures. These were all curved ditches which did not fit with the later (late Saxon) features and which were sometimes truncated by the late Saxon features (eg Ditch 7B.5). Some of the pits in this area have been assigned to the late Iron Age. This includes Pits 7B.1, 7B.2, and 7C.63, all of which contained evidence for *in situ* burning and may have been fire pits. In the north-eastern part of TEA 7C were two post-holes, Structural Features 7C.58. They were spaced 2.65m apart, oriented east-west, and likely formed half of a building. Stone packing was observed in both post-holes and Iron Age pottery was recovered from one of them.

The late Iron Age features identified to the west of the main Iron Age settlement enclosures comprised a series of boundary and drainage ditches, one rectilinear enclosure, and three possible roundhouses (Figure 7BC.5).

Boundary 7C.2 was the main Iron Age feature in this area. It was a curving boundary, observed for c 200m (continuing beyond the northern limit of excavation and into the unstripped rectangle to the southwest). The ditch curved from the northwest round to the south and southwest and essentially enclosed the top of the slope. The boundary ditch measured approximately 4m wide by 1.1-1.6m deep (deeper at the northern end). It had moderately-sloping sides, a concave base, and contained numerous silty-clay fills (likely derived from natural silting). Relatively few finds were recovered from this boundary, except for the northern slot where large quantities of Iron Age and early Roman pottery had been

dumped. The boundary was truncated by later features, including Saxon Building 7C.19 and medieval Trackway 7C.2.

Boundaries 7C.4 and 7C.9 were parallel ditched boundaries, aligned east-west and spaced c 70m apart. Boundary 7C.4 was observed for 95m (continuing beyond the eastern limit of excavation and truncated by Trackway 7C.2 to the west), and Boundary 7C.9 was observed for 160m (terminating in pit [764832] to the east and truncated by Trackway 7C.2 to the west). Boundary 7C.9 was observed to the west of Boundary 7C.2, whereas Boundary 7C.4 was not. These ditches likely functioned as field boundaries.

Two large parallel ditched boundaries (Boundaries 7C.5 and 7C.6) and two smaller curving boundaries (Boundaries 7C.7 and 7C.8) projected off Boundary 7C.4. These may have delineated work areas. This is supported by the fact that Boundary 7C.8 was a different type of boundary, formed by a series of intercutting pits and segmented ditches, which enclosed Roundhouse 7C.1.

Roundhouse 7C.1 was located within the area bounded by Boundary 7C.8. The northern half of the roundhouse was exposed (internal diameter of 6.7m), with a projecting ditch (funnel entrance?) out to the east. The roundhouse drip gully measured between 0.4 and 0.6m wide by c 0.16m deep and had moderately-sloping sides and a concave base. It was filled with a brown-grey silty-clay, with some charcoal, fired clay, pottery, and animal bone. There were three large post-holes in the centre of the structure, two post-holes just within the ring gully, and a further four post-holes outside the structure. A small pit was located at the eastern end of the entrance. Pottery recovered from the roundhouse during the evaluation was dated to the late Iron Age.

Enclosure 7C.1 was a rectilinear enclosure tacked onto the northern side of Boundary 7C.9. It measured 22.5m east to west by 16.5m north to south. The northern ditch of the enclosure continued to the east for a further 45m. Two ditches formed the eastern side of the enclosure – the inner may have been a later (blocking?) of the enclosure. A terminus (potentially part of an entrance) was identified in the outer eastern ditch, however the northern side of this was truncated by pit [765241]. Within the enclosure were 15 post-holes and 2 pits – these do not form any identifiable structure and may have been associated with the later (Saxon?) activity. Pottery recovered from the enclosure was preliminary dated to the late Iron Age. The function of this enclosure is unclear, although it was likely associated with agricultural activity.

Roundhouse 7C.2 was another very small 'roundhouse' or shelter (or possible hay rick), to the east of Boundary 7C.1 and north of Boundary 7C.9. This had an internal diameter of 2.65m and an entrance to the west. The ring gully measured 0.35m wide by 0.2m deep, with a single brown-grey silty-clay fill. No internal features were identified. The structure was too small to be a roundhouse as such (for living) but may have been used for storage or similar. It was located very close to Boundary 7C.2, and so it is possible that it belongs to a slightly different (earlier?) phase of Iron Age activity? There was the suggestion of one further roundhouse, Roundhouse 7C.3, to the west of Enclosure 7C.1. Only the southern half of the possible roundhouse ring gully survived. If complete this would have had an internal diameter of 6.5m. The surviving ring gully measured 0.3m wide by 0.09m deep, with a grey-brown

sandy-clay fill. No internal features or associated post-holes were identified. The gully was truncated by beam slot [738083].

Other ditches in this area have been assigned to the Iron Age in this assessment, based on their stratigraphic relationships and the fact that they do not fit the alignments of the later (Saxon and medieval) activity. This includes Boundary 7C.3 (to the west of, and broadly parallel with, Boundary 7C.2 and comprising a series of smaller intercutting ditches); Ditch 7C.1 (aligned east-west, running off the top of the hill into Boundary 7C.2); and Ditches 7C.2 (a series of ditches projecting off the northern side of Boundary 7C.9). These features are thought to have functioned as drainage ditches within the agricultural landscape.

Roman

No definitively Roman features were identified during the excavation or stratigraphic assessment. However, the pottery assessment identified a small collection of Roman pottery (451 sherds) from the site. This likely reflects some continuity of activity from the late Iron Age enclosures, or activity on the outskirts of the Roman activity at TEA 7A.

Middle Saxon

A middle Saxon settlement was identified in the main field in TEA 7. This was an unenclosed settlement and comprised at least 38 post-built buildings, six sunken-featured buildings, and 19 pits/wells (Figure 7BC.6). The area of settlement, as excavated, covered c 34,000m² (3.4ha). It did not continue to the east (TEA 7C East), south (TEA 7A), west (north-western part of this field) or north (underneath the medieval village of Houghton, at least certainly not in the area to the north of the trackway). Most of the settlement was concentrated to the east of the Late Iron Age Boundary 7C.2, potentially suggesting that it was a relict earthwork in the Saxon period.

Preliminary dating of some of the pottery recovered from these features suggests that the settlement was occupied in the early – middle Saxon period (late 6th/7th century onwards), with radiocarbon dates (of SFB 7C.1, Building 7C.3 and Building 7C.20) suggesting that the settlement was occupied between the 7th and 10th centuries AD (SUERC-85533, SUERC-85537, SUERC-85539). These dates will be refined once the full pottery analysis has taken place and following a more comprehensive radiocarbon dating programme. It will be crucial to get a clear understanding of when this settlement was occupied, whether the archaeological remains are from one 'phase' of occupation (a relatively large settlement occupied for a shorter time), or from many centuries of occupation (a smaller community occupying the area for a longer period), and whether any movement across the landscape can be identified.

This settlement developed from earlier Saxon activity (the dispersed sunken-featured buildings identified in TEAs 10, 11, and 12) into a more defined community. Some of the sunken-featured buildings on this site may have been part of this earlier dispersed Saxon activity (eg SFB 7C.4), whereas others appear to have formed part of the middle Saxon settlement itself (eg SFB 7C.1). This settlement was also the precursor for the later Saxon activity (11th century) to the east, and the medieval (later 11th – 13th century) village of Houghton to the north. The settlement comprised the houses (the post-built structures) and

associated 'service' structures (wells, rubbish pits, cooking pits, extraction pits). The surrounding fields would have supported the settlement.

DIVISIONS WITHIN THE SETTLEMENT (FIGURE 7BC.6)

The settlement itself was unenclosed and few ditched divisions were observed within it. Instead, there may have been fence-lines separating the different buildings and activity areas. Some of these have been identified (eg Boundary 7C.10), but it is possible that more of the post-holes formed other, as yet unidentified, fence-lines.

Boundary 7C.1, the stream which crossed the site on an east-west alignment, ran through the centre of the middle Saxon settlement. This appears to have been open in the middle Saxon period and may have divided the settlement, with buildings located to the north and south of it. It is possible that this was managed periodically or seasonally. Two wells (Pits 7C.7 and 7C.8) were positioned on its northern and southern banks. Ditches 7C.4 and 7C.5 may have formed the southern 'entrance' into the settlement. The ditches were parallel, 22m apart, aligned NNW-SSE for 56m, before curving to the east and west (respectively).

Ditch 7C.3 was one of the few ditched boundaries which, towards its north-eastern end, appeared to enclose a middle Saxon building (Building 7C.1). This was aligned NE-SW out of the southern limit of excavation for 65m, before bending to the north for 45m, and then to the northeast for 48m. This neatly enclosed Building 7C.1, to the south, separating it from the others. This suggests that Building 7C.1 may have had a slightly different function, or be of a slightly different date, from the others.

Boundary 7C.10 was aligned NE-SW in the northern part of the settlement, just to the south of Building 7C.24. It is the only identifiable fence-line within the settlement, and comprised a shallow ditch to the east, and a line of post-holes to the west. It was observed for c 90m, but likely continued further to both the northeast and southwest. It is likely that other fence-lines existed within the middle Saxon settlement and that some of the currently unassigned post-holes may have formed parts of these.

POSTHOLE STRUCTURES (FIGURE 7BC.6)

Approximately 3,000 post-holes were identified in this area, many of which formed buildings. In total, 38 post-built buildings have been identified (at this stage), with it being likely that other post-holes formed part of further buildings. This will be looked at in the analysis stage. Understanding the date of these buildings is difficult, as little material culture was recovered from them. However, the morphology of these buildings suggests they were middle Saxon in date (7th – 9th century). This is supported by the preliminary dating of some of these structures – pottery recovered from Buildings 7C.4, 7C.14, and 7C.29 was spot dated to the early-middle Saxon period; and radiocarbon dates from Buildings 7C.3 and 7C.20 were dated to 775-962/963 cal AD (95.4% probability; SUERC-85537; SUERC-85539).

The post-hole buildings represent houses within the settlement, used for living, sleeping, and eating. There was no indication in any of the buildings for different functions, with the possible exception of Building 7C.22 which was larger and may have been a 'hall'. The buildings were scattered around the area on a variety of alignments - 16 buildings were aligned ENE-WSW; six buildings aligned east to west; five buildings aligned NW-SE; four buildings aligned NNW-SSE; three buildings aligned NNE-SSW; two

buildings aligned NE-SW; one building aligned WNW-ESE; and one building aligned north to south. In some places there was evidence for the arrangement of buildings into lines. This is most noticeable in the southern part of the site, where there was a row of five buildings (Buildings 7C.1, 7C.2, 7C.3, 7C.4, and 7C.6). The greater number of buildings across the site aligned ENE-WSW also suggests some degree of planning. Some of the buildings, particularly Buildings 7C.1, 7C.2, 7C.4, 7C.12, 7C.16, 7C.17, 7C.18, and 7C.20, may fit into a 'short perch' grid system – a grid of 4.57m used to lay out Saxon buildings (Blair J 2013). This suggests that these buildings, at least, were contemporary and laid out deliberately.

Most of the buildings were purely post-built structures. There were two exceptions to this – Building 7C.1 which had a beam slot along its south-western side and Building 7C.20 which had three beam-slots along its southern and western sides. These different types of building construction may indicate a different date or function to these particular buildings. The majority of the buildings were rectangular in shape. The exceptions to this were Building 7C.18 (slightly sub-circular in shape) and Building 7C.36 (more L-shaped than others). The buildings measured between 5.1m and 18.7m long by 3.3m and 7.6m wide (an average of 11.4m by 5.3m). The largest building was Building 7C.22 (18.7 x 5.5m = 102m²) – this may suggest it had a different function, potentially a hall or communal building. The number of surviving post-holes which made up these buildings varied between 11 and 79 (an average of 27 post-holes per building). Building 7C.3 was exceptional, with 79 post-holes, because of the numerous intercutting post-holes.

The layout of some of the buildings was very clear, with rows of posts on each side of the building (eg Buildings 7C.9 and 7C.11). Other buildings had a more confused layout, such as Building 7C.25, where many post-holes delineated broadly rectangular shapes, but the actual walls were trickier to identify. In other examples, some of the walls were missing (removed via ploughing or later activity). For example, Building 7C.31 did not have an eastern or western wall and Building 7C.28 did not have a southern side. Internal post-holes, forming internal divisions were observed in fourteen buildings. These were particularly obvious in Building 7C.17 (three rooms), Building 7C.3 (two rooms), and Building 7C.7 (two rooms). Some of the buildings had more complicated floor-plans, including possible annexes on Buildings 7C.14, 7C.16, 7C.17, 7C.30, 7C.34, 7C.35, and 7C.37; potential 'porches' or corridors on Buildings 7C.12 and 7C.13; and internal post-holes forming arcs/circles within Buildings 7C.22 and 7C.32. Possible entrances were identified in thirteen of the buildings. These were in a variety of places (four towards the southeast; four towards the northeast; three towards the southwest; one facing east; and one west facing). They measured between 2m and 4.2m wide (an average of 2.75m wide).

Few internal features were found within any of these buildings, with no evidence for floor surfaces or hearths. Instead, some of the buildings had internal post-holes or pits:

- 27 buildings had internal post-holes. These are thought to have formed internal divisions in fourteen of the buildings. In the others, the post-holes may have held smaller internal structures (posts to hold cooking pots etc).

- Small pits were identified within four buildings (two in Building 7C.1, and one in Buildings 7C.18, 7C.24, and 7C.28). Most of these were relatively small shallow pits, with limited information about their function. Two of the pits, [763611] in Building 7C.1 and [735920] in Building 7C.18, were larger (0.45m and 0.53m deep respectively). Pit [735920] was interpreted on site as a “storage” pit.
- One beam-slot [738719] was identified within Building 7C.38. This was aligned north to south and measured 1.7m long, 0.25m wide and 0.36m deep.

There was evidence for phasing with three of these buildings:

- Buildings 7C.9, 7C.10 and 7C.11 – the earlier building (Building 7C.11) was on an ENE-WSW alignment. This was replaced by Buildings 7C.9 and 7C.10. The later Building 7C.9 overlay the western half of Building 7C.11.
- Buildings 7C.19 and 7C.20 – the earlier building (Building 7C.19) was on a NE-SW alignment, which was replaced by Building 7C.20 on a northwest-southeast alignment. The later Building 7C.20 overlay the eastern part of Building 7C.19.
- Buildings 7C.21 and 7C.22 – the earlier building (Building 7C.21) was on a NE-SW alignment, which was replaced by Building 7C.22 on an ENE-WSW alignment. The later Building 7C.22 overlay the southern part of Building 7C.21.

Elsewhere, there was evidence for continued maintenance of buildings. Many of the buildings had intercutting post-holes, showing that the posts were replaced over time. This was most noticeable with Building 7C.3 where there were many examples of intercutting post-holes (up to five together).

The following table provides information about each of the post-built structures on the site:

Table 7B/C.1 Post-built structures on TEA 7C

Building	Location	Alignment	Dimensions	No. of post-holes	Entrance	Internal features	External features	Date	Relationship with other features	Notes
Building 7C.1	TEA 7C western field, southern part	ENE-WSW	14.75m X 6.4m	19 (plus 1 beam slot)	SW corner? (3m)	2 pits 9 post-holes (not clear divisions)	2 pits (1 to south, 1 to west).		Bounded by Ditch 7C.3 (only building in this area). On same line as Building 7C.2	Beam-slot along southern side of building.
Building 7C.2	TEA 7C western field, southern part	ENE-WSW	9.8m X 5.3m	29	Eastern side? (2.2m)		Adjacent to Pit 7C.2.		On same line as Building 7C.1.	
Building 7C.3	TEA 7C, western field, southern part	ENE-WSW	10.5m X 5.8m	79	SE corner? (2.75m)	7 post-holes (NW-SE division?)		Radiocarbon date: 775-962 cal AD (95.4% probability; SUERC-85537)	On same line as Buildings 7C.4 and 7C.6.	2-5 intercutting post-holes in lots of places, suggesting continued maintenance of structure?
Building 7C.4	TEA 7C, western field, southern part	ENE-WSW	10.5m X 4.2m	20	NE corner? (2.5m)	8 post-holes (not clear divisions)	1 pit to west.	Pottery spot-dated to the early-middle Saxon period (738953)	On same line as Buildings 7C.3 and 7C.6. 3 post-holes connecting Building 7C.4 with Building 7C.5.	

Building 7C.5	TEA 7C, western field, southern part	E-W	5.1m X 4.3m+ (northern side not observed)	13		2 post-holes (N-S division?)			3 post-holes connecting Building 7C.5 with Building 7C.4.	Smallest building in this line, and on a slightly different alignment.
Building 7C.6	TEA 7C, western field, southern part	ENE-WSW	10.5m X 5.1m	21	SE corner? (2.9m)	1 post-hole (NW-SE division?)	3 pits to south-west.		On same line as Buildings 7C.3 and 7C.6.	Line of 3 post-holes out to east.
Building 7C.7	TEA 7C, western field, southern part	ENE-WSW	13m X 4.2m	17	SE corner? (4.2m)	3 post-holes (2 x NW-SE divisions).	1 pit to south.		SW corner truncated by Pit 7C.4. West of Building 7C.4.	Suggestion of 2 rooms with corridor in between?
Building 7C.8	TEA 7C, western field, southern part	WNW-ESE	9.8m+ (northern side not observed) X 3.3m	12		2 post-holes (ENE-WSW division?)	Beam-slot to south.			Only eastern half of building survives.
Building 7C.9	TEA 7C, western field, southern part	NNE-SSW	10.7m X 5.4m	26	SW corner?				Works with Building 7C.10. Replaces Building 7C.11, over similar footprint.	
Building 7C.10	TEA 7C, western field, southern part	E-W	8.4m X 2.5m+ (southern side not observed)	21					Connected to Building 7C.9 to the west – extension of this?	
Building 7C.11	TEA 7C, western field, southern part	ENE-WSW	13.2m X 6.6m	40		3 post-holes (internal division?)			Earlier than Building 7C.9 and replaced by Building 7C.9.	
Building 7C.12	TEA 7C, western field, southern part	ENE-WSW	9.8m X 5.5m	38		2 post-holes (E-W division?)			More post-holes to the NE of this building, may be other buildings.	Possible 'porch'/corridor on northern and western sides?
Building 7C.13	TEA 7C, western field, southern part	ENE-WSW	11.2m X 6.4m	25	SW corner? (3.9m)					Possible 'porch'/corridor on eastern side?
Building 7C.14	TEA 7C, western field, southern part	NNE-SSW	6.4m X 4.2m	32	NE corner? (2.3m)	2 post-holes (N-S division?)	Some post-holes outside building.	Pottery spot-dated to the early-middle Saxon period (737324)	Adjacent to and fits with SFB 7C.1.	Possible annex on NW side (4.8m X 4m).
Building 7C.15	TEA 7C, western field, southern part	NW-SE	12.1m X 5.6m	48	SE corner (2.75m) or NW side (2m)?		2 pits outside.		Adjacent to Building 7C.16, but at a slightly different angle.	Lots of post-holes making up this structure – not clear lines.
Building 7C.16	TEA 7C, western field, southern part	NW-SE	10.2m X 5.6m	62			Line of post-holes heading to south.		Adjacent to Building 7C.15, but at a slightly different angle.	Possible annex on NW side (4.7m X 3.5m). Double rows of posts around southern and western sides.
Building 7C.17	TEA 7C, western field, southern part	NW-SE	15.4m X 4.7m	34	NE corner? (2m)	10 post-holes, forming 2 NE-SW divisions	Small group of pits to the SW.			Possible annex on NW side (5m X 2.5m).
Building 7C.18	TEA 7C, western field, southern part	NW-SE	7.5m X 5m	16	W side? (2.25m)	Small pit in centre and 1 post-hole				More circular than other buildings.

Building 7C.19	TEA 7C, western field, southern part	NE-SW	14.7m X 5.7m	26		3 post-holes			Earlier than Building 7C.20 (eastern side truncated by Building 7C.20).	Truncates Iron Age Boundary 7C.2.
Building 7C.20	TEA 7C, western field, southern part	NW-SE	11.6m X 5m	12 (plus 3 beam slots)		7 post-holes (ENE-WSW division)		Radiocarbon date: 775-963 cal AD (95.4% probability SUERC-85539)	Replaces Building 7C.19, on a different alignment but over same footprint.	Three beam slots along southern and western sides.
Building 7C.21	TEA 7C, western field, central part	NE-SW	17m X 5.5m+ (southern side not observed)	18		20 post-holes, forming 2/3 NW-SE divisions.			Earlier than Building 7C.22 (southern side truncated by Building 7C.22).	
Building 7C.22	TEA 7C, western field, central part	ENE-WSW	18.7m X 5.5m	43		4 post-holes at western end, forming arc.			Replaces Building 7C.21, on a slightly different alignment but over same footprint.	Largest building on site. Curved internal division at western end.
Building 7C.23	TEA 7C, western field, central part	N-S	11.5m+ (southern side not observed) X 5.6m	27		2 post-holes			Close to SFB 7C.5 and 7C.6.	Southern side does not survive.
Building 7C.24	TEA 7C, western field, central part	E-W	8.5m X 5.9m	29		12 post-holes in SE corner. 4 post-holes. 1 pit.	Cluster of 12 post-holes and 1 pit to the west.		Adjacent to Boundary 7C.10.	
Building 7C.25	TEA 7C, main field, central part	E-W	11.3m X 5.7m	37		Cluster of 11 post-holes.	14 post-holes to south.		Adjacent to Boundary 7C.12 (medieval village boundary)	Lots of post-holes making up this structure – not clear lines.
Building 7C.26	TEA 7C, main field, central part	ENE-WSW	13.5m X 5.4m	27		14 post-holes, forming internal divisions (some curved).				
Building 7C.27	TEA 7C main field, southern part	NNW-SSE	9.15m+ (southern side not observed) X 7.6m	14		1 post-hole.	Some post-holes to east.			Possible annex on NE side (5m X 4.8m).
Building 7C.28	TEA 7C main field, central part	NNW-SSE	12m+ (southern side not observed) X 7.5m	12		1 pit.				
Building 7C.29	TEA 7C main field, central part	ENE-WSW	12.5m X 4.6m	28			Some post-holes to east.	Pottery spot-dated to the early-middle Saxon period (739252)		Lots of post-holes making up this structure – not clear lines.
Building 7C.30	TEA 7C main field, central part	ENE-WSW	12m X 4.6m	13						NE extension (4.3m X 3.7m).
Building 7C.31	TEA 7C main field, central part	E-W	6.1m+ (eastern + western sides not observed) X 4.9m	11						
Building 7C.32	TEA 7C main	ENE-WSW	13.6m X 4.3m	29		9 post-holes				Slightly curved internal division.

	field, central part					forming curving internal division? 6 additional post- holes.				
Building 7C.33	TEA 7C main field, northern part	ENE-WSW	11m X 4.8m	19		15 internal post- holes.	3 pits on edge of building.		Adjacent to Building 7C.34 – contemporary and worked together?	Lots of post-holes making up this structure – not clear lines.
Building 7C.34	TEA 7C main field, northern part	NNW-SSE	11m X 5.1m	26		18 internal post- holes.			Adjacent to Building 7C.33 – contemporary and worked together?	Truncates Iron Age Boundary 7C.9. Possible annex on NW side (5.3m X 3.9m).
Building 7C.35	TEA 7C main field, northern part	NNE-SSW	14.9m X 5.1m	20		3 internal post- holes.			Adjacent to Building 7C.36.	Possible annex/extension on NW side (7.1m X 4.9m).
Building 7C.36	TEA 7C main field, northern part	E-W	16.6m X 7.25m (max)	33		9 internal post- holes, poss forming divisions?			Adjacent to Building 7C.35.	L-shaped.
Building 7C.37	TEA 7C main field, southern part	NNW-SSE	7m X 4.1m	14		6 internal post- holes.	1 pit on corner of building.			Possible annex on NE side (2.1m X 1.3m).
Building 7C.38	TEA 7C main field, northern part	ENE-WSW	10.3m X 5.1m	13		1 beam- slot.				

SUNKEN-FEATURED BUILDINGS (FIGURE 7BC.6)

Six sunken-featured buildings (SFBs) were identified in the central part of this area, around the post-built buildings. Sunken-featured buildings are often thought to be of a slightly earlier Saxon date (6th – 7th century) and it is possible that some of the smaller SFBs (SFB 7C.2, 7C.3, 7C.4, 7C.5, and 7C.6) were earlier in date than the middle Saxon post-built structures. This is supported by the 6th century pottery recovered from SFB 7C.4. However, pottery from some of the other SFBs (SFB 7C.1, 7C.2, and 7C.5) was dated to the early - middle Saxon period (the same period as the post-built structures), and a radiocarbon date from SFB 7C.1 suggests a later 7th – mid 9th century date. Furthermore, the positioning of SFB 7C.1 directly adjacent to Building 7C.14 suggests that some of them, at least, were part of the middle Saxon settlement. The function of these SFBs is unclear. Those which worked in conjunction with the post-built buildings may have been 'backyard-type' structures, potentially for weaving or storage.

SFB 7C.1 was the largest of these structures. It was 6.2m long, 4.3m wide, and 0.15m deep, with moderately-sloping sides and a flat base. It was filled with a brown-grey clayey-sand fill, containing pottery, animal bone, daub, a bone pin and an iron nail. Twenty-one post-holes were identified within this structure, concentrated around the edges, with the largest at the northern and southern ends. A beam-slot was also identified along the western side of the structure. The SFB was positioned adjacent to Building 7C.14, on the same (north-south) alignment and the same length, suggesting they were constructed and used together. A radiocarbon date of a cereal grain from the basal fill of SFB 7C.1 was

dated to 682-868 cal AD (95.4% probability; SUERC-85533), broadly contemporary with the post-built structures.

SFB 7C.2 was located 28m to the southeast of SFB 7C.1. It was 2.87m long, 2.18m wide, and 0.29m deep, with moderately-sloping sides and a flat base. It was filled with a brown-grey sandy-clay, with some pottery, animal bone, and slag. There were two post-holes at either end of the long axis. There was a cluster of post-holes to the west of this structure, which may have been associated with it.

SFB 7C.3 was located 8m to the northeast of SFB 7C.2. It was more circular than the other structures and measured 3.4m long, 3m wide, and 0.14m deep, with gently-sloping sides and a flat base. A brown silt fill was identified within the structure, with charcoal, pottery and animal bone (concentrated in the western part of the structure, suggesting some backfilling). There were five post-holes within and three outside the structure – two to the north (there was evidence of *in situ* burning of one of these posts) and one to the south.

SFB 7C.4 was located towards the centre of the middle Saxon settlement. It was the smallest SFB, measuring 2.07m long by 1.58m wide by 0.07m deep, with gently-sloping sides and a flat base. It was filled with a grey brown silty-clay fill with occasional animal bone and pottery. It had three post-holes associated, on the edge of the pit.

Two SFBs, 7C.5 and 7C.6, were located adjacent to each other (0.7m apart) in the northern part of the middle Saxon settlement. One of these may have been a later replacement of the other – the relationships with the surrounding pits would indicate that SFB 7C.6 was the earlier (as this was cut by later pit [739201], which may have been associated with SFB 7C.5). SFB 7C.6 was 3.5m long, 2m wide and 0.2m deep, with gently-sloping sides, a flat base, a grey-brown silty-sandy fill with animal bone and pottery, and three large post-holes. SFB 7C.5 was 3.7m long by 2.67m wide by 0.25m deep, had gently-sloping sides, a slightly concave base, a brown-grey silty-clay fill with animal bone and pottery, and two deep post-holes (at either end of the long axis).

PITS (FIGURE 7BC.6)

Around the area of the middle Saxon settlement were 19 large pits which would have performed different functions. This included eight wells, three rubbish pits, one storage pit, two extraction pits, four pits associated with burning, and one enigmatic pit possibly associated with communal cooking. For this assessment, they have been divided based on the preliminary interpretation of their function. This will be considered further at the analysis stage, and depth analysis undertaken to estimate the local ground water height.

It should be noted that there is a line of pits / wells in the south-eastern part of the settlements (Pits 7C.2, 7C.6, 7C.16, 7C.13, 7C.5, 7C.17). Most of the buildings are located to the north of this. It is possible that they functioned partly as wells / work places on the edge of the settlement, and had a slightly different function from those within the settlement itself.

Those which are thought to have been wells/associated with water were (shown on Figure 7BC.6):

- Pit 7C.2. This was the largest pit in this area, measuring 10m in diameter by 1.05m deep. It was interpreted as a large artificially-constructed 'pond', partly due to its size and its profile (a gradual slope from the northeast and steeper in the southeast). It contained a series of silty-clay (naturally-derived) fills, with animal bone, pottery, an iron blade, a bone pin, and flint debitage. It was located adjacent to Building 7C.2 and south of Building 7C.3, suggesting it was used by more than one household. It is possible that this pit was a feature in the landscape for longer than the other pits or Saxon buildings – potentially being constructed in the Roman period (associated with the settlement activity in TEA 7A to the south) and continuing into the Saxon period. It may have originally functioned as a pond or clay pit and was later used as a rubbish pit. This is supported by some of the pottery recovered from the pit, which was preliminary dated to the late Iron Age – early Roman period.
- Pit 7C.3. This was located in the southern part of the area. It was sub-circular and measured 4.35m long by 2.7m wide by 1.09m deep. Its morphology suggests it was a well – moderately-sloping sides at its upper level, levelling out, and then a shorter steep section down to the base.
- Pit 7C.4. This was located between Buildings 7C.7 and 7C.8 and truncated the corner of Building 7C.7. It was oval-shaped and measured 5.9m long by 2.6m wide by 0.95m deep, with moderately-sloping sides and a relatively flat base. The lower fills were clay with frequent iron panning.
- Pit 7C.5. This was located in the far southeastern part of the site, was oval-shaped, and measured 3m in diameter by 1.6m deep, with steep sides, and seven silty-clay fills. The fills contained some animal bone, flint, and frequent charcoal. It was interpreted on site as a well.
- Pit 7C.6. This was in the southeastern part of the site and measured 3.4m by 2.9 by 1m+ deep. It had steep sides with three silty fills (with lots of animal bone). The profile of this pit suggests that it was a well.
- Pit 7C.7. This was located at the end of a gully projecting off Boundary 7C.1 (the stream). It measured 3m in diameter by 1.8m deep and had steep sides. It contained seven sandy-clay fills with animal bone and pottery. The location of this pit, adjacent to the stream with the gully running into it, combined with its profile and depth, suggests it was a well.
- Pit 7C.8. This was located just to the north of Boundary 7C.1 (the stream) and was also likely to have been a well. It measured 2.2m in diameter by 1.6m deep with steep sides and four fills. The eastern side of the pit was vertical, whereas the western side was less regular.
- Pit 7C.9. This was in the northwestern part of the Saxon settlement, measured 2.6m in diameter by 0.85m+ deep, with steep sides and silty-clay fills. There were some post-holes around the pit, potentially to hold structures over the well.

The following pits contained quantities of domestic material (pottery, animal bone etc.) and may have had at least a secondary use as 'rubbish' pits:

- Pit 7C.10. This was located in the southern part of the area. Large quantities of finds were recovered from the pit, including animal bone with evidence for butchery, pottery (much of which appeared to be the same fabric and was preliminarily dated to the middle Saxon period), part of a bone comb, a bone pin, iron objects, CBM, a whetstone, and part of a quernstone. The pit was tear-drop shaped and measured 7m by 5.3m by 0.8m deep, with steep sides and a sloping base.
- Pit 7C.11. This was located to the northwest of Building 7C.14 and was interpreted on site as a 'rubbish' pit. It was oval-shaped, measured 2.4m by 1.5m by 0.4m deep, with two silty-clay fills with frequent animal bone and pottery.
- Pit 7C.12. This was located to the southwest of Pit 7C.11 and was also interpreted as a 'rubbish' pit. It measured 1.6m by 1.37m by 0.9m deep and contained three fills with frequent animal bone and pottery.

Extraction pits:

- Pit 7C.14. This was to the northeast of SFBs 7C.5 and 7C.6 and comprised a series of intercutting pits which covered an area of 5.6m by 1.5m. The pits contained two fills – the lower derived from natural infilling, and the upper a deliberate backfill. These may have been extraction pits, potentially for clay for construction.
- Pit 7C.15. This was in the northern part of the Saxon settlement and may have also been used for extraction. It was broadly circular and measured 2.1m in diameter by 0.81m deep and had three fills – the lower derived from natural infilling, and the upper from deliberate backfill.

Pits with evidence for burning (hearth/fire pits):

- Pits 7C.16. This was located in the southeastern part of the site. It measured 5.8m by 3.2m by 0.79m deep, and contained evidence for *in situ* burning, suggesting that it was used as a hearth or fire pit.
- Pit 7C.17. This was also in the south-eastern part of the site and measured 2.7m by 2.4m by 0.8m deep. It had moderately-sloping sides, a concave base, and four fills, including a thin dark grey clay deposit halfway up which may indicate *in situ* burning and suggest this was a hearth.
- Pit 7C.18. This was in the central part of the area, close to SFBs 7C.4, 7C.5, and 7C.6. It was tear-drop shaped and measured 1.6m by 1.1m by 1.5m deep. It contained many fills, including two thin burnt clay layers and lots of charcoal, indicating *in situ* burning.
- Pit 7C.19. This was in the northern part of the area of Saxon settlement and comprised two shallow intercutting pits – approximately 3.5m in diameter by 0.04m deep. The later pit contained a high frequency of charcoal and may indicate its use as a hearth.

Other pits:

- Pit 7C.13. This was located in the southwestern part of the site. It was oval-shaped and measured 6.6m by 2.1m by 0.9m deep, with five fills. It was interpreted on site as a 'storage' pit.

- Pit 7C.20 (Figure 7BC.13). This pit group was located in the southwestern part of the settlement and was the most enigmatic series of intercutting pits within the settlement. They were filled with burnt material and a possible large 'cooking pot'. The original (and largest) pit [735526]/[738528] was circular and measured 4m in diameter by 1.5m deep, with steep sides and a concave base. A series of smaller pits were cut into this over time – [738514] first (which contained significant quantities of burnt material); then [735529/738522]; and then [738518]. The latest pit was [738513/735599], which contained a large vessel (possibly made of degraded pottery or a clay lining). This vessel was 0.7m in diameter, 0.2m thick, and 0.17m high, and had a thin charcoal layer over its base, overlain by a fill containing abundant charcoal and burnt cereal grains. There were two post-holes to the north of the pit – [735541] and [734974]. These pits may have functioned as a cooking pits, with the post-holes supporting a frame to hold the pot. Their location on the western edge of the Saxon village suggests that this may have been a communal cooking area?

There were a number of other pits scattered around this area. It is difficult, at this stage, to ascertain whether they were also of middle Saxon date. This includes pits [763649], [765048], [765054], [760005], [739803], [760234], [764512], [763001], [762960], [735798], [764832] and [738143]. These will be examined at in the analysis stage.

Late Saxon

An area of later Saxon activity was identified in the southwestern part of TEA 7B and southern part of TEA 7C East (Figure 7BC.7). This comprised one building, with suggestions of four other structures, and seven pits, all within a defined block of land. Associated with this were narrow fields to the north and a larger field to the south. This covered an area of at least 43,700m² (4.37ha) and may have continued to the east and west beyond the limits of excavation.

The features assigned to this period were of a different character, and in a different location, from the middle Saxon settlement to the west and the medieval village to the northwest. They truncated the upper fills of the palaeochannels (demonstrating that the palaeochannels had dried up and been infilled by then) but were themselves truncated by the agricultural furrows. This area may, therefore, represent the link between the middle Saxon and medieval settlements. The size of the area and number of buildings identified suggests that this may have been a smaller community than occupied this area in the middle Saxon or medieval period.

A radiocarbon date of a cereal grain from the middle (main) phase of Building 7B.1 was dated to 1041-1210 cal AD (95.4% probability; SUERC-85532), although it must be noted that dating cereal grains can be unsecure (and may be grains from the first cultivation of a site following the settlement's abandonment). Some of the pottery retrieved from these features has been preliminarily dated to a wide variety of dates, including late Iron Age, late Roman, and 11th century pottery from Building 7B.1; mid-12th century pottery from Ditch 7B.13; and Iron Age pottery from Ditch 7B.9. The dating will need to be clarified at the analysis stage but, for now, a later Saxon/early medieval date (11th – 12th century) seems most likely.

CENTRAL SETTLEMENT AREA (FIGURE 7BC.7)

Most of the late Saxon settlement was concentrated within an area delineated by Ditches 7C.90 to the north and west, Ditch 7B.9 to the east, and did not continue beyond the line of Ditch 7B.11 to the south. There was no sign of any southern boundary to this area (it would have been open to the fields beyond). This covered an area of c 5,000m² (0.5ha). It was the settlement area, with agricultural fields to the north and south.

Ditches 7C.93 and 7C.94 were aligned NE-SW across the central area, spaced c 5m apart. They may have functioned as plot divisions and potentially a passageway crossing the area. Two pits (Pit 7C.66 and 7C.68) were positioned between the ditches – perhaps they were communal wells or other shared pits. Within this area was a single building (Building 7B.1), four other possible structures (Structural Features 7C.59–7C.62), and seven pits. There was evidence for different phases of activity, with some of the pits truncating the structural features (eg Pit 7C.67 truncated Structural Features 7C.60, and Pit 7C.66 truncated Structural Features 7C.61).

Building 7B.1 was the clearest example of a building within this area, located in the southeastern part of the settlement. There was evidence for three phases of modification to this building:

- The earliest beam-slots were aligned NW-SE ([710692/710695]) and NE-SW ([710722/710655/710629]), to the northeast of the building.
- These were replaced by a series of ENE-WSW and WNW-ESE beam-slots – [710645/710746/710620/710738/710752/710717], which formed the main rectangular building. This measured 3.8m by 2m. The beam slots were 0.35-0.5m wide by 0.1-0.2m deep, with steep sides, flat bases, and an orange-brown clayey-silt fill with moderate charcoal and some animal bone and pottery. No internal features were identified within the building, although a single pit, [710655], was located to the northwest of it and was likely contemporary with it. To the north of the building were further ENE-WSW and WNW-ESE beam slots which may have functioned as additional ancillary buildings or rooms. A cereal grain from the fill of one of these beam-slots (710747) was radiocarbon dated to 1041-1210 cal AD (95.4% probability; SUERC-85532).
- The building was later truncated by a longer NE-SW beam-slot [710175/710626/710703].
- To the west of the building there was also one pit [710117], which was likely associated with it.

Four other possible structures were identified. These comprised a mixture of beam-slots and post-holes:

- Structural Features 7C.59 - ENE-WSW aligned beam-slot (4m long, 0.9m wide, 0.25m deep).
- Structural Features 7C.60 - north to south aligned beam-slot (1.7m+ long, 0.7m wide, 0.15m deep). The beam-slot was truncated by Pit 7C.67, so may have continued further to the south. There were also two post-holes 3m to the southeast.
- Structural Features 7C.61 - NE-SW aligned beam-slot (4.3m+ long, 0.7m wide, 0.2m deep). It continued to the south-west but was truncated by Pit 7C.66.

- Structural Features 7C.62 - east to west aligned narrow gully, possibly a beam-slot (11.4m long, 0.6m wide, 0.18m deep). There were also a number of post-holes in this area – two to the southeast; one to the northeast; and four forming a small square to the north (1.5 x 1.5m), potentially a platform or similar.

Seven pits were identified within this area. They were a mixture of wells, 'rubbish' pits, and extraction pits:

- Pit 7C.64 - sub-rectangular pit, measuring 5.6m by 2m by 0.55m deep, in the southwestern part of this area. It had steep sides and a concave base, and two fills with frequent animal bone, pottery, and burnt CBM.
- Pit 7C.65 - sub-circular pit measuring 2.3m by 1.5m by 0.7m deep, in the southwestern part of this area. It had steep sides and an uneven base and four fills – the upper of which contained frequent charcoal and some animal bone, pottery, fired clay, and a metal object, suggesting it was deliberately backfilled.
- Pit 7C.66 - oval-shaped pit in the central part of this area, measuring 4.8m by 3.2m by 0.5m deep. This pit truncated Ditch 7C.94 and Structural Features 7C.61.
- Pit 7C.67 - small circular pit in the southern part of this area, which measured c 1.8m in diameter by 0.5m deep. Evidence for burning was identified in one of the fills. It truncated the beam-slot in Structural Features 7C.60.
- Pit 7C.68 - sub-rectangular pit, in the area between Ditches 7C.93 and 7C.94, which had vertical sides and measured 1.8m by 1.4m by 0.55m deep (not bottomed). Two fills were identified, containing animal bone and pottery. The shape of this pit suggests it may have been a well.
- Pits 7C.69 – sub-circular pits in the northern part of this area, measuring 1.5m in diameter by 0.52m deep (not bottomed). They had steep sides, and a gravelly-clay fill with animal bone, fired clay, and pottery.
- Pit 7C.70 – sub-circular pit, adjacent to Pits 7C.69. It measured 1m by 1.2m by 1m deep. It had steep sides and three fills and may have been a well. Some wood was recorded from the bottom fill.

In addition to these features were a few scattered post-holes [733121], [733208], [733635], [733387], [733217], [733319] and [733320]. These may have formed parts of other buildings or fence-lines.

LARGE SOUTHERN FIELD (FIGURE 7BC.7)

To the south of the settlement area was a large field, measuring approximately 180m NW-SE by at least 90m NE-SW (continuing beyond the eastern limit of excavation). This field was delineated by Ditch 7B.12 to the west, 7B.13/7B.14 to the south, and 7B.11 to the north (although with no northern boundary separating this field from the settlement). The eastern boundary to the field was not identified during these excavations, although it may have simply been an informal boundary. No entrances to the field were identified – these may have been positioned to the east or in the area under the oil pipeline. Within

the main southern field was an area of quarry pitting which has been provisionally assigned to the late Saxon period – Pits 7B.3. The pits measured 11.6m long by 5.4m wide by 0.3-0.5m deep. The upper fill across all the pits was the same, a grey-brown silty-clay with stones and pottery, suggesting it was deliberately backfilled at the end of the quarrying activity. Other features within this area, including some east-west aligned ditches, may have been associated with the late Saxon activity but this is currently unclear.

SMALLER FIELDS TO NORTH (FIGURE 7BC.7)

A NW-SE aligned field system was identified to the north of the settlement area. This field system truncated the upper fills of the palaeochannels and earlier (Iron Age) features; but was truncated by the later medieval agricultural furrows and was on a slightly different alignment from the later (18th-19th century) field divisions. It was only observed in the area directly to the north of the late Saxon settlement area so is thought to have been associated with this. The field system was delineated by a series of NW-SE ditches (7B.7, 7B.8 and 7B.9) and perpendicular NE-SW ditches (7B.10, 7B.11, 7C.89, and 7C.91). These formed fields which measured approximately 120m long by between 25m and 30m wide and covered an area of approximately 13,200m² (1.32ha) not seen to the north or south. A gap of 5m was observed towards the centre of Ditch 7B.8. This may have been an entrance or access between the fields. No internal features were identified within any of these fields. The size and regular nature of the fields suggests they may have been used for differing agricultural practices than the large southern field, perhaps arable as opposed to pastoral farming.

Medieval

The remains of part of the deserted medieval village of Houghton were uncovered in the northern and north-western parts of TEA 7C (Figure 7BC.8). This covered an area of approximately 2.5ha. The village did not continue to the east (into TEA 7C East) or south (into the area of the middle Saxon settlement). It may have extended slightly to the north and west of our excavations, although surviving historic maps (particularly the 1772 Enclosure Map; Figure 7BC.10) suggests that it did not extend much further. This is supported by an earthwork in the trees to the northwest of our site which is aligned north to south before returning to the east – this may be the north-western corner of the village. Furthermore, no medieval remains were identified in archaeological trenching in the field to the north, and the density of medieval remains in our excavations was reducing towards the western edge.

The medieval archaeological remains comprised a trackway across the site; plot boundaries off the trackway; buildings set within these plots, and industrial activity (including retting and metalworking) (Figure 7BC.8). There was little evidence for houses, although the quantities of domestic pottery and other finds demonstrate that people were living and working here. Another smaller area of medieval activity was identified in the southern part of TEA 7C (Figure 7BC.9). This covered an exposed area of 8,860m² (0.88ha) and comprised a boundary ditch enclosing at least three buildings, a well, and two pits. It is likely that this was connected to the main medieval settlement, presumably via the track.

This settlement was likely an outlier or daughter settlement to Brampton, with no church or manor house (although the earlier relationship between Houghton and Brampton is unclear). Instead, it appears to

have been the industrial zone, potentially utilising the nearby woodland. Pottery dating suggests it was occupied between the late 11th and mid-13th centuries, with a resurgence of activity in the late 14th – mid-15th century. This will be refined once the full pottery analysis has taken place and radiocarbon dates obtained. Nonetheless, this suggests that it was the successor to the middle Saxon and late Saxon settlements to the south and southeast. The reasons for the village's desertion are unclear. One suggestion is that it was related to Brampton or Harthay Woods - if the villagers depended on the woodland for food and fuel, they would have deserted the village when the wood became inaccessible.

OTHER SOURCES FOR THE VILLAGE

The village is recorded on the Cambridgeshire Historic Environment Record (CHER 11422), based on a record in Bigmore's *'The Bedfordshire and Huntingdonshire Landscape'*. Houghton, as a settlement, was not included in the 1086 Domesday Book. It may have been subsumed under one of the two entries for Brampton – the main one stated that Brampton was held by *'Ranulf, brother of Ilger from the King'* and that it contained 36 villagers, 15 ploughlands, 100 acres of meadow, 0.5 league of woodland, a church, and 2 mills (Domesday Book Online). The generic place-name *'tun'*, Old English for *"enclosure, estate, homestead"*, suggests that the settlement was established in the 11th century (and probably existed at the time of the Conquest). This may, however, relate to one of the earlier (Saxon) phases of settlement, and not necessarily this incarnation of the village.

Brampton Manor was held by the crown until 1194, when it was passed to Lambert de Colonia (Page et al 1936). Houghton itself is mentioned in the mid-13th century, when it is recorded that the manor of Brampton and Houghton were allotted to Henry de Hastings before 1241 (Page et al 1936; *Cal. Close R.* 1237–42, 364; *Rot. Hund.* loc. cit.). It was then passed between various individuals over the following centuries. Houghton was positioned within an area known as the 'Forest of Harthay'. This is demonstrated in the record of the bounds of Harthay Forest in 1154 and 1299 (although the 1299 document was a repeat of the 1154 record), where the name 'Houghtone' was recorded - *'the field of Houghtone'* (Page et al 1936).

In 1215, Harthay was granted by King John to St Mary's Cathedral in Lincoln, as compensation for the destruction caused during the Interdict (Page et al 1936; *Rot. Chart.* (Rec. Com.), 214b). The farm 'High Harthay', 300m to the west of our site, is thought to indicate the location of the royal and episcopal wood which formed part of this.

Houghton is included in the 1279 Hundred Roll for Huntingdonshire. In this, 21 buildings are mentioned, with the names of all inhabitants (all of whom were 'soke' men).

Historic mapping provides information on the later fortunes of the medieval village. The 1772 *'Inclosure Map for the Township of Brampton'* depicts fields labelled *'Houghton Close'*, *'Houghton Ploughed Close'*, and *'Great Houghton Corner'* (Figure 7BC.10). This map shows the trackway and an area of 'waste land', broadly corresponding to the area of the village (and potentially suggesting that the industrial activities taking place in the village rendered the land unusable for agriculture in the following centuries).

The Ordnance Surveyor's Drawing of 1808 also labels '*Houghton Grove Cot*' in the north-eastern corner of the deserted village but does not provide any other information about the village. The trackway and all other traces of the village had disappeared by this date, and the whole area was in agricultural use.

THE EXCAVATIONS - EARLIEST PHASE OF MEDIEVAL VILLAGE ACTIVITY (FIGURE 7BC.8)

Evidence for a slightly earlier phase of medieval activity, predating the main medieval village, was identified in the north-eastern part of the excavation. This comprised a trackway (Trackway 7C.1) and a boundary leading off the Trackway (Boundary 7C.11).

Trackway 7C.1 predated many of the remains associated with the medieval village, as post-hole [072027], pit [730263], ditch [072182], pit [730020] and pit [730356] truncated the upper backfill of the trackway ditches. Furthermore, its alignment did not fit with the medieval village layout, suggesting it belonged to a slightly different (earlier) phase of activity. This trackway was aligned broadly east to west and was observed for c 160m in length, continuing beyond the eastern and north-western limits of excavation. It was between 9m and 11m wide and comprised two drainage ditches (c 1.1m wide by 0.22–0.8m deep, with the northern ditch being consistently deeper), spaced 8m apart. In one place, a grey-brown silty-gravel deposit (730002) was identified between the two drainage ditches - this was 0.31m thick and may be the remnants of the trackway surface.

Boundary 7C.11 was laid out alongside Trackway 7C.1. It projected out of Trackway 7C.1 for 4.5m, before turning to the northeast for 43m and connecting to a NW-SE aligned ditch. It likely functioned as an earlier plot boundary. It was truncated by some of the other medieval remains (most notably Boundary 7C.16, Structural Features 7C.10, and Boundary 7C.22), demonstrating that it formed part of the slightly earlier phase of the medieval village. It is difficult to identify any other features which formed part of this slightly earlier medieval phase.

MAIN PHASE OF MEDIEVAL VILLAGE ACTIVITY (FIGURE 7BC.8)

TRACKWAY 7C.2 (FIGURE 7BC.8 AND .14)

Trackway 7C.2 was the main feature in the medieval village, around which the village was organised. It was observed along the northern and western sides of the excavation. The trackway was aligned east-west across the northern part of the site (for 170m), before turning to the south (observed within the main area of excavation for 115m but continuing to the south within and beyond the unstripped area for a further 125m). It measured between 9m and 13m wide. The line of the trackway is shown on the 1772 Inclosure Map, labelled '*S E B Bexuards 9th A Hoersst Copyhold 178*' (Figure 7BC.10). It is not clear whether this was still functioning as a trackway at this time, or whether its alignment was simply preserved in field boundaries. This had been lost by the time of the 1808 Ordnance Surveyors' Drawings. This map demonstrates that the trackway did not continue to the northeast much beyond the limit of excavation, but likely connected with the existing track between the main field in TEA 7C and TEA 7C East. It also demonstrates that the trackway continued to the south beyond the limit of excavation and connected with an east-west aligned trackway located in the copse between TEA 7A and TEA 7C (labelled 'SEB' on the 1772 Map).

The composition of the trackway varied slightly over its course:

- The far southern part of the trackway (to the south of the unstripped rectangle) was not identified as part of the trackway during the excavation. However, the evidence from the 1772 Enclosure Map, combined with rechecking the excavation records, suggests that it did indeed continue to the south and was identified during the excavation as a series of intercutting ditches:
 - The western part comprised two intercutting ditches, approximately 3m wide by 0.6m deep.
 - The eastern part comprised a further two intercutting ditches, approximately 3.5m wide by 0.58m deep.
 - The central area was interpreted on site as an earlier truncated ditch [070316/070319] with an uneven base, 4m wide and c 0.3m deep. Instead, this may have been the remains of a sunken track (similar to that along the northern part of the site).
 - The central part of the track was cut by a later ditch [070289] containing a post-medieval land drain.
- The stretch of the trackway along the western part of the site was the most conventional 'trackway' in form (Figure 7BC.14). It comprised two drainage/demarcation ditches (on its eastern and western sides) and the central track:
 - The western ditch was consistently larger (3.5-4m wide by c 1m deep) than the eastern ditch (1.7-2.8m wide by 0.45-0.7m deep). The western ditch was located uphill, so this would have collected water off the slope.
 - There was a recut in the eastern drainage ditch, demonstrating maintenance of the trackway over time.
 - The central 'track' measured 5-6m wide and comprised a clay deposit with frequent gravel, 0.15m thick. This may be the remnants of a metalled surface. It was only observed in this location along the trackway, potentially because this was the wettest area so the ground needed consolidating.
- The stretch of trackway along the northern part of the site was more complicated in form, with numerous ditches appearing and disappearing over its course. The trackway in this area appears to have been a 'sunken way':
 - The southern ditches were the clearest. These comprised two ditches, measuring c 2.5m wide by 0.7m deep.
 - The northern ditch was less obvious, mainly because of the other (contemporary and earlier) ditches directly to the north of it. Nonetheless, it appeared to be a single ditch, measuring 0.6m wide by 0.4m deep.

- The central 'trackway' area was clearest in the eastern slot excavated. Here, there was a cut for the track itself, which measured 4.7m wide by 0.22m deep, with gently sloping sides and a relatively flat base. The cut was filled with brown-grey sandy-clay (similar to the colluvium in this area), suggesting that it was allowed to naturally infill at the end of its useful life.
- Possible ruts were identified within the central trackway area. In the eastern slot, three of these were identified, measuring 0.72-0.94m wide by 0.22-0.32m deep. Some of the small 'ditches' identified in the western slot may also have been ruts – [072206], [072208] and [072210].
- In one place, there was an indication of a trackway surface deposit (730049) – a brown-grey gravelly-clay deposit, 0.15m thick.

A variety of finds were retrieved from the trackway (mainly from the ditches) This included medieval pottery, animal bone, iron nails, a bronze ring, ceramic building material, part of a quernstone, slag, and part of an 18th century pair of cufflinks. The existence of ruts in the trackway suggests that it was used by carts as well as people on foot and animals.

Most of the medieval features within the village were aligned on and respected this trackway, particularly the plot boundaries (Boundaries 7C.13, 7C.14, 7C.33, 7C.15, and 7C.16). This demonstrates that the trackway was set out as a central and defining part of the village. It is unclear when the trackway fell out of use. It seems likely that it would have ceased to be useful when the village was deserted, however some of the later finds from the trackway (such as the 18th century cufflinks) and its depiction on the 18th century Inclosure Map, suggests that it survived, in some form, into the post-medieval period – it may have simply been a useful route between fields.

PLOT BOUNDARIES (FIGURE 7BC.8)

A southern boundary to the village (Boundary 7C.12) and five main plot boundaries were identified on the northern/western side of the trackway (Boundaries 7C.13, 7C.14, 7C.33, 7C.15, and 7C.16).

Boundary 7C.12 was the southern boundary to the village. It was a curving ditched boundary, aligned NE-SW across the site, broadly parallel to Trackway 7C.2 (c 30m to the south/east of the trackway). The boundary truncated the Iron Age ditches (Boundaries 7C.2, 7C.3, 7C.6, and 7C.9) and some of the Saxon buildings (Buildings 7C.35 and 7C.36). This, combined with the way it mirrored the line of Trackway 7C.2, suggests that it formed part of the medieval village. The boundary was observed for c 190m. It was truncated by a later medieval agricultural furrow at its eastern end, so it is unclear precisely where it ended. It curved round to the south and terminated at its western end. There was a gap in the boundary, 10m wide, approximately halfway along. This may have been an entrance in and out of the village, potentially to the fields beyond. The boundary ditch itself varied in size but was generally quite small (0.35-0.85m wide by 0.05-0.2m deep). It had moderately sloping sides with an uneven base and was filled with a grey-brown silty deposit. This boundary was not intended as a major defensive boundary, but rather a separation of the village from the surrounding fields. In places, particularly towards the

southwest, post-holes were cut into the boundary indicating that there may have been a fence. In other places, particularly towards the east, the boundary was irregular and may have been a hedge-line.

Another ditched boundary, Boundary 7C.17, was located 4.5m to the north of Boundary 7C.12. This boundary was a 'staple' shape, parallel to Boundary 7C.12 for 22m and turning to the north at either end. It is unclear what function this boundary would have performed, but the fact it was parallel to Boundary 7C.12 suggests it worked as an internal division of some sort within the village.

The plot boundaries on the northern and western sides of Trackway 7C.2 projected directly off the trackway. They were the main divisions within the medieval village and divided the area up into distinct plots of land, potentially 'activity zones' or areas owned by different people. These plots measured 40-70m wide. The boundary ditches themselves measured between 1.7m and 4.5m wide (Boundary 7C.13 was the largest). They varied in depth between 0.2m and 0.95m deep. The ditches generally had moderately sloping sides and concave bases and were filled with grey-brown silty-clay fills. In places, particularly Boundary 7C.13, there was evidence for re-cutting of the boundary ditches, demonstrating maintenance over time. Many of the boundaries had 90° returns, forming a series of almost sub-rectangular blocks of land, rather than simple divisions:

- Boundary 7C.13 was the southern-most boundary and was aligned WNW-ESE off the trackway for 43m, before turning 90° and continuing to the southwest for 33m. This boundary continued to the southwest beyond the limit of excavation.
- Boundary 7C.14 was in the northwestern corner of the excavation. It was aligned north to south off the trackway for 10m, turned 90° and continued to the west for 35m, and then turned 90° again to continue to the south for 13m (and terminated there).
- Boundary 7C.33 was in the northwestern corner of the excavation. It was aligned NNW-SSE (continuing beyond the northern limit of excavation) for 8.5m, before turning 90° to the NE and continuing for at least 30m. It was truncated by Pond 7C.2, so its connection with the trackway was not observed.
- Boundary 7C.15 was in the northern part of the excavation. It aligned NNW-SSE (continuing beyond the northern limit of excavation) for 20m, before turning 90° to the NE and continuing for 90m alongside the northern trackway ditch. This boundary was essentially 'tacked' onto the side of the trackway.
- Boundary 7C.16 was the eastern boundary. It was aligned NW-SE out of the trackway for 20m, before turning 90° to the northeast and continuing for 59m. There was also a small extension of the boundary to the southwest for 11.5m. This boundary was narrower and shallower than the other boundaries and appeared more rectilinear, suggesting it may have performed a slightly different function or be of a slightly different date.

There were numerous other smaller ditched divisions and boundaries within the medieval village. These divided up areas around individual buildings or features:

- Boundary 7C.18 – northwestern part of excavation. This was aligned east to west for 45m (continuing beyond the western limit of excavation) and terminated in a pit to the east (not connecting with the trackway). Part of this boundary branched off to the south and joined Boundary 7C.13.
- Boundary 7C.19 – northwestern part of excavation. This was aligned north to south for 23m before turning to the east for 42m. It did not connect with the trackway, however was on broadly the same alignment as some of the other boundaries (eg Boundary 7C.13).
- Boundary 7C.20 – northwestern part of excavation, within the area enclosed by Boundary 7C.19. This was aligned east to west for 17m, before turning to the south for a further 13m. It essentially 'mirrored' the larger Boundary 7C.19 and may have been designed to enclose Waterhole 7C.1.
- Boundary 7C.21 – northwestern part of excavation. It was aligned north to south for 35m (continuing beyond the northern limit of excavation). It was located just to the west of Boundary 7C.14 and terminated before Boundary 7C.19.
- Boundary 7C.22 – northeastern part of excavation. This was on a different alignment from the others in the medieval village. It was aligned NE-SW for 14.3m before curving to the NW for c 15m. It truncated the earlier Boundary 7C.11. It may have been a windbreak or similar around Structural Features 7C.10 and Pit Group 7C.35.
- Boundary 7C.23 – 8m to the north of and parallel with Boundary 7C.16. This ditch was aligned NE-SW for 60m, before turning to the SE for 5m. It was truncated by a furrow.

BUILDINGS (FIGURE 7BC.8)

The remains of at least 12 buildings were identified within the medieval village. These were mainly located to the north and west of Trackway 7C.2 (with the exception of two – Building 7C.39 and Structural Features 7C.11). The ground-plan of only one of these buildings, Building 7C.39, could be identified. The other eleven 'buildings' comprised groups of post-holes and beam-slots, which may have formed more than one building. They have been classified in this assessment as 'Structural Features'. The majority of the buildings comprised groups of post-holes. Many of them also contained some beam-slots (Building 7C.39, Structural Features 7C.2, 7C.5, 7C.8, 7C.9, 7C.11). Of slightly different construction were Structural Features 7C.3 which comprised a stone surface (potentially a yard surface); and Structural Features 7C.6 which were set on top of a possible house platform or consolidation layer.

Building 7C.39 was the only building to which a function could be ascribed, as a 'blacksmiths'. Some of the other buildings within the village may have also had industrial functions, particularly because of the existence of the industrial pits (see below). This seems highly likely for some of the buildings, such as Structural Features 7C.10 which was a long 'barn'-type structure adjacent to the industrial Pits 7C.35. However, the quantities of domestic pottery and other finds recovered suggest that some of the buildings were houses. Some of the buildings lend themselves towards this interpretation – for example, two rubbish pits (Pits 7C.29) were located adjacent to Structural Features 7C.3.

Building 7C.39 was the most obvious building in the deserted medieval village, located to the south of Trackway 7C.2 (Figure 7BC.15). Large quantities of slag were recovered from this building, suggesting that it was associated with metalworking (likely a smithy). The building was sub-rectangular and measured 8.7m long by 3.8m wide. The northern side of the building was truncated by a post-medieval land drain and tree-throws [764271/764273]. A series of post-holes formed the outer structure of the building. These generally measured c 0.4m in diameter and were between 0.14m and 0.4m deep (an average of 0.3m) with vertical sides and flat bases. There was a beam slot around the southeastern part of the building. This measured 4m long, 0.4m wide, and 0.1m deep. It was filled with a dark grey-brown silty-clay with frequent charcoal and slag. This would have potentially held a screen (for wind protection?). Within the building were shallower post-holes (0.03m-0.11m deep) which would have had different functions. This included some around the central hearth (see below). In the centre of the building was a sub-circular shallow pit, measuring 0.95m in diameter by 0.08m deep, with steep sides and a flat base. The pit was filled with a dark grey-brown silty-clay fill with frequent charcoal and slag. It has been interpreted as a hearth in the centre of the structure. Five stake-holes were identified around the outskirts of this pit, which may have supported the forge bellows.

To the west of the building was a cluster of sub-rectangular pits. These covered an area measuring 4.4m long by 1.5m wide and were approximately 0.7m deep. They contained three fills – a lower grey-brown silty-clay (likely formed via natural infilling), and two dark grey-brown silty-clay fills with frequent charcoal, fired clay, and slag (deliberate backfills). These pits were likely used for waste disposal from the metalworking activity. A selection of finds were retrieved from these features. This included large quantities of slag, some animal bone, ceramic building material, metal objects (nails and a pin), one worked flint, and some pottery.

Objects typically associated with items blacksmiths (eg horseshoes and horseshoe nails, locks and keys) were found in this area, alongside metalworking residues which were certainly indicative of smithing (undiagnostic ironworking slag, 45 smithing hearth bottoms, and hammerscale). A radiocarbon date from Building 7C.39 was dated to 665-769 cal AD (95.4% probability; SUERC-85538), significantly earlier than expected. However, this was from oak charcoal, which is a long-lived species and the date could therefore be c 500 years out. This will be checked at the analysis stage, and other C14 dates obtained.

Structural Features 7C.1 were in the western part of the excavation. This comprised a group of 19 post-holes within an area measuring 17m by 7m. It is likely that further post-holes existed to the west beyond the limit of excavation. Some of the post-holes were quite large (c 1m diameter by 0.8m deep) and so may have been for a large structure such as a barn. This was located outside of the area enclosed by Boundary 7C.13 (ie outside the main medieval zone), suggesting it may have had a different function from the other structures.

Structural Features 7C.2 were in the northwestern part of the excavation, just to the north of Boundary 7C.19 and east of Pits 7C.26. This comprised two beam-slots (one aligned north to south for 1.9m; and one on a slightly curving NW-SE alignment for 6.3m), 11 post-holes, 2 small pits (which may have functioned as larger post-holes), and 2 stake-holes. This covered an area which measured approximately

18m by 12m. It is possible that there was more than one building in this area and that they may have been associated with the industrial Pit Group 7C.26 to the west.

Structural Features 7C.3 were in the northwestern part of the excavation area, just to the northwest of Trackway 7C.2. They comprised a stone surface (3.8 x 1.6m by 0.15m deep), a stone-filled beam-slot to the south, and three post-holes. The existence of the stone, both in the surface and the beam-slot, was unusual – this may indicate a slightly higher status building, with the stone surface functioning as an outside yard or working area. Two rubbish pits, Pit Group 7C.29, were located to the south and suggest that this structure may have been a house.

Structural Features 7C.4 were in the northern part of the excavation, to the west of Boundary 7C.15. This covered an area measuring approximately 13 x 12m and was bounded by two beam-slots (one aligned NW-SE for 14.5m and one aligned NE-SW for 16m). Within this area were five post-holes and one smaller NE-SW beam-slot (2.2m long, 0.3-0.5m wide, 0.06m deep).

Structural Features 7C.5 were in the northern part of the excavation, within the area enclosed by Boundary 7C.15. This covered an area measuring 18.7m by 16.5m. It comprised 22 scattered post-holes, two beam-slots along the northern edge (1.8m and 3.5m long respectively); and three small pits. The pit at the southern end [072158] contained evidence for burning (a black silty-clay fill with frequent charcoal and fired clay) and may have been a hearth for the structures. There may have been more than one building in this area.

Structural Features 7C.6 were in the northern part of the excavation area, to the east of Structural Features 7C.5. It comprised an area of stones (5.2m long by 1.4m wide by 0.18m deep); a stone-filled post-pad (1.2m diameter by 0.1m deep); and two adjacent post-holes, in an area of c 5m². These features were set on top of a larger area (12m by 10m) of a dark grey silty-clay deposit, c 0.35m deep, and filled with pottery and animal bone. This may have been a preparation area or platform, consolidating the ground for the construction of the building.

Structural Features 7C.7 were located to the east of Structural Features 7C.6. This comprised a large stone-filled post-pad (0.9m diameter by 0.11m deep), and four surrounding post-holes, in an area measuring 3.8m by 2m.

Structural Features 7C.8 were located to the east of Structural Features 7C.7. This covered an area of 12.25m east to west by 9m north to south. It comprised north to south aligned ditch bounding the area to the east and west, with a series of post-holes and small pits within this area. The 'pits' measured c 1m in diameter by 0.2-0.6m deep and were aligned north-south line spaced approximately 0.5m apart, so may have been larger post-holes. The other post-holes were scattered around the area – one [072104] contained large stones towards its base (a packing deposit).

Structural Features 7C.9 were in the northern part of excavation. This comprised two short beam slots at right angles to each other – one aligned NE-SW (4.75m long); and one aligned NW-SE (3.6m+ long, continuing beyond the northern limit of excavation). This likely formed half a building, with the rest located to the north of the excavation.

Structural Features 7C.10 were in the northern part of the excavation, just to the south of Boundary 7C.16. This comprised a row of 12 post-holes aligned ENE-WSW, with a further 14 post-holes to the south, covering an area 14.2m long by 8m wide. The southern side of the building could not be identified. The proximity of this structure to Pit Group 7C.35 suggests that they functioned together – potentially this structure was a barn used to store materials associated with the industrial activities. Environmental samples from this building included significant quantities of flax seeds.

Structural Features 7C.11 were located to the south of Trackway 7C.2, south of Pit Group 7C.41. This comprised a number of different 'structural' elements, including five beam slots, 11 post-holes, and nine small pits (which may have functioned as larger post-holes). These were all in an area measuring 17m by 15m. It is likely that there was more than one building in this area (demonstrated by the southern beam-slot truncating an earlier beam-slot), however the number and layout of these cannot be discerned. These buildings may have been used in conjunction with the retting activities taking place in Pit Group 7C.41 (although it should be noted that the northern beam-slot truncated one of these pits).

PITS (FIGURE 7BC.8)

Twenty-three groups of pits and wells have been identified within the area of the medieval village. These were located either side of Trackway 7C.2, all to the north of Boundary 7C.12. These pits had a variety of different functions. This comprises three wells/waterholes, two groups of rubbish pits, one group of storage pits, nine areas of quarry pits, three groups of retting pits, three groups of 'other industrial pits', and three groups of pits with currently unknown functions. These pits provide an indication of the types of activities taking place within the medieval village. There was a definite industrial element to the activity, demonstrated through the existence of the retting pits, 'industrial' fire pits, and number of pits in the northwestern part of the excavation containing dumped industrial waste. There was also some (arguably more limited) evidence for more typical habitation, particularly with the rubbish pits and storage pits.

Waterhole 7C.1 was in the northwestern part of the excavation. It was sub-circular and measured 5.75m by 5.2m by 1.75m deep. It had gently sloping sides at its upper level, becoming steeper towards the base, and a concave base. Six fills were recorded – some formed by weathering/natural infilling, and others via deliberate backfill. The upper fills contained significant quantities of medieval pottery. This pit has been interpreted as a watering hole, potentially for livestock. Well 7C.2 was in the northern part of the excavation, to the east of Boundary 7C.15. It was oval-shaped and measured 7.5m by 2.8m by 1m+ deep (not bottomed). It had steep sides and was filled with a dark brown silty-clay fill, with numerous stones. Two small pits/post-holes [072120] and [072140] were cut into the edges of the well – potentially supports for a well structure. Well 7C.3 was in the north-eastern part of the excavation, cut into the eastern end of Boundary 7C.16. It was oval-shaped and measured 6m by 3.5m by 2m deep. It had steep sides and a flat base and contained four fills. The basal fills contained wood – possibly part of a well structure.

Pit Group 7C.29 was in the north-western part of the excavation, south of Structural Features 7C.3. There were two pits, both of which contained higher quantities of pottery and other finds than other pits in the area. The northern pit contained the remains of four near-complete medieval pottery vessels. The location of these pits, adjacent to Structural Features 7C.3, suggests that they were the 'rubbish' pits for

the nearby building and that this building may have been a house. Pit Group 7C.39, to the south of Trackway 7C.2, may be another group of three 'rubbish' pits. These pits measured between 1.5m and 3m in diameter by c 0.35m deep. They contained frequent pottery and animal bone in their fills. The northern pit was truncated by the post-medieval Boundary 7C.29. Pit Group 7C.25 comprised a group of three pits, all cutting the 'inside' (southern and eastern sides) of Boundary 7C.19. These were small pits (maximum of 2.5m diameter and c 0.35m deep), with moderately-sloping sides and concave bases. They contained frequent pottery, animal bone, and charcoal in their fills, and may be further 'rubbish' pits.

In the western part of the excavation, within the area enclosed by Boundary 7C.13, were two groups of intercutting quarry pits - Pit Group 7C.21 and Pit Group 7C.22. Pit Group 7C.21 covered an irregular area of 7.5m by 2.8m; and Pit Group 7C.22 covered an area of c 10m by 5m. The pits themselves were sub-circular and measured between 0.3m and 0.8m deep. They were filled with two fills – the lower brown-yellow clay (natural infilling), and the upper dark grey clayey-silt with frequent charcoal and CBM (deliberate dumps of waste material). These pits have been interpreted as extraction pits (for clay?), which were later used to dump burnt waste in.

Pit Group 7C.23, in the northwestern part of the site within Boundary 7C.19, was a single large pit, measuring 3.6m in diameter by 0.81m deep. It was irregular in shape, had moderately sloping sides and an uneven base, and was filled with sandy-clay backfills. Its irregular shape suggests that it was likely used for extraction. Pottery recovered from these pits was preliminarily dated to the mid-12th century.

In the northwestern part of the site was another area of intercutting quarry pits - Pit Group 7C.27. This covered an irregular area of c 12m by 6m. The pits themselves were around 1.0m-1.4m deep with irregular sides and bases. They were backfilled at the same time, and the fills contained frequent burnt clay and charcoal (likely from nearby industrial activities). There was no evidence for weathering or slumping in these pits, suggesting they were backfilled soon after they were opened.

Two groups of intercutting quarry pits were located in the northwestern part of the site within Boundary 7C.14 - Pit Group 7C.28 and 7C.30. These comprised groups of 5 and 9 intercutting pits covering areas of between 6.4-6.6m long by 2.7-4m wide. The pits were between 0.3m and 0.6m deep with steep sides. Three groups of intercutting quarry pits were identified along the northern side of the excavation – Pit Groups 7C.33, 7C.34, and 7C.36. These covered irregular areas (6.5 x 6m; 10 x 3.3m; and 7 x 2.15m) and comprised irregular-shaped pits between 0.3m and 1m deep. They were filled with deliberate backfill deposits (dark grey silty-clays with frequent charcoal).

The pits in Pit Group 7C.41, to the south of Trackway 7C.2, have been interpreted as retting pits. These were four elongated rectilinear pits arranged in a NE-SW line. The pits measured between 3.15m and 5.6m long, 1.2-1.6m wide, and 0.22-0.45m deep. They all had steep sides and flat bases and were filled with a grey-brown silty-clay with occasional charcoal, bone, pottery, and fired clay. These pits have been interpreted as retting pits based on their profile and the nature of their fill (which likely accumulated via standing water). Postholes were identified around the pits – two to the west and ten to the south.

Pit Group 7C.40, to the south of Trackway 7C.2, comprised a similar group of five elongated rectilinear pits. These all had steep – vertical sides and flat bases and measured between 3.5m and 8.5m long, 1.6-2.4m wide, and 0.5-1m deep. They were on a variety of alignments and not in an ordered line. Two of these truncated the Iron Age Boundary 7C.5; and one was truncated by the post-medieval Pit 7C.50. The profile of these, and their location relatively close to Pit Group 7C.41, suggests that they may have also functioned as retting pits. Pottery recovered from one of these pits (763105) was dated to the 12th century.

Pit 7C.32, to the north of Trackway 7C.2, may have also been a retting pit. This measured 7.4m long by 1.5m wide by 0.3-0.4m deep, with steep sides and a flat base. The pit widened slightly at its eastern end and was filled with a brown-grey clayey-silt, with occasional stones, charcoal, bone, pottery, and fired clay.

An area of *in situ* industrial activity was identified in the northwestern part of the village, Pit Group 7C.24. This comprised a series of four large intercutting pits (likely quarry pits) which were truncated by the cut for a kiln/oven [767566]. This measured 2.3m in diameter by 0.5m deep. Within the cut for the oven was a rectangular area, 1.1 x 0.8m, with a clay lining (767525), stone bedding (767522), and evidence for *in situ* burning – this may have been the kiln or oven itself. To the east of this, within the overall cut, was an area of scorched red clay (767537). To the north was a sub-rectangular cut [767567] which may have been the flue. Directly to the west of this was another pit also containing evidence for *in situ* burning [767130]. This measured 1.05m by 0.8m by 0.15m deep and had three fills – the lower was red clay (from burning), overlain by a thin black charcoal deposit (potentially the base of the kiln/oven), overlain by a yellow silty-clay (potentially the remnants of the superstructure). It is unclear, at this stage, precisely what industrial activity was being undertaken here.

Pit Group 7C.26, in the northwestern part of the excavation, was another cluster of pits with evidence for *in situ* burning. This comprised three intercutting pits, covering an area of 4.3m by 3.8m, with the pits being c 1m deep. These pits contained dumped layers with frequent clay, ash, and charcoal in. In particular, the basal fill of pit [733530] contained frequent charcoal, ash, and burnt clay, which likely derived from *in situ* burning.

Pit Group 7C.35, in the north-eastern part of the excavation area, are thought to have had an industrial function. There were nine small oval-shaped pits – eight arranged in pairs (connected to each-other), and one on its own. They covered an area of c 10m by 5.8m, with each pit measuring between 1.5m and 2m long, 0.8-1m wide, and 0.35-0.85m deep. The fills within these pits contained frequent charcoal, cereal products, grain, chaff, and fired clay. One suggestion is that they may have been the basal remains of small kilns. However, there was no evidence for *in situ* firing or kiln structure, and the features were positioned very close together. Nonetheless, it is clear that they were associated with industrial activities of some description.

To the west of Trackway 7C.2 were 29 small-medium pits, with no clear function. These have been grouped as 'Pit Group 7C.31'. They were mainly concentrated in the area closest to the trackway, particularly to the south and east of Boundary 7C.19. Many of these were filled with quantities of burnt

waste (charcoal, fired clay, etc), which were presumably dumped here from nearby industrial activities. There were another two groups of pits (Pit Groups 7C.37 and 7C.38), to the east of Trackway 7C.2, with unclear functions. They varied in size, between 0.7m and 5.6m in diameter, and 0.25m-0.85m deep. They were generally filled with grey-brown silty-clay, derived via natural infilling. One pit [736851] contained charcoal and slag in its upper fill, suggesting it may have been used for dumping of industrial waste. Otherwise, there was no indication from the fills or profiles of the pits to what their function was.

SOUTHERN AREA (FIGURE 7BC.9)

An area of medieval activity, presumably associated with the village, was identified in the southern part of TEA 7C (Figure 7BC.9). This covered an area of at least 8860m² (0.88ha) and potentially continued to the south beyond the limit of excavation (although it was not identified in the excavations in TEA 7A, c 60m to the south).

Boundary 7C.24 was the northern boundary to this area. This was a ditched boundary, observed for 240m (continuing beyond both the eastern and western limits of excavation). The boundary had been recut many times, and it is possible that it continued as a boundary into the later medieval/post-medieval period (as is on the same alignment as the later medieval furrows) but was certainly out of use by the 19th century when Brick Kiln 7C.1 truncated it. 35m to the south of Boundary 7C.24, and parallel to it, was another ditched boundary – Boundary 7C.25. This boundary was shown on the 1772 Enclosure Map as the boundary to an ‘*Old Inclosure*’ to the south (Figure 7BC.10), but it had disappeared by the time of the 1888 First Edition OS Map. This suggests that this boundary delineated an earlier (potentially medieval?) enclosed area of land to the south and may have also been the southern limit to this area of medieval activity.

Between these two boundaries, in the western area, were smaller ditched divisions (Boundaries 7C.26), aligned NW-SE and NE-SW. These divided the area into narrow plots directly to the south of Boundary 7C.24 (40 x 10m), and larger plots south of this (40 x 25m). These divisions were not observed in the eastern area. Between these two boundaries were features assigned to the medieval period:

- Well 7C.4 – 9.4m by 7.1m by 3.2m deep. Steep sides and a complex base, with five silty-clay fills. Pieces of wood were recovered from the base of the well.
- Pit 7C.42 – 4.5m by 3m by 0.57m deep. Contained burnt materials (CBM, charcoal, etc), but no evidence for *in situ* burning. Likely a refuse pit.
- Pit 7C.43 – 8.25m by 4.6m by 0.76m deep. Contained a mixed fill with CBM, chalk, charcoal, pottery, etc. Likely a refuse pit.
- Structural Features 7C.12 – 3 beam slots and 40 post-holes, covering an area of 28m by 20m, and continuing beyond the southern limit of excavation. This may represent the remains of more than one building.
- Structural Features 7C.13 – 2 beam slots and 6 post-holes, covering an area of 14m by 9m, and continuing beyond the southern limit of excavation.

- Structural Features 7C.14 – 9 post-holes and 2 larger post-holes/small pits, covering an area of 19m by 5m, and continuing beyond the southern limit of excavation.

Later medieval

Agricultural furrows, dated to the medieval period, were observed across the site (see Figures 7BC.2 and .3). Those in 7B and 7C East were orientated NE-SW and spaced 8.5m apart (Furrows 7C.1). Those in the western part of TEA 7C East and eastern part of TEA 7C Main Field were aligned NW-SE and spaced c 7m apart (Furrows 7C.2). Those in the main part of TEA 7C were aligned ENE-WSW and spaced c 7m apart (Furrows 7C.3). There were also a few furrows in the southwestern part of TEA 7C which were aligned NNW-SSE and spaced c 6m apart (Furrows 7C.4). This shows that this area was divided into (at least) four parcels of land (or furlongs) in the medieval period. Some of these divisions were identified in the excavations and continued into the post-medieval period - Boundary 7C.27 divided Furrows 7C.1 and Furrows 7C.2; and Boundary 7C.30 divided Furrows 7C.2 and Furrows 7C.3. The division between Furrows 7C.3 and Furrows 7C.4 was marked by a headland.

The furrows truncated the upper fills of Palaeochannels 7C.51, 7C.52, and 7C.54; the Iron Age activity (enclosures in TEA 7C East); the middle Saxon activity in TEA 7C Main Field (eg Buildings 7C.13, 7C.27, 7C.32); and the late Saxon activity in TEA 7C East. The relationship between the agricultural furrows and the medieval village is less clear. The furrows were not seen across the whole of the village – not in the areas to the north or directly south of Trackway 7C.2. They were, however, observed in the north-western part (west of Trackway 7C.2), and far eastern part of the village – in these areas they truncated the archaeological remains of the medieval village. The furrows were therefore agricultural activity which was at least in part later than the medieval village. The patchy distribution of them may be because the existence of the medieval village rendered some areas unusable for cultivation. This is supported by the 1722 Enclosure Map (Figure 7BC.10) which depicts certain areas around the trackway as 'waste land' – these areas do not exactly match the areas without furrows but may nonetheless suggest that certain areas around the deserted village were avoided for cultivation. This may have been because the industrial activities which had taken place had rendered the land unusable.

Post-medieval - modern

Evidence for post-medieval and modern agricultural activities was identified across all parts of the site (Figure 7BC.11). This mainly relates to agricultural activity (field boundaries, features relating to Grove Farm, and individual pits). Two 19th century brick kilns were also investigated.

BRICK KILNS (FIGURE 7BC.11)

Two 19th century brick kilns were excavated in this area. The bricks may have been produced for 'Grove Farm', shown on historic maps from at least the 1888 First Edition OS Map and demolished by the time of the 1978 OS Map. Both of these kilns were rectangular, however Brick Kiln 7B.1 was set on the ground and was open to the air, whereas Brick Kiln 7C.1 was sunk into the ground with a superstructure over it. Both brick kilns are thought to date to the 19th century – Brick Kiln 7B.1 to the 1830s and Brick Kiln 7C.1 to the 1880s.

Possible quarries (for clay) were identified around both kilns, and there was evidence for 'stanks' (for clay preparation) around Brick Kiln 7B.1. There was no obvious evidence for structures where other activities associated with brick production were based, such as where the wooden moulds were made, where the clay was put into the brick moulds, and where the bricks were left to dry before firing. These activities may have taken place in relatively ephemeral structures difficult to identify in the archaeological record.

Brick kiln specialists, from 'The Bulmer Brick and Tile Company', visited the site and saw both brick kilns under excavation. They provided information about how the structures (and surrounding features) may have worked (see discussion below). They also took a sample of clay from adjacent to Brick Kiln 7B.1 and fired it in their kiln. This showed that the clay, although quite wet, was of good quality (it shrank by 4%, whereas clay on average shrinks by 12%) and would have weathered well.

Brick Kiln 7B.1 was located in the northern part of TEA 7B (Figure 7BC.16). The kiln itself was a rectangular brick structure which measured 7.5m long by 4m wide by 0.36m deep. Brick rubble overlay the whole structure. Two hand-excavated slots were excavated through it to understand its form and function. The outer brick foundations of the kiln were observed along the northern and southern sides. This comprised two surviving brick courses, roughly laid in a header pattern and not mortared together. Along the eastern side of the kiln were the foundations of three brick 'buttresses', spaced 0.75m apart. The gaps between these would have formed the 'fire boxes'. The bottom two courses of these buttresses survived, laid in a stretcher pattern. In the centre of the kiln were the foundations of two internal dividing walls, spaced 0.75m apart. Two courses of these walls survived, with bricks set in a herringbone pattern. These divided the kiln into three firing chambers. An area of brick rubble and charcoal, to the east of the kiln, may represent debris cleaned out from the kiln during firings. A layer of collapsed material (brick rubble) covered the western half of the kiln, from when the kiln fell out of use. The brick kiln was truncated by three later field drains.

Surrounding Brick Kiln 7B.1 were a series of 'stanks' (shallow rectangular pits for settling wet clay and removing impurities). These were to the north, east, and south of the kiln, and covered an area of 50m north-south by 30m east-west. Those to the north and south were aligned NNE-SSW, and those to the east aligned ENE-WSE. The stanks measured 1.5m wide by 0.1-0.15m deep, with gentle sides and flat bases. They were spaced in regular rows, with gaps of c 0.3m between each of them. They were filled with a grey-brown silty-clay with frequent brick inclusions, suggesting they were backfilled with kiln waste once the kiln stopped operating. There were also two potential quarry pits to the north of the brick kiln – [710317] and [710419]. Pit [710317] measured 2.4m by 0.2m by 0.4m deep, and pit [710419] measured 7m by 3m by 0.8m deep. There was some suggestion of different phases of brick-making activity in this area, as the construction cut for the kiln truncated the fill of stank [710391].

Brick Kiln 7C.1 was located in the southern part of TEA 7C. The kiln truncated all other features in this area. It was a rectangular brick structure which measured 10.7m long by 5.7m wide by 1.2m deep and was excavated into the ground (ie sunken). The kiln was made up of three long rectangular firing chambers, orientated north to south. These measured 5.3m long by 1.3-1.5m wide, with a gap of 0.2m between each of them. At the southern end of the structure, corresponding to these three chambers,

were three narrower 'fire boxes' – c 1.4m long by 0.65m wide. They were blocked up by brick at their southern ends, presumably this was done when the kiln stopped being used. The foundations of a brick wall to the structure was observed on the southern side. The northern, eastern, and western walls were covered by red clay, 0.12m thick, which had been heat-affected. The floor of the structure was concrete. Above the concrete floor was a light grey charcoal-rich silty-clay fill, c 0.2m thick. This deposit may have accumulated when the kiln was in operation. The layer formed by the structure's collapse was a brown-red silty-clay with frequent bricks, 0.44m thick. Overlying this layer were further demolition fills. These were silty-clay and gravel fills with frequent charcoal, bricks, tiles, pottery, clay pipe, slag, and nails. The existence of these demolition fills suggests that this brick kiln had a superstructure (roof), presumably with a chimney (or similar) for the heat to escape.

There were no obvious features associated with the kiln (stanks or quarries). It is possible that Pond 7C.1, to the south, may have originally been a quarry for clay.

FIELD BOUNDARIES (FIGURE 7BC.11)

A series of field boundaries were identified in TEA 7B dividing the area up into small NW-SE aligned fields, (they were not present across the rest of the site). These truncated the later medieval furrows but were not shown on historic maps, and so pre-date the late 19th century. These comprised Ditches 7B.15, 7B.17, and 7B.19 (aligned NE-SW and spaced 230–300m apart); and Ditches 7B.16, 7B.18, and 7B.20 which projected off to the southeast. The other field boundaries identified across the site were shown on historic maps (from the 1888 First Edition OS Map):

- Boundary 7C.27 was aligned NE-SW across the whole of TEA 7B and 7C, for 370m, and continuing beyond the eastern and western limits of excavation. It was connected to Ditch 7B.22 to the east and Boundary 7C.28 to the west. This boundary was shown on historic maps from at least the 1888 OS Map until the 1958 OS Map (backfilled by the 1978 OS Map), dividing the area into separate fields.
- Boundaries 7C.28, 7C.29, and 7C.30 formed a sub-rectangular field within the western field in TEA 7C. This measured 180m north to south by 150m east to west. It was shown on historic maps from the 1888 OS Map until the 1958 OS Map (backfilled by the 1978 OS Map).
- Boundary 7C.31 formed the northern boundary to Grove Farm, shown on historic maps from the 1888 OS Map until the 1958 OS Map (backfilled by the 1978 OS Map). This was observed for 30m, connecting to Boundary 7C.30 to the west and continuing beyond the eastern limit of excavation.
- Ditches 7B.22 and 7B.23, although not directly shown on historic maps, were aligned along the tracks in TEA 7B (Ditch 7B.23 along the southern side of the east to west track, and Ditch 7B.22 along the eastern side of the north to south track). These tracks were shown on historic maps from at least the 1888 OS Map until the present day. They were likely drainage ditches for the tracks. It is possible that the other ditches on this alignment (currently phased as 'unknown') may have been related to an earlier incarnation of the Great North Road.

OTHER FEATURES (FIGURE 7BC.11)

A series of other features associated with the post-medieval – modern agricultural landscape were identified across the site. This included three ponds, scattered pits/animal burials, and a structure.

Pond 7B.1 was located in the northern part of TEA 7B and was shown on historic maps from at least the 1888 First Edition OS Map up to the 1958 OS Map (it had been backfilled and was not shown on the 1978 OS Map). The pond was sub-circular, and measured 17m by 14m (not bottomed) and contained a grey-brown silty-sand fill. This pond may have originally been a quarry for clay for the nearby Brick Kiln 7B.1. Pond 7C.1 was located in the southern part of TEA 7C and was shown on historic maps from the 1888 OS Map up to the 1958 OS Map (backfilled and not shown on the 1978 OS Map). The pond was sub-circular and measured 28 x 20m. This pond may also have originally been a quarry for clay for the nearby Brick Kiln 7C.1. Pond 7C.2 was located in the north-western part of TEA 7. This pond was not shown on the 1888 OS Map, and so fell out of use earlier than the other ponds. However, it clearly truncated the medieval Trackway 7C.2 and was not shown on the 1772 Enclosure Map, so likely existed at some time between 1772 and 1888. The pond was oval-shaped and measured 32m by 12m.

Boundary 7C.32 comprised a line of 30 post-holes in the central part of TEA 7. They were aligned NE-SW, in three adjacent rows, for 32m. The post-holes were filled with modern material – this, and their location in the area around Grove Farm, demonstrates that they formed a modern boundary with the Grove Farm complex (in use from at least 1888 until 1958, but demolished by the time of the 1978 OS Map).

A rectangular feature, Structural Features 7C.63, was identified in the northern part of TEA 7. This measured 6.5m northwest-southeast by 5.5m northeast-southwest by 0.13m deep. It truncated all medieval furrows and contained a plastic tent pin and metal screw within its fill. It may have been a platform for a small modern structure.

The scattered pits and animal burials across the site were:

- Two sheep burials, in Pits 7C.71, in TEA 7C East.
- Pit 7C.72, a large oval-shaped pit in the eastern part of TEA 7C. This truncated all other features in the area and contained porcelain and glazed pottery. It was likely a post-medieval rubbish dump.
- Pit 7C.50, a large oval-shaped pit in the northwestern part of TEA 7C. This truncated the other medieval features in the area and contained post-medieval metal finds (including a key!) and some 15th century pottery.
- Pit 7B.4, a rubbish pit in the southern part of TEA 7B. This contained brown-black sandy-silt fills with frequent charcoal and occasional stones, bone and pottery. Pottery recovered from here was provisionally dated to the 18th century.

Unknown

There are a number of features across these excavations which cannot, at this stage, be assigned to a phase or period. The main ones are discussed here. A number of short stretches of ditch in the southern

part of TEA 7B, within the late Saxon field, have not yet been assigned to a phase (Figure 7BC.7). They have no stratigraphic relationship with any other features, and do not appear to fit with the alignments of any of the phases.

Four long curving ditches crossed the southern part of TEA 7C East, three on a north-south alignment and one on an east-west alignment (Figure 7BC.7). They truncated the upper fills of the palaeochannels but were cut by the late Saxon features, suggesting they date from between the Iron Age and late Saxon period. It isn't clear what these ditches functioned as - they did not delineate obvious fields or enclosures, did not fit with the alignments of other features in this area, and did not work in association with the palaeochannels. Perhaps they were (failed?) attempts at drainage – maybe by the Romans who were hoping to use this area?

A north-south aligned ditch, in the southern part of TEA 7C, is also undated (Figure 7BC.9). This was observed for 60m, continuing to the south beyond the limit of excavation. It was truncated by medieval Boundary 7C.24 and Well 7C.4 (so was pre-medieval in date). It may have been part of a prehistoric field system, but this is currently unclear.

A curving ditch in the central part of TEA 7C, aligned northeast-southwest before turning to the north, is currently undated (Figures 7BC.5, .6 and .8). This ditch was truncated by the agricultural furrows (at its northern end), demonstrating that it belongs to an earlier phase of activity. One suggestion is that it formed part of a boundary within the middle Saxon settlement, but this is unclear.

Another short stretch of ditch aligned northwest-southeast, in the centre of the main field in TEA 7C, is also currently undated (Figures 7BC.5, .6, and .8). This was observed for c 40m in length. It was recorded as truncating the Iron Age Enclosure 7C.1 in one place but being truncated by it in another! This ditch did not fit with the alignments or layout of any of the surrounding activity (Iron Age, Saxon, or medieval), so cannot currently be assigned to a phase.

There were a series of short narrow segments of ditches in the far western part of TEA 7C, to the west of Trackway 7C.2 (Figure 7BC.8). These may have formed part of the medieval village, however equally may have formed part of the late Iron Age drainage system in this area.

Finds and environmental summary

Tables 7B/C.1 – 7B/C.3 provides a quantification of the finds, bone, and environmental samples from TEAs 7B/C.

The earlier prehistoric finds comprised pottery from the early Neolithic to the middle Bronze Age, including a collection of late Neolithic Grooved Ware, similar to Durrington Walls types, from Pits 7C.1.

The Iron Age pottery assemblage was focused on the late Iron Age period, with some evidence for earlier Iron Age activity. This included nine late Bronze Age/early Iron Age flint-tempered body sherds from one context, and a limited quantity of middle Iron Age pottery. The larger assemblage of late Iron Age pottery predominantly comprised sandy and grog-tempered wares, mainly La Tene style vessels. A

smaller Roman pottery assemblage (greywares and shelly wares) was also identified within 7B/C, suggesting some continuation of activity into the Roman period.

The Iron Age plant remains included wheat, hulled barley, oats, spelt, occasional chaff and wild plant seeds, and bread and porridge seeds. The concentrations of these were low throughout the scattered Iron Age activity and in the enclosure ditches, but slightly higher in the pits and ditches within the enclosures.

The Saxon pottery assemblage indicated that the main phase of activity was from the late 6th/7th century, with a slight drop-off in the later Saxon – early 11th century. Little could be definitively dated to the early Saxon period, although a stamped sherd and four incised sherds could be of 5th/6th century date. The middle Saxon assemblage was dominated by Maxey wares, with some Ipswich wares. The late Saxon pottery assemblage included Thetford, St Neots, and Stamford Wares.

The other Saxon finds were 7th – 9th century dress accessories, particularly pins but also buckles and strapends. No loomweights were recovered, however there were other objects associated with cloth production including thread pickers and spindle whorls.

Plant remains from the Saxon features included wheat, barley, oats, rye, grass and wetland seeds, corroborating other evidence for a decrease in glume wheat and increase in free-threshing wheat, oats, and rye in the Saxon period. There was a low presence of chaff, suggesting that the processing of grain was carried out in the fields or barns away from the settlement.

The animal bone assemblage from the Saxon features included cattle, sheep/goat, pig, and horse, with little dog or poultry. 12% of contexts showed signs of butchery, 6% gnawing, and 3% burning.

The medieval pottery assemblage was broadly dated to the later 11th – mid-13th century, with a resurgence in the late 14th – mid 15th century. The assemblage was dominated by unglazed coarsewares, with jars, bowls, and jugs as the most common forms. This is fairly typical for a medieval rural settlement in this area.

TEA 7C had the largest assemblage of medieval finds, mainly recovered from the subsoil. This included a large number of dress accessories (buckles, strap ends, and strap mounts), and items associated with a blacksmiths (horseshoes, horseshoe nails, locks and keys). There was also a collection of antler-working waste. The metalworking residues from TEA 7C were certainly indicative of smithing, and comprised undiagnostic ironworking slag, 45 smithing hearth bottoms, and hammerscale.

The plant remains recovered from the medieval features included similar cereal remains as from the earlier periods, with little chaff. Particular concentrations were noted in certain features, such as Structure 7C.10 which contained a large quantity of flax seeds; Pit Group 7C.35 which contained charcoal, cereal products, grain and chaff (potentially suggesting they were rubbish pits or corn driers?); and Pit Groups 7C.41, 7C.42, and 7C.43 which contained frequent charcoal, cereal grains, and bread-like substances, suggesting they were refuse pits from crop-processing or cooking.

The animal bone assemblage from the medieval features was focused on cattle, then sheep/goat. There was less poultry and horse than in the Saxon period, but an increase in game (rabbit and fallow deer). Little bone modification was identified in this assemblage.

Table 7B/C.2 Quantification of finds from TEA 7B/C

Type	Count	Weight (g)	Date
Pottery	411	2,939	Early Prehistoric
	8,544	121,072	Iron Age – Roman
	5,754	81,826	Post-Roman
Coins	19		
Small Finds	479		
Iron Nails	122		
Lithics	140 pieces worked		
Stone	51 pieces		
Glass	25 sherds		
Wood	11 pieces		
Building Materials (5-15% assessed)	135	95,713	
Metalwork Residues	1,787 pieces	39,472	

Table 7B/C.3 Quantification of bone from TEA 7B/C

Type	Count	Weight (g)	% of bone assessed
Inhumations	2		
Cremations	8		
Animal Bone	13,373	127,458	31

Table 7B/C.4 Quantification of environmental samples from TEA 7B/C

Type	Count	Date/type
Bulk Environmental Samples	1,755	
Kubiena Tins	42	
Monoliths	13	

Provisional interpretation and potential

Specific objectives and research aims relevant to TEA 7B and 7C were detailed and discussed in the WSI (Atkins CH2M 2016c). The current Research Framework for the East of England was also reviewed (Medlycott 2011), alongside the draft versions of the reviewed East of England Research Frameworks for the Saxon and medieval periods (Hills 2018; Hoggett 2018; Martin 2018).

The excavations in TEA 7B and 7C uncovered limited evidence for earlier prehistoric activity; an area of late Iron Age enclosures with associated field systems and dispersed agricultural activity; a large middle Saxon settlement; a smaller area of late Saxon settlement and agriculture; a deserted medieval village;

and post-medieval – modern agricultural and industrial activity (including two brick kilns). There is potential to answer research questions associated within each of these periods, and about the transitions between the periods.

Earlier prehistoric

Limited evidence for earlier prehistoric activity was identified across the site - two Neolithic pits and an area of earlier prehistoric flints adjacent to one of the palaeochannels. As such, there is limited potential for further work. This is aside from looking at these as part of the larger collection of flint and earlier pottery recovered from all of the A14 sites, to gain an understanding of how earlier peoples were moving across and using the landscape.

Late Iron Age

A series of late Iron Age enclosures, located at the bottom of the slope around the palaeochannels, was identified. Some of these likely functioned as stock enclosures (Enclosures 7C.51-57, and Enclosures 7C.60-61), with Enclosure 7C.58 potentially being for settlement. Scattered Iron Age activity was identified around these enclosures, including the remains of field systems, houses, cremation burials, and pits.

These have the potential to answer questions about Iron Age settlement and agriculture, areas highlighted in the East of England Research Framework:

The nature of the agrarian economy needs further study...What are the relative proportions of cereals and livestock and is there a changing dynamic throughout the period (Medlycott 2011, 31);

Settlement types. Distribution, density, and dynamics need further study: zonation of use/internal spaces, interaction with hinterland, location with ref to topography and geology, resources, communication routes, etc (Medlycott 2011, 31).

In particular, the proximity of settlement and features relating to agricultural practices lends itself to answering questions about how they interacted, as identified by Haselgrove et al:

there needs to be greater dialogue between workers focusing on Iron Age societies, and those analysing plants, bones and the environment, in order to tie in agriculture and society (Haselgrove et al 2001, iv).

The size, shape and morphology of the enclosures (large open areas with few internal features or divisions, ditches forming routeways into the enclosures) suggests that they were used for livestock management. There is the potential to gain a greater understanding of this by analysing the environmental evidence (particularly the animal bone assemblage) in conjunction with the site narrative. This will include consideration of the relative proportions of different animals, their size and stature, and their mortality profiles. The environmental and artefactual evidence from the area of settlement and field systems will also be considered so that the nature and extent of arable and pastoral farming can be determined.

Further analysis of Enclosure 7C.58 and the scattered roundhouses may provide information on settlement activity. The scattered roundhouses suggest there was dispersed 'open' settlement (with individual families living in these buildings, or with groups frequently moving around and these buildings being occupied on a seasonal/occasional basis). In contrast, the settlement activity within Enclosure 7C.58 appears more intensive and concentrated. Questions to be considered in analysis will include: 1) Is there any evidence for changes in settlement (type and location) over time; 2) How, and why, did people move across the landscape (seasonal etc?); 3) What size population were living here; 4) What other activities (craft etc) were the population undertaking?

On this site, the positioning of the Iron Age enclosures in association with the palaeochannels is of particular interest. The Iron Age peoples appear to have deliberately located themselves with reference to these channels and would have used them for various activities (fishing, transport, washing). The finds, palaeoenvironmental evidence (including from the channels themselves), and site narrative, will be analysed to provide further information on these activities.

The five cremation burials and a single inhumation burial provide some information about how Iron Age people treated their dead. This could provide information on burial rites, and social relations, particularly when compared with other examples from the area and other sites on the A14 scheme.

Refined dating will help elucidate how long these enclosures were used for, and at what date the modifications were made. This will also provide an indication of when the enclosures were abandoned and whether there was any continuity into the early Roman period. Certainly, there was clearly a major transformation of the landscape at some point during the early Roman period, as also witnessed at TEA 7A, where a new phase of settlement was located. The questions behind why this happened will be considered (with reference to TEA 7A) – was it because of environmental changes (such as the palaeochannels drying up), or because of the impact of the conquest or Boudiccan revolt?

The Iron Age activity on this site will also be considered as part of the broader corpus of Iron Age sites excavated along the A14. The type, size, form, and nature of this Iron Age activity will be compared to other Iron Age sites in the vicinity, particularly the sites at TEA 5, TEA 7A, TEA 10, TEA 12, TEA 13, and TEA 14.

Saxon

The remains of a substantial middle Saxon settlement (38 post-built structures, six sunken-featured buildings, and 19 pits/wells); and a smaller area of late Saxon settlement (1 building, suggestions of four other buildings, seven pits, and surrounding fields) were identified. It is unusual to find settlements dating to the Saxon period, particularly such extensive ones, and so this has significant potential to answer numerous questions about Saxon settlement.

The Saxon period is often considered as the period when 'modern' settlement patterns started to emerge and, as such, this site is of immense importance in understanding the development of this. This is highlighted as a key question in the (draft) revised Research Framework for the East of England:

This period saw the transition from the localised and largely transitory practices of the early Anglo Saxon period, which gave way to the emergence of the Anglo-Saxon kingdoms, the foundation of towns, bishoprics, monastic houses, churches and almost all of the settlements which we know today (Hoggett 2018, 1).

In particular, the fact that this site contained evidence for early(?) Saxon settlement, middle Saxon settlement, late Saxon settlement, and medieval settlement (see below) enables a more nuanced understanding of the transitions between the different periods to be gained. This is identified as a key research objective in the current East of England Research Framework:

The region would benefit from a detailed study of the changes in settlement types and forms over time during the early, middle and late Anglo-Saxon periods, highlighting some of the distinctive changes which take place. This also needs to be considered on a broader scale, particularly with reference to the way that Anglo-Saxon settlements and organisation of the landscape influenced the medieval landscape (Medlycott 2011, 58).

It should be noted that this Saxon (and medieval) settlement has survived archaeologically because it 'failed' as a settlement. Most Saxon and medieval settlements became our modern villages, and so the archaeological remains of their earlier phases are less readily uncovered in excavations. This has been demonstrated in the CORS test-pitting project, where the remains of middle and late Saxon settlement have been uncovered in and around modern villages (Lewis 2014). Our settlement is, therefore, somewhat exceptional/different, and this should be remembered. It may be atypical when compared to those settlements that survived.

Comparative Saxon settlement sites will be considered. This will include recent excavations in the East of England at Harston Mill (Cambridgeshire), Langford (Essex), and Kentford (Suffolk), as well as some of the more renowned Saxon settlement sites (Mucking, Yarnton, Cottenham, West Heslerton, Raunds, and Flixborough). HER searches will also be carried out for comparative Saxon settlements within Cambridgeshire and Huntingdonshire. All elements of this Saxon settlement will be compared with these other examples.

EARLY SAXON SETTLEMENT

There was no obvious evidence on this site for very early post-Roman (5th century) settlement. This will be looked at in the analysis stage, to see if any of the features (or indeed finds) can be attributed to the 5th century. This will be important in gaining an understanding of the transition from the Roman period (Roman activity was identified in TEA 7A to the south) into the Saxon period.

However, it is possible that some of the sunken-featured buildings on this site were earlier in date (6th century) than the main middle Saxon settlement. If so, they may have formed part of the 'ribbon' development of earlier Saxon settlement identified along the western side of the A1 (to the south in TEAs 10, 11, and 12). The date of the SFBs needs to be checked through full artefactual dating and radiocarbon dating. Each of the SFBs will need to be looked at individually, as it is possible that some of the structures were earlier, whereas others (such as SFB 7C.1) may have formed part of the middle Saxon settlement. If it is shown that some of the SFBs did form part of an earlier (more dispersed) Saxon

settlement, this site will be a good example of the transition from early Saxon dispersed settlement into middle Saxon nucleated and defined settlement – the ‘mid-Saxon Shuffle’.

The form and function of these SFBs will need to be considered. SFBs are debated structures, with questions over whether they were sunken or had suspended-floors; and whether they were used as small-scale craft/industrial buildings (for weaving?), grain storage, or had any other functions (Tipper 2004). Analysis of these buildings, including consideration of their form, structure, deposits, environmental analysis (any charred grain?), finds, and potentially micromorphological analysis, will contribute to this.

MIDDLE SAXON SETTLEMENT

Before analysis of the middle Saxon settlement commences, it is necessary to obtain tighter dates for the settlement features in order to produce a better chronological framework. This will be undertaken through full pottery and artefactual analysis and, crucially for this site because of the lack of material culture, a radiocarbon dating programme. This will allow questions about changes over time to be tackled, such as:

- How long was the settlement occupied? When did it start (6th or 7th century?) and when did it end (10th century?)
- Did this settlement directly follow on from the earlier Saxon dispersed settlement to the south (TEAs 10, 11, 12)? Does this site provide any information about why this change happened?
- Did this settlement directly precede the later Saxon settlement to the east? Was there any break in settlement? Does this site provide any information about why this move happened?
- Is there any indication of different areas being occupied at different times, within the middle Saxon settlement?
- Can any changes in settlement form/layout be identified over time? In particular, were the ditched boundaries a later addition?
- Can any changes in building structure/form/alignment be identified over time? In particular, were the buildings with beam-slots of later date?
- Can any changes to the economic or agricultural practices over time be identified?

Analysis of the settlement itself has the potential to answer questions relating to Saxon settlement types, forms, and layout, such as:

- Is there any evidence, in this settlement, for deliberate and organised settlement planning? In particular, is there any evidence for the “short perch” grid system identified on other middle Saxon sites in Kent, Northumbria, Mercia and East Anglia in the period 600-800 and 950 onwards (Blair 2013).

- Can any other divisions or enclosures be identified within the settlement (fence-lines, ditched boundaries)? What does this suggest about the nature of settlement?
- Is there any evidence for 'zoning' of activities within the settlement?
- Is there any evidence for any other features within the settlement, such as animal pens, yards, 'ritual' structures (domestic shrines?), etc.
- Why were no burials identified within the settlement, when middle and late Saxon cemeteries were typically located within the settlements? What makes this settlement different?

Close analysis of the buildings may increase our understanding of middle Saxon building form, structure, and morphology. Before doing this, it will be necessary to look at the site plan and post-holes, to try to identify any further buildings or fence-lines. Following this, the following questions could be considered:

- There is currently no typological sequence for Anglo-Saxon timber buildings– can this site help to redress this at all? It has been suggested that there was a trend, over the mid-late Saxon period, from individual post-hole construction, to post-in-trench, and occasionally sill-beam construction (Hamerow 2012, 22). Can this be identified here?
- Is there any evidence (from the environmental samples and finds) for the building materials used (timber, thatch, daub)?
- Is there any evidence for how the buildings were actually constructed? This could include evidence for setting-out posts, trusses being laid on the ground and then raised, or other construction techniques?
- Can different functions to the buildings be identified? Were they all houses? This will involve looking at the positioning of entrances, internal subdivisions, hearths, other internal features, and finds and environmental evidence. In particular, the suggestion that Building 7C.22 may have functioned as a hall will be considered.
- Can we understand the 'life cycle' of the buildings? Evidence for repairing buildings is generally found from the 7th century onwards and has been identified on this site. What does this suggest about how long buildings were used for?
- It must be remembered that there may have been other buildings which are archaeologically invisible. This could include solid-walled constructions of turf or cob and moveable tents.

All of the pits/wells need to be considered (including those not currently grouped), to ascertain whether they formed part of the Saxon settlement and what functions they had. This will particularly include analysis of Pit 7C.20 (the pit potentially associated with communal cooking). Analysis of these features could answer questions such as:

- What information do these pits provide about the activities being undertaken within the settlement?
- Does the distribution of pits/indicate anything about 'functional zones', as identified at Yarnton?

- Could any of these pits also have functioned as boundaries? (particularly the line of pits in the southeastern part of the settlement: Pits 7C.2, 7C.16, 7C.13 and 7C.5).

The archaeological remains of the settlement also have the potential to answer questions about the agricultural and economic activities being undertaken. The following areas will be considered in relation to this:

- What evidence is there for the types of agriculture being undertaken – was it more arable or pastoral, and what types of animals/crops were focused on? This will involve analysis of the animal bone assemblages and charred grain assemblages.
- Can the changes in agricultural practices in the 'long eighth century', as proposed by McKerracher, be identified within this settlement (McKerracher 2018). This essentially comprised more intensive farming regimes, focused on arable farming and geared towards producing regular surpluses. Did this have any impact on the layout, form, and function of the settlement?
- Is there any evidence for other (non-agricultural) 'industrial'/craft activities taking place within the settlement, such as weaving. What scale was this happening at?

The archaeological evidence may also provide some information on the population, their social make-up, and beliefs, in the following ways:

- Can this excavated settlement provide us with an indication of the population size? Was it a relatively large community living here for a short(er) period of time; or a smaller group living here for many centuries?
- Is there any evidence for internal ranking within the settlement? Do the buildings and layout (including existence of boundaries) indicate anything about whether it was an egalitarian society, or whether there was social ranking?
- Is there any evidence for cooperation and collective investment, within this settlement and in the agricultural activities? Is this reflected in the layout of the settlement?
- Is there any evidence for peoples' beliefs? This could include structured deposits, possible 'home shrines' in the partitioned ends of buildings, or individual finds.

Any 'external' influences over the settlement should also be considered, particularly:

- What evidence is there for post-Roman 'British' influences, vs 'continental' influences, over the settlement? This can partly be seen in building traditions - what elements of 'continental' building techniques (ground-plan, annexes, double-plank construction), or 'British' building traditions ('round' elements) can be identified on this site? Is there any evidence from other sources (such as the finds) for continental or British influences?

- Is there any evidence for the influence of the church or monasteries over this settlement? In particular, the 'short perch' grid system is often thought to have been associated with monastic settlements – is there any evidence that this was the case here?
- Is there any evidence for the influence of lordship or landlords? Was the introduction of planned layouts and enclosures partly because of the impact of lordship, and is there any evidence for this on this site?

LATE SAXON SETTLEMENT

There was a significant change in settlement activity on this site in the late Saxon period, with a smaller area of activity emerging to the east of the middle Saxon settlement. It is crucial to obtain a tighter chronological framework for this activity – currently, it is thought that this activity dates to the 10th/11th century, but this needs confirming. This will be undertaken through full artefactual analysis and radiocarbon dating.

If this settlement directly followed on from the middle Saxon settlement to the west, there are questions about why such a major change happened. This change should be placed within the context of other late Saxon settlement changes – some settlements show continuity from the middle Saxon period into the late Saxon period (eg Cottenham in Cambridgeshire); whereas others show changes in the 10th century (eg Flixborough).

The relative sizes of these two settlements suggests that this later Saxon settlement was a contraction from the middle Saxon settlement. If so, where did the people move to, and why? Possible suggestions include environmental changes or the impact of the Vikings. It is, however, possible that some of the buildings in the late Saxon period were archaeologically 'invisible' (or are located outside our areas of excavation, potentially to the north), including buildings constructed of cob or turf, or transitory 'tent'-like structures. This will be considered in the analysis stage.

Building 7B.1 was very different, structurally (a rectangular beam-slot building), from those in the middle Saxon settlement and from the other 'structural features' in this area. This suggests it may have performed a different function – potentially this was the 'main house', with the other 'structural features' representing ancillary buildings. This fits within the broader late Saxon building tradition, as different types of buildings start appearing from the 10th century, with longer ranges (including aisled halls) at Raunds, and 'aristocratic' houses on some settlements such as at Faccombe in Hampshire. This will be considered in the analysis stage, looking at the building itself and the finds from it.

The surrounding fields were likely used for agriculture – potentially pastoral agriculture in the large open field to the south, and arable agriculture in the narrower fields to the north. The animal bone assemblages and palaeoenvironmental evidence will be analysed in relation to this, to gain an understanding of the types of animals and crops being farmed, and any information about specialisation or farming regimes.

This settlement may have continued beyond the Norman Conquest – tighter dating is needed to confirm this. If it did, there is the question of whether the impact of the conquest can be identified in the archaeological record.

Medieval

The remains of part of the deserted medieval village of Houghton was uncovered, comprising an area in the northern part of the excavation (containing a trackway, plot boundaries, buildings, and industrial activity); and an area in the southern part of the excavation (boundary ditch enclosing at least three buildings, a well, and two pits). This is thought to date to the 11th–13th century (with a resurgence in the late 14th – 15th century), and be an outlier of the main settlement at Brampton.

The discovery of this medieval village, particularly in conjunction with the Saxon settlement, has the potential to answer numerous questions about the nature of medieval rural settlements. This is particularly important as this is one of the few (only?) deserted medieval villages excavated in Cambridgeshire. Understanding the nature of medieval villages is an area highlighted in the East of England's Research Framework:

The origins and development of the different rural settlement types need further research, also the dynamics of medieval settlement.... More data will add to our understanding of the way places appear, grow, shift and disappear. (Medlycott 2011, 70).

Comparative sites to this will be sought and considered. This will focus on medieval villages with evidence for industrial activity and will include Cheveley (Cambridgeshire), Goltho and Wharram Percy. HER searches will also be carried out for excavations on Cambridgeshire medieval villages such as Giant's Hill and Clopton.

A tighter chronological framework and history of this village is required. This will be undertaken through documentary research, full artefactual analysis, selected radiocarbon dates, and revised stratigraphic analysis. This will allow questions about changes over time to be tackled:

- How long was the village occupied? When did it start (11th century?) and when was it deserted (13th century?). Can this be traced in documentary records?
- What activity was taking place here in the 14th/15th century? Why was there an apparent hiatus between the mid-13th century and later 14th century?
- Did the village directly follow on from the late Saxon settlement identified to the east? If so, what factors caused the area of settlement to move and the later village to be established?
- Why was the village deserted? Was it because of local economic reasons (such as losing access to nearby woodland) or other wider conditions (such as the Black Death, landownership changes, royal bequests, etc)? Documentary work will be undertaken on this.
- Is there any indication of different parts of the village being occupied at different times? Were the northern and southern parts of the village contemporaneous?

- What phasing, within the village, can be identified? How much earlier were Trackway 7C.1 and Boundary 7C.11 from the rest of the village? Can any other features be identified as part of this earlier phase of village activity?
- Do changes in activities/buildings/layout over time reflect other changes taking place (agricultural, economic, social, political)?

Analysis of the village layout has the potential to answer questions relating to medieval settlement types, forms, and layout. This covers a number of different areas:

- The southern area. It is unclear precisely how this area worked or what it was used for, as it was separate from the main village. It may have been part of the same village, forming a ribbon of development around the northern, western and southern parts of the excavation and avoiding the middle Saxon settlement area (which may have become a green in the centre of the village)? This type of settlement, arranged around the edges of common pastures, were typically post-Norman Conquest in origin.
- The village was clearly organised and planned, around the trackway with plot boundaries leading off it. The nature of this planning will be considered, particularly who organised and maintained it.
- How did this settlement work in conjunction with Brampton? It is thought that this was an outlier to the main settlement at Brampton. The connections between this settlement and Brampton will be considered, using both archaeological and documentary evidence.
- Some consideration of the surrounding land, particularly the agricultural land, will be undertaken. Is there any evidence for the type of agricultural activities being undertaken?
- Surrounding woodland? How connected to the surrounding woodland was the village? Did the trackway lead to Brampton Wood? What would the villagers have been using the woodland for? Was the establishment of the village here based on the existence of the woodland? What is the earliest record for woodland in this area (potentially using pollen data from the palaeochannels) – could it have been planted in the Saxon or post-conquest period, or had it been there since the late Iron Age?

This settlement appears to have been dominated by industrial activities, with the existence of a blacksmiths, retting pits, and numerous pits filled with burnt industrial waste. The nature of this industrial activity will be focused on in the analysis, as has the potential to answer questions about medieval rural industry:

- Blacksmiths. The 'blacksmiths' (Building 7C.39) will be fully analysed, to gain greater understanding of medieval metalworking. This will include analysis of the structure itself (any evidence for the hearth, anvil, water container, or storage?); finds (any blacksmiths' tools?); environmental evidence (including slag, hammerscale, and other by-products); and refining the dating. Following advice from metalworking specialists, scientific techniques, including analysis of the slag and plotting the distribution of flake hammerscale, may be undertaken. Comparative examples of medieval

blacksmiths will also be considered, including Goltho and Cheveley (Cambridgeshire). This may answer questions such as:

- What metalworking techniques were being used?
 - How many blacksmiths were working there?
 - How long was the smithy operating?
 - How much metalwork was produced?
- Retting. Ten pits, in three groups, were identified as 'retting pits'. This will need to be checked in the analysis, looking at the palaeoenvironmental evidence to confirm that retting was taking place here. Questions concerning the size, scale, and nature of this activity will be considered.
- What activities were the burnt pits associated with? What industries were taking place here?
- Where did the large quantities of burnt industrial waste, uncovered in many of the pits across the village, come from? What was it that they were producing?
- Was industrial activity taking place here because of the existence of nearby woodland?

Few medieval buildings could clearly be identified within this village – only the ground-plan of the 'blacksmiths' (Building 7C.39) could be understood, alongside 11 other 'structural features' (comprising groups of post-holes and beam-slots). These will need to be looked at in more detail in the analysis stage, to try to ascertain whether these formed buildings. It is possible that some buildings may be archaeologically 'invisible', as many medieval buildings were shallow with no foundations. It will therefore be necessary to look at the 'gaps' and alignments of boundary ditches, alongside the spread of domestic material, to see where buildings may have been located. Once this has been undertaken, it may be possible to answer questions related to medieval buildings, such as:

- Can the function of the buildings be ascertained? There is the suggestion that some of them (particularly Building 7C.39 And Structural Features 7C.10) were associated with industrial activities – is there any further evidence for this? How many of the other buildings were likely houses?
- What different building techniques can be identified, and is there any evidence for changes in building techniques over time? In particular, there was a shift from earth-fast construction (posts in holes or trenches) to ground-set timbers (placing timbers on the ground) between 1150 and 1250 – can this be identified in the archaeological record? The spacing of posts and development of bays also took place over the medieval period (Gardiner 2014) – is there any evidence for this on this site?
- What building materials were being used? Was Structural Features 7C.3 constructed out of stone (and what does this suggest about its function)? Were the others all timber?
- How long did buildings typically last? Is there any evidence for repairs?

Analysis of this village also has the potential to provide some information about the social structure of medieval rural settlements:

- What size population was living and working here? How would this have compared with the main settlement at Brampton?
- Is there any indication of land ownership within the village (do the boundaries divide areas owned by different people?) What does this suggest about the structure of society?
- What does the planned nature of the settlement suggest about social organisation? Was it organised and controlled by a central person or authority (lord or religious authority?) Can documentary evidence provide any information about this?
- Is there any evidence for 'Norman' influence over the village? This may be in terms of the buildings, the finds, or the village layout?
- Is there any evidence for 'religious' influence over the village? This may be relevant because Harthay was granted to Lincoln Cathedral in the 13th century. Is there any reference in Lincoln Cathedral's accounts of timber coming from here?

Post-medieval

During the post-medieval period this area was under agricultural use. Remains related to this were identified across the site. These are not considered to have any potential for further work. However, there is the potential to answer research questions about post-medieval brick making, through further analysis of the two brick kilns (Brick Kiln 7B.1 and 7C.1). *"The development and diversity of rural industry"*, including brick-making, is identified in the East of England's Research Framework as an area of interest (Medlycott 2011, 78).

Specific questions which will be considered in analysis include:

- What were the kilns making bricks for? Was it for nearby Grove Farm?
- Can we identify these kilns in documentary or cartographic evidence?
- What size 'industry' was in operation with these kilns? How long was it in operation? How many bricks were produced?
- Can any of the ancillary activities associated with brick making be identified?

Recommendations

Approximately 60% of contexts have been preliminary grouped at Entity and Group level for this assessment. Full grouping and assignment to period is required following results of specialist pottery analysis and radiocarbon dating. This may require some revision of the stratigraphic sequence discussed here. This will focus on the Saxon and medieval remains and particularly:

- Can any earlier Saxon settlement be identified (the SFBs)?

- Can any phasing of the middle Saxon settlement be understood?
- What date is the late Saxon area and how does it relate to the middle Saxon settlement and medieval village?
- Can the dating and phasing of the medieval village be refined? (particularly the earlier phase of medieval activity)?
- Was there continuous settlement (from middle Saxon through to the 15th century), or are there any gaps?

It is recommended that a full sequence of radiocarbon dates is obtained from across the site, focusing on the Saxon and medieval features, in order to refine the chronology. Other stratigraphic and research work recommended for the analysis stage in order to provide the information necessary to tackle the questions outlined above, includes:

Iron Age

- Analysis of settlement enclosures and roundhouses.
- Analysis of Iron Age activity alongside other Iron Age settlements uncovered on the A14 sites and other excavated sites in the vicinity.

Saxon

- Looking for any evidence of 5th century activity.
- Full analysis of SFBs, focusing on their form and function.
- Full analysis of post-holes, identifying other buildings or fence-lines. This will include looking at the specifics of all post-holes to work out what may go with what.
- Superimposing a grid of 4.57m (the “short perch”) onto the middle Saxon settlement, to see if the settlement was set out according to this.
- Full analysis of all pits in the areas of the middle and late Saxon settlement. Pit 7C.20 is of particular interest.
- Full analysis of all buildings – building materials, structure, life cycle, function.
- Calculations of population size for both the middle and late Saxon settlements.
- Consideration of comparative sites.

Medieval

- Documentary research into the village of Houghton and surrounding areas. Including all documentary and cartographic records and Lidar data.
- Full analysis of the blacksmiths workshop

- Analysis of other 'industrial' features (retting pits, burnt pits, industrial waste).
- Identifying and analysing other possible structures. This will include consideration of the 'gaps' in the site plan to identify other potentially 'invisible' buildings.
- Consideration of comparative sites.

Post-medieval

- Analysis of brick kilns.

TEA 8/9

James West

TEAs 8 and 9 are located within Section 2, directly to the east of the A1, west of Brampton village, and to the east of TEAs 7 and 10 (NGR: TL 1967 7097; Figure 8.1). Both TEAs are split into two fields, divided by modern boundaries. The total size of TEA 8 is 4.13ha, and TEA 9 is 3.13ha. The underlying geology of TEA 8 is river terrace deposits of sands and gravels in the northern field, with the southern field consisting of oxford clays and river terrace sands. The underlying geology of TEA 9 is river terrace deposits of sands and gravels, with bands of oxford clay and paleochannels aligned north-east to south-west. A palaeochannel was observed orientated NE-SW across the northern field.

Archaeological Background

Trenching in TEA 8 was conducted in 2014 by Wessex Archaeology. Contemporary with the subject of this report MOLA carried out an archaeological excavation directly to the east of TEA 8 - their site contained Saxon and Iron Age archaeology which did not extend into TEA8. No trenching was conducted within TEA 9 before it was stripped and excavated.

Methodology

The areas were designated as a 'strip, map, and sample' area and were investigated in October-November 2017. Parts of TEA 8 and 9 were stripped by machine under archaeological supervision. For TEA 8, this comprised a strip down the centre of the southern field; an area in the centre of the central area; and a strip along the western side of the northern field. For TEA 9, this was the eastern $\frac{3}{4}$ of both fields along with three trenches adjacent to the A1 in the southern field. As limited archaeological remains were identified in all these areas, it was decided (upon consultation with the county archaeologist), that there was no need to strip any further areas.

Summary of results

Prehistoric activity

A small quantity of worked flints were recovered in TEA 8, particularly from the northern field, their locations were recorded by GPS survey. This suggests that there was some prehistoric activity in the general area.

A single unurned cremation burial was identified and fully excavated in TEA 9 (Figure 8.6). The cremation burial was located in the middle of the northern field, adjacent to a paleochannel aligned NW - SE. A sample of the cremated bone was radiocarbon dated to 1496-1319 cal BC (95.4% probability; SUERC-85540) (middle Bronze Age).

Post-medieval – modern agricultural landscape

A series of post-medieval and modern ditches were observed and investigated within the area (Figures 8.2-3). One of these ditches in TEA 8, in the northern field aligned NW-SE, is shown as a field boundary on Ordnance Survey mapping between 1888 and 1958 (it was gone by the survey for the 1972 edition) (Figure 8.4).

Other ditches in the southern field of TEA 8, are not shown on any historic maps, however they are also likely to have formed part of the post-medieval agricultural landscape. The northern-most was parallel to the existing boundary ditch to the north and so may have been a drainage ditch alongside this. The two central ditches were both aligned NE-SW, and one contained a land drain in its base, demonstrating their drainage function. The southern ditch contained few artefacts but may have also been a drainage ditch associated with the boundary to the south. A single band of dark material was present in the NW corner of the central field, aligned NE-SW. Three machine trenches were excavated through it and showed evidence for post-medieval gravel extraction (Figure 8.5). This activity is not shown on any historic maps.

In TEA 9, a modern ditch was aligned NNW – SSE across the site, forming a 'T' junction with another modern ditch running east to west in the lower part of the southern field. Upon investigation, both ditches contained modern glass and pottery. These two ditches are shown on historic maps as forming part of a field boundary from at least 1888 (the First Edition OS Map; Figure 8.4) until at least 1901. However, as they do not appear on the 1926 OS Map, we can deduce that between 1901 and 1926 this particular field boundary design was changed. Another small segment of modern drainage ditch, was aligned NE – SW in the southern part of the southern field. Upon investigation, modern pottery was recovered, and a high proportion of articulated animal bone was recorded.

Finds and environmental summary

Tables 8.1 - 8.3 provides a quantification of the finds, bone, and environmental samples from TEAs 8-9.

Few finds were uncovered in TEAs 8 and 9. A small quantity of flint (three flakes and a piece of irregular waste) were recovered, along with a small quantity of post-medieval finds (pottery, fragments from a 19th century wine bottle, and fragments of yellow post-medieval brick).

One sample, of the undated cremation, was also processed. This identified 10% of the remains of one adult, including cranial bones and teeth.

Table 8/9.1 Quantification of finds from TEAs 8/9

Type	Count	Weight (g)	Date/type
Pottery	9	111	Post-medieval
Lithics	4 (worked)		
Glass	3	36.7	Post-medieval
Building Materials	14	432	Post-medieval

Table 8/9.2 Quantification of bone from TEAs 8/9

Type	Count	Date/type
Cremations	1	

Table 8/9.3 Quantification of environmental samples from TEAs 8/9

Type	Count	Date/type
Bulk Environmental Samples	1	

Provisional interpretation and potential

TEAs 8 and 9 identified the presence of modern field boundaries and post-medieval gravel extraction, along with a single unurned middle Bronze Age cremation burial. There was potential for Saxon activity in TEA 8, as excavations in TEA 7 to the west uncovered a significant Saxon settlement. However there appears to be a definite break in the archaeology between TEA 7 and 8, as no presence of Saxon activity was found.

Further work

No further work is required for TEA 8 or 9, although the results presented here could be used to understand the wider context of the archaeological landscape surrounding it.

TEA 10

Jeremy Mordue

TEA10 is located within Section 2, towards north-western end of the A14 road improvement scheme (Figures 10.1-2). It is to the west of the A1, between the A14 to the north and Grafham Road to the south (NGR: TL 1943 7043). The site was divided into two (10A to the west and 10B to the east, each 16.7ha) by an unstripped oil pipeline corridor. The total stripped area comprised approximately 28ha.

The underlying geology was of the Oxford Clay Formation (undifferentiated) – mudstones, siltstones and sandstones. This was overlain by River Terrace deposits of sands and gravels found on the lower ground. The geology in the stripped areas was changeable; at times pure sand, gravel, mixed clay-gravel and silty clay. The higher ground to the south-west was mostly chalky gravel. The site was located on a gentle slope, falling to the east, with a broad shallow east-west valley in the central part of 10A. This valley was the location of a suspected colluvium or buried soil deposit.

Archaeological Background

An aerial photographic survey (APS 2014) showed numerous curvilinear enclosures and ditches, interpreted as part of a larger prehistoric settlement, typical of larger and more complex groups of agglomerated enclosures.

Geophysical Surveys completed for the Ellington-Fen Ditton Scheme (Bartlett 2009a) covered most of TEA10 and revealed a large number of archaeological anomalies (Figure 10.3). Several enclosures were identified, including two distinct enclosures one within TEA10A and two additional enclosure complexes on the northern end of TEA10. Other anomalies related to the cropmark sites identified through aerial photography, including the ring ditch recorded on the Cambridgeshire HER (reference 5765). No suggestions as to age or function of the sites were given in the geophysical report, but the morphology of the anomalies indicated late prehistoric to Roman. However, the ring ditch identified at TEA12 may represent earlier occupation, and the enclosure near to the Houghton DMV may reflect medieval use of the area. Further geophysical survey (Stratascan 2016, S2-GEOPHYS-001) identified a large sub-circular enclosure in the northern part of the area with ditches extending out to the south-east.

Evaluation trial trenching by CAU (Patten et al 2010) included trenches excavated to inform the Ellington-Fen Ditton Scheme. In the south-east corner of TEA10 the trenches uncovered a number of late Iron Age features. Some trenches revealed a series of intercutting ditches, as well as a large irregular, subcircular feature, thought to date to the late Iron Age. A cluster of small pits or post-holes were identified but left unexcavated. Fifteen trenches were excavated within the road outline by Wessex Archaeology (WA 2014), these were located in the eastern part of TEA10. Further trial trench evaluations were carried out by MHI in May 2016 (MHI 2016). Twenty-eight trenches were excavated within TEA10. This identified a large 1st century AD sub-circular settlement enclosure in the northern part of the area; and a Romano-British settlement in the central/southern part.

Methodology

The fieldwork followed the methodology set out within the WSI (Highways England, 2015). The area was stripped by A14 IDT's earthmoving contractor Walters using 36 tonne tracked excavators under constant supervision by a qualified archaeologist. The area was opened piecemeal starting with 10B south, then 10B south (eastern area: 'wheelwash' and 'Fill Area'), and 10B north between January and June of 2017. From June 2017 stripping commenced on 10A beginning at the southern end and working northwards. This was completed in September 2017. The final piece of 10A, a 20m wide "Haul Road" corridor adjacent to the oil pipeline corridor was stripped in January 2018.

Fieldwork was carried out on 10B between February and June 2017, on 10A between July 2017 and January 2018, and the Haul Road strip between February and May 2018.

Summary of results

Archaeological excavations on TEA10 identified occupation beginning in the early Bronze Age and extending up to the medieval and post-medieval period (Figure 10.4). Evidence for earlier prehistoric activity was concentrated mostly within TEA10B, with a funerary landscape comprising multiple cremation burials and a barrow with a single inhumation burial. There was an area of burnt pits and possible cremations in the centre of 10B, and an intensively quarried area in the centre of 10A.

The later prehistoric period was represented by intensive activity in the middle Iron Age, when large polygonal enclosures, strip enclosures and droveways were created in the north of 10A. The settlement spread towards the south-east in the late Iron Age, with further enclosures, circular dwellings, and burials.

Roman activity was concentrated in the south of 10B, where sub-square and rectilinear enclosures abutted the late Iron Age settlement system, and in the north of 10A, where a rectilinear enclosure and associated kilns overlay the earlier Iron Age activity.

Saxon occupation was restricted to the southern halves of both 10A and 10B, with five sunken featured buildings, several post-built structures, a suspected latrine pit, and several large waterholes or wells.

By the medieval period the land had been turned over for agricultural purposes. Ridge and furrow ploughing was extensive across the entirety of the site, on a ESE-WSW orientation. This orientation was retained in the latest feature on the site, a rectilinear field boundary system, which was sufficiently recent to appear on old maps and aerial photographs.

Phase 1: Neolithic/early Bronze Age (Figures 10.5-7)

The prehistoric activity in TEA10 was characterised by two ring ditch barrows to the north and south. Further to the north were two ponds and several stream channels, thought to be parts of a palaeochannel and predating other archaeological activity here. To the west were a series of intercutting pits, quarrying for possibly clay or flint. In the central area was an intense zone of small pits, cremation burials and post-holes, and to the south of the southern barrow a loose scatter of pits and post-holes.

There was evidence for a funerary landscape, with a single inhumation burial and cremation burials close to the southern barrow, and further possible cremation burials in the central area.

PALAEOCHANNEL (FIGURE 10.5)

In the centre of 10B north was an area of wet ground interpreted as two ancient ponds (Natural 10.1). These appeared to pre-date all archaeological activity here. The two ponds measured approximately 25m in diameter with lineated elements stretching east and west. They were not investigated, and it is equally likely that they represent a periglacial event or change in geology leading to a lack of drainage. The lineated braids or channels linking the two ponds were investigated in several slots. Each of the channels was approximately 1.30m wide and extended for about 50m. Up to six separate channels were identified. As with the pond, these channels pre-dated activity here and may represent ancient water courses or palaeochannels.

FLINT SPREAD

Flint artefacts including waste flakes and blades were recovered from across the entire site, often from the fills of later features. Surface finds of worked flint were assigned small find numbers. Fifty-nine flints received small find numbers and a further 11.6kg of flint was collected across the site. A distribution plan of the flints will be plotted to locate areas of activity. A flint dagger was recovered from a layer in the middle part of TEA 10B. This dagger would have been associated with funerary activity (Barry Bishop, pers. comm.) and may be indicative of a wider funerary landscape associated with the two barrow ring ditches on 10B. The presence of less specific flint artefacts suggests a prehistoric landscape, with a focus perhaps away from funerary monuments. To the southeast of 10B two tree-throws produced a large quantity of worked flint. Over one hundred flakes were recovered from one of them. Analysis of the flint assemblage may assist with the prehistoric chronology and indicate whether these tree-throws contained the remains of a single episode of tool manufacture or the opportunistic deposition into a convenient hole.

FLINT PITS AND CREMATION BURIALS (CREMATION BURIAL 10.1; PIT GROUP 10.1-9) (FIGURE 10.6)

The central part of TEA 10B contained an area of intensive activity roughly 37m across. This consisted of small pits, possible post-holes and cremation burials. The cremation pits (Cremation Burial 10.1) were between 0.19-0.48m in diameter and contained buried vessels. The burnt pits (Pit Group 10.1) varied greatly in size and shape. Some were elongated: c 2.78m long by 0.78m wide, while others were sub-ovoid in shape and roughly 1.20m in diameter. They contained large quantities of fire-cracked stones. Similar pits found at Love's Farm (Hinman and Zant 2018, 51) were interpreted as hearths and dated to the Iron Age. Some of the pits in this group were clustered together (Pit Group 10.2) in a manner similar to small-scale quarrying, and it may be indicative of flint quarrying. The remaining features (Pit Group 10.3 to Pit Group 10.9), were mostly a combination of small pits and post-holes and are likely to represent activity and structures associated with the quarrying and heating of flint. Further analysis may be able to detect traces of light industrial activity, and examination of the flint recovered may be useful in providing a more accurate chronology. This zone of activity was roughly equidistant between the two ring ditch barrows.

RING DITCH BARROWS (DITCH 10.1, 10.2; PIT GROUP 10.10, 10.11) (FIGURES 10.5 AND 10.7)

Two ring ditch barrows were identified in TEA10B approximately 330m apart. The first, on the western edge of 10B north, was a continuous circular ditch roughly 13m in diameter (Ditch 10.1). This had a substantial ditch up to 2.50m wide. The ditch fills indicated slumping from a central mound. The ring ditch was likely to be early Bronze Age in date and used for funerary purposes. No inhumations or cremations were found in association with this 'barrow'; however, two internal features (Pit Group 10.10) had an inconclusive interpretation. Comparisons with the second ring ditch may be useful in determining the extent of the prehistoric funerary landscape and its date.

The second ring ditch (Ditch 10.2) was located in the southern part of 10B. It was 16m north-south and 18m east-west. In contrast with the first ring ditch, this had a narrow entrance to the north (0.85m wide). The ditch was a substantial, steep sided v-shape, infilled with a series of slumped and collapsed sand and gravel similar to the surrounding geology, suggesting a slumped mound or bank, and topped off by natural silting. Pottery recovered from the terminals of the entrance was Iron Age, suggesting that this monument was a feature in the landscape for a long time. This may also account for the proximity of Saxon structures in the near vicinity as these were often associated with prehistoric monuments. As with ring ditch 1 two small internal features were present (Pit Group 10.11) but no conclusive interpretation was achieved. The function of this monument is unclear, although the lack of funerary remains inside it suggests that it may have been a 'henge' rather than a barrow.

Funerary activity in close proximity to ring ditch 2 (but outside of the monument) consisted of a single crouched burial approximately 21m to the west (Inhumation 10.1), and cremation burials in two separate locations to the west and east (Cremation Burial 10.2). The grave was a shallow scoop 1.05m in length (NE-SW) and 0.64m across. The body was lying on its left side in a crouched position, head to the northwest. No grave goods were present. The cremation burials were located close to the inhumation burial, with one outlier 15m to the east of the ring ditch. One of the cremation burials showed signs of *in situ* burning, with the ground around the buried vessel scorched. Another was located 14m to the south-west of the group in amongst a cluster of possible cremation burials (Cremation Burial 10.3). Beside it was a small pit containing a complete collared urn offering vessel.

EXTRACTION PITS (PIT GROUP 10.12) (FIGURE 10.5)

In the central part of 10A was a cluster of at least fourteen deeply cut pits (Pit Group 10.12), extending 10.5m north-south, by 5.6m east-west. The pits were of varying shape and size, and indicated repeated episodes of activity, possibly for gravel extraction. Worked flint was recovered from these pits, as well as animal bone (including the skeleton of a sheep) from the disuse fills.

ELONGATED PITS (PIT GROUP 10.16) (FIGURE 10.7)

In the south of 10B were three elongated pits (Pit Group 10.16). One pit, located within group Pit Group 10.15 (below), was oriented NE-SW and measured 6.2m in length and 1.58m wide. The second elongated pit was located to the southeast of Pit Group 10.14 and measured 4m in length and 1.05m. It was oriented NW-SE. A third, located 62m south-west of ring ditch (Ditch 10.2) was oriented NW-SE and comprised three distinct intercutting elements to form a lineated whole, approximately 5.70m in length and 1.0m across. Alternatively, these features may represent the remnants of segmented ditches.

DISCRETE PITS AND POSTHOLES (PIT GROUP 10.13, 10.19) (FIGURE 10.7)

The remainder of the features here were dispersed pits and post-holes, often in small clusters. Many were poorly defined against the background geology and truncated by intensive medieval ploughing. Adjacent to Cremation Burial 10.2 were a pair of post-holes, each up to 0.55m in diameter, and three small pits (Pit Group 10.13). The rest of these features at the southern end of 10B (Figure 5) were collected into arbitrary groups based on location (Pit Groups 10.14-15; Pit Groups 10.17-19; not marked on plan).

Phase 2: Middle Iron Age (Figures 10.8-10)

The middle Iron Age period was dominated by two large polygonal enclosures, to the north and the south, and the control of livestock movement around the landscape (Figure 10.3). Drove ways, smaller enclosures and field boundary ditches were concentrated to the west. This activity may have been contemporaneous with the Iron Age occupation on TEA7B and the settlements linked by a large ditch heading north from the northern enclosure.

NORTHERN ENCLOSURE (ENCLOSURE 10.1) (FIGURE 8)

The northernmost ditched enclosure measured approximately 60m by 70m, with an entrance located to the south. The earliest form of the enclosure was roughly half the size and sub-rectangular (Enclosure 10.1) with curvilinear ditches and an entrance to the south. There may have been other entrances in the northwest and northeast corners. The ditch was approximately 2.1m wide and less than a metre deep. The southern part of the earlier enclosure's eastern ditch had been reworked towards the terminus. The western arm had been largely cut away by the later reconfiguration; its northwest end visible only as it extended beyond the later ditch limit. Pottery recovered from this earlier version of the enclosure was given a preliminary date of late Iron Age. The northern part of the earlier enclosure was completely truncated by the later version.

The later polygonal enclosure that characterises this location (Enclosure 10.1) was partially superimposed over the earlier sub-rectangular version. The later ditch was 3.0m wide and up to a metre deep. Its terminal produced no datable finds. Modification work to the termini at the southern entrance took the form of short stretches of ditch 14.7m long and 2.3m wide, tapering to the east, and 9.8m long by 1.6m wide. Preliminary dating of pottery recovered from the later enclosure ditch again indicated a late Iron Age date.

In the western half of the enclosure were several segments of gully. They were positioned relatively close to the western boundary and may represent segments of internal subdivisions. These short subdivisions were between 2.16m and 14.8m in length and 0.38m to 0.88m wide. The eastern half of this enclosure also contained a number of linear segments, mostly north to south oriented and these may represent further subdivisions. They ranged from 5.43m to 16.57m in length and 0.46m to 1.52m wide.

A number of discrete features were identified inside the northern enclosure. These formed into five small clusters and comprised small elongated pits and isolated post-holes. Some of the pits were larger, approximately 2m in diameter and intercutting. Four of the post-holes were positioned close to the southern entrance but did not form a recognizable structure.

SOUTHERN ENCLOSURE (ENCLOSURE 10.2) (FIGURE 10.8)

The southern enclosure measured approximately 95m north to south by 80m east to west. It comprised a single enclosure ditch for the full circuit, with an entrance to the west, with additional parallel ditches to the east forming a possible driveway, and a further one beyond that which may feed into a driveway to the southwest. The enclosure ditch (Enclosure 10.2) was substantial, measuring 2.40m across and 1.0m deep. The entrance, 4.27m wide, was positioned to the west. Pottery recovered from interventions was given a preliminary date of late Iron Age. The eastern side of the enclosure had a second ditch beyond the complete circuit. This ditch followed closely the line of enclosure 10.2 inner (east) ditch, with a gap of approximately 8-9m closing to 3.80m towards the north. The ditch was approximately 2.30m wide and almost 1.0m deep. As it curved the ditch revealed an earlier line slightly to the west. The parallel ditches formed by the inner east and the middle east ditches may represent a driveway and could be associated with the reworking of the western side. Beyond enclosure 10.2, inner (east) ditch was another. This arced sufficiently to suggest it may be enclosing land to the west as part of an original layout of enclosure 10.2. There were indications that this outer ditch had undergone several recuts suggesting the need for constant management, perhaps to ensure the safe containment of livestock. The western side of the enclosure had undergone substantial modification works to straighten the side and close off the entrance. These works may have been part of a larger scheme of works which also included the building of new square enclosures to the west. The modification moved the entrance to the north creating a more complex access into both northern and southern enclosures. Preliminary dating for pottery recovered from interventions into Enclosure 10.2, western modification, indicated a date of middle Iron Age.

PIT AND SPREAD TO EAST OF SOUTHERN ENCLOSURE (OCCUPATION FEATURES 10.2; PIT GROUP 10.21) (FIGURE 10.8)

In the eastern part of the southern Enclosure 10.2 the ditches appeared to cut through an extensive gravelly deposit (Occupation Feature 10.2) 14.8m east-west by 9.5m north-south. The gap between the ditches would have been able to accommodate pedestrian, vehicle or animal traffic and perhaps served as a driveway. The stony spread between and around the ditches of the southern enclosure was in close proximity to a large pit (Pit Group 10.21) and may have represented an attempt to consolidate trampled ground. It was sufficiently stony to be considered a road surface during excavation and recording. The pit measured 2.8m in diameter and 1.50m deep. As the only feature within the enclosure this may represent a waterhole for livestock.

SUB-CIRCULAR AND SUB-SQUARE ENCLOSURES (ENCLOSURE 10.4, 10.6, 10.5) (FIGURE 10.8)

To the southwest of the southern enclosure was a sub-square segmented enclosure (Enclosure 10.4). It formed a rough square approximately 8m by 10m in size, and contained multiple backfill episodes, many of which were blackened and thought to be burned. Environmental analysis revealed they contained no significant burnt material. The definition of this feature was strong, and its multiple backfill episodes and potential re-cuts and intrusions indicate a possible light industrial activity here. Pottery recovered from this feature has been given a preliminary date of middle Iron Age.

Partially cutting over the top of sub-square enclosure 10.4 was a D-shaped enclosure (Enclosure 10.6). It measured approximately 18m by 14m, with the ditch measuring 3.2m wide. No internal features were observed. This was a substantial ditch for such a small enclosed area, and the function of this feature was unclear. Cutting away the western side of enclosure 10.6 was a circular enclosure (Enclosure 10.5), approximately 27m in diameter. The width of its ditch was variable, between 2.30m and 4.0m, and very substantial, with a maximum depth of 1.60m. It cut the smaller, D-shaped enclosure 10.6, and was cut by the droveway ditch and square enclosure (Enclosure 10.3). Preliminary dating for pottery recovered from this ditch indicated a date of middle Iron Age. A potential entrance was indicated to the north by the presence of a ditch terminal, although the exact size of the entrance is not known.

A number of discrete features were identified within Enclosure 10.5. This comprised 32 post-holes and a tree-throw. The post-holes all occurred in the central part of the enclosure, with the exception of three which were situated towards the north-eastern edge. The post-holes truncated the backfills of the sub-square enclosure (Enclosure 10.4). These posts may form a structure within the circular enclosure, or depending on its function, animal pens.

NEW SQUARE ENCLOSURES (ENCLOSURE 10.3, 10.8) (FIGURE 10.8)

Further development to the west of the large polygonal enclosures consisted of the creation of two new sub-square enclosures abutting the original enclosures, both with entrances towards the west. These may represent not only expansion, but replacement of the sub-circular/D-shaped enclosures 10.5 and 10.6, and a move towards the more regular layouts suggested by the later Iron Age settlement activity. They each contained a sparse scatter of small pits or post-holes indicating possible small structures or animal pens.

The first square enclosure (Enclosure 10.3) abutted both the southern and northern enclosures. It measured 49m across, with its ditch becoming more substantial (3m wide and 1m deep) as it joined the larger enclosure. The entrance in the western arm was less than 2m across but was probably sufficient for controlling access. Preliminary dating for pottery recovered from this ditch group indicated a late Iron Age date. Inside of this were fifteen discrete features, comprising post-holes and small pits. The second (Enclosure 10.8) was created abutting the square enclosure (Enclosure 10.3), northern enclosure (Enclosure 10.1) and the ditch of Trackway 10.2. It measured approximately 35m by 35m and partly re-worked the north-western arm of Enclosure 10.3. There were two entrances into this enclosure, both on the west side; one of 8.60m width and the other 3.0m wide. Pottery dates from this suggest a late Iron Age date. Inside this were ten discrete features comprising small pits and post-holes.

FIELD BOUNDARIES AND DROVEWAY TO SOUTHWEST (TRACKWAY 10.1; BOUNDARY 10.1) (FIGURE 10.8)

Several ditches extended in a broad fan away from the large polygonal enclosures and towards the southwest. Two of these (Trackway 10.1) were substantial, 2.60-2.80m wide and up to 1.0m deep. They ran mostly parallel, opening out at the east end to respect the southern enclosure. These ditches were filled with fine sediment similar to the surrounding geology and almost invisible in the ground. They had filled up over a long period of time. There was no evidence for management of these ditches. Together

they may have formed a droveway, directing livestock towards grazing lands in the west and back to the enclosures. Cut into the southern terminus of ditch was a late Iron Age fire pit (Kiln 10.2).

Four ditches were identified north of this possible droveway (Boundary 10.1). They were poorly defined, relatively short lengths of shallow ditches oriented towards the southwest and may represent remnant field boundary ditches. Fragments of several other ditches (Boundary 10.1) were recorded to the southwest of the above groups. These were also short and poorly defined. Some of them had perpendicular segments or lined up to create segmented boundaries. These ditches constitute a connection between middle Iron Age activity in the north of the area and possible further activity to the southwest.

PASTURE, DROVEWAY AND ENCLOSURE (BOUNDARY 10.19; TRACKWAY 10.2; ENCLOSURE 10.7) (FIGURE 10.8)

Further evolution of the middle Iron Age farmstead occupation to the west was demonstrated by the creation of two large ditches (Trackway 10.2), and a boundary to the north (Boundary 10.19). Boundary 10.19 was 80m to the north of Trackway 10.2, and likely formed a boundary for an area of pasture. It was 2.74m wide and over 1.0m deep and cut into the infilling of enclosure 10.1 ditch. Preliminary analysis of pottery recovered from this ditch indicated a late Iron Age date.

Trackway 10.2 was aligned NEE-SWW, and was observed for 120m (continuing beyond the western limit of excavation). The two ditches were spaced 8-10m apart. The southern ditch was 3.4m wide and over 1.0m deep. Preliminary pottery dates for this ditch have been varied, with late Bronze Age/ early Iron Age, middle Iron Age/late Iron Age, and late Iron Age/early Roman sherds recovered from interventions along its length. Preliminary pottery dates from slots excavated into the southern ditch also provided a spread of dates ranging from middle Iron Age to early Romano-British. It will therefore be necessary to consider the heights at which the various pot types were recovered, and the possibility that these ditches were open over a long period and developed in a piecemeal fashion.

To the north of the circular enclosure (Enclosure 10.5) was an enclosure shaped like a question mark (Enclosure 10.7). This partially infilled and reworked the eastern extent of trackway 10.2. The ditch was approximately 2m wide with a v-shaped profile and may have represented a small catchment area (c 70m²) for livestock. Preliminary pottery dates indicate a middle Iron Age date.

RADIATING STRIP FIELDS TO NORTH (FIELD SYSTEM 10.1-5; ENCLOSURE 10.9) (FIGURE 10.8)

Abutting to the north of the northern enclosure were a series of radiating ditches. Where these connected to the main ditch their depth matched the depth of the partly infilled enclosures demonstrating that they were added some time after the original layout. No entrances were discernible. The westernmost of these ditches (Field System 10.1) was oriented NW-SE and measured 2.32m wide and up to 1.0m deep. It formed a field with another ditch (Field System 10.2) located 15m to the east. Abutting it was an enclosure comprising two ditches (Enclosure 10.9). By utilising the corner of trackway 10.2 ditch this formed an area 57m long and up to 16m wide. To the north of the northern enclosure, the field ditch (Field System 10.3) was oriented north to south, roughly perpendicular to the enclosure ditch. It stopped at the edge of the enclosure, and now created a sub-square enclosed area in excess

of 60m by 60m. Two further ditches were present on this northern side. One of them, (Field System 10.4) crossed over Field System 10.3 oriented NE-SW, and the other (Field System 10.5) ran parallel with it but was shorter, possibly respecting the 'ladder' ditches extending southeast.

'LADDER' DITCHES (DITCH 10.3, 10.4) (FIGURE 10.8)

To the northeast of the two main enclosures were two sets of parallel ditches. These were 8m apart and linked by short linear features to create compartments. The 'ladder' extending southeast (Ditch 10.3) ran for approximately 114m, with a slight curve at its northern end where it connected to strip field systems 10.3 and 10.4. The compartments created by the linking ditches were 34m in length. Neither ditch was straight, with some pronounced curves. They were up to 2.50m wide with some evidence for re-cutting in the northwestern half, but none in the south-eastern half. Preliminary dating of pottery recovered from this feature provided a spread of dates, mostly late Iron Age. Further analysis may be able to work out the chronology of the radiating strip fields and the ladder. The two arms of the ladder connected to differing radial ditches indicating that these were not originally planned as parallel boundaries. The linking 'bridges' may have been opportunistic re-use of space. The 'ladder' to the northwest (Ditch 10.4) had poor definition, and a staggered linking point to the first via an extended bridging ditch. The southern ditch extended beyond the edge of the site. It was substantial where investigated at its relationship with strip field ditch, field system 10.3. An apparent terminus and narrow entrance was located at its intersection with strip field system 10.4. The exact location was truncated by a large pit. The northern ditch was linked into by later Iron Age enclosure (Enclosure 10.13). Its connection to the other 'ladder' was interrupted by a later pit and inhumation burial (Inhumation Burial 10.2; late Iron Age).

PITS TO EAST OF NORTHERN ENCLOSURE (OCCUPATION FEATURE 10.1; PIT GROUP 10.20) (FIGURE 10.8)

To the east of the northern enclosure was a stony spread (Occupation Feature 10.1) cut by several pits. The spread was approximately 0.20m thick and covered an area of approximately 16m by 13m. It was relatively stony and may represent an external surface. Cut into this surface were a number of large pits (Pit Group 10.20), the largest of which was up to 6m in diameter and 1.0m deep. They were filled with episodes of gravelly backfill and semi-organic silting. Two clusters were apparent. In the second cluster the pits were approximately 5.0m in diameter. One of these contained a complete horse skeleton. Two post-holes were recorded cutting into the top of the second pit cluster. These were approximately 0.80m in diameter and up to 0.40m deep. They contained black gravelly fills.

CURVILINEAR DITCHES TO EAST OF NORTHERN ENCLOSURE (DITCH 10.5, 10.6) (FIGURE 10.8)

East of the northern enclosure (Enclosure 10.1) were two curvilinear ditches, possibly representing relict field boundaries beyond the main enclosure. The first curvilinear ditch (Ditch 10.5) was approximately 33m in length and of variable width; it was orientated west to east before curving towards the north. It was truncated by a large late Iron Age pit and late Iron Age double ditch enclosure (Enclosure 10.14). The second curvilinear (Ditch 10.6) was located within (underneath) ring gully (ditch 10.18) and measured 9m in length and 1.0m wide, running NE-SW.

ROUNDHOUSES (ENCLOSURE 10.10, 10.11; DITCH 10.7, 10.8) (FIGURES 10.8-10)

In the southeast corner of 10B was a roundhouse ring gully (Enclosure 10.10; Figure 10.10). It was 9m in diameter with an entrance to the east. Preliminary analysis of pottery recovered from this gully suggests a date of middle Iron Age, although its position suggests late Iron Age. Five internal features were investigated. These were shallow pits with some evidence for dumping of burnt material. In the northeast corner of 10B was a roundhouse ring gully approximately 14m in diameter (Enclosure 10.11; Figure 10.9). It was situated immediately adjacent to the migrating driveway ditches (Trackway 10.3). It had an entrance to the east, approximately 4m wide, and had been cut by later (medieval) ditches. Preliminary dating of pottery recovered from this ring gully indicates a middle Iron Age date. Two fragments of ring gully were located in the northern part of 10A, near the northeast corner of the Northern Enclosure (Enclosure 10.1; Figure 10.8). The first (Ditch 10.7) was the southern arc of a drip gully. If this had been a complete circle its diameter would have been approximately 11.3m. A small quantity of middle Iron Age pottery was recovered from a single intervention into this ring gully. Lying 10m to the southwest was a second fragment (Ditch 10.8), also part of the southern arc of a drip gully. Its reconstructed diameter would have measured 10.4m.

Phase 3: Late Iron Age (Figures 10.9-10)

The late Iron Age occupation added to the two polygonal enclosures of the middle Iron Age in an almost organic continuation to the east. A small amount of activity cut the ditches, but otherwise the later activity acted as a development rather than a replacement, with a roundhouse located close to the northern enclosure. The 'spine ditch' pointing to the southeast appeared to have had breaks indicating the limit of expansion. One of the first new areas was the living/dead rectangle with its zones of graves and roundhouses, part of a larger enclosure directly east of the middle Iron Age southern enclosure which had a dense area of pitting against its boundary ditch. Further occupation spread southeast, with a splinter 'spine ditch' and a slightly off-set continuation of the first spine ditch creating a large wedge which contained an enclosure and another circular dwelling. A lone roundhouse to the southeast which was given a middle Iron Age date was located a very long way from the rest of the middle Iron Age activity and is more likely late Iron Age. Large fields were built off this wedge, some of them with 'soft' boundaries which were probably hedges, as the ditches were ephemeral and existed in places as short segments.

DISCRETE AND LINEAR FEATURES INSIDE THE MIDDLE IRON AGE SOUTHERN ENCLOSURE (ENCLOSURE 10.2) (FIGURE 10.9)

The middle Iron Age southern enclosure (Enclosure 10.2) was largely devoid of any features thought to be contemporaneous with its use. However, several features of later date were identified. At the northern end of the enclosure were four discrete features: a circular pit, 1.40m in diameter, and three post-holes, one of which was detached from the group and located 16m to the east. It was not possible to form these into a structure. Continuing the north-south line of the enclosure 10.12 system to the north, two almost parallel gullies extended southwards through the southern middle Iron Age enclosure. The western gully had an uninterrupted run of 39m north to south, followed by a break of 3.7m and a further 3m. It led towards a possible fragmented roundhouse gully. The eastern gully connected the northern side of the middle Iron Age enclosure to its southern side, a distance of 55m. Associated with these were

several small discrete features located near the western edge of the enclosure. These comprised two elongated pits, three post-holes and another pit. Also located here were a kiln (Kiln 10.1) and segmented curvilinear gully. This was present in two segments, each approximately 8.5m in length. They enclosed an area approximately 10m in diameter. It is unclear whether this was a relict roundhouse, part of a small animal enclosure or an activity area. It was cut by the north-south gully and may represent activity at the tail end of the lifetime of the enclosure.

STRAIGHT DITCHES, ENCLOSURES AND DISCRETE FEATURES NORTH OF MIDDLE IRON AGE ENCLOSURES (ENCLOSURES 10.12-14; FIELD SYSTEM 10.6; DITCH 10.9-11, 10.18; PIT GROUP 10.22; STRUCTURAL FEATURES 10.1) (FIGURE 10.9)

The northern part of 10A contained several ditches which were straight and regular, and which turned right-angled corners. They had more in common with Roman activity, but the orientation was not consistent. They may have formed part of a transitional evolution from the more irregular late Iron Age enclosures. Ditches for enclosure 10.12 appear to form a consistent rectilinear enclosure system of parallel and perpendicular gullies. Field system 10.6 appears to have belonged a slightly earlier system.

The southern ditch of Enclosure 10.12 extended east-west for 70m then turned to the south and ran for another 12m. There was a gap in the east-west section, 1.40m wide, which may represent an entrance. At its west end was a north-south gully of similar scale. Only 12.4m was present in the site. It appeared to be earlier than the east-west ditch, and later than the middle Iron Age strip field system 10.2, to the north. The northern parallel ditch of enclosure 10.12 was 16m distant and extended as far as the middle Iron Age strip field system 10.3 before turning to the south. Abutting its south side was a curvilinear enclosure/roundhouse gully (Structural Features 10.1). It measured 11m by 9m, with an entrance to the east. It is likely that activity in this area may be centred on this house. Preliminary analysis of pottery recovered from this feature group has indicated an early Romano-British date.

Under Enclosure 10.12 was a ditch which ran for 11m SW-NE at 45 degrees to the overlying enclosure, before turning to the southeast and continuing for 29.5m. Here it met the middle Iron Age strip field system 10.4. A terminus was visible approximately 3m from the meeting point, although the gap between the two termini was negligible. It is possible that this enclosure was positioned within extant middle Iron Age ditches on a slightly different alignment; field system 10.4 seems to share its relative orientation, and field system 10.3 shares that of Enclosure 10.12. A later off-shoot from Enclosure 10.12 was located near its corner. It ran for 5.3m north-east to southwest and its terminus was cut by a pit. A second, similar segment of gully was detached from the main piece and located on its south side. It measured 3.5m in length. To the north of Enclosure 10.12 was an arc of gully (Field System 10.6), probably related to the underlying enclosure.

On the same alignment as Enclosure 10.12 were two parallel gullies 10m apart and oriented roughly north-south (Ditch 10.9). The western of this pair was 13m long, connecting Roman ditch (Enclosure 10.27) to Iron Age ditch (Ditch 10.11). Another segment of gully in the same location (Ditch 10.10) ran north-south for 7.8m before it turned to the east. Its full extent eastwards is not known. The corner of this ditch was truncated by the terminus of a ditch heading to the west (Ditch 10.11). It was at least 15.5m long and 1.3m wide.

Four pits and two post-holes (Pit Group 10.22) were located north of the gully segments ditch 10.9-10.11. Two pits and one post-hole were investigated. They probably belonged to the Iron Age activity post-dating the two fragments of roundhouse (Ditch 10.7 and Ditch 10.8) immediately to the south. Adjacent to the pits and post-holes were two fragments of curvilinear gully (unexcavated). The two fragments were not investigated due to time constraints. The reconstructed circumference of this feature overlies that of ditch 10.7, and the diameter would have been 7.5m.

At the northern extent of 10A was a curvilinear ditched enclosure (Enclosure 10.13). It appeared to be enclosing an area to the north, mostly outside the site. Its western arm shared a boundary with ditch 10.4. The only features inside it were pits of a Romano-British date. Extending the shared boundary line of enclosure 10.13 and ditch 10.4 to the southeast was a straight ditch. The ditch had a kink at the eastern end, bending the ditch towards the south and into the (unexcavated) oil pipe corridor.

To the east of the northern middle Iron Age enclosure was a roundhouse (Ditch 10.18), 7m in diameter with an entrance to the east. It was positioned in the southwest corner of a potential enclosure formed by ditches (Enclosure 10.14).

DISCRETE FEATURES IN THE NORTHWEST CORNER OF 10A (OCCUPATION FEATURES 10.3) (FIGURE 10.8)

A number of discrete features were located in the north-western corner of 10A. Preliminary analysis of pottery recovered from this group suggests a date of late Iron Age (from pit 104472). The features can be separated into several smaller clusters. Cluster 1 was located in the far north-western corner and comprised a small pit or cremation burial, and a short stretch of gully 5m in length and oriented north-south. Cluster 2 was located to the south of trackway 10.2 and comprised post-holes, small pits, and elongated pits of variable size. The largest of these was a pit 2.18m in length, which produced pottery of LIA date. Cluster 3 was located south of Cluster 2 and to the north and south of trackway 10.2. A small number of linear features was also identified.

DISCRETE FEATURES NORTH AND EAST OF 10A (INHUMATIONS 10.2, 10.3; PIT GROUPS 10.23-29; STRUCTURAL FEATURES 10.2-4; OCCUPATION FEATURES 10.4-6) (FIGURE 10.8)

The eastern part of 10A between the MIA enclosure and the oil pipeline corridor contained a number of clusters of small discrete features. Lying 25m to the east of the possible roundhouse (Structural Features 10.1), an inhumation burial (Inhumation 10.2) was found in a pit. The body was supine with legs bent at the knees and resting up against the side of the pit. The burial was located at the junction of two middle Iron Age 'ladders' (ditch 10.3 and 10.4) This is one of only two inhumation burials thought to be of this date in the northern part of TEA10; the other (Inhumation 10.3) was a crouched burial located under a Roman kiln (Pit Group 10.75). Although inhumation burials are occasionally found, the 'normative' method of funerary rite for middle to late Iron Age would seem to be exposure followed by dispersal (and there are body part finds across the area) (Smith et al 2018, 209).

Three pits (Pit Group 10.23) were located at the intersection of enclosure 10.14 and enclosure 10.13. They were not clustered, being positioned up to 16m apart from each other. Their exact function is not known. To the southeast of these a pit (Pit Group 10.24) measuring 2.74m long and 1.0m wide. Adjacent to this

were eight post-holes and a possible gully terminus (Structural Features 10.2). They were arranged into a loose line running approximately north to south, with a turn to the east at the southern end. The extent measured 11.2m. Several of them exhibited post-pipes. It is possible that this group represents part of a structure or fence line.

Five discrete pits (Pit Group 10.25) were located west of Enclosure 10.14. These were dispersed features. Of the two investigated one was elongated north to south and could have been a piece of a segmented ditch. The shape of the other suggests two pits rather than one. A group of six discrete features (Structural Features 10.3) was located to the north and east of roundhouse ditch 10.18. Five of these were post-holes. A group of three was located straddling the outer ditch of enclosure 10.14, and two were positioned on the east side of the inner ditch of enclosure 10.14. The group of three may have lost a potential fourth into the top of the ditch, and if present this would have formed a structure c 2.40m square. The group of two were parallel with the adjacent ditch and may have formed a fence line. The pit was located beyond the northern terminus of the ditch and measured 3.15m long and 1.7m wide. It was oval in shape and initially interpreted as a tree throw.

Several discrete features (Pit Group 10.26) were located to the south of enclosure 10.14. One of them, a large unexcavated pit 7.3m by 4.6m, was cut by the enclosure ditch. An adjacent pit, 4.5m in diameter, cut into the middle Iron Age ditch 10.5. Three pits of similar shape and dimensions were located to the southeast of these two pits. To the south of the cluster was two post-holes; it was not possible to form a viable structure from these. A small group of discrete features was located to the north of the middle Iron Age southern enclosure 10.2. Two pits and three post-holes were present.

A possible rectangular structure or enclosure comprising four straight gullies (Structural Features 10.4) was located to the south of Enclosure 10.14. The structure was 12m long by 5.5m. Parts of it were well defined in the ground, forming a v-shaped gully 0.48m wide and 0.20m deep, and parts were absent due to over-stripping, noticeably the southeast corner. The northern arm of the structure was fully detached from the rest forming wide gaps to east and west interpreted as entrances. No evidence for post-holes was found.

A loose cluster of pits (Pit Group 10.27) was located in and around the ditches of Enclosure 10.14, to the north of Structural Features 10.4. They were varied in size and shape. A large pit, 3.3m in diameter, cut into the top of the enclosure ditch. Close to it was a circular pit 2m in diameter; both of these pits were 1m deep. To the south of this was an elongated pit 1.0m by 0.50m with vertical sides, initially interpreted as a possible empty grave. South of this was a small ovoid pit. Cutting into Enclosure 10.14 ditch (south) were three pits, one of which was 3.2m long. Its full extent was not known as it extended beyond the stripped area and into the oil pipeline. The two circular pits next to this were approximately 1.0m in diameter, and relatively shallow; they contained large quantities of burnt material. West of Structural Features 10.4 was an unexcavated circular pit of similar dimensions. Adjacent to this was a sub-ovoid pit cutting the western arm of structural features 10.4. It measured 2m by 1.25m. Within the structure were two irregular pits, which may have been tree throws. Two sub-rectangular pits intersected with Enclosure 10.14 (south) close to the north-east corner of structural features 10.4. These were 1.18m by 0.57m and 2.0m by 0.78m respectively.

In the 10A haul road, and against the oil pipeline corridor, was another cluster of pits (Pit Group 10.28). These were located to the south of Enclosure 10.14 and adjacent to enclosure ditch (Boundary 10.3). One of these was large (9.5m by c 6.0m), but only 0.50m deep and cut the enclosure ditch. A discrete circular pit 2.0m in diameter and 0.60m deep also cut the enclosure. The remaining circular pits were up to 1.5m in diameter and also relatively shallow (less than 0.50m deep). These, however, appeared to be cut by the enclosure ditch indicating either management of the ditch subsequent to episodes of pitting, or pitting activity pre-dating and post-dating the creation, use and disuse of the enclosures.

Four discrete features (Occupation Features 10.5) were located within the curving boundary 10.3 ditch. These comprised two possible post-holes, a sub ovoid pit and a possible well. The posts were positioned 13.4m apart and were unrelated. The sub-ovoid pit measured 2.55m by 1.24m and up to 0.80m deep. The possible well was 3.15m in diameter and comprised a large steep sided pit filled around its sides with redeposited gravel and sand; in the centre of the pit was series of grey silty deposits forming a central 'shaft'. Although the pit was less than a metre deep the signature of deposition events suggested its use as a well rather than a waterhole.

Directly north of the 'necropolis' (Enclosure 10.15) ditch was a selection of discrete features (Occupation Features 10.6). A large circular post-pit 1.2m in diameter was located close to the intersection between enclosure 10.15 and boundary 10.3 ditches. This post-pit was substantial and exhibited a broad post-pipe in its section. It was similar in size to two large post-holes in structural features 10.21 further to the south, which were interpreted as Saxon. A single post-hole was located to the east of this group. It was difficult to attribute this to any particular phase of activity here. A large pit 3.7m in diameter and over 1.0m deep was located on the outer edge of Enclosure 10.15. Its base and sides had been studded with occasional large blocks of stone, and it contained multiple backfill episodes of charcoal-rich and stony deposits. It is thought that this feature may have been a waterhole. Cutting into the top of this large pit was a short segment of ditch or elongated pit 2.5m in length, 0.5m wide and 0.20m deep. A very small quantity of pottery was recovered from this feature; the large pit produced no dateable finds at all.

Other large pits (Pit Group 10.29) were located at or near the intersection of the boundary 10.3 ditch and the 'necropolis' ditches (Enclosure 10.15). On the north-western corner was a large pit 3.5m in diameter. This had been cut into the corner angle of the ditches. The pit was in excess of 1.0m deep. On the opposite side of the intersection, to the south, was a pit 8m north-south by 6.5m east-west. This, too, was in excess of 1.0m deep. This cut a smaller pit to the west which was approximately 3.5m in diameter; it contained a large quantity of burnt material, and had been cut by another, even smaller, pit. The juxtaposition of large pits and enclosure ditch intersections is noteworthy. Even though the ditches had entered a disuse phase they must have retained visibility in the landscape and were still used to identify limits of activity, ownership or restricted access.

MIGRATING DROVEWAY DITCHES AND LOCAL DISCRETE FEATURES (TRACKWAY 10.3; OCCUPATION FEATURES 10.7-8; STRUCTURAL FEATURES 10.5; PIT GROUP 10.30-2; DITCH 10.12-3) (FIGURE 10.8)

In the north of 10B was a series of parallel ditches running approximately east to west. These ditches, a possible droveway, turned towards the southeast at their eastern end. The general arrangement of the

ditches was a central corridor 17m wide with three ditches on the north side and four on the south side (Trackway 10.3). These ditches provided very little in the way of dating material. What little was recovered has provided a preliminary date of late Iron Age from one section and Romano-British from another. They have been provisionally phased as 'late Iron Age'; however it is possible that they may actually be early Roman in date (as are very straight), and potentially related to the Roman activity in TEA 7A. However these ditches were not identified in TEA 7A – perhaps they may have turned to the west and continued along the line of the modern path between TEAs 7A and 10?

A number of small discrete features (Occupation Features 10.7) was located to the north of migrating driveway boundary. These were thought to be post-holes, although the dispersed nature of these made it difficult to create structures or fence lines from those present. Four small features (Structural Features 10.5) were located south of roundhouse enclosure 10.11 and east of migrating driveway. These were thought to be post-holes. This cluster of four posts may have formed part of a structure but are probably too close to form a viable structure by themselves. The long side measures 8.6m but the shorter of the short sides were less than a metre apart. Pre-excavation mapping indicated the presence of further small features in the near vicinity of this group which may have contributed to the creation of a structure here. Many features were mapped between the trackway 10.3 ditches; only three were investigated and these were interpreted as three throws or other bioturbation events.

Several discrete features (Pit Group 10.30) were located south of the trackway 10.3 ditches. Two were interpreted as fire pits. These could be evidence of light industrial activity here. Although on the fringes of activity within TEA10, it is not known how much activity lay further east adjacent to the Great North Road. The effect of four post-medieval field boundary ditches and intense medieval ridge and furrow ploughing in this area may have had a twofold impact by truncating, destroying or masking archaeological features, and attracting further disturbance at the edges of these later fields. Several discrete features (Pit Group 10.31) were located immediately north of the east-west ditch of enclosure 10.14.

Several discrete features (Pit Group 10.32) were located south of Pit Group 10.31. One of these was a large pit approximately 3.6m in diameter. Features further east were sparsely distributed (Occupation Features 10.8). Some of these were irregular and interpreted as tree throws. Two fragments of curvilinear gully were also identified but it was not clear what activity they were associated with.

RECTANGULAR ENCLOSURE 10A NORTH-10B NORTH (ENCLOSURE 10.14) (FIGURE 10.9)

This ditched enclosure extended the width of 10B and into 10A. It was approximately 300m east-west and 120m north-south. The driveway ditches (Trackway 10.3) formed the northern side. To the south was a further enclosure comprising groups Ditch 10.15 and Boundary 10.3. The southern boundary (Enclosure 10.14) appeared to consist of two parallel ditches 13m apart for some of its length and as it turned to become the western arm. A small amount of pottery recovered from the southern ditch underwent preliminary analysis, providing a date of AD 40-100. The western side of the enclosure (Enclosure 10.14) appeared almost deformed, with a pronounced curve and large gap. This gap, 19.5m wide, was too broad to be an entrance and it is likely that truncation by medieval ploughing or modern stripping removed a portion of the ditch. As with the southern boundary the south-western corner of

this enclosure seems to have an inner enclosure. It is possible that this large enclosure formed part of the smaller system of Enclosure 10.12 and Ditch 10.9.

DITCHES IN CENTRAL 10B NORTH (FIGURE 10.9)

Heading southwards from Enclosure 10.14 was a straight ditch (Ditch 10.14). It started from the 'stream' and ended at the pit cluster pit group 10.34 inside the inner curving boundary ditch of boundary 10.2. This ditch is illustrative of the shift from large curvilinear polygons to rectilinear enclosures. A ditch (Ditch 10.15) roughly parallel to ditch 10.14 ran from south to north, then turned to the west to track along the south side of enclosure 10.14 (south). It may link to boundary 10.3 in 10B. On the north side of enclosure 10.14 (south) were three segments of ditch forming a rough rectangle (Structural Features 10.6). Although much larger than structural features 10.4 this may be a similar feature, either a drip gully for a large rectangular structure or an enclosure ditch. The general orientation is consistent with that of the rectilinear system of enclosure 10.14.

South of the southern middle Iron Age Southern Enclosure 10.2 was a short segment of gully (Ditch 10.16) on a similar alignment to ditch 10.14. It ran 28m south-west to north-east, before turning to the north-west for 5.5m and connecting into enclosure 10.15.

A ditch 250m long (Ditch 10.17) appears to represent the main eastern boundary of the late Iron Age activity in the northern part of TEA10. It had an irregular line with several kinks, followed a largely NE-SW line, and connected with 'spine ditch' ditch 10.21. Preliminary analysis of pottery recovered from this ditch indicates an early-mid Romano-British date. A long curvilinear ditch (Boundary 10.2) linked Ditch 10.17 to the spine ditch. In landscape terms it appeared to be bridging the gap from the polygonal middle Iron Age enclosures to the rectilinear enclosures of the later Iron Age and Romano-British period. Together with Ditch 10.15 and Boundary 10.3 it would encompass an area of approximately 1.5ha. The ditch exhibited signs of multiple recuts, especially along the line adjacent to pit group 10.34. Preliminary dating of pottery recovered from this ditch group indicates a late Iron Age or early Romano-British date. A linear cluster of pits (Pit Group 10.34), about forty in number, was located to the north of Boundary 10.2 and at times cut into it. These were extremely variable in size and probably represent activity associated with occupation to the north and west.

Immediately to the east of MIA Southern Enclosure was a large curvilinear ditch (Boundary 10.3) orientated north to south, with a pronounced curve to the east at its northern end. The line of this ditch split into two separate parts at its northern end, where it turned to the east, indicating a long-standing or continually managed boundary. If the line of this ditch were to be projected through to the east it would join with ditch 10.15. Preliminary dating from excavations across Boundary 3 provided a range from late Iron Age through to early Romano-British.

'DEAD' ZONE (ENCLOSURE 10.15; BOUNDARY 10.4; INHUMATIONS 10.4) (FIGURE 10.9)

Some of the activity within the late Iron Age can be zoned. A sub-rectangular enclosure, close to the MIA settlement was divided into areas for the living and the dead, separated by boundary 10.3. The northern boundary of the enclosure (Enclosure 10.15) extended from the line of the middle Iron Age driveway ditch (Trackway 10.1). The triangular area defined on the western side by boundary 10.3 was

used to bury the dead (see inhumations 10.4, Enclosure 10.15 below). The rough triangle to the east of Boundary 10.3 contained at least three ring gullies thought to be roundhouses (Structural Features 10.7, 10.8, 10.9). The zones to the north of these contained a moderate quantity of pitting of various sizes. The preliminary analysis of pottery recovered from the arcing ditch indicates a late Iron Age-early Roman date.

Three rows of post-holes (Boundary 10.4) oriented roughly east to west were identified. The westernmost of these was located beyond the spine ditch in an area of sparse activity. The lines continued to the east across Spine Ditch 10.20 and across arcing ditch (enclosure 10.15). The first row comprised thirteen post-holes, one of which was positioned out of line and not recorded. Row 2 comprised just three posts and was situated a few metres off-line to the north. Row 3 comprised nine posts, with others located in the near vicinity and also cutting into the top of Enclosure 10.15 ditch. No lines of posts running perpendicular to these was discovered and it is thought that these posts may represent a fence line rather than a structure.

Small pits within Enclosure 10.15 exhibited signs of burnt remains and also human remains, although these may be pyre-related features and/or 'informal' disposal of human remains in this zone. Human remains were also recovered from ditch slots in the area. One of the discrete features here produced preliminary dating of late Iron Age.

Within the zone described by the ditches here, were two crouched inhumation burials (Inhumations 10.4) and at least three grave-shaped pits which contained no human bodies. One of these, a double-length pit, contained the skeleton of a young horse positioned at its eastern end. Two further possible 'empty graves' were located towards the south of 10A, one of which still had its offering vessel present, although this had been damaged by a robber pit (see Pit Group 10.42 below). Some sherds from this vessel were located within the robber pit and these were dated to the late Iron Age. If grave sites were marked, the bodies may have been subject to relocation at a later date. The graves were all rectangular in shape with vertical sides and flat bases.

'LIVING' ZONE (STRUCTURAL FEATURES 10.7 – 10.9) (FIGURE 10.9)

To the east of this funerary area was an area containing the drip gullies of three roundhouses, aligned north to south. The northernmost roundhouse (Structural Features 10.7) was an almost complete circle (extending out of the area and into the oil pipeline corridor) which would have had a diameter of roughly 10m. It had a narrow gully with an entrance on the northern side. Three internal features were present: a small post-hole, a larger post-hole with a single large stone for packing, and a small-medium sized pit containing a significant quantity of burnt material. Four satellite post-holes were present.

The middle roundhouse (Structural Features 10.8) was indicated by a segment of drip gully approximately 4m in length, representing the northern side of the dwelling, immediately adjacent to the first roundhouse. A small number of associated features was also present, although of poor definition, and the remainder of the structure was not present. A full diameter of 9m may be inferred from the distance to the third roundhouse.

The southernmost roundhouse (Structural Features 10.9) was represented by two separate segments of gully, forming the western and northern arcs. Nine internal post-holes were identified, as well as a possible burnt pit, positioned off-centre towards the north. This structure would have had a diameter of approximately 10m.

SPINE DITCH (DITCH 10.20, 10.21, 10.36) (FIGURES 10.9-10)

This ditch represented the NW-SE axis of late Iron Age occupation. The first stretch of this ditch (Ditch 10.20) was approximately 215m in length and had been subjected to numerous recuts and truncations from later abutting enclosures. The spine ditch broke at this point to create a staggered entrance, overlapping by 8m, with a space 2.50m between them. It continued to the southeast on the new line for 107m. After the staggered junction with Boundary 10.6 the spine ditch continued to the southeast (Ditch 10.36) for 144m and terminated just inside the site boundary. Preliminary dating of pottery recovered from this ditch group suggests a late Iron Age Ditch.

From the Spine Ditch 10.20 near D-shaped enclosure 10.16, the second spine ditch (Ditch 10.21) diverged east to west, creating a triangular wedge of land which contained pit group 10.36, a roundhouse (Structural Features 10.10) and an enclosure system (Enclosure 10.17) (all discussed below). Preliminary analysis of pottery recovered from this ditch suggests a date of early-mid Roman. Spine ditches 10.20 and 10.21 were linked by a ditch approximately 38m in length (Ditch 10.19). It was on the same alignment as boundary ditch 10.17 and linked back to spine ditch 10.20 at its disconnect with the new line. This ditch was severely truncated by Roman strip ditches and pitting. In the area between the two spine ditches were several pits of varying size and shape (Pit Group 10.36). This was the focus of occupation in this phase and further work will be necessary to identify activities and precise dating.

ENCLOSURE 10.17 (FIGURE 10.10)

Within the spine ditch 'wedge' were two conjoined enclosures, which together formed a paired enclosure off the spine ditch (Enclosure 10.17). The larger western enclosure was approximately 34m in length and 18.6m wide. There was no evidence for an entrance, although extensive pitting on its circuit to northeast and northwest may hide one. The second and smaller enclosure measured 22m in length and 18.5m wide. Both enclosures linked directly into the Spine Ditch 10.20. At this point, the spine ditch was also subject to interaction with another ditch 10.26 feeding in from the west. Preliminary analysis of pottery recovered from enclosure 10.17 suggests a date of late Iron Age. Several pits (Pit Group 10.38) were identified within the enclosure. These were of variable size and shape. Further analysis of finds and environmental samples will assist in understand their function and date.

Attached to the northern side of the enclosure was a roundhouse (Structural Features 10.10). It measured 12.25m by 9.81m, with an entrance on the east side. The drip gully was relatively substantial. Preliminary analysis of pottery recovered from this roundhouse suggests a date of late Iron Age.

D-SHAPED ENCLOSURE AND ENVIRONS (ENCLOSURE 10.16; PIT GROUP 10.37; OCCUPATION FEATURES 10.9, 10.10; DITCH 10.22, 10.23) (FIGURE 10.10)

The D-shaped enclosure (Enclosure 10.16) had an unusual appearance. Initially observed as a simple D-shape against Spine Ditch 10.20 and second Spine Ditch 10.21 this extended to the southeast becoming

a ditch previously observed and mapped turning towards the west. Having turned the ditch was then lost under medieval furrows and its exact line and extent is not known. Preliminary analysis of pottery recovered from this ditch suggests a date of late Iron Age. To the south of the D-shaped enclosure and beyond the spine ditch was a curving ditch, which may have been the other half of an enclosure partly formed by Enclosure 10.16.

To the south of the curving ditch of Enclosure 10.16 were several other features (Pit Group 10.37). Close to the projected circumference of Enclosure 10.16 were two small pits, one elongated and containing another small pit, with a third located to the south.

Two short (2.7m and 3.9m) segments of ditch (Occupation Features 10.9) were located to the south of Enclosure 10.16. These were probably contemporaneous and may have functioned as windbreak gullies. Three pits were located in close proximity to these gully segments, one of which was fairly small the other two of a medium size. South of the southern segment was a large pit 4.6m by 4.3m.

The D-shaped enclosure and its extension curved and passed through this area. Although the ditch's continuation to the west was lost on the ground it was visible on the geophysical survey. A second ditch intersected with it and they both faded into background geology and ridge material. Discrete features here were better defined and several post-holes and pits of varying sizes were visible. A ditch (Ditch 10.22) ran NW-SE and forked apart. It was probably the continuation of Enclosure 10.15 ditches but it was not possible to determine which was which as they converged at the location of pit group 10.34. An east-west ditch (Ditch 10.23) linked the eastern gully of ditch 10.22 to the spine ditch 10.20, travelling through D-shaped enclosure 10.16 to get there. It was probably a sub-division of an enclosure.

PIT COMPLEX AREA (PIT GROUP 10.39, 10.40) (FIGURE 10.10)

In the south-central part of 10B was a large area approximately 41m north-south by 27m east-west. This represented an area of intense pitting and infilling (Pit Group 10.39). Initial excavation strategy focused on establishing relationships between the spread/pits, and the linear features which entered it from the west. Later, a machine slot was excavated north-south through it to establish character and depth. This revealed that the pits in the mass were not deep and that much of the area was covered by a relatively shallow spread. Further isolated pits were identified to the northeast of the cluster (Pit Group 10.40).

INDUCTRIAL FEATURES (KILN 10.1-10.3; PIT GROUP 10.41) (FIGURES 10.9-10)

In addition to the two 'burnt pits' located in the north of 10A (Pit Group 10.30), there were several burnt features in the southern half of TEA10. Situated within the southern middle Iron Age enclosure, but of a late Iron Age date, was a large, roughly built kiln (Kiln 10.1). It was constructed of red fired clay with a characteristically wide flue, exhibited signs of repair work and had almost certainly seen multiple firings. Preliminary analysis of pottery recovered from this ditch group suggests a date of late Iron Age.

In the west of 10A (inside the Roman rectangular enclosure) was a rectangular pit (Pit Group 10.41) which contained a bed of burnt cobbles lying on a base of heavily burned charcoal. It is thought that this may have been a roasting pit. Pits containing large quantities of fire-cracked stones were also found in the centre of 10B (Pit Group 10.1) and at Love's Farm (Hinman and Zant 2018, 51), where they were interpreted as hearths.

At the western terminus of middle Iron Age droveway ditch (trackway 10.1), a circular kiln (Kiln 10.2) had been cut into the top of the ditch fills. The pottery recovered from this kiln has been assigned a late Iron Age date.

Three narrow, elongated pits were excavated with scorched vertical sides and crammed with burnt material and pottery. These may have been simple corn dryers (Kiln 10.3), though such features are very much a Roman-period phenomenon (Allen et al 2017, 55). 'Corn Dryer' 1 was 1.41m long 0.44m wide; 'Corn Dryer' 2 was 2.15m long and 0.55m wide. 'Corn Dryer' 3 was 1.86m long and 0.59m wide. Preliminary analysis of the pottery recovered from these pits suggests a date of late Iron Age.

POSSIBLE FUNERARY AREA (DITCH 10.24, 10.25; PIT GROUP 10.42, 10.43) (FIGURE 10.10)

Located towards the south of 10A was a small circular ditched feature (Ditch 10.24) 3.50m in diameter. Its drip gully was substantially deeper than would be expected for a gully of this width (0.54m). The circuit was not complete on the southeast side except for a short shallow segment. The gully exhibited signs of having been reworked, with the deeper gully forming the later phase. The function of this feature is unknown.

To the east of the micro-ring ditch 10.24 were three grave shaped pits in a line (Pit Group 10.42). The size and shape of these were all roughly consistent with each other. The grave to the west was 1.53m long and 0.42m wide. The two to the east were linked by a shallow v-shaped gully (Ditch 10.25). The middle 'grave' was 1.53m long and 0.43m wide. The eastern 'grave' was 1.61m long and 0.59m wide. It contained an offering vessel and showed signs of being robbed out. Preliminary analysis of the pottery offering vessel recovered suggests a date of late Iron Age. The pits (Pit Group 10.43) to the southwest of micro-ring ditch 10.24 were all relatively small and shallow, but of varying shapes and sizes.

POSTHOLE STRUCTURE 10B SOUTH (STRUCTURAL FEATURES 10.11) (FIGURE 10.10)

The remains of a possible Iron Age dwelling were located in the southern part of 10B, outside of the Roman enclosure system and beyond Iron Age boundary 10.5 ditch. It comprised remnants of segmented curvilinear gully along with multiple post-holes spread over an area approximately 9m in diameter. Reconstruction of the circumference of the drip gully based on the surviving fragments indicated a complete circle with a diameter of 8.80m. Several post-holes were located outside of this area.

LINEAR FEATURES CENTRAL 10B AND 10A (DITCH 10.26-8, 10.30-3; ENCLOSURE 10.18) (FIGURE 10.10)

Scattered linear features were found throughout the central parts of 10A and B. These included a pair of narrow gullies (Ditch 26-7), and fragments of a NW-SW ditch (Ditch 10.28), which appeared to run parallel with spine ditch 10.21. Towards the south of 10A was a ditch (Ditch 10.30) which ran 25m away, and parallel with, southern boundary 10.5. The line of this ditch appears to have inspired the Roman open enclosure 10.21 which follows its line 5m to the north.

In the middle of 10A, and extending from the northwest corner of Roman enclosure 10.23, was a poorly defined and segmented ditch (Enclosure 10.18). This, with Ditch 10.30 and Boundary 10.5, represented linkages from activity in the east associated with the spine ditch to activity in the far west of 10A. The

pattern of activity here was repeated and formalised in the Roman period. Perpendicular to enclosure 10.18 was a short stretch of ditch (Ditch 10.31). It probably represented a fairly tenuous field boundary, possibly hedged.

SOUTHERN BOUNDARY DITCHES (BOUNDARY 10.5; FIELD SYSTEM 10.7; DITCH 10.34-5; ENCLOSURE 10.19; PIT GROUP 10.44-5; STRUCTURAL FEATURES 10.11) (FIGURE 10.10)

Several Iron Age ditches appeared to converge on the same location in the southeast corner of 10B. Here, the pit group 10.39 marked the junction of various field systems with the main areas of settlement. Here also is where the southern boundary ditch changed its orientation (Boundary 10.5). The western half of this boundary would be re-established in the Roman period as southern boundary ditch (Enclosure 10.21).

To the east of boundary 10.6 ditch and the north of spine ditch 10.36 were a series of parallel ditches, oriented NW-SE (Field System 10.8). They were fragmentary and between 3m and 6m apart. They may represent the remnants of bedding trenches in fields beyond the areas dominated by occupation and activity. Such features as found elsewhere on the A14 excavations and further field are typically earlier Roman in date.

In the southwest corner of 10A was a gully (Ditch 10.34) oriented NW-SE. This gully ran for 75m and had an entrance 3.8m wide. The alignment of it matches more closely the spine ditch activity than the western activity. In the far southwest of 10A was a cluster of ditches (Ditch 10.35) which had undergone continual re-working, before being replaced by a Roman enclosure. These appeared to be associated with curving LIA boundary ditch (enclosure 10.19), which enclosed an area largely outside of the site.

DISCRETE FEATURES IN THE SOUTHWEST OF 10A (PIT GROUP 10.44-5) (FIGURE 10.10)

Roasting pit (pit group 10.41) was at the centre of a group of discrete features (Pit Group 10.44), pits and post-holes in the western part of 10A. These features may be associated. The group was a continuation of loose clusters of pitting activity across the southern half of 10A. No definite structures were discernible in this group. A second cluster of discrete features (Pit Group 10.45) was located in the far southwest corner of 10A. These consisted of a mixture of post-holes and small pits. The post-holes contained charcoal-rich fills. The position of these features inside enclosure 10.19 may be significant.

DISCRETE FEATURES IN THE SOUTHERN HALF OF 10A (PIT GROUP 10.46-50; OCCUPATION FEATURES 10.11-12) (FIGURE 10.10)

Close to ditch 10.30 was a group of discrete features (Pit Group 10.46) comprising small and medium pits, while north of this was a small cluster of pits and post-holes (Occupation Features 10.11). This group was relatively isolated from other activity and could easily fall into another period. To the east of this group was another group of dispersed pits and post-holes (Occupation Features 10.12), and a larger irregular feature.

A more complex and diverse group of features was located in the centre of the area (Pit Groups 10.47-8). This group comprised two fragments of gully, four small circular pits and two irregular features. In the centre of 10A were dispersed pits (Pit Groups 10.49-50) located vaguely along the line of, or adjacent to, enclosure 10.18. They may represent activity along the line of this boundary.

DISCRETE FEATURES IN THE NORTHERN PART OF 10A SOUTH (STRUCTURAL FEATURES 10.12, 10.14; PIT GROUP 10.51-3; OCCUPATION FEATURES 10.13) (FIGURE 10.10)

A loose group of four pits (Pit Group 10.51) was located to west of the area. Three of these were close together and adjacent to structural features 10.13. Three structures were present in this area. The first (Structural Features 10.12) was located in the west of the area and comprised nine post-holes, arranged in a linear fashion north to south. A second structure (Structural Features 10.13) also located in the west of the area comprised eleven post-holes, eight of which formed a rough east to west line. The third structure (Structural Features 10.14) was located in the middle of this area and comprised four post-holes in a rough east-west line.

A collection of pits (Pit Group 10.52) was located to the east of structural features 10.12 and 10.13. Two of the pits were large in size (2.24m and 3.0m in diameter), with another 1.60m in diameter. A second group of four pits (Pit Group 10.53) was located in the middle of the area. Another loose group of features (Occupation Features 10.13) was located close to the Spine Ditch 10.20. It comprised two pits, a tree throw and three post-holes.

Phase 4: Romano-British I: South (Figure 10.11-12)

The Roman activity on TEA10 falls into two distinct locations, with the bulk of the activity in the southern half of the area. Following the evolution of settlement from the middle Iron Age polygons to the late Iron Age spine and landscape enclosures, the Romano-British period brought a new style of settlement. It more closely respected spine ditch (Ditch 10.20) and created smaller, regular, square and rectangular units to the east and west of it. This new enclosure system in the southeast of TEA 10 began life as a square enclosure abutting the spine ditch and partly re-cutting it, with a rectangular sub-enclosure on its south side. Later, another 'square' was added to the south on a slightly different orientation and the new party boundary necessitated the reworking of the smaller internal rectangular sub-enclosure. The new sub-square enclosure respected the revised spine ditch orientation and extended as far as the large intersection of Iron Age ditches next to a zone of intercutting pits. East-west 'sub-divisions' probably represent strip fields beyond the original enclosure. A long southern boundary ditch extended westwards to a new set of rectangular enclosures. This created a large open space, which probably incorporated small structures and pockets of activity. Another enclosure system, this time, perhaps planned as a conjoined enclosure, was positioned over the first, in such a way as to simultaneously respect it and replace it. The new enclosure projected below the southern boundary ditch and its southern extent faded out towards the east into apparent strip fields. Large pits of this period appear to have been positioned outside of the main enclosures. Where pits were positioned on top of the ditches it is thought that these were of a Saxon date. Roman activity in the north represented the southern side of the occupation present on TEA7A and is discussed below.

The pottery dating of the Roman assemblage suggests activity in the early and middle Roman period, apparently ceasing around the 3rd century.

RECTANGULAR ENCLOSURES (ENCLOSURE 10.19-20) (FIGURE 10.11)

In the southwest of 10A was a rectangular enclosure (Enclosure 10.19), approximately 120m north-south by 60m east to west. This enclosure had an entrance in the east side and overlay a moderate quantity of Iron Age activity along the western edge of the site. The enclosure ditch was of a moderate size with a v-shaped profile. Preliminary analysis of pottery recovered from the east and north ditches of this enclosure suggests a date of late Iron Age. The northern ditch ran for 49m and was 1.50m wide. The eastern ditch ran for 68m from the northeast corner to the entrance. It was 2.5m wide, with a rough v-shaped profile which showed signs of re-cuts in places, but not consistently along its length. In one location the complete remains of a horse were recovered, possibly a structured deposit. The entrance was 7m wide, with the ditch terminals noticeably square and up to 0.80m deep. The ditch ran for a further 46m to the southeast corner. The southern ditch was 50m long and 2m wide and ran unbroken to the south-western corner. The western ditch was 61m long and extended beyond the western limit of 10A.

A number of discrete features near Enclosure 10.19 straddled the northern and eastern ditches. A cluster of post-holes (Structural Features 10.15) was located adjacent to the northern boundary of the enclosure. Most of them were positioned inside the ditch, with only three located on its outer edge. These may represent a structure oriented east to west. However, the northern line appeared to be situated over the top of ditch infilling, which would not make structural sense. Further down the eastern side of the Roman enclosure 10.19 was a small scattered group of pits (Pit Group 10.64).

Enclosure 10.20 was positioned adjacent to the south of enclosure 10.19. It measured 65m east to west. At its west end it was 19.4m north to south, and at its east end 25m north to south. An entrance was located in the east side. This enclosure cut the Iron Age ditches located in this corner of the site and was subsequently cut by the larger Roman enclosure 10.19. This indicates continued management and re-use of existing land parcels. The west ditch was 19m long and 2.8m wide. The southern side lay outside of the stripped area. Its position can be inferred by examining geophysical survey results and extrapolation of the line of enclosure 10.21 (south ditch) from the east. The eastern side of the enclosure was approximately 25m long with an entrance in it. The entrance would have provided access into another enclosure towards the east, (Enclosure 10.21). More than half of the northern ditch had been cut away by Enclosure 10.19. The remaining portion measured 17.5m long. The ditch was 1.3m wide and turned to become east ditch. Located inside the Enclosure 10.20, Occupation Features 10.23 comprised a large pit which had been used to block the eastern entrance, a shallow depression possibly for pigs, and three discrete small pits.

OPEN ENCLOSURE (ENCLOSURE 10.21) (FIGURE 10.9)

Enclosure 10.20 would have opened into a further enclosure (Enclosure 10.21) 135m in length, with a continuous boundary to the south, re-cutting the line of Iron Age boundary 10.5. This was a relatively substantial ditch, almost 1m deep. It remained a well-defined ditch into the eastern part of 10B, and probably continued further to the east as field system 10.9. The northern boundary disappeared after 95m. The ditch was narrow and shallow, and its path was at times a little erratic suggesting a ditch with hedge or bank and it is possible that this was intentional, forming a 'soft' boundary into a less formally

defined area between the enclosed units. At its eastern end the ditch met a spur ditch and this may have defined a broad entrance into this area 33m wide. Poorly defined in the ground and located over a large pit this ditch was visible for only 10m, extending to the south beyond the intersection with the northern boundary. The ditch disappeared to both north and south suggesting that any continuation of the boundary beyond this point was a positive feature such as a bank or hedge.

THE SOUTH-EASTERN ENCLOSURE SYSTEM (ENCLOSURE 10.22; DITCH 10.37-8) (FIGURE 10.11)

The southern part of TEA 10B south was dominated by a Roman double enclosure system of two roughly square enclosures (Enclosure 10.22) positioned adjacent to each other north to south with a shared boundary (Ditch 10.37) running east-west across its widest point. The southern ditch ran for 96m. Although well defined in the ground this ditch suffered from truncation the further east it ran. Its profile moved from v-shaped in the west to broad concave and back to truncated v-shape at the east. It was typically 0.80m wide and up to 0.50m deep. The western ditch was apparent for 36.8m within TEA 10B. In this stretch the ditch was typically 1.5m wide and 0.60m deep, with a deep concave profile. Beyond the unstripped oil pipeline zone, the ditch continued for 82m to its northwest corner. The ditch was 2.25m wide and 0.70m deep and had been cut by several large pits of an early medieval date. In TEA 10A the northern ditch ran for 18.70m before passing into the oil pipeline corridor. Here, the ditch was a maximum of 1.40m wide and 0.50m deep with a strong v-shaped profile. Examination of the multiple infilling episodes may help to determine whether a bank was present. In TEA 10B the northern ditch continued for another 36m, before turning to the south and running alongside late Iron Age spine ditch 10.20. The eastern side of this enclosure was entirely within 10B. It ran for approximately 61m. Its southern half was affected by localised pitting indicating the proximity to occupation. An entrance 5m wide was present in the eastern side, and the ditch then continued another 33.10m until it reached the central division across the two enclosures.

Ditch 10.37 ran approximately east-west and separated the conjoined enclosures at their widest point. It ran for 117m to the eastern boundary and then continued another 47m eastwards into the late Iron Age Enclosure 10.17. Beyond the eastern side of Enclosure 10.22, the division ditch continued as two ditches (Ditch 10.38) which followed the same curvilinear route.

ENCLOSURE SUBDIVISION DITCHES (DITCH 10.39, 10.46, 10.40) (FIGURE 10.11)

Several parallel ditches were recorded associated with the Roman occupation here. These ditches were mostly northeast to southwest oriented and were consistent with the general orientation of the Roman activity. One of these ditches (Ditch 10.39) was located within the southern half of Enclosure 10.22 and extended 95m from the Iron Age Spine Ditch 10.20 only as far as the western edge of Enclosure 10.23. This may indicate that these ditches were associated with the later phase of activity, or that the earlier ditches were still open and respected by later activity. The change of orientation of this enclosure may be indicative of the changing landscape requirements. Immediately to the north of the central division ditch was a segment of ditch (Ditch 10.46) which extended east as far as the Spine Ditch 10.20. It ran parallel with Ditch 10.40, 13m to the north, and also parallel with Ditch 10.39, 13m to the south. The western segment of this ditch continued the line after a hiatus of 6.5m. It was 21.5m long and extended almost as far as the western boundary of Enclosure 10.23. In the northern half of the enclosure was a

ditch (Ditch 10.40) parallel with Ditch 10.39. This extended as far the later enclosure and was 21m long. This ditch continued after a hiatus of 7.5m. It was 11.6m in length and headed westwards out of the stripped area. It had been cut away by the Saxon windbreak ditch (SFB 10.3).

DISCRETE FEATURES IN THE SOUTHERN HALF OF ENCLOSURE (FIGURE 10.11)

The area south of Ditch 10.39 and north of Enclosure 10.23 (south ditch) contained a number of contemporary features as well as later Saxon structures. The discrete features here (Pit Group 10.54) were dispersed with just two elongated pits in the western part of this area. These measured approximately 1.70m long. One contained a large quantity of pottery in the form of a buried vessel and a copper alloy coin. Further west were a few discrete post-holes and pits. Small clusters of pits (Pit Group 10.66-7) were in the western side of the Enclosure 10.22. Between Enclosure 10.23 (south ditch) and Enclosure 10.21 (south ditch) were several discrete features (Occupation Features 10.25). These were dispersed and probably do not represent any meaningful clusters of activity in isolation. A further group of pits, most of them small, and one large (Pit Group 10.69) was located between Enclosure 10.22, east ditch, and the south ditch of Enclosure 10.21. To the south was a dispersed group of pits (Pit Group 10.70), one of which contained a scorched deposit thought to be *in situ*; it may have been a burnt-out tree throw or, more likely, a dump of material from a local burnt feature.

A cluster of intercutting pits (Pit Group 10.71) was located south of Roman enclosure 10.21, south ditch, partly cutting into the ditch. It was approximately 7m in diameter and consisted of at least six pits of varying sizes. The pits cut into each other, frequently overlapping but not substantially destroying adjacent pits, suggesting that they were originally used for clay, sand or gravel extraction, and that the cluster demonstrates repeat visits for the same purpose, old pits being backfilled with new upcast or waste, and interspersed by *ad hoc* dumping events. The pits were investigated in four separate interventions to establish relationships between them. Each of the pits had a complex sequence of deposition events often characterised by interleaved episodes of natural silting or erosion/collapse and episodes of dumping, most noticeably a series of deposits close to the base of one of the pits which appeared to indicate *in situ* scorching but which was later reinterpreted as the dumping of a destroyed oven/kiln structure.

THE MODIFIED SOUTH-EASTERN ENCLOSURE SYSTEM (ENCLOSURE 10.23) (FIGURE 10.11)

This conjoined enclosure appears to be an antecedent of Enclosure 10.22 with its eastern sides respecting the two variant lines of the Iron Age Spine Ditch 10.20. It comprised two sub-square enclosures positioned adjacent to each other north to south and with a shared boundary which connected to the spine ditch at the point at which the spine ditch breaks. The total length of the double enclosure was 159m. The northern enclosure was 70m long by 56m wide, and the southern enclosure 84m by 71m wide at the north and 103m at the south. Preliminary dating of pottery recovered from a slot across this enclosure indicated a late Iron Age-early Romano-British date.

The southern side of the enclosure was positioned well inside of the earlier enclosure and extended to the northeast. It passed into an area of intense Iron Age pitting (pit groups 10.39 and 10.40) and did not emerge from the other side. One of the pits investigated by a machine trench in this cluster was probably the terminus of the southern boundary ditch rather than a pit. The western side of the enclosure was

3m wide and 1m deep, with a broad v-shaped profile. The ditch changed its line as it passed the central division line to reflect the orientation of the spine ditch on the eastern side. Within 10A the ditch was significantly diminished, being 1.5m wide and less than 1m deep. The northern side of the enclosure passed out of TEA 10A after 21m. Where it reappeared in TEA 10B it was on the northern corner adjacent to Spine Ditch 10.20. The eastern side extended for 99m as far as the disconnect in the spine ditch, re-cutting it as it went.

INTERNAL FEATURES OF ENCLOSURE 10.23 (BOUNDARY 10.6; ENCLOSURE 10.24; DITCHES 10.50-53; ENCLOSURE 10.26) (FIGURE 10.11)

The boundary ditch between the northern and southern halves of the enclosure (Boundary 10.6) ran from the western ditch of Enclosure 10.23 to the spine ditches where it turned towards the southeast and connected to Spine Ditch 10.20. On the northern side of the ditch was a small rectangular enclosure (Enclosure 10.24). It had seen some reconfiguration work and had several potential entrances. The basic shape was rectangular, 33m long and 13.5m wide. The western half had been reworked with a new northern boundary forking into the enclosure. Stumps of subdivisions survived at the southern edge, and the whole enclosure was truncated by pitting, most severely in the southeastern corner. With the northern side being brought further south, it seems the entire enclosure was shifted to abut the new shared boundary with the southern half of the greater enclosure. Pits and post-holes were located mostly at the eastern side of the enclosure.

A series of ditches was located the central area of TEA 10B, mostly within Enclosure 10.23. To the south of Boundary 10.6 was a curving ditch (Ditch 10.50) approximately 25m in length. Its southern end was truncated by Roman ditch 10.40. An irregular ditch (Ditch 10.51) was located to the east of the curving ditch. It comprised a relatively straight ditch oriented roughly north to west to south to east, hooked at its north end, and with two or three branches off to the east and west. It passed through the area of prehistoric pitting and may have continued to the south beyond Roman ditch 10.40 to be part of Ditch 10.52. To the south of hooked ditch 10.51 were three curvilinear ditches (Ditch 10.52). The western two had had their northern termini removed by later Roman ditch 10.40. They turned at their southern ends to form an entrance into a mini-enclosure roughly 11m by 9m, with an entrance to the south 2.8m wide. The third of this group extended the southern line eastwards 9.4m. A matching spur on the north side of Roman Ditch 10.40 would have created an enclosure roughly 10m by 10m. These appeared to tie into the hooked enclosure creating small square or rectangular 'cells', although some definition has been lost. Several fragments of ditches and enclosures (Ditch 10.53) were located in the area to the south of Ditch 10.52. These continue the line of Ditch 10.51.

A segmented ditch (Enclosure 10.26) lay towards the south-western part of Enclosure 10.23, comprising a long central piece 9m long, and two shorter ones each approximately 2m long. The southern short segment was at right angles to the others. The gullies were narrow and steep sided. This may have formed part of an enclosure.

A fragment of east to west ditch (Ditch 10.45) was found to pre-date enclosure 10.23. It was 12.5m in length and 2m wide. It was cut by large pits at its west end. It may have been part of a longer ditch joining to the original south side of enclosure 10.24 and pre-dating the southern enclosure of the

domino. This may provide evidence that this conjoined enclosure was not pre-planned in this layout, but grew organically. It appears to partner the similarly oriented Ditch 10.40 (west) fragment to the south.

EASTERN SQUARE ENCLOSURE (ENCLOSURE 10.25) (FIGURE 10.11)

A large square enclosure was present on the east side of the spine ditch. It measured 93m NE-SW and 65m NW-SE. The alignment of it matched with the top half of Enclosure 10.23. It had an open-ended extension to the north, approximately 20m wide. The southern boundary terminated to leave a similar gap 9m wide to the south. Its western edge ran parallel to the spine ditch 10.20. This was a straight ditch which cut all features it encountered except for a post-medieval field boundary 10.17. The northern ditch ran for 57m. It stopped 17m short of the eastern side, where it met the Iron Age boundary ditch 10.17. It had a narrow entrance into it, approximately 1.0m wide. At its western end it met inner western boundary. The eastern ditch ran 79m parallel to the west ditch. It extended beyond Iron Age boundary 10.2 ditch to the north, and beyond the limit of the site to the south. There were no entrances in this side. The southern side of the enclosure lay parallel to the north ditch and connected to second Spine Ditch 10.21. It had been cut into by several pits. The inner western ditch was parallel with the western ditch for 29m, past its connection with the north ditch and towards Iron Age boundary ditch 10.2 ditch and Pit Group 10.34. At this point it changed direction further to the northwest and ran for a further 30m. This formed part of the northern extension.

FEATURES TO THE EAST OF ENCLOSURE 10.23 (DITCHES 10.41-44, 10.48; FIELD SYSTEM 10.9-10.11) (FIGURE 10.11)

A number of ditches, pits and other occupation features were revealed to the east of enclosure 10.23 and south of enclosure 10.25. Several sets of parallel ditches were identified across TEA 10B. These looked initially like trackway ditches but may represent migrating boundaries or water management channels. Ditch 10.41 was located intersecting with the southern ditch of eastern enclosure 10.25. The ditches were orientated northwest to southeast and were fairly shallow features only 1.5m apart. Ditch 10.42 was located to the southwest of Ditch 10.41 and on the same orientation. The ditches curved to the west at their southern end to meet Ditch 10.44, suggesting they were draining into it (see below). They were less than 1.0m apart. The ditches of Ditch 10.43 were 5.5m apart and located south of Ditch 10.41. They were slightly wider apart and more likely to have a different interpretation than the other pairs.

The eastern side of 10B contained many parallel linear features which ran on an almost identical alignment as the later medieval ridge and furrow ploughing. The Roman ditches in this part of the site that were not part of the basic structure of the enclosures were oriented roughly northeast to southwest. They cut across the Iron Age activity and extended westwards into the main enclosures, indicating they could belong to a relatively late Roman phase, possibly even transitional into the Saxon phase. They may represent strip fields.

Ditch 10.48 passed close to the earlier ring ditch (Structural Features 10.10) and appeared to stop at the edge of Enclosure 10.17. As just noted, parallel gullies (Ditch 10.42) appeared to feed into Ditch 10.44. This ditch ran as far as the Enclosure 10.22 eastern boundary ditch and turned briefly north to match it and represents a link between the Roman enclosure system and the potential strip fields to the east. Field System 10.10 represents another strip field associated with the main enclosures. This was a double

ditch, although the second ditch was not always recognised in intervention slots. Field System 10.11 was located close to the southern boundary ditch of the eastern Enclosure. It was another double ditch, with a third emerging briefly on its northern side. Many slots across this ditch did not recognise the other ditches.

Three parallel ditches in the southeast corner of TEA 10B ran on the same alignment as the strip fields along the eastern side (Field System 10.9). The middle one of the three (Strip 1) may represent the continuation of Enclosure 10.21 southern boundary ditch. It crossed an area of Iron Age pits and spine ditch 10.20/10.36, running for 111m before heading out of the stripped area. The northernmost of the three (Strip 2) was 16m from strip 1 and on the same orientation, with a third a similar distance to the south.

PITS IN THE CENTRE OF 10B (PIT GROUP 10.56-10.63; OCCUPATION FEATURES 10.17) (FIGURE 10.11)

The central part of 10B contained many large, medium and small pits of a Roman date, some lying within Enclosure 10.23 and others located to the west. Further work may be necessary to work out the exact chronology of these pits, their functions and their relationship to the ditched enclosures. Pit Group 10.56 was located between the spine ditches 10.20 and 10.21 and the linking ditch 10.19. Pit Group 10.57 was located on the line of Enclosure 10.25 south ditch. Pit Group 10.58 cut into the spine ditch near the link. Pit Group 10.59 was situated in the area between the spine ditches east of Ditch 10.19 and west of Boundary 10.6. Pit Group 10.60 was a cluster located adjacent to Enclosure 10.17. Occupation Features 10.17 was a collection of post-holes and a pit north of the 10.60. Pit Group 10.61 was located in the gap within Roman Enclosure 10.22. South of this was Pit Group 10.62, which comprised two pits and a single post-hole. South of this was a small group of three pits (Pit Group 10.63).

DISCRETE FEATURES IN THE CENTRE OF 10A (OCCUPATION FEATURES 10.18-10.24) (FIGURE 10.9)

Between the large rectangular Enclosure 10.19 in the west and Enclosures 10.22/10.23 was an area open to the north, which contained several clusters of medium sized pits and post-holes. These were thought to be Roman in date but given the proximity to Saxon, Iron Age and prehistoric features they could also fit into an alternative chronology. Further examination of finds including pottery and flint from this area may assist in refining the chronology.

Straddling the Roman Enclosure 10.19 east ditch (though mostly outside to the east) was a loose group comprising post-holes, small pits and two elongated pits (Occupation Features 10.18). North of this group and located outside the entrance to the enclosure was a small scatter of pits and post-holes (Occupation Features 10.19). North of this group was another scatter of small pits (Occupation Features 10.20). Occupation Features 10.21 was in the vicinity of the prehistoric pit group 10.12 and the Saxon SFB 10.2 and could be subject to re-interpretation. A small cluster (Occupation Features 10.22) was located close to the western side of Enclosure 10.22. The large pits were recorded cutting into the fills of the ditch and post-hole structures were assigned a Saxon date. (See Structural Features 10.18). Further analysis of finds from this cluster of pits may assist in providing a more accurate date. A pit approximately 0.85m in diameter (Occupation Features 10.24) was located to the west of enclosure 10.22. It was cut over the top of a tree throw and was characterised by the presence of a large number of stakeholes

around and inside the pit. Four post-holes were also associated with the pit, but its function was not known.

LARGE PITS IN THE SOUTH OF 10A AND 10B (PIT GROUP 10.65, 10.68) (FIGURE 10.11)

Two large pits were located towards the southern extent of TEA 10A. They bore similarities to the pits recorded cutting into Roman Enclosure 10.22, west ditch, which were given Saxon dates based on a timber lining found in well. The first pit (Pit Group 10.65) was located between Enclosure 10.21 south and north. It was approximately 5m in diameter and in excess of 2m deep. It had steep sloping sides, becoming vertical in the lower half. A horse skeleton was recorded in the lower half, possibly a structured deposit. It is likely that this pit was used as a well. The second pit (Pit Group 10.65) was located cutting into the fill of Roman enclosure 10.21 south ditch approximately 65m south west of the first pit. This was also approximately 5m in diameter. Hand excavation to 1.0m did not reach the base, and fills investigated and recorded constituted disuse phase infilling and natural silting. Six large pits (Pit Group 10.68) were in the southern end of TEA10B. These were dispersed or isolated. They had reasonably sterile fills characterised by orange-brown sandy silt. Following initial excavation by hand these pits were machine excavated to reach the base.

Phase 4: Romano-British II: North (Figure 10.12)

While the Romano-British activity in the southern part of TEA 10B respected the late Iron Age settlement pattern, using a sympathetic evolution of enclosures, the post-conquest activity in the north of TEA 10A was more of a replacement. The substantial middle Iron Age ditched enclosures were avoided, but ditches to the north were cut off. With the original settlement some centuries in the past it is likely that either all traces of the less substantial features had vanished.

A large straight ditch running west to east turned to the north and continued out of the site and into TEA 7A, which contained extensive Roman occupation. This ditch represented the outer enclosure ditch for the Roman settlement. Inside of it, and limited to an area close to the boundary, were several pottery kilns probably dating to the early 2nd century. Outside of the ditch were three inhumation burials, with two further burials located inside the boundary ditch of uncertain date. A small cluster of pits and post-holes close to the three inhumation burials may reflect structures and associated with 'repeated acts of commemoration' close to the bodies (Smith et al 2018, 205).

LARGE DITCHED ENCLOSURE (ENCLOSURE 10.27)

The north of TEA 10A contained the southern side and southeastern corner of an enclosure in excess of 210m long and 65m wide. It continued to the north and into TEA 7a. The ditch for this enclosure was substantial. The north-south ditch, which represents the eastern side of Enclosure 10.27, was a substantial ditch 1.0m deep and 2.5m wide, clearly cutting across all other features in this area. The southern boundary ditch was a very substantial east-west ditch with a v-shaped profile. Preliminary analysis of pottery recovered from this ditch group suggests a date of early Romano-British

DISCRETE FEATURES OUTSIDE LARGE ENCLOSURE (PIT GROUP 10.73; OCCUPATION FEATURES 10.26-7)

Several features were located immediately outside of the large enclosure, on the south side of the ditch. Two medium sized, but shallow pits were located south of Inhumation 10.7, and two further pits (Pit Group 10.73) were located straddling the Iron Age gully, ditch 10.9. One of them also had a post-hole cutting into its fill. Several post-holes (Occupation Features 10.26-7) were located immediately outside of the Roman enclosure and in association with three inhumation burials 10.5-10.7.

Inhumation burials (Inhumation 10.5–7)

Outside of the enclosure, on its south side, were three inhumation burials. A further burial, discovered 35m to the north was in a pit within the Roman enclosure and interpreted as Iron Age. A fifth, discovered within burnt feature (Pit Group 10.75) may also have been Iron Age; these burials will require radiocarbon dating.

The first inhumation burial (Inhumation 10.5) belonged to a juvenile. It was poorly preserved but well represented and appeared to be lying in a crouched position. The second (Inhumation 10.6) was an adult lying in a supine position on an east-west orientation. A modern land drain cut through it. The third (Inhumation 10.7) was an adult lying in a crouched position. This was located on the southern cusp of the Roman enclosure 10.27. A group of inhumation burials this close to the outside of the settlement boundary would suggest a date of mid- to late Roman, with inhumation becoming the 'normative' burial rite later in the Roman period (Smith et al 2018, 209).

POTTERY KILNS (PIT GROUPS 10.74-5; KILNS 10.4–7)

Within the large Roman enclosure 10.27 was a series of kilns of varying complexity and design along with other associated features. These represent an area of light industrial activity within the enclosure. On the very northern edge of the area were a series of interlinked pits containing burnt material with signs of *in situ* burning (Pit Group 10.74). Preliminary analysis of pottery recovered from this feature suggests it is of early Roman date. A similar pit (Pit Group 10.75) located 17m to the south of pit group 10.74 contained a crouched inhumation burial. Preliminary analysis of pottery recovered from this feature suggests a date of late Iron Age. It is unclear whether the presence of an inhumation burial was pertinent to the pit's previous function. Approximately 5m to the north of pit group 10.75 was a pottery kiln (Kiln 10.4) comprising firing chamber, flue and rake out pit. Scorched ceramic residue and the remains of a single pilaster were identified. Preliminary analysis of pottery recovered from this ditch group suggests it is of Roman date. Located 23m to the east of Kiln 10.4 was a similar, smaller kiln (Kiln 10.5). The firing chamber contained eight round pilasters. Preliminary analysis of pottery recovered from this suggests it was of Roman date. Just 4m east of Kiln 10.5 was an almost identical kiln (Kiln 10.6). Its firing chamber contained seven square pilasters. Kilns of this form have been found at Brampton, Norfolk and dated to the early 2nd Century (Swan 1984, 121). Less than 5m to the north of kiln 10.6 was a 'micro-kiln' (Kiln 10.7), a short, narrow flue exhibiting signs of scorching. No chamber or rake-out pit was present.

POTTERY PITS (PIT GROUP 10.76)

On the northern edge of the area three large pits contained a large quantity of high status Roman pottery (Pit Group 10.76). This may have been a convenient place to dispose of domestic rubbish, or to dump wasters from kilns. The westernmost of the pits, 4.7m wide, was the first dug. The middle pit was not fully excavated and may have represented part of an east-west ditch. The easternmost pit of this cluster measured 6.8m in length and 5.4m wide. Preliminary analysis of pottery suggests the pit was mid-late Roman in date.

Phase 5: Early medieval (Saxon) (Figures 10.13-14)

The Saxon activity was largely restricted to the southern half of TEA 10. A sinuous ditch (Boundary 10.7) ran from the north, connecting this activity to the occupation on TEA 7C. On TEA 10 the occupation consisted of five sunken-featured buildings (SFBs) scattered across the area and at least eight post-built structures located close to the Roman enclosure ditches, which probably survived as earthworks. Also surviving as an earthwork was the prehistoric ring ditch barrow in the southern end of TEA 10B which almost certainly survived into the Iron Age as pottery of this date was recovered from the ditch. Saxon occupation is often found in association with prehistoric monuments.

Large pits were sunk into the Roman ditches. Some of these pits may have started out as wells or were repurposed as wells. The 'off-line' pits comprised a large sub-rectangular pit adjacent to a smaller pit which contained two dogs. The date for this could be Roman or even Iron Age and analysis of pottery would be necessary to confirm a date. Another 'off-line' pit was positioned in a shallow scoop and characterised by a number of stake holes possibly representing a windbreak.

Several gullies which crossed over the Roman boundary ditches may have their origins in the Roman period. Residual Saxon pottery of 8th or 9th centuries has been recovered from the main Roman enclosures, although this is likely to be residual, the pottery should be examined for the degree of wear associated with residuality.

The Saxon pottery assemblage mainly comprised early - middle Saxon wares, with some middle Saxon and later sherds. The Saxon small finds from this site were dated to the 7th-9th centuries and were focused on cloth production (loom weights, spindle whorls, thread pickers etc).

SUNKEN-FEATURED BUILDINGS (SFB 10.1 – 10.5)

The SFBs were generally sub-rectangular with rounded corners and two post-holes, one on each of the short (gable) ends. However, SFB 10.4 was sub-ovoid. SFBs of this shape were less common, although examples can be found at West Stow and West Heslerton (Tipper 2004, 64). While the size of SFBs can vary the average size is approximately 4m by 3m and the ratio between length and breadth 'has a strong tendency towards 1.2:1 and 1.3:1' (ibid). The interpretations for the function and form of these structures is also not fixed. They may have had suspended floors creating a basement for storage; cavities in the floor may have allowed the warp yarn from looms to pass through the floor and weighted there. Or there may have been no suspended floor. Loom weights were recovered from the fills of SFB 10.5. This was the deepest of the SFBs on TEA 10.

Although the Saxon presence here is thought to be 8th to 9th centuries, based on pottery recovered from ditches, the date of the structures could be refined with further analysis.

Two SFBs were located in TEA 10A. The first (SFB 10.1) was situated near to the entrance of the Roman rectangular enclosure 10.19. It comprised a rectangular, vertical-sided and flat-bottomed pit 7m north-south by 4m east-west. Few fills were present, although these produced several worked bone objects. Preliminary analysis of pottery recovered from this structure suggests an early Saxon date (AD 400-600). Two post-holes were present, one each to north and south inside the pit. In addition to the post-holes, there was an internal ring of stake-holes positioned around the base of the side-wall.

The second SFB in TEA 10A (SFB 10.2) was located in the centre of the open sided enclosure. It was excavated in two opposing quadrants (north-east and south-west). The sub-rectangular pit was 4m east-west by 3m north-south. The sides were steep but not vertical. Two post-holes were present, located to east and west outside the pit. Stake holes were identified in each of the quadrants.

Three SFBs were present in TEA 10B. The first (SFB 10.3) was positioned close to the western edge of 10B. The SFB pit was sub-rectangular and measured approximately 8m NE-SW and 4m NW-SE. It had steep sides and an uneven base. A number of worked bone objects were recovered from the backfill of this SFB including a rare worked bone musical instrument similar to a flute. Preliminary analysis of pottery recovered from this pit suggests a Saxon date. There were also two axial post-holes present. Six small post-holes or large stake holes were present and a large number of stakeholes. A windbreak gully was situated to the south of SFB 10.3. It was curvilinear and measured approximately 7m in length and 0.90m wide. Several pits were located within the immediate locus of SFB 10.3. One was located between the SFB and the windbreak gully, the remainder in a cluster to the north-east and cutting into the Roman enclosure 10.23 west ditch. To the south west of SFB 10.3 and beyond the windbreak gully was a small group of post-holes, possibly representing a structure associated with the SFB.

The second SFB in TEA 10B (SFB 10.4) was also located close to the western edge of 10B 90m to the south of SFB 10.3. The SFB pit measured approximately 4m in diameter. It was sub-ovoid in shape with steep sides and flat base. Dug into sandy silt, it had probably been subject to erosion. Several post-holes were identified within and around the pit. These may have extended to the east to form a larger structure. A cluster of post-holes was present to the east of the SFB pit. They may be associated with those in and around the pit and together may have formed a viable structure.

The third SFB in TEA 10B (SFB 10.5) was located 45m south of SFB 10.4 and was oriented north-south. It is one of the largest recorded examples. The pit was rectangular with rounded corners and measured 10m north-south by 8m east-west. It was almost 1.0m deep with a ledge around the inside. The backfills contained numerous worked bone objects and fragments of loomweights. A row of seven post-holes partitioned the rectangle into two squares. These were of varying depth and size. Cutting through the partly filled up feature was a large circular pit 3.1m in diameter. Which had been filled in with a large quantity of burnt material and then left to silt up. The presence of a ledge within an SFB has been the subject of much discussion with a variety of interpretations from floor support to an area protected or hidden from use (Tipper 2004, 84-85).

LATRINE PIT (10B) (PIT GROUP 10.77)

This feature (Pit Group 10.77) was located 60m northeast of the large SFB and 39m southwest of structural features 10.16. It comprised several elements. A shallow scoop pit 3.4m by 2.24m contained in its centre a deep pit 0.95m in diameter and 1.0m deep. The pit had vertical sides and produced a worked bone pin. Pottery recovered from the pit suggested a date of early medieval. Around the interior of the shallow pit were more than two dozen stake holes mostly around the southern side. It is thought that this feature may have been a latrine pit with modesty screen/wind break.

POSTHOLE STRUCTURES (STRUCTURAL FEATURES 10.16 – 10.21, 10.23)

Several post-hole structures were identified in the southern parts of TEA 10A and TEA 10B. Some of these were more definite than others. They were located close to the Roman enclosure ditches and seem more cohesive than the clusters of post-holes seen in the western side of 10A.

Structural Features 10.16 were located towards the west of TEA 10B and comprised nearly forty post-holes arranged into a sub-divided rectangle 12m long by 7m wide around a shallow burnt pit. The outer western line comprised four post-holes and ran 5.7m along the south of Ditch Enclosure 10.23. It was positioned 5.2m from the rest of the building. The middle west line comprised eight post-holes, one with a post-pipe. It was 8.6m in length and 6.1m from the eastern side of the building. The inner west line comprised seven post-holes and ran 4.3m alongside the inside of the building. It did not extend to either end of the building and may have been a means of offering additional support. Alternatively, it may match with the outer west line of posts to form another structure. The east line comprised twenty post-holes, some of which were doubles. It ran for 11m and formed the eastern end of the building. The centre of the structure contained two lines of posts crossing between the long sides. The north line comprised four posts (one was a double). The southern cross-line of posts was 2.4m from the outer north line. It comprised three post-holes. The central pit was 1.0m in diameter and was a relatively shallow scoop. Stake hole around the inner circumference of the central pit suggested the presence of a superstructure, with a single post on the pit's northern side.

Structural Features 10.17 was located 55m to the east of Structural Features 10.16. It was positioned adjacent to the southern ditch of domino enclosure 10.23 and formed a loose rectangle 16.7m east-west and 6.5m north-south. It comprised twenty-six post-holes, including three outliers to east and west. The remainder formed a rough square.

Structural Features 10.18 was located adjacent to the oil pipeline corridor in 10A. It straddled Roman enclosure 10.22, west ditch. It comprised of eight posts that formed a rectangle 5.3m by 4.8m. Two of the posts contained post-pipes. It is likely that at least one post was lost in the line of the ditch.

Structural Features 10.19 was located 23.5m to the north of Structural Features 10.18. It straddled the Roman enclosure 10.22 west ditch. Six post-holes were present which formed a rough square 4.3m long. The western side was represented by two posts, both of which cut into an earlier pit. The eastern side comprised four posts.

To the north of Structural Features 10.19 was a line of post-holes oriented north to south on the west side of Roman enclosure 10.22 (Structural Features 10.20). This line of posts was 7.7m in length comprised

of four posts and a possible pit or disturbed post. No evidence was found for a parallel run to create a solid structure.

A concentration of posts was located to the east of Roman enclosure 10.22, west ditch. The spread (Structural Features 10.21) was 17m in length and 10.3m wide. It comprised two large post-holes fourteen smaller post-holes, a pit with burnt material and a fragment of possible drip gully. This feature seemed similar in character to Structural Features 10.11. The large post-holes were between 0.75m and 0.95m in diameter with vertical sides, and nearly 1.0m deep. They contained well defined post-pipes. The smaller posts were quite shallow. Although the trend was generally north to south it was not possible to make a complete structure from these posts. To the east of the post-holes was a pit which contained a significant quantity of burnt material in recognisable dumping episodes. The pit measured 1.0m in diameter and was approximately 0.50m deep. The drip gully comprised an arc of curvilinear gully 2.6m long 0.65m wide. No further segments of this gully were detected in the area and it is not known whether this is integral to the post-hole structural features 10.21.

A structure comprising four posts in a square (Structural Features 10.23) was located to the northeast of Structural Features 10.17. The square measured approximately 2.5m on each side, although it was not a true square and the area it enclosed not large enough to live inside. A similar structure found at Love's Farm (Hinman and Zant 2018, 44) was interpreted as an Iron Age hay rick based on charred grain recovered from the post-holes.

BEAMSLLOT STRUCTURE (STRUCTURAL FEATURES 10.22)

Located northwest of overlapping Domino Enclosures 10.22 and 10.23, was a possible structure (Structural Features 10.22). It comprised two post-holes relatively close to possible beam slot or segment of drip gully 6.7m long. It was positioned directly north of post-hole structural features 10.18-10.21. The gully or beamslot was narrow and steep-sided, with a dark fill.

NARROW GULLIES (10B) (DITCHES 10.55-9)

A series of narrow gullies, post-dating all other features except furrows, was identified in the southern part of TEA 10B. These gullies were both straight and curved with steep sides and v-shaped profiles, and probably represent drainage gullies.

The first gully (Ditch 10.55) ran generally northwest to southeast with a pronounced arc towards the southern end. The north-eastern corner was rounded. The northern wing of the gully ran for 73m to the west. After a hiatus of 7.6m it continued. This location had seen more activity with two segments of ditch (Ditch 10.60) and a large pit. A second gully (Ditch 10.56) had an arc opposite to that of Ditch 10.55. It ran for approximately 45m generally northwest to southeast. It intersected with a gully at both of their southern ends. Crossing ditch 10.55 was a straight gully (Ditch 10.57) with an orientation generally north-south. It ran parallel with Ditch 10.59 for 37m, connecting to Roman enclosure 10.23, in the south and Ditch 10.37 to the north. The orientation of these gullies did not conform with that of the Roman or Iron Age enclosures and activity in this area. West of structural features 10.17 was a short length of gully (Ditch 10.58) that ran roughly east to west, with a slight kink at the western end. It measured 14.7m in length and 0.30m wide and did not interact with any other features. Gully Ditch 10.59 ran parallel with

ditch 10.57 at a distance of 45m. It was 27.8m in length, starting at the Roman enclosure 10.21 ditch to the south. After a gap of 27m this gully continued for 31m.

LARGE PITS (10 A AND 10B) (PIT GROUPS 10.78-81)

Several large pits were found scattered over the area. These were situated on or near the Roman enclosure ditches indicating a possible intention to collect water. Some of the deeper ones, where they had penetrated the water table, produced large quantities of wood, although much of this was not worked. Similar pits, positioned over old Roman boundary ditches, were found at Love's Farm (Hinman and Zant 2018, 133).

Located on the line of Roman enclosure 10.22, west ditch, were several substantial pits (Pit Group 10.78). These were associated with post-hole structural Features 10.18-10.21. The pits were generally 3m to 5m in diameter and over 1.0m deep. The southernmost pit of this group was 3m deep and contained a hollowed-out tree trunk in its base, which had been used as a well lining. To the east of 10B a large pit (Pit Group 10.79) cut both the Saxon ditch 10.57 and Roman ditch 10.39. This was 4.5m in diameter and over 1.0m deep. Cutting the division ditch of the Roman enclosure was a very large pit 5.5m in diameter (Pit Group 10.80). The pit contained an unusually large stone in its southwest quadrant, roughly 1.0m across. The pit was excavated initially by hand to a depth of 1.0m and then bottomed using a machine. A large quantity of timber was recovered from this pit. Close to SFB 10.3 was a circular pit 4.2m diameter and a smaller pit 2.0m in diameter (Pit Group 10.81).

DOUBLE-DOG BURIAL (10B) (PIT GROUP 10.82)

Close to one of the large pits in the south of TEA 10B was a medium sized pit, which contained the articulated skeletons of two dogs. The skeletons were not located on the base of the pit suggesting the pit was not dug specifically to contain them, though they may have been a votive offering. The pit (Pit Group 10.82) was 1.04m in diameter and 0.94m deep (similar in size and shape to 'latrine' pit group 10.77.). Its sides were slightly undercutting, possibly due to the loose compaction of the sand that the pit was cut into and either the presence of a high-water table or the deposition of wet waste into the hole. The articulated skeletons of two dogs were discovered within this pit, along with the disarticulated bones of a larger animal, possibly a cow. The cow bones may represent butchery waste, the dog skeletons may be part of a ritualised activity and the bones should be examined for any signs of pathology.

A large pit (Pit Group 10.84) was located to the southwest of pit group 10.82. It was sub-square in shape with rounded corners. Its sides were vertical and undercutting. It measured 4.1m long by 3.18m wide, and less than 1.0m deep.

NORTH-SOUTH BOUNDARY DITCH (10B NORTH) (BOUNDARY 10.7)

A long narrow ditch ran roughly north-south through 10B. It was attached to a medieval field system (Ditch 10.60-10.70) in the far north. It changed its orientation several times and exhibited signs of re-cutting, especially along its northern stretch where two interweaving channels were observed. These recuts indicate a managed boundary. After a gap of 20m it continued to the south before turning towards the southeast. At the southern end the ditch it split into two, with one part turning east. This

piece of ditch was not observed further east in the Fill Area. Also diverging from the main ditch in the southern run was a ditch which probably joins up with the segmented Ditch 10.59. Further examination of this boundary may assist in obtaining a precise date and linking the landscape between TEA 10 to TEA 7.

Phase 6: Later medieval (Figures 10.13-14)

By the medieval period the area was no longer occupied, with Houghton and Brampton the focus of occupation. The entire area had been abandoned and turned over to agricultural use, with extensive ridge and furrow ploughing on a northeast to southwest orientation. Some of the furrows may have been sufficiently long-standing to form ditches; parallel and perpendicular ditches in the north may represent ploughing and cross-ploughing. It was clear from historic mapping that Modern field boundaries preserved the line of the furrows and some of the arrangement of furlongs.

In the southern part of TEA 10A the northeast to southwest furrows became more substantial and were interpreted as ditches, specifically as a ditch and hedge boundaries. These comprised Boundaries 10.8 to 10.13. Several discrete features (Pit Group 10.85) were located in and around these medieval 'ditches' These comprised small and medium sub-ovoid pits and other irregular features, thought to be representative of tree throw activity along a hedged boundary.

In the north of TEA 10B a sequence of perpendicularly arranged ditches were situated, on an east-west and north-south orientation. The northernmost ditch (Ditch 10.60) comprised several channels and had been subject to repeated management. At its western end it met the northern end of Saxon boundary 10.7. Further examination of these ditches may assist in understanding whether these ditches are of an early medieval origin and how they fit into an evolving landscape. South of ditch 10.20 was a slightly curvilinear ditch (Ditch 10.61) running eastwards out of the stripped area. South of ditch 10.60 was a parallel ditch (Ditch 10.62), 26m in length. It was directly adjacent to Ditch 10.63 which ran for 99m, connecting to a north to south Field System 10.12 at its east end. A terminus to the west created a hiatus of 25m before it continued as Ditch 10.64. South of Ditch 10.63 was a parallel ditch (Ditch 10.65) 5.6m away. It was in two segments, with the western half 49m long and the eastern part 19m long, with a gap of 5.5m. On the eastern side of the site, and cutting middle Iron Age ring ditch enclosure 10.11, was a short length of ditch (Ditch 10.66) 16m long. It was parallel with a similar ditch (Ditch 10.67) and the pair connected to north-south field system 10.12 at their west ends.

Further east-west and north-south ditches lay to the south, probably representing parts of a medieval field system or remnants of cross-ploughing.

Phase 7: Post-medieval (Figures 10.13-14)

A rectilinear field boundary system was identified. In TEA 10B the boundary comprised a ditch oriented NNW-SSE (Boundary 10.17). In TEA 10A the boundary comprised a shallow ditch infilled with gravel and noticeable by striations similar to wheel ruts infilled with silt. This boundary ran ESE-WNW (Boundary 10.15) before turning towards the south. This feature is visible on twentieth century aerial photographs and map regression. In TEA 10A parts of a further field to the north were identified with fragments of a

north to south ditch. The southern ditch (Boundary 10.18) was patchy and faded out to the west. A fragment of north-south ditch located 109m to the east represented part of another field (Unexcavated).

Finds and environmental summary

Tables 10.1 - 10.3 provides a quantification of the finds, bone, and environmental samples from TEA 10.

The largest quantity of prehistoric worked flint from the A14 scheme was recovered from TEA 10. This comprised 966 pieces of worked flint, including microliths (Mesolithic), a chisel arrowhead (later Neolithic), plano-convex knives (later Neolithic/early Bronze Age), and a barbed and tanged arrowhead (early Bronze Age). This demonstrates that there was human activity in this area throughout prehistory. Four complete/partially complete collared urns were also recovered, close to the prehistoric ring ditch (Ditch 10.2).

The Iron Age pottery assemblage included a small quantity of early Iron Age coarse flint-tempered sherds, and far greater quantities of middle Iron Age shell-tempered and sandy wares (in plain and scored jar forms) and late Iron Age grog and shell-tempered forms (mainly storage jars). There were also two Iron Age coins and finds associated with textile work (loomweights and a comb).

The Roman pottery assemblage was mainly dated to the early or middle Roman period, apparently ceasing around the 3rd century. This was mainly sand-tempered reduced and oxidized fabrics, with one samian ware Dr.37 bowl with lion, tree, and hunter motifs. The pottery kiln products were mainly reduced greyware lid-seated or globular jars. Also recovered were 12 Roman coins, brooches, early Roman military artefacts (armour fitting, horse harness strap fitting), tegula and imbrex roof tile, and a sherd of luxury imported 1st century glass.

The Saxon pottery assemblage mainly comprised early - middle Saxon wares, with some middle Saxon and later sherds. The Saxon small finds from this site were dated to the 7th - 9th centuries and were focused on cloth production (loom weights, spindle whorls, thread pickers etc). There were also some dress accessories, a bone flute/recorder, and other objects (combs, knives, a bell clapper, and an iron dish). The decayed wooden base of a dugout well lining was also recorded, and the base of a wooden log ladder (tentatively dated to the Saxon period).

The plant remains from the site included cereal grains typical of Iron Age - Saxon sites (spelt wheat, glume wheat, hulled barley, oats). The flax seeds and capsule fragments from Iron Age pit 106207 suggests flax-processing here. The presence of pulses such as broad bean and pea may indicate the intensification of horticulture over time.

The animal bone assemblage was fairly typical of sites in this area, with a focus on cattle, then sheep/goat, pig, horse, and dog. There were also smaller quantities of cat, chicken, goose, and wild animals (deer, rabbit, duck, swan, pheasant, badger), and an eel fragment. Little evidence for bone modification was identified, although there were examples of horn cores being removed (indicative of horn working) in the Roman and Saxon assemblage. Large mammal skulls were also identified in the Roman assemblage.

Table 10.1 Quantification of finds from TEA 10

Type	Count	Weight (g)	Date/type
Pottery	590	2,045	Early prehistoric
	14,440	164,705	Iron Age
	2,394	27,593	Roman
	617	9,359	Post Roman
Coins	20		
Small Finds	274		
Lithics	966 (worked)		
	735 (burnt)		
Stone	184		
Glass	3		
Clay Tobacco Pipe	3		
Wood	30		
Building Materials	912	41,150	
Metalwork Residues	290	27,895	

Table 10.2 Quantification of bone from TEA 10

Type	Count	Weight	Date/type	% of bone assessed
Cremations	35			
Inhumations	22			
Disarticulated bone contexts	2			
Animal Bone	40,806	409kg		40

Table 10.3 Quantification of environmental samples from TEA 10

Type	Count	Date/type
Bulk Environmental Samples	940	
Monoliths	11	
Kubiena tins	37	
Waterlogged	4	

Provisional interpretation and potential

Excavations at TEA 10 have established the habitation and utilisation of this part of the landscape for 1500 years, although not continuously. Many periods were represented from Neolithic to post-medieval, although Bronze Age and early Iron Age activity was absent. The height of activity on the site lay between the Iron Age and early Roman periods, with subsequent Saxon occupation in the 8th and 9th centuries. This section seeks to answer some of the research questions that were posited prior to commencement of the fieldwork and determine whether further work is necessary.

Landscape and settlement:

Development of the character and form of the agricultural landscape of the Iron Age and Romano-British period.

The nature of the settlement changed from the Iron Age through to the Roman period. The middle Iron Age clusters of large polygonal enclosures, droveways and fields on TEA 10 match the settlement pattern on TEA 7B, with the enclosure of domestic livestock seemingly of great importance. When expansion happened, it occurred piecemeal and probably over a considerable period. At first, there were small-scale additions to the settlement complex, followed by larger enclosures and larger fields, of organic sub-rectangular shape. Landscape management during the Roman period appears more systematic and ordered, with smaller enclosures blocked together in adjoining square or rectangular cells. Although continuous, the development is hardly seamless. The initial expansion to the west followed by the subsequent expansion to the east and southeast may be significant. The substantial ditches of the middle Iron Age may still have been open and operational long after their construction. The evolution of the settlement to the east may have been the logical choice, given the extensive settlement to the north in TEA 7B. There is no way of knowing whether these people had good relationships with their neighbours.

Field systems changed over the centuries, probably reflecting changes in agricultural practices. Further analysis of charred grain may indicate what kind of crops were being grown, and faunal analysis will indicate which animals had been domesticated and were using the droveways that stretched away from the initial settlement hub. The later Iron Age settlement was less reliant on droveways to move livestock around the landscape, and it is possible they continued to use those constructed in previous generations, as did the Roman-period inhabitants of this place. The presence of multiple parallel ditches to the east of the late Iron Age and Roman settlements suggests a new form of farming here, with possible narrow strip fields allowing people to farm close to the settlement hub.

Natural topography and the prehistoric environment:

Does the untruncated surface of natural gravels and or subsoil survive? What is the nature of the natural topography?

The natural topography was of a gently sloping landscape sloping down to the east, and very gently down to the south in TEA 10B. In TEA 10A the ground still sloped gently down to the east; it also contained a shallow broad dry valley running east-west. The dry valley had a remnant colluvial deposit in it which was observed in the baulk section against the oil pipeline corridor. The geological substrate comprised mixed clay silts and sandy gravels with clayey gravels. Outcrops of sand and chalky gravel were also present towards the south and southwest. Although a subsoil was present, at times this was very thin and comprised only a plough disturbance horizon. This was especially so in the centre of TEA 10B where topsoil thickness was barely sufficient to support the dumpers running on it without creating ruts in the substrate. Medieval and modern ploughing had truncated the horizon extensively. Overburden deposits were deepest against the western baulk; unfortunately, this was the area most prone to overstripping. It is possible that the depth of overburden here was as a result of a headland. Archaeological evidence generally was sparse along the western side of the site, with only the south-

west providing dense, deep and reasonably well-preserved features, mostly of middle Iron Age date, overlain by a Romano-British enclosure system.

What evidence is there for palaeo-environmental remains?

The east-west valley that passed through TEA 10A was broad and shallow, and contained a thin colluvial deposit which underwent micromorphology sampling. This valley almost lined up with the palaeochannel and 'ponds' in TEA 10B north, a series of braided channels filled with dark silt and two large areas of dark organic silting. This feature marked the transition from a relatively dry mixed sandy clay silt substrate to a relatively wet sandy silt clay

Period specific research objectives relevant to TEA10

Bronze Age

Funerary practice: what is the evidence for the relationship between settlement sites and burial, and the development of and use of monuments?

Two ring ditch barrows were present in TEA 10B. Neither of these barrows contained inhumation or cremation burials within the ring ditch, though the northern barrow was close to the later Iron Age occupation and potential cemetery (see below). No direct evidence for a Bronze Age settlement existed within TEA 10. However, pits and hearths were present roughly equidistant from the two barrows and these may represent a form of settlement here.

Iron Age

Development of the agricultural systems and economy. What is evident in the landscape? Does field morphology offer any information? Potential of faunal remains to inform land use and economy.

As discussed above, field morphology changed over time. The Iron Age communities appeared to be utilising the landscape to grow cereal crops as well as manage livestock. The large, deep ditches of the middle Iron Age are indicative of attempts to keep unwanted people or animals out and keep valuable assets in. While there was no evidence for inner circuit fences, a structure of this type may have been positioned on top of a bank. The parallel ditches in the north of TEA 10B, a migrating droveway, may have been exploiting the wet land in this location and leading livestock onto lush pasture on lower lying ground closer to the river. The repeated re-cutting of the line of the droveway ditches may have been as a result of inundation, especially during the wet months. The analysis of faunal remains will undoubtedly assist in understanding land use and economy.

Settlement chronologies and dynamics: the possibility of continued development and use of settlements – is there evidence for the abandonment /re-use/ continuity?

There is little activity in the late Iron Age which contradicts the earlier middle Iron Age settlement. Expansion to the east appears to be just that. Rather than abandonment or replacement, construction of further enclosures add to the existing pattern, and it appears that the original enclosures were built to last, and were reused in the following centuries. Interventions from these enclosures and droveways to the west produced pottery of a variety of dates from middle Iron Age to Roman.

Settlement types: spatial use within settlement; are there clear working and living areas/zoning?

The southern middle Iron Age enclosure was devoid of contemporary archaeological features and it was believed to have been used as an animal stockade, though truncation by ploughing may have destroyed evidence for structures; the small enclosures adjacent to it probably had an associated function. The northern enclosure had visible sub-divisions within it although even these could be associated with the movement and storage of livestock in addition to likely domestic activity. The expansion to the east witnessed larger enclosures and more obvious zoning with the living/dead split and a large zone of pits cut against the inside of the enclosure ditch. The two spine ditches which define the expansion to the southeast are associated with further enclosures and a single roundhouse.

It will be easier to identify the different spatial uses of the site (domestic vs stock enclosures) once the pot/finds distribution work has been done.

The location of one of the Bronze Age barrows within a large later Iron Age enclosure may not have been coincidental, and the creation of a split enclosure for the living (three roundhouses close together) and the dead (two known inhumation burials, two empty graves, and several potential cremation burials) may be significant.

Roman

Rural settlements and landscapes: how did their morphology develop and what is the inter-relationship between settlement and agricultural land?

Roman habitation in the northern part of TEA 10 was not sympathetic to earlier occupation. The Roman activity here was represented by a large rectilinear boundary ditch, within which were pottery kilns and outside of which were burials. This zoning of activity is significant and investigation of the activity here should be linked to the analysis of the Roman features from TEA 7A immediately to the north.

The Roman enclosures to the west are single abutting rectangles with small entrances to the east. The enclosures to the east are large squares. No entrances are visible to the west, so they must be opening out towards the east again towards the possible strip fields. The settlement pattern was built on the infrastructure that originated during the Iron Age but did not replace it or imitate it. It was a reasonably sympathetic continuation with the first main enclosures being built up against the main spine ditch. 'Replacement' enclosures are positioned in such a way as to create additional, smaller cells.

Saxon

Saxon activity on TEA 10 dated to roughly AD 700-900 and was restricted to the southern half of the area. Extensive Saxon occupation to the north in TEA 7C was of a contemporaneous date, and slightly later. Saxon activity to the south in TEAs 11 and 12 was earlier in date, and this indicates a slow movement of settlement to the north. Further investigation may concentrate on the juxtaposition between prehistoric monuments such as the ring ditch monument on TEA 12 and the ring ditches on TEA 10, and whether these features represented existing earthwork monuments through to the Saxon period, and therefore fitting places to position settlements to be associated with the ancestors. Activity during this period in TEA 10 consists of SFBs, some post-hole structures, a selection of large water pits and/or wells

and a series of narrow gullies. The large middle Iron Age and Roman ditches would also probably have existed as earthworks at this time. The post-hole structures appear to have been placed respecting the ditches. The pits were probably cut into the partly silted up ditches to collect water, although the presence of an undeniable timber-lined well on one of these ditches indicates the intention to tap into ground water resources too. The narrow v-shaped gullies may have been designed to move water around the area rather than to enclose occupation or activity areas. There appeared to be no preference in the siting of SFBs here, with most located outside of the Roman enclosures. Some analysis of distribution patterns and mean distance may elicit a meaningful result, especially by utilising the expanded dataset afforded by inclusion of TEAs 7, 11 and 12.

Medieval

Can medieval agricultural practices be defined?

This question passes over the Saxon period which has a dispersed settlement layout. Not much later than this the whole of the site is given over to ploughing. Given the still visible earthworks of Roman and prehistoric ditches which attracted the Saxon settlement, and which must have taken centuries to fill in, it is surprising that the whole area is then ploughed flat, which is a landscape statement in itself. There is no evidence for smaller fields on TEA 10 as there is in TEA 7C, where changes in orientation of furrows denote new fields. In TEA 10 all furrows are oriented the same direction. It appears to have been an industrial scale change from a presumably mixed (but largely pasture-based) economy to an arable-based economy, where ditches and pits are filled in and banks and mounds smoothed out. Unless there was help from natural processes; a severe or wet winter or two could inundate the land and fill in the already partly in-filled ditches, allowing for a flattened, silty and sediment-rich soil to be ploughed.

Post-medieval

Post-medieval activity is restricted to the large sub-square field and boundary ditches which can also be seen on the aerial photographs and old maps. The roughly east-west alignment matches the line of the furrows that came before it, indicating a continuity of use. The ridge and furrow earthworks probably informed the pattern of landuse and its carving up into new properties, before being ploughed away by mechanical means in the 20th century.

Recommendations

A large proportion of contexts have been preliminarily grouped to produce this report. In general, it is necessary to seek a more accurate and nuanced dating by reference to diagnostic finds and a programme of radiocarbon dating and modelling. By examining the complete sequence of deposits from large features such as pits and ditches it may be possible to understand the longevity of these features. It is important now to ensure that pottery provides dates for depositional events rather than feature construction. Any subsequent pottery dates should be cross-referenced to that deposit's position in the feature matrix and take into account contamination from intersecting features. This is particularly relevant in the case of ditches which take a long time to fill up. Pits can be filled in soon after they are dug or go out of use and pottery from the top fills may still be useful even if finds were not recovered from the base.

Undated features will need to be matched by form and proximity to datable features to provide more settlement texture. The prehistoric features such as hearth and burnt pits need to be proved as such, and the post-hole structures need to be given a secure position in the chronology.

TEA 10B EAST

Helen Holderness

TEA 10B East is within Section 2, at the northwestern end of the A14 road scheme (Figure 10B.1). It is located to the east of the A1 and south of Brampton (NGR: TL 2011 7020). It covers an area of 3.63ha. The underlying geology was of the Oxford Clay Formation (undifferentiated) – mud stones, siltstones and sandstones. This was overlain by River Terrace deposits of sands and gravels found on the lower ground.

The quality and preservation of the archaeological features on TEA 10B East was generally good. Archaeological features on the east of the site appeared to be more clearly defined. Some relationships between features on the west of the site were difficult to discern, especially between the field system ditches making simple relationships more complex.

Ridge and furrow ploughing was extensive across the northern end site, with parallel furrows running roughly ENE-WSW across the site. This affected approximately 5% of the archaeological features with 2m-wide furrows at intervals of approximately 7m. Although shallow, they were capable of masking or destroying features and relationships. Furrows have been removed from the site and phase plans in the interest of clarity.

Archaeological Background

No geophysical survey or trial trenching took place before mitigation commenced although the area sits within a landscape of Iron Age, Romano-British and early medieval settlement.

Methodology

The fieldwork followed the methodology set out within the WSI (Highways England, 2015). The area was opened between March and April 2017 starting in the northeast end of the site. Hand excavation continued until June 2017.

Summary of Results

Archaeological excavations on TEA10B East identified occupation from the middle Iron Age with a linear field system and enclosure containing a roundhouse (Figure 10B.2). In the later Iron Age, the field system was altered, and the enclosure extended to the east and west, with an associated roundhouse. Cooking pits and wells from both phases were identified along with trackways leading round the eastern and southern edges of the enclosure. By the medieval period the land had been turned over for agricultural purposes. Ridge and furrow ploughing was extensive across the entirety of the site, on an ESE-WSW orientation.

Iron Age 1 (Figure 10B.3)

The first Iron Age settlement was dominated by a large horseshoe-shaped enclosure with an entrance to the west. A roundhouse was constructed at the entrance, with a scattering of pits in the immediate

area. Field boundaries marked by ditches extended from north-west to south-east across the central part of the site. A second unenclosed roundhouse was situated to the north.

FIELD SYSTEM 10B.1

The earliest remains of field boundaries were a shallow ditch (Ditch 10B.1) visible for 80m through the central part of the site north-west to south-east. It widened in the south-east to 1.30m but the depth remained consistent at 0.20m. At the south-west a shorter length (Ditch 10B.2) was parallel for 30m suggesting a narrow trackway. These ditches were filled with fine sediment similar to the surrounding geology and were almost invisible in the ground. They had filled up naturally, seemingly when the enclosure had been deserted and no material culture or animal bones were recovered from them.

ENCLOSURE 10B.1

Lying 50m to the south was a horseshoe-shaped enclosure which measured approximately 25m by 22m, with an entrance located in the west. The enclosure was consistent in depth, 0.50m, and width, 1.20-1.50m. Interventions in the southern arm of the enclosure revealed the earliest phase with ditch [109095]. This ditch was 1.20m wide and 0.74m deep. It was, maybe, a 'false start' for the enclosure as the ditch had been rapidly backfilled with a relatively sterile soil with no finds. The later enclosure ditches all produced pottery and careful examination may give us a better stratigraphic resolution.

ROUNDHOUSES

In the entrance of Enclosure 10B.1 was a section of a roundhouse gully, c 7m in diameter (Roundhouse 10B.1). Four interventions were excavated, but no datable material was recovered. Four shallow post-holes were arranged along the interior curve of the gully and would have been used to support the roof beams. The ring gully had been cut by post-medieval agricultural activity removing the southwestern arc.

To the northeast, 165m away, was another ring gully (Roundhouse 10B.2). It was 10m in diameter with an entrance to the south-east and presented a more emphatic footprint than Roundhouse 10B.1. The larger footprint was matched by a wider gully, 0.40m, which was consistent across the feature. Seven small post-holes (0.20m to 0.35m in diameter) were investigated inside the structure: these would have been used to support the roof beams. No dateable material was recovered but this ring ditch shows stylistic similarities with others found across the A14, (TEA 5, 13, etc) generally dated to the Iron Age.

PITS

Just outside the southern arm of Enclosure 10B.1 were two small pits (pits 10B.1 and 10B.2) approximately 0.40m in diameter; both contained a large amount of fired clay including daub. Fragments of the daub retained faint impressions of the wattles used in the walling. The other notable pits in Enclosure 10B.1 were a series of four pits spread out across the area surrounding the Roundhouse 10B.1, thought to have been used as settings for cooking. There was some variation in size ranging from 0.70m to 1.10m in diameter but all had a similar depth of 0.20m to 0.30m. All the pits contained Iron Age pottery, animal bone and daub along with a significant quantity of fire-cracked cooking stones. Three of the pits had the fire cracked stones in the upper fill where they had been cleaned out from other pits and dumped into an earlier disused cooking pit. However, in Cooking Pit 10B.1, the stones were in the lower fill and

are likely to be *in situ*. By comparing the dating evidence from the fills of the cooking pits we have the potential to give us a date range for the life of the settlement.

WELLS

Within Enclosure 10B.1 was an oval well, 3.20m by 1.72m and 0.69m deep (Well 10B.1). This appears to be the primary water source for the enclosed settlement and was deliberately backfilled rather than being abandoned to silt up. A large quantity of Iron Age pottery was recovered from primary and upper fills, which may be used to develop general chronology for the settlement and its abandonment. A column sample (S10918) was taken through the entire sequence allowing us to see with finer resolution the deposition process and surrounding environmental context, of landscape, crops and vegetation.

Located 60m to the north of Well 10B.1 a second Well 10B.2 had been dug along the trackway created by Field System 10B.1. This well/waterhole was 1.35m in diameter and 0.75m deep. It appeared to have a greater connection to the field systems and surrounding pasture than the enclosure and settlement and could have been used for either irrigation or for watering animals. No pottery was recovered but a quantity of brushwood was recovered from both surviving fills. A column sample was taken through the entire sequence to assess the macrofauna and the botanical survival.

Iron Age 2 (Figure 10B.4)

The next phase of Iron Age activity saw an expansion and change. The field system was altered to a ladder arrangement and its alignment was rotated by 45 degrees. A narrow trackway was constructed around the southern end of the enclosure to a newly constructed roundhouse. Another trackway led north-east away from the roundhouse and seemingly returned to the north-west and out to the fields. There may also have been more intensive occupation within the enclosure as the cooking pits get placed into their own area rather than being scattered.

ENCLOSURE 10B.2

Enclosure 10B.1 was expanded to both the east and the west. The eastward expansion formed a 15m sub-square enclosure adjacent to enclosure 10B.1. An entrance faced east and could indicate a change in emphasis for the settlement and their relationship with neighbouring communities. The westward expansion continued from the western end of the established enclosure and dog legged round a large pit (pit 10B.5). This reduced the entrance width into the western enclosure and removed the southern side of roundhouse 10B.1.

TRACKWAY

A shallow gully was dug approximately 1m away from the enclosure to form a trackway (Trackway 10B.1) running around the southern end of enclosure 10B.2. A small quantity of Iron Age pottery was recovered along with small pieces of daub and animal bone. The trackway ended at the entrance to roundhouse 10B.3, where another trackway (Trackway 10B.2) turned away to the north-east and extended beyond the limit of excavations. A slim ditch [109454] returned almost immediately and may have been bringing the trackway out to the fields to the north.

ROUNDHOUSES

At the south-east end of Enclosure 10B.2 was a newly constructed Roundhouse 10B.3. The drip gully was semi-circular and measured 9m in diameter; there was no indication that it continued to form a circle but the surviving feature was only 0.10m deep, so there is a likelihood that the opposing half did not survive. Three shallow post-holes followed the interior curve of the gully. Although the shape and size and presence of post-holes would strongly suggest that this was a roundhouse, it is also possible that it was used as an animal corral. The entrance faces north and is at the southern end of trackway 10B.2, which appears to lead out to the field system to the north.

PITS

This phase of Iron Age activity saw the excavation of four cooking pits into the east annex of the enclosure (Pit Cluster 10B.1). There was a small variation in size ranging from 0.70m to 1.10m in diameter but all had a similar depth of 0.35m. All the pits contained Iron Age pottery, animal bone and small fragments of daub along with a significant quantity of fire-cracked stones. The pattern seen in Phase I was reproduced; three of the pits had the fire cracked stones in the upper fill but in [109015] the stones were *in situ* in the lower fill. A single outlier cooking pit (Cooking Pit 10B.5) lay 25m to the north-east of the main cluster. It was otherwise similar to the others. It was 0.85m in diameter with a depth of 0.35m. The fire cracked stones were in the upper fill that also contained pottery and a small amount of animal bone.

Trackway 10B.1 dog-legged around a large, circular pit, 2.75m in diameter (Pit 10B.5). The base of the pit was uneven, and the primary deposit contained a significant quantity of worked deer antler and Iron Age pottery pushed into the unevenness of the base. The pit's location in the dog leg of the trackway, suggests that it was a landscape feature, probably a tree-throw.

A large, shallow pit (Pit 10B.3), 3.50m diameter, truncated the south side of Enclosure 10B.2. Dumps of domestic waste were in the west part of the pit. Most of the pit appeared to have naturally infilled and contained a small quantity of Iron Age pottery. Stratigraphically the pit was relatively late, and it may have continued to collect material even after the site had been abandoned.

Three large post-holes were present across the site. Two (Posthole 10B.1 and Posthole 10B.2) were at the turn of the ditches forming the annex of Enclosure 10B.2. They were of similar size in diameter (0.70m) but differed significantly in their fills. Posthole 10B.2 had been burnt *in situ* and had then slumped or been removed. Iron Age pottery was found in the post-packing, which may date the construction. Posthole 10B.1 had both postpipe and packing, but these were undated.

The third post-hole 10B.3 was 45m to the north of Posthole 10B.1. It was 1.1m diameter and 0.45m deep. The postpipe was visible and packing with a small quantity of Iron Age pottery. The size of this post-hole and its isolation from other features but on the route of Trackway 10B.2 could suggest its use as a tethering post for animals, or a form of totem or marker in the landscape.

WELLS

Located 45m to the north of the Roundhouse 10B.3 was Well 10B.4, which was 2.25m in diameter and 0.85m deep. The primary fill was a sterile natural gravel that has slumped and eroded into the well from

the sides. Above this were five deliberately deposited fills, all of which contained domestic rubbish. Bulk and column samples were taken for micromorphology and environmental data.

A waterhole (Well 10B.3) was 35m to the west of Well 10B.4. It was 5.30m by 2.70m and had a maximum depth of 0.88m. The southern part of the cut sloped down gently to the north until the centre where it sloped sharply to the base. The surface of the slope was uneven, possibly trampled by animals whilst gaining access to the waterhole. The fills contained a mixture of deliberate and natural backfill. The lower deposits were waterlogged and contained a moderate quantity of brush and branch wood.

Lying 120m north of the waterhole was Well 10B.5, which cut through Roundhouse 10B.2. It was 1.7m in diameter and 0.75m deep with steep side and a flat base. The fills were a mixture of natural infill with a capping of deliberately backfilled charcoal rich soil. This deposit contained a small quantity of Iron Age pottery. With no other features in the immediate vicinity it is difficult to interpret this well other than as a possible source for irrigation relating to now vanished field systems.

FIELD SYSTEM 10B.2

The Field System 10B.1 was abandoned and a new ladder system installed at 45 degrees to the previous ditches. This new system Field System 10B.2 comprised three straight north-east to south-west shallow ditches (ditches 10B.3, 10B.4 and 10B.5) between 30m and 45m in length, and a west to southeast curvilinear ditch (Ditch 10B.6) that crossed the whole site. The ditches were of a similar depth and backfill which could indicate that they were cut at the same time and abandoned together. As there was no connection between the two field systems, it reinforces that the entire site was abandoned during the hiatus of occupation.

Post-medieval and undated features (Figure 10B.5)

A sequence of three boundary ditches, running north-east to south-west, were identified at the southern limit of the site and were covered by a 15m by 4.3m length of trackway (Trackway 10B.3). Both the ditches and the trackway followed the same alignment of a road seen on the 1808 plan of Huntingdon by William Hyett. The earliest ditches in the sequence, [109184] and [109185], had flat bases and gently sloping sides. [109184] was 1.90m wide and 0.65m deep. [109185] was slightly narrower, 1.60m, and shallower, 0.46m deep. The fills were unlike suggesting they were backfilling at different rates. After [109185] had filled another ditch was cut 0.5m to the north-east but following the same alignment. This ditch appears to be reasserting the boundary and may be contemporary with the trackway but the relationship has been removed with a post-medieval furrow. A copper Tudor cloak clasp (F.10907) was recovered from here when the site was metal-detected but no dating evidence was recovered from either the ditch fills or the trackway.

Ditch 10B.7 cut north-west to south-east across the site. Five interventions were placed along the 75m length, but no dating material was located. The ditch maintained a similar width 1m, and depth, 0.40m along its entirety.

Three undated dispersed pits were located outside the immediate area of the enclosures. Pit 10B.6 was a small puddling pit, cut through into the end of one of the ditches forming the field system 10B.2. It

was 0.90m in diameter and 0.34m deep with steeply sloping sides and a flat base. The lowest fill contained a high amount of clay and stones leading to the interpretation as a puddling pit. Pit 10B. 7 and 8 were similar in size and depth and both contained only a single fill. No datable material was recovered but they were in the vicinity of the Iron Age enclosures so they could be contemporary.

Finds and environmental summary

Tables 10B.1 – 10B.3 provides a quantification of the finds, bone, and environmental samples from TEA 10B.

Most of the finds from TEA 10B East were middle Iron Age in date. The pottery assemblage included plain and scored jars in handmade shell-tempered and sandy fabric. Two sherds of Roman greyware were also identified. Other finds of interest included an Early Roman coin, which is thought to have been brought over by invading legionaries.

Table 10B.1 Quantification of finds from TEA 10B East

Type	Count	Weight (g)	Date/type
Pottery	503	3,997	Iron Age
	2	3	Roman
Coins	2		
Small Finds	5		
Lithics	9 (worked)		
Wood	6		
Building Materials	21	618	
Metalwork Residues	4		

Table 10B.2 Quantification of bone from TEA 10B East

Type	Count	Weight	Date/type	% of bone assessed
Cremations	0			
Inhumations	0			
Disarticulated bone contexts	0			
Animal Bone	Uncertain			

Table 10B.3 Quantification of environmental samples from TEA 10B East

Type	Count	Date/type
Bulk Environmental Samples	58	
Monoliths	1	
Kubiena tins	1	
Waterlogged	0	

Provisional interpretation and potential

Excavations at TEA10B East have established the presence, habitation and utilisation of this part of the landscape for 2500 years, although not continuously. The height of activity on the site was during the Iron Age. This section seeks to answer some of the research questions that were detailed and discussed in the WSI (Atkins CH2M 2016b). The Research Framework for the East of England was also reviewed (Medlycott 2011).

Landscape and settlement:

Development of the character and form of the agricultural landscape of the Iron Age and Romano-British period.

The nature of the agricultural landscape from the Iron Age through to Roman period changed during the period of time represented on TEA10B East. The Iron Age enclosures and fields on TEA10B East match the settlement pattern on TEA10 and TEA7B, with the pasturing of domesticated animals and their housing within deep-ditched enclosures with smaller fields being used for arable. Expansion happened piecemeal and probably over a long time, evolving and developing organically. The lack of Roman landscape features means that comparison between the two periods is not possible. There is no evidence to demonstrate how this part of the landscape was utilised during the Roman period. Environmental analysis may indicate what kind of crops were being grown, and faunal analysis will help to understand livestock farming strategies.

Natural topography and the prehistoric environment:

Does the untruncated surface of natural gravels and or subsoil survive? What is the nature of the natural topography?

The natural topography was of a flat landscape with little variation. The geological substrate comprised mixed clay silts and sandy gravels with clayey gravels. Outcrops of sand and chalky gravel were also present towards the south. Subsoil survived to a depth of 0.40m across the site with the plough soil adding another 0.30m. Medieval and modern ploughing had truncated the horizon extensively.

Period specific research objectives relevant to TEA10B East include the following:

IRON AGE

Development of the agricultural systems and economy. What is evident in the landscape? Does field morphology offer any information? Potential of faunal remains to inform land use and economy.

The Iron Age communities were utilising the landscape to cultivate cereal crops as well as pasture livestock. Unlike other sites in the area, the ditches at TEA 10B East were not deep or wide, raising the question how livestock would have been kept within the enclosures, especially as Enclosure 10B.1 was open to the west. The use of fences or hedgerows, if present, do not survive in the archaeological record, most probably due to later ploughing. The analysis of faunal remains will undoubtedly assist in understanding land use and economy.

Settlement chronologies and dynamics: the possibility of continued development and use of settlements – is there evidence for the abandonment /re-use/ continuity?

The relative lack of material from Enclosure 10B.1, and the single construction phase surviving for the building, with no evidence of replacement and repair, suggests that the first phase of settlement was not long term or intensive. It could be that the roundhouses were being used seasonally, which would possibly explain why there are so few cooking pits and they are dispersed. There is little evidence of abandonment but activity on the site does appear to slow down. Possibly the area was left to allow it to recover from over grazing or to carry out soil improvements.

The expansion of the settlement to the west and east, the more certain trackways leading from Roundhouse 10B.3 and formal areas for cooking, all suggest that the second phase of use was more intensive and planned.

Settlement types: spatial use within settlement; are there clear working and living areas/zoning?

The organisation of the pits, the laying out of trackways and the suggestion of formal entrances are indications of zoning and planning.

POST-MEDIEVAL

What post-medieval agricultural practises and land use can be defined?

Post-medieval activity was restricted to the trackway and boundary ditches running along the south of the site. The ENE to WSW alignment matches the line of the later furrows indicating use for arable and a continuity of use over many years.

Recommendations

The bulk of identified activity on TEA10B East occurred during the Iron Age period, probably the middle Iron Age, though further pottery analysis is required to confirm this. Further work is needed to refine the phasing and integrate the artefactual and ecofactual data with the stratigraphic narrative.

The results from the excavations here will also be compared with the evidence for Iron Age activity on the western side of the A1 (TEAs 7-12).

TEA 11

Sandy Pullen (PCA)

TEA 11 was located towards the western end of the A14 road scheme in Section 2, west of the Great North Road (A1), opposite Lenton Lakes and directly north of Brampton Road (NGR TL 1970 6003; Figure 11.1). The geology was Oxford Clay Formation overlain by River Terrace deposits of sands and gravels. The site contained significant archaeological remains arising from episodes of Roman and Saxon rural settlement. This stratigraphic assessment should be read in conjunction with reports from adjacent sites; archaeological features extend northwards from TEA 11 into TEA 10 and southwards to the northern area of TEA 12. The excavation ran from November 2016 to May 2018. TEA 11 covered an area of approximately 8.2ha.

This assessment details the main archaeological features on TEA 11 (Figure 11.2). Features were assigned to the Roman, Saxon or medieval periods based on their morphology, relative stratigraphic position and some limited dating information (Figure 11.3). A collection of middle Bronze Age pottery, particularly from a cluster of cremations, suggests that there was earlier activity on the site. No Iron Age features were identified, demonstrating a gap between the Iron Age settlement to the north (TEA 7/10) and that to the south (TEA 12).

Where possible, Roman features were assigned to sub-periods according to their relative stratigraphic position. Two distinct concentrations of Roman activity on TEA 11 are summarised separately as TEA 11 (South) and TEA 11 (East). Significant features that could not be assigned to a stratigraphic sub-period, including most of the Roman pottery kilns, are also discussed separately. Because of its dispersed nature, the Saxon archaeology was not assigned to *stratigraphic* sub-periods.

Summary of results

Bronze Age

The pottery assessment identified a collection of middle Bronze Age pottery. This included four vessels associated with the cremations in the southern part of the site (Cremation Burials 11.1 – 11.6; currently phased as 'Roman'), and three small assemblages from pits spread across the site. This suggests that there was an earlier phase of activity, and that the cremations are actually Bronze Age in date (and potentially associated with the Bronze Age Cremation Cemetery 12.1 to the south).

Roman (TEA 11 South)

The Roman archaeology in TEA 11 (South) consists of a series of intercutting, agricultural enclosure ditches with associated features. The enclosures represent episodic re-modelling and re-sizing of the holding over a currently unknown timespan. Archaeological features were assigned to three stratigraphic sub-periods (Figure 11.4).

In Sub-period 1, a sub-rectangular enclosure (Enclosure 11.1) was found associated with an extensive north to south oriented, boundary ditch (Boundary 11.1). No indications of domestic settlement were found within this presumably agricultural enclosure. However, a heavily truncated roundhouse

(Roundhouse 11.1) was located a short distance to the east of Enclosure 11.1 and may have been associated with it.

In Sub-period 2 a rectangular sub-divided enclosure (Enclosure 11.2) was excavated. This enclosure contained a smaller C-shaped enclosure (Enclosure 11.3) and associated pits (Pit Group 11.1) within its southernmost sub-division. Enclosure 11.2 truncated both Boundary Ditch 11.1 and Enclosure 11.1. Although Enclosure 11.1 had become infilled by the time Enclosure 11.2 was cut, it generally respects the position of the earlier enclosure; Enclosure 11.1 may have survived as a hedge line.

Enclosure 11.3 and associated Pit Group 11.1 (Figure 11.5) are not thought to represent a dwelling, but an area defined for small scale agricultural activities. This enclosure may once have held an associated structure, although there is no evidence for this. Enclosure 11.3 may have occupied a strategic position at the junction of Enclosures 11.1, 11.2 and 11.4 (see Stratigraphic Sub-period 3). Two partial dog skeletons from Pit Group 11.2, located between the entrance of Enclosure 11.3 and the western entrance of Enclosure 11.2, would appear to be placed deposits. Ditch 11.1, a north to south ditch, extending from Enclosure 11.1 and a similarly aligned Trackway 11.1 nearby to the east, both seem likely to be in phase with Enclosure 11.2. Though the function of Ditch 11.1 is unclear, it is plausibly a partial restatement of the line of Boundary 11.1, following the disruption of the original line of this feature by the sub-divided Enclosure 11.2.

Enclosure 11.4 was a 70m square enclosure straddling the southern boundary of TEA 11 and the northern edge of TEA 12 (Enclosure 12.4). It truncated an east to west aligned ditch in TEA 12 thought to be in phase with Boundary 11.1 and Enclosure 11.1; ie Enclosure 11.4 is *later* than Enclosure 11.1. The evaluation by the Cambridge Archaeological Unit recovered second to fourth century pottery from this feature (Patten et al 2010). The layout of Enclosure 11.4 is in sympathy with the earlier enclosures on site. Its northeast corner aligns broadly with southwest corner of Enclosure 11.2 and the ditch terminus on its northern edge respects the edge of Enclosure 11.1, which, as noted, may have survived as a hedge-line.

In Stratigraphic Sub-period 3, post-holes belonging to two rectangular buildings (Building 11.1 and Building 11.2) were excavated in the southern part of TEA 11. The first of these, Building 11.1, truncated the C-shaped Enclosure 11.3 and Pit Group 11.1. It is not possible stratigraphically to ascertain the contemporaneity of these buildings with each other or with the square Enclosure 11.4. We should consider carefully whether these stratigraphically late buildings are, in fact, Saxon buildings with residual Roman artefacts. Rectangular post-built Saxon buildings of similar dimensions to Buildings 11.1 and 11.2 were recorded on TEA 12. A cluster of three large intercutting irregular pits (Pit Group 11.3) truncated the southeast corner of Enclosure 11.2. The function of these pits isn't obvious. They may have been extraction pits associated with the construction or occupation of Building 11.1 and Building 11.2 nearby.

Certain features could not safely be assigned to sub-periods. A series of seven kilns, likely to date from the second to third century AD, occur in three groups in TEA 11 (South). The kilns lie between 50m and 60m west of Enclosure 11.2. The kilns all appear to be of a similar type, consisting of a circular kiln chamber with a flue opening out to a roughly oval shaped rake-out pit. They each measured approximately 3m long by 1m wide. These kilns are likely to have only been used for a limited number

of firings and together represent small-scale and sporadic pottery making activity by farmers or perhaps the work of itinerant potters. The spacing and alignment of these kilns is striking in its organisation and they may have been aligned with or in respect to a feature or boundary no longer present. The kiln chambers are generally c 0.50m wide and 1.50m long, are clay lined and in some cases contain significant amounts of kiln architecture.

Three inter-cutting Roman inhumation burials, orientated north to south (inhumation burials 11.1 to 11.3) were excavated in the northwest corner of Enclosure 11.4. These burials likely represent a small family burial plot associated with one of the phases of settlement at the Roman farmstead. To the west of these burials, near the southwest limit of excavation, a group of six isolated and heavily truncated cremation burials (Cremation Burials 11.1 to 11.6) were excavated. These burials were thought to be Roman on site, but subsequent pottery analysis suggests a middle Bronze Age date (see above). During the evaluation an inhumation (Inhumation Burial 11.4) was recorded inside Enclosure 11.2 near its northwest corner (Patten et al 2010).

The pottery assessment identified pottery from throughout the Roman period, but with a concentration in the middle-late Roman period (150-300) when the pottery kilns were operating, and in the latest Roman period (4th century onwards).

STRATIGRAPHIC SUB-PERIOD 1

ENCLOSURE 11.1

Enclosure 11.1 was a 50m long by 30m wide sub-rectangular enclosure composed of north to south and east to west oriented ditches. The northern part of this enclosure was in TEA 11, the southern half extended under Brampton Road into TEA 12 (Enclosure 12.5). Enclosure 11.1 was truncated by the southeast corner of Enclosure 11.2 and by Building 11.1 and Building 11.2.

ROUNDHOUSE 11.1

Roundhouse 11.1, which was 9m long and 7m wide, was represented by a sub-circular eaves gulley 0.60m wide and 0.25m deep. A ditch line extending south from the western side of the eaves gulley suggests a partially enclosed yard or work area attached to the dwelling. Roman pottery was recovered from this feature. No domestic features were found associated with this roundhouse. This feature was truncated by Trackway 11.1.

BOUNDARY DITCH 11.1

Boundary 11.1 was a north to south oriented ditch originating at the northeast corner of Enclosure 11.1 into TEA 10. It was 1.8m wide and 0.40m deep. An east to west oriented branch of this boundary ditch ran westward from southwest corner of this enclosure in TEA 12. Boundary 11.1 was truncated by the Enclosure 11.2 and later by Enclosure 11.3. This boundary ditch may have been associated with a trackway running from the farmstead northwards.

STRATIGRAPHIC SUB-PERIOD 2

ENCLOSURE 11.2

Enclosure 11.2 is a sub-divided rectangular enclosure (sometimes termed 'ladder' enclosure) that utilised existing Boundary 11.1 as its eastern extent. As ladder form enclosures were typically built extending from trackways, we may conjecture that Boundary 11.1 marks the presence of a track. The elongated rectangular external ditch of the enclosure is c 2.8m wide and c 1m deep. It was subdivided by a series of ditches c 1.30m wide and c 0.50m deep. The largest of these sub-enclosures is the southernmost and contains a small C-shaped Enclosure 11.3 (Figure 11.5). Some of Enclosure 11.2's internal ditches have been maintained by re-cutting. The southwest corner of the Enclosure 11.2 is open. Other entrances are located on its east and west sides. Enclosure 11.2 truncated the northwest edge of Enclosure 11.1 and Boundary 11.1. There is no stratigraphic relationship with Enclosure 11.4 (detailed below).

ENCLOSURE 11.3, PIT GROUP 11.1 AND PIT GROUP 11.2

Enclosure 11.3 was a C-shaped enclosure located in the southern partition of Enclosure 11.2. Internally it was 6.9m long and 5.7m wide. The ditch, which could have functioned as an eaves gully for an associated shelter, was c 1.4m wide and 0.40m deep. The character of pits excavated in the interior (Pit Group 11.1) of this enclosure point to its function as a work area rather than a dwelling. The 4m wide east-facing entrance is opposite the eastern entrance of Enclosure 11.2, located 5m to the west. Enclosure 11.3 truncated the northern edge of Enclosure 11.1. It was truncated by post-holes belonging to Building 11.1.

Positioned at the back of Enclosure 11.3, Pit Group 11.1 consisted of a cluster of three intercutting pits, 3.3m long and 2.5m wide. Described by the excavators as 'fire-pits' these c 0.70m deep, charcoal-rich features contained an assemblage of pot, bone, metal small finds (unidentified), slag, quernstone and burnt stone.

Pit Group 11.2 occupied a similar stratigraphic position to Enclosure 11.3. It contained two articulated dog skeletons and an assortment of other animal bones, which appear to have been deliberately placed. The position of Pit Group 11.2 between the entrance to the putative working area (Enclosure 11.3) and the eastern entrance of Enclosure 11.2 may have been significant.

ENCLOSURE 11.4

Enclosure 11.4 was a 70m square enclosure straddling the southern boundary of TEA 11 and the northern edge of TEA 12. The ditch was c 2.5m wide and 0.8m deep. In terms of its position and orientation, Enclosure 11.4 largely respects the existing enclosures on site and probably represents the last expansion and re-organisation of the farmstead. Pottery from the second to fourth century was recovered from this feature during the evaluation (Pattern et al 2010).

DITCH 11.1

Ditch 11.1, which extends northwards for c 50m from the northeast corner of Enclosure 11.1, was 2.4m wide and 0.50m deep. The ditch was re-cut at least once. Ditch 11.1 is aligned with the eastern ditch of the ladder Enclosure 11.2 and may represent a reconfiguration of an earlier trackway running north to south thought to be associated with Boundary 11.1.

TRACKWAY 11.1

Two parallel, shallow, north to south oriented ditches located to the east of Ditch 11.1 form Trackway 11.1. Trackway 11.1 represents a further iteration of a route from this area of settlement northwards (ie adhering to Boundary 11.1).

STRATIGRAPHIC SUB-PERIOD 3

BUILDING 11.1 AND BUILDING 11.2

The remains of two similarly sized and oriented (long axis NNW to SSE) rectangular buildings were found in the southern part of TEA 11. We cannot be sure whether these structures were principally for agricultural use (eg barns for storage) or domestic activity.

Building 11.1 was located directly on top of Enclosure 11.3 truncating it and its associated internal features (Pit Group 11.1). This could be a co-incidence or a deliberate replacement of the putative workshop with another building. Building 11.1 was 8.5m long and 4.5m wide formed from c 15 post-holes that are generally about 0.60m wide and 0.25m deep. The long axis of this building was oriented NNW to SSE. Two large internal post-holes may have marked internal divisions or load bearing posts. One of these central post-holes [110104], which truncated the Enclosure 11.3, contained four copper alloy coins and some stamped Samian pottery. Some of the other post-holes contained Roman pottery and fragments of quernstone.

Building 11.2, located 15m west of Building 11.1, was slightly larger at 10m long and 4.8m wide. It was assumed to be broadly contemporaneous. A row of post-holes at the centre of the building appears to have divided the building into two roughly equal halves.

Buildings 11.1 and 11.2 resemble the (presumed) Saxon buildings found nearby on TEA 12. As stated above, we should therefore be alert to the possibility that these structures were in fact part of the Saxon occupation of this area. There is no stratigraphic reason why this could not be the case. The Roman pot contained within these features could easily be residual (ie derived from activities concentrated within Enclosure 11.3).

PIT GROUP 11.3

This cluster of three large intercutting and irregular pits was c 2.6m long, 2.1m wide, and c 1.2m deep. Pit Group 11.3 truncated the southeast corner of Enclosure 11.2. The function of these pits is unclear, but they may be some sort of extraction pits associated with the occupation of nearby Building 11.1 and Building 11.2. They contained Roman pottery and animal bone.

ROMAN SUB-PERIOD UNASSIGNED

INHUMATION BURIALS

Three intercutting Roman inhumation burials were excavated in the northwest corner of Enclosure 11.4, aligned north to south. Inhumation 11.1 (stratigraphically the latest) was badly truncated and appeared to be in a prone position. A copper alloy disc (probably a brooch) was recovered from between the knees of this burial. Inhumation 11.2 was buried in a supine position and contained a small pot or cup

next to the skull. Inhumation Burial 11.3. was in a supine position and contained coffin nails at the head and feet. A cup with a handle was located to the west of this individual's right shin.

Inhumation Burial 11.4 was recorded during the evaluation but did not survive to excavation. It was located inside the northwest corner of Enclosure 11.2.

CREMATION BURIALS

A group of six heavily truncated cremation burials (11.1 to 11.6) were found near the southwest limit of excavation at TEA 11. Some of the cremation burials in this group were truncated by the presumed medieval/post-medieval ditch (Ditch 11.6) running parallel to Brampton road. The cremation burials were between 0.2m and 0.45m in diameter. They varied in depth from 0.03 to 0.10m. Fragmentary remains of funerary urns were recovered in Cremation Burial 11.4 and Cremation Burial 11.5. The pottery assessment of these demonstrates that they were middle Bronze Age in date and, therefore, should be reassigned to a 'middle Bronze Age' phase.

POTTERY KILNS

Pottery kilns 1.2 and 1.2 were located 50m west of the northwest corner Enclosure 11.2. Unlike the other kilns in TEA 11 (South) they were oriented with their stoke-holes facing SSE. The kilns were set 1.5m apart from each other. Kilns 11.3 and 11.4 were located 15m to the southwest of Kilns 11.1 and 11.2. The kilns were 3m apart from each other. They had stoke-holes facing ENE. Both these kilns have post-holes at their eastern ends presumably the remains of structures associated with their use. Kiln 11.5 was situated 7m north of Kiln 11.6. Kiln 11.7 was situated 9m south of Kiln 11.6. These kilns were in exact alignment with Kilns 11.3 and 11.4. These kilns were similar in form to the others. Their stoke-holes faced ENE.

Roman (TEA 11 East)

Archaeological features in TEA 11 (East) represent activities associated with small scale, non-intensive Roman rural settlement and agriculture (Figure 11.6). In Sub-period 1, southeast to northwest oriented ditches mark the presence of Trackway 11.2.

In Stratigraphic Sub-period 2, overlying Trackway 11.2 are the truncated remains of a co-axial field system (Field System 11.1) comprising a series of east to west and north to south field boundary ditches (Ditch 11.2 to Ditch 11.8). Two of these ditches (Ditch 11.7 and Ditch 11.8) are truncated by Enclosure 11.5.

In Sub-period 3, a small rectangular enclosure (Enclosure 11.5) containing six post-holes along its western edge (Structural Feature 11.1), seems to have been the focus of activity. Four structural features (three four-post structures and a 12-post structure) were located nearby to the southwest. Four kilns likely associated with Enclosure 11.5 were also found nearby (Kiln 11.9 to Kiln 11.12). Nearby, two large waterhole features (Waterhole 11.1 and 11.2) presumably supplied water for people and stock. A truncated human inhumation burial (Inhumation Burial 11.5), which we might speculatively assign to this stratigraphic sub-period was excavated near to Kiln 11.9.

STRATIGRAPHIC SUB-PERIOD 1

TRACKWAY 11.2

Trackway 11.2 was formed from two parallel ditch lines that curved gently as they travelled northwest from the east boundary of TEA 11 towards TEA 10. The ditches were shallow, c 0.50m wide and set c 7m apart from each other. This trackway was truncated by Field System 11.1 (Ditch 11.2 to Ditch 11.8).

STRATIGRAPHIC SUB-PERIOD 2

FIELD SYSTEM 11.1

Overlying Trackway 11.2 stratigraphically are the truncated remains of co-axially organised Field System 11.1, comprised of a series of east to west and north to south field boundary ditches (Ditch 11.2 to Ditch 11.8). This field system was truncated by Enclosure 11.5.

STRATIGRAPHIC SUB-PERIOD 3

ENCLOSURE 11.5 AND STRUCTURAL FEATURE 11.1

Enclosure 11.5 was a 15m long and 10m wide rectilinear enclosure located in the central area of TEA 11 (East). The enclosure had entrances at its northern edge and southeast corner. Enclosure 11.5 is in alignment with Field System 11.1 and is probably roughly contemporary.

Structural Feature 11.1 consisted of a line of mostly shallow post-holes c 0.20m in diameter aligned with the western ditch of Enclosure 11.5. This structure may have been used for some sort of agricultural processing – eg as a hayrack. Alternatively, the post-holes may have been part of a larger structure defined by Enclosure 11.5, with the remaining structural elements either truncated or comprising mass-walled (eg turf) elements, which would leave no archaeological trace (cf. Smith et al 2016, 51).

STRUCTURAL FEATURES

Structural Features 11.2 to 11.5 were located between 5m and 30m to the southwest of Enclosure 11.5. Three of these features (Structural Feature 11.2 to 11.5) are typical four-post structures. Feature 11.5 is perhaps more interesting in that it was comprised of twelve posts. This could represent a sequence of three four-post structures or perhaps a large L-shaped structure comprised of twelve posts. The function of all these post-built structural features is assumed to relate to agricultural processing or storage, although other functions need not be excluded.

WATERHOLES

Waterholes 11.1 and 11.2 were substantial sub-circular features located next to each other, c 50m to the southwest of Enclosure 11.5. Waterhole 11.1 measured 8m by 10m; Waterhole 11.2 was larger, measuring 12m by 11m. These features were both c 1.5m deep. Though these features were stratigraphically isolated, it seems reasonable at this stage to associate them with the Roman activity at Enclosure 11.5.

POTTERY KILNS

Five kilns were excavated in TEA 11 (East) (Kilns 11.8 to 11.12). Kiln 11.9 and Kiln 11.10 were located on the western side of Enclosure 11.5; Kiln 11.11 and Kiln 11.12 were located on the eastern side. Kiln 11.8 is located much further north on the northern side of Track 11.2. Kilns 11.10 and 11.8 were aligned with stoke-holes facing east, Kilns 11.9, 11.11 and 11.12 each had their stoke-holes facing southeast.

INHUMATION BURIAL

An isolated, truncated, human burial (Inhumation Burial 11.5) was excavated near Kiln 11.9. The burial cut was 1.84m long and 0.80m wide. The skeleton was supine but with legs flexed to the west. Pottery fragments recovered from near the remains of the skull may have been the remains of a grave offering or part of the funerary activity.

Saxon

Seven sunken featured buildings (SFBs) were excavated at TEA 11 (Figure 11.7). These features were distributed c 50 to 70m apart across the northwest area of the site. Except for SFB 11.7, these features were located to the west of the Roman north to south oriented Boundary 11.1. Some of these buildings appear to have associated features nearby (eg storage pits). Finds recovered from these buildings included pottery, fragments of quernstone, tweezers, loom weights, bone pins, and a copper ring, dated to the 6th-7th century and with a focus on cloth production. Some of the TEA 11 SFBs contained remains of the building's superstructure preserved as post-holes.

SUNKEN FEATURED BUILDINGS AND PIT GROUPS

SFB 11.1 was characterised by a flat-based sub-rectangular pit measuring 4.6m long, 4m wide and 0.48m deep. Ten post-holes which must have supported the buildings superstructure were excavated within the SFB. Several bone pins were recovered from this feature.

SFB 11.2 was slightly longer and narrower than SFB11.1. It was 4.8m long, 3m wide and 0.2m deep. Two post-holes associated with this building ([1102811] and [110287]) were set 5m apart in the southwest half of the SFB.

SFB 11.3. was the largest of the SFBs on TEA 11. It was 5.47m long, 3.6m wide and 0.21m deep. Four post-holes, located at the margins of the building, were excavated. Pit Group 11.4, a group of four pits ([110643], [110645], [110713]) was situated between 3m and 15m to the northwest of this SFB. One of these pits [110723], located nearer to the SFB than the others (3m), was circular and measured 1.55m in diameter and 0.85m in depth. It was filled with domestic material including horse bone, pottery and much charcoal in the lower fills. Three other pits ([110643], [110645], [110713]) formed a cluster c 12m from the SFB, one of which contained similar pottery to that recovered from [110723].

SFB 11.4 was 5.53m long, 4.62m wide and 0.29m deep. Two post-holes were positioned along its eastern and western edges.

SFB 11.5 was 4.5m long, 2.8m wide and 0.36m deep. It contained a line of three post-holes ([110059], [110057] [110055]) situated along its central long axis. A large, shallow and irregular pit (11.5), 2m wide and 0.20m deep, was located 1.5m to the west of SFB 11.5. Though this pit contained pottery described as Iron Age, it seems reasonable at this stage to assume this feature is, in fact, Saxon (ie the pottery either being misidentified or residual). A decorated spindle whorl (F110029) was found in this feature.

SFB 11.6 was 5m long, 3m wide, and 0.15m deep. It contained two post-holes situated at either end of its length ([110052], [110062]). Pit Group 11.6 comprised six pits associated with SFB 11.6. Two large and approximately oval pits ([110025] and [110035]) were located immediately to the west of SFB 11.6. These

pits contained large quantities of pottery and bone. Pit [110025] was 3.4m long, 2.5m wide and 1.18m deep. Pit [110035] was smaller, being 1.9m long, 1.5m wide and 1.2m deep. Four other pits were located to the south and southeast of SFB 11.6. These features were sub-rounded and varied in diameter between 1.5 and 2m. These pits were relatively deep (c 1m). Some of these pits may have been storage pits subsequently infilled with domestic refuse or they might have provided material for the construction of the SFB. Other pits (eg 111126) contained Saxon pottery, a lot of charcoal and fire-cracked rocks and may have primarily been used for cooking or industrial processing (eg heating water with hot stones).

SFB11.7 truncated the north to south Roman Boundary 11.1. It was 5m long, 4m wide and c 14m deep. There were no pits or post-holes associated with this SFB.

Medieval/Post Medieval

The medieval and post-medieval archaeology comprised a ridge and furrow system, a truncated field system that is probably post-medieval (though containing residual Roman pot) and a medieval or post-medieval agricultural field boundary which runs parallel with Brampton road (Figure 11.7).

FURROWS

Medieval/post-medieval furrows (11.1) were present across the site spaced at intervals of approximately 10m. They were c 2m wide and oriented ENE to WSW. The furrows were straight and generally clearly defined, apart from in the southwest corner of the site where they appeared wider and more poorly defined.

FIELD SYSTEM

Ditch 11.9 and 11.10 were components of a truncated field or drainage system (Field System 11.2). Stratigraphically these features appear to have cut Ditch 11.7 (part of the Roman field system described above). The stratigraphic relationship of this field system and the medieval furrows was not established on site. This co-axial field system is composed of NW-SE and SW-NE oriented ditch elements. Though this feature contained concentrations of Roman pottery, particularly towards Enclosure 11.5, this material is likely to be residual. The orientation of these ditches aligns with the post-medieval/modern field divisions shown on the 1888 Ordnance Survey County Map Huntingdonshire 1:2,500.

DITCH 11.12

Ditch 11.12 was a 0.70m wide, 0.25m deep ditch running parallel to Brampton Road. It appears to have been heavily truncated and only sections of this ditch remain. A similar ditch line is to be found on the opposite side of Brampton Road at TEA 12. Fragments of brown bottle glass recovered from this feature indicate that Ditch 11.12 is a post-medieval or modern field boundary and/or drainage ditch.

Finds and environmental summary

Tables 11.1 – 11.3 provides a quantification of the finds, bone, and environmental samples from TEA 11.

The earliest finds from TEA 11 were a collection of middle Bronze Age pottery. This included four vessels with the cremations in the southern part of the site, and three small assemblages from pits across the

site. A small collection of worked flint (117 pieces) also demonstrates that there was earlier prehistoric activity here.

The majority of the pottery from TEA 11 was Roman in date. The pottery assemblage covered the entire Roman period, but with a concentration in the middle-late Roman period (150-300) when the pottery kilns were operating, and in the latest Roman period (4th century onwards). The assemblage mainly comprised local products (Nene Valley and Horningsea), with fewer regional and continental imports. A complete Nene Valley Parchment Ware flagon was also recovered.

The products from the pottery kilns were mainly coarse sandy grey-wares in lid-seated and necked jar forms, dating from the second quarter of the 2nd century into the early 3rd century. There were also some less frequent forms (triangular-rim bowls and plain-rim dishes), evidence for decoration (burnishing, incisions, and rustication), and wasters (with firing faults and poorly-finished rims and bases).

Other Roman finds included 17 coins (starting from the 1st century, unusually early in comparison with other coins from across the scheme); brooch fragments; a bracket; and pieces of roof tile, brick, and box-flue tile.

Early - middle Saxon pottery (6th - 7th century) was also collected from the site, including two 6th century stamped sherds. Other Saxon finds included items associated with cloth production (loom weights, spindle whorl, bone thread pickers) dated to the 6th - 9th centuries.

The plant remains recovered included hulled barley and spelt wheat (particularly in the Roman features). Higher quantities of chaff, particularly glume bases, were identified in these samples than across most of the A14 scheme, indicating that there may have been crop-processing taking place here.

The animal bone assemblage was focused on cattle, then sheep, and then horse and pig. Higher quantities of cattle and sheep bone were identified in the Saxon features than in the Roman features.

Table 11.1 Quantification of finds from TEA 11

Type	Count	Weight (g)	Date/type
Pottery	428	1,509	Early Prehistoric
	36	378	Iron Age
	10,725	13,217	Roman
	563	13,439	Post-Roman
Coins	18		
Small Finds	104		
Lithics	117 (worked)		
	534 (burnt unworked)		
Stone	47		
Glass	2		
Clay Tobacco Pipe	1		
Building Materials	132	80,639	Roman

Metalworking Residues	62	2,654	
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Table 11.2 Quantification of bone from TEA 11

Type	Count	Weight	Date/type	% of bone assessed
Cremations	4			
Inhumations	5			
Disarticulated bone contexts	0			
Animal Bone	1,500	17,500		40

Table 11.3 Quantification of environmental samples from TEA 11

Type	Count	Date/type
Bulk Environmental Samples	260	
Monoliths	0	
Kubiena tins	3	
Waterlogged	0	

Provisional interpretation and potential

The TEA 11 excavation, when combined with other archaeological data from along the A14 scheme, presents a possibly unparalleled opportunity to explore and develop our current understanding of Roman and Saxon rural settlement distribution, density and dynamics (Medlycott 2011; Smith et al 2016; Allen et al 2017).

During the Roman period the southern part of the site was occupied by a small complex farmstead (cf Smith 2016, 28), which continued over into TEA 12, comprising a series of intercutting, morphologically distinct, enclosures. This was part of a larger arrangement of rural settlement in this area. Another area of Roman activity, c 150m to the northeast, comprised a small rectangular enclosure/structure, and a number of other post-hole structures, possibly connected with grain storage, along with elements of a field system. It remains uncertain if this was a small unenclosed settlement, or a satellite agricultural focus of the southern settlement. It should be noted that higher quantities of chaff were identified in the environmental samples from TEA 11 and TEA 12 than from the rest of the A14, potentially suggesting that this Roman settlement was used for crop-processing.

Twelve of the c 40 Roman kilns found on the A11 scheme were located on TEA 11, seven to the west of the southern settlement and five in the area of the north-eastern Roman activity. As an aspect of this site's economy, the Roman pottery kilns have significant research potential. These kilns are likely to date from the second to third century AD (Anderson, K. pers. com 2018). The kilns are remarkably consistent in form; kilns described by Evans at the Hutchinson Site in Cambridge are much more varied (Evans et al 2008). An analysis of the kilns together with the Roman pottery assemblage and its distribution has the potential to confirm whether this was both a site of production and consumption. Study of these kilns and their assemblages may further our understanding of important aspects of rural craft production

(eg seasonality and craft specialisation), including the status of the pottery makers themselves (eg farmers or itinerant potters) (Kramer 1985).

The Saxon archaeology on the site comprised seven well-preserved sunken-featured buildings with associated features, which presents an opportunity to explore continuities and changes in land utilization from the Roman into the Saxon period. Analysis of the morphological variability, associated features and finds assemblages of the TEA 11 SFBs will enhance our understanding of the development of Saxon settlement patterns and social organisation. Specifically, analysis of TEA 11 data offer the clear potential to enhance our understanding of SFBs as a feature type, both in terms of their construction and intended use (eg as living-houses, weaving houses, apiaries and so on; see Rahtz 1976).

Recommendations

Approximately 50% of contexts have been preliminarily grouped to produce this report. Errors and inconsistencies evident in the survey plans need to be resolved. Full grouping and assignment to period of all contexts is required following results of specialist pottery analysis; this may require some revision of the stratigraphic sequence discussed here. Radiocarbon dating is required to for analysis of architecture (dating of apparently late Roman buildings), dating of burials, identification of possible 5th century activity, and dating of early / middle Saxon dispersed settlement.

TEA 12

Jon House (PCA)

TEA 12 was located at the western end of the A14 road scheme (Figure 12.1) immediately to the west of the A1 and south-west of Brampton (NGR: TL 19681 69618). It lay to the south of TEA 11, with a Roman settlement straddling the two excavated areas. The underlying geology of the site is Oxford Clay Formation, a mudstone. This is overlain by Quaternary sand and gravel river terrace deposits. The gravels contained occasional larger stones, or erratics.

The site is situated on the edge of a wide flood plain. The Great Ouse River is located approximately 2.2km to the east and a small water course runs through the site flowing west to east. The ground is generally flat to the east towards the course of the river and gently rises to the west. The ground to the west of the site is characterised by low undulating slopes, with a pronounced dip in the area of the post-medieval quarrying. The local land use is generally arable farming. Modern quarrying activity has taken place in the flood plain to the east, creating artificial lakes and bodies of water close to the river.

Archaeological background and methodology

Aerial photographic transcripts and the geophysical survey identified the remains of a circular ring ditch in the northern part of the TEA 12, alongside potential archaeological deposits across the site (Figure 12.2). Iron Age and Saxon remains were identified by Cambridge Archaeological Unit (Hall 2009; Area B1). The circular ring ditch was not targeted in the trenching evaluation. The TEA 12 area was stripped and excavated in several separate phases of work from November 2016 to June 2018. The excavation covered 7.79ha.

Summary of results

Neolithic/Bronze Age

The Neolithic/early Bronze Age was characterised by the ring-ditch monument (Ditch 12.1), and Cremation Cemetery 12.1.

Ditch 12.1 was a large complete circle with no breaks; the ring ditch. It was located towards the north-eastern corner of TEA 12 and was identified in the geophysical survey. No positive features or layers were found associated with the monument. The outer diameter measured 45.5m and the inner diameter 37.2m. The ditch varied between 3.50m and 5.20m in width and between 1.20m and 1.40m in depth. Its sides were steep, and it had an irregular base that tended to vary between concave and almost 'V'-shape. The ditch had a pronounced step on the outside edge which was more evident on the south than on the north side, but not consistent within the ditch. During field investigation, the focus was on looking for entrances, working on the theory that this monument was a 'henge'. This is now under question, and it is possible that the monument was actually a barrow.

An initial investigation slot was machine excavated into the northeast part of the ditch, subsequently a series of 21 slots set placed 3m apart and measuring 3m across were hand excavated. After this the uppermost fills of the remaining bulks were machine excavated and the remaining lower fills were

excavated by hand to the base. This allowed the lower fills to be fully hand excavated. At all times including during machine excavation the ditch fill sequence and later features were removed in stratigraphic order. The ditch demonstrated a consistent process of infilling; in localised areas isolated fills were often identified associated with evidence for burning. However, the fills were generally consistent throughout the monument. Two main distinctions were observed within the fills.

The earliest distinct group of fills were mainly gravely in composition and poorly sorted. The fills were exclusively located on the feature edges and on the base. The earliest gravel fills contained few finds and were interpreted at least for the most part as erosion of the cut. It is possible some cleaning or maintenance may have occurred during this period of infilling as some of the lower fills showed signs of truncation though this was not clear or definable.

The second distinct group of fills within the ditch were dominated by silts with a higher frequency of finds. These fills formed the bulk of the infilling and represent a prolonged episode of silting. Finds material appeared to suggest this occurred over the course of the early Bronze Age. It was within these silt fills that two burials were interned. One was an adult male (Inhumation Burial 12.2), positioned within an apparently undersized grave pit on the south-east side of the monument (see Figure 12.12). The grave was cut from within the fill sequence, through the lower fills of the ditch and into the natural gravels. The adult burial was subject to preliminary radiocarbon dating and was given a date range of 1607-1415 cal BC (95.4% probability; SUERC-75948; middle Bronze Age). The other burial was that of an infant (Inhumation Burial 12.1), located on the west side of the monument and cut from a similar stratigraphic level or even the same level as the adult. Unlike the adult the exact height of the infant burial cut was not confirmed and can only be postulated, although the size of the cut and the depth within the ditch would suggest it was not cut from significantly higher. A copper alloy dagger (SF 12112) was found on the eastern side of the monument (Fill 122200). This object was found high in the fill sequence, potentially at a similar physical and stratigraphic position as the cut for the Inhumation Burial 12.2.

The dating for the foundation of the monument is not currently established. A sample of charcoal from the basal fill of the monument was radiocarbon dated to 1955-1774 cal BC (95.4% probability; SUERC-85541; early Bronze Age). It is clear that it was still a significant feature in the landscape when the burials were inserted in its partially filled ditch, in the middle Bronze Age. It is possible that maintenance of the monument was taking place during the early Bronze Age, although no definitive evidence was seen for this in the excavation.

There was no evidence for a central burial within the ditch circle, or for any associated features. A number of sporadic, questionable features were excavated, but aside from a possible cremation burial on the north-eastern side of the monument no conclusive features were present. Interestingly later Anglo-Saxon features close to and around the monument appeared to respect the ditch circle, with little intrusion inside the monument, suggesting that the monument was still visible at this time.

A historic badger set was located inside the south-western quarter of the monument, it extended over a large area of the southwest corner. The feature was sampled with test pits, using a chequer board

method; once the feature was identified as animal burrowing the method was abandoned. The infilling soils within the burrows did contain artefacts. Worked flints and animal bones were recovered, although the animal bones are likely to be contemporary with the burrows.

Cremation cemetery 12.1 was identified in the north-western corner of the excavation area; some of the cremation burials were within pots. Preliminary dating of the pots has suggested an early Bronze Age date (pers comm, S. Percival). In total six cremation burials were excavated. A cluster of other features in the area possibly included further burials, having been truncated to the extent that all evidence has been removed. Many of the non-cremation features were suggested to be post-holes, possibly the partial remains of raised pyre structures. It is likely the cemetery post-dates the ring ditch monument (Ditch 12.1), with the location chosen in view of the monument. The cremation burials were also sited on a depression in the ground or a wide shallow pit feature (121657). Three of the cremation burials cut into the fill of the feature, so the feature if visible must of at least been partially filled. The feature was fully excavated and did not seal any features or further cremation burials. An initial interpretation onsite considered the feature to be a barrow, the excavation methodology was led by that thesis. The amorphous shape of the feature might suggest a natural derivation, a hollow or dip in the landscape. This in itself may have created a focal point or a preference for the location for the cemetery. Further analysis may be able to establish the provenance of the feature and the relationship with the cemetery.

An undated segmented ditch to the west of the Ditch 12.1 is probably prehistoric in date. Its highly leached fills and form of the feature was consistent with early remains and was dissimilar to the features of other periods represented on the site. It is possible the feature may even be contemporary with the monument; it is considered unlikely to be earlier, but dating of the ditch should be attempted to establish contemporality with Ditch 12.1.

IRON AGE

Two foci of Iron Age activity can be seen in the excavation area (Figure 12.4). A settlement defined by enclosures (principally Enclosures 12.1 and 12.2) was located to the south, associated with four-post structures and waterholes. Enclosure 12.2 was not fully seen within the trench and has been partly projected; discreet features were used to define the extent of the enclosed area. Previous investigations, including geophysics and trial trenching, have shown that the settlement extended beyond the limits of the excavation area. The evaluation (Patton et al 2009) suggested the enclosures were of middle Iron Age date.

Located c 170m north of this settlement was Enclosure 12.3, possibly contemporary in date. This was a small enclosure aligned with Boundary 12.4. It was rectangular and had a break or entrance in the southern corner and may represent a pen for livestock. Elements of another, larger enclosure were seen to the south-west, while further south, Boundary ditch 12.2 may have been part of a contemporary field system, though further dating of these features is necessary.

The overall arrangement of enclosures, structural remains and finds assemblage all indicate a fairly typical Iron Age farmstead with outlying fields and enclosures.

ROMAN

The focus of Roman archaeological activity was located at the northern end of the site and represents the southern part of the complex farmstead revealed principally in TEA 11 (Figure 12.5) (see TEA 11 for a more detailed account of this settlement). Enclosures 12.5 and 12.4 extend to the north as Enclosures 11.1 and 11.4 respectively. The Roman remains from TEA 12 were mostly confined within these enclosures, and include a corn-drying oven, though some of the waterholes seen across the rest of the site may have been established in the Roman period. The waterholes were spread out across the excavation area and were probably for livestock. The majority of the site is likely to represent utilised farmland leaving few archaeological remains. The Roman pottery assemblage from here covered the entire Roman period, but with a peak in the later Roman period (4th century onwards).

The intrinsically significant find of a Medusa jet pendant (SF 12006) together with an antler amulet (SF 12005) were found in the backfill of the later post-medieval quarrying in TEA 12. These finds probably derived from a disturbed burial or possibly a votive offering.

SAXON

Saxon occupation can be seen across almost the full extent of TEA 12, composed of small, dispersed clusters of post-built buildings and associated structures (Figures 12.6-8). Pottery recovered from the evaluation, including a comparatively large number of sherds from a sunken-featured building (SFB), suggest an early Saxon date for the occupation (Hall 2009).

A total of 14 well defined, presumably timber framed buildings were identified on TEA 12 (Figure 12.8). These buildings were formed by rectilinear-shaped arrangements of evenly spaced post-holes. The post-holes were often shallow and many others are likely to have been truncated. More buildings were probably present on site, although clear floor plans for these structures were not discernible. Posthole clusters may represent partially surviving buildings or other associated structures, such as small fence lines or subsidiary smaller structures, such as animal pens or sheds. In the absence of a clearly defined single structure these features are grouped as 'Structural Features'.

Ten sunken-featured buildings (SFB 12.1 to 12.10) were present, often associated with post-hole structures nearby or within an area of post-holes (Figure 12.6). The configuration of structural elements and SFBs appear to form small groups of buildings and post-built structures. Good examples of multi-building 'groups' were seen centrally within the site (ie Buildings 12.8 to Building 12.13; SFBs 12.3-12.5). Two waterholes (Waterhole 12.7 and Waterhole 12.8) are likely to be associated with these features.

Building 12.12 is a good example of a single 'domestic group'. Here a rectangular post-built building is associated with an SFB and a post-built Structural Feature. The layout and scale of these features suggest occupation by a family, or small extended family group. The structures themselves, though not rigidly aligned with each other, would have served to enclose a small area.

POST-MEDIEVAL

A large area of quarried ground was identified within the middle of the excavation area (Figure 12.9). The extensive quarrying area was formed from many small intercutting gravel extraction pits. A sample of these features was investigated. The quarrying was likely the result of historic repairs to the A1 (Great

North Road); occasional repairs to the road accounting for the apparently intermittent nature of the extraction activity.

Gravel extraction appears to have started near the road and subsequently fanned out eastward as activity progressed; the earliest dated pottery wares, including medieval sherds, were seen in the quarrying closer to the road. The fills were dominated with silts, with a low frequency of well rolled finds. The Roman Medusa pendant (SF 12006) was recovered from the quarry backfill – this quarrying is thought to have gone through Saxon features, and the Medusa pendant is therefore thought to have originally been from a Saxon context.

UNDATED FEATURES

A significant proportion of features on TEA 12 are yet to be dated, including a truncated and poorly defined coaxial field system formed by Boundary Ditches, 12.1, 12.3, 12.4, 12.5 and 12.6, which may be Bronze Age or Iron Age (Figure 12.10). An area of features, mostly consisting of post-holes, has remained largely undated at this time, the area is to the south of the extensive post-medieval quarrying and adjacent to Boundary Ditch 12.3. Dating of the features in the area is problematic due to the proximity of both Saxon and Iron Age features; finds material from both periods was noted from contexts in the same area, Roman features were also identified in the area although the finds material was more distinct for initial assessment.

Finds and environmental summary

Tables 12.1 – 12.3 provides a quantification of the finds, bone, and environmental samples from TEA 12.

The early prehistoric pottery assemblage included five sherds of early Neolithic flint-tempered ware; three sherds of late Neolithic/early Bronze Age beaker pottery; and a far larger collection of early Bronze Age pottery. This included five collared urns from Cremation Cemetery 12.1, collared urn sherds from well [121686], and possible displaced funerary vessels from the prehistoric Ring Ditch 12.1. Other prehistoric finds included 11 amber beads from one of the cremations, a jet stud, and a knife. The worked flint assemblage was in good condition and demonstrated activity from the later Mesolithic period (microliths, bladelets) into the later Neolithic/early Bronze Age (triangular arrowhead, plano-convex knives).

The Iron Age pottery assemblage included a few sherds of early Iron Age wares, but was mainly middle – late Iron Age in date with a collection of plain and scored jars in shell-tempered and sandy fabrics. There was only one Iron Age registered find, a loomweight.

The Roman pottery assemblage covered the entire Roman period, with a peak in the later Roman period (4th century onwards). This assemblage mainly comprised local wares (Nene Valley, etc). The registered Roman finds were all made of black 'jet' stone, and included a bracelet, finger ring, and a Medusa amulet (typically found on urban sites, and, interestingly, thought to have come from a Saxon context, truncated by post-medieval quarrying, here). There was a large collection of building material, including roof tile, brick, box-flue, and a possible voussoir tile from a heated vaulted room.

The Saxon pottery included hand-built wares of early - middle Saxon date, and some middle Saxon Ipswich and Maxey Ware sherds. There was also a sherd of North French Black Ware from the rim of a pitcher – this is a rare type of pottery and may suggest slightly higher status. The registered Saxon finds included both dress accessories (brooches, pins, bead, chatelaine) and weaving tools (loom weights, spindle whorls).

The plant remains recovered from all features included a range of cereals (hulled barley and spelt wheat), cereal chaff (mainly glume wheat bases), and arable weeds. The presence of cereal chaff and arable weeds indicates that crop-processing was probably taking place here.

The animal bone assemblage was focused on cattle, sheep and goat, with some pig, horse, dog, poultry, and an eel vertebra. Two fossils, a sharks' tooth and a belemnite, were also identified. Little bone modification was identified in the Roman assemblage, with more butchery evident in the Saxon assemblage.

Table 12.1 Quantification of finds from TEA 12

Type	Count	Weight (g)	Date/type
Pottery	289	6,355	Early Prehistoric
	743	4,919	Iron Age
	1,474	16,390	Roman
	415	6,657	Post-Roman
Coins	13		
Small Finds	186		
Lithics	328 (worked)		
	127 (burnt unworked)		
Stone	58		
Glass	1		
Clay Tobacco Pipe	4		
Building Materials	45	4,743	Roman
Metalworking Residues	281	9,565	

Table 12.2 Quantification of bone from TEA 12

Type	Count	Weight	Date/type	% of bone assessed
Cremations	10			
Inhumations	4			
Disarticulated bone contexts	0			
Animal Bone	5,159	29,920		47

Table 12.3 Quantification of environmental samples from TEA 12

Type	Count	Date/type
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Bulk Environmental Samples	788	
Monoliths	0	
Kubiena tins	3	
Waterlogged	7	

Provisional interpretation and potential

Neolithic and early Bronze Age

The TEA 12 excavations presented an excellent and rare opportunity to fully excavate and record a large prehistoric ring-ditch monument (Ditch 12.1) (Figure 12.11). The issue of terminology for these types of monument is recognised by Deegan, with terms being applied ‘in a rather loose and inconsistent manner’ (Deegan 2014, 52). In the case of the TEA 12 monument, evidence for an outer bank was fairly conclusive and there was little evidence for an inner bank or mound. However, for the moment, the interpretation of the ring-ditch monument as a ‘henge’ remains problematic, in particular the lack of a clear evidence for an entrance way. It is possible, instead, that it may have been a barrow. Establishing a sequence of dating through C14 and finds spot dating will greatly inform the interpretive aspects of the monument.

Ring-ditch monuments are known in the immediate area, as seen at Buckden (Ingham and Oetgen, 2016) and TEA2 to the north of this site. A Bronze Age Barrow was located to the east of the site at TEA 16. Late Neolithic to early Bronze Age monument complexes are known both at Brampton and Buckeden-Diddington (Malim 2000). A monument complex can also be seen further to the east at Godmanchester (Lyons In Prep). Further south, but within a similar landscape setting within the Great Ouse valley, prehistoric landscapes can be seen at Eynesbury (Ellis 2004) and at the Biddenham Loop (Luke, 2016). At Eynesbury, Saxon settlement and habitation are also in evidence.

A parallel for the re-use of the monument for an adult burial (Inhumation Burial 12.2; Figure 12.12) can be seen at the Bronze Age barrow at Fordam, Cambs, where a burial within an undersized grave pit was present in the barrow ditch (Gilmour 2015). However, in the case of Fordham the burial was said to have been cut close to the base, at a time soon after the barrow’s construction. The Fordam burial was dated to between 1666-1509calBC (ibid).

Much study has already been dedicated to Neolithic and early Bronze Age monuments, not least within the Great Ouse valley. Monuments or monument complexes occur at regular intervals along the course of the Great Ouse (Malim, 2000; and shown on the HER). The ring-ditch monument (Ditch 12.1) may form part of this system. The number and concentration of monuments within this landscape is high, perhaps relating to the confluence of important routes of travel. TEA 12 is close to the Great Ouse River and potentially major ancient land routes both north to south and east to west. Detailed analysis of the ring-ditch monument at TEA 12, together with data from other TEAs on the scheme, will contribute to our already rich understanding of the prehistoric settlement and landscape of the Great Ouse Valley.

Iron Age

The Iron Age evidence from TEA 12, when combined with data from other sites nearby, reveal an intensively occupied and utilised landscape at this time. Preliminary dating suggests the Iron Age

occupation to date from the middle to late Iron Age. The archaeological remains are characterised by systems of enclosures formed by ditches. The enclosures represent elements of farmsteads employing a mixed economy of arable and pastoral agriculture.

As with much of the archaeology on the A14 scheme, and this may be particularly true of the Iron Age, the most positive research outcomes will arise through looking at archaeological sites (where possible) in their entirety within their settlement and geographic contexts.

Roman

The concentration of Roman features to the north of TEA 12 was clearly southern element of the complex farmstead revealed in TEA 11. The remaining landscape within TEA 12 was probably utilised for pasture and arable cultivation. This is one of a growing number of agricultural establishments in proximity to the Roman nucleated 'small town' of Godmanchester (*Durovigutum*), and the relationships between these settlements is key to understanding wider economic and social developments.

Comparative material for excavation of large-scale Roman rural landscapes is moderately abundant in other parts of Cambridgeshire, particularly in the Cambridge environs (eg at TEA 38, Northstowe, North-West Cambridge and the extensive excavations in Trumpington). Examples are also known in the Great Ouse Valley with archaeological investigations around St Neots at Loves Farm (Hinman and Zant 2018), and Wintringham park (Phillips and Hinman 2009) (cf. Smith et al 2016, 192-206).

Saxon

The Saxon settlement at TEA 12 was characterised by small clusters of post-built houses and associated structures, including SFB.s representing small 'domestic units'. A standout and almost curious absence is the paucity of funerary features; this is contrary for the period, with burials often dominating the surviving archaeological remains.

Saxon occupation is usually less visible in the archaeological record than other periods due to the paucity and dispersed nature of features associated with their settlements. Previous excavations have shed light on Saxon settlement development, for example at the various excavations at Stratton, Bedfordshire (McOmish et al 2009), or Cottenham, Cambs (Mortimer 2000), as well as sites closer to the A14 (e.g. Buckden, Little Paxton). Larger excavations such as Mucking, Essex (Hamerow 1993), Flixston, Suffolk (Boulter et al 2012) and West Stow (West 1985), will provide good material for comparison. However, the scale of the A14 scheme excavations at TEA 12 and other important sites (particularly TEA 7C) allows an excellent opportunity to look at Saxon settlement data (both spatial and temporal) on a significant scale.

Summary

The excavations at TEA 12 can provide a significant contribution to research in the East of England and potentially on a national level, especially when considered alongside the excavations within the A14 scheme as a whole. Three important post-excavation aims for TEA 12 are as follows:

1. Establish a date for initial construction of the Ring Ditch Monument (Ditch 1) and a sequence of dating for the use and infilling of the monument.
2. Apply dating where possible to all features, combining stratigraphic relationships, character and morphological aspects, with artefact and scientific dating.
3. Assign all features to groups and phase where possible, establish clear dating for waterhole features and larger pits within the fills sequence.

Recommendations

A large proportion of contexts have been preliminarily grouped to produce this report. Further work is needed to refine feature interpretations and dating before this information can be added to the MHI Oracle database. Errors and inconsistencies evident in the survey plans need to be resolved. Full grouping and assignment to period of all contexts is required following results of specialist pottery analysis; this may require some revision of the stratigraphic sequence discussed here. Radiocarbon dating is required to help determine the function and significance of the ring ditch monument, the relationship between Bronze Age cremation cemeteries and earlier and contemporary monuments, and the chronological and spatial relationship between inhumations and cremation burials. Further radiocarbon dating would also aid dating of the early / middle Saxon dispersed settlement.

TEA 13

Sam Dixon

TEA 13 is an archaeological area on the A14 road scheme located in the northern part of Borrow Pit 2 within Section 2, to the south of TEA 10B East and east of TEA 12 (Figure 13.1-2). It lay to the east of the A1 and south of Brampton (NGR: TL 2025 6985). The excavation area covered 2.2ha. The underlying geology of the site was Oxford Clay Formation overlain by sand and gravel river terrace deposits.

Archaeological background

The geophysical survey of the area identified a series of enclosures and roundhouses in the north-eastern part of Borrow Pit 2 (Stratascan 2016). The trenching evaluation (MHI 2016; S2-006) identified late Iron Age activity in one trench towards the south-western corner of the stripped site – this comprised two curvilinear ditches, a post-hole and a large quarry pit. Other trenches in the area were quiet.

Methodology

The targeted excavation area was designed to cover the north-eastern corner of the borrow pit, based on the results from the geophysical survey. However this design was not communicated to the construction team, and so parts of the targeted excavation area (to the east, south, and west) had already been impacted on by construction before the archaeological work took place. A small area (0.6ha) to the west was excavated in March 2017. A larger area surrounding this had already been impacted by construction, but two ditches were observed and recorded. The remaining area of TEA 13 (1.6ha) was stripped in June 2017, and hand excavation took place in June – August 2017 (MHI 2017) (Figures 13.3-4).

Summary of results

The excavation identified four main phases of activity that included a prehistoric pit-alignment, a middle Iron Age settlement including three Iron Age roundhouses and associated work areas, a series of sub-rectangular late Iron Age enclosures and a later Iron Age sub-divided enclosure with a parallel outer ditch (Figure 13.5). This was of a different character from the Iron Age settlements on the western side of the A1 (TEAs 7-10), and more similar to that observed in TEA 5.

Prehistoric pit alignments

A prehistoric pit alignment (13.1) crossed the excavation area on a NW–SE slightly curving alignment. It was shown on the geophysics as continuing for 400m. The alignment comprised 50 circular/sub-circular pits, measuring between 0.5 and 2m in diameter and 0.2–0.6m deep. They generally had moderate to steep sides and a concave base and were spaced approximately 2.5–3m apart. At the eastern end of the alignment there were a double row of pits, spaced c 4.5m apart.

The infilling of pits occurred naturally over time and their fills generally consisted of a light brown-grey silty clay devoid of charcoal or cultural material. There was, however, some artefactual evidence recovered from the upper fills. Noteworthy small finds included a complete bone die/gaming piece (F.132099), and a flint blade (F.132395), both found in the capping fills of pits.

On the western site, c 130m to the west, is a small alignment of four pits (Pit Alignment 13.2). Their individual dimensions match those of the eastern alignment and may be associated with it, if not a part of the same alignment. These pits did not survive as well as Alignment 13.1 and only their basal fills were visible; however, they contained a greater amount of charcoal than the pits on the main site. A continuation of the alignment was not identified in TEA 10B East to the north-west, or TEA 12 to the west.

In the Great Ouse Valley, pit alignments typically date from the late Bronze Age and early Iron Age (Pryor 1993; Pollard 1996, 110 and Walker 2011, 5). This fits the stratigraphy on TEA13 with the alignment truncated by a middle Iron Age settlement dated between (400BC and 100BC). Similar pit alignments are located c 1Km to the south on TEA 15 and TEA16. These are associated with an earlier Bronze Age barrow with secondary cremation burials cut into it.

Iron Age 1

IRON AGE BOUNDARY DITCH AND ENCLOSURE

Later in the Iron Age a boundary Ditch 13.1, orientated NW-SE, reinforced the earlier pit-alignment. This ditch formed the boundary of the middle Iron Age settlement activity immediately to the south. It was 141m long by 1.1-1.5m wide and 0.32-0.48m deep with a shallow U-shaped profile. The fills were broadly similar for the entire length. These consisted of a natural infilling of mid-brown silty clay which accumulated naturally. Toward the centre of the site this was overlain by dark grey charcoal-rich silty clay typical of deliberately dumped domestic waste. Pottery recovered from the basal fill is of middle Iron Age date.

In the centre of the excavation area there were two ditches, orientated NE-SW appended to the main boundary ditch, probably forming an enclosure (Enclosure 13.1). The ditches had shallow U-shaped profiles and were on average 0.5m wide and 0.2m deep. The fill of the ditch was mid-brown grey sandy clay. The stratigraphic relationship between the enclosure and the main boundary ditch was partially obscured by later pitting, however the pottery suggests that they were contemporary. At its northern end the enclosure ditch turned in a NW direction and continued beyond the northern limit of excavation. The boundary was recorded in Trench 137 of the evaluation (MHI 2016). The western end of enclosure 13.1 was cut by the eighteenth-century field boundary.

IRON AGE ROUNDHOUSES AND ASSOCIATED FEATURES

The remains of three roundhouses were identified in the south-eastern corner of the excavation; this confirmed the results of geophysical survey. The buildings sat closely within an Iron Age boundary ditch that was orientated on the same axis as the earlier pit alignment. Several pottery spot dates indicated that these roundhouses were middle Iron Age in date.

Roundhouse 13.1; had an outer diameter of 12.7m with an entrance to the east. There was one possible post-hole on the inside, and an area of trample, which may be the remnants of floor surface. The gully of Roundhouse 13.1 was c 0.45m deep and 0.75m wide, with rounded terminals forming an eastward-facing entrance. There is evidence of re-cutting (132260) that demonstrates the continued maintenance of the structure. A quantity of middle Iron Age domestic pottery was recovered from the fills of the gully.

Roundhouse 13.2 was constructed immediately to the south of the pit alignment with an east-facing entrance. It was bounded by a semi-circular gully, c 11m diameter. In profile the gully was a shallow U-shape and was on average 0.3m wide and 0.15m deep. The fill contained middle Iron Age pottery. A second curvilinear gully spurred off from the entrance of Roundhouse 13.2 to the northeast. This probably enclosed a sheltered work area (13.5), with the run-off from this activity draining into a pit or well inserted into the boundary ditch.

The partial remains of another roundhouse, 13.3, was identified in the southeastern corner of the excavation (extending beyond the excavated area). With an outside diameter of 9m, this is much smaller than the other roundhouses, and had an entrance to the north. No post-holes or internal features were identified. This is more likely to be an ancillary building associated with Roundhouse 13.1.

The geophysical survey indicates that an additional two roundhouses existed to the east of this area beyond the limit of the current excavation.

To the west of the roundhouses was 'Work Area' 13.4, consisting of a curving gully, semi-circular in plan, open to the north and 16.5m in diameter. It had a shallow U-shaped profile and was on average 0.35m and 0.2m deep. Iron Age pottery was recovered from the gully. Within the arc of the gully and nearby were five pits averaging 0.75m wide and 0.2m deep. These were filled with charcoal, burnt stones and heat affected clay, and some of them may have been the bases of ovens. One of the pits had post-holes on either side of it, which may have been for an associated structure. The pits and post-holes appear to represent a work area just outside the dwellings.

Iron Age 2

An arrangement of concentric sub-rectangular enclosures was located in the north-eastern corner of the excavation area (Enclosure 13.2). The pottery recovered from the ditches of these enclosures suggests they were later Iron Age in date, with the southern extension being the latest addition to this arrangement.

The northern enclosure measured 45m east to west by 39m north to south. It was formed by two ditches (an outer and inner boundary), with an entrance to the south. The ditches were U-shaped in profile with a narrow flat base. They were generally 1m wide and 0.7m deep. No internal features were present within the enclosure.

The southern enclosure measured 23m north to south by 16m east to west. It comprised a single boundary ditch, with a possible entrance to the south-east. The ditches were on average 1m wide and 0.55m deep. The enclosure was divided by an east-west ditch, with an area of trample indicative of livestock passing through the entrance between them. There were no internal cut features within these enclosures.

The size and shape of the enclosures indicates that they may have been used for livestock rather than defining areas of domestic occupation. The larger northern enclosures were set out in one formal phase, while in the southern area there is evidence of additional enclosures being added later and some maintenance of enclosure entrances. Horizontal banding of their fills suggests that the enclosure ditches

filled gradually by natural means. Occasional pottery and charcoal found within these fills suggests proximity to some form of settlement.

Latest Iron Age

The latest phase of Iron Age activity comprised a series of sub-rectangular ditched 'ladder' enclosures in the southern part of the site. Enclosure 13.3 was aligned NW-SE, and measured 47m NE-SW by at least 85m NW-SE (continuing beyond the southern limit of excavation). This enclosure system was formed of a double line of ditches forming a trackway around the outside perimeter. The enclosed area had two internal divisions. Pottery sherds found in trench 135 during the evaluation dates the complex to the first century AD (MHI 2016), typical of a number of complex farmsteads in the region (Smith et al 2016, 195). There were no internal features identified within this area, which may indicate that the enclosure was used for keeping livestock, though domestic structures of this date are often hard to distinguish (ibid. 56). The enclosure ditches truncated one of the roundhouses and the pit alignment. Interestingly the northern boundary of the enclosure utilised the same line as the pit alignment and the middle Iron Age boundary ditch suggesting long-term continuity in the structure of the landscape.

A second enclosure system, 13.4, was identified in the south-west corner of the excavation area. Although there were no finds recovered from the fills, its size and shape suggested that this also belonged to the latest Iron Age period.

Several clusters of pits disturbed filled in boundary ditches along the along the earlier NW-SE boundary axis. The pits were intercutting and of varying sizes and contained a charcoal rich deliberate backfill that contain sherds of Iron Age pottery and heat effected stone. Some of these pits may represent quarrying activity.

Iron Age D-shaped enclosure

Two ditches were recorded in the western site (Enclosure 13.5). They formed part of a D-shaped enclosure measuring 70m by 50m shown on the geophysical survey. One ditch was aligned NE-SW for c 87m (continuing beyond both limits of excavation); and the other connected to it (32m in length and aligned NW-SE). Only the basal fills of the ditches survived – this would suggest that the ditches were significant in size (at least 1.2m deep by 2m wide). Iron Age pottery was recovered from their fills. There were also a few pits, post-holes and tree-boles, in the western area.

Outside the enclosure to north were c 20 discreet features identified as post-holes/pits of uncertain function and date. Of these, one group of post-holes arranged in a square formed a four-post structure (13.6), of a type commonly interpreted as grain storage platforms. The structure covered an area of 3.5m and the post-holes were c 0.5m in diameter and c 0.2m deep. Three of the corners held double posts perhaps showing ongoing maintenance of the structure.

Medieval and post-medieval agricultural landscape

Some evidence for medieval to post-medieval agricultural activity was identified across the site. A north to south field boundary formed part of fields shown on OS maps from at least 1888 until 1926. Other features included a pond (shown on the 1888 OS Map); and a single furrow aligned north to south. Two

quarry pits provide evidence of sporadic, small-scale quarrying of the underlying gravels. In the southwest corner of the site quarrying (131172) cut through the fill of a furrow. In the northern central area of the site another quarry pit (132621) was partially obscured by modern ploughing but respected the nineteenth-century field boundary.

Finds and environmental summary

Tables 13.1 – 13.3 provides a quantification of the finds, bone, and environmental samples from TEA 13.

The pottery assemblage was almost all of middle - late Iron Age date (with only one sherd of possible early Iron Age date and one of possible late Iron Age/Roman date). This mainly comprised vessels in sandy and shelly fabrics, with a large proportion of scored wares.

Few other finds were recovered from this site. There was one decorated rectangular antler counter or plaque, and a small collection of worked flint. The ceramic building material fragments include a collection of daub and fired clay, some with wattle marks, and curved fragments which likely formed part of kiln or oven structure.

Low quantities of cereal grains (barley, wheat, spelt) and pulses were recovered from TEA 13, with no cereal grains from the Iron Age enclosures. Higher quantities of animal bone were recovered, focused on cattle, pig, sheep/goat, and some horse and red deer.

Table 13.1 Quantification of finds from TEA 13

Type	Count	Weight (g)	Date/type
Pottery	1,909	16,505	Iron Age
	5	65	Post-Roman
Coins	1		
Small Finds	2		
Lithics	23 (worked)		
	108 (burnt unworked)		
Stone	1		
Building Materials	747	13,477	Iron Age
Metalworking Residues	13	16	

Table 13.2 Quantification of bone from TEA 13

Type	Count	Weight	Date/type	% of bone assessed
Cremations	0			
Inhumations	0			
Disarticulated bone contexts	0			
Animal Bone	2,618	6,900		100

Table 13.3 Quantification of environmental samples from TEA 13

Type	Count	Date/type
Bulk Environmental Samples	116	
Monoliths	2	
Kubiena tins	0	
Waterlogged	0	

Provisional interpretation and potential

Prior to the excavation it was supposed that the site was Romano-British in character and so the research objectives were written accordingly (MHI 2017a). The excavation subsequently identified activity from the late Bronze Age/early Iron Age to the late Iron Age/early Roman period, with no evidence of activity continuing beyond the first century AD. However, further analysis of the finds, in particular the pottery, will no doubt refine this chronology.

The following research questions are drawn from the current research agenda for East Anglia (Medlycott 2011, 22-32) and in the new revision (Brudenell, forthcoming).

Bronze Age to Iron Age Transition

There is clear evidence for some parts of the region for complex 'off-site' activities included isolated pits and waterholes, pit alignments, deposits in barrow ditches, isolated four-posters etc. Understanding more about these settlement patterns and use of the landscape is a key question (Medlycott 2011, 29-30).

The pit alignments of TEA 13 are indicative of how the landscape was re-organized in the early first millennium BC. These are the earliest features on the site dividing open spaces. The wider landscape context are the alignments on TEAs 15 and 16 and the hengiform monument on TEA 12.

The new data from the A14 investigations can be studied alongside the 1990s excavations of the Bampton and Eynesbury monument 'complexes'. The latter includes several pit alignments that are associated with earlier monuments and former courses of the River Ouse. (Summaries are in Tim Malim's chapter on the ritual landscape of the Lower Ouse Valley in Dawson 2000, 57-88). Pit alignments are relatively rare in Cambridgeshire, although very common in Northamptonshire, and well known in Buckinghamshire and Bedfordshire.

Early to Middle Iron Age Transition

The scale of changes that occurred across the Bronze Age – Iron Age transition have come into sharper focus in the region since 2011. [...] Consequently the once dominant narrative of continuity in these areas has begun to be eroded over the last decade. Further work, however, is required to understand changes that occurred across the early – middle Iron Age transition, at a point conventionally placed during the fourth century BC (Brudenell, forthcoming).

Pit Alignment 13.1 appears to have been inserted into an open space devoid of any settlement activity. In the middle Iron Age, this boundary line was exactly the place the community chose to site their settlement.

The agrarian economy

The nature of the agrarian economy needs further study. Is a real understanding of continuity and change emerging? What are the relative proportions of cereals and livestock and is there a changing dynamic throughout the period? (Medlycott 2011, 31).

The evolution of enclosure design on TEA 13 show the changing nature of pastoralism over the few centuries leading up to the Roman conquest. The increase in size from the sub-rectangular enclosures (13.2) of the first century BC to the 'ladder' enclosures of the first century AD (13.3) points to an intensification of activity during this period.

Prehistoric pit alignment

This belongs to a category of 'monument' that is relatively common in the East Midlands and East Anglia and in the low lying floodplain of the Fen Edge. There may more examples sealed under alluvium deposits (Pollard 1996, 109). These pit alignments often seem to be referencing pre-existing monuments or even the rivers themselves. The current course of the Great Ouse is just under 2km to the east of TEA 13. There are several notable examples both upstream and downstream of here.

At Haddenham, Bedfordshire a large pit alignment joins up both sides of a bend in the river (Dawson 2000, 80) and another at Passenham, Northamptonshire, is doing something very similar (Walker 2011, 5). At St Ives, Cambridgeshire, two pit alignments run parallel to a former course of the Ouse (Pollard 1996, 99). In all three cases the alignments are presumed to be in association with earlier monuments and the river itself or paleochannels (Pollard 1995, 99). In the case of Brampton, an entire 'ceremonial complex' lies just northwest of the modern village to the south of Alconbury Brook, this is c 2.5km north of TEA13. This group of monuments includes a mortuary enclosure, a cursus, a henge and a palisaded enclosure dating to the Beaker period.

It is generally agreed that pit alignments functioned as boundaries of one sort or another. They clearly carried a common, deeply symbolic meaning to the communities that constructed them. There have been suggestions that such alignments were quarry pits for continuous banks but this view has mainly been rejected (Pollard 1996, 110). The permeable nature of pit alignments is clearly intentional. They may well be symbolic divisions of the land constructed with the intention that people could pass freely through them from one side to the next. These could be marking out territories of common kin groups or land holding or dividing zones or resources (Pryor 1993, 142).

The TEA 13 pit alignment seems to have been short-lived with no attempt to re-cut the pits again until it was formalised into a continuous ditch in the middle Iron Age; this demonstrates the continued use of the alignment as boundary. The digging of the pit alignment several hundred metres in length was surely a significant undertaking. This level of organisation must have transcended the level of an individual household group, and may have involved the mobilisation of a large workforce.

The pit alignments here and on TEA 16 demonstrate variation in profile in depth meaning that they could have been constructed in individual clusters. This will definitely require further analysis to identify any such patterns.

Middle Iron Age settlement

There seems to have been some sort of ideological or social motivation behind the chosen location of the Iron Age settlement in the south-east of the excavation area. A row of four roundhouses were all placed as close to boundary as physically possible. A contemporary boundary ditch runs straight through inbetween a double row of pits. It seems likely that the inhabitants of this settlement knew the significance of placing their houses in this location.

Later Iron Age enclosure complexes

'Ladder' enclosures are systems of rectilinear enclosures associated with later Iron Age and Roman settlement activity. They tend to be accretive complexes with successive enclosures added on like rungs of a ladder. In this case the three enclosures within the excavation area appear to have been formally set-out and built as one phase. When viewed in contrast with the late Iron Age sub-rectangular enclosures to the north this is clearly an intensification of activity. The TEA 13 enclosure system is one of several examples have been identified in the Great Ouse Valley, two others were investigated as part of the A14 works on TEA 4 and TEA 5. Both were in association with Iron Age and Roman settlements.

Recommendations

Full grouping and assignment to period of all contexts is required following results of specialist pottery analysis; this may require some revision of the stratigraphic sequence discussed here. Limited radiocarbon dating may help with chronological resolution of latest 'late Iron Age' horizons (in relation to the Roman conquest and/or the Boudiccan revolt).

TEA 14

Emma Jeffery

TEA 14 was an archaeological site towards the western end of the A14 road scheme, within Section 2, to the south-east of TEA 12. It was located to the east of the A1 and west and north of the B1514 Buckden Road (NGR: TL 2005 6930) (Figure 14.1). The total excavated areas covered 9.5 hectares. The site was previously an arable field on relatively flat land (c 15m AOD). There were no nearby watercourses. The underlying geology of the site was Oxford Clay Formation, a mudstone (NERC 2019). This was overlain by sand and gravel river terrace deposits.

Archaeological background

Three phases of geophysical survey were carried out over the site (Bunn 2008; Bartlett 2009; Davis 2016). These identified ditched enclosures on broadly NE-SW alignments in the central part of the site, a series of pits and other discrete features across the site, and NE-SW aligned ridge-and-furrow.

The site was trenched by CAU (Patten et al 2010; Area B2), Wessex Archaeology (Wessex Archaeology 2014; land parcel 1131), COPA (Clarke et al 2016; Plot 28), and Mola-Headland Infrastructure (MHI 2016; S2-008). This mainly identified late Iron Age and Roman activity, including settlement features in the south-eastern part of the site (ditches, pits, and post-holes); small enclosures for livestock and trackways in the central part of the site, and quarrying in the north-western part. Medieval ridge-and-furrow cultivation was also uncovered.

Methodology

The results of the geophysical survey and trenching evaluation were used to define the archaeological mitigation areas – the whole of TEA 14 was defined as a ‘targeted excavation area’, with no further work required to the north-east and south-west (Figure 14.2). A small area within the site was not stripped (the NE part of the old watermain) as it was not impacted on by construction. TEA 14 was stripped and hand excavated between October 2016 and January 2018. All works were undertaken in accordance with the Written Scheme of Investigation (Atkins CH2M 2016c).

Summary of phasing (Figure 14.3)

Earlier Prehistoric

No features of earlier prehistoric date (Palaeolithic - Bronze Age) were identified on this site. However, worked flint, including a Neolithic axe, was recovered during cleaning in the eastern part of the site (SF14029), a scraper was found in the fill of the Iron Age Boundary 14.1 (SF14028), and 28 other pieces of worked flint were recovered. This suggests that there was some activity in the earlier prehistoric period, most likely itinerant people crossing the landscape. This is unsurprising considering the known evidence for other earlier prehistoric activity in the area, particularly the Neolithic ring ditch monument at TEA 12 (500m to the north-west of this site) and the Bronze Age barrow and associated features at TEA 16 (700m to the south-east of this site).

Late Iron Age

Two areas of late Iron Age activity were identified – a small area of seemingly unenclosed settlement in the south-western part of the site, to the south of a long boundary ditch (comprising a roundhouse, other structural features, four pit clusters, and a cremation burial; Figure 14.4); and a further area of settlement in the north-eastern part of the site (comprising four buildings, a fence-line, and two waterholes; Figure 14.5).

To date, there is no evidence for any earlier (early or middle) Iron Age activity on the site, with only eight contexts (mainly in Pit Cluster 14.4) producing pottery which was spot-dated to the middle-late Iron Age. Pottery recovered from the two areas was generally spot dated to the late Iron Age–early Roman period, with no apparent distinction (in chronology) between the two areas. It is therefore possible that both areas of settlement were broadly contemporary. Further analysis of the pottery from these areas will help to refine the chronology and determine if any of the features continued in use into the early Roman period.

There was little evidence for Iron Age activity elsewhere across the site, with no evidence for any fields surrounding the settlements. According to the pottery spot dates, one other feature may be Iron Age in date – pit [142120] in the northern part of the site. It is possible that some of the other discrete features may also be Iron Age.

SOUTH-WESTERN AREA (FIGURE 14.4)

The remains of an area of late Iron Age settlement comprising a roundhouse, four pit clusters, and a cremation burial, were identified in the south-western part of the site, to the south of an extensive boundary ditch.

Boundary Ditch 14.1 crossed the entire site on a NW-SE alignment. It was observed for c 350m NW-SE, continuing to both the east and west beyond the limits of excavation. The composition of the boundary changed over its course – at its western end it comprised a single small ditch (c 1.2m wide by 0.35m deep); towards the centre it comprised two small ditches which criss-crossed each other; and at its eastern end it comprised a single larger ditch (c 2.3m wide by 0.8m deep). The existence of the two ditches in the centre of the site demonstrates that there was some maintenance of the boundary (at least in places) over time – this may have happened in this location because it was closest to the main Iron Age settlement area (eg Roundhouse 14.1).

The boundary ditch had moderately sloping sides and a concave base and was filled with grey-brown silty-clay. These fills accumulated through natural silting, with limited evidence for deliberate backfilling. The boundary was truncated by some of the Roman features, most noticeably Quarrying 14.1. However, most of the Roman activity was located to the north of this boundary, suggesting that it may have existed (perhaps as an earthwork) into the Roman period and influenced the location of the Roman activity.

The pottery recovered from Boundary 14.1 was spot dated to the early Roman period, with some late Iron Age sherds. This suggests that the boundary was likely constructed and used in the late Iron Age,

and slowly silted up over the course of the early Roman period. This supports the suggestion that it may have survived into the early Roman period as a marker in the landscape.

A single roundhouse, Roundhouse 14.1, was uncovered in the southwestern part of the site, to the south of Boundary 14.1 (Figure 14.10). This was circular in plan, with an internal diameter of 10.9m. It had an entrance on its eastern side, 3.2m wide. The roundhouse drip gully was 0.32–0.45m wide by 0.15–0.25m deep, with steep/moderately-sloping sides and a relatively flat base. The drip gully was filled with a grey-brown silty-clay, with occasional charcoal, stones, pottery and flints. Pottery from the roundhouse drip gully was spot dated to the late Iron Age–early Roman period.

Within Roundhouse 14.1 were eight post-holes. Three of these [140563; 140604; 140590] were around the northern edge of the structure, 1.8m apart, and would have held the supports. Four post-holes [140531; 140564; 140533; 140597] formed an approximate square just inside the entrance and may have been some form of inner entrance structure, or alternatively may belong to a different phase. One further post-hole [140592] was located closer to the centre of the structure. This was not associated with any others and did not have an obvious function. Two pits were also located within the interior of the structure – [140637] and [140498]. Pit [140637] on the western side of the structure, measured 1.1m by 0.7m by 0.25m deep, and was filled with two silty-clay deposits with frequent charcoal inclusions. Pit [140498], which truncated the southern roundhouse terminus, measured 1.5m by 1.3m by 0.15m deep, and contained burnt stones. It may represent a ‘closing’ event when the structure was abandoned. A NE-SW ditch [140562, 140628, 140641] crossed the centre of Roundhouse 14.1, and terminated after 18.75m (continuing to the south beyond the limit of excavation). It does not form any clear or obvious system of enclosure. It was truncated by the roundhouse, so must represent a slightly earlier phase of Iron Age activity.

Other Iron Age activity to the south of Boundary 14.1 comprised four clusters of pits (Pit Cluster 14.1 and 14.2 to the north-west of the roundhouse; and Pit Cluster 14.3 and 14.4 to the east of the roundhouse), eight post-holes making up a building (Structural Features 14.1, to the north-east of the roundhouse), and a cremation burial (Cremation Burial 14.1, to the south-east of the roundhouse).

Pit Cluster 14.1 comprised seven small roughly-circular pits, between 0.4 and 1.4m in diameter and 0.15–0.4m deep. Some of the pits contained significant quantities of charcoal, daub, and fired clay in their fills (particularly pit [142551] and [142538]), suggesting they may have been hearths. There were also two post-holes, adjacent to pit [142551] and [142549], which may have held a structure or frame over the pits.

Pit Cluster 14.2 was located c 8m to the southeast of Pit Cluster 14.1. It comprised four slightly larger pits, between 0.7 and 1.7m in diameter and 0.1–0.35m deep. One of these pits, [142521], contained significant quantities of burnt and fire-cracked sandstone and charcoal, demonstrating its function as a cooking pit. The other pits contained charcoal and some stones, but not in the same quantity.

Pit Cluster 14.3 was located 18m to the southeast of the roundhouse and comprised three pits (with one associated post-hole). These measured 0.75–1.4m in diameter by 0.25–0.3m deep. All of these contained significant quantities of charcoal and burnt stones in their primary fills, suggesting they were cooking

pits. The post-hole adjacent to pit [142669] may have supported a structure hanging over the pit, potentially to hold pots containing food.

Pit Cluster 14.4 was located 28m to the east of the roundhouse. It was the largest cluster, with thirteen pits (one of which was made up of six intercutting pits). These were a variety of shapes and sizes – most were broadly circular, but some were elongated or oblong-shaped. They varied between 0.6m in diameter and 3.8m long, by 0.3-0.45m deep. Some of the pits contained charcoal and burnt stones (eg [142644] and [142614]) and so were likely cooking pits, whereas others may have been refuse or quarry pits. Interestingly, this group of pits contained pottery slightly earlier in date (mid-late Iron Age) than from the rest of the site.

A single cremation burial (Cremation Burial 14.1) was uncovered, 9.5m to the southeast of the roundhouse entrance. This was unurned, in a pit 0.6m in diameter by 0.15m deep. This was the only burial seen in this area. No dating evidence was recovered from the cremation, although its location close to Roundhouse 14.1 and within Boundary 14.1 suggests it was Iron Age or early Roman.

Eight post-holes (Structural Features 14.1) were excavated to the east of the roundhouse, adjacent to Pit Cluster 14.4. These may have been the remains of a rectilinear north to south orientated structure (as two lines of north to south post-holes were discerned), which measured approximately 12m long by 9m wide. Late Iron Age pottery was recovered from one of the post-holes (142276). It was likely associated with the roundhouse – perhaps an outbuilding for storage?

Other individual features were uncovered close to Roundhouse 14.1 and to the south of Boundary 14.1, so were likely associated with this area of late Iron Age settlement. This includes post-hole [142532] to the west of Pit Cluster 14.1; three pits [140606, 140712, and 140639] to the north of Roundhouse 14.1; and two individual pits further to the east [142606 and 142715].

NORTH-EASTERN AREA (FIGURE 14.5)

The remains of another area of late Iron Age settlement, comprising four buildings, a fence-line, and two waterholes, was identified in the north-eastern part of the site. This was truncated by the Roman activity (Trackway 14.1).

Boundary 14.2 was a fence-line aligned WNW–ESE for at least 70m (truncated by Trackway 14.1 to the east and by other Roman features to the west). It marked the southern boundary of the Iron Age buildings and other features in this area. This boundary was made up of post-holes, spaced approximately 3.5m apart. Many of the post-holes were lost towards the eastern side of the excavation. Although no dating evidence was recovered from the post-holes, the boundary clearly pre-dated the Roman activity and no Iron Age features were uncovered to the south of it, so it is likely that it was the southern limit to this Iron Age settlement.

BUILDINGS

The western half of Roundhouse 14.2 was uncovered in this area. This had been truncated by a furrow to the east, and by Trackway 14.1 to the south. It would originally have had an internal diameter of c 8m. No entrance was seen. The circular drip gully of the roundhouse measured 0.4m wide by 0.2m deep,

had gently-sloping sides with a concave base, and was filled with a grey-brown clayey-sand. Two post-holes were positioned opposite each other on the western side of the building – one inside the building [141934] and one outside it [141845]. Two other post-holes were located further from the building – [141847] to the northwest, and [141912] to the northeast. Pottery from the roundhouse drip gully was spot dated to the early-mid Roman period, but this may be because of the proximity of the Roman trackway and other Roman features.

Building 14.1 was located 8.5m to the north-west of Roundhouse 14.2. This was a long post-built structure, comprising thirteen post-holes in two irregular rows, aligned roughly east to west. The post-hole grouping measured 12m long by 1.9m wide, with a gap, potentially an entrance (4.75m wide), observed on the south-western side. No finds or dating evidence was recovered from the structure, but its association with other Iron Age buildings in the area makes it likely that it was also late Iron Age. Its shape and size, particularly its narrow width, suggests it was not used for habitation, but instead may have been a platform or small storage shed of some kind. The environmental samples contained occasional charred wood, but no evidence for grain or cereals, suggesting that these were not being stored here.

Building 14.2 was a square 4-post structure, located just to the west of Roundhouse 14.2. This building measured 3.75m² and was truncated by the later Roman ditch [141815 and 141897]. The post-holes were relatively substantial (1.2m in diameter by 0.5-0.7m deep), and some had evidence for packing. Pottery recovered from these post-holes was spot dated to the early-mid Roman period. The position of this building directly outside Roundhouse 14.1 suggests they worked in conjunction with each other – perhaps this functioned as an external storage shed?

Building 14.3 was another square 4-post structure, located 65m to the west of Building 14.2, just north of Boundary 14.2. This building measured 3.5m². These post-holes were also substantial (1.5m in diameter by 0.5m deep), with evidence for packing. The pottery recovered from these post-holes was spot dated to a wide range of periods – late Iron Age to late Roman. This may also have functioned as a storage shed of some kind.

WATERHOLES

Two waterholes were in this area of Iron Age activity (Waterholes 14.1 and 14.2). They were different (in size, shape, and structure) from the Roman waterholes seen to the south, so have been provisionally assigned to the late Iron Age. They were both oval in shape and measured 7–8.5m long by c 5m wide (although the full extent of Waterhole 14.2 could not be ascertained because modern services truncated the southern side of it), by 0.9-1m deep. Both waterholes contained a sloping base, with a shallower end on one side (0.17-0.38m deep) which would have enabled access. They were filled with a series of clayey-silt fills (with gravelly fills adjacent to their edges). Iron panning was observed throughout the fills and lamination in the grey clay basal fills, indicating the presence of standing water.

Both waterholes contained evidence for structures around them. This comprised a single post-hole [143188] on the northern side of Waterhole 14.1; and a similar single post-hole [143173] to the west of Waterhole 14.2. These may have held posts on which buckets were suspended (such as the Egyptian

'Shaduf'), or alternatively could have been tethering posts for animals. Pottery recovered from both waterholes was spot dated broadly to the early-mid Roman period, with some late Iron Age sherds in Waterhole 14.1.

A number of features were cut into the upper fills of Waterhole 14.2, including two ditches [143175] and [143177]; a post-hole [143122]; three smaller shallower pits [143145], [143160] and [143097]; and part of a curvilinear ditch [143120]. These may have been Iron Age in date (the curvilinear ditch may form part of a roundhouse, and one of the pits looked like a typical Iron Age cooking pit), suggesting that there was more than one phase of Iron Age activity in this area. Waterhole 14.1 cut pit [143213] and linear [143215], which were also likely Iron Age in date.

OTHER FEATURES

There were a series of other features in this area which were likely to be late Iron Age in date, many overlain by the later Roman trackway (see below). The main feature to the north was a NNE-SSW aligned ditch [141852], with an east to west ditch heading off it [143092]. There was also a series of smaller gullies [143081/143089/143167/143094] and [141781/141791]; three pits [143227], [143206] and [143223]; and three post-holes [143085], [143087] and [143083].

To the south of these was a series of small ditches. Ditches [141002], [141007], [141013], [141016], [141019] and [141022] were aligned NNW-SSE. Ditch [141037] was aligned north to south from the north and was not observed beyond the northern ditch of the later Roman trackway. Ditch [141329] was a short stretch of ditch aligned east to west, while ditch [141919]/[141915] was aligned NE-SW. Further south were a number of smaller gullies [141032/141034], [141319/141046], [141363/141026], [14337], [141321], [141341/141326], [143120] and [141070], some of which may have formed parts of buildings (drip gullies etc) or drainage gullies. There were also a number of other dispersed post-holes [141339], [141314], [141333], [143122], [141336] which likely formed parts of buildings or fence-lines; and six pits [141303], [141052], [141345], [143160], [143097] and [143213].

Ditch 14.1 was uncovered in the north-eastern corner of the excavation, curving on a NE-SW alignment and extending beyond both the northern and eastern limits of excavation. No dating evidence was retrieved from this ditch, however it did not fit with the Roman system or alignments and so it has been tentatively assigned to the later Iron Age. It was a relatively large ditch (3.2m wide by 0.5m deep), with evidence for a possible bank on the southern side (a silty-gravel deposit slumping in). It may be part of a curving enclosure.

Roman

Three phases of Roman archaeology were identified (Figure 14.3). This is mainly based on stratigraphic relationships and the site plan, as most of the initial spot dates from the site were assigned quite broadly to the early-mid Roman period.

The first phase of Roman activity (early Roman) was concentrated in the central part of the site and comprised the establishment of a trackway running east-west, a series of small conjoined enclosures and fields with evidence for buildings within them, and five waterholes (Figure 14.6). The second phase

of Roman activity (early to mid-Roman) comprised the establishment of larger enclosures in the southern part of the site, two pottery kilns and a possible potters' workshop, and three waterholes (Figure 14.7). The third phase of Roman activity (mid-Roman) comprised the establishment of a larger field system which ignored the earlier trackway (Figure 14.8).

This appears to be an agricultural landscape, occupied from the early to middle Roman period. The pottery assemblage supports this, with very little pottery from the later Roman period (4th century).

ROMAN PHASE 1 (FIGURE 14.6)

The first phase of Roman activity comprised the establishment of a trackway across the site, a series of small ditches to the south of this which formed small enclosures and fields, and five waterholes.

TRACKWAY 14.1

Trackway 14.1 crossed the entire site from east–west and formed the northern boundary for the main area of Roman activity. It followed a relatively straight and regular course across the site, curving to the south at its eastern end, to a NE–SW alignment. The trackway was delineated by two ditches, spaced between 6m and 10m apart. The ditches measured 1–1.6m wide, by 0.3–0.7m deep, with moderately-sloping sides and concave bases. Most sections through the trackway ditches contained a single fill, typically a grey-brown silty-clay with stones. This was likely a deliberate backfill deposit, suggesting that the trackway fell out of use and was deliberately closed, prior to the next phase of activity. These ditches would have functioned as drainage and delineation ditches (to stop the animals wandering off the line of the trackway). There was no evidence for metalling or any other surface between the two ditches. The southern trackway ditch terminated at its western end [142464] and at its eastern end [141785]. The northern trackway ditch continued to the east and west beyond the limits of excavation.

In places, particularly along the central part of the trackway, there were additional ditch cuts on the northern and southern sides. These were not found along the whole length of the trackway – presumably they were excavated in the wetter parts where there was a need for additional drainage.

Finds recovered from the trackway ditches mainly comprised animal bone and pottery. This was concentrated towards the eastern part of the trackway, unsurprisingly around the area of more activity. Few small finds were recovered – in the main trackway ditches, only two iron nails and a single piece of worked flint. Initial spot dating from the backfill of the trackway ditches was dated to the 1st–2nd century AD (early-mid Roman). There did not seem to be much variation in this over the course of the trackway, suggesting it was constructed, used, and fell into disuse at the same time over its entire length. The trackway was likely constructed in the early Roman period, as part of the Phase 1 Roman activity, continued in use into the early-mid Roman period (Phase 2 Roman activity), before falling out of use and being backfilled before the last Roman phase (Phase 3 Roman activity).

The trackway (or at least the northern ditch of it) continued to both the east and west beyond the limits of excavation. To the west, it is likely that it would have connected with the Roman road which is thought to run north to south broadly along the line of the A1. To the east, the trackway would have continued on the other side of Buckden Road. Previous excavations to the southeast of this uncovered the remains

of Romano-British field systems (including droveway ditches), so it may have connected with these (Burrow and Foard-Colby 2006).

BURIAL 14.1

To the south of Trackway 14.1, in approximately the centre of the site and away from the concentrated activity, was Inhumation Burial 14.1. The burial was of an adult, orientated east to west and placed in a foetal position with the head to the east, the right arm extended, and the left arm placed across the torso. The skeleton was relatively poorly-preserved, with no vertebrae or ribs, and very little pelvis surviving. The skeleton was placed in a cut, which measured 1.2m long by 0.5m wide by 0.36m deep. No grave goods were found with the skeleton.

SETTLEMENT ENCLOSURES

A series of small ditches, broadly arranged on a NE-SW alignment, were concentrated in the central part of the site, to the south of Trackway 14.1. These formed small enclosures and fields, part of the early Roman complex farmstead. There was evidence for some buildings within these enclosures, potentially for crop/animal storage. Overall, the area of this settlement measured approximately 210m NE-SW by 110m wide (c 2.3ha). The western edge of this activity was relatively clear, formed by ditches 14.2, 14.8, and 14.10. The northern edge of the activity stopped at the line of the trackway. Neither the southern nor the eastern limits were clear. The ditches which formed these small enclosures were relatively small – 0.5–0.75m wide by 0.15–0.25m deep, with moderately sloping sides and concave bases. They were generally filled by a single orange/grey-brown sandy-silt, with stones, pottery and animal bone.

The northwestern side of this area of activity comprised a ‘corridor’ of longer ditches which ran in parallel with each other (ditches 14.8, 14.10, 14.11, 14.12, 14.13, 14.5) and were spaced approximately 3m apart. These may have been used to funnel animals through. The central part of the area was made up of a series of rectilinear enclosures which hung off the western spine (ditches 14.14, 14.17, 14.16, 14.6, 14.3). These formed enclosures of a variety of sizes – around 30m long (NW-SE) by between 9m and 18m wide (NE-SW). Ditch 14.4 formed the south-eastern boundary to this area, with smaller north to south ditches dividing the area to the north of this. Ditch 14.9 extended out of the main area of activity, for c 25m, and may have been used for drainage. Some possible entrances between enclosures were identified, eg Ditch 14.16 had a large gap of 11m halfway along it, and Ditch 14.13/Ditch 14.8 where there was a gap of 3.8m. These would have provided routes through the separate enclosures. There was evidence for modifications to the layout of this system over time – ditches 14.12 and 14.13 were on a slightly different alignment from ditches 14.10 and 14.11; and ditch 14.2 was on a slightly different alignment from the others to the north.

There was evidence for buildings within some of the enclosures. This included a cluster of six post-holes and two small pits positioned within one of the enclosures in the north-eastern part of the site (Structural Features 14.2); five post-holes, eight pits, and a beam-slot to the west of this (Structural Features 14.3); three post-holes and two small pits towards the centre of the area (Structural Features 14.4); and six post-holes and three pits to the south of this (Structural Features 14.5). There were also some individual post-holes and small pits scattered around within the enclosures. None of these formed obvious

buildings, but nonetheless suggest there were some structures within these areas. Pottery recovered from these enclosures was spot dated to the early–middle Roman period.

WATERHOLES

Five waterholes were investigated in the eastern part of the site, in the area of dense Roman activity. They would have functioned for both water collection (ie providing water for livestock) and drainage (of the area). Four of these were located within the small Roman enclosures (Waterhole 14.3, 14.4, 14.5, and 14.6), with one in open fields to the west (Waterhole 14.7). Two of the waterholes were paired (Waterhole 14.4/14.5), whilst the others were on their own. Most of these waterholes were located on the lines of ditches – Waterhole 14.3 had two small drainage ditches running into it (from the north and east); Waterhole 14.4 had three small ditches feeding into it (from the north, south, and west); Waterhole 14.5 was positioned on the line of a north-south ditch; and Waterhole 14.6 was located on the line of an east-west ditch. This suggests they were used partly for drainage of the area. Waterhole 14.7, in contrast, was positioned on its own in the open fields.

These waterholes were all sub-circular in shape and measured between 4.1m and 9.5m in diameter by c 1.3m deep. They generally had steep sides with concave bases, and a series of gravelly-silty-clay fills mainly derived from natural silting and erosion of the sides. Iron panning was observed in some of the clay fills, indicating the presence of water. Pieces of wood were recovered from the basal fill of Waterhole 14.5. These were not structural but were likely smaller pieces and parts of trees and vegetation which were washed into the waterhole. Pottery recovered from these waterholes was spot dated to the mid-Roman period. There was no evidence for any structures associated with these waterholes.

ROMAN PHASE 2 (FIGURE 14.7)

The second phase of Roman activity comprised the establishment of a series of enclosures and routeways across the site, concentrated to the south of the trackway (which would have still been used). There were also two pottery kilns, one of which was surrounded by other features and which may have formed part of a potters' workshop.

DITCHES FORMING ENCLOSURES AND ROUTES ACROSS THE AREA

A series of ditches were identified across the southern part of the site. These likely formed sub-rectangular enclosures, most probably for livestock, and routes used to move animals through the landscape. They utilised the earlier trackway, demonstrating that it remained in use. They were generally on a different alignment (more NEE-SWW) than the earlier system.

Ditches 14.21, 14.23, and 14.24 were all aligned ENE-WSW, along the southern part of the site. Ditch 14.21 continued across the entire site (240m) and continued to the east and west beyond the limits of excavation. Ditch 14.23 was 12m to the north of this and was observed for 60m in the central part of the area. Ditch 14.24 was 11m to the north of this and was observed for 76m ENE-WSW before continuing to the north-west to form a larger rectilinear enclosure. These three ditches functioned together and may have delineated routeways through which animals and people moved. Pottery from ditches 14.21 and 14.24 was spot dated to the early-mid Roman period.

A single building, Building 14.4, was positioned between Ditches 14.21 and 14.23. This comprised a curving gully, forming half a circle, with an internal diameter of 9.7m NE-SW. The gully measured 0.3m wide by 0.12–0.18m deep, with an orange-grey silty-clay fill. Ditch 14.24 formed a larger rectilinear enclosure, measuring 90m NE-SW by 43m NW-SE. Within this larger enclosure was a smaller rectilinear enclosure formed by Ditch 14.25 (see discussion below). Few other features were identified within this rectilinear enclosure.

Ditches 14.30 and Ditches 14.31 were also aligned ENE-WSW in the central part of the site. They were spaced 5.3m apart and were observed for c 135m (stopping at Trackway 14.1 to the east, and not continuing beyond the waterpipe area (which was never stripped) to the west). Ditch 14.30 was far larger (1.6m wide by 0.5m deep) than Ditch 14.31 (0.8m wide by 0.1m deep). They may have delineated a routeway through the site. Pottery from Ditch 14.30 was spot dated to the early-mid Roman period. Ditch 14.22 connected with Ditch 14.21 in the south-western part of the site. This was aligned north to south off Ditch 14.21 for 24m, before turning to the NW for 90m. This was therefore on a slightly different alignment from some of the other ditches in this area. Pottery from Ditch 14.22 was also spot dated to the early-mid Roman period.

In this area were two groups of pits (Pit Cluster 14.5 to the west of Ditch 14.22, and Pit Cluster 14.6 to the east of Ditch 14.22) and one group of post-holes (Structural Features 14.6). Structural Features 14.6 comprised five post-holes in a small area, not forming an obvious building. Pottery from these post-holes was spot dated to the late Iron Age – Roman period. Pit Cluster 14.5 comprised ten roughly circular small pits, measuring between 0.75m and 2.7m in diameter and 0.1–0.47m deep. Pit Cluster 14.6 comprised fourteen small circular and oval-shaped pits, measuring between 0.6m and 2.7m in diameter by 0.1–0.5m deep. The fills of the pits in both pit clusters was generally a grey-brown clayey-silt, although some pits had dark black charcoal-rich fills (eg [141672]). Pottery from these pit clusters was broadly dated to the early-mid Roman period.

Ditches 14.26, 14.27, and 14.28 were shorter stretches of ditch in the central part of the site. They may have formed smaller enclosures – Ditch 14.26 was slightly curving and may have formed the south-western part of an enclosure; and Ditch 14.27 formed the south-eastern part of an enclosure (pottery from Ditch 14.27 was dated to the early-mid Roman period). Few features were identified within these enclosures. Ditch 14.29 was located to the north-west of the other ditches and formed two sides of a rectilinear enclosure coming off Iron Age Boundary 14.1. This measured 26m NE-SW by at least 28m NW-SE. No features were present within this enclosure.

Ditch 14.33 was the only ditch to the north of Trackway 14.1. It was orientated north to south for 26m (continuing beyond the northern limit of excavation), before connecting with Trackway 14.1 and extending along the northern side of this, to the east, for 60m (terminating in the area of the old waterpipe, which was never stripped). This may have formed the southern part of a rectilinear enclosure. This ditch measured between 1m and 1.9m wide, had moderately-sloping sides and a concave base, and was filled with a grey-brown silty-clay. There were few features within this enclosure (only three small pits).

Ditch 14.32 was parallel to Ditch 14.33, 45m to the west of it. It was orientated north to south for c 60m and continued both to the north and south of the trackway (but not across the trackway itself). It then turned to the east for 104m, before turning to the south-east for 20m and connecting to Ditch 14.33. The fact that Ditches 14.32 and 14.33 were parallel suggests they functioned together, potentially to funnel animals through the landscape. This may have acted as a crossing point or exit off the trackway, enabling animals to be moved either north or south off the trackway and into the fields and enclosures beyond.

BURIAL 14.2

Just to the north of Ditch 14.21, in the eastern part of the site, was Burial 14.2. The burial was very fragmented, orientated east to west, and placed in a crouched position with the head to the east. Parts of the cranium, mandible, arms, ribs, pelvis, and legs were recovered. The skeleton was placed in a cut which measured 1.29m long by 0.75m wide which survived only 0.06m deep. No grave goods were found with the skeleton.

KILNS AND POSSIBLE POTTERS' WORKSHOP

Kiln 14.1 was identified in the northeastern part of the site, to the north of Trackway 14.1. This was located away from the other kiln and Phase 2 Roman activity. It measured 2.8m long (NE-SW) by 1.4m (NW-SE) and 0.5m deep. It was an updraft figure-of-eight type kiln, with the firing chamber (1.3m by 0.8m) to the south-west; stoking pit (1.3m by 1.4m) to the north-east; and a single flue. The kiln was badly-preserved. No clay lining survived, however a single pedestal was recovered (displaced and found in the firing chamber). The upper fill of the firing chamber was a yellow clay, which may be the remnants of the superstructure. There were no obvious features associated with this kiln. One small pit [141800] was positioned 4.3m to the north-west and may have been associated with it, but this cannot be confirmed. Pottery recovered from this kiln was dated to the mid-Roman period (2nd century?). No further information about the pottery types can be provided at present.

Towards the centre of the site was another Roman pottery kiln (Kiln 14.2), positioned within a rectilinear enclosure and surrounded by other features which were likely associated with it (quarry pits, post-holes, potential puddling pits, and a stone surface). These may be the remnants of some form of 'potters workshop'. Kiln 14.2 measured 2.7m long (east to west) by 1.5m (north to south) by 0.27–0.31m deep. It was an updraft figure-of-eight type kiln, with the firing chamber (1.1m by 0.8m) to the west; rake-out pit (1.2m by 1.5m) to the east; and single flue (0.4m by 0.5m) connecting them. The eastern side of the rake-out pit was truncated by a post-medieval drain. The clay lining of the kiln survived within the firing chamber (a compact dark blue-red burnt clay, c 0.2m thick). Several separate linings were visible, suggesting that the kiln was used over a fairly long period of time. The backfill of the firing chamber was a dark black silty-clay with evidence for kiln structure, including collapsed superstructure and displaced pedestals. The rake out pit of the kiln contained two fills – a lower grey ashy fill and an upper grey silty deposit with frequent pottery wasters. Pottery recovered from the backfill of the kiln was spot dated to the early-mid Roman period (1st – 2nd century). No further information on the types of pottery is available at this stage.

Kiln 14.2 was located within an open-ended rectilinear enclosure, measuring c 25m ENE-WSW by 11m north to south. This was formed by Ditch 14.24 along the southern side which terminated at its eastern end [145368]; and Ditch 14.25 along the northern and western sides. There was no evidence for an eastern side to the enclosure, although this may have been obscured and confused by the wide NE-SW spread of material which crossed this area (potentially a medieval boundary, see below). A large pit [145391]/[145398] was located 6m to the south-east of Kiln 14.2. This was truncated by the east to west Ditch 14.24, demonstrating that the pit was earlier than the enclosure and kiln. However, a layer of stones and flints were laid down, apparently as a surface, on top of the upper fills of the pit. This stone layer may be contemporary with the kiln and may have been laid down to solidify the ground, either to form a working area (for pottery making?), or as access into the enclosure. At 3.6m to the north of the kiln were two post-holes [145111 and 145113]. These were aligned north to south, spaced 0.65m apart, and filled with a grey-black charcoal-rich fill with frequent fired clay. They might have formed part of a structure, potentially associated with the kiln in some way (storage shed or platform?). No other evidence for buildings was identified within the enclosure.

In the northeastern corner of the enclosure was an area of three small intercutting pits [145257, 145258, 145259], which may have been quarry pits associated with the kiln. These were relatively shallow surface quarries (0.1–0.3m deep) and were filled with waste from the kiln (pottery, charcoal, etc), demonstrating that they were contemporary with the kiln. Adjacent to the small intercutting quarry pits was a larger pit [145326]. This measured 3.58m by 2.22m by 0.32m deep and was filled with a black silty-clay fill with frequent charcoal, pottery (much of which was burnt), two iron nails, a hairpin, and a piece of stamped samian ware. This may have also been a quarry pit, later used as a rubbish pit for kiln waste. Within the enclosure was a small pit [145389], 0.9m in diameter by 0.3m deep, which contained frequent charcoal.

Just to the north of the enclosure, but potentially still associated with it, was an area of large pits [145345, 145350, 145288 and 145287]. These pits were sub-circular and measured 1.8–3.7m in diameter by 0.4–0.8m deep, with moderately-sloping sides and concave bases. The pits were filled with an upper grey clay deposit, and a lower silty-clay with stones. Few finds were recovered from these pits (so they were not rubbish pits), their regular shape suggests they were not dug as quarries, and they were not deep enough to have functioned as waterholes/wells. Instead it is possible they may have been ‘puddling pits’ for the pottery production – a theory supported by the small ditches (potentially leats) which ran into the pits – [145359] from the south, [145530] from the east, and [145371] from the west. To the east of these pits, outside the enclosure, were three further small intercutting pits [145230, 145152, and 145238]. They may also have been small quarry pits.

QUARRYING 14.1

An area of Roman quarrying was identified in the south-western part of the site, truncating the Iron Age Boundary 14.1. This covered an area which measured c 20m north to south by 18.3m east to west. It comprised a series of intercutting pits, c 0.5m deep. This fits with the quarrying identified during CAU’s trial trenching of the area. The quarrying may have been to obtain materials for the kilns. Because of this, it has been assigned to the Phase 2 Roman activity.

WATERHOLES

There were three waterholes in the southern part of the site, within the Phase 2 Roman enclosures (Waterhole 14.8, 14.9, and 14.10). They have been provisionally assigned into this phase of Roman activity based on their location and slightly smaller size. Pottery from Waterholes 14.9 (145156) and 14.10 (145083) was dated to the early-mid Roman period. Waterhole 14.10 was positioned on the line of Ditch 14.21, which would have fed water into it. This suggests that the waterhole was contemporary with the ditch. Waterholes 14.8 and 14.9 were not located on the lines of any ditches. The waterholes were oval in shape and measured between 3.5 and 4.9m long by 2.8-3.12m wide, by 0.75-0.82m deep. They had steep sides and concave bases, and a series of silty/sandy-clay fills with iron panning.

ROMAN PHASE 3 (FIGURE 14.8)

The latest phase of Roman activity saw the abandonment of the settlement and a complete remodelling of the area, to divide it into a series of NE-SW aligned fields. The ditches which comprised these field systems cut across the other Roman features in the area including Trackway 14.1. This suggests that, at this stage, the trackway had fallen out of use.

Ditches 14.34 and 14.35 formed one corner of a NE-SW aligned field, measuring c 50m wide by 110m NE-SW (continuing beyond the northern edge of excavation). The southern part of Ditch 14.34 was lost, although it must have continued and connected with Ditch 14.35. Ditch 14.36 was aligned NE-SW, to the south of this, and may be the continuation of Ditch 14.34. These ditches were relatively small (0.65–0.93m wide by 0.14-0.4m deep), with gently sloping sides, concave bases, and orange-brown sandy-silt fills. Ditches 14.38 and 14.39 divided the area into another two fields. Ditch 14.38 crossed the site on a NE-SW alignment for 150m, with Ditch 14.39 connected to it (approximately halfway along) and running SE-NW for 220m. These divided the area up into two larger fields, with no further internal divisions or drainage ditches. Both of these ditches were also relatively small (0.52-0.75m wide, by 0.06-0.38m deep), with gently sloping sides, concave bases, and grey-brown silty-clay fills. Pottery from Ditch 14.39 (142075) was spot dated to the early-mid Roman period. Ditch 14.37 was a larger NE-SW aligned ditch, which crossed the site for 170m just to the west of Ditch 14.38. It split into two smaller ditches at its northern end. It may have been the main division between the fields. The ditch had moderately-sloping sides with a concave base, measured 0.68-0.98m wide by 0.1-0.25m deep, and was filled with a grey-brown silt. No other features were definitely associated with this phase of field systems.

Saxon

Sunken-Featured-Building 14.1 was located in the western part of TEA 14, between the ditches of Trackway 14.1 (Figure 14.9). It was not identified in the geophysical survey or trenching evaluation. No other Saxon features were identified across the site. The building was sub-rectangular, with relatively steep sides and a flat base. It measured 3.65m long (north to south) by 2.5m wide (east to west), and 0.15m deep. The eastern part of the building was truncated by a medieval furrow [142358]. No post-holes or other structural features were found with it. A single fill was identified within the building. This was a grey-brown clayey-silt, with occasional stones and manganese, likely accumulated via natural silting. Few finds were recovered from the building – only a single copper alloy pin. A cereal grain from this sunken-featured-building was radiocarbon dated to the 14th-15th century (SUERC-85542), however

this is thought to be an intrusive cereal grain and is not a reliable date. There were no associated features with this building.

Medieval

Medieval agricultural furrows were identified across the site, demonstrating that the area was in arable cultivation throughout the medieval period. The furrows were aligned NE-SW and spaced c 5.5m apart. A spread of material was observed in the southern part of the site, aligned NE-SW. This measured 8.5m wide and overlay a series of ditches and pits. Although undated, the fact it was on roughly the same alignment as the furrows suggests it may have formed part of the medieval agricultural landscape, potentially a boundary or headland. At 160m to the west of this spread of material was a large ditch/spread on the same alignment (NE-SW). This truncated the Roman features and measured approximately 4m wide by 1m deep. It is possible that this also formed part of the medieval agricultural landscape and was potentially another boundary between fields.

Post-medieval

A NNE-SSW post-medieval field boundary, Boundary 14.3, crossed the central part of the site (Figure 14.9). This was 0.5m wide by c 0.15m deep. It truncated the Roman Trackway 14.1 and all other features. It is shown dividing the area into two separate fields on the 1888 and 1901 OS Map; but was removed by the time of the 1926 survey. A single post-medieval rubbish pit [143133] was investigated in the central part of the site (Figure 14.9). The pit was oval-shaped and measured 7.25m by 4.2m by 1.2m deep. It contained a series of sandy-silty-gravelly fills, with ceramic building material (bricks, fired clay), clay tobacco pipe, metal (iron nails etc), and mortar, recovered from all fills. This was likely utilised when the area was in use as agricultural land. Many post-medieval land drains were present across the site in all directions.

Finds and environmental summary

Tables 14.1 – 14.3 provides a quantification of the finds, bone, and environmental samples from TEA 14.

The pottery assemblage comprised late Iron Age and Roman pottery (up to the middle - late Roman period), with little late Roman (4th century). The Iron Age assemblage was mainly grog-tempered wares, with a mixture of jars and bowls. The Roman assemblage was mainly sand-tempered wares, with a wide range of jars, bowls, and dish. It was a mostly utilitarian assemblage, but the presence of some 'table' wares suggests a degree of higher-status activity, and there were some regionally-traded and imported vessels (Gaulish samian ware, Spanish amphora). Some contexts contained large sherds of pottery and almost-complete vessels, possibly from deliberate dumping or abandonment.

Other finds included two Iron Age triangular fired clay loom weights, a collection of Roman dress accessories (mainly 1st – 2nd century in date, with both British and continental types), some domestic items (spoon handle, gridiron), tools (needle, rake tines, shears), and three fragments of Roman glass. A large collection of stones, making up at least 26 quernstones and one millstone, were recovered, including a French puddingstone quern. A fragment of Roman leather sandal was also recovered, and two oak fence pales from one of the waterholes.

The plant remains from the Iron Age features included glume wheat, hulled and twisted barley, and occasional oats. The plant remains from the Roman features demonstrate an increase in spelt wheat, weeds associated with arable crops, and charred figs (an import).

The animal bone assemblage was poorly-preserved. Cattle and sheep/goat were the main animals represented. Little bone modification was present on the Iron Age assemblage (no butchery or knowing), whereas slightly more was identified on the Roman assemblage (burning most frequent).

Table 14.1 Quantification of finds from TEA 14

Type	Count	Weight (g)	Date/type
Pottery	513	4,174	Iron Age
	12,132	128,476	Roman
	20	283	Post-Roman
Coins	4		
Small Finds	86		
Lithics	67 (worked)		
	69 (burnt unworked)		
Stone	48		
Glass	7		
Clay Tobacco Pipe	1		Post-medieval
Leather	1		Roman
Wood	2		Roman
Building Materials	157	20,675	
Metalworking Residues	90	996	

Table 14.2 Quantification of bone from TEA 14

Type	Count	Weight	Date/type	% of bone assessed
Cremations	3			
Inhumations	4			
Disarticulated bone contexts	0			
Animal Bone	4,010	20,400		39

Table 14.3 Quantification of environmental samples from TEA 14

Type	Count	Date/type
Bulk Environmental Samples	245	
Monoliths	5	
Kubiena tins	0	
Waterlogged	1	
Other	Phosphate samples	

Provisional interpretation and potential

Specific objectives and research aims relevant to TEA 14 were detailed and discussed in the WSI (Atkins CH2M 2016c). The Research Framework for the East of England was also reviewed (Medlycott 2011). Archaeological evidence on TEA 14 comprised finds of earlier prehistoric date, two areas of late Iron Age settlement, three phases of Roman activity, incorporating settlement, agricultural and industrial activity (ie evidence for pottery production), a single Saxon building, and medieval and post-medieval agricultural activity. There is potential to answer research questions associated with each of these periods, and about the transitions between the periods.

Earlier Prehistoric

Earlier prehistoric flints were recovered from across the site, however no features were assigned to these earlier periods. As such, there is no potential for further work. This is aside from looking at the flint as part of the larger collection of flint recovered from the A14 sites.

Late Iron Age – Roman

The majority of the archaeological remains on the site were dated to the late Iron Age – Roman period, and essentially comprised the remains of settlement within an agricultural landscape. It is sometimes difficult (and unhelpful) to disentangle these two periods from each-other so, for this section, they have been discussed together. Further analysis of the pottery and other finds will almost certainly help to refine the chronology of these phases, as well as the nature of activity.

LATE IRON AGE – ROMAN TRANSITION

This site contained substantial evidence for both late Iron Age and Roman settlement and agricultural activity and is, therefore, a key site to understand the nature of the late Iron Age – Roman transition, and particularly the impact of the Conquest on everyday people and the agricultural economy.

For this assessment, activity was divided into 'late Iron Age' and 'Roman', based on morphology, stratigraphy, and spot dates. It is, however, likely that there was more of a piecemeal development from one period to the next, with some of the features surviving into later phases. This will be clarified and consolidated during analysis, when more dating is available.

At some point in the Roman period (if not immediately after the Conquest), there was a reorganisation of the landscape. This is most noticeable with the establishment of Trackway 14.1, which cut across Iron Age settlement in the north-eastern part of the site. It will be crucial to establish the date at which this took place, as major transformations of the landscape are known in the region both in the later first and early second centuries AD (Smith et al 2016, 195-7). Analysis of the finds and environmental assemblages will help our understanding of the nature of social and economic change during this period.

The research value of this site is very much enhanced by comparison with other sites in the region which show evidence for late Iron Age – Roman transition, such as Milton, Haddon, the Whittlesey-Stanground pipeline, and Northstowe in Cambridgeshire, in addition to other sites on the A14 scheme (eg TEA 5, TEA 7A, TEA 10A, TEA 12, TEA 20, and TEA 38). This will all help gain an understanding of what this site can tell us about the late Iron Age – Roman transition, a question identified by Medlycott in the Research

Agenda: "On sites of this period, does the evidence suggest a seamless transition or a change in use of the land or farmstead... or continued occupation of the site but a change in building-types or agricultural practices?" (Medlycott 2011, 31).

AGRICULTURAL ACTIVITY

The excavated area of TEA 14 encompassed an agricultural landscape spanning the later Iron Age to at least the middle Roman period. As such, it has the potential to answer questions about the agricultural economy, and how (and why) it changed over time. The agricultural activity extended to the south-east, into the site evaluated by Northamptonshire Archaeology (Burrow and Foard-Colby 2006); and into TEA 15. The results from both of these investigations will therefore be considered alongside this site, along with those from the excavations at RAF Brampton to the north (Nicholls 2016).

During the late Iron Age phase, agricultural activity was organised around two separate areas of activity, each containing buildings (two roundhouses and three post-hole structures) and pit clusters. This suggests that the Iron Age agricultural activity may have taken the form of small, individual (seemingly unenclosed for the most part) farmsteads, with the farmers living and working there. In contrast, the Roman agricultural activity was spread over a single, large complex of enclosures and fields; there was less evidence for buildings, though this is not uncommon in Roman rural settlements and does not indicate a lack of domestic activity (Smith et al 2016, 46); indeed the quantity of types of artefacts and ecofacts certainly suggests a domestic component.

The initial evidence suggests that at least the early-mid Roman settlement's economic basis was more concerned with livestock farming than arable cultivation. This is based on the presence of various enclosures, routes through which to funnel animals, and the trackway to move animals. Furthermore, there is a lack of evidence for 'arable' farming practices (no corndryers, granaries etc), although these are generally uncommon prior to the mid-Roman period (Allen et al 2017, 59). The initial archaeobotanical results support this, with charred grain only being recovered, in 'occasional' quantities, from 12% of the samples.

It appears that the farming settlement within TEA 14 was abandoned by the mid-Roman period, with the stock enclosures going out of use. A system of larger fields was then established, which may relate to a shift to more arable emphasis, as has been found on many other sites in the West Anglian Plain region, where the later Roman economy was heavily based on the cultivation of spelt wheat (Allen et al 2017, 153).

There were clearly many changes in the layout and organisation of the agricultural activity here, in what appears at present to be a relatively condensed timeframe. It is possible that these changes (particularly with the establishment of the Phase 2 Roman enclosures) reflect changes in agricultural practices, potentially brought about by the Roman Conquest and the 2nd century farming expansion. This is a key question raised in the 'Rural Economy of Roman Britain' volume, which states that *'examining how this (the 2nd century expansion in farming) occurred, through different forms of farming practice, is crucial for understanding the agricultural economy of Roman Britain'* (Allen et al 2017, 145).

Pastoral farming, in particular, underwent significant developments after the Roman conquest. This included an increase in the scale of livestock farming, increases in individual livestock size, and the widespread husbandry of domestic fowl. The 'Rural Economy of Roman Britain' has studied this on a regional basis – this area falls under the 'Fens' region, where there was a shift towards increasing proportions of cattle (compared with sheep/goat and pig) by the later Roman period (Allen et al 2017, 94). Further analysis of the animal bone from this site (focusing on the numbers of different animals from the different phases of activity, their size and stature, and mortality profiles), in conjunction with the site narrative, will help elucidate the nature of the agricultural economy on this site, and how it changed over time.

The importance of waterholes is another interesting element of the site, which would have been integral to the pastoral economy. Palaeoenvironmental evidence from the basal fills of these waterholes may provide information on the local environment.

This will add information to a key research question identified by Medlycott – *"The nature of the agrarian economy needs further study. Is a real understanding of continuity and change emerging? What are the relative proportions of cereals and livestock and is there a changing dynamic throughout the period"* (Medlycott 2011, 31).

ROUTEWAYS

Trackway 14.1 was the most obvious Roman feature on the site and was the focus of much of the other Roman activity. There is therefore the potential to gain an understanding of how the activity on this site was connected to other settlements in the area. It has been suggested that the trackway was established as part of the first phase of Roman activity on the site and continued in use into the second phase. This will need to be checked when more refined dating is available. It is part of the widespread development of communication routes in this region during the early to mid-Roman period, with different farming settlements links to their surrounding fields, areas of pasture, other farming settlements and the emerging new major road networks and nucleated centres (Smith et al 2016, 202). The trackway fell out of use by the third phase of Roman activity. The reasons behind this will need to be considered, through comparison with other trackways and landscape features in the vicinity.

The trackway continued beyond both the eastern and western limits of this excavation. It was not observed in TEA 12, to the west of the site (west of the A1). It may have connected to another Roman route, potentially the road which is postulated to run north to south along the line of the modern A1. To the east, it is possible that it was the droveway identified in the evaluation at Brampton Road (Burrow and Foard-Colby 2006). It was not, however, identified in the A14 excavations to the east of Brampton Road.

The line of this trackway will be plotted, alongside all other tracks, roads, and routes identified during the A14 excavations and previous archaeological work. These will be plotted alongside known Roman settlements, and the geology, topography, and water-courses. This will provide an understanding of how people and goods were connected to each-other and moved through the landscape.

Trackways and roads are, according to Medlycott, *"under-studied"*. This therefore provides an opportunity to answer questions raised, such as *"What variations in structure exist? Are they different in the countryside, and on different terrain? Why did some disappear, and others continue in use?"* (Medlycott 2011, 48).

POTTERY PRODUCTION

Two early Roman pottery kilns (likely 1st – 2nd century AD) were identified in TEA 14. This adds to the corpus of kilns identified in this area during the A14 excavations (TEA 7A, 10A, 11, 15, and 16) and those excavated at RAF Brampton (Nicholls 2016), only 1km to the north-east. Together, they form a whole new pottery industry and have significant research potential.

This adds to previously excavated examples of Roman pottery kilns in Cambridgeshire, such as those at Swavesey, Duxford (Anderson et al 2016), Greenhouse Farm, Addenbrookes, and Cherry Hinton. The kilns uncovered here will be compared to those examples and elsewhere on the A14 excavations (TEA 38), to see if they were sharing traditions (and potentially even sharing potters).

One of the key questions for Roman pottery kilns is whether they were producing pottery just for themselves and the local population (at a household level), or whether it was more of an industrialised (and potentially specialised) industry. The fact that only two kilns were identified on this site suggests more localised activity, although when taken with the other examples discovered in the area, there is the possibility that there may have been a larger more organised, commercial business, albeit one that was quite dispersed – perhaps it was a series of small groups operating under a collective umbrella?

Other questions which will be tackled in the analysis stage include how long the kilns were in use for (ie how many firing episodes can be discerned and is there any evidence for re-linings or repairs), were they used episodically (seasonally?) or continuously, and how many pots were produced in one firing. Questions about the architecture of the kilns (how they changed over time, and why) will also be addressed.

The pottery wasters and other vessels found in the kilns and nearby features will be analysed. This will provide information on the types of pottery objects being produced, how much of a variety there was and whether there was any evidence for specialist production (as in the Duxford kilns, which focused on production of flagons). The type of pottery produced will, if possible, be traced and mapped in nearby settlement sites, to gain an understanding of whether it was being traded to other areas. Clay samples were taken of the clay from the site, to be compared to the clay found in the pottery being produced.

The possibility that the features around Kiln 14.2 may be the remains of a potters' workshop is particularly interesting. There was evidence for many of the stages in pottery production – the extraction of the clay (in the extraction pits close to the kiln and the larger area of quarrying to the south-west); the water supply (in the nearby waterholes); the puddling of the clay (in the four possible puddling pits); and the firing of the pots themselves (in the kiln). The location of this within an individual enclosure, and the evidence for structures and a stone surface, supports this theory.

Comparative examples of Roman potters' workshops will be sought from across the country, such as the 4th century pottery production workshop at Stibbington in Cambridgeshire (Upex 2008). It is unusual to find examples of this, so this has significant research potential.

Saxon

Sunken-Featured-Building 14.1 was one of a number of Saxon buildings excavated along the A14 scheme. The collection of these structures, together, has great potential to increase our understanding of Saxon building techniques, their use, settlement, economy, and how they developed over time. This building was isolated, with no other structures, pits, or other features around it. Some Sunken-Featured-Buildings across the scheme were also located on their own (eg TEA 2, TEA 15), while others were in groups of 5+ (eg TEA 7C, TEA 10, TEA 11, TEA 12).

The location of this building on the line of the trackway is interesting, as suggests that the track was still visible in the Saxon period, although clearly not in use. This ties into questions about the relationships between peoples and landscapes in the early post-Roman period, and in particular how this was reflected in the positioning of their buildings – an idea seen elsewhere on A14 sites where Saxon buildings avoided earlier Roman enclosures (eg TEA 7, 10, 11, and 12).

Although no dating evidence was recovered from this building, the lack of late Roman activity across the site demonstrates that there was no direct continuity from the Roman period into the Saxon period, but rather a return to this area at a later date.

This will tie into research questions focusing on Anglo-Saxon rural landscapes and settlements. Medlycott states that *"Further work needs to be done regionally and nationally to clarify the morphology of settlement sites of the early to middle Anglo-Saxon period"* (Medlycott 2011, 57).

Medieval – Post-medieval

Medieval and post-medieval agricultural remains were identified across the site. This is not considered to have any potential for further work.

Recommendations

Approximately 75% of contexts have been preliminary grouped at Entity and Group level for this assessment. Full grouping and assignment to period is required following results of specialist pottery analysis. This may require some revision of the stratigraphic sequence discussed here. In particular, the grouping of the Roman ditches and the waterholes will need to be checked. This is critical, as the date of the changes across the site is crucial in understanding the impact of the Conquest.

It is recommended that radiocarbon dates are obtained from the burials and from appropriate contexts that may aid in understanding the broad horizons of change within the Roman period.

Other site-specific work, recommended for the analysis stage, includes:

- Palaeoenvironmental analysis of basal fills of waterholes.

- Plotting the route of the trackway alongside other routes in the area, and in relation to nearby settlements, geology, topography, and watercourses.
- Full analysis of the kilns (structure, use).
 - Full analysis of the pottery and wasters from the kilns and nearby features.
 - Analysis of the clay samples from the site, to compare to the clay used in the pottery.
 - Comparative work on other sites

TEA 15

Tamsin Scott

TEA 15 is an archaeological area on the A14 Cambridge to Huntingdon Improvements Scheme, located towards the western end of the project, immediately south of TEA 14 and northwest of TEA 16. The site is situated to the south of Brampton, east of the A1 and south of B1514 Buckden Road. The excavation area covered 4.4ha, centered at NGR TL 2046 6880 (Figure 15.1). and at c 14-15m AOD. The natural geology of the site is Oxford Clay, overlain by River Terrace gravels (NERC 2019).

Archaeological background

Aerial photography assessments identified cropmarks in the area, and previous investigations by Northamptonshire Archaeology directly to the north of TEA 15 revealed Romano-British field systems and a stock enclosure (Burrow and Foard-Colby 2006). Trenching evaluations for this scheme by Cambridge Archaeological Unit identified limited archaeology, including two post-holes, two ditches, two pits and tree-throws. Romano British pottery was recovered in the western part of the site during fieldwalking (Patten et al 2010, Site 10).

Methodology

Archaeological excavation took place between October 2016 and March 2018, starting with the haul road in 2016, and later stripping the remainder of the area. The excavations adjacent to the B1514 revealed significant contamination from a former fuel depot. A small area in the center of the site has been truncated by an Anglian Water pipeline. There is still a small area, beneath the northwestern haul road, to be stripped (agreed by the A14 IDT).

Archaeological features have been preliminarily grouped (at entity and group level) with stratigraphic sub-periods within the Bronze Age – Iron Age. Features defined as either Neolithic or Bronze Age – Iron Age were assigned based on their morphology, relative stratigraphic position and some limited spot-dating information. Features assigned to the Iron Age – Romano-British and medieval periods were assigned based on their morphology, relative stratigraphic position and the recovery of numerous Romano-British artefacts.

Summary of results

The excavation identified four main phases of activity that included Neolithic Pits, a prehistoric pit-alignment and curving ditched enclosure with associated pits; late Iron Age to Romano British enclosures and a Saxon sunken-featured-building (SFB) (Figure 15.2).

Neolithic

Pit 15.1 was 4m in diameter, located in the centre of the site (Figure 15.3). It contained a dumped layer of burnt material with bone and pottery fragments – early-middle Neolithic Impressed Ware (151714, 151733). Pit 15.2 was located 10m to the east of pit 15.1 and may also have been Neolithic. The pit measured 3.9 x 2.7m and contained animal bone and lenses of decomposed organic material (151687, 151861).

Bronze Age – Iron Age

CURVING ENCLOSURE, DITCH 15.3

At the southern edge of the site was part of a curving enclosure, c 50m in diameter, with an entrance to the west (Figure 15.3). The enclosure ditch was 1.3m–2m wide and 0.85m–1m deep. The fill of the ditch was naturally-infilled clay. Small quantities of animal bone were recovered from two locations in the ditch (151700, 151727). Small sherds of pottery were recovered from the uppermost fill (151744). Within the enclosure was a crouched burial (15.4) and two tree-throw hole [151707, 151720]; a single lithic was found in each feature. The enclosure was likely Bronze Age in origin, however an earlier date is feasible.

CROUCHED BURIAL 15.4

A poorly-preserved crouched burial was uncovered within the curving enclosure, 2m to the southeast of the entrance (Figure 15.4). The individual faced eastwards, towards the centre of the enclosure. Lithics and small pieces of pottery were recovered from beneath the skull (151594). The burial was cut into a tree bowl [151590]. Further lithics were retrieved from the tree bowl fills (151591, 151592). A radiocarbon date from this burial failed to produce a result (GU50633).

STRUCTURE 15.5

Close to the curving enclosure ditch were four post-holes [151586, 151588, 151597]. The central post-hole [151586] contained a visible post-pipe with large pieces of charcoal (151692) and packing. The fourth smaller Posthole [151558] was located 4m to the east, beneath a furrow. It is possible that these may be the remnants of a prehistoric structure, associated with the other prehistoric activity in the area.

LINEAR FEATURES

Short stretches of ditch were investigated across the site, which may have formed part of the prehistoric landscape. South of the curving enclosure was a 14m long, north to south ditch 15.6. Animal bone, charcoal, lithics and small fragments of pottery (151574, 151534) were recovered from the fill of the ditch. Analysis of samples from this feature may provide clear dating and evidence of settlement activity. It is unclear whether this was earlier or later than Enclosure 15.3. The ditch was truncated by depression 15.12. To the southwest of the curving enclosure was another short stretch of ditch (15.7, 3m in length), with no finds. This ditch was truncated by Pit 15.13. Analysis of samples from the pit fill (151571) may provide dating evidence. Two undated NE-SW aligned ditches 15.8, 5m apart and 16m long, were investigated close to the pit alignment (Figure 15.5). They may be associated with the wider prehistoric landscape beyond the north-east limit of excavation. To the south of the double ditches was a single 30m stretch of ditch, 15.9, aligned NE-SW (perpendicular to the double ditches). Although undated this was clearly truncated by the ridge-and-furrow.

PIT ALIGNMENT 15.15

In the eastern part of the site was part of a pit alignment orientated NW-E (Figure 15.5). The pit alignment continued to the south-east into TEA 16 (towards the barrow), for a total length of 260m. Within this site, the alignment comprised 41 sub-circular pits, measuring between 0.75m and 2.5m in diameter by 0.18–0.65m deep. They generally had moderate - steep sides, a concave base, and brown-grey silty-

clay fills. The pits were spaced approximately 0.5 to 0.75m apart. The pits appear to have been dug in groups, with pits of similar dimensions in groups of three or four.

Pit [151754], at the southern limit of excavation, contained a post-hole in its base. Three additional pits with post-holes were located to the immediate north [151769, 151822] and south [151794] of the pit alignment. Towards the eastern extent of the site was a NE-SW pit that truncated [151846] an earlier north to south pit [151844]. Another pit [151802] near the southern limit of excavation had a re-cut [151792].

Only a single pit [151835] within the alignment contained pottery fragments (151836); although the remainder were undated the pit alignment was likely of late Bronze Age or early Iron Age date. This will hopefully be confirmed via radiocarbon dating if suitable samples are available.

PITS

Seven pits and an irregular depression were investigated close to the curving enclosure ditch entrance. Some of these truncated the ditch and so represented a later phase of prehistoric activity (Phase 2b), whereas others may be contemporary to the curving enclosure (Phase 2a).

STRATIGRAPHIC SUB-PHASE 2A

Two intercutting pits 15.13 were situated north of the curving enclosure (Figure 15.3). The earlier pit had an irregular profile and was naturally-infilled; and the later had near-vertical sides and distinct clay fills. Neither pit contained any finds. A further pit, Pit 15.14, was situated north of 15.13 and truncated by ridge and furrow activity. The pit had been deliberately backfilled with charcoal and fragmented sandstone (151585).

STRATIGRAPHIC SUB-PHASE 2B

Pit 15.10 truncated the terminus of the curving Enclosure 15.3 (Figure 15.4). This was a large pit (3.5m in diameter) with silty-clay fills indicative of standing water. This was overlain by 15.11, an irregular depression (6.5 x 5m in size), which contained prehistoric pottery, lithics and animal bone (151851, 151612, 151689). The depression also truncated the north to south ditch 15.6. These have been interpreted as a watering hole and associated trampled area. Pit 15.12, which truncated the terminus of linear feature 15.7, contained worked stone and charcoal (151570, 151571). Pit [151614] truncated the curving enclosure ditch. Another pit [151540] was located 10m NW of the structural post-hole 15.5. These pits contained no finds or notable inclusions.

Iron Age – Roman

Elements of a late Iron Age to Romano-British settlement were identified in the west of the site (Figure 15.6), undoubtedly part of the same settlement as that revealed to the northwest in TEA 14. The pottery assemblage suggests that activity here was concentrated in the middle – late Roman period.

Gullies 15.16 may be of Iron Age origin. Pottery recovered from (151080) may provide a secure date. The southern gully was re-cut and enlarged by ditch 15.17 from which Roman pottery, metal and animal bones were recovered (151019). A series of intercutting Iron Age to Roman pits and a ditch (15.18) demonstrate sub-phases of Iron Age - Romano British activity.

Located 5m north of the intercutting pits, an oven and associated pit (15.19) were excavated. Other notable pits in proximity to the enclosure comprised Pit 15.20, from which a copper pin fragment (SF15007) was recovered; pit 15.21, which contained decorated pottery; and cesspit 15.22, which contained pottery and bone.

Two ditches, 15.23, spaced 7m apart, extended south-westwards from this area and may have formed a trackway dating to the late Iron Age. The eastern ditch extended 33m in length, whereas the western ditch was truncated at half this length.

A large rectilinear enclosure, with interior dividing ditches spaced at 12m intervals, was excavated in the far western part of the site, probably later in date than most of the features further to the southeast. The enclosure bounded an area thought to have been used for industry and domestic occupation – part of the larger complex farmstead in TEA 14, with evidence for pottery production and stock enclosures. Frequent finds of pottery, bone, CBM, nails, and stone were retrieved from the enclosure ditches. The southern enclosure boundary ditch truncates the eastern ditch at [152079]. This may be a re-cut. Re-cutting of Enclosure Ditch 15.25 was also evident to the north. A Roman copper spoon (SF15209) was recovered from within the bounds of the rectilinear enclosure. A kiln 15.26, rich in pottery, was excavated in the southeastern part of this enclosure. The kiln had been put out of use and its interior structure removed before pottery was dumped inside it. The nearby enclosure ditch [151988] contained a dumped layer of charcoal and pottery (152019) which probably originated from the kiln.

Within the central part of the enclosure was a possible building 15.27. This comprised a short segment of NE-SW aligned ditch (7.8m long) and three post-holes to the east, forming an arc. Roman pottery, a spindle whorl fragment (SF15220), and a metal object (SF15215), were retrieved from the ditch. A pit 151939 (1.4m in diameter by 1m deep); with part of a large broken iron rod (SF15205) and a fine spindle whorl (SF15210), was located to the north of the post-holes suggesting the area may have been where yarn production took place.

The remains of a second possible oven 15.28, were positioned to the immediate south-west of this enclosure. This feature appeared to have been backfilled with burnt sandy clay and charcoal. Fragments of pottery were also retrieved (151904, 151916). A large pit from which burnt stone, pottery and animal bone were recovered 15.29, was positioned to the immediate east of the enclosure.

Saxon

A Saxon Sunken-Featured-Building (SFB 15.30) measuring 3.9 x 2.4m (Figure 15.6) was situated adjacent to the southern ditch of the Romano-British Enclosure 15.24. Saxon and residual Roman pottery were retrieved from the building (152059, 151941). It was heavily disturbed by modern rooting.

It is possible that some of the ditches in this area were post-Roman in date. To the south-west of the SFB was a 50m long NW-SE aligned ditch, 15.31, containing a single fragment of worn Roman pottery (151868). To the east of Enclosure 15.24 was a 50m long slightly curving ditch 15.32, with a 3m entrance. It continued NW-SE, broadly on the same alignment as the southern rectilinear enclosure ditch. Pottery was recovered from the western terminus, close to the Roman enclosure in (151950) and the in western extent in (151977). Sterile ditches 15.33 and 15.34 truncated Iron Age/Romano-British features 15.16 and

15.19 to the north. A third sterile ditch [151073, 152089, 152091] may also be contemporary. These ditches all retain the Roman rectilinear formation, respecting the boundaries of, and continuing from, the rectilinear enclosure 15.24 whilst truncating the earlier Iron Age – Romano-British features (Fig 15.2). They have been interpreted as late Romano-British – Saxon field boundaries.

Pit 15.35, located 30m S/SW of the western terminus of 15.32, may also be of post-Roman date. Fired clay, CBM and charcoal were recovered from the feature.

Medieval

Medieval furrows were evident across the site on a NNE-SSW alignment. Extant ridge and furrow earthworks existed prior to the commencement of the topsoil strip at the eastern edge of the site. A small engraved stone (SF15204) found may be of medieval date.

Post-medieval

Three post-medieval field boundary ditches were uncovered across the site (Figure 15.2) – two aligned east to west (the northern of which is extant to the NE and SW as modern field boundaries and was shown on OS maps until 1982), and one along the southern limit of excavation, which had evidence of a gated entrance (two post-holes and a 4m gap).

Finds and environmental summary

Tables 15.1 – 15.3 provides a quantification of the finds, bone, and environmental samples from TEA 15.

No earlier prehistoric pottery or other finds were identified from TEA 15. There was, however, a small collection of 122 worked flints, mostly unretouched debitage, suggestive of a Mesolithic or early Neolithic blade-based industry in this area.

The pottery assemblage comprised late Iron Age and Roman pottery, with an emphasis on the middle – late Roman period. The Iron Age assemblage, from 15 features, was mainly grog-tempered and shell-gritted wares. The Roman assemblage comprised sand-tempered wares, of local manufacture, with a few examples of regional and continental imports (OXF RS and samian ware). The pottery from the kilns was reduced-ware, mainly lid-seated jars.

A small collection of other finds were recovered, including two Roman bracelets, two spindle whorls, a spoon, a coin, a millstone, four fragments of Roman glass, and a small collection of tegula and imbrex roofing tile.

The Iron Age and Roman samples identified moderate quantities of cereal grains (mainly hulled barley and oats), and some chaff and arable weeds. The presence of chaff and weed seeds suggests that crop-processing was taking place here.

The animal bone assemblage mainly comprised cattle bone, followed by sheep/goat, with less horse, pig, and dog. There was very little evidence for bone modification (only 3% of fragments).

Table 15.1 Quantification of finds from TEA 15

Type	Count	Weight (g)	Date/type
Pottery	1,828	24,317	Iron Age/Roman
	10	190	Post-Roman
Coins	1		
Small Finds	54		
Lithics	122 (worked)		
	2 (burnt unworked)		
Stone	1		
Glass	5		
Clay Tobacco Pipe	1		Post-medieval
Building Materials	47	3,556	
Metalworking Residues		57	

Table 15.2 Quantification of bone from TEA 15

Type	Count	Weight	Date/type	% of bone assessed
Cremations				
Inhumations	1			
Disarticulated bone contexts	0			
Animal Bone	598	7,890		22

Table 15.3 Quantification of environmental samples from TEA 15

Type	Count	Date/type
Bulk Environmental Samples	82	
Monoliths	0	
Kubiena tins	0	
Waterlogged	0	

Provisional interpretation and potential

Research questions are drawn from the current research agenda for East Anglia (Medlycott 2011) and in the new revision (Brudenell, forthcoming). Specific objectives and research aims relevant to TEA 15 originally drawn from the Highways England WSI (2015) and highlighted in the mitigation design concerned the development and character of the Iron Age – Romano British agricultural landscape, social organization, potential of faunal preservation and evidence of an Iron Age-Roman transition (ACJV 2016).

Archaeological evidence from a range of periods was uncovered on TEA 15. This included prehistoric activity associated with the barrow to the east - Neolithic pits, a Bronze Age-Iron Age enclosure, a Bronze Age-Iron Age pit alignment, and associated pits and ditches. There was an Iron Age–Romano-British enclosure, with evidence for industrial activity, at the western edge of the site, which formed the

south-eastern fringes of a settlement revealed in TEA 14. Medieval agricultural furrows were found across the site, and there were three post-medieval field boundaries.

Neolithic

Palaeoenvironmental sampling strategies need to be strengthened in deposits of ... well sealed Neolithic pits to maximise chances of recovering macrobotanical evidence, particularly of cereals...Furtherwork, employing a variety of methods, is needed to establish or confirm the date and character of a representative sample of sites mapped by the NMP projects. Without dating such sites more closely, it is difficult to relate them to regional and national trends. (Medlycott 2011, 14)

Samples from well sealed pit deposits in 15.1 may provide macrobotanical evidence that can be securely dated by the recovered Neolithic Impressed Ware.

Neolithic and Bronze Age: the relationship of settlement and funerary landscapes

Many of the known Neolithic sites comprise 'monuments', usually of a funerary and/or ceremonial nature...However the substantial proportion of the archaeological record...-flint-working sites, agriculture, unenclosed settlement or pit groups- is under-represented in the NMP/HER dataset. More work is needed to try to reduce or compensate for this bias, and to investigate further the relationship between the monuments and the less visible sites. (Medlycott 2011, 14)

Examination of the inter-relationships between settlements, together with variation and changes in settlement types, offers considerable potential to explore the social changes taking place, as well as the inter-relationship between settlements and monuments. (Medlycott 2011, 20)

Settlement and funerary landscapes are evident for the Neolithic and Bronze Age - Iron Age within TEA 15 and the wider landscape. The curved Enclosure (15.3) and associated Burial (15.4) and settlement activity (15.5 – 15.7, 15.10 – 15.14) were excavated in TEA 15. A barrow rich with cremation burials was located to the southeast in TEA16, east of the pit alignment (15.15) and a Neolithic ring ditch monument was investigated to the northwest at TEA 12. Beyond this TEA 10 revealed Bronze Age field systems and settlement activities. There is enormous potential to study the relationship between settlement activity and funerary landscapes within this area and for it to be studied within the wider context of regional multi-period occupation and monument landscapes such as that investigated at Eynesbury (Ellis 2004).

Bronze Age Burial Practice

Patterns of burial practice need further exploration. This should include the relationship between settlement sites and burial, and the development and use of monuments, including burial mounds as key elements in determining and understanding the landscape. Later Bronze Age burial practices are now known to be variable, however we do not know why this is the case. (Medlycott 2011, 20)

Routine radiocarbon dating of cremations will be crucial. Isolated cremation should be dated, and the extent of dating programmes for cemeteries will need careful consideration on a site by site basis to address the issues above. The same is true for isolated, often flexed, inhumations,

which have yielded dates covering the whole of the late second and first millennium BC. (Brudenell forthcoming, 17)

Numerous cremation burials were recovered from the barrow in TEA 16. Dating of the crouched burial (15.4) within the curved enclosure of TEA 15 may enable study of the relationship between these two burial types within the context of funerary and settlement enclosures should it be found to date from the Bronze Age.

Bronze Age and Iron Age Landscapes

More extensive palaeoenvironmental evidence would enable past landscapes and economies to be recreated. (Medlycott 2011, 20)

A number of enclosures of possible Bronze Age date have been identified where a domestic function is suspected; again, further investigation on the ground could establish the date and function of these sites with greater certainty. (Medlycott 2011, 21)

There is clear evidence for some parts of the region for complex 'off-site' activities included isolated pits and waterholes, pit alignments, deposits in barrow ditches, isolated four posters etc. Understanding more about these settlement patterns and use of the landscape is a key question. (Medlycott 2011, 29-30)

Ditches, isolated pits, watering holes, a possible structure and intercutting features at the terminus of the curving enclosure (15.3) in TEA 15 provide evidence for stratified settlement activities both within and beyond the bounds of the enclosure. Study of these features combined with analysis of samples of buried soils within the Depression (15.11), Watering Hole (15.10) and curving enclosure may provide secure dating and enable further understanding of transitions in settlement patterns, agricultural activity and landscape use across these periods.

The prehistoric Pit Alignment (15.15) appears to respect the boundaries of and be aligned in reference to the pre-existing barrow monument located c 50m to the southeast in TEA16 and the curving Enclosure (15.3), c 250m to the northwest in TEA 15. This is in keeping with late Bronze Age to early Iron Age pit alignments found elsewhere in the Britain (Pollard, 1995, 99). Smaller pit alignments were present in TEA16, east of the barrow, and at TEA 13.

Distribution, density and dynamics

Distribution, density and dynamics need further study: zonation of use/internal spaces, interaction with hinterland, location with ref to topography and geology, resources, communication routes, etc. (Medlycott 2011, 31)

The topography local to TEA 15 slopes downwards from southwest to northeast, the centre of TEA 15 being situated at the lowest point of c 14m AOD. The rectilinear enclosure (15.24) was located at c 15m AOD, downslope from the southern high ground but at the western and highest extent of TEA 15. Geology in this location consists of sandy-gravels with good natural drainage. Geology in the centre of TEA 15 consisted of terrace gravels with frequent clay deposits.

There is some evidence for different zones of activity associated with rectilinear Enclosure 15.24, which was itself the southernmost part of the settlement revealed in TEA 14. Pottery manufacture was evidenced in the southeast (15.26) of the enclosure and a building (15.27) further to the west may have been domestic in nature, with evidence for yarn manufacture, a widespread and typically household-level domestic activity (Allen et al 2017, 226). Further Roman agricultural activity was found to the north in the form of a field system and stock enclosure (Burrow and Foard-Colby 2006).

The clay rich river terrace gravels in the centre of TEA15 may have provided a local resource for pottery manufacture. The possible clay extraction pit located in the clay rich centre of TEA 15 (15.13) has been provisionally dated to the Bronze Age – Iron Age, although no secure dating has been recovered. It may have been a source of clay during the Iron Age – Romano-British period.

Late Iron Age - Roman transition

On sites of this period, does the evidence suggest a seamless transition or a change in use of the land or farmstead (as at the MAFF site, Hoddesdon), or continued occupation of the site but a change in building – types or agricultural practice? At what date(s) are the extensive field systems and enclosures (like those plotted by the NMP in the Norfolk coast and Broads) established, and how do these relate to earlier systems and settlements? (Medlycott 2011, 31)

In TEA15 there is evidence to indicate occupation from the later Iron Age into the Roman period. More refined dating from excavated features and excavation of the area beneath the haul road may provide further evidence of transition and change.

The possible Iron Age trackway (15.23) that led southwest from possible contemporary occupation may be indicative of a communication route or of Iron Age field systems being situated to the south. The trackway was respected by the rectilinear Enclosure (15.24) suggesting continuation of use during the late Iron Age – Romano British period. No further evidence of Roman field systems was uncovered within the area of excavation. It is not yet clear if Romano-British field systems investigated to the north by Burrow and Foard-Colby (2006) were contemporary with the transitional enclosure and trackway or the rectilinear enclosure.

Manufacturing

The nature and extent of manufacturing needs further study—how much was on a commercial basis and how much small scale and localized cottage industry/production? (Medlycott 2011, 30)

Manufacturing was evident in the form of a single kiln (15.26) and a spindlewhorl indicating yarn manufacture (15.27). The small-scale nature of these features is suggestive of localized household industry. Further excavation of the rectilinear enclosure may uncover additional zones of industrial activity.

Romano-British - Saxon

There is increasing evidence from excavations for sites which span the transition period between Roman Britain and Anglo-Saxon England. These need to be synthesized on a regional basis, at

present it is not known whether the general trend is for continued occupation or for shifting settlements or for deliberate destruction. (Medlycott 2011, 57)

The sunken-floored-building (15.30) was positioned adjacent to the southern boundary of the rectilinear Roman Enclosure (15.24). At the level of excavation, it did not truncate the enclosure ditch. Some truncation at a higher depth may have been present during construction however an enclosure ditch of this size and depth would likely have been visible in the landscape into the Saxon period.

Ditches 15.31 and 15.32, provisionally dated to the post-Roman era respect both the boundaries of the Roman rectilinear enclosure and, in the case of 15.32, extend eastwards from the south-east enclosure corner. A re-cut of this corner at 152079 may also be dated to a transitional period. These, in association with late-post Roman ditches 15.33, 15.34 and [151073, 152089, 152091] form rectilinear field boundaries extending from the Romano British enclosure. These indicate continuation of settlement and landscape use beyond the Roman period.

Recommendations

Approximately 80% of contexts have been preliminarily grouped at Entity and Group level to produce this report. Further work is needed to refine feature interpretations before this information can be added to the MHI Oracle database. Full grouping and assignment to period of all contexts is required following results of specialist finds and sample analysis; this may require some revision of the stratigraphic sequence discussed here. Further radiocarbon dating is recommended for greater chronological resolution of the Bronze Age settlement, the pit alignment, and the crouched burial.

Further study of Iron Age, Romano-British and Saxon features within TEA 14, 15 and 16 in relation to Burrow and Foard-Colby's (2006) evidence of Romano-British field systems to the immediate north of TEA15, may also enable a greater understanding of multi-period transitional use of the landscape.

TEA 16

Emma Jeffery and Jeremy Mordue

TEA 16 was an archaeological site within Section 2, towards the western end of the A14 road scheme. It was south of Brampton, to the east of the A1 and south of the B1514 Buckden Road. It was located to the east of TEA 15 and continued to the infilled gravel quarries adjacent to the River Great Ouse (NGR: TL 2092 6854). The excavation area covered 5.64ha (Figure 16.1). The site was previously under arable cultivation and comprised parts of two fields. It lay on relatively flat land, at around 15m AOD, sloping down to the east towards the River Great Ouse, c 400m to the east of the site. The underlying geology was the Oxford Clay Formation - mudstones, siltstones and sandstones. This was overlain by River Terrace deposits of sands and gravels (NERC 2019). The far eastern part of the site was in a 'wet' area, with strongly gleyed soils and peats within the floodplain of the River Great Ouse, and ponds (previous quarry pits) beyond.

Archaeological background

A geophysical survey over the western field identified the southern part of an enclosure and other discrete features (Davis 2016, S2-008). Two phases of archaeological trial trenching evaluation were then carried out by Cambridge Archaeological Unit (CAU 2010, Area M1) and MOLA Headland Infrastructure (MHI 2016, S2-010). This identified an early Bronze Age barrow (with possible Neolithic origins), Bronze Age field systems, and middle Iron Age activity in the eastern part of the site.

Methodology

The results of the geophysical survey and trenching evaluation were used to define the archaeological mitigation areas – the barrow in TEA 16 as a 'targeted excavation area' and the remainder of TEA 16 as a 'strip map and sample' area. TEA 16 was stripped and hand excavated in various stages between November 2016 and June 2018. All works were undertaken in accordance with the Written Scheme of Investigation (Atkins CH2M, 2016c).

Phase summary

Natural geology

One palaeochannel was identified in the eastern part of the site (Figure 16.2). This was aligned roughly north to south and was c 14m wide. It broadly followed the edge of the 'wet' area (the edge of the River Great Ouse's floodplain). It was used as a boundary in the Roman period.

Prehistoric (Mesolithic – Bronze Age)

MESOLITHIC

No features assigned to the Mesolithic were identified on the site. However, the worked flint was likely Mesolithic in date, and therefore suggests some activity on the site before the construction of the barrow monuments. Much of this worked flint was recovered from the buried soil which was sample excavated via test pits.

THE BARROW MONUMENTS (FIGURES 16.3-6)

Towards the centre of TEA 16 were two prehistoric monuments (Barrows 16.1 and 16.2). Barrow 16.2 directly overlay and truncated Barrow 16.1 (Figures 16.4 and 16.6). These monuments were positioned on a gravel ridge (Oadby Member) at around 15m AOD. They were placed on a 'false ridge', with the apex of the ridge slightly further to the east, sloping down towards the River Great Ouse.

There was limited dating evidence for the earlier monument (Barrow 16.1), however it seems likely that it was Neolithic in date. The later monument was most likely constructed in the early Bronze Age, with a later (middle Bronze Age) cremation cemetery inserted into it. There was also some evidence for continued use, potentially into the Iron Age, of the monuments.

The proposed chronology of the monuments is as follows:

- 1) Tree-throws (representing a phase of tree clearance across the site) and earlier ditches pre-dating both monuments.
- 2) Construction, use, and disuse of Barrow 16.1 (Neolithic).
- 3) Construction and use of Barrow 16.2 (including outer ditch, mound, cremations and pits) (early Bronze Age).
- 4) Later modifications to Barrow 16.2 – recut of outer ditch and later pits and cremation burials cut into outer ditch fills (middle Bronze Age).
- 5) Later activity on the site – short stretches of ditch truncating Barrow 16.2.

FEATURES PRE-DATING THE MONUMENTS (FIGURE 16.4)

A number of 'tree-throws' were recorded within this area. They were concentrated in the northern part, within the area enclosed by Barrow 16.1. They were uncovered beneath the level of the Barrow 16.2 mound material (around 14.5m AOD), demonstrating that the tree-throws pre-dated Barrow 16.2. Furthermore, tree-throw [161696] was uncovered within the 'entrance' to Barrow 16.1, suggesting that it also pre-dated Barrow 16.1. Worked flint was recovered from three of these tree-throws, and a sherd of Roman pottery from one. These tree-throws may have been associated with a phase of woodland clearance prior to the construction of the monuments.

Two ditches pre-dated the construction of the Barrow 16.2 ditch – ditches 16.1 and 16.2. Ditch 16.1 was aligned north to south in the northern part of the area, observed for 13m, and was truncated by the Barrow 16.2 ditch. Ditch 16.2 was aligned north to south in the southern part of the area, observed for 11.3m (with no clear termini), and was truncated by the Barrow 16.2 ditch. No dating evidence was retrieved from either of these ditches. They do not fit with the alignments of the earlier monument (Barrow 16.1), and so they have been provisionally assigned to this earlier phase of activity.

BARROW 16.1 (NEOLITHIC) (FIGURE 16.4)

Barrow 16.1 was the earliest monument in this area. It was oval-shaped and formed by a single ditch. This enclosed an area which measured 31.5m (NE-SW) by 14.5m (NW-SE). There was an entrance to the

northwest. Barrow 16.1 was truncated by the later monument (Barrow 16.2). This was most noticeable in the northern part of the monument where the Barrow 16.2 ditch [161724] truncated the Barrow 16.1 ditch [161728]. Here, the Barrow 16.2 ditch cut through all of the Barrow 16.1 ditch fills, demonstrating that Barrow 16.1 had become disused and completely infilled by the time Barrow 16.2 was constructed. Furthermore, the Barrow 16.2 mound material overlay the upper backfills of the Barrow 16.1 ditch, eg mound material (161426) overlay the upper fill (161423) of Barrow 16.1 ditch [161421].

The Barrow 16.1 ditch measured 2.2-3.6m wide, by 0.3-0.7m deep. The ditch had moderately-sloping sides and a concave base. It was filled with a mixture of sandy-clayey-silt fills, likely derived through silting (rather than deliberate backfill). There was some evidence for a bank, with gravel-rich deposits towards the sides and base of the ditch, in the southern slots [161511] and [161517] and northeastern slot [161309]. These were concentrated on the northern/western sides of the ditch, which indicates that the bank lay on the 'inside' of the monument.

A post-hole [161306] was identified in the base of ditch [161309]. This was likely contemporary with the construction of the Barrow 16.1 ditch and may indicate the existence of fences or other structures within the ditch. No other post-holes were identified within the Barrow 16.1 ditch. The northeastern entrance measured 3.3m wide and within this was a tree-throw [161696] and two pits [161098] and [161102]. The tree-throw is thought to pre-date the Barrow 16.1 ditch (likely related to the earlier phase of tree clearance, see above); whereas the pits were cut through the later mound material and were likely related to Barrow 16.2 (see below – Pits 16.2). No evidence for an inner mound was identified in association with this monument, although this was apparently identified during CAU's evaluation (CAU 2010, 108-110 and figure 34).

Little dating evidence is currently available from the Barrow 16.1 ditch. Two Neolithic flint blades were recovered from the ditch during the evaluation, potentially suggesting a Neolithic date for the monument. A total of 255 pieces of worked flint were recovered from the ditch during the excavation and these may provide some indication of the monument's date. In particular, part of a polished axe (SF 16304) was recovered from the fill of ditch [161309].

The Barrow 16.1 ditch was recorded as cutting through the 'natural geology'. This may be because the upper parts of this ditch have been truncated, and so it is possible that the ditch was also cut through the original topsoil and subsoil. However, it has been suggested that the area was 'de-turfed' (and all existing topsoil removed) prior to the construction of Barrow 16.2 (see discussion below), and this may have happened prior to Barrow 16.1's construction.

There was no evidence for any other features associated with Barrow 16.1, with no central burial or other funerary/burial features. Most of the discrete features (pits and cremation burials) were cut through the Barrow 16.2 mound and so were associated with this monument or later activity. The other features which pre-dated Barrow 16.2 (Ditches 16.1 and 16.2) did not respect the alignment or work with Barrow 16.1, and so are unlikely to have been associated with it. The lack of mound, central burial, and other funerary features suggests that this monument may not have been a barrow, but instead may have been a 'henge' or similar. The function of the monument is unclear, such that care must be taken in

applying the “barrow” label. Further work in analysis will focus on gaining an understanding of the function of this monument, including detailed consideration of what the ditch (and environmental samples) contained, dating, and comparisons with other monuments.

BARROW 16.2 (EARLY BRONZE AGE) (FIGURE 16.4)

After Barrow 16.1 had become disused and infilled, Barrow 16.2 was constructed. This was a broadly circular monument with an internal diameter of c 38m (slightly longer NE-SW, 38.5m; in comparison with NW-SE, 36.2m). No entrances were identified in this monument. The remains associated with this monument comprised the outer ditch, inner mound, 68 cremation burials, and 15 small pits cut into the mound. The construction of this barrow is thought to date to the early Bronze Age (based on its morphology), but the barrow was in use over a long period and so some of the cremation burials and pits likely relate to later activity. There was also clear evidence for later modifications to this monument, most noticeably a recut of part of the outer ditch and a cremation cemetery cut through the outer ditch fills. No central burial was identified within this monument and there was no evidence to suggest that there ever was one.

This monument was constructed on irregular and undulating fluvial sands and gravels (Macphail 2018). There was no evidence for any buried topsoil, however in some places there was evidence for the remains of a sandy subsoil (eg (161735)). This suggests that the original topsoil may have been removed prior to the construction of Barrow 16.2. This may have been for an unknown constructional purpose or because the topsoil had been disturbed (via trees etc) (Macphail 2018). It is unclear whether this happened before or after the construction of Barrow 16.1.

The outer ditch measured between 2.94m and 4.9m wide, by 0.84-1.7m deep. It generally had moderately-sloping sides and a concave base, although steeper sides were observed in places. The ditch was filled with a series of silty-clay and silty-sand fills. The basal fills appear to have derived through natural silting or edge weathering, shortly after the ditch was constructed and whilst the monument was in its initial phase of use; the ditch may have been periodically cleaned out during this period. Above the basal fills were more homogeneous and thicker deposits of clayey-silts and silty-sands, which likely derived from natural silting and from slumping and erosion of the ditch edges. Iron staining was identified in many of these fills, which suggests periodic standing water within the ditch.

The upper fills of the ditch were generally silty-clay and more frequently contained pottery. The pottery was provisionally dated to the Iron Age, suggesting that the final silting of the monument took place at this time. Some of these fills may have originally been mound material which was washed-in. This may explain the presence of charcoal (from the cremations) and human remains within these deposits. There was no evidence within this ditch for deliberate backfilling, at any stage.

There was some suggestion of an outer gravel bank, however this was not clear. Gravelly deposits were observed within the ditch fills along the ‘outside’ edge of the monument (eg (161238) along the southern edge of [161235]; (161486) along the southern edge of [161490]; and (161624) along the southeastern edge of [161626]). However, on the eastern and northern sides gravelly deposits were observed on the

'inside' edge of the monument (eg (161176) along the eastern edge of [161255]; (161614) along the eastern edge of [161617]; and (161246) on northeastern edge of [161243]).

Discrete deposits of charcoal were identified within the fills of some of the ditch slots – (161250) in [161235]; (161303) in [161490]; (161410) in recut [161411]; and (161655) in [161626]. These deposits covered relatively small areas within the ditch backfills (c 1.3 x 1.3m) and were essentially sat within the fill sequence (at a join between fills, and typically halfway down the fill sequence). They may relate to later 'burning' activities taking place at the barrow, after it had started silting up, and be associated with the later cremation burials.

A small quantity of human remains was identified in one of the outer ditch fills– (161271), the upper fill of [161270]. The most likely explanation is that this fill was 'washed in mound material', and that the human remains derived from a cremation burial which was previously inserted into the mound. Some worked flint, pottery, and animal bone was recovered from the fills of the Barrow 16.2 ditch. Much of the pottery is currently of 'unknown' date, however that which has been dated is generally from the Iron Age. This included:

- early Iron Age pottery from (161128) (the final fill in [161255]);
- Iron Age pottery from (161486) (the penultimate fill in [161490]);
- Iron Age pottery from (161489) (the primary fill in [161490]);
- late Iron Age pottery from (161278) (the penultimate fill in [161275]);
- Iron Age pottery from (161552) and (161555) (fills within [161550])

This demonstrates that Barrow 16.2 was being infilled during the Iron Age but provides little information on the date of construction of the barrow or its lifetime or duration.

The Barrow 16.2 mound was positioned within the monument (ie within the area defined by the outer ditch). Evidence for this was identified across the entire monument. The surviving mound deposits were between 0.4m and 0.8m high. This meant that a slight earthwork rise, formed by the mound, was visible even before excavation. The mound would originally have been higher but it has been reduced through erosion and later activity. The mound contained a large variety of soil components and it was suggested that these may have come from different soils and sediments, potentially from different places (Macphail 2018). This is not unusual, particularly because barrows were constructed and used over a relatively long period of time. The mound included some gravel-rich sandy soils, which may have derived from the excavation of the outer ditch. Some finer soils (sandy loams) were also identified, which may have been excavated from nearby subsoils. There was no evidence for any obvious turf horizons within the mound.

The mound appeared to have been constructed in different ways in different parts of the monument. For example, the various mound deposits were positioned next to each other (almost side-on) in the north-eastern quadrant of the barrow; whereas in other places the different mound deposits were layered on top of each other. In other places there was evidence for thin layers at the bottom of the

mound, which may have acted as consolidation or levelling layers (eg (161426) in the south-western quadrant). Elsewhere, there was the suggestion of 'tip lines', such as (161678), in the north-western quadrant where the gravel lines may indicate a process of banking up and building outwards. Few finds were recovered from the mound materials – some worked flint (including a flint blade), some prehistoric pottery, and some mid-late Roman pottery from the upper mound deposits.

As mentioned above, there was no sign of any buried topsoil, suggesting that the area had been 'de-turfed' before the construction of the mound. There was, however, the suggestion of an earlier 'buried subsoil' (161735). This was a mottled pink-red sandy-clay observed in the northeastern quadrant of the barrow, c 0.4m thick, directly overlying the natural geology and sealed by mound deposit (161734). This mound clearly post-dated the disuse of the earlier monument (Barrow 16.1), as the mound deposits overlay the upper fills of the Barrow 16.1 ditch (eg mound material (161571) overlay the upper fills within Barrow 16.1 ditch [161563]. The recut of the outer ditch was observed cutting through mound deposits in one place – recut of outer ditch [161708] cutting mound material (161731). Numerous features associated with Barrow 16.2, particularly cremation burials and pits, were cut through the mound (see discussion below).

CREMATION BURIALS CUT INTO THE MOUND

Sixty-eight cremation burials were identified cutting through the Barrow 16.2 mound. Fifty-three of these were in a cluster in the southeastern quadrant (Cremation Burials 16.6) and are considered to be part of a later cremation cemetery. The other fifteen were spread around the rest of the monument. Of these fifteen, four were urned, one (Cremation Burial 16.3) appeared to be placed in an organic container, and the other ten were unurned. These cremation burials likely date from different periods of the barrow's use. Some of them may have been related to the initial phase of the barrow's use (early Bronze Age); whereas others were likely later (middle Bronze Age) as they were cut through the outer ditch fills. For the purposes of this assessment, all of the cremations are considered as part of this phase with the exception of Cremation Burials 16.6.

Cremation Burials 16.1 were located in the south-western quadrant of the barrow, cut through the mound. This comprised three cremation burials, all within pottery vessels (urned). Two of these vessels were placed within the same pit [161171] on their sides, with one vessel larger than the other.

Cremation Burials 16.2 were located in the south-western quadrant, to the southeast of Cremation Burials 16.1, and also cut through the mound. This comprised seven cremation burials, none of which were urned. One of these cremations [161192] was in a larger and deeper pit and contained larger pieces of bone. There was also evidence in this pit that the cremated remains had been put in hot. Some of these cremation burials were at different levels from others, suggesting that they were inserted into the mound at different times.

Cremation Burial 16.3 comprised one cremation [16111] in the north-western quadrant of the barrow. The cremated remains appear to have been placed within organic material (wood? leather?) within the pit.

Cremation Burials 16.4 comprised two cremations in the north-eastern quadrant of the barrow, one placed in a pottery vessel [161267] and one without a vessel [161296]. Cremation burial [162167] cut the recut of the outer ditch, suggesting that it was part of a slightly later phase of funerary activity. Late Iron Age pottery was also recovered from the fill of cremation burial [161296], potentially suggesting longer-term funerary use of the monument.

Cremation Burials 16.5 comprised two unurned cremations in the south-eastern quadrant of the barrow, c 6m away from the main cremation cemetery (Cremation Burials 16.6). They were c 0.2m higher than the upper level of the Barrow 16.1 ditch, demonstrating that they had been cut through the mound.

PITS CUT INTO THE MOUND

Three small groups of pits cut through the barrow mound. These have all been discussed as part of this phase of activity, but it is possible that some may relate to later phases:

- Pit Group 16.1. This comprised three small pits in the south-western quadrant of the barrow, spaced closely together. They measured between 0.23-0.68m long by 0.23-0.4m wide by 0.06-0.17m deep. They were cut through the mound material, approximately 0.5m above the level of the Barrow 16.1 ditch. All three of these pits contained significant quantities of charcoal but no evidence for *in situ* burning or cremated remains. No dating evidence was retrieved from any of these pits.
- Pit Group 16.2. This comprised six small pits in the north-western quadrant of the barrow, within an area of 8.5 x 7.5m. These measured between 0.17m in diameter to 1.38m by 0.9m, and between 0.08m and 0.15m deep. They were all cut through the mound material and contained significant quantities of charcoal (but with no evidence for *in situ* burning or cremated remains). Worked flint was recovered from pit [161104].
- Pit Group 16.3. This comprised six small pits in the north-eastern quadrant of the barrow, within an area of 10 x 2.5m. They measured between 0.4 and 0.55m long, 0.34-0.45m wide, and 0.08-0.14m deep. They were all cut through the mound material. These pits contained moderate quantities of charcoal and fired clay, but not in the same quantities as observed in the other pit groups. No dating evidence was retrieved from any of these pits.

LATER MODIFICATIONS TO BARROW 16.2 (MIDDLE BRONZE AGE) (FIGURE 16.4)

There was some evidence for the continued use and modification of Barrow 16.2 over a longer period of time. This comprised a recut of the outer ditch in the eastern part of the barrow; the later cremation cemetery (Cremation Burials 16.6) in the south-eastern quadrant; and other features cut through the outer ditch fills. These have been provisionally assigned to the middle Bronze Age (based on the cremation vessels in Cremation Burials 16.6).

A later recut of the outer ditch was identified in the eastern part of the monument – ditches [161411 and [161404] within [161420]; ditch [161447] within ditch [161626]; ditch [161530] within ditch [161521]; and ditch [161542] within ditch [161528]. There may also have been a recut of the ditch [161550] in the northeastern part of the monument, however this was not visible because Ditch 16.4 truncated it. There was no sign of this recut in other parts of the Barrow. The recut comprised a wider shallower ditch than

the original outer ditches (a maximum of 14.2m wide, but generally around 4.5-4.8m wide, by between 0.4m and 0.8m deep). This recut truncated approximately half of the fills of the original outer ditch, demonstrating that it was significantly later in date than the original construction of the barrow (as the ditch had had time to silt up). However, some of the other cremations eg [161301] were cut through the fills of this recut ditch, suggesting that the barrow was still in operation as a funerary monument following this modification. Pottery identified as 'prehistoric' was recovered from (161408), the final fill of the recut ditch [161411].

Cremation Burials 16.6 comprised 53 cremations in the south-eastern quadrant of Barrow 16.2, within an area measuring 11m by 6m. These were the most concentrated cluster of cremation burials, forming an apparent cemetery. Three of these cremation burials cut through the outer ditch fills, and so this cemetery has been assigned to a slightly later phase of activity (middle Bronze Age) than the other burials. Nineteen of these cremation burials were urned (or contained evidence, such as complete pot bases, that they were originally urned) – 35% of those in this area. At the time of writing these had not yet been looked at by specialists but appear to be typical Bronze Age funerary vessels. None of these cremations contained evidence for different or unusual burial practices.

Few finds were recovered from these cremation burials. Pottery was recovered from some of the cremation pits – this was generally too small and scrappy to be easily dated, however late Iron Age pottery was identified in two burials [161831] and [161153]. This may suggest later use of the barrow for funerary purposes. Worked flint was recovered from four cremation burials [161754], [161819], [161781] and [161745]; and an unidentified small corroded copper item from burial [161831]. The cremated bone from one of these cremations was radiocarbon dated to 1495-1310 cal BC (95.4% probability; SUERC-85543, middle Bronze Age).

These cremation burials were cut through the barrow mound and were generally positioned at around the same level (c 14.6m AOD). This is with the exception of those cut through the barrow's outer ditch, which were positioned c 0.5m lower than those within the mound. Some of the cremation burials intercut – eg [161122] cut cremations [161493] and [161134]; and [161444] cut cremation [161446]. This demonstrates that the burials in this cemetery were not interred at one point in time, but rather that they were interred sequentially and over a longer period of time.

Three cremation burials, [161301], [161284], and [161407], truncated the barrow's outer ditch fills. Cremation [161284] was cut into fills of the original outer ditch; cremation [161301] was cut into the fills of the recut outer ditch; whereas cremation [161407] was cut into the fills of the original outer ditch but was also cut by the recut outer ditch. There was also the suggestion that cremations [161484], [161480], [161437], [161482], [161439], [161441], [161446] and [161444] had been cut by the recut outer ditch. This suggests that some of the cremations in this cemetery may be of slightly different dates from each other. The cremations in Cremation Burials 16.6 were truncated by Ditches 16.6. These ditches did not form clear divisions or boundaries within the cemetery, so were part of a later phase of activity (see discussion below).

Three other features were identified cutting through the outer ditch fills. Some of these may have been associated with the recut of the ditch or the later cremation cemetery. These features were:

- Posthole [161280]. Cut through fills (161278; 161277; and 161276) of ditch [161275]; but sealed by upper ditch fill (161279).
- Pit [161621]. Cut through all fills (161622 and 161623) of recut ditch [161447].
- Posthole [161507]. Cut through upper fill (161501) of ditch [161505].

FEATURES POST-DATING THE MONUMENTS (FIGURE 16.4)

Some features post-dated Barrow 16.2 entirely. This mainly comprised short stretches of ditch – Ditches 16.3, 16.4, 16.5, and 16.6. These truncated all fills within the outer barrow ditch, mound material, and cremation burials. They may have been associated with later modifications to the barrow (potentially with the Roman or Saxon activity to the east); or were the result of later animal burrowing.

Ditch 16.3 was aligned NW-SE for 9m, towards the northern part of the monument. Ditches 16.4 comprised two segmented ditch sections in the north-eastern part of the monument, aligned NW-SE and measuring 5.6m and 2m respectively. Ditch 16.5 was aligned NE-SW in the southern part of the monument, observed for 3.2m. All of these ditches truncated the upper fills of the Barrow 16.2 ditch. No dating evidence was retrieved from any of these ditches. Ditches 16.6 comprised two short curving stretches of ditch – one aligned east to west with a curving ‘hook’ to the north; and one on a curving NW-SE alignment. Both of these truncated the cremations in Cremation Burials 16.6. It is not clear whether these were the remnants of later animal burrowing through the mound (based on their irregular shape), or whether they were short stretches of later ditch.

PIT ALIGNMENTS (BOUNDARIES 16.1 AND 16.2) (FIGURE 16.3)

Two pit alignments were identified – one to the west of the barrow (Boundary 16.1) and one directly to the southeast (Boundary 16.2). These have been provisionally dated to the late Bronze Age – early Iron Age, although this needs to be confirmed. Their position with respect to the barrow suggests that they were orientated upon it.

Boundary 16.1 was orientated NW-SE, continuing into TEA 15 to the west (see Pit Alignment 15.15) and beyond the southern limit of excavation. The pit alignment was observed for 155m (within TEA 16), for a total distance of 240m (including TEA 15). The alignment within TEA 16 comprised 59 sub-circular pits, spaced c 0.6-0.8m apart. The pits measured between 0.5m and 2.5m long, 0.5-1m wide, and 0.18-0.46m deep. They had steep sides, concave bases, and a grey-brown sandy-silt fill. Worked flint was retrieved from one of these pits but otherwise there was no dating evidence. One of these ‘pits’ comprised two intercutting pits [161377/161379]. Five pits and a post-hole [161335] were located just off the alignment.

Boundary 16.2 was aligned NW-SE for 35m and terminated at both ends. This alignment comprised 13 pits, spaced 0.8-1m apart. The pits measured between 1.1m and 2m long, 0.6-1.2m wide, and 0.22-0.5m deep. They had moderately-sloping/steep sides, concave bases, and brown-grey silt fills. Some worked flint and late Iron Age pottery was recovered from one of these pits [161596]. One of these ‘pits’

comprised two intercutting pits [161936/161938]. Five pits were located just off the alignment. Pit [161946], within Boundary 16.2, was different in character from the rest. This was a circular pit, located just to the south of the main pit alignment and truncated by pit [161938] within the alignment. This pit contained large quantities of fired clay, with burnt material both above and below it. It may be the remnants of a kiln lining.

These pit alignments respect the barrow and would have formed divisions within the wider prehistoric landscape (operating at the same time as, or potentially slightly after, the barrow). Certainly Boundary 16.2 led towards the barrow and terminated before it, suggesting that the barrow was a feature in the landscape when the pit alignment was established, and that this boundary may have been established in conjunction with the barrow.

OTHER PREHISTORIC FEATURES (FIGURE 16.5)

Within the Roman Enclosure 16.2 was a pit [160018] which was likely prehistoric in date. This was cut by both the Roman Ditch 16.8 and Kiln 16.4. The pit measured 4.2m long by 2.7m wide by 0.7m deep. It had three fills, two of them gravelly and one a grey sticky silt. Prehistoric pottery in flint and shelly wares, worked flint, and a possible antler pick were recovered from the gravelly fills. There was also a general spread of prehistoric worked flint across the site, both to the east and west of the barrow. Distribution plans of these flints could chart the extent of prehistoric activity across this area.

Iron Age

Iron Age activity was identified to the east and west of the barrow (Figure 16.3). This comprised an enclosure to the west of the barrow (Enclosure 16.1), and field systems and structural features to the east. Ceramic dating evidence places these features in the late Iron Age. They appear to respect Barrow 16.2, suggesting that it remained a landscape feature into the Iron Age.

ENCLOSURE 16.1 (FIGURE 16.3)

Enclosure 16.1 was an open-ended (three-sided) 'staple'-shaped enclosure, 80m to the northwest of Barrow 16.2. It was aligned NE-SW and measured 70m by at least 30m. A northeastern side to the enclosure was not observed - termini were observed at both ends, suggesting that there may never have been a complete circuit. This enclosure was identified in the geophysical survey (Davis 2016). This also showed it as an open-ended 'staple' shape. However, a NW-SE aligned ditch was identified further to the northeast, which could have functioned as the other side to the enclosure. This was not identified during the excavation – potentially it was the post-medieval Boundary 16.27.

The enclosure ditch measured between 0.55m and 1.1m wide and 0.3-0.5m deep, had steep sides and a concave/v-shaped base, and was filled with brown-grey clayey-silt fills (derived via silting). No dating evidence was retrieved from the fills of this enclosure, however its morphology and the Iron Age pottery recovered from features within it suggests it was Iron Age in date. Few internal features were identified within this enclosure. There were two pairs of post-holes – two towards the north-western part of the enclosure and spaced 1.4m apart; and two towards the central part of the enclosure spaced 1.5m apart and containing late Iron Age pottery. There was also a single post-hole [161387] in the northern part of the enclosure. These may indicate structures within the enclosure. Four shallow pits were within the

enclosure. They measured between 0.5m and 1.25m in diameter, by 0.04-0.35m deep, with gentle sides and concave bases. They were filled with grey-brown (sterile) sandy-silt fills, providing little information about their function. Middle-late Iron Age pottery was recovered from pit [161380].

FIELD BOUNDARIES (FIGURE 16.3)

A series of ditched boundaries on the northern and eastern sides of the barrow were dated to the Iron Age. These respected the barrow (with Boundaries 16.5 and 16.6 essentially enclosing Barrow 16.2) but were later in date than some of the features associated with the barrow (such as the pit alignment, Boundary 16.2).

Boundary 16.3 was the earliest, truncated by Boundaries 16.4 and 16.5. This was a curved boundary, aligned NW-SE before curving to the west and with a short return to the south. It was observed over 40m. This boundary truncated Boundary 16.2 (the pit alignment). Worked flint was recovered from the boundary ditch. Boundaries 16.4, 16.5, and 16.6 formed part of a longer boundary which essentially 'enclosed' Barrow 16.2. Boundary 16.4 was located on the northern side of the barrow and comprised two stretches of ditch (10m and 15m long, with a gap of 4.5m) which continued beyond the northern limit of excavation. Boundary 16.5 was a slightly more sinuous curving boundary heading to the SE for 65m. This may have been the continuation of Boundary 16.4, potentially forming the corner of a field with the barrow positioned within it. Boundary 16.6 was located to the southeast of the barrow – it was aligned east-west for 15m, before turning to the south for 28m, and then to the east for 80m. Boundary 16.7 was connected to the eastern end of Boundary 16.6 and was aligned NNW-SSE. It was observed for approximately 20m in length and was 0.56-0.60m wide and 0.18-0.25m deep. It intersected with the post-medieval Boundary 16.27 at its northern end and was not seen beyond this.

Boundary 16.8 was also aligned NNW-SSE, to the southeast of Boundary 16.7. It was 19m long, 0.34-0.47m wide and 0.1-0.18m deep. It turned to the west at its northern end for 5.4m before terminating close to Boundary 16.9. It had a reasonably steep profile, mixed fills, and no finds. Boundary 16.9 was aligned NE-SW and was recorded for 44m as far as the post-medieval Boundary 16.27. The ditch was between 0.42m and 0.81m wide and 0.14-0.2m deep, with no finds recovered from its silty fills.

In the southeastern corner of the excavation were two parallel NE-SW ditches – Boundaries 16.10 and 16.11, spaced c 17m apart. These were truncated by the Roman ditches (Boundaries 16.13 and 16.23). Boundary 16.10 was observed for 29m in length, was 0.69-0.9m wide and 0.21-0.4m deep. Boundary 16.11 was observed for 16.2m in length, before a break of 0.7m followed by a short segment 4.7m long. There was then a gap of 34m before the ditch restarted, continuing its line to the northeast and cutting into the top of the palaeochannel. The first stretch of this ditch was 1.04m-1.86m wide and 0.43-0.52m deep with sterile blue-grey silty-clay fills, possibly indicating standing water. To the northeast the ditch was approximately 1.4m wide and 0.5m deep with a grey clay lower fill and a dark humic upper fill. No finds were recovered from either of these boundaries. Perpendicular to Boundary 16.11 was Boundary 16.12. This was very shallow to the west (0.03m) becoming broader and deeper (0.3m) to the east. Its fills were dark and humic and produced a small quantity of animal bone, flint, shell and Iron Age pottery. In the southeast corner of the site, within the area enclosed by Boundaries 16.11 and 16.12, was a curvilinear ditch, Ditch 16.7, with a partial re-cut. This ditch fitted inside the angles of intersecting ditches

around it and may be of contemporaneous date, although no finds were recovered from any of the fills. The ditch was 0.59-0.85m wide and 0.06-0.3m deep with silty fills and frequent chalk lumps.

STRUCTURAL FEATURES (FIGURE 16.3)

There were three areas of potential 'structural features' to the southeast of the barrow. These have been provisionally assigned to the Iron Age, because of their location within the Iron Age boundaries. They likely represent small temporary agricultural structures.

Structural Features 16.1 comprised four small post-holes, 55m to the southeast of the barrow. These formed a rectangle, oriented NNE-SSW, measuring 5.25m long by 1.7m wide. They may have been the posts for a platform or similar. Structural Features 16.2 were located in the southern part of the excavation and comprised two short stretches of ditch, two small pits, and four post-holes. These covered an area measuring 15m NW-SE by 8m+ NE-SW (continuing beyond the southern limit of excavation). The only dating evidence retrieved from these features was a sherd of Roman pottery from one of the post-holes, and they may therefore be Roman rather than Iron Age in date. Structural Features 16.3 were located 9m southeast of the barrow, just to the southwest of Boundary 16.2. These comprised a short east to west aligned ditch (potentially a beam-slot) and a pit to the north and south of it.

Roman

To the east of Barrow 16.2 was an area of Roman activity (Figure 16.5). This was situated on higher ground that dropped off to the south and east (into the wet area). The Roman activity was demarcated by a large boundary ditch, inside which was a rectilinear enclosure. The enclosure had been sub-divided several times and there were many clusters of pits cut alongside and sometimes into the ditches. Later, kilns and large pond-type pits were cut into the filled-up ditches. Outside of the enclosure were discrete features and fragments of ditches. The pottery assemblage suggests that there was a concentration of activity in the Mid-Roman period, with little activity from the 4th century onwards.

BOUNDARY 16.13 (FIGURE 16.5)

The curving boundary ditch marked the western extent of the Roman activity. It was observed for 103m on a roughly north-south alignment (continuing to both the north and south beyond the limit of excavation), with a distinct curve to the west at its southern end. The ditch was generally in excess of 1m wide and between 0.4m and 0.86m deep. No features were recorded cutting this ditch. Towards the south, the ditch became two ditches. This may account for its extreme width (3.4m) at the southern baulk, although only one ditch was observed at that location. Worked flint, animal bone (including a pig skull), and middle-late Roman pottery was recovered from the upper fills of this ditch.

ENCLOSURE 16.2 (FIGURE 16.5)

A rectilinear enclosure was situated against the eastern edge of Boundary 16.13. It measured approximately 50m east-west and in excess of 26m north-south (continuing to the north beyond the limit of excavation). The boundary to the enclosure was not substantial, with the western ditch measuring less than 1m wide and surviving from 0.4m deep in the north to 0.08m deep in the southwest. A small quantity of Roman pottery was recovered from one intervention across this ditch, and another slot

excavated across the corner yielded Roman pottery, animal bone, worked flint and a Roman copper coin. The southern boundary was even more fragmentary. The ditch was between 0.64m and 1m wide and 0.19-0.4m deep. After this it broke down into a lineated series of shallow pits typically less than 0.5m wide and less than 0.23m deep, before picking up again as a segmented ditch. Flint, animal bone and late Iron Age/early Roman pottery was recovered from its terminus, and sherds of 2nd-4th century black burnished ware was recovered from another slot. The definition of the boundary was lost as it entered the palaeochannel zone. The eastern limit was probably marked by the curvilinear palaeochannel which was aligned roughly north to south. The channel was 14m wide and filled with several sandy and gravelly deposits. The lower deposits were darker and more organic. Roman pottery, worked flint, CBM and animal bone were recovered from three fills. No Roman activity was observed to the east of the palaeochannel.

DIVISIONS WITHIN ENCLOSURE 16.2

Enclosure 16.2 was divided on an east-west alignment by a ditched partition which was constructed and managed over a number of years. The northernmost iteration of this ditch (Boundary 16.14) ran 30m to Boundary 16.18, then kinked slightly to the southeast and continued for a further 15m before terminating as the ground fell away to the east. It was between 0.58m and 1.11m wide and less than 0.3m deep. Finds from this ditch comprised pottery (including samian and other Roman wares), flint, and some slag. Adjacent to this was a later version, Boundary 16.15, on the same course and terminating in the same place. This was 0.5-1.13m wide and 0.16-0.36m deep, and produced a small quantity of pot, bone and flint. In the western part of the enclosure was another east-west ditch (Boundary 16.16) with a terminus to the west. This ditch headed east into Pond 16.1 and contained Roman pottery, flint, animal bone, and a stone spindle-whorl. Halfway between the southern boundary of the enclosure and the east-west division was a curvilinear ditch (Boundary 16.17), 0.3-0.9m wide and 0.14-0.25m deep. This ditch had a noticeable arc similar to the kink in the east-west divisions and had termini at both the east and west ends. Roman pottery, animal bone and worked flint, including a 6.5cm long flint blade, were recovered from its fill.

Within Enclosure 16.2 were also a series of north-south dividing ditches. The first, Boundary 16.18, was positioned approximately 30m from the western side of the enclosure. This ditch was typically 1m deep and over 2m wide, with multiple silting episodes from which middle-late Roman pottery, animal bone and an iron knife blade were recovered. Boundary 16.19 was located 11m to the east of Boundary 16.18. This ditch connected to east-west Boundary 16.15 at its north end and ran south for 8.4m before terminating. This ditch was narrow and shallow, was cut by a later Roman kiln, and contained middle-late Roman pottery, fired clay and a clay upper fill which, while unfired, may have been associated with the construction of the kiln lining. A shale spindle whorl was recovered from the surface of the ditch immediately adjacent to the kiln. Other finds recovered from this ditch comprised animal bone and an iron nail. Approximately 5m to the east of this was another ditch (Boundary 16.20) which connected to the southern boundary of Enclosure 16.2 and was observed for 11.6m to a terminus. This ditch was up to 1m wide and 0.35m deep and produced Roman pottery and animal bone.

In the eastern part of the enclosure was a ditch which ran northeast to southwest, Ditch 16.8. It was roughly parallel with the palaeochannel and likely respected it. This ditch connected to the southern boundary of the enclosure near the east end of Boundary 16.17. It was later than all the features it encountered until the boundary. It produced no finds from its southern intervention; a small amount of abraded early Roman pottery from its upper (disuse) fill further to the north; and, where it was close to a later Roman kiln, a small amount of animal bone, some CBM and a large quantity of middle Roman pottery (possibly dumped wasters from the kiln).

PITS WITHIN ENCLOSURE 16.2 (PIT GROUP 16.4 AND 16.5)

Several pits were identified within Enclosure 16.2 – Pit Group 16.4 in the western part of the enclosure and Pit Group 16.5 in the eastern part. Pit Group 16.4 comprised sterile tree-throws, a small pit with Roman pottery in, two conjoined small pits with sterile gravelly fills, and a circular pit which contained only (residual) worked flint. Pit Group 16.5 comprised a cluster of pits abutting both sides of Boundary 16.18, and a small cluster of pits between Boundaries 16.19 and 16.20. The pits abutting Boundary 16.18 varied in size, with the largest measuring 2.1m diameter and 1.05m deep. It had multiple gravelly fills with stratified finds including a large quantity of Roman pottery and a complete vessel from the upper fills. Three of the pits were medium-sized, approximately 1.5-1.8m diameter and 0.6-0.75m deep. They contained moderate quantities of finds including worked flint. Two pits were small, measuring less than 1m in diameter and 0.45-0.5m deep. All pottery recovered from these pits was of middle-late Roman date. A sherd of pottery from one of these displayed possible deformation from misfiring. Between Boundary 16.19 and 16.20 was a small cluster of pits of varying sizes. The largest was 2m in diameter but only 0.22m deep and contained only flint. It cut another pit, more than 1.28m in diameter and 0.68m deep, with multiple fills and stratified middle-late Roman pottery. This pit cut a smaller one, 1.2m in diameter and 0.68m deep which contained only a small quantity of Roman pottery.

LARGE PITS ON THE EDGE OF PALAEOCHANNEL (PIT GROUP 16.6)

Several large shallow pits were located adjacent to the palaeochannel (Pit Group 16.6). They may have been constructed to collect water (as they were adjacent to the palaeochannel), a suggestion supported by the mottled and almost gleyed nature of some of the deposits within the pits. The first large pit was against the northern baulk and measured roughly 5m in diameter and 0.38m deep. It had three fills - a 'greasy' clay silt primary deposit and two gravelly upper fills which produced early-middle Roman pottery, flint and animal bone. The second pit was located immediately to the south of the first and measured 7.8m by 5.6m and 0.2m deep, dropping steeply to more than 0.53m deep. This pit had multiple fills of alternating grey clay with coarse stones, mottled grey/orange silty sand, and clean yellow or orange sand. These fills produced a small quantity of Roman pottery and worked flint. The third pit was located immediately to the west of the second. It was approximately 5.6m in diameter and 0.18-0.29m deep. Roman pottery and flint was recovered from its gravelly fills.

PONDS

Two very large pits, interpreted as ponds, were within Enclosure 16.2. This part of the site lay in a wet landscape tipping down towards the floodplain of the River Great Ouse. The palaeochannels to the east would have carried water and may even have been wet barriers in the Roman period. The presence of

ponds may indicate either that the palaeochannels were not a reliable source of water for the activities undertaken here, or that the ground was becoming saturated and the ponds formed naturally through poor drainage.

Pond 16.1 was located in the western half of the enclosure, abutting Boundary 16.14. It measured 13.2m by 6.6m and was 0.11-0.2m deep. Its gravelly fill was generally sterile, although a small quantity of pottery and CBM was recovered. Pond 16.2 was located over the southern enclosure boundary and Boundary 16.18. It measured 13m by 14m. Investigation revealed a complex series of cuts and re-cuts – these may have been draining into the pond or were obliterated by it. Many of the fills were sterile, although eleven produced varying quantities of pottery, worked flint, animal bone, and a very small quantity of CBM. Pottery recovered from this feature was mostly middle-late Roman, with a small quantity of early Roman from the northern edge.

KILNS

Within Enclosure 16.2 were six Roman pottery kilns. These were located in the eastern half of the enclosure, arranged in a line of four and a separate pair. The kilns were of different types and sizes but were mainly a figure-of-eight shape comprising combustion chamber, flue and stoking pit. Four of the kilns cut into the existing network of ditches, another cut into a pit, and one was discrete. Pottery recovered from these kilns showed a very subtle differentiation between the group of two, which contained pottery of early-middle Roman date; and the group of four, which contained pottery of a middle-late Roman date.

Kiln 16.1 was the westernmost in the line of four, with the west end cut into the upper fills of Boundary 16.18. Its roughly-circular combustion chamber was to the west, 1.2m long by 0.92m wide, and opened into a short narrow flue 0.24m wide. This opened into the sub-rectangular stoking pit (or rake-out pit), which measured 1.6m in length and 1.1m wide. It survived to a depth of 0.35-0.45m below the stripped surface. The combustion chamber sides were vertical and the base flat. No evidence remained for *in situ* lining, although fragments of ceramic lining, possibly part of the collapsed superstructure, were recovered from one of the fills. The stoke pit contained five fills, the lowest of which produced a nearly complete vessel, possibly a waster. The upper fills were dark, with moderate concentrations of charcoal, and contained middle-late Roman pottery and a worked bone object. On the south side of the stoke-pit was the trace of a north-south gully, approximately 0.4m wide.

Kiln 16.2 was located 1.6m to the east and was also positioned with the combustion chamber to the west. The chamber was roughly circular, 1.4m long by 1.2m wide. The sides were steep but not vertical, with evidence for a ceramic lining c 20mm thick on the north side. The flue area was poorly defined, possibly a product of the instability of the surrounding sandy-gravel geology. The stoking pit was sub-ovoid in shape, 0.95m long and 1.12m wide, with vertical sides. The kiln survived to a depth of 0.4m below the stripped surface. Three fills were identified, with the lower fills comprising a sterile ashy gravelly-sandy-silt, probably representing edge collapse. The upper fill was charcoal-rich and coarse, with high concentrations of middle Roman pottery, moderate quantities of ceramic kiln lining fragments, and a small quantity of animal bone.

Kiln 16.3 was located 3.24m to the east and positioned directly over the top of Boundaries 16.14 and 16.15. Again, the combustion chamber was located to the west and measured 1.05 long, 1.2m wide and 0.77m deep. It had vertical sides and a flat base. The sides were covered with a fired ceramic lining 20-40mm thick. High on the west side was an eruption mark, a possible exhaust vent or indicator that bellows had been introduced here. On the eastern side, at the base, the lining opened out into a broad flue 0.3m wide and 0.3m high, with an intact roof, extending roughly 0.23m to the east. Beyond the flue the stoke-pit was sub-ovoid, 1.65m long, 1.18m wide and 0.57m deep. The pit contained a single fill containing a large quantity of middle Roman pottery, animal bone and fired clay, as well as a black glass bead. The three fills of the combustion chamber were gravelly and ashy, and also contained middle-late Roman pottery and animal bone, as well as a shale object, possibly part of a bracelet.

Kiln 16.4 was located 1.77m to the east. As with the others in this line, the circular combustion chamber was located to the west and measured 1.35m long, 1.2m wide and 0.48m deep. The base was slightly concave and the sides were vertical with a grey ceramic lining 30mm thick to a depth of 0.22m, probably the location of the 'floor' of the kiln. A central east-west tongue-support divided the chamber in two. This was constructed from the same fired grey clay as the chamber lining and measured 1.15m long, 0.17m high and 110mm wide. At the east end of the chamber was a narrow flue approximately 0.4m wide with no lining. Beyond the flue was a rectangular stoke-pit 1.95m long, 1.3m wide and 0.37m deep. The pit was filled in a single event with a charcoal-rich gravelly silt, containing a large quantity of middle Roman pottery (some of it misfired), CBM (fragments of collapsed lining), worked flint and animal bone. The chamber contained a 'dirty' orange sand below the level of the lining, probably the result of side slumping. Above this, the chamber had been backfilled with a charcoal-rich clay-silt containing high concentrations of Roman pottery, fragments of ceramic lining (possibly collapsed roof structure), and an iron nail.

Kiln 16.5 was located to the south of Kiln 16.3, with its east end cutting into Boundary 16.19. It was oriented northeast to southwest. In contrast with the line of four kilns to the north, the combustion chamber was located at the east end. The chamber was roughly circular, 1.78m long, 1.2m wide and 0.52m deep, with steep sides and a concave base. The sides had a grey ceramic lining 0.35m high and 20-50mm thick. The flue was 0.49m wide and opened out into a sub-ovoid stoke pit 1.59m long, 1.34m wide and 0.43m deep, with vertical sides and a flat base. The earliest backfill of the stoke pit was a thick deposit of brown gravel which had no finds. An extensive backfill deposit infilling both chamber and pit contained substantial dump of CBM, early-middle Roman pottery and animal bone. In the flue area was a complete animal skull, probably sheep. Also recovered from this deposit was a whetstone. Overlying the backfill deposit and CBM dump was a localised dump of unfired yellow-brown clay, possibly representing the raw material for kiln linings. The final infilling comprised a sandy spread (probably collapse of the stoke pit sides), covered by a gravelly-clay which contained middle-late Roman pottery, CBM and animal bone, some of which was burnt.

Kiln 16.6 was located 1.5m to the south and also oriented northeast to southwest. Its west end cut into Boundary 16.17. This kiln had its combustion chamber to the east. This was circular, and measured 0.88m long, 0.81m wide and 0.25m deep. The sides were almost vertical with a slight concavity, and the base

of the chamber was also concave. The sides of the chamber had a grey ceramic lining which continued through into the flue area, 0.21m long. This opened out into a sub-ovoid stoke-pit 1.15m long, 1.1m wide and 0.19m deep. The fills of the kiln comprised a yellow-grey sandy-silt at the base of the chamber, covered by a charcoal-rich backfill containing a large quantity of early-middle Roman pottery which filled the chamber flue and stoke-pit.

FEATURES OUTSIDE ENCLOSURE 16.2 (FIGURE 16.3)

To the west of Boundary 16.13 were a few discrete features (Pit Group 16.7). These comprised a shallow pit containing the skeleton of a female horse with the remains of a foal inside it, three tree-throws (one with evidence of possible burning), a post-hole with a single worked flint, two further post-holes, one shallow irregular pit with heat-affected stones, and another irregular pit containing a moderate quantity of Roman pottery, bone and worked flint. In the southern part of this area was a large pit (2m in diameter) cut by a short segment of ditch. A loose cluster of pits (Pit Group 16.8) was located to the south of Enclosure 16.2. These features were small irregular pits and post-holes containing a small quantity of Roman pottery, animal bone, CBM, and worked flint.

To the west of Boundary 16.13 were a series of parallel NW-SE ditches (Boundaries 16.21, 16.22, and 16.23), spaced 13-21m apart. Boundaries 16.21 and 16.22 ran towards Boundary 16.13 but were not recorded meeting it, nor were they present in the area to the east. Boundary 16.23 continued eastwards beyond Boundary 16.13 for 39m, to the edge of the area. It was between 0.57 and 0.78m wide and 0.18-0.33m deep. A small quantity of Roman pottery was recovered from this ditch. A NE-SW ditch, Boundary 16.24, was observed connected to Boundary 16.23 and running to the north. This boundary was observed for 8.6m and was 0.75-0.78m wide and 0.09-0.23m deep. No finds were recovered from this ditch. Boundary 16.25 was positioned at the eastern observed extent of Boundary 16.23, aligned NE-SW across it. The ditch continued north to a terminus, 0.36m wide and 0.20m deep. No finds were recovered from this ditch.

To the west of Boundary 16.21, after a gap of approximately 10m, was a line of eleven post-holes (Boundary 16.25). They ranged in size from 0.2m-0.4m in diameter and 0.1-0.2m deep, with steep sides, concave bases and sterile fills comprising silts which had accumulated naturally.

One cremation burial (Cremation Burial 16.7), was located outside Barrow 16.2 (2m to the east of the outer ditch) (Figure 16.4). This was an unurned cremation, containing two pieces of worked flint and a sherd of Roman pottery. The existence of this Roman pottery suggests that this was a Roman burial, potentially positioned here in deliberate association with the earlier barrow.

Roman pottery was also found in a few other features across the site:

- A small pit [161199], to the northwest of the barrow;
- Tree-throw [161214], within the barrow;
- Pit [161995], in Boundary 16.2;
- Posthole and pit within Structural Features 16.2.

Saxon

To the east of Barrow 16.2 were three Saxon sunken-featured buildings (Figure 16.3). These were between 50m and 135m away from the barrow. They measured between 2.6m and 4.25m long, 2m–2.5m wide, and 0.2–0.3m deep. Some post-holes were present in the SFBs (mainly at either end of the long axis). A collection of sun-baked (not fired) loom weights was uncovered within Sunken-Featured Building 16.1, and were likely made locally. No other features of Saxon date were identified on the site.

The westernmost SFB (Sunken Featured Building 16.1) was located 45m to the east of Barrow 16.2. The pit was sub-ovoid in shape and measured 4.6m long and 2.5m wide. Saxon pottery and several complete and fragmented loomweights were recovered from its brown silty fill. A single internal post-hole, 0.45m in diameter by 0.45m deep, was in its south-eastern quadrant. Two further post-holes were located outside the SFB to the west and cut into an earlier amorphous pit. These post-holes were steep or vertically sided, 0.45–0.5m deep. One of them contained a post-pipe.

The second SFB (Sunken-Featured Building 16.2) was located 14m to the east of SFB 16.1, nearly 60m from the barrow. The sub-ovoid pit measured 2.5m in length, 2m across and 0.1m deep. It was filled with a sandy-silt deposit representative of weather-eroded edges. A small quantity of Saxon pottery was recovered from the pit. Postholes were situated at either end of the pit. These were 0.58–0.65m in diameter and 0.5–0.57m deep with evidence for post-pipes in both. A small quantity of Saxon pottery was recovered from the western post.

The third SFB (Sunken-Featured Building 16.3) was located 60m further east from SFB 16.2, 120m from the barrow. The sub-rectangular pit measured 2.5m long by 2m wide and had been infilled with an orange sandy-silt. Five post-holes were situated within the pit. The three central posts were of varying shapes and sizes between 0.26m and 0.55m in diameter; all were less than 0.1m deep. The end posts were more substantial: between 0.2m and 0.5m in diameter and 0.2–0.4m deep with steep or vertical sides. A small quantity of pottery was recovered.

Medieval

A series of NE-SW aligned agricultural furrows were identified on the site (Figure 16.3). These were only identified in the field to the west of Barrow 16.2, and not over the barrow itself nor in the field to the east. This may have been because the upstanding earthwork remains of the barrow made it difficult (and not worthwhile?) to plough over in the medieval period. The field to the east was located in a 'wet' area, adjacent to the floodplain of the River Great Ouse and with earlier palaeochannels running through it, which may have made this field too wet and unproductive to cultivate.

Post-medieval

The post-medieval remains relate to the agricultural use of this area (Figure 16.3). Boundary 16.27 was a field boundary aligned east to west for 110m across the eastern part of the excavation, not observed for 145m, and then observed for a further 120m curving to the northwest. This boundary truncated all other archaeological features however it was not shown on any historic maps (suggesting it pre-dated the later 19th century). A brick culvert was identified in the western part of this boundary [161846] – this was an arched culvert made of London Brick held together in a white mortar, 1.3m high and 1.4m wide.

Boundary 16.28 was part of another field boundary, observed for c 40m in the western part of the site. This boundary was aligned roughly north to south and crossed Boundary 16.27. The morphology of the boundary suggests it was a hedgerow. It is shown on historic maps from the 1888 OS Map until the 1958 OS Map and had been removed by the time of the 1978 OS Map.

Finds and environmental summary

Tables 16.1 – 16.3 provides a quantification of the finds, bone, and environmental samples from TEA 16.

A large worked flint assemblage was recovered from the site (771 pieces). 87% of this was unretouched debitage, with 55% blades. The worked flint was in good condition and is highly suggestive of a Mesolithic date – potentially evidence for activity predating the construction of the barrow monuments.

The earlier prehistoric pottery assemblage was focused on the middle Bronze Age cremation urns, but also included a small quantity of early Neolithic flint-tempered wares, two sherds of late Neolithic/early Bronze Age beaker, and a small collection of early Bronze Age pottery including four or five collared urn cremation vessels. Twentyfour middle Bronze Age cremation vessels were identified, mainly plain tub-shaped vessels in a shell-rich fabric, similar to those seen at Papworth Everard. There was also one later (middle - late Bronze Age) cremation vessel.

Low quantities of cereal grains were identified in the Neolithic and Bronze Age samples, with some wild plant seeds and nutshell fragments. Charcoal and false oat-grass roots and tubers were identified in the Bronze Age cremations. Tubers are common in cremations of this date and are thought to have been included as part of ritual deposition or as fire-starters.

The Iron Age pottery assemblage was mainly late Iron Age in date. It included La Tene 'Belgic' forms in grog or sand-tempered fabrics, and a rare Thompson D3-3 lid-seated 'barrel'. There was one other late Iron Age find, part of a shale bracelet.

The Roman pottery spanned the entire Roman period, with an apparent concentration in the mid - Roman period and little activity in the 4th century. The pottery assemblage, including that produced in the kilns, was mainly coarse sandy greywares, in lid-seated and necked jar form. The products from the kilns were dated to the late 1st/2nd century, with some warped and bloated vessels. Other Roman finds included two coins, a pin, spindle whorl, two glass fragments, and a collection of roofing tile and brick.

The plant remains from the Iron Age and Roman features included cereal grains, charcoal, and some chaff and wild plant seeds. The pottery kilns had the highest concentration of plant remains. Animal bone from the Iron Age and Roman features included a lot of frog (!), but also cattle and sheep/goat. There was little evidence for any bone modification.

A collection of early - middle Saxon pottery was identified from the Sunken Featured Buildings. This included a sherd which appears to have been imported (with an unusual bridge spout and rim-form), and a large 6th century sherd with ring-and-dot stamps. Other Saxon finds included a collection of loomweights which had been sun-baked (not fired) and were likely made locally. Interestingly, no other items associated with cloth production were found.

Low quantities of plant remains were identified in the Saxon features. Occasional cereal grains (barley, spelt, and oat) and arable weed seeds were present, but with no chaff.

Table 16.1 Quantification of finds from TEA 16

Type	Count	Weight (g)	Date/type
Pottery	2,283	14,350	Early Prehistoric
	880	10,975	Iron Age
	2,238	34,376	Roman
	109	1,319	Post-Roman
Coins	2		
Small Finds	53		
Lithics	771 (worked)		
	24 (burnt unworked)		
Stone	6		
Glass	5		
Clay Tobacco Pipe	6		Post-medieval
Building Materials	131	27,286	
Metalworking Residues	13	235	

Table 16.2 Quantification of bone from TEA 16

Type	Count	Weight	Date/type	% of bone assessed
Cremations	97			
Inhumations	0			
Disarticulated bone contexts	0			
Animal Bone	1,655	5,820		60

Table 16.3 Quantification of environmental samples from TEA 16

Type	Count	Date/type
Bulk Environmental Samples	278	
Monoliths	2	
Kubiena tins	3	
Waterlogged	0	

Provisional interpretation and potential

Specific objectives and research aims relevant to TEA 16 were detailed and discussed in the WSI (Atkins CH2M 2016c). The Research Framework for the East of England was also reviewed (Medlycott 2011). Archaeological evidence within TEA 16 comprised two prehistoric monuments (an earlier oval-shaped monument truncated by a later multi-phased (Bronze Age) barrow with inserted cremation burials); an Iron Age agricultural landscape; a Roman enclosure with evidence for pottery production (almost

certainly the periphery of a settlement); and three Saxon buildings. There is potential to answer research questions associated with each of these periods.

Prehistoric

Two prehistoric monuments – an oval-shaped monument (likely Neolithic) truncated by an early Bronze Age barrow – were identified in the centre of TEA 16. These would have been in use over a long period, with evidence for modifications to the monuments (eg a re-cut of the outer ditch) and cremation burials inserted into the monument at different times. These have the potential to answer questions concerning the development of prehistoric funerary monuments, funeral practices, and the role of these within the wider landscape over longer periods. These are all areas of research identified in the East of England Research Agenda:

Patterns of burial practice need further exploration. This should include the relationship between settlement sites and burial, and the development and use of monuments, including burial mounds, as key elements in determining and understanding the landscape (Medlycott 2011, 20).

The barrows were positioned on a ‘false ridge’ overlooking the floodplain of the River Great Ouse. This was a relatively common landscape positioning for barrows, with other Bronze Age barrows identified with the Great Ouse river valley (eg Barleycroft Farm and Over Quarry) and within other river valleys (eg Biddenham Loop and Bedford Western Bypass). Palaeoenvironmental evidence (including micromorphology and pollen analysis) will provide information about the local environment and how the monuments fitted into this. For example, there was some suggestion that this area was previously wooded and that there was a phase of tree clearance prior to the construction of the monuments.

The siting of the barrows in relation to other prehistoric activity (including other monuments, settlement features, and field systems/agriculture) should also be considered. No evidence for contemporary settlement features were identified within the site or nearby sites, suggesting that the barrows were deliberately constructed away from other activity. The only broadly contemporary feature within this landscape were the pit alignments (Boundaries 16.1 and 16.2) which respected the barrow and were likely associated with its latter phases of use, although the precise dating of these need to be confirmed.

Other nearby examples of earlier prehistoric monuments include those to the north of Brampton identified as cropmarks and during a 1966 excavation (CHER 02117); and the Neolithic **monuments** identified in TEA 2 and TEA 12 during the A14 excavations. These, and others in the wider vicinity, should be looked at together, considering questions of siting and inter-visibility of the monuments.

The preliminary chronology of the construction, use, and disuse of these monuments is as follows:

- 1) Tree-throws (representing a phase of tree clearance across the site) and earlier ditches pre-dating both monuments.
- 2) Construction, use, and disuse of Barrow 16.1.
- 3) Construction and use of Barrow 16.2 (including outer ditch, mound, cremations and pits cut into mound).

- 4) Later modifications to Barrow 16.2 – recut of outer ditch and later pits and cremations cut into fills of outer ditch.
- 5) Later activity on the site – short stretches of ditch truncating Barrow 16.2.

This chronology needs to be refined and tightened. This is particularly in relation to the use and modifications of Barrow 16.2 and the date of the cremation burials. These are not all from the same period with some, such as those in Cremation Burials 16.6, clearly being part of a later phase. It is therefore necessary to gain a clearer understanding of which burials were associated with the initial phase of the barrow and which were later (and how much later). Radiocarbon dates, potentially combined with Bayesian modelling as was undertaken on the barrow at Over Quarry in Cambridgeshire, could provide this level of detail and enable a high-resolution independent chronology to be gained (Garrow et al 2014).

The remodelling and reactivation of an earlier monument (Barrow 16.1) as a funerary site during the early Bronze Age is not an unusual concept. Other examples have been identified at Biddenham Loop and Trumpington Meadows. This should therefore be considered as part of this broader corpus of examples, considering the reasons why (and precisely when) this change happened, and what function the earlier monument performed. It would appear that there was not continuity of activity at this site, but rather a gap and a return to the site (as the Barrow 16.1 ditch had silted up before the construction of Barrow 16.2) – the reasons why this happened will be considered.

The constructional practices of both monuments should be considered. This should focus particularly on the construction of the mound – is there any evidence for a mound associated with the earlier Barrow 16.1? How was the mound constructed? Was it constructed differently in different areas? Why (and when) was the topsoil removed? What different soil components were used in the construction of the mound, and where were they brought in from? Over what period of time was it constructed and modified? This will involve micromorphological analysis of the mound deposits and consideration of excavation photographs and sections.

There is the potential to gain information about the function of both monuments. Barrow 16.2 clearly had a funerary function however it is unclear whether Barrow 16.1 was also constructed as a funerary monument. The possibility that the monuments may have had other functions should be considered, using comparative examples.

This site also has the potential to answer questions concerning Bronze Age (and later) funerary practices. This includes questions about procedures, rites, and rituals involved, such as:

- The choice of burial – Why was this monument constructed? Was it just for burial, or is there any evidence for other rituals/purposes? Why was there no central inhumation burial? Why were there no inhumations?

- The practice of cremation – Is there any evidence for pyres (do some of the charcoal-filled pits represent these)? Is there any suggestion where this was taking place (within the barrow itself, or outside of it)? Do the cremated bones provide any indication of the temperatures involved?
- The practice of deposition - Why were some cremations urned and others not? Is there any other evidence for organic containers or other 'different' types of deposition? Is there any evidence for 'grave goods'? What bones were deposited, how many, and why? What does the location of the cremations suggest (concentrated in the southeastern quadrant)?
- Dating – What date were these cremations? Many of them may have been later (potentially even Iron Age) and so it is important to pick apart the relative dating of the different cremations.

There is also the possibility for the cremation burials to answer questions about individuals. This would be through scientific techniques, including osteoarchaeological analysis of the cremated remains (the potential of this is relatively limited due to the fragmented nature of the cremations); and potentially isotope analysis. Recent work at Stonehenge has shown isotope analysis to work for fully calcined bone (as well as for dental enamel), providing an average of the foods eaten over the last decade or so before death (Snoeck 2018). This could therefore provide an indication of the location and origins of the individuals buried at the barrow.

The barrow would have been an ancient feature in the landscape and affected land use and location of later settlement and activity, including the Iron Age field systems which surround the barrow and the Saxon buildings to the west. Individual later features, positioned in close proximity to the barrow, may have been located there specifically because of the barrow. For example, Cremation 16.7 was positioned adjacent to the barrow and contained Roman pottery – this may be indicative of some residual ritualistic belief in the deposition of human remains near the ancestors? Once full dating has been obtained from all features across the site, more examples of this may be identified.

Away from the barrow monuments, distribution maps of flint may be useful in identifying its spread across the landscape.

Iron Age

The Iron Age activity across the site was relatively fragmented, with partial ditches and field boundaries in the south of TEA 16 and around the barrow. A three-sided enclosure lay to the west of the barrow, but there were no indications of roundhouses or other post-hole dwellings indicating settlement. The ditch fragments, separated from a broader landscape context, do not form into either fields or enclosures with identifiable functions. Nonetheless, it seems likely that these fields were used for agricultural purposes. Consideration of the animal bone and charred grain assemblage may therefore help gain an understanding of what types of agriculture were being undertaken in the Iron Age.

There was also some suggestion of continued Iron Age activity at the barrow. Late Iron Age pottery was recovered from the upper fills of the outer ditch, demonstrating that the barrow was still a feature within the landscape (and was still partially open) in the Iron Age. Furthermore, the Iron Age boundary ditches respected and essentially 'bound' the barrow. Of even more interest is the fact that late Iron Age pottery

was recovered from some of the cremation burials inserted into the barrow, potentially suggesting Iron Age funerary activity at the site. A programme of radiocarbon dating is therefore needed on these burials, as noted above.

Roman

A Roman enclosure was identified in the northeastern part of the excavation. Six pottery kilns, scattered pits and two 'ponds' were identified within this enclosure, although no structures were revealed. The full size and shape of the enclosure is not known, though it certainly continued to the north. The Roman period features revealed in TEA 16 would seem to represent the periphery of a farmstead, perhaps associated with pottery production and livestock management, with the main domestic core probably lying to the north. The finds recovered from the Roman enclosure included two coins, flint, a shale bracelet fragment and two spindlewhorls, as well as large quantities of pottery, much of which may relate to the use of the pottery kilns.

There are similarities between the Roman enclosures in TEA 15 and TEA 16. Both were set into an Iron Age landscape of field systems and dominated by a curving pit alignment. Both comprised large rectilinear enclosures with interior dividing ditches spaced 11-12m apart, kilns, and evidence for yarn production (spindlewhorls). The enclosure in TEA 15 had evidence for at least one structure, and was clearly related to the settlement identified just to the north in TEA 14.

The north-south boundary ditch which demarcated this area of Roman activity may have been indicative of a change of culture. Was it marking out the hinterland around the barrow and the activities that may be conducted there? The Roman enclosure was built close up against this ditch but did not re-cut it. Why would these people not take advantage of a ready-made ditch and was there a reason for siting the enclosure at this specific distance from the barrow and against the boundary ditch?

Two large ponds were located on the southern edge of the Roman enclosure. Their functions need to be established. Were they waterholes for animals, water collection pits for industrial use, or processing pits (eg puddling)?

Six kilns were identified within the Roman enclosure, within a very small area. This adds to the corpus of kilns identified in this area during the A14 excavations (TEA 7A, 10A, 11, 14, and 15) and those excavated at RAF Brampton (Nicholls 2016). Together, they form a whole new pottery industry and have significant research potential. This adds to the previously excavated examples of Roman pottery kilns in Cambridgeshire – at Swavesey, Duxford (Anderson et al 2016), Greenhouse Farm, Addenbrookes, and Cherry Hinton. The kilns uncovered here will be compared to those examples, to further understand the nature and chronology of the pottery industry in this region. This will contribute to research questions about kilns – *'knowledge of pottery production sites is fundamental to our study of pottery'* (A Research Strategy and Updated Agenda for the Study of Roman pottery in Britain, 41).

The kilns on this site were all similar in form. There was some (limited) variety - one had an exhaust vent (*'one or more holes often at the top or back of the oven superstructure, through which hot gases could escape into the atmosphere. At certain stages in the kiln-firing they were either left open or blocked up,*

as necessary, to increase or decrease draught upwards' (Swan 1984, 32)); and another had a tongue support. Some of the ditches close to the kilns had clay dumps in them which might be indicative of the building materials used to make the linings. The kilns cut into the fills of other features such as ditches and pits, but none cut each-other. They were positioned deliberately: a pair and then a line of four, cutting into earlier features, rather than within an area of their own. Have other areas of kilns seen a similar layout?

One of the key questions for Roman pottery kilns is whether they were producing pottery just for themselves and the local population (at a household level), or whether it was more of an industrialised (and potentially specialised) industry. The presence of six kilns, within a defined enclosure, may suggest a more industrialised activity, although this depends on their relative chronology of use (ie how many kilns were contemporary). Other questions which will be tackled in the analysis stage include how long the kilns were in use for (ie how many firing episodes can be discerned and is there any evidence for re-linings or repairs), were they used episodically (seasonally?) or continuously, and how many pots were produced in one firing. Questions about the architecture of the kilns (how they changed over time, and why) will also be addressed.

The pottery wasters and other vessels found in the kilns and nearby features will be analysed. This will provide information on the types of pottery being produced – how much of a variety there was and whether there was any evidence for specialist production (as in the Duxford kilns, which focused on production of flagons). The type of pottery produced will, if possible, be traced and mapped in nearby settlement sites, to gain an understanding of whether it was being traded to other areas.

Saxon

The three sunken-featured buildings identified on this site are representative of a number of Saxon buildings excavated along the A14 scheme. A comparative study of the SFBs located in the Brampton area has the potential to make wide-ranging observations about their chronology, form and use. There appears to be a correlation between prehistoric funerary monuments and areas of Saxon settlement. This is the case here as well as on TEA 2 (SFB adjacent to a henge), TEA 10 (SFBs close to a prehistoric ring ditch), and TEA 12 (numerous SFBs and post-built structures close to the **ring ditch monument**). Interestingly, the three on this site were in a relatively empty part of the landscape, not interacting with any other features, but close to the barrow. This was similar to the SFBs on TEA 10, which were relatively isolated from each other, did not interact with other features, and were localised to within 500m of a barrow monument. A specific research question which could therefore be addressed is how the Saxon peoples viewed their prehistoric ancestors. This will tie into research questions focusing on Anglo-Saxon rural landscapes and settlements. Medleycott states that *'There is still a problem in locating and identifying Anglo-Saxon settlements'* (Medleycott 2011, 57), and this work will go to some way to address this.

Recommendations

Approximately 85% of contexts have been preliminary grouped at Entity and Group level for this assessment. Full grouping and assignment to period is required following results of specialist pottery analysis and radiocarbon dating. It is therefore recommended that some radiocarbon dates are

obtained, focusing on the prehistoric features, in order to refine the chronology. As a start, the following radiocarbon dates are recommended, however it is anticipated that further dates will be required.

- Barrow 16.1 (construction);
- Barrow 16.2 (construction);
- Cremation Cemetery 16.6 (one of the cremations towards the centre of the cemetery).

Bayesian modelling and a full radiocarbon dating programme, as undertaken on the barrow at Over Quarry in Cambridgeshire, could provide a high-resolution independent chronology of the barrow, and should be looked into. This may require some revision of the stratigraphic sequence discussed here. This will focus on the prehistoric remains and particularly:

- Date of the construction, use, and disuse of the earlier monument (Barrow 16.1)?
- Date of the construction of Barrow 16.2?
- Date of the cremations inserted into the Barrow 16.2 mound? In particular, can we identify the (potentially different) dates of individual cremations, to give an idea of the timespan over which the barrow was used?
- Date of the later modifications to Barrow 16.2? Particularly the recut of the outer ditch and the later ditches.
- Date of Boundaries 16.1 and 16.2 (the pit alignments)? To work out which phase of the barrow's use they were associated with.

Other work, recommended for the analysis stage in order to provide the information necessary to tackle the questions outlined above, includes:

Prehistoric

- Palaeoenvironmental analysis of samples from the barrows and surrounding area, to reconstruct the past environmental landscape.
- Research into the wider prehistoric landscape, considering questions of monument inter-visibility and how the monuments operated with settlements and agriculture.
- Full stratigraphic analysis of barrow features, looking at all sections, photographs, levels, to gain a complete understanding of the construction history and sequence of use and disuse.
- Consideration of function of both monuments, particularly Barrow 16.1.
- Micromorphological analysis of mound materials.
- Consideration of whether any evidence for a mound associated with Barrow 16.1 can be identified.
- Full analysis of all cremation burials from the barrow. Potentially including isotope work.

- Full analysis of worked flint (and other objects) recovered from the barrows.
- Mapping the distribution of residual worked flints in fills of nearby features, to gain an understanding of how prehistoric peoples used the wider landscape.
- Research into other barrows in the area (particularly Over Quarry, Barleycroft Farm, Biddenham Loop).

Iron Age

- Analysis of animal bone and grain assemblage, to gain an understanding of the type of agriculture being undertaken.

Roman

- Comparison of enclosures in TEA 14/15 and TEA 16.
- Consideration of the function of the enclosure (purely industrial or any occupation), and particularly the ponds.
- Full analysis of the kilns (structure, use). Potentially including scientific work such as petrological and residue analysis.
- Full analysis of the pottery and wasters from the kilns and nearby features.
- Mapping where the pottery from the kilns is found.
- Comparisons with other kilns in the region.

Saxon

- Full analysis of the SFBs (fill sequence, micromorphology, all finds).
- Comparative study of SFBs on A14, particularly in relation to their positioning close to prehistoric monuments.

TEA 19

Levente Balazs

TEA 19 is located on Section 2 of the A14 road scheme, between the River Ouse and the East Coast Mainline (Figure 19.1). It is centred at NGR TL 2199 6833. Archaeological fieldwork took place between February and July 2017. The geology of the site is Oxford Clay, overlain by alluvium (adjacent to the river), River Terrace deposits and diamicton, adjacent to the East Coast Main Line (ECML). The stratigraphy of the area is not uniform, as there are slight changes in the geology with differing composition and spread of alluvial and colluvial deposits. Further information about this is provided below.

Archaeological background

Previous fieldwalking suggested the presence of palaeochannels of the River Great Ouse and a remnant gravel 'island'. The geophysical survey was conducted in 2008 (Bartlett-Clark 2009) and trial trenching by CAU in 2009. The geophysical survey and the later trial trenching of the archaeological anomalies identified an Iron Age enclosure and dispersed features on a larger scale on the gravel ridges or 'islands'. Test-pitting near the river showed peat layers that were preserved by later alluvium.

Methodology

As part of the A14 mitigation archaeological investigations were carried out to investigate the river floodplain and palaeochannels including archaeological trenches, strip and recording and the coring of augerholes. Adjacent to the river, the platform and haul road was excavated and stoned up in stages (4 x 4m square areas), to depths of up to 4m. The strategy here mainly comprised recording and taking photographic evidence. Elsewhere, on the gravel ridges, the normal methodology of site strip and recording the archaeology was applied.

Across the wider floodplain, eleven auger holes were drilled across the western field, closest to the River Ouse, using a Cobra TT petrol power auger (powered by 110V). The boreholes were drilled through the Holocene sequence to the surface of the Pleistocene sand and gravel deposits or underlying geology in accordance with the WSI.

The core columns were drilled through the Holocene sequence and sediments recovered in the auger chamber. The deposits were logged and subsampled before being transported back to the MOLA geoarchaeological laboratory. The deposits were described using standard sedimentary criteria (relating to colour, compaction, texture, structure, bedding, inclusions, and clast-size). Lithological transects of the floodplain and palaeochannels will be created and the early Holocene surface mapped in Arc GIS V10, based on these investigations, during the analysis phase. Close to the ECML, four trenches were dug by machine to investigate the palaeochannel.

Summary of results (Figure 19.2)

Prehistory

During the building of the platform and haul road, 81 total 4 x 4m squares were excavated. Alluvial deposits were identified on top of the natural gravels and the peat layers identified in the evaluation (Patten et al 2010).

FORMER RIVER BANK 19.1

A sequence of six different alluvial deposits were identified underneath the topsoil. The dark brown peat layers identified in the evaluation were exposed (Figure 19.3). Its formation was dated to the late Neolithic and early Bronze Age (Patten et al 2010, 92-3). This first appeared at the depth of -3m meters, around 20m-25m east of the actual river bank, rising gradually until its disappearance around 30m-35m east of the actual river bank. The disappearance of the peat and the rise of the river gravels suggests that it was a former bank of the River Great Ouse. Wood fragments were recovered from the dark-brown peat. One piece of worked wood was dated to the late Bronze Age.

PALAEOCHANNELS 19.2

The geoarchaeological work consisted of two site visits to investigate and sample the palaeochannels at TEA 19. The first visit consisted of 11 auger holes across 4 transects, focusing on the palaeochannels associated with the Great Ouse Crossing and a gravel island within the study area. The second visit consisted of examining and sampling deposits in 4 trenches across the palaeochannels in Area C, 400m east of the auger hole transects across the main channel toward the floodplain edge. The augerhole locations were chosen to allow a comprehensive spread of data across the whole study area. The locations are focused on the palaeochannels and the river's edge but also on the high points associated with the gravel island.

Whilst onsite, selected auger holes were subsampled for microfossil assessment, the results of which are fully described in the Geoarchaeology assessment. To summarise, a limited number of subsamples from AH9 were sent for pollen and ostracod assessment from within the palaeochannel. In general the pollen describes a wooded environment with discrete areas of anthropogenic disturbance and arable activity in close proximity to the floodplain. The ostracod results indicate a shallow, clean waterbody with a long history (possibly back to the early Pleistocene/late Glacial period).

Radiocarbon dates were also obtained from the material subsampled from the auger holes in the field. Two subsamples for radiocarbon dating were taken from AH9: one at 2.30m below ground level (BGL) and one at 4.7m BGL. Unfortunately, the sample taken at 4.7m failed to produce a date due to a lack of carbon. The sample taken at 2.3m produced a date of 201-46 cal BC (95.4% probability; SUERC-82511). As this date is obtained for the upper part of the sedimentary sequence, and considering the ostracod results, it is likely that the palaeochannel was active long before this Iron Age date.

Further geoarchaeological work included four trenches (Trenches 1 to 4) which were opened up across the palaeochannels in Area C.

Trench 1, located on the southern perimeter of Area C, showed a relatively steep drop off the gravel and sand terrace in the east (within 3m) into initially yellow, becoming grey sandy silt deposits which represented Holocene alluvial deposits within a north to south orientated palaeochannel. This palaeochannel was approximately 5m wide to a depth of just over 1m BGL from the (stripped) surface of the site. As the trench progressed further west, the underlying gravel surface rose to reveal a gravel high area at approximately 0.7m BGL extending for approximately 5m westward. The gravel surface dipped again into a more substantial palaeochannel stretching some 20m to the west and lying slightly deeper at approximately 1.2/1.5m BGL. The western edge of the second palaeochannel was located close to the western extent of the trench where the gravel rose to similar levels and higher to that of the gravel ridge dividing the two channels.

Trench 2, running east to west parallel to Trench 1 was located approximately in the centre of Area C. It revealed a similar palaeotopography with two channels divided by a gravel high area with the most westerly channel being the more substantial channel. The initial dip off the terrace was less marked however in Trench 2, being a more gradual slope down from the terrace to the alluvial deposits. Furthermore, the initial (eastern) palaeochannel seemed less significant than when seen in Trench 1, with the gravel high area extending from approximately 3m from the terrace edge for approximately 8 or 9m westward. In contrast, the second, more substantial palaeochannel, remained similar in dimensions to that seen in Trench 1.

Trench 3, running parallel and close to the northern perimeter of Area C, revealed a different sequence of deposits than the other two trenches. Initially, the dip from the river terrace was steep (as in Trench 1) into what seemed a much broader and more substantial palaeochannel although, significantly, this palaeochannel was filled with Pleistocene sands and not Holocene alluvium. The gravel ridge dividing the two palaeochannels was much reduced in width (perhaps to 2 or 3m) although, at this point, the gravel dipped to reveal again, a slightly deeper, more substantial palaeochannel to the west (to perhaps 1.8m BGL) filled with Holocene alluvium. Furthermore, the Holocene alluvium included organic (woody) material within the silts (mixed with gravels) near the base of the sequence which could have been entrained in the alluvial deposits or remnants of vegetation that grew from the gravels prior to inundation in the Holocene (when the main channel of the Ouse began to flood).

One monolith sample was taken through trench 1 which will be subsampled for pollen analysis and radiocarbon dates during analysis.

BURIED SOIL 19.3

On the east bank of the earliest palaeochannel was an area of buried soil, extending 20 x 30m; 75% of all the flint tools and flakes recovered in the TEA were retrieved from the top of this deposit. The flints included a few possibly Mesolithic microliths; the majority are from the Neolithic/early Bronze Age date (see Devanney, Vol. 2). On this surface and surroundings were a large number of burnt stones, also mentioned in the evaluation. These may represent intermittent human activity, or wider landscape clearance by fire. The buried soil was investigated by a small array of test pits. In test pit 192 was a possible extraction pit [19202]. The pit was oval and measured 2.2m long, 1.57m wide and 0.43m deep. The fill (19201) was very similar to the buried soil, and also contained lithics.

LATE BRONZE-AGE WOOD BEAM 19.4

Wood fragments were recovered from the exposed peat deposits. Some of them were unworked, probably fallen from adjacent trees into the river and preserved by the peats. A fragment of a possible beam was retrieved from a depth of c -3.5m BGL. It measured 1.8m long and 0.24m in diameter. (Figure 19.4) Tool marks present were unclear. Wood specialist, Damian Goodburn, noted that they were made by a small, rounded axe blade probably in the late Bronze Age.

Late Iron-Age/Romano-British

RECTANGULAR ENCLOSURE 19.5

East of the buried soil, on the higher gravel ridge, was a double ditched rectangular enclosure, which dated from the late Iron Age. The enclosure was c 10m wide, east to west and 22m north to south and was 6.5m wide; it was later enlarged. The presence of the enclosure and its northern extent was recorded in Trench 216 of the evaluation (Patten et al 2010, 95).

The east to west ditches were truncated by those orientated north to south. The northern extent of the enclosure was not present; this was most likely destroyed by heavy ploughing. Two sherds of Iron-Age/Romano-British pottery were retrieved from the fills of the ditches. No internal features were present within the enclosure. The north to south orientated ditches respect the alignment of the palaeochannel located 50m away towards the west.

Roman

At 60m east of the rectangular enclosure, during stripping an amount of Roman pottery was scattered around an area c 50mx30m. Upon hand-cleaning no cut features were visible, and it is possible that the pottery was displaced from archaeological features on the higher ground to the east, either by alluvial or colluvial activity. The elevation difference between this area and the highest point is 0.973m.

BOUNDARY DITCHES 19.6

Adjacent to the East Coast Main Line were two parallel ditches orientated north to south. Both share the alignment of palaeochannel P2 and truncated its fill. The ditches were recorded in Trenches 228A and 228C of the evaluation (Patten et al 2010, 91). The western ditch [190146] was 130m long, up to 1.7m wide and 0.56m deep. The eastern ditch [190144] was 102m long, also 1.7m wide and 0.4m deep. These are probably the western boundary ditches of the settlement found on TEA20, which is the opposite side of the ECML. At the south eastern corner of the site were two east-west orientated ditches which were continuations of two large droveway ditches investigated in TEA20, to the east of the ECML.

INHUMATION GRAVE 19.7

Cut into the fill of the northern droveway ditch, next to the limit of excavation, was an inhumation burial. The grave [190174] was orientated north-south, rectangular with rounded corners, 1.31m long, 0.55m wide and 0.18m deep. The grave fill contained three possible coffin nails and a broken residual flint tool fragment. The skeleton (190172) (Figure 19.5) had a good preservation. It lay on its right side, slightly crouched. This skeleton was radiocarbon dated to 260-415 cal AD (95.4% probability; SUERC-85547).

CURVILINEAR DITCH 19.8

South of the driveway was a curved ditch, extending from and returning to the eastern limit of excavation. The ditch measured 1.2m wide and 0.55m deep with concave base. The fill of the ditch contained part of a Roman pottery vessel, possibly a cremation, that may have been part of a second burial.

Medieval

Medieval activity is represented by 2 Long Cross silver coins found during metal detecting.

Post-medieval and modern

Post-medieval coins and metal objects were recovered during metal detecting. The remnants of a few drainage ditches were recorded, coincident with the existing modern landscape.

Undated

A small number of undated features were investigated across the TEA. Three pits were at the east side of the site, close to the ECML. At the north-east was a circular pit with vertical edges [190101], 1.5m in diameter and 0.56m deep. Both fills contained worked flint, and the upper fill also had fired clay/daub fragments (too fragile and small to collect). To the south were two undated intercutting pits, with well-defined edges and contained burnt course stones.

On the north edge of the buried soil was the remnant of a ditch, orientated northwest-southeast, with only 0.93m of its length surviving, 1.27m wide and 0.31m deep and heavily ploughed on both ends.

Finds and environmental summary

Tables 19.1 – 19.3 provides a quantification of the finds, bone, and environmental samples from TEA 19.

The flint assemblage comprised 105 pieces of worked flint, mainly recovered from the buried soil adjacent to the palaeochannels. 91% of this was unretouched debitage, including 21% blades. This suggests that there was a blade-producing industry, likely Mesolithic or early Neolithic in date. No earlier prehistoric pottery or other finds were identified.

The pottery assemblage was mainly of late Iron Age – Roman date (1st century BC to 2nd or 3rd century AD). This included sherds of Lower Nene Valley white ware, Horningsea reduced ware, and a complete profile of a necked bowl of late La Tene 'Belgic' style.

Two pieces of worked wood, an oak log and a vertical roundwood stake, were recovered from the reed peat layer (during the watching brief on the floodplain). The axe marks on these suggest they were late prehistoric in date.

Other finds from this site were medieval and post-medieval in date, including two rare medieval coins (King John of England 1199-1212, and King John Baliol of Scotland 1292-1296).

The plant remains included some cereal grains and charcoal, but no chaff, suggesting no crop-processing was taking place. The animal bone assemblage was focused on cattle, with some sheep/goat and pig, and some duck fragments!

The pollen from the geoarchaeological work (the auger holes and the trenches across the palaeochannels), demonstrated that there was 40-60% trees and shrubs (mainly oak, alder, ash and hazel) – different from the rest of the scheme and suggesting that the woodland in this area had not been cleared.

Table 19.1 Quantification of finds from TEA 19

Type	Count	Weight (g)	Date/type
Pottery	100	1,085	Iron Age – Roman
	15	181	Post-Roman
Coins	7		
Small Finds	25		
Lithics	105 (worked)		
Glass	2		Post-medieval
Wood	2		Late Prehistoric
Building Materials	4	225	Post-medieval
Metalworking Residues	92	20	

Table 19.2 Quantification of bone from TEA 19

Type	Count	Weight	Date/type	% of bone assessed
Cremations	0			
Inhumations	3			
Disarticulated bone contexts	0			
Animal Bone	177	6,850		100

Table 19.3 Quantification of environmental samples from TEA 19

Type	Count	Date/type
Bulk Environmental Samples	17	
Monoliths	1	
Kubiena tins	0	
Waterlogged	0	
Other	11 Augur holes	

Provisional interpretation and potential

The above mentioned archaeological remains can answer only some of the research aims of this area (A14 Cambridge to Huntingdon Improvement Scheme ARCHAEOLOGICAL MITIGATION SPECIFICATION). Our periods of interest are from prehistory, late Iron Age/Romano-British and Roman periods.

Prehistory

Evidence of *landscape clearance* and/or small-scale human activity is present from the Neolithic. They prefer the east side of the palaeochannels. Possible evidence of *field system* building from the Neolithic is noticeable with the heavily ploughed cut of ditch [190037], but no further evidence is present from prehistoric times. Possible mineral mining activity is present, but it is nearly impossible to define the functions of the possible prehistoric pits.

Presence of a human activity is noticed in the *buried soil* recorded in the middle of the site. The flint tools were locally produced using local flint cores. (Patten et al 2010, 97-98). The buried soil was examined with 12 test pits (Medlycott 2011, 3). The presence of the burnt stones in the buried soil and around it suggests small scale activities. It also tells us, that they are staying for a longer period far from the river banks.

Exploitation of the floodplain, activity next to the river bank is represented by worked wood remains from the late Bronze Age and the pollen assessment. Worked wood remains from the late Bronze Age were retrieved from next to the former river bank. Its function is unclear. In the evaluation, in Test Pit 11, a single wooden post was retrieved (Patten et al 2010, 93). We could consider the fact that there was a crossing or a wooden structure near the river in that period.

Iron Age/Romano-British

Nature of IA and RB agricultural landscape. A rectangular enclosure was recorded on the east side of a former palaeochannel. The tendency of using the east side of watercourses is visible here as well. They witnessed seasonal flooding generated by the Great River Ouse, that's why they most likely reinforced the east and south sides of the enclosure. In the evaluation they found Roman pottery in the enclosure ditches (Patten et al 2010, 96). This suggests that they were used and maintained for a longer period. The western boundary ditches of the settlement in TEA 20 are located 160m away towards the east. The enclosure could have been used for safe keeping domestic animals. We could be witnessing a clear zonation of the land (Medlycott 2011, 31). The lower and wetter ground was used for pastoral activities. The higher and drier ground was used for human habitation.

Roman

There is *evidence of 'Romanisation'* in the area, associated with the development of TEA20 and exploitation of river floodplain (Medlycott 2011, 47). There is evidence that the late Iron Age enclosure was managed and maintained in the Roman period.

Settlement and Agricultural Landscape. There is a tendency of using the higher ground for human habitation (see above). There is a 1m difference in the elevation of the landscape, and the densest human activity is present on the highest point. Water management was the biggest concern in this period too. The western boundary of the Roman settlement that continues from TEA 20 was enforced with two parallel north-south orientated linear ditches. Since we only have the westernmost part of the settlement from TEA20 we cannot answer any more questions.

Treatment of the dead- association of living and dead. There was a single inhumation burial and a fragment of a second human skull was retrieved from the fill of one of the ditches in the near vicinity. The presence of the urn in the fill of the curvilinear ditch is further evidence for a disturbed cemetery, that could lay underneath or destroyed by the ECML. The inhumation grave, the skull fragment and the half of an urn were all retrieved from westernmost side of the settlement from TEA20. It raises the question if these is a common practice or not?

Recommendations

Further geoarchaeological work is outlined in the specialist report. There is no further stratigraphic work recommended.

TEA 20

Adam Douthwaite

TEA 20 was located between the East Coast Mainline (ECML) and the current route of the B1043 Offord Road (NGR: TL 2267 6839), between Offord Cluny and Godmanchester. The archaeological work was undertaken ahead of the construction of the new ECML crossing, the straightening of the existing Offord Road, the construction of a new junction between Offord Road and the new A14, and the construction of new A14 carriageway and associated groundworks. The total area covered by the excavation was just over 11.2ha (Figure 20.1).

The site had previously been arable land. The highest ground was located in the northeast part (24m AOD), with the ground sloping down to both south (14m AOD) and west (12m AOD). Located just to the west of the ECML was the River Great Ouse.

The underlying geology of the site was Oxford Clay Formation, with superficial deposits of Oadby Member clay (northern embankment) and sand and gravel river terrace (southern embankment and mainline; NERC 2019). The vast majority of the archaeology was situated on the lower gravel terraces, with only a small number of Iron Age enclosures and boundary ditches being located on the higher clay outcrop in the northern embankment.

Archaeological background

Aerial photographic assessments carried out by Air Photos Services (APS) on the land to the east of the ECML suggested two areas of activity. Site AP13, located in the field to the west of TEA 20, showed evidence of fragmented ditches and pits, suggestive of settlement from the prehistoric or Roman period. Site AP14, located in the mainline and to the north of site, showed evidence of fragmentary ditches, ring ditches and pits. Further note was made of the differential in soil depth across this part of site (APS 2014).

A geophysical survey of the site undertaken by Pre-Construct Geophysics identified remains of a dense area of settlement activity within the mainline, probably related to two phases of occupation. Further settlement activity was identified to the south-east within the southern embankment. No activity was identified in the northern embankment, partly due to disturbance by a mains service in this part of site (Bunn 2008, 6).

A fieldwalking survey of the site identified remains from several periods within the boundaries of the site. Adjacent to the ECML, evidence of low-level activity from the Mesolithic to the early Bronze Age was recovered in the form of worked flints. The distribution of Roman pottery and tile recovered from the eastern half of site tied into the evidence from the geophysical survey, with material recovered suggesting activity from the second to fourth century, with an emphasis on the third and fourth century. The presence of building material suggested a structure in the near vicinity (Anderson, Hall and Standring 2009, 19-25).

A total of 35 trial trenches were excavated by Cambridge Archaeological Unit across the site. These excavations identified two phases of occupation, dated to the Iron Age and Roman periods. The Iron Age occupation comprised at least two enclosures (one sub-circular, the other rectangular) within the

mainline, with pottery suggestive of a middle Iron Age date. The Roman occupation comprised ditches, pits and post-holes, alongside a possible well and burial. The core occupation was confined to a relatively small but intensively utilised area, with strong evidence for industrial and agricultural processing. Material recovered also hinted at the possibility of buildings nearby. This activity was sealed by an overlying 'dark earth' deposit. Possible horticultural activity was identified to the east of this area, suggesting the periphery of settlement, and further settlement remains were found in the far south of the evaluation area. No later occupation activity was identified, although the remains of medieval and post-medieval agriculture were identified across the site (Patten, Slater and Standring 2010, 63-88).

Methodology

The results of the evaluations were used to define the archaeological mitigation area, which was designated as a 'Targeted Excavation Area'. The site was mechanically stripped of topsoil and hand excavated between October 2016 and June 2018 (Figure 20.2). All works were undertaken in accordance with the Written Scheme of Investigation (HE 2015, Atkins CH2M 2016d).

Summary of results

The excavations at TEA 20 have shown evidence of a long period of human activity, dating from the late Bronze Age/early Iron Age through to the post-medieval period. The earliest phase of occupation was located on the westernmost fringes of site, adjacent to the ECML. Here, during the fieldwalking, artefacts from the Mesolithic to the Bronze Age were recovered but no definite features from this period were revealed by the excavations. What the excavation did show was that the main Iron Age occupation was concentrated around a series of enclosures across the northern half of the site, part of a wider managed landscape, with evidence of field systems and large boundaries extending from these centres of occupation.

Roman period occupation of the site was long-lived and extensive. The earliest of this was centred on the western half of the mainline area. This was aligned to a substantial NNE to SSW boundary ditch that crossed the mainline, and this formed the spine to a series of enclosures attached to its eastern edge. These enclosures surrounded a number of structures, including a rare elm-constructed building of the 2nd century AD.

In the third and fourth centuries, a new alignment was imposed on the landscape in the form of an extensive double-ditched enclosure, orientated east to west. On the periphery of this enclosure, and around the internal edges, there was widespread evidence for enclosures, most probably related to livestock. In the entrance to the main enclosure was a timber gateway, through which was a substantial metal trackway. Unfortunately, the majority of the internal space within the enclosure was to the west of the excavation area but based on the material recovered from the surrounding features a substantial structure was likely to have been the main focus of the site. Further buildings were present, such as those identified in the northeast corner of the enclosure. It is likely that the double ditches formed the perimeter of a villa complex.

At the very end of the Roman period, perhaps into the fifth century, evidence was identified for a small field system which was superimposed on top of the southeastern corner of the enclosure. A few other small features also appear to cross the enclosure ditches, but no concentrated area of activity survived. The site was abandoned in the very late Roman or early post-Roman period, most likely due to worsening ground and weather conditions as evidenced by the build-up of a substantial alluvial deposit across part of the site. Following this, the next activity was medieval ridge and furrow field systems across the site, which later gave way to post-medieval enclosed fields.

Prehistoric (Figures 20.3 and 20.4)

An unusual but significant monument, Structure 20.1, was located in the mainline. It was a timber circle that comprised of a series of post-hole groups, each formed by five post-holes, arranged to form a large circle 28m in diameter. The post-hole groups were set out in the shape of an X, with one post-hole at each corner and a fifth in the centre. Seven defined groups survived the later Roman activity; three on the western side and four on the east. Further post-holes have been attributed to this monument as a number appeared between the defined groups, while others not forming defined groups as described above were on the projected line. The monument, if taken as a cohesive whole, measured 28m in diameter and surrounded an internal space of 1380m². Apart from some small sherds of Roman pottery, which were considered intrusive, there was no dating evidence within the post-holes. A sample of charcoal from one of these post-holes was radiocarbon dated to 1754-1632 cal BC (95.4% probability; SUERC-85548, early Bronze Age).

Iron Age 1 (Figure 20.4)

Slight traces of a field system survived in the extreme western end of the site, close to the ECML, and toward the southern end of the site elements of a fine metalled trackway were preserved in what was likely to have been the base of a hollow-way.

BOUNDARY 20.1 AND ENCLOSURE 20.1

At the western end of the site, adjacent to the ECML, a short boundary, boundary 20.1, was formed of a series of segments of ditch, some of which were recuts overlying earlier versions of this boundary. The boundary was 33m long and aligned roughly northeast to southwest. No other boundaries related to this were present in TEA 20 or in the neighbouring TEA 19 (located to the west of the ECML). To the southeast of this boundary were two small pits. Although these features were undated, their proximity to Boundary 20.1 was suggestive of a relationship.

To the south of Boundary 20.1 was the northeast corner of a rectilinear enclosure, Enclosure 20.1. The extant part of the enclosure within the excavation measured 13m by 34m, with the longer side aligned north to south. The ditch was 2m wide and 1.3m deep but the eastern side was disturbed by a later boundary 20.8, so it was not possible to measure the full width and depth of this part. This enclosure extended both west and south beyond the limit of excavation, although it was possible that it was identified in TEA 19 on the other side of the ECML. A 1.80m wide entranceway was identified in the eastern side and although it contained no artefacts it had been cut by an Iron Age 2 boundary 20.3.

TRACKWAY 20.1

In the southern embankment an early metalled trackway, was identified. This had been heavily disturbed in places, as it was located in an area of complex later activity, but in the area where the trackway was crossed by the perimeter ditches of enclosure 20.12, a significant portion of the fine and compacted stone surface remained *in situ* (Figure 20.5). This trackway was aligned east to west and could be observed for a length of 72m, but the western extent had been lost due to later disturbance. It is likely that the pebble metalled surface, which survived best in low lying areas, was within the base of a hollow-way that led from an area heavily disturbed by later gravel quarries (pit group 20.2).

Iron Age 2 (Figure 20.4)

The second phase of Iron Age activity was characterized by two substantial enclosure complexes in the northern half of site and a series of associated landscape boundaries. In the centre of the mainline area was a complex of two connected enclosures, with a large boundary extending towards the southeast. In the northern embankment, a series of enclosures sat within the corner of an earlier boundary system. It could be that the enclosures of the northern embankment represent a movement of occupation to higher ground, possibly due to worsening environmental conditions in the latter part of the Iron Age.

ENCLOSURES 20.2 AND 20.3 (FIGURE 20.6)

Enclosure 20.2 was a roughly circular enclosure, approximately 50m in diameter that enclosed an area of approximately 1125m², and had an entranceway located in the northeast quadrant. The entranceway was 5.5m wide, with a short gully attached to the northern terminal which probably acted as a drain. No recuts were present, suggesting a well-maintained enclosure. The ditch averaged 2.5m wide and 1.1m deep.

Within Enclosure 20.2, several internal divides were present, with indications for at least two layouts of the internal space. The earliest version split the enclosure in two; a ditch extended off the western corner of enclosure 20.3 on a north-west to south-east alignment for 13m, before turning to the north-east. This extended a further 9.5m on a north-east to south-west alignment before it terminated short of the external enclosure ditch. This created an access between the two halves of the internal space in the northeast quadrant (due to later disturbance by the eastern arm of enclosure 20.8, the exact width was unobtainable, although a rough estimate would have been 2.5m). A later reorganisation of the internal space saw it divided into four areas, with enclosed spaces in the northwest and southwest quadrants of the interior. The south-western space had an entrance against the southern enclosure ditch, that was 3.8m wide. The north-western space had an entrance, 4m wide, which led into the centre of the enclosure. The western arm of this entranceway also had the effect of splitting the remaining space in two, with a 7.3m gap between it and the ditch of enclosure 20.3.

Within the interior there was a scatter of other features, mostly small pits. These do not appear to relate to any structures, and were presumably short-lived rubbish pits, although there is one pit, aligned northwest to southeast, which may relate to the latest incarnation of Boundary 20.5.

Enclosure 20.3 was a 22m square enclosure with rounded corners, which enclosed an area of 260m². The enclosure was contemporary with the larger enclosure 20.2; most likely enclosure 20.2 was a stock

enclosure, with Enclosure 20.3 the location of a dwelling, although no domestic remains were identified. It had undergone several remodellings, which were most notable around the entranceway at the northern corner. The first arrangement of the enclosure was difficult to identify, as the only extant part was a short length of ditch across the space used as the entranceway for the later version of the enclosure. This ditch was significantly narrower and shallower than its successors, averaging 1.1m wide and 0.6m deep opposed to the later versions which averaged 2m wide and 1m deep.

When the enclosure underwent its first remodelling, the entranceway was moved to the northern corner. In its original form, this measured 2.5m wide. This remodelling probably occurred around the same time that the internal space in Enclosure 20.2 was reorganised. The entranceway was widened to 6.3m during the final remodelling of the enclosure, with the northeastern arm of the enclosure ditch shortened to line up with the internal edge of Enclosure 20.2.

This enclosure had no major internal divisions within it, and only a few small features survived within the interior. Most were situated in the eastern corner with two patches of irregular rooting, two possible post-holes and a rectangular pit.

BOUNDARY 20.5 AND ENCLOSURE 20.4 (FIGURE 20.3)

A sinuous field boundary 20.5 was connected to the southern corner of Enclosure 20.3 and extended to the southeast for 80m before it turned to the south and ran out of the southern extent of the excavation. This boundary was a long-lived division in the landscape as evidenced by multiple re-establishments during its lifespan. Some of these boundary ditches, particularly the earlier versions, were shallow but with deeper areas, especially in the north to south aligned portion of the boundary. Through the earliest ditch were gaps, one of which led to Enclosure 20.4. This enclosure had been added to the eastern side of the boundary and was presumably associated with livestock, possibly being used to direct animals northwards once through the boundary.

The later version of this boundary predominantly ran to the east of its predecessors. Unlike the earlier ditches, this version of the boundary was formed of a singular uninterrupted ditch, which ignored the earlier through routes. The ditch itself was also more substantial, with an average measurement of 1.4m wide and 0.3m deep. The northern end of this boundary had been cut into the upper fills in the ditch of Enclosure 20.3, suggesting that this re-cut of the boundary was later Iron Age, and possibly related to Boundary 20.6 or Enclosure 20.5 to the north.

BOUNDARY 20.6 (FIGURE 20.7)

Boundary 20.6 formed the first phase of activity identified within the northern embankment and consisted of a series of ditches that were relatively narrow and shallow, averaging 0.9m wide and 0.3m deep. These ditches were part of a larger system of fields or enclosures that extended beyond the limits of the excavation. Two ditches were located in the area north of the later Enclosure 20.5. One was aligned roughly north-west to south-east, extending out of the western baulk across the embankment area to meet a second, northeast to southwest aligned ditch. This second ditch extended beyond of the northern limit of the excavation and went south until it was cut by the ditch of Enclosure 20.5. It is likely that this ditch would have continued south along the line taken by the eastern arm of Enclosure 20.5.

Two further ditches formed southern parts of Boundary 20.6. The southern ditch aligned roughly east to west, and curving to the north-east at its eastern extent, extends from the eastern limit of the excavation across the embankment area until it was cut away by the terminus of a ditch associated with Enclosure 20.5. This ditch would have been a continuation of the north-east to south-west aligned ditch mentioned above. The western boundary ditch was located to the west of the western arm of enclosure 20.5, extending from the northern edge of excavation south and terminating just short of the roughly east to west ditch that formed the southern side of Enclosure 20.5. It is conjectured that an entranceway would have existed between the western and southern ditches of Boundary 20.6.

BOUNDARY 20.22 (FIGURE 20.3)

Leading west from the eastern edge of the excavation was a substantial Boundary 20.22 that was likely to have formed a continuation of the southern boundary to Enclosure 20.5; this may have had an earlier, narrower, version linked to the earlier Boundary 20.6 forming a corner into which Enclosure 20.5 was placed.

A separate gully, located to the south of Boundary 20.22, may also have been linked to the ditch system formed by boundaries 20.6 and 20.22. It was aligned north to south, and measured 23m long, 0.75m wide and 0.4m deep

ENCLOSURES 20.5, 20.6 AND 20.7 (FIGURE 20.7)

The three enclosures 20.5, 20.6 and 20.7 represent the second phase of activity identified within the northern embankment. Enclosure 20.5 was added to the southeast corner of Boundary 20.6, with substantial ditches directly replacing, or closely mirroring, the earlier boundary ditches. These new ditches averaged 2m wide and 1m deep, except for the eastern arm on the north side of the enclosure, which were slighter, being on average only 0.8m wide and 0.6m deep. This series of ditches enclosed an area of at least 6300m² (not including any area outside of the excavation limits). Two entranceways gave access to the enclosure; one on the northern side which measured 6.6m wide, another in the southwest corner against the southern ditch which measured 4.8m wide. The northern entrance was a simple gap between two arms of the enclosure ditch, whereas the southern entrance saw the western ditch of the enclosure turn inwards, creating a funnel between itself and the southern enclosure ditch. The southern ditch then extended westward, most probably replacing an earlier ditch that would have been part of Boundary 20.6

Within Enclosure 20.5 was an open-sided Enclosure 20.6. This was formed by a ditch of a similar size to that of Enclosure 20.5, measuring on average 2m wide and 1m deep. This formed a C-shaped enclosure, with the open side to the south. It contained two pits and two short lengths of gully.

The space between the main outer Enclosure 20.5 and the inner Enclosure 20.6 was further divided by two ditches. One of these was 0.6m wide and 0.2m deep and connected the western terminal of enclosure 20.6 and the terminal of the western arm of Enclosure 20.5. The other ditch was 1.2m wide and 0.4m deep and was located across the space between the northern ditch of Enclosure 20.5 and the northern side of Enclosure 20.6.

Enclosure 20.7 is a conjectured enclosure attached to the outer western edge of Enclosure 20.5. A large ditch extended westward from the western arm of Enclosure 20.5 for 34m, cutting over the western ditch of Boundary 20.6, before turning north. It could be traced for a further 12m before continuing beyond the northern limit of excavation. The ditch was similar in size to the enclosure ditches of 20.5 and 20.6, on average 1.75m wide and 0.7m deep. A possible return was identified on the northern side of enclosure 20.5, adjacent to the western edge of excavation. No entranceway was observed within the excavation.

WESTERN AND SOUTHERN BOUNDARIES (FIGURE 20.3)

At the western end of the mainline two field boundary ditches were identified. Boundary 20.2 was on a WNW to ESE alignment and extended from the western limit of excavation for 93m before it turned south on a NNE to SSW alignment for a further 42m. The ditch averaged 0.6m wide and 0.25m deep. Boundary 20.3 was situated in the southwest corner of the mainline; the ditch extended from the western limit of excavation for 60m before continuing beyond the southern limit. The ditch averaged 0.8m wide and 0.5m deep. When considered together these two boundaries may have been three sides of a large square/rectangular field or enclosure, with the western side lost underneath the ECML (while no continuation of Boundary 20.2 could be identified in TEA 19, there was a possible continuation of Boundary 20.3).

A similar boundary ditch to those described above was observed in the southern embankment (Boundary 20.4). The longest length of the ditch was aligned NNE to SSW and was 47m before turning to the west on a WNW to ESE alignment. This arm of the ditch was 13.5m long, with the boundary ditch as a whole averaged 0.5m wide and 0.3m deep. Again, this may have been the remnant of a large square or rectangular enclosure.

A further boundary ditch was also located in the southern embankment (Boundary 20.7). It was aligned east to west and was 0.85m wide and 0.4m deep on average. The ditch probably formed another part of the proposed field system observed across the site. A later pit had been cut into the southeastern edge of the eastern terminus.

ROMAN 1 (Figure 20.8)

The earliest Roman phase was located within the mainline area, with the most intensive area of activity centred on a group of three buildings and their surrounding enclosures. This constituted a small industrial zone, with working areas and probable storage facilities. It is most likely that this area is associated with a larger complex to the south, connected via the identified trackway, which may have been a predecessor to that seen in the Roman 2 and 3 phases.

BOUNDARIES 20.8 AND 20.9

Boundaries 20.8 and 20.9 were in the western half of the mainline, crossing the excavation area. The boundaries were parallel and aligned NNW to SSE. This mirrored an alignment seen in a pair of ditches situated in the eastern part of TEA 19, just the other side of the ECML. All of these ditches respected palaeochannels observed in TEA 19, which were identified as former routes of the River Great Ouse. Of the two ditches, Boundary 20.9 was more substantial at 4m wide and 1.8m deep, whereas Boundary

20.8 was on average 2m wide and 1m deep. Boundary 20.9 formed the western side to the main area of activity and as such it had been re-cut at least once.

ENCLOSURE 20.8, TRACKWAY 20.2, OVEN GROUP 20.1 AND WATERHOLE 20.1 (FIGURE 20.9)

Enclosure 20.8, 4m to the east of Boundary 20.9, enclosed the core of activity in this phase. This large enclosure was at least 92m NNE to SSW (the full extent of the enclosure was not seen, as the north-west corner was beyond the northern limit of excavation) and 173m WNW to ESE, an area of at least 13,500m². Whilst the western and southern sides formed a rectilinear south-west corner with long lengths of ditch extending to the north and east (92m and 168m respectively) the northern side extended from the northern limit of excavation on a different alignment, northwest to southeast. After 112m, the ditch turned due south, where it continued for 5m before being removed by a later Roman boundary 20.10.

Trackway 20.2 was placed across the centre of this enclosure, again on the NNE to SSW orientation that defined this phase. There was no surface on this trackway but it was defined by a pair of parallel ditches. The trackway measured 4.5m between these flanking ditches, while the ditches themselves were on average 1.3m wide and 0.4m deep. Within the western trackway ditch, a burial, inhumation 20.1, had been placed. The skeleton was of an adult, possibly male, who had been laid out on their left side with their head to the south. Their hands were crossed in front, resting on the upper legs, which were slightly flexed. The position of the limbs suggested that the body may have been wrapped in a shroud before being placed in the ditch. There was no sign of an intentional grave cut, thus the burial must have been placed into the ditch while still open, and then the area backfilled. Slightly further to the south, an unurned cremation Burial 20.1 had been cut into the top fill of the eastern trackway ditch.

The addition of this trackway split Enclosure 20.8 into two distinct areas. The eastern half did not contain any internal features and was most probably used as a large stock enclosure with an entranceway in the southeast corner. The western, rectangular, portion of the enclosure had an entranceway in the western side, which measured 4.5m wide. This led to the narrow space between Enclosure 20.8 and Boundary 20.9. Its position suggested that at some point Boundary 20.9 would have had a reciprocal through route, however no such route was present, suggesting that any entrance may have been removed by the later re-cutting of the boundary. This may have occurred at the same time as one of the remodellings of the adjacent enclosures 20.9 and/or 20.10.

The western half of Enclosure 20.8 was further divided by a large ditch that was aligned WNW to ESE that extended from Trackway 20.2 to Boundary 20.9, to the north of the entranceway. This ditch was 2.2m wide and 0.9m deep, although a recut had removed all but the northern edge of the original ditch.

The space to the north of this ditch was an area that contained few features attributable to this period. However, these did include a pair of short gullies and a pair of waterholes, one of which (Waterhole 20.1) was excavated by machine. Cut through the gravel terrace into the underlying clay, waterhole 20.1 on the surface was rectangular in shape (6m by 3.3m, aligned NNE to SSW), but the base was circular (1m diameter). This dramatic change in shape was down to the very loose nature of the gravel terrace through which the feature had been cut, with the edges collapsing until it came to a 45° angle. A further

possible waterhole, sub-circular in plan and containing a similar dark fill to the upper part of Waterhole 20.1, was observed just to the south. This was partially excavated, but due to safety concerns was not bottomed.

To the north of Waterhole 20.1, a group of four oven-like features 20.1 were identified. Three of these were slightly keyhole shaped with two chambers, whilst the fourth was a single chamber; all four had a partial stone lining. Originally thought to be corndryers, due to the dark, organic looking fills, subsequent early environmental analysis showed no evidence of cereals amongst the fills. So, although they were unlikely to have been corndryers they were ovens/kilns of some description.

ENCLOSURE 20.9, BUILDINGS 20.1, 20.2 AND SURFACE 20.1 (FIGURE 20.9)

The core of activity for this phase was located in the space to the south of the large dividing ditch, with multiple enclosures surrounding several structures. There were two distinct phases in this activity. The first phase was spread across this southern space, with Enclosure 20.9 enclosing areas around buildings 20.1 and 20.2 and surface 20.1. The second phase was confined to a smaller area in the north of the space, with enclosure 20.10 just to the south of the earlier dividing ditch, enclosing a space around Building 20.3.

Enclosure 20.9 was a long-lived series of enclosures, with multiple remodellings. Some ditches were cut to the western ditch of enclosure 20.8, while others went beyond to Boundary 20.9, again pointing to a probable remodelling of this boundary during this phase of activity. At least three phases of enclosure were identified within this system, although more subtle alterations may become apparent with further analysis. The enclosures surrounded two contemporary structures.

Building 20.1 in the southern corner of Enclosure 20.9 consisted of two parallel rows of post-holes; the southern row was formed of at least four large post-pits, although it seemed likely a fifth post-pit to the east of the four had been completely removed by a later ditch, with a central post that contained packing. The northern row comprised seven less substantial posts, some of which were doubled-up. The building was aligned east to west and measured 15.7m by 8.5m. It had no surviving internal features and with possible open ends this building could have been a barn. A pair of shallow ditches to the east may have been directly associated, possibly enclosing a small area outside the buildings east end.

Building 20.2 was located in the eastern part of Enclosure 20.9 and was the central focus of the enclosure system, with each subsequent remodelling respecting the perimeter of this building. This was an aisled building with two central rows of substantial post-holes, with two outer rows of smaller post-holes. Many of the central post-holes showed similarities in their construction to those in the southern row of Building 20.1, suggesting that these two buildings may have been contemporary. The building was aligned NNE to SSW, and was 13.5m by 10.6m, with the central area being 5.2m wide. The quantity of industrial waste in this area suggests that this building was used as a workshop, or possibly a blacksmiths forge. It was interesting to note that within the base of six of the main post-holes the ends of elm posts survived to varying degrees in waterlogged conditions (Figure 20.10). One of these posts has been radiocarbon dated to cal AD 84-317 (95.4% probability; SUERC-759470) making this the first known example of the use of structural elm in Roman Britain.

Directly adjacent to the eastern wall-line of Building 20.2 was an area of laid pebbles and cobbles forming a continuous surface 20.1, which covered an area of 84.5m². This surface had a clear straight edge on its western side, respecting the building. Considering its position outside this building, it was likely to have been an associated working surface or yard. It was later disturbed by the south-eastern corner of Enclosure 20.10.

ENCLOSURE 20.10 AND BUILDING 20.3 (FIGURE 20.9)

The second phase of activity in this area focused on Enclosure 20.10 and Building 20.3. Enclosure 20.10 was rectangular and had several remodellings, as noted in the multiple shallow gullies within the limits of the larger enclosure ditches that delineated the enclosure. It was situated just to the north of Building 20.2, with the southern arm of the enclosure ditch running through the footprint of the building, indicating Enclosure 20.10 was a later addition when Building 20.2 had been demolished.

Building 20.3 sat within Enclosure 20.10 and consisted of two rooms. This rectangular building was aligned WNW to ESE and measured 10.1m by 6.9m. It was a post-built building, with the post-holes being smaller than the two earlier buildings in Enclosure 20.8. Most of the post-holes that made up the walls of the eastern room and the partition survived, while only the post-holes of the north-eastern portion of the western room remained. The function of this building was not discernible.

ENCLOSURE 20.11 (FIGURE 20.8)

In the southern half of the southern embankment, against the edge of excavation, the northwestern corner of an enclosure was revealed. The ditch was 2.3m wide and 0.8m deep and was cut by pit group 20.2. This enclosure cut the filled in ditches of the Iron Age Boundary 20.5 and was itself cut by a later Roman Boundary 20.12. A possible continuation of this enclosure into the arable fields on the opposite side of the Offord Road could be seen in aerial photographs (GM 2018), suggesting that this corner formed part of a large rectangular enclosure. However, this crop-mark could also be a continuation of Boundary 20.12, which lies just to the south, and is aligned similarly to the northern edge of this enclosure.

Inhumation 20.2

A grave cut for an inhumation burial was located beneath a ditch terminal associated with the later Enclosure 20.13. The grave was aligned north to south and was 1.5m long, 0.5m wide and 1m deep. It contained the articulated remains of an adult female, laid in a supine position with the skull to the south. The skull was turned to the west, with the right forearm resting above the lower abdomen and left arm flexed so the left hand was by the left clavicle. The legs were fully extended. The inhumation was attributed to this phase due to its stratigraphic connection to later Roman phases. A sample of human bone from this inhumation was radiocarbon dated to cal AD 242-381 cal AD (95.4% probability; SUERC-85549).

Roman 2 (Figures 20.11-13)

The site was completely remodelled by the removal of the previously existing arrangement of enclosures. A very formal layout was then imposed on the site, with the addition of a large double-ditched enclosure,

although the majority of the core of the site within the interior of this enclosure lay just beyond the western edge of excavation.

Enclosure 20.12 was a substantial rectangular enclosure that was present within the southern half of the mainline and western half of the southern embankment areas of site. The enclosure was defined by a pair of boundary ditches, boundaries 20.10 and 20.11. Elements of the northern and southern sides of the enclosure were within the excavation area, but the entire eastern side, which contained an eastern entranceway and gatehouse, was present. The northern ditches were also located in TEA 19 on the western side of the ECML, although the northwestern corners were not identified, making the western extent or form of Enclosure 20.12 unclear. However, based on the identified extents of the perimeter these ditches would have enclosed an internal space of roughly 68,700m².

Within Enclosure 20.12, internal enclosures were identified, predominantly in the northeastern corner. Within one of these two buildings (20.5 and 20.6) were identified. A number of enclosure ditches terminated short of the internal edge of Boundary 20.11. This indicated that an internal bank surrounded the space defined by the boundary ditches.

Further enclosures were attached to the external edges of Boundary 20.10. Enclosure 20.14 was located on northern side of the enclosure, while Enclosure 20.15 was on the eastern side. Associated, but not directly attached to the enclosure, was a series of boundaries that represent the beginnings of large open field system that extended to the north of the enclosure. To the east, near Offord Road, a number of pit groups were identified, associated with gravel, clay and/or water extraction.

PERIMETER - BOUNDARIES 20.10 AND 20.11, STRUCTURE 20.2 AND TRACKWAYS 20.3, 20.4 AND 20.5

The outer boundary 20.10 was consistently about 8m outside of the parallel inner Boundary 20.11. The boundary was observed for a total of 611m across the northern, eastern and southern sides of Enclosure 20.12, with the northern and southern sides extending beyond the limits of excavation. The ditch was on average 2m wide and 1m deep, but the northern arm the ditch both widened and deepened to the west, in the wetter ground, and the southern arm was shallower than elsewhere.

Boundary 20.11, which formed the inner of the two ditches that made up the perimeter of enclosure 20.12, was observed for a total of 567m. As with Boundary 20.10 the northern and southern sides of this boundary extended beyond the limits of excavation. This boundary was maintained for a considerable time, even after the outer boundary Ditch 20.10 had gone out of use, so the recorded dimensions represent its final form (discussed in Roman 3 below).

An entranceway was located towards the centre of the eastern side of the enclosure. This entranceway was created by the chamfering of Boundary 20.10 inwards to meet Boundary 20.11; the external width of this entranceway was 25m, while the internal width was 7.5m (Figure 20.12). A timber gateway, Structure 20.2, was located on the internal side of the entranceway. The remains of this structure consisted of two rows of three post-holes across the entrance, with the middle posts being located centrally within the entranceway; the gate may have been tied into an internal bank. Multiple versions of this structure were identified, the earliest of which was associated with the earliest version of a

Trackway 20.3. The gate was maintained for a considerable time as the latest phase was re-built cutting later repairs to the metalled track.

A metalled track of laid cobbles and pebbles, Trackway 20.3, was located inside and outside the perimeter of the entrance into enclosure 20.12. This trackway led through the entranceway towards the centre of the enclosure, although it was not present in the gap between the boundary ditch terminals. The metalling was heavily disturbed in places but enough survived to indicate that externally the track extended to the south of the entranceway, towards an area of external enclosures, and the internal track was 6m wide. Within the interior, spurs of cobbled surface were observed to lead away from the main east to west trackway and these may have represented paths that led to enclosures either side of the entranceway. Trackway 20.4 was a cobbled surface that headed north towards Enclosure 20.13, indicating this may have been the location of an entranceway into that enclosure system. Trackway 20.5 was a 4.7m length of surface that led south.

INTERNAL SPACE- BUILDINGS 20.4 AND 20.5, ENCLOSURE 20.13 AND SURFACE 20.2 (FIGURE 20.13)

A series of enclosures were present within the northern half of the internal space of enclosure 20.12. Enclosure 20.13 was an enclosure system that was constructed along the northern internal edge of Boundary 20.11; a number of ditches terminated 3m to 4m short of this boundary ditch, indicating the presence of an internal bank. These enclosures were generally square or rectangular in shape, although there was one curving ditch that was part of this system.

Building 20.4 was placed within enclosure 20.13. This was constructed of two rows of four post-pits, aligned east to west and measured 11.5m by 6m. Just to the east was another similar building 20.5, which was also constructed of two rows of four posts. This building was also aligned east to west and it was 12m by 6.5m.

To the south of Building 20.4 was a large metalled yard surface 20.2, which covered an area of 265m². For this to be relatively level, the area that it was laid in was prepared by terracing into a slight slope to the north, toward the building, which was at its maximum 0.3m deep. The straight northern and eastern edges of the surface respected narrow ditches that presumably delineated the yard; the eastern side of the yard was in line with the western side of Building 20.5.

EXTERNAL ENCLOSURES – BOUNDARY 20.12, ENCLOSURES 20.14 AND 20.15

Enclosure 20.14 was added to the north side of Boundary 20.10. It had an 8.5m wide entranceway roughly centrally through its northern side. Inside the enclosure the remains of two small ditches were also identified. The western one ran parallel with the main enclosure ditch, with a small gully extending at a right-angle half way across the space between the two ditches.

Enclosure 20.15 was situated to the south of the entrance into Enclosure 20.12. This area consisted of many small enclosures that probably formed part of a small ladder system. The northern end of this system respected the southern side of Trackway 20.3, which presumably provided access to it. The system then continued south until it met a large boundary Ditch 20.12, aligned east to west, which had been added to the southeast corner of the main Boundary 20.10. This boundary ditch was maintained

into the Roman 3 period, with the later re-cut having removed most of the earlier ditch. As mentioned above, there is crop-mark evidence of a possible continuation east of the Offord Road, although this may instead be the continuation of the northern edge of Enclosure 20.11. There was a gap between Enclosure 20.15 and Pit Group 20.2, to the east, which might indicate that the likely quarrying associated with these pits was active during this period.

KILN 20.1

Within the northwest area of this enclosure system 20.15 a small pottery Kiln 20.1 was present. The kiln was aligned east to west, with the main chamber to the east cut into the natural subsoil with a pedestal of natural clay left in place opposite the flue. The flue extended to the west and the sides were scorched, into the smaller stokehole chamber. Large amounts of pottery and kiln furniture or lining material were recovered from the backfill. Just to the south, two pits [207759] and [207761] also contained large quantities of pottery (including possible wasters) and kiln furniture or lining material.

BOUNDARIES 20.13 AND 20.14

Boundary 20.13 formed a large field boundary that begins adjacent to the northeast corner of Enclosure 20.12. The ditch, which measured 1.8m wide and 0.5m deep on average, then extended for 120m on a roughly east to west alignment, before turning to the northeast. On this new alignment the ditch joined with another ditch, which was aligned northwest to southeast and measured 0.75m wide and 0.3m deep, that stretched across the excavation area. These ditches were contemporary and probably part of a large open field system that extended beyond the limits of site to the north and east. Within one of the excavated slots were the articulated skeletal remains of a whole cow.

Boundary Ditch 20.14 was aligned northwest to south-east to the north of the north-east corner of Enclosure 20.12, but its southern end turned southward to terminate just short of the western end of boundary 20.13. It formed the southwestern boundary to the field which was bounded to the south and east by Boundary 20.13. It was on average 1.5m wide and 0.25m deep. There was a 10m wide gap between the north-east corner of boundary 20.10 and southern terminal of Boundary 20.14, which provided access around the external corner of Enclosure 20.12.

ENCLOSURE 20.16

Enclosure 20.16 was a large square enclosure located in the mainline to the north of Enclosure 20.14. It was aligned NNE to SSW, which may suggest a link to the earlier phase of Roman activity discussed above. The enclosure measured 28m NNE to SSW and 29m WNW to ESE and enclosed an area of 581m². The ditch was continuous with no entrances and there was an internal division.

PIT GROUPS 20.1, 20.2, 20.3 AND 20.4

There were a large number of pits on the eastern side of the southern embankment, mostly adjacent to the limit of excavation beside Offord Road. While much of this activity was Roman, there were some pits that were likely to have been later in date, especially very deep pits located to the north of Pit Group 20.3 and a large unexcavated pit to the immediate south of Pit Group 20.3

Pit group 20.1 was located in the southern end of the southern embankment, in an area where the natural subsoil was more gravel than clay. The group was characterised by a series of relatively deep inter-cutting pits, the purpose of which was most likely gravel extraction.

Pit Group 20.2 was a large area of pitting located adjacent to the eastern limit of excavation in the southern embankment. The area was characterised by multiple inter-cutting pits that had been excavated into the underlying clay. These pits had truncated several earlier features, including Enclosure 20.11, and possibly Trackway 20.1, although no direct relationship was observed during excavations. The area was noticeable as a hollow in the landscape that had a sealing layer covering the pits. The northern edge of this group was cut through by boundary 20.16. The purpose of this group of pits may have been clay extraction, or for water as groundwater entered the bases of the excavated portions.

Pit Group 20.3 was located to the northeast of Pit Group 20.2 adjacent to the eastern limit of excavation. This pit group was characterised by shallow, broad pits cut into the natural clay, again presumably for clay extraction.

Pit Group 20.4 was located just south of Boundary 20.13 and comprised four small clusters of pits. These pits were also cut into the natural clay, so clay extraction would seem the most likely reason for their presence.

Roman 3 (Figure 20.11)

Enclosure 20.12 underwent remodelling during this phase, with Boundary 20.10 going out of use as part of the perimeter, and Boundary 20.11 being enlarged by a re-cut. The entranceway remained in place with the main trackway being maintained, new spurs of track added, and the gateway structure renewed. The internal enclosures were also remodelled at this time, with generally larger ditches being cut to replace their slighter predecessors. Building 20.6 was constructed and replaced the two earlier buildings. Attached to the southeast perimeter, a new enclosure system, enclosure 20.17, was dug to replace the earlier Enclosure 20.15 system.

PERIMETER - BOUNDARY 20.11, STRUCTURE 20.3 AND TRACKWAYS 20.3, 20.5 AND 20.6

Boundary 20.11 became the sole perimeter ditch around Enclosure 20.12. The ditch was widened to 3m and was 1.5m deep on average. In the northeast corner there was evidence for a slight alteration. A short spur of ditch, of similar dimensions to the main portion of Boundary 20.11, was added to the eastern edge of the corner. This spur extended for 8.5m, terminating at the western edge of the infilled Boundary 20.10. This spur was associated with the reworking of this area following the disuse of Boundary 20.13.

The entranceway through Boundary 20.11 into Enclosure 20.12 remained at its previous location and with little alteration. The gateway, Structure 20.2, was replaced 0.75m to the east, as evidenced by three posts that cut through the earlier trackway. Trackway 20.3 continued to be maintained and re-laid, leading to a number of features from the previous phase being covered over, such as the post-holes of the earlier version of Structure 20.2, and a small ditch that had previously run parallel to the trackway edge before turning south (Figure 20.12).

Trackway 20.6 was laid to the north of the main trackway route and this covered another earlier short ditch, aligned NNW to SSE. This spur probably replaced trackway 20.4, which due to the remodelling of Enclosure 20.13 to the north of the entranceway, now led to the corner of a large ditch.

INTERNAL SPACE – BUILDING 20.6, DARK EARTH 20.1, ENCLOSURE 20.13 AND SURFACE 20.2

The internal space continued to be divided by a series of enclosures, some of which underwent significant remodelling. In general, the ditches associated with Enclosure 20.13 during this phase were wider and deeper. Again, the enclosures that made up this system were predominately square or rectangular in shape. Of particular note, ditches [200402] and [208423], which were found to contain substantial layers of discarded animal bone, considered by the excavators to be primary butchery waste due to the high number of non-meat bearing bones recovered.

Building 20.6 replaced the earlier buildings 20.4 and 20.5 but was much larger as it covered the footprint of both earlier buildings. The building was constructed of two rows of eight post-holes, some of which had been dug through the post-holes of the earlier buildings. These post-holes were substantial, with the deepest at 0.75m, though most measured 0.5m deep, which suggested that the building may have been two stories high. Within the footprint of this building three oven-like features survived (two had been disturbed by a later medieval furrow), though whether all these features were associated with this building, or one of its predecessors, was not clear (Figure 20.13).

The yard surface 20.2 was still in use, although a narrow ditch was cut across it on a northwest to southeast alignment. Across the southern part of the surface an occupation layer (208742) and (208745) had begun to build up. This deposit was had a green tinge, suggestive of organic origins. At the end of this phase the yard surface, associated ditches and a group of pits and a ditch to the east were covered by a substantial midden layer, dark earth 20.1. This layer contained a substantial amount of pottery, animal bone and CBM, as well as a large number of iron nails and several coins.

EXTERNAL ENCLOSURES - BOUNDARY 20.12, ENCLOSURE 20.17 AND PIT GROUP 20.5

Enclosure 20.17 replaced the earlier enclosure system 20.15 on the south-eastern side of Enclosure 20.12. Unlike the earlier enclosure system, which was characterised by narrow, shallow ditches, the ditches of Enclosure 20.17 were more substantial, being wider and deeper. The system of ditches that made up Enclosure 20.17 formed a series of large sub-square and sub-rectangular enclosures, with entrances located on the eastern sides of these enclosures. A number of these enclosures were attached to Boundary 20.11 (cutting over the infilled earlier Boundary 20.10), using this ditch as their western perimeter. There was evidence of sporadic remodelling of the enclosures during their lifetime, with some ditches being replaced or recut. As with the preceding Enclosure 20.15, the system was bounded to the south by Boundary 20.12. From within the fills of these enclosures, a large volume of occupation material was recovered, suggesting possible occupation activity within the system. However, considering the amount of material recovered from the large boundary ditches of Enclosure 20.12 (Boundary 20.10 and 20.11), the dumping of occupation material derived from activity to the west should not be ruled out.

Within the northwestern enclosure of the system that made up Enclosure 20.17 was a Pit Group 20.5 that had been cut into the infilled Boundary 20.10. These pits were probably primarily used for the

procurement of water for the livestock that would have been penned in these enclosures. A small area of stone surface had been laid into the top of one of these infilled pits as an area of hard standing to allow access to the edge of the latest pit in the sequence.

BOUNDARY 20.15, ENCLOSURE 20.18 AND SURFACE 20.3

Boundary 20.15 formed the southern boundary of an open field, replacing Boundary 20.13 which lay to the north. It was a WNW to ESE aligned ditch, which extended from the eastern limit of excavation before curving northward into a chicane that curved around the northeast corner of Enclosure 20.12 before terminating on the corner of the backfilled Boundary 20.10. To the south of the chicane between Boundary 20.15 and Boundary 20.11, were remnants of a stone surface 20.3. This surface had been laid over the top of the infilled terminal of Boundary 20.13 and parts of Boundary 20.14. This no doubt was to improve ground conditions and prevent rutting during the movement of livestock through the opening between the boundary ditches.

A small enclosure system 20.18 was attached to the southern side of Boundary 20.15. This comprised three internal enclosures; two square spaces (240m² and 270m²) in the northern half and a larger rectangular space (375m²) in the southern half. No entrances into these enclosures were identified.

PIT GROUPS 20.6, 20.7 AND 20.8

Pit Group 20.6 was located north of the entranceway into Enclosure 20.12, and to the west of Enclosure 20.18. This was formed by a series of intercutting pits, the function of which was unclear. Pit Groups 20.7 and 20.8 were located north of Enclosure 20.12 and were cut through the ditches that formed the earlier Enclosure 20.14. Group 20.7 lay to the east of Pit Group 20.8 and was the larger of the two. Both groups were characterised by intercutting pits of varying sizes, some were substantial in diameter and depth, while others were small and shallow. Considering the underlying geology in this part of the site, gravel extraction may have been the primary reason for their excavation.

Although they did not form part of larger groups, isolated individual pits were scattered across the site outside of Enclosure 20.12. Most if not all appear to date from this period of activity, and almost all were excavated into the courses of ditches from preceding phases of activity. It was suggested that collection of water was the primary use of these pits, using the natural effect of these infilled ditches to channel water, probably for livestock.

BOUNDARY 20.16

Boundary 20.16 was a northwest to southeast aligned ditch which had been cut across the northern extent of Pit Group 20.2, cutting the pits on the periphery. It measured 1.5m wide and 0.4m deep on average.

Roman 4 (Figure 20.14)

A number of isolated late Roman, or potentially post-Roman, features overlay the infilled features of the previous Roman activity, although only one group appeared to form a coherent Field System 20.1. During the post-Roman period the site suffered from a series of flood events from the River Great Ouse which ultimately resulted in a substantial layer of alluvium, (200552 and associated contexts)

accumulating over large areas, especially in the western half of the mainline. This flooding resulted in the erosion of the archaeological deposits, with the result that the alluvial deposits contained an abundant number of mixed artefacts, including a large quantity of fourth century coins. It was possible that other remains of late Roman or post-Roman activity had been scoured away by the flooding, resulting in the artefacts being mixed throughout the layers.

There was also some early 5th century pottery in the (very) late Roman layers (possibly middens).

FIELD SYSTEM 20.1

Elements of a Field System 20.1 were located in the area that had previously been within the southeast corner of enclosure 20.12. The ditches associated with this system were aligned northeast to southwest or east to west, and partly overlay the infilled Boundary 20.11. The northeast to southwest ditches may have been acting as boundaries to the system, with the east to west aligned ditches acting as agricultural trenches or drainage gullies.

Medieval (Figure 20.15)

Remains of a medieval open field system survived at the site, presumably associated with Offord Cluny to the south. Three distinct alignments of ridge and furrow were present, and these were separated by boundary ditches. Field system 20.2 was the largest, with furrows aligned east to west across the western half of site. The eastern edge of this field was delineated by Boundary 20.17, which was aligned north to south. The southern boundary 20.19 of this field system was a wide, shallow, ditch at the southern end of the site.

To the east of Boundary 20.17 was a north to south aligned ridge and furrow field system 20.3. The northern extent of this field was delineated by a shallow ditch, Boundary 20.18, aligned east to west. To the north was the remnant of Field System 20.4, which was aligned roughly east to west, but on a slightly different orientation to Field System 20.2. These furrows respected the alignment of Boundary 20.20, which survived in its post-medieval form but probably formed the northern extent of the medieval fields. To the north of this boundary the evaluation trenching recorded remnants of furrows aligned north to south, but these furrows were not present during excavation.

Post-medieval (Figure 20.15)

A post-medieval Boundary 20.20 survived across the northern part of the site. This was the parish boundary between Godmanchester and Offord Cluny and as such was likely to have had an earlier origin. The historic mapping shows that this boundary had gone by the 1950s. Boundary 20.21 was a further part of the post-medieval enclosure field system. It was shown on the historic mapping where it connected to Boundary 20.20, but it had gone by 1926.

Finds and environmental summary

Tables 20.1 – 20.3 provides a quantification of the finds, bone, and environmental samples from TEA 20.

There was a small collection of earlier prehistoric finds on TEA 20. This included 61 sherds of early Neolithic – early Bronze Age pottery and 691 pieces of worked flint, mostly unretouched debitage likely dating from the Mesolithic through to the early Bronze Age.

The Iron Age pottery assemblage was mostly middle – late Iron Age in date and comprised a collection of handmade sandy and shelly wares. There were no other definite Iron Age finds.

Low quantities of charred cereal seeds (grain, wheat and hulled barley) were found in the Iron Age environmental samples, suggesting that crop processing was not taking place here. The animal bone assemblage contained only domesticated species, mainly sheep/goat.

A very large Roman pottery assemblage was recovered from TEA 20. This included pottery from throughout the Roman period, but was dominated by late Roman pottery, suggesting that the site peaked in the late 3rd/4th century. The late Roman material contained more finewares, particularly Nene Valley colour-coated sherds, than on other Roman rural sites in the area, suggesting that this site was of higher status. There was also some early 5th century pottery in the (very) late Roman layers (possibly middens).

A large collection of other Roman finds was also retrieved, including 386 coins, 108 registered finds (dress accessories, craft items, and tools), a large quantity of worked stone including 12 fragments of structural stone, 52 fragments of Roman glass (including colourless glass from high-quality tablewares), a large collection of roofing tile, brick, box-flue tile, and voussoir tile (from a bath building), a huge number of iron nails, and a collection of metalworking residue which indicates that there was smithing on the site. Particularly interesting finds included a middle – late Roman iron stylus for use with wax and wood writing tables, and a scalpel (potentially indicating the existence of a doctor or surgeon).

The six elm post bases from the Roman building, radiocarbon dated to cal AD 84–317 (95.4% probability; SUERC-75947), were particularly interesting, as elm has not been found on any other Roman sites in England. They may be the first evidence for the newly introduced Italian elms in the Roman period.

The collection of leather, which comprised thong-stitched pieces from a shoe, was also interesting as these are typically 10th century in date, but these examples were definitely found within a Roman context.

Plant remains from the Roman features included localised abundances of grain and chaff, derived from burnt crop processing waste. Flax seeds were recovered from one of the enclosures, suggesting there was linen production there; fen-sedge (possibly used as tinder) in the kiln; and evidence for imported foods (grape, olive, fig). The animal bone assemblage included a wider diversity of species than in the Iron Age, including domesticates, game, and wild birds, and a greater concentration on cattle.

Table 20.1 Quantification of finds from TEA 20

Type	Count	Weight (g)	Date/type
Pottery	61	180	Early Prehistoric
	604	6,327	Iron Age
	37,635	612,433	Roman
	33	806	Post-Roman
Coins	406		
Small Finds	478		
Iron Nails	1,912		
Lithics	691 (worked)		
	317 (burnt unworked)		
Stone	106 (burnt)		
	12 (structural)		
	72 (millstones/quernstones)		
Glass	56		
Clay Tobacco Pipe	3		
Leather	Largest assemblage		
Wood	9		
Building Materials	1,187	150,080	
Metalwork Residues	3,938	155,229	

Table 20.2 Quantification of bone from TEA 20

Type	Count	Weight	Date/type	% of bone assessed
Cremations	3			
Inhumations	3			
Disarticulated human bone contexts	1			
Animal Bone	16,091	299,310		33

Table 20.3 Quantification of environmental samples from TEA 20

Type	Count	Date/type
Bulk Environmental Samples	895	
Kubiena Tins	7	
Monoliths	7	
Waterlogged samples	7	

Provisional interpretation and potential

No definitive evidence of activity earlier than the Iron Age was identified during the excavation. However, a radiocarbon date obtained during the assessment stage identified Structure 20.1 as an earlier prehistoric (early Bronze Age) monument, presumably a timber circle. If this was a timber circle, then it

was an unusual form and as such would be a significant discovery. Further work will need to focus on locating any other potential examples of this form of monument.

The Iron Age activity focused on two areas; the enclosure group in the central part of the excavation (Enclosures 20.2 and 20.3), and Enclosure 20.5/20.6 in the north-eastern part of the excavation. Enclosures 20.2 and 20.3 presumably represented a middle Iron Age farmstead, while Enclosures 20.5/20.6 were probably later. This shift may have been due to worsening climatic conditions and a move away from the flood prone gravel terraces. Beyond these farms there was evidence of field systems and divisions of the landscape extending beyond the limits of site.

It is significant that there was evidence for continuity of occupation between the middle and late Iron Age, with settlement focus moving from the gravel terrace on to the higher clay. These two areas also present opportunities to investigate spatial use, with evident divisions of space within enclosures, such as in Enclosure 20.2. The enclosures were unlike many others discovered during the project and there was also little evidence for buildings, so the analysis of the recovered material and its distribution will be important in determining areas of domestic activity.

During the Roman period there were two quite distinctly different characters to the archaeological remains. The earliest consisted of part of a linear settlement enclosure complex, probably a complex farmstead (Smith et al 2016, 28), which was connected to a trackway and contained at least three buildings. One of these, a typical aisled building (20.2) often found at such farmsteads, has provided evidence for the first elm-built building in Roman Britain; industrial waste found in this building suggested that it was associated with metalworking. There appears to have been a hiatus between the abandonment of the late Iron Age enclosed settlement and the establishment of this first phase of Romano-British settlement, currently believed to be in the 2nd century AD.

This farmstead was swept aside by the construction of a substantial, and formally laid out, double-ditched enclosure. This was the perimeter to a significant site, probably a villa, the core of which was located just outside of the site. Finds from the later fills and deposits suggest that there was at least one stone building (the assemblage included stone architectural fragments), and there were also quantities of roof tile, box flue tile, plaster and mortar. There was a gated entrance through the eastern boundary and within the north-eastern interior of the perimeter enclosure was a series of smaller enclosures, one of which contained ancillary buildings. The likely villa was positioned 3km southwest of the Roman town at Godmanchester (*Durovigutum*), with the River Great Ouse just to the west. The nearest known Roman road was 1km east, located in TEA 21, and this was Margary's road 22 which connected *Durovigutum* to Braughing in Hertfordshire, via Sandy (Margary 1973). Part of the reasoning for the realignment of the site and the excavation of the large double ditch system may be due to severe flooding. Evidence of such flooding events was identified at Godmanchester and in the southern Fenland, and has been dated to the mid-third century (Green 2017, 91, 140-1; Phillips 1970).

Later in the Roman period it was possible that the site incorporated a processing centre for cattle. Butchery waste was plentiful in the fills of the latest features, more than would be expected from domestic use. The large Building 20.6 and the areas around it may have had a role in this industry,

especially as many of the surrounding layers were green-tinged cess-like deposits which suggested that animals were corralled in the area.

Potential

The excavation at TEA 20 has provided a dataset with a very high potential to provide significant information on a wide range of research questions. On the question of settlement and landscape, the longevity of the site will allow for study of continuity and change of landscape use over a considerable period from the middle Iron Age to the end of the Roman period, and perhaps beyond into the fifth century. This will also focus on whether there was continuous activity from the middle Iron Age into the Roman period, or whether there were any 'breaks' in occupation. The substantial faunal and botanical assemblages may be able to inform on agricultural production and consumption and indicate how this altered through time. Aside from agriculture, there was also good evidence for industrial activities, including small-scale metalworking and pottery production.

Specific attention should be given to Building 20.2, and the elm post-bases that were recovered. Elm was a very rare building material in Roman Britain, and has not previously been securely identified as a principal construction timber. As such, this is an exceptionally rare find and work on identifying the species of elm involved, and confirming whether elm was present in the landscape or whether it was imported, should be a priority.

Particular attention must be paid to similar sites in the landscape, such as the villa sites at Rectory Farm, Godmanchester (Frend 1968 and Lyons forthcoming) and at Great Staughton (Greenfield, Poulsen and Irving 1994), as well as how this site fits into the landscape and development of the town of *Durovigutum* itself (Green 2017).

Recommendations

Further work needs to be done on consolidating and reviewing the archive and survey, with attention given to the stratigraphic anomalies still outstanding. This should also include adding in any information required that was missed during fieldwork. The excavation produced a quantity of hand-drawn plans, and some of the hand-drawn features do not appear on the digital survey due to operational constraints so these plans need urgent digitisation.

Full grouping and assignment to period is required following results of specialist pottery assessment and radiocarbon dating (particularly chronological resolution of transformation to villa; identifying the 5th century). This will require some revision of the stratigraphic sequence discussed here. Artefact and ecofact distribution analysis across the site should help determine how the settlements functioned and developed over time.

TEA 21

Simon Markus

TEA 21 was a strip, map and sample area measuring approximately 4.5ha, located between Silver Street and Offord Road (NGR TL 2381 6794) along the new A14 carriageway. It lay just over 500m to the east of the excavations at TEA 20, and was excavated between October 2016 and March 2018 (Figure 21.1). The site was located on a relatively flat hilltop at approximately 39m AOD and it had been previously used as an arable field. The underlying geology comprised diamicton till overlying Oxford clay (NERC 2019).

Wessex Archaeology undertook trial trench evaluation at the site in 2014 and revealed a series of mostly undated ditches, although some were dated to the late Iron Age or early Roman period.

Summary of results

The site had a small Iron Age farmstead comprising a roundhouse, four-post granary storage building and three rectilinear enclosures. These field enclosures were replaced by fields of cultivation trenches in the first century AD, either side of a Roman road (Figures 21.2-3).

Iron Age (Figure 21.4)

STRUCTURES

There was a single, apparently unenclosed, roundhouse with an east facing entrance located towards the eastern end of the site. It had a drip gully 13.5m in diameter which showed evidence of regular maintenance. Within the interior were 18 pits and post-holes though these were in no discernible structural order. The gully contained a small amount of early to middle Iron Age pottery as well as a late Neolithic or early Bronze Age flint arrowhead.

At the far east of the site was a four-post structure, probably a granary or storage building. It measured 2.6m by 2.8m. The posts were between 0.4m and 0.6m in diameter and up to 0.15m deep. No datable finds were recovered, however there were small pieces of burnt clay within the post-holes. Environmental bulk samples from these produced pieces of oak charcoal, small fragments of marine mollusc (oyster or muscle), and some barley grains and spelt chaff.

ENCLOSURES AND FIELD SYSTEMS

Separating the roundhouse from the four-post structure was a pair of parallel broadly sinuous ditches aligned north-east to south-west. Attached to the western ditch was a small 29m wide square enclosure 21.1, with a south-west facing entrance 5.6m wide. This was probably a small paddock leading into a bounded pasture field.

North of the roundhouse was a further 52m wide enclosure 21.2 that extended beyond the northern limit of excavation. It had two entrances, a small one 1.6m wide on the western side and a larger one in the southern corner, facing the roundhouse. It is unclear how wide this entrance would have been as the southern corner of the enclosure has been lost. To the west of the roundhouse was the northern part of a third enclosure 21.3 with a 21m wide north facing entrance.

To the north of the roundhouse were a large number of dispersed pits and post-holes, some of which were within enclosures 21.1 and 21.2. No clear structure or sequence could be identified within these. They likely had variable uses; some were probably for collecting water for animals, and others were packed with burnt stones or pot boilers for cooking. Early to middle Iron Age pottery was recovered from several of these, as well as small amounts of burnt clay and animal bone.

Roman (Figure 21.5)

ROAD

On the eastern side of the site, aligned north to south, was a 16m wide road with a single 0.6m wide drainage ditch on each side. No road surface survived within the excavations. Roman pottery dating to the first and fourth centuries was recovered from the roadside ditches.

CULTIVATION SYSTEM

Either side of the Roman road, and clearly respecting it, were field systems of cultivation trenches. These were constantly spaced between 4m and 5m apart. The area east of the road contains only a single field 90m wide. To the west of the road the cultivation trench system extended 265m and continued beyond the western limit of excavation, towards the Roman settlement revealed in TEA 20. These were split into strips or fields between 45m and 65m wide. A single sherd of Roman greyware was recovered from one of the cultivation trenches.

Finds and environmental summary

Tables 21.1 – 21.3 provides a quantification of the finds, bone, and environmental samples from TEA 21.

The finds recovered were mainly dated to the middle – late Iron Age. The pottery was predominantly sandy fabrics, including East Midlands Plain Ware (vessels with slack shoulders and short upright rims). There was also a smaller collection of Roman pottery (mostly greywares), three Roman coins, and a small collection of Iron Age daub and fired clay.

The plant remains from this site included occasional cereal grains (spelt wheat and barley). A small quantity of animal bone (cattle, horse, pig, sheep/goat) was also recovered, although much of this was poorly preserved.

Table 21.1 Quantification of finds from TEA 21

Type	Count	Weight (g)	Date/type
Pottery	571		Iron Age
	26		Roman
	6	58	Post-Roman
Coins	3		
Small Finds	1		
Lithics	8 (worked)		
	33 (burnt unworked)		
Building Materials	289	591	
Metalwork Residues	23	20	

Table 21.2 Quantification of bone from TEA 21

Type	Count	Weight	Date/type	% of bone assessed
Animal Bone		920		100

Table 21.3 Quantification of environmental samples from TEA 21

Type	Count	Date/type
Bulk Environmental Samples	62	

Provisional interpretation and potential

TEA 21 was a dispersed Iron Age farmstead, possibly associated with an area of more intense Iron Age settlement less than 1km down the hill to the west at TEA 20. The environmental evidence from the 4-post structure will provide a comparison with other similar structures on the scheme to assess the variation in crop cultivation in the Iron Age throughout the region.

The Roman road identified on the east side of the site is designated as Margary's road 22, which connects Godmanchester (*Durovigutum*) to Braughing in Hertfordshire, via Sandy (Margary 1973). The evidence from TEA 21 confirms the location of a missing section of this road. The bedding trench cultivation systems either side of the road add to a growing number of such agricultural features known from the A14 scheme and the wider region, generally dating to the early and mid-Roman periods (Smith et al 2016, 182; Allen et al 2017, 73-4). They are typically believed to have been used for the cultivation of horticultural crops such as fruit trees, but positive evidence is usually lacking. The cultivation systems in TEA 21 should be assessed alongside the Roman settlement at TEA 20 to the west as they likely form part of the landscape managed from this location. Dating of the cultivation trenches will be key to understanding the relationship between the two sites. Advancements in pollen analysis may also give us a chance to finally understand how these cultivation systems were used in the Roman period, and what crops they were used for.

The research areas most likely addressed from this site, as outlined in the regional research framework (Medlycott 2011), are:

- What evidence is there for clear working areas and living areas/zoning across TEAs 20 and 21?
- What evidence is there for social organisation across TEAs 20 and 21?
- How does the agricultural system and economy develop across TEAs 20 and 21?
- What evidence is there for Roman rural consumption and production across TEAs 20 and 21?

Recommendations

Further research on this site would have very limited potential, however it is one of many dispersed Iron Age farmsteads, which should not be viewed in isolation. Environmental remains were sparse, and the features present are widely understood. The relationship between TEA 21 and TEA 20 to the west should be looked at further as they are likely to be related and the presence of Roman farming around the

high-status site could be key to understanding how the landscape was organised and managed. Further, the Roman cultivation trenches should be assessed alongside evidence of these feature types from other sites on the A14 (TEAs 26, 32, 33) and other sites in the region to try and understand this form of landscape feature. Further understanding of these cultivation systems would be aided by additional analysis of similar feature sets identified during the several trial trench evaluation phases for this scheme.

TEA 26

James West

The archaeological excavation was undertaken ahead of the construction of the new A14 mainline between an area southwest of Littlebury Farm, across Mere Way (a local access road) to St Ives Road (B1040), a distance of approximately 1.9km, between January and April 2017 (Figure 26.1). The area lay immediately to the west of TEAs 27 and 28. The underlying geology was boulder clay, with River Terrace Gravels at the eastern end, over mudstone of the Oxford Clay Formation (NERC 2019). The area of excavation covered 3.7ha.

Archaeological background

The site of the proposed mainline was subject to a trial trench evaluation by Wessex Archaeology in 2014, with the TEA area being trial trenched by MOLA Headland Infrastructure in 2016. The 2014 trenching identified numerous linear ditches running on a variety of alignments but only a single sherd of late Iron Age or early Roman pottery was recovered from them. In addition, a waterhole and several small undated pits were also discovered. Medieval to post-medieval furrows and post-medieval ditches were located at the eastern end of the SMS area. The 2016 trenching revealed small pits and two small ditches.

Methodology

The 125m wide route of the proposed A14 mainline within TEA 26 was designated as a strip, map and sample (SMS), with a proposed soil storage area, 120 x 80m in size, southwest of Mere Way designated as a targeted excavation area (TEA). However, in consultation with the Cambridgeshire County Archaeology Officer, a decision was taken to strip the southern 10m of the mainline for a haul road and only strip the full mainline width, under archaeological monitoring, in areas where archaeological remains were discovered in the haul road. As a result, wider areas were investigated to either side of Mere Way and an area adjacent to Potton Road (Figure 26.2).

Summary of results

Iron Age

Elements of an Iron Age agricultural landscape were revealed. This consisted of an enclosure or long boundary ditch either side of Mere Way and a further ditch within the soil storage area (Figure 26.4).

ENCLOSURES 26.1 AND 26.2

A ditch, approximately 180m long, formed the southern side of an enclosure 26.1. This ditch was aligned roughly east to west and had a single entrance. It was poorly preserved and in areas it had been entirely ploughed away, especially at its western end. A short length of surviving ditch formed a probable sub-division (Boundary 26.1), although its relationship with the ditch that formed the south side of enclosure 26.1 had been removed by the cutting of a Roman ditch. Iron Age pottery was present within the ditch for enclosure 26.1.

Located approximately 6m south of Enclosure 26.1 was the northern ditch of a parallel Enclosure 26.2, which was equally damaged by later ploughing and cut by a Roman ditch. This ditch survived for a length of 180m and at the eastern end the last surviving 30m turned to the southeast.

FIELD BOUNDARY 26.2

Located to the southwest of enclosures 26.1 and 26.2, within the soil storage area, was a northeast to southwest aligned boundary ditch 26.2 that terminated within the site. The terminal had been re-cut and the fill (260443) of the recut contained a bronze dagger, which dated to the Bronze Age, that was found in association with Iron Age pottery. Two large intercutting pits were located just to the south of the ditch terminal, and although these were undated it is likely that they were also Iron Age in date.

Roman

Elements of a contrasting Roman agricultural landscape were located at the site, continuing in use up to the 2nd/3rd century. A possible Roman trackway 26.1/26.2 was located in two areas on a NNE-SSW alignment, and to the east of it was a series of enclosures and boundaries (Figure 26.4); evidence for Roman cultivation trenches were found across many of the excavated areas (Figures 26.3-5).

TRACKWAY 26.1 AND 26.2

Trackway 26.1 was present in the southeast corner of the soil storage area, on a NNE-SSW alignment. This was represented by a pair of parallel drainage ditches, approximately 9m apart (Figure 26.4). Traces of these trackside ditches (Trackway 26.2) were present to the north in the mainline area, where there was also evidence for a later realignment of the track to a more north to south alignment. It is possible that these tracks represent the earliest foundation of what became Mere Way. There were two quite distinct agricultural landscapes to either side of this track, which must have formed a prominent local landscape feature.

THE ENCLOSURES AND BOUNDARIES

To the east of Trackway 26.2 were several large enclosures and field boundaries. The most prominent of these was the northern end of a double ditched square or rectangular enclosure 26.3. The inner enclosure was approximately 126m wide east to west, with a 12m wide entrance located centrally. Parallel to the inner enclosure ditch, about 8m to the north, was the outer ditch. This was best preserved around the north-west corner and west side of the enclosure but had suffered from plough damage elsewhere. There were no internal features or evidence for dating but given its form it was likely to have been Roman. Also, a boundary ditch 26.3, which did contain Roman pottery, ran north to south from its origin within the entrance of the double ditched enclosure, suggesting the two were associated.

A further ditch was added to the northwest corner of the outer enclosure ditch. This ran southwest from the double ditch enclosure before it turned north to south, creating an appended Enclosure 26.4. To the west of Enclosure 26.4 where two further enclosures, 26.5 and 26.6. The western side of Enclosure 26.6 was formed by the western flanking ditch of re-aligned trackway 26.2.

TRACKWAY 26.3

Located approximately 30m to the east of the double ditched Enclosure 26.3 was a north to south aligned trackway 26.3. The track was flanked by ditches that contained no dating material, but it was cut by a later Roman Enclosure 26.7, so presumably it was Roman in date and potentially contemporary with the double ditched enclosure that shared the same alignment.

ENCLOSURE 26.7

The southern end of a large enclosure 26.7 ran east to west, east of Mere Way, with both ends of the ditch turning northward. The ditch was more substantial than the earlier Roman ditches described above, at 1.60m wide and 0.40m deep, and it contained late Roman pottery. This enclosure ditch had been cut across trackway 26.3 and boundary 26.3.

THE CULTIVATION TRENCH SYSTEM

Cultivation trenches within a field system were located to the west of Trackway 26.2. These fields contained a series of trenches parallel to the original NNE-SSW aligned trackway (cultivation sets 26.1 and 26.2). The trenches, evenly spaced at approximately 4m apart, were straight-sided and flat bottomed and contained a single homogenous fill. The position of a perpendicular fence between fields was betrayed by a 1m wide gap in the rows of trenches, which created cultivation trench system 26.1 on the north side of the gap and cultivation trench system 26.2 to the south. Early Roman pottery was recovered from the fill of one of the cultivation trenches in the northern of the two fields (cultivation trench system 26.1). Other identical parallel ditches formed further parts of similar cultivation trench systems at the eastern end of TEA 26 (cultivation trench system 26.3) and at its extreme eastern end (cultivation trench system 26.3), a distance of approximately 1.7km.

Cultivation trench system 26.1 was later amended and subdivided by the addition of two perpendicular ditches. To the south, and following the abandonment of cultivation trench system 26.2, two parallel ditches on an ENE-WSW alignment formed trackway 26.4. These ditches had been cut across the cultivation trenches to join Trackway 26.2. On the east side of Trackway 26.2 the alignment of the southern ditch of Trackway 26.4 continued to the east, forming the north side of enclosures 26.4 and 26.5. A further north-south aligned Trackway 26.5 was located at the western end of cultivation trench systems 26.1 and 26.2. Although there was no relationship between the track ditches and the cultivation trenches, the track presumably post-dated the trenches based on the similar later shifting of the orientation of the Roman enclosures to a north to south alignment.

PITS

A number of isolated small pits were found, with the majority being located on the western side of Mere Way. Only one feature [260310] contained pottery, however it is likely that these features were associated with either the Iron Age or Roman agricultural landscape.

Post-medieval

A waterhole or well 26.1 was located west of Mere Way, cut into the earlier Roman cultivation trench set 26.1 (Figure 26.4). The waterhole was 1.50m deep and it had a gently inclining trench, from ground level, providing access from the eastern side of it. The earliest fills contained earlier post-medieval pottery but

the base of the access trench was partially consolidated with nineteenth century tile and brick, particularly adjacent to the deep part of the watering hole; suggesting that this was a later addition. A number of nineteenth century artefacts were also recovered from the fills, including pottery and clay tobacco pipe stem fragments.

Mere Way

Post-medieval ditches were located under the modern Mere Way road surface (trackway 26.6). These have been interpreted as post-medieval ditches because of the presence of modern pottery within their fills, and the fact that they were parallel to the road shown on 19th century maps (1888 First Edition OS Map). However, it is possible that they relate to an earlier (medieval?) trackway. This will be considered at the analysis stage.

Finds and environmental summary

Tables 26.1 – 26.3 provides a quantification of the finds, bone, and environmental samples from TEA 26.

The finds recovered were mainly dated to the late Iron Age to late 2nd/3rd century AD. The pottery assemblage was from local sources and included sandy and shelly wares and the base of a Lower Nene Valley White Ware flagon or jar.

Only one registered find was recovered – part of an early - middle Bronze Age dagger or dirk. There was also a small collection of lithics (3 worked and 158 burnt), and 19th century ceramic building material.

The plan remains included very few cereal remains, with nothing from the cultivation system. The animal bone assemblage was relatively small and poorly-preserved but was concentrated on cattle, horse, pig, and sheep/goat.

Table 26.1 Quantification of finds from TEA 26

Type	Count	Weight (g)	Date/type
Pottery	16	215	Iron Age and Roman
	5	97	Post-Roman
Small Finds	1		
Lithics	3 (worked)		
	158 (burnt unworked)		
Building Materials	32	4,412	
Metalwork Residues	39	33	

Table 26.2 Quantification of bone from TEA 26

Type	Count	Weight	Date/type	% of bone assessed
Animal Bone	74	570		100

Table 26.3 Quantification of environmental samples from TEA 26

Type	Count	Date/type
Bulk Environmental Samples	38	

Provisional interpretation and potential

The archaeological excavations at TEA 26 revealed evidence of long established agricultural landscapes. The earliest of these were elements of large Iron Age field enclosures or boundaries, presumably related to the known sites in the vicinity (ACJV 2017a, 14). These enclosures were similar to others located across the project, though the research potential of the Iron Age landscape at TEA 26 is limited.

The Roman agricultural landscape is more interesting, however, and does have the potential to inform on the land use and agricultural practices over time in the Roman period. It was clear that the minor roads or trackways were an important component of this landscape from the earliest Roman use of the site, and significantly it is possibly that the present Mere Way is the final form of a local route first established in the Roman period. A trackway formed the first Roman landscape division, with two differing field systems to either side. Potentially the earlier was the cultivation trench system which has also been identified at other sites on this project, at TEAs 21 and 33 for example, as well as from other sites in the region (see discussion, TEA 21 and in UPD). As yet, these trenches remain an enigma despite detailed study elsewhere, but the soil samples taken from those in TEA 26, together with those from other trenches excavated during the project, have the potential to inform on the function of these features. The other landscape features were the more typical field enclosures. However, the large double ditch enclosure was unusual and is more typically seen within settlement contexts.

The archaeological excavation results from TEA 26 can be used to help inform the following research questions collated from the regional research framework (Medlycott 2011), the written scheme of investigation (HE 2015) and the site-specific specification (ACJV 2017a):

Research Themes and Objectives

- Landscape and settlement: development of the character and form of the agricultural landscape of the Iron Age and Roman period (Medlycott 2011, 25-26, 33-37 and 84),
- Late Iron Age/Roman transition (Medlycott 2011, 26-28), and
- Economic and social change and development during the late Iron Age and Iron Age/Roman transition (Medlycott 2011, 26-28).

IRON AGE

- What is evident in the landscape, does field morphology offer and information, what is the potential for faunal remains to inform study? (ACJV 2017a, 15),

ROMAN

- Agriculture – consumption and production; what is being produced where?
- Rural settlements and landscapes (field morphology) – how far can the size and shapes of the fields be used to identify agricultural regimes?

- Infrastructure – are minor roads evident in the immediate landscape? (Medlycott 2017, 15).

Recommendations

Limited further stratigraphic work is needed to fully understand the dating of the double-ditched enclosure and combined with the study of the ecofactual evidence it is hoped that a function could be understood. A review of the evidence from the cultivation trenches, alongside those from the other sites, has potential to increase our understanding of their use.

TEA 27

Anthony Haskins and Richard Mortimer (COPA)

This report presents a rapid post-excavation assessment of the archaeological investigation carried out at TEA 27 (NGR TL 29451 67901), by COPA under the guidance of MOLA Headland Infrastructure (MHI) on behalf of the A14 Integrated Delivery Team (A14IDT). The site is located to the north and east of TEA 26 and to the west of TEA 28, approximately 1.75km north of Hilton on the west side of Potton Road. The archaeological excavation was undertaken ahead of the construction of a new Flood Compensation Area (FCA) to the north of TEA 26 along the new A14 route and west of Potton Road that separates the site from the far larger site of TEA 28 (Figure 27.1). TEA 27 was 6.6ha in size (213m north to south by 345m east to west; Figure 27.2). The underlying geology of the site is Oxford Clay Formation, overlain by River Terrace Deposits (NERC 2019)

Archaeological background

The TEA area had been subject to a trial trench evaluation by COPA in 2014. This identified numerous linear and curvilinear ditches, on a variety of alignments, and a number of pits. These dated to between the late Iron Age and late Roman periods. Medieval to post-medieval furrows were also recorded across the site.

Methodology

TEA 27 was designated as a targeted excavation area (TEA). However, the original design of the FCA area was altered after the excavation area had been archaeologically stripped by mechanical excavator. The re-design allowed *in situ* preservation of the settlement area in the northeast corner. Therefore, this area of site was not excavated but was surveyed and surface finds were collected prior to careful backfilling. After the FCA had been redesigned, and in consultation with the Cambridgeshire County Archaeology Officer, a decision was taken to reduce the excavation area with the majority of the archaeological site lying outside of it. As such, only the routes of the utility service diversions and a compound area, were excavated. The remainder of the enclosure system was recorded by a mapping exercise with some surface pick-up and the excavation of sensitive remains such as visible human burials.

Summary of results (Figure 27.3)

Undated and natural

A number of undated features were identified including ditches forming outer field systems in areas away from settlement and lacking in associated datable finds material. Within the settlement area itself very few features were excavated and, while precise dating is not known, broad phasing can be assumed.

Prehistoric

The site did not contain any significant early prehistoric finds or features. Residual prehistoric pottery was recovered from Field System 27.1 at the eastern limit of the site but the only feature clearly dated to this period was a tree throw (270722). This produced a moderate assemblage of struck flint (c 44 pieces) with characteristics that indicate it is of early Neolithic date.

Bronze Age

Activity relating to the Bronze Age was very limited, comprising a single pit (270739), a small unurned cremation cemetery (Cremation Group 27.1) and a single inhumation burial (270731). Pit 270739 was circular in plan with gently sloping sides and a flat base. It was shallow, presumably heavily truncated, measuring just 0.03m deep, was 0.57m in diameter and filled with a moderately compact, mid grey-brown silty sand; the upturned base of a Bronze Age vessel, fragmented into c 30 pieces, was recovered from within it. The dating of the pot base as Bronze Age is tentative and the feature lay in close proximity to another feature dated to the early Iron Age (270736, see below).

Located towards the western edge of the site was a small cremation cemetery (Cremation Group 27.1; Figure 27.4). This comprised five truncated cremation pits, arranged in an approximate square. All the features were shallow and were between 0.34m and 0.61m in diameter and 0.11m and 0.29m deep. None of the cremation deposits had been interred within urns and no intrinsically datable material was recovered from them. Two samples of cremated bone from this cemetery were radiocarbon dated to 1423-1291 cal BC (95.4% probability; SUERC-85550) and 1414-1277 cal BC (95.4% probability; SUERC-85551; middle Bronze Age), and the others are all phased as middle Bronze Age on morphology.

Forty metres to the south of the cremation cemetery was an inhumation burial (270731). The grave cut was circular in plan and measured 0.66m in diameter, with steeply sloping sides. A single badly preserved skeleton (270733) was revealed within a mid orange-brown compact sandy silt fill. The body had been bound into a tight ball with the legs drawn against the chest and buried in an upright squatting position. The hands were down by the feet. A Bronze awl was recovered from the fill (270732). The burial is currently thought to date to the late Bronze Age by association with other burials of this type within the region, although these are usually placed on their sides in a foetal position.

Iron Age

The Iron Age phase can be divided into two sub-phases, provisionally dated to the early and middle Iron Age. While there was little early Iron Age activity within the area – a few pits and four-post structures – the site produced two of the most archaeologically significant objects from the entire project. The two early Iron Age metalworking tools from pit 270967 appear to be the earliest well-dated objects of their kind in the country. Iron objects are incredibly rare finds on early Iron Age sites within the region, and these had been deliberately ‘killed’ by being bent in the middle and deposited within a small pit. The activity here must lie on the periphery of more significant settlement, aspects of which were seen to the east in TEAs 28 and 29. Without further excavation of the settlement core, middle Iron Age activity remains limited to a single boundary ditch.

STRATIGRAPHIC SUB-PHASE 1 - EARLY IRON AGE

Features assigned to the early Iron Age by datable finds (pits) or by morphology (four-post structures) were recorded across the site. A total of 153 pottery sherds have thus far been identified as early Iron Age.

Pit 270967, close to the northern edge of the site, was circular, 0.72m in diameter and 0.23m deep, steep sided with a concave base. It contained a single fill comprising moderately compact black silty

clay. It contained the most archaeologically significant finds from TEA 27 in the form of two iron metalworking tools, a 'spatula' and a 'poker' (SF 27020, 27021). They have been reported as Treasure Finds (2017 T548, Museum ref: CAM-790F9F). The tools were recovered alongside 66 sherds of early Iron Age pottery and fragments of burnt animal bone; a radiocarbon date from the burnt bone gives a date of 792-523 cal BC (95.4% probability; SUERC-75288) suggesting that the objects may be the earliest dated iron metalworking tools in the country. A further 80 sherds of early Iron Age pottery were recovered from a tree throw (270736) suggesting that this material was deliberately dumped during the backfilling of the feature.

A group of four four-post structures lay across the western and southern parts of the site (buildings 27.1 – 27.4): these are dated to the early Iron Age largely on morphological grounds, although very few clearly datable finds were recovered from any of the features. However, Building 27.2 contained two potentially early or middle Iron Age pottery sherds. The structures were all square and of similar sizes, 2.60 to 2.90m wide, and all were aligned north-west to south-east.

Building 27.1 (Figure 27.5) was situated at the western edge of the site with a fifth post-hole (270506) located to its immediate southwest. The post-holes had vertical sides and rounded bases, with fills comprising moderately compact mid brown-grey sandy silt. It measured between 0.33m and 0.51m in diameter and 0.23m to 0.38m deep.

Building 27.2 (Figure 27.6) was situated at the southwest of the site. The post-holes were steep to vertical sided with flat bases measuring 0.3m in diameter and 0.2m to 0.31m deep. Two fragments of early or middle Iron Age pottery were recovered from fill 270642.

Building 27.3 (Figure 27.7) was situated in the central part of the site, to the southwest of the later settlement activity. The post-holes were 0.2m to 0.39m in diameter and 0.09m to 0.23m in depth, with very steep sides, flat bases and mid brown grey friable sandy silt fills.

Building 27.4 (Figure 27.8) was situated centrally, to the south of the site. The post-holes varied between 0.15m and 0.28m in diameter and 0.08m to 0.2m in depth. A single sherd of undiagnostic prehistoric pottery was recovered from post-hole 270965.

STRATIGRAPHIC SUB-PHASE 2 - MIDDLE IRON AGE

A slight scatter of potentially residual middle Iron Age pottery and a single ditch (Ditch 27.1), both in the northeastern corner of the site, comprise the middle Iron Age archaeology of the site. Just 19 sherds have currently been, tentatively, assigned a middle Iron Age date.

Ditch 27.1 was c 1.6m wide and 0.30-0.44m deep. It was aligned approximately north to south turning halfway along its length to a north-east to south-west orientation. It terminated just to the north of a Roman trackway (see below 1.2.5.2). Containing a few sherds of pottery, the ditch may represent an earlier phase of settlement activity focussed to the north/north-east of the main site.

Late Iron Age/Romano-British

The most significant phase of activity relates to the settlement area in the north-east of the site, which has been divided into two sub-phases. The settlement comprises several roundhouses within ditched Enclosure 27.1. The area remained largely unexcavated and thus there is very limited contextual information. The settlement originated within the late Iron Age (sub-phase 1) and continued into the Roman period (sub-phase 2). The proximity of the settlements on TEAs 27 and 28 – linked by a trackway – and the difference in size and form, could suggest that the former represents a satellite farming settlement linked to the latter. The bedding trench system recorded in TEA 26 and the south of TEA27 (Field System 27.1) were probably linked to a higher status/larger settlement than that at TEA27.

STRATIGRAPHIC SUB-PHASE 1 (LATE IRON AGE /EARLY ROMANO-BRITISH)

It would appear that the main settlement site saw its foundation in the late Iron Age (although a middle Iron Age date is possible). Dating is very tentative at present but approximately 100 pottery sherds from the settlement area have been assigned a late Iron Age, and another 80 a late Iron Age/early Roman, date. The area was stripped and the visible features surveyed during the excavation but it was not comprehensively excavated. Therefore, it is not possible to understand fully the relationships between settlement and the surrounding features. However, excavation at the periphery of the settlement demonstrates that the principal settlement enclosure ditches date to this early phase, alongside aspects of surrounding field systems and/or trackways.

Enclosure 27.1 comprised two ditches that formed the main circuit of the settlement site, a broad inner ditch up to 5m wide, itself made up of a series of smaller ditches, and an outer, narrow ditch, c 1.50m wide. The ditches formed the western and southern sides of the enclosure, any northern or eastern arms lying beyond the excavation area.

To the west of the main enclosure another ditch (Ditch 27.4) ran parallel to the outer enclosure ditch at a distance of some 20m. It was c 1.50m wide and 0.6m deep and perhaps formed part of a trackway which headed northwards along the western side of the enclosure. Further to the west were two parallel, shallow west-east ditches (ditches 27.2 and 27.3) which also lay 20m apart and may have formed a second trackway heading westwards.

STRATIGRAPHIC SUB-PHASE 2 – (ROMANO-BRITISH)

The focus of settlement remained the same through the Roman period with continued occupation within the early enclosure. Enclosure 27.1 was re-cut at least twice between the two earlier enclosure ditches; the first re-cut (Ditch 270074) was c 2.1m wide and 1.3m deep and was truncated by a second, larger ditch (270076) at 3.25m wide and 1.3m deep.

Ditch 27.6, 1m wide and 0.5m deep, which headed out of the main settlement in a sinuous south-west to north-east direction, was truncated by a series of smaller enclosures in the northeastern extension to the excavation area (enclosures 27.2, 27.3 and 27.4) that extended the enclosed, occupied area. The full scale and form of the enclosures could not be ascertained since they extended beyond the limits of excavation.

Enclosure 27.2 appeared rectangular in plan with a steep sided ditch that was subsequently re-cut, both features containing multiple fills. Only the eastern corner of Enclosure 27.3 was seen, again rectangular in plan. The ditch had stepped, moderately steep sides and a flat base, with multiple fills and measured 2.4m wide and 1m deep.

Adjoining Enclosure 27.3 along its north-eastern edge was Enclosure 27.4. The ditch was steep-sided with a rounded base and measured 1.5m wide and 0.35m deep. This ditch continued along the southwest to northeast alignment extending beyond the northern baulk. A second ditch (270453), with a recut, followed the same alignment, perhaps representing a separate phase. It measured 1.75m wide and 0.50m deep. Aligned north-east to south-west across the southernmost of these enclosures was a trackway (Trackway 27.1), 6.5m wide, which linked to the site TEA 28 to the east. The trackway was delineated by two shallow ditches.

To the south of the settlement area was Ditch 27.5, a boundary relating field systems in TEA 27 to TEA 28 to the east. Field system 27.1 comprised a series of three bedding trenches aligned east to west across the southwestern part of the site with a north to south ditch enclosing them to the west. These may represent the northern limit of a system of bedding trenches, which extended to the south into TEA 26. They also related to more open drainage ditches towards the south-eastern part of the site. Overlying Field System 27.1 were two, shallow north-south ditches (Field System 27.2). The ditches forming these boundaries were shallow with diffuse edges and suggest a change in land-use later in the Roman period.

A loose group of three inhumation burials was found on the western edge of Enclosure 27.1 (Burial Group 27.1; Figure 27.9). One of the graves partially truncated the infilled enclosure ditch suggesting that the burials were of later Roman date. All the graves had visible bone at the surface, indicating considerable truncation of the original ground surface. Burial 270867 was aligned northeast to southwest and was 1.5m long, 0.6m wide and 0.1m deep; Burial 271108 was on a similar alignment, 1.85m long, 0.65m wide and 0.25m deep, the skeleton (271109) was well preserved with the majority of remains surviving *in situ* and with the body in a supine position. The most southerly, Burial 271105, was oriented northwest to southeast.

Medieval/Post-medieval

A medieval or post-medieval open field system (Field System 27.3) comprising ditches and furrows indicated later activity on the site. The field systems were broadly aligned to the Iron Age and Roman landscape with furrows aligned east to west in the northern and eastern parts of the site and north to south in the south-western part. This suggests that little further landscape re-organisation occurred after the Roman period. Trackway 27.2, aligned NNW-SSE, was located at the north-eastern corner of the site. It was c 11m wide, delineated by two shallow ditches.

Three areas of the site contained small but significant post-medieval finds assemblages: a ditch (Ditch 27.7) in the east of the site produced 14 sherds of pottery, 25 brick/tile fragments, slag and glass; and pit 270698 at the southwest around 100 pottery sherds, 18 brick/tile fragments, glass and clay tobacco pipe. A building (Building 27.5) was recorded occupying the area of the northeastern limit of excavation

on the 1st edition OS map (1887) that truncated part of the Roman enclosure systems produced 40 pottery sherds, nails, glass and tobacco pipe.

Finds and environmental summary

Tables 27.1 – 27.3 provides a quantification of the finds, bone, and environmental samples from TEA 27.

The earliest finds were a small collection of early prehistoric pottery, including early Bronze Age undecorated body sherds and the base of a middle Bronze Age urn from a cremation. A Bronze Age awl was also recovered from an inhumation, and a collection of worked flint.

The environmental samples from the Bronze Age cremations included burnt tubers, which are often found in cremations and are thought to have derived from de-turfing around the pyre site to create a fire break, and a rose seed. There was surprisingly little charcoal in the cremations, suggesting either that the bone had been carefully selected prior to deposition, or that the charcoal did not survive.

There was a larger collection of Iron Age finds, including 155 sherds of early Iron Age pottery (one of the larger assemblages from the project). The majority of the Iron Age pottery assemblage was, however, middle or later Iron Age in date, focused on middle Iron Age sandy wares and later Iron Age grog-tempered and sandy wares. Other Iron Age finds of particular interest included the two iron hearth tool parts, possibly part of a poker, which have been radiocarbon dated to 792-523 cal BC (early Iron Age).

Few plant remains were recovered from the Iron Age features. The animal bone assemblage from the Iron Age features was mainly cattle and sheep, with 50% of the contexts showing some evidence for butchery.

The largest pottery assemblage was of Roman date and included pottery from throughout the Roman period. The pottery was mainly utilitarian in type, with a focus on jars. There were some examples of regional and international imports including Verulamium-type white wares and Gaulish Samian ware. Other Roman finds included nine coins, 48 fragments of stone (including quern stones), and two brooches.

Few cereal grains were recovered from the Roman features and little chaff, suggesting that the cereals were fully processed before they were brought to site. The Roman animal bone assemblage was all domesticates, with fewer sheep/goat than the Iron Age features.

Table 27.1 Quantification of finds from TEA 27

Type	Count	Weight (g)	Date/type
Pottery	48	142	Early Prehistoric
	868	9,282	Iron Age
	1,014	17,639	Roman
	178	2,763	Post-Roman
Coins	9		
Small Finds	35		
Lithics	84 (worked)		
	252 (burnt unworked)		
Stone	48 fragments		
Glass	17 fragments		Post-medieval
Building Materials	135	6,013	
Metalwork Residues	22	1,290	

Table 27.2 Quantification of bone from TEA 27

Type	Count	Weight	Date/type	% of bone assessed
Inhumations	5			
Cremations	5			
Disarticulated bone contexts	1			
Animal Bone	3,103	46,100		100

Table 27.3 Quantification of environmental samples from TEA 27

Type	Count	Date/type
Bulk Environmental Samples	96	

Provisional interpretation and potential

The occupation of the site was largely limited to late Iron Age and Roman periods. The main settlement was mostly unexcavated and preserved *in situ*. Very little prehistoric activity was recorded on the site with much of the recovered material representing residual flints from later features. However, the presence of a single utilised tree throw indicates some activity occurring in the area during the Neolithic period.

Limited Bronze Age activity was found within the excavation area, most of which was funerary. Of note are the cremation cemetery situated in the southwest of the excavation area and the single inhumation burial of unusual character to the south of it. A far larger middle Bronze Age cemetery was excavated some 400m to the southeast on the western edge of TEA28, and a large Iron Age ditch on TEA26, to the south and west, produced part of a Bronze Age bronze dirk indicating that, while sparsely settled, the area lies within a well-utilised Bronze Age landscape.

The main aspect of the site is of a small late Iron Age and Roman settlement within a substantially excavated landscape. The site is directly related to the known occupation uncovered on TEA 28. The excavation area is almost certainly on the periphery of early Iron Age occupation with several small four-post structures and a securely dated pit which contained ironworking tools. Whilst the main focus of the occupation and formation of the enclosures probably commenced in the late Iron Age/early Roman periods, this cannot be confirmed due to the limited extent of the excavation.

This site holds relatively limited potential for further work, with its main importance lying in its relationships with other sites in the landscape. However, the early Iron Age metalworking tools are largely unparalleled. Originally described as spatulate-end pokers (Fell 1990), similar items have generally been found at hillforts such as at Hunsbury, Castle Yard, Garton Slack (Jinks-Fredrick, pers. comm.), and Beckworth. Further to this, several tools of a similar appearance have been identified in Wales at Tre'r Ceiri, Gwynedd and Coygan Camp hillfort. Most of these tools are dated to between the c 5th century BC and 1st century AD. The most comparable form is dated to the 5th century BC although the tool forms continued in use into the early Roman period. The excavated examples from TEA 27, however, are significantly earlier with a secure date from charred animal bone within a sealed context of 792 – 536 cal BC and, as such, these are some of the earliest iron metalworking tools yet found in the country.

The iron fragments probably represent a single tool and it is currently believed that the tool was used in smelting, although this would need to be confirmed by detailed metallurgical analysis, (Jinks-Fredrick, pers. comm.).

Recommendations

Full grouping and assignment to period of all contexts is required following results of specialist finds and sample analysis; this may require some revision of the stratigraphic sequence discussed here. Particular attention will be required for the early Iron Age iron tools (see Marshall, Volume 2). Further radiocarbon dating of burials is required.

TEA 28

Gemma Hewitt

This report presents the stratigraphic assessment of the archaeological investigation carried out at TEA 28 (NGR: TL 3019 6783). The 40.3ha archaeological excavation was undertaken ahead of the construction of the main line, associated earthworks, a borrow pit (north cell and south cell) and the re-alignment of Potton Road. It was carried out between January 2017 and May 2018 (Figures 28.1 and 28.2). The site was located on river terrace gravels and overlying mudstones of upper clay formations, at an average height of 13m AOD.

The remains of a paleochannel were located throughout the western side of the site. It was between 13.5m and 16m wide and was 0.47m deep, and branches of this present within the excavation.

Archaeological background

A combination of aerial photographic studies and geophysical surveys suggested that there was a high potential for archaeological remains at the site, including probable settlements in the main line and north-east part of borrow pit and a possible circular enclosure to the west. These were confirmed by trial trenching undertaken by Wessex (2014), COPA (2016) and MHI (2016). A Roman site was located during the 2016 evaluation (Jeffery 2016), c 600m northeast of the main excavated Iron Age/Roman settlement; this was preserved *in situ*.

Phase summary

Palaeolithic

There was a known high potential for Palaeolithic remains within the borrow pits in the north and south cells, so further monitoring of the quarrying in these areas is on-going and the results of this will form a separate report.

Bronze Age (Figure 28.3)

In the southwest corner of the site one of the branches of the palaeochannel flared out to cover a wider area and located on the gravel ridge to the north side of this area were the remains of a Bronze Age cemetery (Figures 28.2 and 28.3a).

CEMETERY

The cemetery, which had been deliberately placed on slightly higher ground overlooking the palaeochannel, had at least two phases, with inhumation burials predating a larger cremation cemetery. Three inhumation burials survived in two graves; one was a double crouched burial (28.2-3) and the other was a single burial (28.4). All graves were cut into the natural gravelly subsoil, and one burial 28.4 was cut by two later cremation burials 28.30 and 28.31.

Burials 28.2 and 28.3 shared a single grave cut. The oval grave was 1.3m by 1.0m and 0.16m deep, and it was orientated east to west. A bronze object and an amber bead were present within the grave fill. The bodies were placed on their left sides, side by side, in a crouched east facing position. Skeleton 28.2

has been radiocarbon dated to approximately 1401-1231 cal BC (95.45 probability; SUERC-76922), the middle Bronze Age.

The grave cut for Burial 28.4 was 1.02m by 0.68m and 0.38m deep and it was aligned northeast to southwest. The skeleton was in a crouched position and was on its right side, and the bone was poorly preserved. No artefacts were present within the grave fill, but the southern side of the grave had been cut by two cremation burials (28.30 and 28.31). A sample of human bone from Burial 28.4 was radiocarbon dated to 390-208 cal BC (95.4% probability; SUERC-85552) – this suggests that this burial is actually middle Iron Age in date and potentially not part of the Bronze Age cemetery.

The cremation cemetery consisted of 55 cremation burials, all clustered within a 22m by 11m area. The cremated remains were placed into pits between 0.2m and 0.6m in diameter and 0.07 and 0.31m deep. At least three (28.31, 28.12 and 28.26) were in urns. However, several other cremation pits appeared 'lined' with very badly degraded fired clay, which suggests that these cremations were placed in poorly-fired urns presumably created for this purpose, that had decayed. A bronze object, possibly part of a spear or sword, was present in the fill of cremation Burial 28.33. A sample of human bone from Cremation 28.27 was radiocarbon dated to 1219-1052 cal BC (95.4% probability; SUERC-85557) – the middle Bronze Age.

BURIAL 28.1

Bronze Age Burial 28.1 was isolated, in the northern end of the central part of TEA 28, near to the palaeochannel (Figures 28.2 and 28.3b). Burial 28.1 was 1.10m by 0.65m and 0.18m deep, and the skeleton was in a crouched position on the left side, aligned north to south. The bone preservation was poor with only the long bones and skull remaining intact. A copper-alloy ring and a worked flint were recovered from the grave fill (280284).

PITS

A single Bronze Age pit (790105) contained an assemblage of 38 sherds of rusticated Beaker. Although it was located within the later 'Banjo' enclosure 28.33 (in the north cell) it is unlikely that they were related. It was also likely to be part of a cluster of further, but undated, prehistoric pits that together make pit group 28.1 (not shown on plan). These pits were circular in plan with generally steep sides and flat bases. They ranged in size from 0.48m to 2.14m in diameter and 0.16 to 0.53m deep, and apart from Pit [790105] none contained any finds. Several, however, contained charcoal and burnt clay.

Also in the north cell, two 'prehistoric' pits (790126 and 790139) were located further east of enclosure 28.33. Both were also circular in plan and had dark charcoal fills. They had flat bases and steep sides and were between 0.4m and 1.2m in diameter and 0.18m and 0.3m deep.

Iron Age 1 (Figures 28.4-5)

During the Iron Age there were two broad phases of activity. The earliest (middle Iron Age) consisted of a sinuous boundary ditch, 28.1, that formed one side to several loosely strung out enclosures, some of which contained roundhouses, forming small farmsteads within an agricultural landscape. A banjo

type enclosure was recorded within the north cell of the site. To the north-west was the corner of a field marked by boundary ditch 28.1, and at the eastern end of the site was a curving boundary ditch 28.4.

BOUNDARY 28.1

The sinuous boundary ditch 28.1 led from the large palaeochannel at the western side of the site and meandered to the southeast before it headed south and then turned to the east. It was on average 2.1m wide and 0.43m deep, although it was more substantial where it formed the southwest corner of enclosure 28.1.

ENCLOSURE 28.1

Enclosure 28.1 was positioned within the right-angled bend of boundary Ditch 28.1, which formed its west and south sides. The north and east sides were apparently open, although it was possible that a fence or a ditch could have been removed by later ditches. Positioned against the ditch along its western side was Roundhouse 28.1. Here the ditch curved around Roundhouse 28.1 suggesting that the house existed before the enclosure was added and a later recut of the ditch was connected to the ring gully of the roundhouse, which suggested a need for water management.

Only the ring gully of Roundhouse 28.1 survived, and this was 15m in diameter and on average 0.60m deep; there was a 4m wide east-facing entrance. Finds from within the silty clay backfill included animal bone and pottery and these were concentrated in the terminals. A large post-hole, 0.77m in diameter and 0.30m deep, was present to the south of the entrance and this may have been related to a porch structure. As mentioned above, the ring gully was eventually incorporated into the ditch that formed the western side of Enclosure 28.1.

Inhumation Burial 28.5 was located within a pit 14m east of Roundhouse 28.1. The pit was 0.80m in diameter and was 0.2m deep, and the burial itself was 0.3m wide and tightly bound. This suggested that the body may have been confined in a bag before being placed in the pit. The size of the skeleton might suggest it was that of a child. A sample from this was radiocarbon dated to 390-208 cal BC (95.4% probability; SUERC-85552; middle Iron Age).

ENCLOSURE 28.32

Enclosure 28.32 was also added to Boundary 28.1, which formed its southern side. This enclosure was heavily disturbed by later intensive activity leaving only a ditch along its west side, which had a slight return to the east at its northern end. The enclosure contained at least one roundhouse 28.2. but, depending on where its eastern side was located, it may have also contained another, roundhouse 28.3.

Roundhouse 28.2 was relatively well-preserved and consisted of a 14m diameter drip gully that was on average 0.6m wide and 0.33m deep, although it had been recut a number of times. There was a 3.03m wide entrance through the drip gully and internally there were 17 post-holes and a short slot that may have been related to the building. The post-holes, which averaged 0.20m in diameter and 0.15m deep, were predominately located within the south of the building and the 1m long and 0.60m wide slot was located along the northern side near to the entrance. Iron Age pottery was present throughout the fills of the drip gully.

Roundhouse 28.3 was located approximately 23m east of roundhouse 28.2, but only part of the north side to the ring gully survived. However, two short straight gullies aligned east to west, 2.8m apart, may have been associated with a porch to an east facing entrance.

BOUNDARY DITCHES 28.6 AND 28.3

To the north of Roundhouse 28.3 was an east to west aligned boundary ditch 28.6. It is possible that this ditch also formed the north side of Enclosure 28.32. Its eastern end terminated adjacent to boundary Ditch 28.2, which was oddly aligned north-west to south-east, unlike any of the enclosures to the west.

ENCLOSURE 28.3

Also added to the north side of Boundary 28.1 was a rectangular enclosure 28.3 that was open to the east, although any eastern ditch could have been removed by later ditches. It was 60m long and 40m wide. Within the south-west corner was the drip gully of a small roundhouse 28.4 with an east facing entrance. The western side of a larger roundhouse 28.5 was located to the northeast, and this had been demolished before the later Iron Age Enclosure 28.5 had been cut across it.

ENCLOSURE 28.4

Only the northern end of this enclosure was located within the excavation area, and it appeared to have been divided into two. Within the western side was the northern end of Roundhouse 38.10. Located approximately 30m north of Enclosure 28.4 was a spring 28.1, which may have been utilised, and a further roundhouse 28.7 was located between the two. Most of the drip gully of Roundhouse 28.7 survived, which suggested a diameter of 10m, as did the east-facing entrance. A burial 28.6 was the only internal feature. The grave cut was 1.5m long by 0.6m wide; the skeleton was aligned north-south in a supine position, with its head at the northern end, and the bone preservation was fairly good. A sample from this was radiocarbon dated to 390-208 cal BC (95.4% probability; SUERC-85553, middle Iron Age).

ENCLOSURE 28.2

A curving enclosure 28.2 was located approximately 120m east of spring 28.1. Only the northern end of the enclosure was present within the excavation area and it was approximately 45m wide. The ditch was 1.5m wide and 0.87m deep and was filled with at least four distinct accumulations of silt. A well-preserved roundhouse 28.8 with an east facing entrance was located within the interior. It had a 16m diameter drip gully that was 1m wide and between 0.23m to 0.56m deep. Inside of, and parallel to, the drip gully was a beam slot that was 0.64m wide and 0.16m deep. A group of 13 post-holes, that ranged from 0.14m and 0.85m in diameter and from between 0.17m and 0.43m deep, were loosely clustered towards the centre of the building.

ENCLOSURE 28.33

In the northern part of the site was a penannular enclosure that had a 4.7m wide east-facing entrance, and a lesser southwest facing entrance. The round bottomed ditch was on average 1.95m wide and 0.65m deep and it had been filled naturally with four to five water deposited accumulations of clay. The eastern entrance was later remodelled with the addition of two parallel ditches that led eastward to form a necked entrance like a 'Banjo' enclosure. These ditches were smaller at 0.95m wide and 0.49m deep but ultimately, they filled in when the main enclosure ditch finally silted up. The uppermost fill in the

ditches contained sherds of Roman pottery, probably derived from manuring practices after the enclosure was out of use and was silting up. Internal features were present but may have pre-dated the enclosure.

BOUNDARY 28.4

At the eastern end of the site was a long curving boundary 28.4 that consisted of parallel ditches that may have resulted from a long period of use and movement in the line of the boundary. Other elements of field boundaries were located to the east of boundary 28.4.

Iron Age 2 (Figure 28.7)

The second phase of Iron Age activity (late Iron Age) consisted of a more formalised arrangement of large rectangular boundaries or enclosures. One of these was added to the north side of the earlier boundary 28.1, and a larger area was enclosed to the east (by Boundary 28.3), which contained a number of smaller enclosures.

ENCLOSURE 28.5

A rectangular enclosure was attached to the north side of Boundary 28.1, within what had formally been Enclosure 28.3. This enclosure, which was approximately 85m long and 65m wide, had a north facing entrance in the northwest corner and internally there was an enclosure within the southeast corner.

BOUNDARY 28.3

Located to the northeastern side of Enclosure 28.5, and presumably contemporary, was a substantial boundary ditch 28.3 which enclosed a large space, approximately 175m east to west, that contained at least three smaller enclosures 28.7, 28.8 and 28.9. In the northern half of the large enclosed area was a roughly rectangular enclosure 28.8 aligned WNW-ESE, similar to the northern ditch of Boundary 28.3. A smaller irregular enclosure 28.9 was added to the northwest side of Enclosure 28.8 and a ditch led from the north side of this to join the northern side of Boundary 28.3. A further sub-division was provided by a ditch that ran from the west side of enclosure 28.9 to join the ditch that formed the east side of Enclosure 28.5.

Within the far eastern end was a ditch that had been cut across the earlier enclosure 28.4, this ran north to south and terminated just to the south-east of the spring 28.1. It is possible that the Roundhouse 28.7 (described above), that contained a burial 28.6, located to the west of the terminal of this ditch, was part of this period.

Roman 1 (Figure 28.8)

During the first century AD the site was further structured with a more regular layout of rectangular enclosures, though there was no radical change to the site's spatial structure. Some features survived from the later Iron Age, such as Boundary 28.3 and the Spring 28.1, and these continued to be used and became important elements to the layout of the site throughout the Roman period. At the eastern end of the site a trackway headed north and south and this also formed the eastern extent of the settlement throughout the Roman period. A large rectangular enclosure was located at the western side

and between them the existing boundary ditch 28.3 connected the two. Smaller enclosures were located in the area south of this boundary.

TRACKWAY 28.1

Trackway 28.1 was over 400m long and aligned roughly north to south. It consisted of a 3.7m wide non-metalled track flanked by drainage ditches that were deeper and wider at the southern end of the site adjacent to the settlement. At the northern end of the track the ditches originally terminated before this end was modified and a branch of this trackway (this branch was originally labelled 28N.2) turned north-westward from the northern end. No finds were present.

ENCLOSURE 28.10

A large 105m² enclosure 28.10 was created at the western edge of the settlement, making use of the pre-existing Boundary 28.1 as its southern side. It had a west facing entrance that was flanked internally by ditches that headed towards a smaller internal enclosure 28.12. An entrance through the eastern side of the enclosure led into an area enclosed by Boundary 28.3.

Enclosure 28.12 was rectangular in shape and measured 25m by 19m. It had a small 2m wide entrance in the eastern side and it was possible that the southern end was attached to the southern boundary ditch of the main enclosure 28.10. A later small square enclosure 28.11 was cut across the north-west corner of Enclosure 28.12. This had no obvious entrance, although the ditch had been maintained and recut several times perhaps removing any earlier gaps.

BOUNDARY 28.3

The area between Trackway 28.1 and Enclosure 28.10 was enclosed to the north by Boundary 28.3. This was likely to have originated in the later Iron Age (see above) but was extended to the west to join the eastern ditch of Enclosure 28.10; the ditch forming this extension was not as substantial as the earlier part. The southern side of this large enclosed area lay to the south of the excavation area, but it may have been on the line of what eventually became Trackway 28.5.

INTERNAL ENCLOSURES

This enclosed area contained at least nine rectangular enclosures predominately aligned east to west. Located in the centre of the area was Enclosure 28.17, which was 24m long by 20m wide and had an entrance in the southeast corner. The enclosure had been altered and added to with a southern arm being the latest edition. The ditch was 0.95m wide and 0.30m deep and was filled with a light-brown silty clay with small stone gravel

Another smaller enclosure 28.15 was located to the southwest side of Enclosure 28.17 and measured 11m by 19m. The narrow ditch was filled initially by a thin band of natural silting before it was backfilled by a dark greyish brown silty clay, which was done to make way for a new larger enclosure 28.16. Both enclosures 28.17 and 28.15 were cut by this larger enclosure 28.16. It measured 36m by 24m and the ditch had U-shaped profile that it had silted up naturally. There was a possible entrance in its southeast corner and the side had been recut.

Within the southern extent of the main enclosure area were a row of three small rectangular enclosures or paddocks. Two of these, enclosures 28.19 and 28.20, extended beyond the excavation area. The best preserved of the three was Enclosure 28.7, which seems to have originated in the late Iron Age (see above). This was 24m by 19m and had a possible entrance in its southeast corner; a narrow gully was attached to the outside corner of its northeast corner to create a smaller partially enclosed area to its east side.

One enclosure 28.14 was located to the west of Enclosure 28.16 and this was possibly open to the east, although an eastern side could have been removed by later activity. This enclosure measured 19m by 13m wide and the naturally silted up ditch had a U-shaped profile that was roughly 0.35m wide and 0.25m deep.

Enclosures 28.13 and 28.18 were both to the north of enclosure 28.16. The smallest was Enclosure 28.13 at 14m and 16m with a 5m entrance to the south side, whilst 28.18 was much longer at 46m long by 12m and was open to the south.

SPRING/POND 28.1

During the early Roman period a compact metalled surface was constructed around the natural spring 28.1 that was first utilised in the Iron Age, and that was during this period located within the western side of the area enclosed by boundary ditch 28.3. The area surrounding the spring had been reduced to form more of a shallow sided pond and the metalling was laid all the way down the sides. This stone surface was very worn on the western side, which was indicative of increased activity on this side. The pond was oval in plan and measured 32m by 28m and 2m deep.

TRACKWAY 28.4 AND FIELD SYSTEMS 28N.1 AND 28N.2

Heading northeast from the east side of Trackway 28.1 was a trackway 28.4, that in the north cell led past the west side of the Roman site located during the 2016 evaluation (Jeffery 2016) and preserved *in situ*. Between the track and the preserved site was a field system 28N.2 of cultivation trenches, similar to those located in TEA 26 to the west and TEA 33 to the east. The trenches were on average 5m apart and aligned east to west. Their western terminals respected trackway 28.4 which suggests that they were contemporary. West of the trackway were elements of a partially preserved field system 28N.1 that did not contain cultivation trenches.

Roman 2 (Figures 28.9-10)

The Roman settlement retained a similar layout, although Enclosure 28.10 expanded eastward reducing the area enclosed by Boundary 28.3 with a new trackway dividing the two. Within the bounds of the main enclosure 28.10 were 15 timber buildings, of which four were located within internal enclosures.

ENCLOSURE 28.10

The existing enclosure 28.10 was extended to the east where it was connected to a new trackway 28.2. It now formed a large compound, 116m by 105m, with a 16m wide entrance that joined Trackway 28.2 and which led into the enclosed space to the east. A large rectangular corner enclosure 28.21 was

located within the southeast corner and to the west side were 11 timber buildings that were positioned in three rough groups.

BUILDING 28.7

The largest building 28.7 was positioned on its own and measured 13m by 6m east-west. Three pairs of post-holes represented the remains of the western wall and five pairs of post-holes the north. Approximately 6m east of the easternmost post-hole forming the northern wall was a 5m length of beam slot that formed the remains of the eastern wall, although it is possible that this formed part of an annex rather than the main building. Only two post-holes remained on the southern side.

BUILDINGS 28.8 TO 28.11

A group of four buildings were positioned south of Building 28.7. Three of these were arranged in a line together, two orientated north to south and one east to west. Buildings 28.9 and 28.11 were both north to south and 12m long by 4m wide. Remains for both consisted of eight large post-holes each; two parallel rows of four post-holes. Building 28.10 was positioned in the space between buildings 28.9 and 28.11 and consisted of one line of seven post-holes on its southern side and four on the north. It was aligned east to west and measured 11m by 2m. It is possible that these three buildings combined may have formed one large structure. The fourth building 28.8 in this group was located west of the others and was on a slightly different alignment. It was also smaller at approximately 5.5m by 2m. A small bread oven was located within the southern end building 28.11 and this was 1.38m by 0.60m.

BUILDINGS 28.1 TO 28.6

The western group consisted of six buildings which included some possible four-post storage structures (28.1, 28.2, 28.5 and 28.6). Building 28.4 was the longest building at approximately 10m and it consisted of five post-holes that formed its southern side and a beam slot along the north wall.

ENCLOSURE 28.21

Within the southeast corner of Enclosure 28.10 was Enclosure 28.21. This was approximately 80m by 70m and it was through this enclosure that access was gained to Trackway 28.2 and the area to the east. A smaller additional enclosure 28.24 was located in the northwest corner of Enclosure 28.21. This rectangular enclosure measured 40m by 17m and had a 5m wide entrance that faced the interior of enclosure 28.21. A small four post structure 28.12 was located in the western end of Enclosure 28.24. Two much larger buildings were located in Enclosure 28.21 and these were both aligned east to west.

BUILDINGS 28.14 AND 28.15

The southern building 28.14 was the largest building at the site and it measured 27m by 6m. It consisted of two rows of 10 large post-holes although the westernmost two posts at the western end of both rows were smaller and this may have represented an annex or entrance porch. Located approximately 25m to the north was Building 28.15 which consisted of two rows of eight large post-holes. This building was 23m by 4m.

ENCLOSURE 28.23 AND BUILDING 28.13

A further smaller rectangular enclosure 28.23 was located in the northeast corner of Enclosure 28.10. Only the southern ditch survived which suggested an enclosure that was approximately 48m by 35m. A

heavily disturbed building 28.13, that measured approximately 10m by 4m, was located in the extreme southwest corner of Enclosure 28.23. Four large post-holes formed the line of the northern wall but only two post-holes survived along the southern wall.

BOUNDARY 28.3 AND TRACKWAYS 28.2, 28.3, 28.4

Boundary Ditch 28.3 was still retained but shortened with its western end having been backfilled to form an entrance way between it and a new trackway 28.2. This 8.5m wide trackway formed the east side of Enclosure 28.10 and the west side of the area enclosed by Boundary 28.10. This trackway was flanked by ditches and was aligned NNE-SSW and at the northern end of the site it turned to the north-west (as trackway 28N.3) and ran alongside Trackway 28.1 (here originally labelled 28N.2). North of Enclosure 28.10 a further trackway 28.3 headed west from Trackway 28.2 toward the palaeochannel and perhaps to TEA 27 beyond. This trackway was 5.2m wide and was flanked by ditches. It was also likely that trackway 28.4 was maintained during this period.

The area enclosed by Boundary 28.3 and trackways 28.1 and 28.2 contained a rectangular enclosure 28.22 which was attached the western flanking ditch of Trackway 28.2. It was 50m by 20m and was without internal features. On the south side of the boundary Ditch 28.4 were the remains of a number of small rectangular compounds along the southern side of Boundary 28.3.

WATERHOLES

Four waterholes 28.1 to 28.4 were located within the northern edge of the settlement almost against the boundary Ditch 28.4 within the small compounds; these were between 1m to 3m wide and 1m to 2m deep. One of these, Waterhole 28.4 [781400], contained 15 late second-century vessels that had been placed in the base of the pit before it was backfilled, presumably a structured deposit. These had suffered some damage when boundary 28.10 had been re-cut and widened.

PALEOCHANNEL AND TRACKWAYS 28.5-6

The paleochannel along the western edge of the site was canalised in the Roman period and made more manageable with drainage ditches feeding into it and though it. A trackway 28.6 partially followed the line of the channel on the eastern edge (and potentially crossed the water towards its northern end), before it veered away southward to possibly join a trackway 28.5. It was unclear when in the Roman period this occurred, but it was likely to have happened by the second century. Only a short part of Trackway 28.5 was within the excavation, located in a small extension of the along the southern edge, and it was likely that this formed the southern side to the Roman site.

Roman 3 (Figure 28.11)

There was little change during this period although Enclosure 28.10 was extended to the north, west and south and the internal layout was altered. The network of trackways was generally maintained, although there were some changes.

ENCLOSURE 28.10

The enclosure was extended to the north and west with new ditches added, and the old northern and western ditched were filled in. To the south trackway 28.5 formed the boundary. A new entrance was

located in the northeast corner and this was approximately 40m wide. At the north end a new internal enclosure 28.25 was added, and this extended westward beyond the line of the new western ditch. The space south of Enclosure 28.25 was given the title of Enclosure 28.27 in the archive. This western ditch joined the southern boundary of the enclosure.

Enclosure 28.25 was rectangular and measured 168m by 55m. It was constructed over the former northern ditch of Enclosure 28.10 and it contained a small paddock or Enclosure 28.26 in the northeast corner. This was 30m by 21m and had an entrance in the southeastern corner.

Within the southern end of Enclosure 28.10 was another small enclosure 28.28. This was 34m by 26m and it had been built over the demolished remains of the earlier Building 28.22. It was unclear if any of the other buildings survived into this period.

TRACKWAYS

Trackway 28.2 was altered slightly by backfilling part of the western ditch at the south end to access the main enclosure. Trackways 28.4 and 28.5 were retained, although the southern end of trackway 28.4 was realigned to cut across the southern end of Trackway 28.1, as to the north of this trackway 28.1 had gone out of use.

WATERLOGGED PIT

Within the southern end of Enclosure 28.25, adjacent to the southern ditch, was a large pit [287296]. This oval pit was 7m by 4m and was approximately 2m deep. It consisted of two chambers divided by a timber revetment structure of predominately cleft ash staves. Two of the stakes had cut marks normally present on structural timbers which suggested that these timbers could have been reused from a building, perhaps from Building 28.7 which the pit had been cut through. It was unclear what the pit was used for but a large amount of burnt seeds were recovered from the soil samples. A large amount of pottery and oyster shell was recovered from the backfills.

Roman 4 (Figure 28.12)

The existing settlement layout was further reorganised in the later Roman period. The main enclosure 28.10 and the area enclosed by Boundary 28.3 were both maintained, although rearranged internally, and the system of trackways was also retained. A group of nine burials were in the north-west corner of Enclosure 29.25, which was itself within the long-lived Enclosure 28.10 and a further two were located in the southeast corner of Enclosure 28.10, where a group of large rubbish pits were also located.

Enclosure 28.10

A 47m wide opening in the western ditch may have been a new entrance into Enclosure 28.10. This led into an internal enclosure 28.30, with Enclosure 28.25 to the north and a new rectangular enclosure 28.29 to the south. Entrances into Enclosure 28.29 were in the northwest and southeast corners. The enclosure was approximately 100m by 20m.

RUBBISH PITS

The southeast corner of Enclosure 28.10 contained at least seven large oval pits, which ranged in length from 8m to 24m, in width from 2.5m and 5m and in depth by 0.11m and 0.36m. These contained building

demolition material, including roof tiles and painted wall plaster, and large quantities of pottery, animal bone and oyster shells. This building material may have derived from buildings 28.14 and 28.15 that had been present in this area.

BURIALS (FIGURE 28.13)

In total there were 13 burials associated with this period of Roman settlement. Eleven of these were within the north-west corner of Enclosure 28.25, and they consisted of an east to west aligned row of six graves, five on a north to south axis and one (Burial 28.14) orientated east to west. One of the graves contained three burials (28.11, 28.12 and 28.13); within this row three skeletons were in a crouched position while the rest were supine. Located 13m to the south-west of this row of graves was a north to south row of two north to south aligned burials 28.6 and 28.8, and 10m to the north was a single east to west aligned grave 28.7.

Two skeletons 28.8 and 28.10 had both been decapitated. The skull of Burial 28.8 was missing from the grave, while two separate damaged skulls were present within Burial 28.10, one at the ankles and the second at the elbow on the right side. These will be excellent examples for studying the treatment of the dead in the Roman period.

Grave 28.14 was 1.66m by 0.5m and 0.20m deep, and the skeleton was in a supine position aligned east-west. Within the grave 32 Roman coins had been scattered in two main clusters, one around the head and one around the hips. Graves containing this quantity of coins are rare (Ward 1990) and interestingly three cremations were also present within the grave and these were placed into the cut at the same time as the burial, suggesting, along with the coins, that this was still very much the burial of a pagan.

SPRING/POND 28.1

The metallised surface surrounding the gradual sloping side of the pond 28.1 was cut on the western side by a ditch that was 12m long, 2.80m wide and 0.4m deep. This cut was lined by wicker hurdles, forming a channel that was 0.7m wide, and at the northern end were three possible tanks in a row, formed by wooden cross-pieces. Toward the southern end of the channel the wicker became more degraded and had collapsed in on itself; wooden braces were also present suggesting that this collapse occurred during its use. The water from the spring that collected within the complex of tanks was crystal clear, suggesting perhaps that this feature was a filtering system for the collection of clean water. A wooden poke was recovered from the base of one of these tanks, which may have fallen off cattle that may have used the waterhole or it may have been a re-used piece of timber. The metallised surface to the west of the feature was also heavily worn from use.

Medieval and post-medieval

The remains of medieval and post-medieval ridge and furrow survived throughout the site. There were three distinct phases of furrows, especially at the eastern end of the mainline and south cell where the ridges between the earliest broad furrows had later narrower furrows cut along them. The earliest broad ridge and furrow may have formed part of a medieval open field system, with some evidence for headlands and changes of alignment visible.

In the south-west corner of site, within the embankment area, was a series of at least two phases of medieval gravel quarry pits. These were large roughly oval pits between 16m to 19m long and between 2m to 3m wide. The latest set was more rectangular and slightly smaller, at 1m to 2.5m long and 1m to 2m wide, and more tightly grouped together.

Three post-medieval enclosure boundary ditches were present within the mainline and south cell.

Finds and environmental summary

Tables 28.1 – 28.3 provides a quantification of the finds, bone, and environmental samples from TEA 28.

The earliest finds were the Neolithic – Bronze Age pottery assemblage, particularly the middle Bronze Age funerary urns associated with the cremation cemetery. Other Bronze Age finds associated with this cemetery included an amber bead (with a cremation), the tip of a bronze blade (with a cremation), and copper alloy fragments (with an inhumation). There was a surprisingly small collection of worked flint (22 worked pieces) from across the site. The environmental samples from the Bronze Age features produced few seeds and a very small collection of animal bone (a few fragments from the cremations).

There was a larger collection of Iron Age finds, including 94 sherds of early Iron Age pottery (shelly fabrics, including a sherd from a fineware vessel), and 1373 sherds of middle Iron Age pottery (handmade sandy wares). The majority of the Iron Age pottery was late Iron Age in date (mainly grog-tempered and sandy 'Belgic' types). There were only two other Iron Age finds – a 1st century bow brooch and an antler comb from one of the roundhouses.

Cereal remains were identified in c 50% of the environmental samples from the Iron Age features. These were mainly glume wheat and hulled barley, with three samples containing evidence for porridge-like or beer-brewing residues. The Iron Age animal bone assemblage was mainly cattle and sheep/goat, with very little worked bone.

The largest pottery assemblage was of Roman date and included pottery from throughout the Roman period (but with an apparent peak in AD40-70 and AD200-300). The pottery comprised typical local coarsewares, with some evidence for regional and national imports (South Gaulish samian ware, Verulamium white wares, Oxfordshire wares). Of particular interest were the collection of 11 near-complete vessels from Pit [781400], dated to the 2nd century, and potentially 'ritually killed'.

The Roman registered finds included evidence for a wide range of activities, including dress accessories, toilet equipment, tools, and a small collection of military equipment (strap fitting, motto belt mount, iron hackamore fragment). 93 Roman coins were also recovered (30 from one inhumation); 122 pieces of stone including structural stone (cornice stone and a flooring slab); 82 fragments of glass; and a piece of a 1st or 2nd century leather sandal bottom. The building material assemblage included Roman roofing tile, wall plaster (some decorated), and five ceramic tesserae.

Higher quantities of cereal grains were recovered from the Roman features, including hulled barley, spelt wheat, and glume wheat chaff. There was a particular concentration of cereal grains and chaff around Buildings 28.9 and 28.13, suggesting there was crop-processing taking place in this specific area.

In general, there was less evidence for barley here than on other sites, demonstrating the increased focus on spelt wheat which was common in the later Roman period. The Roman animal bone assemblage was mostly cattle, with fewer sheep/goat than in the Iron Age, but with the introduction of game species (deer antler).

Table 28.1 Quantification of finds from TEA 28

Type	Count	Weight (g)	Date/type
Pottery	523	2,790	Early Prehistoric
	3,056	36,695	Iron Age
	17,300	283,385	Roman
	40	451	Post-Roman
Coins	97		
Small Finds	247		
Lithics	22 (worked)		
	20 (burnt unworked)		
Stone	122 fragments		
Glass	84 fragments		
Clay Tobacco Pipe	11		Post-medieval
Leather	1		Roman
Wood	5		
Building Materials	398	18,964	
Metalwork Residues	299	3,304	

Table 28.2 Quantification of bone from TEA 28

Type	Count	Weight	Date/type	% of bone assessed
Inhumations	25			
Cremations	112			
Disarticulated bone contexts	1			
Animal Bone	5,173	89,380		41

Table 28.3 Quantification of environmental samples from TEA 28

Type	Count	Date/type
Bulk Environmental Samples	924	
Kubiena Tins	2	
Monoliths	10	
Other	1	Auger sample

Provisional interpretation and potential

The excavation has shown that the earliest activity at TEA 28 was the middle Bronze Age cemetery in the southwest corner of the site. This was nestled on the edge of a palaeochannel which was likely to

have formed the focus but elsewhere, aside from one and perhaps a few more pits in the north cell, the site was probably wooded in the Bronze Age.

During the Iron Age the site was cleared of trees, and a number of small farmsteads were established along the line of a sinuous landscape boundary. Ultimately by the late Iron Age these small farms had developed into one larger farm complex with a layout that was to become fossilised by the subsequent Roman settlements. It is possible that the Spring 28.1 was a prominent feature in the siting and development of this settlement, becoming enclosed within the farm boundary. Within the wider landscape there were elements of field systems and enclosures which were presumably associated with this Iron Age farm.

The earliest Roman settlement developed from the existing Iron Age farmstead and ultimately became a significant Roman site, of a type known elsewhere in the area. These generally developed in their 'regular' form in the later first to early second century AD, often from a later Iron Age background, as here. The whole region seems to have been transformed during the later first to early second century, and there is a much greater emphasis on more extensive (and almost exclusive in some places) spelt wheat cultivation, no doubt at least partly dictated by increased demands of the state. There is typically a spelt and cattle agricultural strategy, with evidence that increased cattle numbers (and sizes) were closely connected with increased need for plough animals (Allen et al 2017, 147). There must also have been the need for increased managed hay meadows for foddering, though the evidence for this is not as great as, for example, in the Upper Thames Valley, where there appears to have been a greater emphasis on pastoralism overall.

The 'high point' of settlements in the region appears to be the second and third centuries, though many settlements continued in some form into the fourth century. The complex farms that seem to develop primarily in the Roman period are more likely (though certainly not exclusively) to be of the 'rich' variety, with large quantities of artefacts, especially coins, pottery and certain other classes of find, which suggests a special socio-economic role (Smith et al 2016, 198).

Superficially at least, the settlement at TEA 28 has a close resemblance to the 'rich' complex farmsteads at Langdale Hale (by Fen edge) and Vicar's Farm (near Cambridge). These sites are suggested as specialist agricultural processing centres. Langdale has been suggested as having more direct associations with the state supply network (partly from the presence of military objects). This site originated in the mid-first century AD as a ladder enclosure system, within which was one rectangular and three circular structures. It was radically re-organised in the early second century AD, with three large rectangular enclosures either side of a trackway and had many timber buildings (including aisled buildings and circular structures).

The settlement at TEA 28 did not have any features that suggested it to be a specialist agricultural processing centre, yet it presumably fulfilled other roles within the agricultural supply network. The large waterhole with metalling around its perimeter is fairly unusual, and suggests perhaps a greater emphasis on pastoralism, such as supplying cattle or sheep to outlying, primarily arable-based farmsteads. The site may also have acted as a distribution centre for agricultural produce.

The position of the complex settlement is also noteworthy. Within the vicinity are examples of more typical Roman farmsteads such as within TEA 27, only 250m to the northwest, and in the north cell of TEA 28, 600m to the northeast, and these were linked to TEA 28 through a system of trackways. This would suggest that the main site at TEA 28 was a supply hub or depot taking produce from neighbouring satellite farms.

Potential

The results of this excavation can be used to help inform the following research questions within the revised excavation strategy for TEA 28 (MHI 2018):

- Was there a gradual transition from the Iron Age into the Roman period, or was there a more sudden shift in settlement form/function at any point, which may help to suggest 'official' involvement (even if in the broadest sense)?
- What evidence was there for agricultural activities (processing or storage) and at what scale? ie quern and millstones, granaries, 4-post structures, well-stratified deposits of charred plant remains, possible threshing areas etc.
- What evidence was there that may suggest a greater emphasis on pastoralism (especially cattle)? – ie waterholes/ponds, animal pens, droveways, deposits of faunal remains?
- Evidence for hay meadows, especially from the waterlogged samples?
- What evidence was there for military finds, which may suggest an official involvement in the organisation and management of the site?
- Were there higher quantities of coins and other small finds? Anything over 40 coins per ha of excavation would put it firmly in the 'rich' complex farmstead category. Generally, such 'rich' complex farmsteads also have higher quantities of other object types (including those associated with literacy).
- What evidence was there for buildings and can we discern function and/or status? 'Rich' complex farmsteads don't often have evidence for particularly high-status buildings (ie not villas), though many include granaries and aisled buildings.
- What was the function of the waterhole and was it related to a pastoral economy and supply, part of an arable economy, used for something like retting, or was it simply for the supply of water to the settlement?
- How was the settlement at TEA 28 physically related to other settlements in the vicinity and is there any information which may help define their relationship?
- Such sites usually have a small discrete cemetery, as well as more dispersed human remains. What evidence was there for human burial and is there evidence for a high proportion of 'deviant' (prone, decapitated) burial, as fairly typical on some sites in the area?

- How long-lived was activity on the settlement? was there evidence for a decline during the fourth century, as typical with many settlements in the area.
- Can we trace the trackways beyond the site, including how they may have been linked to the surrounding road network (e.g. Via Devana)?

In addition to the above, the results could inform on the specific research theme within the relevant project mitigation specification (ACJV 2017a, 19):

- The research theme of landscape and settlement; this is the development of the landscape in the late Pleistocene and early Holocene periods, and the development of the character and form of the agricultural landscape from the Neolithic to the end of the Romano-British period.

Recommendations

Only approximately 50% of contexts have been preliminary grouped at Entity and Group level for this assessment. Full grouping and assignment to period is required following results of specialist pottery assessment and radiocarbon dating. This will require some revision of the stratigraphic sequence discussed here.

This will focus on the late Iron Age and Roman remains and particularly:

- Can the late Iron Age phasing be further understood?
- What was the exact form of the Iron Age settlement that survived into the Roman period and why might this have influenced the layout of succeeding Roman complex farmstead?

TEA 29

Simon Markus

TEA 29 was a strip, map and sample area located east of Hilton Road (NGR TL 3055 6744). The 4ha site was excavated ahead of the construction of the new A14 carriageway and new Hilton Road embankments, between January and August 2017 (Figures 29.1-2). The site was located in a relatively flat arable field at c 10m AOD. The underlying geology comprised river terrace sand and gravel overlying Oxford formation clay (NERC 2019)

Wessex Archaeology undertook trial trench evaluation in 2014, which revealed a small number of undated post-holes, pits and ditches, although some could be dated to the post-medieval period (Jones and Panes 2014).

Summary of results

The site had evidence for limited early to middle Iron Age remains in the form of six wells. More extensive activity occurred during the mid- to late Iron Age, with the introduction of five strip fields, 14 four-post granary storage structures and three roundhouses. The site was only occupied for a short period before it was abandoned. The site was truncated heavily by ridge and furrow, and there was a contemporary trackway on the western side of the site.

Early Iron Age (Figure 29.3)

The earliest features on the site were six irregularly spaced large wells, four of which were arranged in a line WNW to ESE. Three of these were sub-square and the others sub-circular. They measured between 3.5m and 6m across and were between 1m and 2.5m deep. The largest wells (29.01, 29.05 and 29.06) had waterlogged conditions preserving collapsed wooden linings in the base. These linings were a combination of woven sticks and axe-cut planks. Several other wooden artefacts were also preserved including three alder log ladders, an oak paddle, and fragments of rope. Tool marks were clearly visible on multiple pieces of the preserved wood and show utilisation of flint, bronze and iron axes on the same pieces (see Goodburn, Vol. 2). Other finds included a complete Brudenell type N bowl along with large amounts of other early to middle Iron Age pottery and animal bone.

Two samples of wood from separate ladder fragments in wells 29.01 and 29.05 have been radiocarbon dated to 753-408 cal BC and 727-384 cal BC respectively (95.4% probability; SUERC-75285; 75286). The latter sample had a closer date range of 542-384 cal BC at 93.2% probability.

Middle to late Iron Age (Fig 29.4)

FARMSTEAD AND FIELD SYSTEM

During the middle Iron Age, the area was sub-divided into strips by ditches aligned north to south. These boundaries were sinuous and had multiple phases of re-establishment and shifting entrances. At the northern end of one of these strips or thin fields were 12 four-post structures clustered together (Figure 29.5). A further two were located to the south. Small amounts of pottery were recovered from these features, mostly dating to the late Iron Age, though some earlier fragments were also present.

There was little charred plant remains present in the fills of the post-holes, although these included barley, bread wheat and peas, as well as low levels of nutshells, suggesting a variety of food storage.

The field system was shortened during the late Iron Age and the southern end was replaced by two rectilinear enclosures, within which were three roundhouses. One of these, Roundhouse 29.03, was post-built, with 12 posts forming the main building, 7.6m in diameter, and an additional pair forming a porched entrance facing southeast (Figure 29.6). The drip gully was 13.8m in diameter. The only surviving remains of roundhouses 29.01 and 29.02 were the drip gullies, which measured 12.2m and 8.4m in diameter respectively. Due to the level of truncation it was unclear where the entrance was in Roundhouse 29.01, while the entrance for Roundhouse 29.02 lay outside the limit of excavation, on the eastern half of the structure.

Two waterholes/wells, 29.07 and 29.08, similar to the sub-circular examples from the early Iron Age, were located to the north and southwest respectively of roundhouse 29.03. These were 4.3m and 3.3m wide and 1.1m and 0.8m deep respectively. Only animal bone was recovered from well 29.08.

CREMATION BURIALS

Two cremation burials were located together just to the east side of one of the north to south aligned strip field boundaries (Figure 29.4). One of these was placed within a pot dating to the late Iron Age and the other was un-urned, presumably bagged. Very little bone was preserved within these.

Medieval and post-medieval (Figure 29.7)

At the southern end of the site was a small sub-circular enclosure. Most of the enclosure was beyond the western limit of excavation and it was cut by furrows. The fill contained sherds of Cistercian ware dating to around the fifteenth to sixteenth centuries.

At the eastern limit of the site was a trackway, 9.5m wide aligned northeast to southwest. No metaled surface was present, although there were two sets of wheel ruts spaced 3m apart. The track was flanked by ditches for drainage. It does not appear on any historic mapping and furrows either side respected the track, suggesting they were contemporary with this trackway. Several sherds of green-glazed pottery were recovered from the furrows.

Finds and environmental summary

Tables 29.1 – 29.3 provides a quantification of the finds, bone, and environmental samples from TEA 29.

The majority of the pottery assemblage was dated to the late Bronze Age to middle Iron Age period. Where contexts could be more closely dated, this was narrowed to the early Iron Age (“decorated ware” phase, c 600-400BC). The pottery was mostly in shelly, calcereous, or sandy fabrics. The largest collection was from one of the wells (290590) where 91 sherds, including rims and bases of around 14 vessels and the complete profile of a fineware flared bowl and shouldered bowl, were recovered. Other Early Iron Age finds included three triangular fired clay loom weights and a small collection of daub.

The worked wood assemblage from this site, recovered from the wells, is of particular interest. From well (290012), wattle work lining, a notched log ladder radiocarbon dated to 753-408 cal BC (95.4%

probability; SUERC-75285), and other pieces of hazel, roundwood, and oak (potentially fuel wood dumped into the well) were recovered. From well (290586) there was a collection of alder plank-like timbers (potentially a screen or fence around the top of the well), and a Y-crotch section of birch radiocarbon dated to 542-384 cal BC (93.2% probability; SUERC-75286) but with apparent early Bronze Age marks on one side, from a stone axe; and late Bronze Age axe marks on the other side, from a bronze axe). From well (290692), there was a maple log ladder, a roundwood stake (part of a fence around the well?), and a stirring paddle (for porridge, gruel, stew, or ale).

Significant quantities of plant remains were recovered from the wells. This included plant epidermis, stem and root fragments, leaf fragments, and weed seeds (wetland, woodland, ruderal, and arable taxa). The animal bone assemblage, mainly from the wells, was primarily cattle, then sheep/goat and pig, with significant quantities of smaller mammals (amphibian, bird, hare).

There was a smaller collection of later finds, including Roman pottery (20 sherds); medieval and post-medieval pottery; and a small collection of registered finds associated with 15th/16th century equestrian activity.

Table 29.1 Quantification of finds from TEA 29

Type	Count	Weight (g)	Date/type
Pottery	1,563	15,143	Prehistoric (late Bronze Age – Mid Iron Age)
	20	163	Roman
	58	874	Post-Roman
Coins	2		
Small Finds	44		
Lithics	4 (worked)		
	20 (burnt unworked)		
Stone	1 fragment		
Glass	3 fragments		
Clay Tobacco Pipe	10		Post-medieval
Wood	54 (from 3 wells)		
Building Materials	167	3,389	
Metalwork Residues	113	834	

Table 29.2 Quantification of bone from TEA 29

Type	Count	Weight	Date/type	% of bone assessed
Animal Bone	2,784	27,790		100

Table 29.3 Quantification of environmental samples from TEA 29

Type	Count	Date/type
Bulk Environmental Samples	161	
Waterlogged	6	
Monoliths	8	

Provisional interpretation and potential

During the design stage of the project TEA 29 was believed to be predominantly a medieval/post-medieval landscape. The excavation revealed a more significant landscape that originated in the early Iron Age with a series of isolated large wells. At this stage, no other settlement features have been dated to this period. During the mid-late Iron Age, a small farmstead was established, possibly operating in conjunction with settlement activities to the west in TEA 28 and 1km to the east in TEA 31. The site was abandoned in the late Iron Age, perhaps in favour of the growing settlement to the west in TEA 28 where they had easy access to water as the site was adjacent to a palaeochannel.

No features on site were dated to the Roman period though there were small quantities of Roman artefacts recovered from furrows. It is likely the site formed part of a landscape managed by the surrounding Roman settlements.

TEA 29 forms one part of an important opportunity to study a significant Iron Age landscape when considered alongside neighbouring sites at TEA 27, 28, 31 and 33. The wider study of these sites will focus on the questions raised in the fieldwork Updated Project Design (Clarke 2016) and the Regional Research Framework (Medleycott 2011). The most likely research areas these sites can relate to are:

- How does the agricultural system and economy develop across TEAs 27, 28, 29, 31 and 33;
- What evidence is there for abandonment/reuse/continuity across TEAs 27, 28, 29, 31 and 33;
- What evidence is there for clear working areas and living areas/zoning across TEAs 27, 28, 29, 31 and 33.

Recommendations

Further dating of pottery for some of the enclosures and buildings would better associate the activities of TEA 29 with those of the surrounding sites, to more accurately develop our understanding of how the surrounding landscape was organised in the Iron Age, and how it developed/changed throughout this period. A comparison of structure types, sizes and organisation across sites in the local area would better establish how the local economy/community operated and, looking further-afield, would place this settlement area into context of the well-established Iron Age landscape of the region. Further radiocarbon dating of burials is recommended.

TEA 31

Richard Coe and Gary Brogan

TEA 31 was a strip, map and sample area located to the east of Conington Road, on the south side of the A14 (NGR:TL 3177 6755). The 1.2ha site was excavated ahead of the construction of the Conington Road northern abutment, between March and June 2018 (Figure 31.1). The site was previously arable and sloped gently from east to west, 13m AOD to 11m AOD. The site was located at the transitional area of river terrace sand and gravel with unrecorded surface drift geology, as well as being at the transition zone of solid geology between the Oxford Formation Clays and Ampthill Clays (NERC 2010). A palaeochannel was located in the southwest corner of the site and this had a northwest to southeast alignment. The lowest part of the site, in the southwest corner, contained deposits associated with seasonal flood events and had previously been marshy.

Archaeological background

The site was subject to an archaeological fieldwalking survey in 2009 by Cambridge Archaeological Unit and four late Neolithic or early Bronze Age flint flakes were recovered (Anderson, Hall and Standing 2009). This survey was followed in 2014 by an archaeological trial trench evaluation, carried out by Wessex Archaeology. Five trenches were excavated and revealed a number of features that included an Iron Age roundhouse and an inhumation burial that was radiocarbon dated to the early Saxon period (Jones and Panes 2014a, 29-30). One additional trial trench was excavated by MHI in 2016, to the east of the Wessex trenches, and this contained two undated pits (Jeffery 2016, 48).

Summary of results

The archaeological excavation revealed evidence for activity on the site that dated from the late Neolithic or early Bronze Age, but the main focus was a middle - late Iron Age settlement of roundhouses and enclosures. A Roman trackway ran across the site from east to west, with elements of an associated field system. Adjacent to the trackway was the Anglo-Saxon burial found during the 2014 evaluation. The archaeological remains were heavily truncated by medieval and post-medieval ploughing.

Palaeochannel

An 12m wide palaeochannel was located curving within the southwest corner of the site (Figure 31.2). This channel was 1.2m deep and it contained a sequence of natural water deposited silty clays. Around its western end was a wider scoured area caused by periodic flooding and eventually this eroded area formed a localised marsh, which left deposits of dark grey humic silts.

Neolithic/Bronze Age (Figure 31.3)

A shallow pit [310587] that contained a late Neolithic or early Bronze Age flint leaf-shaped arrowhead was located within the southeast corner of the site; it was 2.60m long, 0.80m wide and 0.28m deep. Other residual flint blades and waste flakes found in the fills of later features suggests a general background level of activity on the site that pre-dated the Iron Age.

Iron Age 1 (Figure 31.3)

The earliest Iron Age activity comprised part of a linear field system that was orientated broadly northwest to southwest across the site. This consisted of parts of at least two rectangular fields, the eastern one 31.1 being approximately 45m wide and the western one 31.2 being 40m across. The ditch forming the southern side of the western field was aligned to avoid the marshy area north of the palaeochannel. At this point it was composed of two narrow gullies, which may have been the result of the expansion of the wet area and the need to recut the gully. East of this bend the ditch was cut away by a Roman trackway ditch.

Iron Age 2 (Figure 31.4)

A small enclosed farmstead was the earliest Iron Age settlement on the site. This contained two roundhouses (31.4-5) positioned within a sub-rectangular ditched enclosure (31.3). A later D-shaped enclosure was added to the eastern end of the earlier enclosure and this contained the remains of at least five roundhouses, although these were not all contemporary. Elements of a field system or boundaries attached to the main later enclosure were also present.

ENCLOSURE 31.3

The earliest ditched enclosure 31.3 was 67m long by 36m wide and it was aligned north-west to south-east. The sub-rectangular enclosure narrowed to a more curving southeastern end. The ditch was on average 1m deep and 2.5m wide and it had initially filled naturally before being backfilled with material that contained Roman pottery. The southern ditch was heavily disturbed by a Roman re-cut and it was likely that the entrance into the enclosure was located along this side, as there was no evidence for an entrance elsewhere.

Internally the south-eastern end of the enclosure was sub-divided by a 2m wide and 0.9m deep ditch that formed a smaller end enclosure 31.4, within which was located Roundhouse 31.4. At its northern end this ditch curved to the north-east and terminated short of the northern ditch of Enclosure 31.3, the gap presumably representing a narrow entrance. This entrance was further restricted by a short length of ditch which was added to the northern ditch of Enclosure 31.3. A further smaller corner enclosure 31.7 was added to the west side of the internal Enclosure 31.4. There was no break in the ditch that formed Enclosure 31.7, so the location of the entrance was not clear, and internally four small pits were located toward the southern end; pottery was located in the northernmost two pits [310749 and 310777]. As the internal sub-division ditches connected directly to the main enclosure ditch 31.3 there cannot have been an internal bank to the main enclosure. West of the corner enclosure 31.7 were the remains of a ring gully for Roundhouse 31.5.

ROUNDHOUSES 31.4 AND 31.5

Roundhouse 31.4 was located centrally within the small end Enclosure 31.4. The outer ring gully survived, and this was 11m in diameter and had a 3.5m wide east facing entrance. The gully was a maximum of 0.90m wide and had silted up, although dumps of domestic waste (310396) had been placed in the southern terminal [310394]. A relatively well-preserved hearth was located centrally within the house. This survived as a shallow oval pit [310733], 1.16m by 1.00m in size, that was filled with charcoal, ash and

lumps of burnt clay (310734). The base of a single post-hole south-east of the hearth was the only surviving evidence for the structure.

To the west only the shallow remains of the eastern half of the ring gully for roundhouse 31.5 had survived. This was slightly larger at approximately 13m in diameter, and it also had a 3.5m east facing entrance. Again, the southern terminal [310895] had a dump of domestic material (310894) that included pottery. Internally two small post-holes or pits were located, and one of these may have formed the southern side of the entrance.

ENCLOSURE 31.5

Approximately 16m to the north-east of Enclosure 31.3 was a small ditched Enclosure 31.5. It was aligned northwest to southeast but the only elements to survive later disturbance were parts of the ditch forming southwest and southeast sides and a smaller part forming the north-eastern side. The 4m wide south-east facing entrance survived.

ENCLOSURE 31.1

Whilst Enclosure 31.3 was still in use a large D-shaped Enclosure 31.1 was added to its east side, although the northern ditch of this new enclosure was cut across enclosure 31.5 which was no longer used. It was approximately 54m long and 36m wide, with its southern side in line with the southern side of Enclosure 31.3 and had been heavily disturbed by a Roman Trackway 31.1 ditch, leaving only its northern lip. However, enough survived to indicate that there was an 8m wide entrance in the western end of the southern ditch, next to where it abutted the south-east corner of Enclosure 31.3. Appended to the southern ditch was a small hook-shaped Enclosure 31.6 with an east facing entrance. The northern and eastern sides of the main enclosure ditch were on average 3m wide and 1.10m deep.

Five roundhouses were located within the interior, although these were not all contemporary. The best preserved was Roundhouse 31.3 located in the north-west corner of the enclosure. It consisted of a continuous drip gully, 13m in diameter, and had a 3.5m wide entrance. Inside the ring gully were five large pits and a post-hole. The post-hole may have formed the southern side of the doorway but the pits, which were on average 0.35m deep, contained fills of mid-brown silty clays which suggest being filled by natural processes. Therefore, it was likely that the pits were not associated with the roundhouse, along with two short lengths of gully within the west side of the roundhouse which were cut by the drip gully. An earlier pit group 31.1 was also located immediately to the south of the roundhouse. This consisted of at least ten intercutting pits partially sealed by a layer of greyish brown silty sand (311192). This layer was cut by both the drip gully for Roundhouse 31.3 and a ditch that formed a later internal division.

In the eastern end of Enclosure 31.1 was Roundhouse 31.6. The drip gully was 10m in diameter and had an east facing entrance that was approximately 2m wide, although the northern side of the gully had been recut so originally the entrance may have been wider. The southern end of the gully had been removed by a Roman ditch and the western side by a medieval furrow. Inside, a post-hole formed the south side of the doorway and two short lengths of gully may have been related to workshop activities. A pit had been cut into the northern terminal. The northern side of Roundhouse 31.6 was cut by a much

smaller ring gully, for Roundhouse 31.7. This gully had a diameter of 7.5m with an east-facing 3.5m wide entrance. There were no internal features and the southern gully terminal contained dumps of domestic refuse, suggesting that this building had a domestic use. The ring gully around this structure had been cut by an east to west internal division within a later version of enclosure 31.1. Just to the south-west of Roundhouse 31.6 was Roundhouse 31.1, which had a 10m diameter ring gully and a south-west facing entrance. At the entrance the northern terminal of the drip gully was cut into the earlier hook-shaped Enclosure 31.6. The interior had been heavily disturbed by the northern ditch of the Roman trackway 31.1 and there were no surviving features. Immediately southeast of the roundhouse was a large but shallow oval pit [310253] whose upper fill (310255) contained abundant stones, possibly dumped into it during the Roman period as it was on the line of a Roman trackway.

ENCLOSURE 31.2

Enclosure 31.1 was later modified to form a larger Enclosure 31.2. The ditch around the northern and eastern sides was moved outward by 2m and the northwest corner was re-modelled and extended to accommodate this; the old ditch was filled in with dumps of clay and sand. The new ditch was 2.5m wide and 1.25m deep. It is also likely that the enclosure was extended to the south by approximately 3m, which involved the cutting of a segmented length of ditch and the creation of a new south-west corner entrance. A field boundary Ditch 31.3 led north from the remodelled north-west corner of the enclosure. Internally the space was divided into four areas with the addition of three ditches. One of these was a narrow north to south aligned ditch, that led from the east side of the entrance in the original southern ditch to the now filled in original northern ditch, where it terminated and provided an entrance that was 4.5m wide. The area east of this was subdivided by a narrow east to west aligned ditch, which created a narrow space in the northern end of the enclosure and a larger area to the south. A 5m wide entrance was located toward the eastern end of this dividing ditch, at a point where it cut across the remains of Roundhouse 31.7. The other ditch divided the space to the west side of the north to south division. This was a wider ditch cut across a soil layer (311192) that sealed pit group 31.1 and it terminated approximately 2m short of the north to south ditch, presumably at an entrance.

Roundhouse 31.2 was added after the north to south subdivision ditch had filled in. The Roman trackway ditch had been cut through the southern end of this roundhouse, however the rest was well-preserved. The ring gully had been re-cut and was 13m in diameter originally, before being widened to 14m. It had an east facing entrance and two groups of post-holes internally. In the western half of the roundhouse, opposite the entrance, a small area of an accumulated occupation deposit (310674) survived within a depression of the natural clay internal surface, and part of a human skull (sk310410) was also located in the wider recut gully. It is possible that roundhouses 31.2 and 31.3 were contemporary, given the proximity of the north to south subdivision ditch to the entrance into Roundhouse 31.3, which suggested that it either pre-dated or post-dated the internal north to south division.

PIT [310230]

A large pit [310230] was cut into the northern ditch for the extended enclosure, possibly as a waterhole. This pit was 4.30m long, 2.80m wide and 1.10m deep. Placed onto one of the basal fills of blueish grey clay (310226) was a human skull (sk310215), which appeared to have been carefully positioned to face

east, and the pit filled in with a mixed dump of silty sand (310225) and clay (310224). It is likely that this represents a special deposit possibly related to the final abandonment of the settlement.

Roman (Figure 31.5)

The Roman trackway 31.1 ran across the site, from the southeast to the northwest corner, and was defined by two parallel ditches. It was positioned across the southern half of the earlier Iron Age enclosures, and the southern trackway ditch recut the line of the southern ditch of enclosure 31.1 and 31.3.

TRACKWAY 31.1

Trackway 31.1 was aligned WNW-ESE. It had parallel flanking ditches, which varied from 4m to 5m apart, the track being narrower at the west end where it diverted around the north side of the marshy area. The northern ditch was cut across all features associated with the Iron Age enclosures 31.1, 31.3 and 31.2 and it varied in width from 3m to 2m as it was re-cut at least twice. The southern ditch was also recut, but this was originally cut across the line of the ditches that formed the southern side to the Iron Age enclosures; the line of these ditches presumably survived as a depression.

At the point where the trackway ditches were diverted slightly around the palaeochannel there appears to have been another possible track or driveway heading NNE. This was approximately 15m wide, the side ditches defining elements of fields to the east (31.4) and west (31.5, 31.6).

FIELDS 31.5 AND 31.6

The southeast corner of Field 31.5 was located at the easternmost part of the excavated area. The boundary was composed of narrow double ditches approximately 2m apart, which at the northern edge of the site joined the corner of another field 31.6, which gave a field that was 25m wide.

Anglo-Saxon (Figure 31.5)

A single inhumation burial 31.1 was excavated during the trial trenching by Wessex Archaeology. This was positioned next to southern ditch of the Roman trackway and the grave was aligned north to south. The skeleton, which has been radiocarbon dated to the early Anglo-Saxon period (AD 540 to 640), was lying on its side facing west with the head at the southern end (Jones and Panes 2014a, 30; Jones and Panes 2014b, plate 27). An early to middle Anglo-Saxon pit was located in the northern end of the site during the trial trenching in 2014.

Eight sherds of early/middle Saxon pottery were also recovered from this site during the excavation, although no Saxon features were identified.

Finds and environmental summary

Tables 31.1 – 31.3 provides a quantification of the finds, bone, and environmental samples from TEA 31.

The majority of the pottery assemblage was dated to the Iron Age, mostly the middle – late Iron Age. This is with the exception of four sherds of early Iron Age fineware bowl and five sherds of early Iron Age flint-tempered ware. The middle – late Iron Age pottery was mainly East Midlands Plain Ware, and

the later Iron Age pottery was predominantly grog-tempered wares, including Thompson forms B1/D1 and C6-1. There were no other Iron Age finds.

The environmental samples from the Iron Age features included occasional cereal grains (hulled barley and spelt wheat), seeds, and chaff. There was a particularly high concentration of chaff around Roundhouse 31.2, potentially indicating that crop-processing was taking place here. A relatively wide variety of species is reflected in the Iron Age animal bone assemblage, including cattle, sheep/goat, pig, and horse.

A smaller collection of Roman pottery was recovered. This was mainly greyware, with some samian ware, Verulamium white-ware, and Lower Nene Valley products. There was also a small collection of Roman dress accessories, including three 1st century continental brooches, likely introduced by incomers, and four Roman coins.

A low concentration of cereals was identified in the environmental samples from the Roman features. The animal bone assemblage was dominated by cattle, with some sheep/goat and horse, but no pig or small mammals.

Eight sherds of early/middle Saxon pottery were also recovered from this site.

Table 31.1 Quantification of finds from TEA 31

Type	Count	Weight (g)	Date/type
Pottery	2,191	20,841	Iron Age
	71	818	Roman
	9	135	Post-Roman
Coins	4		
Small Finds	25		
Lithics	160 (worked)		
	1 (burnt unworked)		
Stone	2 fragments		
Glass	1		Roman
Building Materials	26	557	
Metalwork Residues	9	282	

Table 31.2 Quantification of bone from TEA 31

Type	Count	Weight	Date/type	% of bone assessed
Inhumations	2			
Cremations	2			
Animal Bone	1,735	15,660		42

Table 31.3 Quantification of environmental samples from TEA 31

Type	Count	Date/type
Bulk Environmental Samples	94	
Kubiena	2	

Provisional interpretation and potential

Interpretation

There had been activity at the site from the late Neolithic or Bronze Age, when the resources of the former watercourse and the wetland area were probably utilised. Although there was only one feature that could be clearly associated with this activity there was also several undated pits that may have been related. There followed a later prehistoric agricultural landscape, of which the site was part, that consisted of a linear arrangement of rectangular fields. This has initially been interpreted as the earliest Iron Age activity on the site.

When these fields were no longer used a single enclosed farmstead, that consisted of two houses, was constructed. One house was located within its own enclosure within the eastern end of the main enclosure, and the other house sat in the larger western part. Externally there was a further small associated enclosure or building (Enclosure 31.5). The main farm enclosure was later added to by a further ditched enclosure on its east side, perhaps as a result of the expansion of a family group, and this enclosure seems to have had at least three phases of activity within it. Originally the internal space was open with some buildings located in its eastern end. It was then increased in size with the cutting of a new enclosure ditch and internally it became sub-divided into four areas, with a building located in the south-eastern area. The latest phase of activity was the addition of one, but probably two, roundhouses within the enclosure, and by this stage at least one of the internal divisions was no longer used. When the site was eventually abandoned a human skull was placed in the base of a pit, cut into the remodelled external boundary ditch, before the pit was filled in. There was no evidence for any banks associated with the main enclosure ditches.

A Roman trackway was cut across the southern end of these enclosures. The southern flanking ditch of this track utilised the former line of the southern side of the main Iron Age enclosures, which was presumably visible as earthwork. It was possible that this track, if the line was projected to the east beyond TEA 31, was the same one as that located in TEA 33. Also, if the line was projected to the west, then it was also possible that this track headed to the site of the Roman settlement or farm (which was not excavated) located in the northeast corner of TEA 28. To the north of the trackway were elements of Roman field system and a possible further track or droveway.

A single Anglo-Saxon burial was located just to the south of the trackway. It is likely that this burial was related to the newly discovered Anglo-Saxon settlement of Conington located approximately 650m to the east at TEA 32. The relationship of Anglo-Saxon burials to existing landscape boundaries and features is a known phenomenon, which in this instance also suggests that the track was still in use during the early Anglo-Saxon period. Other than a pit, also located during the trial trenching in the

northern end of the site, there was no other obvious evidence for Anglo-Saxon activity. That pit contained early to middle Anglo-Saxon pottery.

Potential

Analysis of this site has the potential to contribute to our understanding of the development of Iron Age agricultural landscapes and farms, especially considered alongside the evidence from elsewhere on the project and from the previously known evidence for the later prehistoric period in the area. The results will also contribute to the study of the wider Roman landscape and the newly discovered system of trackways that connected settlements of differing scales and functions.

As a result, the excavations at TEA 31 can be used to help inform the following research questions collated from the regional research framework (Medlycott 2011), the written scheme of investigation (HE 2015) and the site-specific specification (ACJV 2017d):

RESEARCH THEMES AND OBJECTIVES

- Landscape and settlement: development of the character and form of the agricultural landscape of the Iron Age and Roman period (Medlycott 2011, 25-26, 33-37 and 84), and
- Economic and social change and development during the late Iron Age (Medlycott 2011, 26-28).

IRON AGE

- Development of agricultural systems and the economy:
 - What is evident in the landscape?
 - Does field morphology offer any information?
 - What is the potential for faunal remains to inform study?
- Social organisation:
 - There is possible evidence to suggest family development in the chronology of the settlement
- Settlement chronologies and dynamics:
 - Activity at TEA 31 potentially dates from the middle to late Iron Age, indicating continued development and use of settlements/farming communities
 - Is there evidence for abandonment/reuse/continuity?
- Settlement types:
 - Spatial use within settlements: are there clear working and living areas/zoning?
- Social organisation
 - What is the evidence for social organisation?

ROMAN

- Agriculture – consumption and production:
 - what is being produced where?
- Rural settlements and landscapes (if related to other sites in the immediate vicinity):
 - How did their morphology develop?
 - What is the inter-relationship between settlement and agricultural land?
- Infrastructure:
 - A number of Roman roads are known in the wider landscape, and how might TEA 31 have been connected to this network and could this have influenced its development? (ACJV 2017d, 12-17).

Recommendations

The excavation archive is not fully checked and will need further work. There were inconsistencies noticed with the stratigraphic record, which will need to be corrected. This will need to involve the analysis of the many relationships between the two main Iron Age enclosures and also for the development of the farmstead. More detailed analysis is also needed for the many re-cuts of the Roman trackway ditches, to understand its development through the Roman period. To inform this detailed study, the information from the assessment of the finds assemblages and environmental samples will have to be available, and radiocarbon dates from targeted features (notably burials) will be required.

TEA 32/33

Anthony Haskins and Richard Mortimer (COPA)

An archaeological investigation was carried out at site TEA 32/33 (NGR: TL 3320 6711; Figure 32.1), by COPA under the guidance of MOLA Headland Infrastructure (MHI) on behalf of the A14 Integrated Delivery Team (A14IDT). The archaeological excavation was undertaken ahead of the construction of the main carriageway of the new A14 route north of Conington village. Site TEA 32/33 is located just south of the current line of the A14, approximately 1km north of Conington and 1km southwest of Fenstanton.

The layout of the site was determined by the road footprint, a gas diversion pipeline, an area of landscaping and culvert diversions, as well as current natural watercourses and flood compensation areas. The site was divided conveniently into three equal areas separated by palaeochannels, the course of which was followed by modern tracks/roads (Figure 32.2). Area 1 lay to the west and extended across site TEA 32 and the western end of site TEA33. Area 2 formed the central section of site TEA 33 and Area 3 its eastern section. The excavation areas covered 21.43ha.

The site lies on a bedrock of West Walton and Ampthill Clay formations with superficial deposits of river terrace gravels, alluvium and silts. It is largely low-lying but is dominated by a gravel ridge that runs south to north through Area 1. Flat, low-lying wet gravels stretch eastwards through Areas 2 and 3. The gravel ridge has a high plateau at the western end of Area 1 which falls away to the west within an area of additional trenching.

Archaeological background

The TEA areas had previously been subject to a trial trench evaluation by the Cambridge Archaeological Unit (CAU) and Wessex Archaeology in 2010 and 2014 respectively. These identified several linear and curvilinear ditches, on a variety of alignments, together with a few pits, dating between the late Iron Age and late Roman periods. Medieval to post-medieval furrows were also recorded across the site.

Summary of results

The current phase of excavation work identified that TEA 32/33 provides evidence for late Mesolithic/early Neolithic activity, with more intense land usage in the Bronze Age, and occupation within the early and middle Iron Age. Romano-British activity included extensive field systems and pottery manufacture, but the area was dominated by Anglo-Saxon occupation, which continued into the 8th or 9th century.

This stratigraphic assessment describes the key archaeological features within site TEA32/33 and is based upon spot dating carried out during fieldwork, feature morphology and stratigraphic position. Archaeological features have been provisionally grouped and assigned to stratigraphic periods and sub-periods spanning the late Mesolithic, Neolithic, Bronze Age, Iron Age, Romano-British and Anglo-Saxon periods.

Undated and natural features

The location of two palaeochannels was identified during the archaeological works, although a third probably existed at the base of the hill between Areas 1 and 2 (Figure 32.2). A channel aligned northeast to south-west was located towards the western end of the site, in Area 1 (palaeochannel 32.1), its infills being cut by several Anglo-Saxon wells (see below). This wet area lay on the eastern side of the plateau at the top of the hill. Associated deposits consisted of blue-grey humic-rich clay (320225) which probably began to form in early prehistory, with activity associated with the spread of material within it potentially extending back to the Bronze Age. This deposit slowly accumulated from this time onwards, although the relevant area was largely infilled by the later Anglo-Saxon period. The spread produced a significant range of finds with the lower deposits being dominated by animal bones and the upper layers producing a varied assemblage of animal bone, Romano-British coinage and metalwork, Romano-British and Anglo-Saxon pottery and Romano-British ceramic building material.

The second palaeochannel, a larger and wider meandering channel (palaeochannel 32.2), was initially identified during evaluation works by the CAU and was recorded in the eastern part of Area 2 and the western side of Area 3 along both sides of New Barnes Lane. This channel also ran largely on a broadly northeast to southwest alignment. It was up to 65m wide and approximately 1.5m deep. The Neolithic and Bronze Age activity found in this area respected the position of the channel, suggesting either that it remained an active part of the landscape during this period, or that it was at least a significantly wetter area.

The third potential palaeochannel (Palaeochannel 32.3) lay between Areas 1 and 2, and was again orientated northeast to southwest. This 'channel' (actually more an area of pooling) was not well defined due to its proximity to the exclusion zone for modern services, but the deposits demarcating its probable edge were cut by Romano-British enclosure systems.

Spread across the excavation area, but largely focused on the eastern side of New Barnes Lane (Area 3), lay a group of tree throws, some with evidence for *in-situ* burning, demonstrating that landscape clearance occurred in this part of the site. None of the tree throws were dated, but they either reflect early prehistoric clearance in the Neolithic or Bronze Age or potentially represent later clearance associated with the digging of Roman field systems and landscape realignment.

A small area of natural pooling or possible channel deposits consisting of silts and gravels (Palaeochannel 32.4; Figure 32.3) was identified within the trenches on the western extent of the site, into which Anglo-Saxon wells were later dug.

Early Prehistoric (late Mesolithic\ Neolithic)

Limited but significant late Mesolithic and early Neolithic activity was found within Area 1. The late Mesolithic activity was evidenced by the presence of two microliths and struck blades found within an assemblage of around 700 struck flints which were mainly recovered from the topsoil, Neolithic pits (Pit Groups 32.1 and 32.2; Figures 32.3 and 32.4), a ploughed-out blade-based flint scatter (322320, 322321, 322322) and as residual finds in later archaeological features. The surviving elements of the flint scatters were found within the subsoil and its interface with underlying natural deposits, largely in areas

dominated by sandier material. In particular, they were found in the north-western part of Area 1, a central spread to the south of Area 1 and in the vicinity of early Saxon buildings (Buildings 32.8 and 32.9). Material of Neolithic and Bronze Age date was also recovered from the flint scatters, including the tips of several leaf-shaped arrowheads, a complete leaf-shaped arrowhead, and several barbed and tanged arrowheads. Approximately 40 sherds of Neolithic pottery were found within these scatters.

Further Neolithic activity was indicated by a series of small pits and solution hollows. A group of three pits (Pit Group 32.1) lay towards the southern edge of Area 1 (Figures 32.3 and 32.4), surrounded by a scatter of contemporary pits and a possible tree throw to the south. The largest of the cluster of three pits (321581) was 1.36m wide and 0.84m deep and produced an assemblage of 47 sherds of early Neolithic pottery.

A second more dispersed cluster of 11 pits (Pit Group 32.2) was located on the north-western side of Area 1, on the upper cusp of the west-facing slope (Figures 32.3 and 32.4). The pits were generally small, containing mixed assemblages of pottery and worked flint. Pit 324040, which was 0.52m wide and 0.11m deep, produced an assemblage of seven sherds of Neolithic pottery, 10 struck flints and a fragment of polished stone tool (SF32495). Pit 323677, which lay on the north-eastern edge of the pit group, produced 28 sherds of Mildenhall pottery and a single struck flint.

A further Neolithic pit (322816) was located on the western side of the gravel/clay interface in Area 1 at the top of the east-facing slope (Figure 32.4). It produced a large assemblage of 115 sherds of Mildenhall style pottery from at least two vessels, together with 54 struck flints. Part of the Neolithic flint and pottery scatter (322320) was found in a concentration within this area, suggesting that contemporary activity was focused around the pit.

Approximately 40 sherds of a Neolithic Peterborough ware vessel were recovered from the edge of palaeochannel 32.2 on the north-eastern edge of Area 2, next to New Barnes Lane. Its position suggests that the vessel may have been intentionally placed into the edge of the channel.

Bronze Age

Several Bronze Age enclosures were identified during the course of the excavation. A large rectangular enclosure (Enclosure 32.1) of Bronze Age date, aligned WNW-ESE, was located on the south-western edge of Area 1 (Figure 32.4). It was not fully exposed, with its southern side extending beyond the limit of excavation. The excavated portion of the enclosure was c 66m long by 64m wide and consisted of two re-cutting ditches. The earlier ditch was c 0.40m deep while the re-cut was c 0.9m deep. The enclosure had a segmented ditch on its eastern side with two visible breaks, whilst the western edge had a single break. Three fills (321262, 321331 and 321630) produced a small assemblage of 16 sherds of middle Bronze Age pottery.

A group of five shallow clay-lined pits (Pit Group 32.3) lay within the enclosure. These were c 0.6-0.7m diameter and c 0.10m deep and produced a total of 18 sherds of Bronze Age and unidentified prehistoric pottery. Three of the pits contained fragments of Collared Urn (1, 6 and 12 sherds respectively).

Located at the eastern edge of Area 1 next to a ring gully was a ditch (Ditch 32.1; Figure 32.5) measuring 0.92m wide and 0.40m deep and running on a northeast to southwest alignment. Its fills did not produce any finds, although the similarity of its fills and profile to other dated Bronze Age ditches at the site suggests that it may date to this period. A second ditch ran on a meandering northeast to southwest alignment at the western edge of the excavation area within the area of trenching (Ditch 32.2; Figure 32.3).

A second Bronze Age enclosure (Enclosure 32.2) was found in Area 3, to the east of New Barnes Lane (Figure 32.6). It was c 100m long and c 95m wide and was aligned on a northeast to southwest orientation. Originally, the enclosure had entrances on the south-east, south-west and north-east facing sides. Its ditches had U-shaped profiles and varied in depth, being generally between c 0.6m deep on the northeast, southwest and southeast sides and only 0.10m deep on the north-west side. However, the terminal ends of the southern entrance (331881 and 332150) were approximately 1m deep. Multiple phases of re-cutting were identified, together with the addition of a series of interior ditches and several waterholes or wells (see below). The southwest facing entrance was completely closed off during this remodelling. The enclosure and associated waterholes produced 24 sherds of Bronze Age pottery.

Additional ditches on the same alignment as the enclosure indicate the presence of a field system (Field System 32.1) which was directly associated with the enclosure. Surviving elements of the fields spread across the entire site, although they were largely concentrated in Areas 2 and 3 (Figures 32.5 and 32.6). Thirteen sherds of Bronze Age and prehistoric pottery were recovered from its ditches, nine sherds of which came from a single fill (333334).

Contemporary with a secondary phase of the enclosure in Area 3 (Enclosure 32.2, Figure 32.6) were three wells dug within its interior ditch on its southwest facing and southeast facing sides. Located to the north of the closed entrance was well 331133, whilst slightly further to the south was well 331254. These features may have been associated with the closing of the southwest facing enclosure entrance. Their presence may suggest that the palaeochannel was drying up and/or no longer provided a reliable source of water. A third well (334492) was dug in the eastern corner of the enclosure, while three further examples were identified outside the enclosure. Well 331028 was located on the edge of the palaeochannel deposits, whilst the other two features (331011 and 330945) cut into one of the northeast to southwest aligned ditches associated with Field System 32.1. A large pit (334527) was also dug during the remodelling of the northwest facing side of Enclosure 32.2. It contained a complete cattle burial, the animal potentially having been hobbled prior to burial.

A wide shallow boundary ditch (Ditch 32.3) with a flat base was located at the eastern end of Area 2 (Figures 32.5 and 32.6), running on a similar alignment to that of Field System 32.1. It formed a substantial landscape boundary and aerial photographs demonstrate that it extends a considerable distance on the northern side of the A14. The location of the ditch's terminal suggests a possible link to a Romano-British trackway (Trackway 32.1; see below).

Three undated ring ditches were excavated within Areas 1 and 3 (Figures 32.5 and 32.6), which may represent small barrows. A 7m-diameter ring ditch was identified in Area 1 (Barrow 32.1; Figure 32.5),

potentially associated with boundary ditch (Ditch 32.1) which lay just to the south. No dating evidence was recovered from the feature. Several undated isolated post-holes survived within the feature that were perhaps related to its use; however, the ring ditch and its interior had been heavily truncated by Romano-British features. There was no entrance or break in the feature, as far as can be ascertained from its surviving remains.

The other two ring ditches lay within Area 3 (Figure 32.6), both of which were associated with Bronze Age Enclosure 32.2, one lying within it and the other immediately outside. The first example (Barrow 32.2) measured 8m in diameter, its ditch measuring 1m wide and up to 0.22m deep. It is unclear whether it had an entrance to the south. The third ring ditch (Barrow 32.3) was clearly annular, measuring 9m in diameter with its ditch measuring 0.86m wide and up to 0.36m deep. This feature had been identified during the CAU evaluation. It surrounded an area of heavily disturbed ground, that may have been a tree throw (331646).

As no burials were identified in relation to these ring ditches, their interpretation as barrows is not certain. An alternative suggestion is that they may have been buildings, and this will be considered as part of the analysis stage.

A second cow burial (332720) was found in the northern part of Area 1, directly to the south of ditches associated with Field System 32.1. It had been heavily truncated by Roman features.

Iron Age

A dispersed scatter of early Iron Age pits, principally within the earlier field system in Area 2 and to the north of the middle Bronze Age enclosure in Area 1, provided the main evidence for activity of this period. Wells and four-post structures (of possible early or middle Iron Age date) were found in Area 2. Approximately 100 sherds of early Iron Age pottery were recovered from Area 1, with a further 180 sherds coming from Area 2.

Middle Iron Age activity was concentrated in Area 2, with a series of small but deep enclosure ditches being strung out along a sinuous ditch line running approximately east to west. These clearly represented settlement enclosures and contained large quantities of pottery, animal bone, burnt and worked stone and other finds. No associated buildings were identified. A few ditches and pits of middle Iron Age date were found elsewhere on the site, principally in Area 1. In total, c 1,400 sherds of middle Iron Age pottery were recovered from the entire excavation, dominated by material from the Area 2 enclosure ditches.

Two small ditches at the eastern end of Area 2 (adjacent to the palaeochannel) produced a small assemblage (20 sherds) of late Iron Age pottery. These are currently the only features of this date to have been identified on the site.

STRATIGRAPHIC SUB-PHASE 1 - EARLY IRON AGE

Three pits of early Iron Age date were located within Area 1, while several wells and a group of pits were found in Area 2. Of the pits in Area 1, two were located on the northern edge of the site (Figure 32.4). Pit 323944 was sub-circular in plan, measuring 0.28m wide and 0.11m deep with a U-shaped profile. It

produced an assemblage of 16 sherds of early Iron Age pottery. The second pit (323806) was also sub-circular and measured 0.25m wide and 0.08m deep with a U-shaped profile. Its fills produced a single sherd of early Iron Age pottery. The third pit (324238), which lay close to the northeast corner of Bronze Age Enclosure 32.1, was circular in plan with steep sides and a flat base. It was 1.12m in diameter and 0.18m deep. Its fills produced a large quantity of *in-situ* burnt clay and charcoal, as well as cremated animal bone (sheep/goat) and a notable quantity (20 sherds) of early Iron Age pottery.

Three wells or waterholes were excavated to the north of enclosures 32.3 and 32.4 in Area 2 (Figure 32.5). Waterhole 332350 lay on the northern edge of the excavation area, while waterhole 331841 was located just north of the current gas main and produced a mixed assemblage of animal bone and early Iron Age pottery. A third feature (331698) was located to the east of well 331841. This produced worked wood, including part of a plank and a possible fragment of log ladder. A sample of wood produced for dendrochronology dating did not produce any results (see Tyers Vol. 2). It was surrounded by a group of 10 pits (Pit Group 32.4) of variable size and shape. One example (pit 332339) was a sub-circular in plan, measuring c 0.83m wide and 0.23m deep: it produced a single sherd of early Iron Age pottery.

Two isolated four-post structures were found in Area 2 (Figure 32.5): they have been provisionally phased as early Iron Age on the basis of the few sherds of associated pottery, but may date to the subsequent phase since they lay close to a later farmstead, witnessed by the presence of ditches, enclosures and settlement-related waste (see below). The first example (Building 32.3), which measured approximately 2.5m long and 2.5m wide, was aligned northeast to southwest: its four post-holes measured c 0.4m in diameter and between 0.14 and 0.23m deep. The second structure (Building 32.4) was approximately 1.5m in length and width and was aligned ENE-WSW. Its post-holes were c 0.4m in diameter and 0.04 to 0.18m deep.

STRATIGRAPHIC SUB-PHASE 2 - MIDDLE IRON AGE

Middle Iron Age activity was concentrated in Area 2 (Figure 32.5). It consisted of a series of enclosures, clustered in the south-western part of the site, which were strung out along a ditch line. The primary phase took the form of two adjacent sub-rectangular enclosures that may have formed part of a single entity (Enclosure 32.3) which extended beyond the southern limit of excavation. The western element had a north-facing entranceway, which was later extended further to the north. Its ditch was up to 1.2m deep and 2.5m wide. It produced a significant assemblage of middle Iron Age pottery and animal bone. The eastern element also originally had a north-facing entrance and may have formed a later addition. Its ditch was 2.1m wide and 1.3m deep.

The enclosure entranceways were subsequently closed off by a sinuous ditch (Ditch 32.4) which extended over a total recorded distance of more than 360m. Its western section was heavily re-cut with at least five cuts being present on the same broadly east to west alignment, although it turned southwards at its western end, perhaps creating another enclosure (Enclosure 32.4). The terminus of the western part of the ditch respected the position of a second enclosure (Enclosure 32.5). This consisted of three irregular compartments of organic form: the enclosure ditches were partially segmented and had been substantially remodelled during the enclosure's lifetime. They were generally 1-2.5m wide and 0.5-1m deep. The southernmost element was formed by a shallow double gully, creating a semi-circular

shape 11m wide with an opening to the north. A limited number of internal features were identified including a small pit (334621) that lay centrally within the double ditch and a single pit (334669) within the northern compartment. Significant quantities of pottery and animal bone were recovered from the ditches and associated features, indicating that the enclosures were related to a settlement.

Attached to or forming part of the western end of the southern arc of the double ditched enclosure was a curvilinear ditch (also Ditch 32.4) aligned ENE-WSW, which extended the line of the ditch lying to the southwest. It ran north-eastwards across Area 2, truncating part of the Bronze Age field system and terminated just south of the northern limit of excavation. The reason for its sinuous line is uncertain, since it ran across flat ground.

Two further ditches were located within Area 1 to the east of the blue-grey clay (320225) associated with one of the palaeochannels (Figure 32.4). Ditch 32.5 was a slightly sinuous ditch on a northeast to southwest alignment that was later re-cut by part of Burial Group 32.1 and an early Anglo-Saxon ditch (32.14). Ditch 32.6 was on a northeast to southwest alignment that turned to the southeast at its north-eastern end and then extended into blue-grey clay (320225). A northwest facing entrance was located along the northeast to southwest aligned ditch.

STRATIGRAPHIC SUB-PHASE 3 – LATE IRON AGE

Lying to the east of the enclosures and ditches assigned to the middle Iron Age was a curving ditch of possible late Iron Age ditch date (Ditch 32.7; Figure 32.5) which lay adjacent to palaeochannel 32.2.

Romano-British

The early Roman period was dominated by a complete reorganisation of the landscape. The earlier Bronze Age field systems potentially still visible in the Iron Age were ignored and a new more east to west landscape alignment developed. Remains of Romano-British date had two principal elements: the southern part of what appears to have been a high status settlement was found in the northeast of Area 1, set within a deep-ditched enclosure. Much of Area 2 was covered by an extensive cultivation system of narrow bedding trenches, further elements of which were found to the south and west of Area 1. Similar traces were found in Area 3, along with evidence for small fields and extensive gravel quarrying. The extracted gravel may have been used to construct a causeway across the palaeochannel between Areas 2 and 3 to take a track which bordered the northern side of the cultivation system in Area 2 and led up the hill to the settlement in Area 1. The track is visible as a cropmark bending around the north and west of that site and leading away down the hill to the west. This is the same track that ran through site TEA31, broadly parallel to the presumed route of the *Via Devana* to the north. A side track headed southwards and separated the settlement site in Area 1 from the cultivation trenches in Area 2.

Occupation of the settlement found in Area 1 evidently spanned the 1st to the 4th centuries AD although construction, if not necessarily use, of the cultivation systems may have been generally limited to the 1st century AD. More than 1,500 sherds of Roman pottery were recovered from the three areas combined, largely deriving from Area 1. Aspects of the finds assemblage of note are the relatively substantial number of Roman coins recovered (around 50 examples, mostly of 4th century date), and the presence of quantities of worked building stone, principally Barnack Limestone, including facing stones and a

large column base. The latter indicate the presence of one or more stone-built or stone-faced structures within the ditched enclosure, lying just to the north of the excavation area: these were presumably of high status. Area 1 also produced a rare copper alloy fascinus charm.

Two main phases of settlement development were apparent, both on the 'hilltop' gravels at the west of Area 1 and on the wet clays at the bottom of the slope to the east. Two broad 'defensive' ditches formed the southern and western boundaries of the settlement site at separate periods. The later phases on the lower ground were associated with craft/light industrial activity, the remains comprising burnt and fired clay dumps. Metalworking slag was present (including small numbers of smithing hearth bottoms) along the northern edge of this area, possibly suggesting the presence of a smithy at the roadside to the north. A series of ditches running down the slope from the west fed a deep sump or watering hole, perhaps forming part of a water management system. A large post-built structure, possibly a barn, lay excavated to the south of the sump.

On the eastern slope in Area 1 (at the interface between the clay and gravel and both within and to the south of the enclosure) were shallow clay extraction pits. These were mostly sub-rectangular in plan, some being larger and more circular in plan. Those nearer the top of the slope contained significant quantities of Roman pottery, with a high proportion of fine and colour-coated wares. Some also contained quantities of limestone building stone. A small 'industrial' area – consisting of a series of bowl-shaped features with flues containing collapsed superstructures – was located on the gravel to the west of the extraction pits. Significant quantities of pottery were also recovered from these features. A second area of extraction pits was recorded on the western slope of Area 1.

STRATIGRAPHIC SUB-PHASE 1 – EARLY ROMANO-BRITISH

Early Romano-British remains were found in the eastern part of Area 2 and within Area 3. These consisted of four large enclosures, one located at the top of the hill (Enclosure 32.6; Figures 32.7 and 32.8), a second (Enclosure 32.7, Figure 32.8) located to the southeast and surrounding a building, and the others (enclosures 32.8 and 32.9; Figure 32.8) at the eastern end of Area 1: these continued into Area 2.

The westernmost enclosure (Enclosure 32.6) lay on the northern edge of the excavation area and extended outside of it: it was either square or rectangular in plan; it was aligned north-west to south-east, the ditch on its eastern side turning to the northeast to continue beyond the limit of excavation. Its ditches were generally v-shaped in profile and variable in depth, with those on the southern and western boundary sides being at least 1.4m deep and 3.75m wide. Its eastern boundary consisted of two ditches measuring 1.10m wide and 0.28m and 0.38m deep. The ditches were backfilled with what may have been bank material deriving from an earthwork on the southern side of the ditch. A wider ditch (Ditch 32.8) ran outside the enclosure and continued south-eastwards towards another group of enclosures.

Lying at the eastern end of this large ditch was a sub-rectangular enclosure (Enclosure 32.7) which measured 90m long and 45m wide. It had a northwest facing entrance on its south-western corner and two small internal divisions towards its eastern end, one of which housed a large timber building that may have been a barn. The ditches forming the outer edge of the enclosure were c 1m wide and 0.4m

deep. A turned shale bowl (SF 33153) was recovered from ditch slot 335083 on the south-western edge of the enclosure. The interior divisions were aligned NNE-SSW. The southern division measured c 0.9m wide and 0.5m deep, whilst the northern division was c 0.5m wide and 0.1m deep. Postholes, c 0.2m in diameter, were found within the terminus and excavated slots of across the ditch, suggesting that it formed part of a palisade or fence line.

The post-built structure (Building 32.5) lay within the northern subsidiary enclosure and was orientated on a northwest to southeast alignment with four post-holes on its southern side and six post-holes on the eastern side. The post-holes were generally c 0.5 – 0.6m wide and up to 0.3m deep. A possible quarry pit (335250) lay within the adjacent sub-enclosure. It contained a relatively large quantity of early Roman pottery (140 sherds) and a copper alloy phallus charm (SF 33168). Lying to the northeast of the main enclosure and reflecting its alignment was another rectangular enclosure (Enclosure 32.8), most of which lay outside the excavated area. Its ditch was 5-6m wide and at least 1.4m deep.

Positioned between the two enclosures detailed above was a large square enclosure (Enclosure 32.9), attached to the eastern end of Enclosure 32.6 and bounded to the east by a possible track. It measured c 57m in both directions and was aligned northeast to southwest. It had several internal divisions and may have extended to the southwest to be delimited by a continuation of the eastern ditch which formed the western side of the trackway (Trackway 32.1). The ditches forming the enclosure were variable in form, with some being significantly deeper than others, but were generally quite wide and shallow (c 1m wide and 0.2m deep).

No internal features were found, although a square post-built structure (Building 32.6) lay on the outside of the north-east corner of the enclosure. This structure was 12m long and 12m wide and consisted of a series of approximately 15 post-holes, with a northeast to southwest orientation. The post-holes were generally c 0.2-0.3m in diameter and were generally very shallow with an average depth of only c 0.10m. Two small ditches and a large pit (332054) were placed around the building, possibly in association with the adjacent track.

Running between fields, the track (Trackway 32.1; Figures 32.8 and 32.9) was visible in aerial photographs of the area to the north of the site, running on a roughly east to west alignment. It was exposed in the north-eastern part of Area 2, where remnants were visible in the site baulk as a substantial and broad gravelled surface overlying natural feature (Figure 32.10). Towards the west, an offshoot turned southwards within Area 2 (Figure 32.8), while the main trackway continued upslope alongside (or within) the main Roman settlement area. The southern branch appears to have been deliberately blocked in the late Roman period.

Several large areas of what may have been a single Roman field system (Field System 32.2) consisting of discrete areas of bedding trenches were revealed within and around site TEA 32. The most westerly element lay within Area 1 (Figures 32.3 and 32.7), where an area of ENE-WSW aligned bedding trenches was located on the cusp of the hill. These may have been delimited by a ditch aligned northeast to southwest (Ditch 32.7). Further features of probable early Roman date lay to the west. These included a

small group of possible extraction pits (Pit group 32.7; Figure 32.3) and several small linear features on a northeast to southwest alignment.

Another area of similar trenches lay at the south-eastern end of Area 1 within the flood compensation area and in the southern part of Area 1 (Figure 32.8). Here, the bedding trenches were aligned ENE-WSW with a ditch (Ditch 32.9) marking their eastern extent. This ditch may have formed part of another trackway (Trackway 32.2) which was bounded to the east by another ditch (Ditch 32.10); this ran parallel to the other track noted above (Trackway 32.1), with further bedding trenches on the same alignment on its eastern side (in Area 2). The remaining bedding trenches within Area 2 were aligned NNE-SSW. A further surviving group was found in Area 3, aligned northwest to southeast (Figure 32.9). The bedding trenches were generally 0.3 – 0.6m wide and were variable in depth from 0.2–0.5m deep with relatively steep sides and flat bases.

A series of gravel quarry pits found in Area 3 (Pit Group 32.5; Figure 32.9) were of variable size, but generally had steep sides and flat bases. A group of clay quarry pits (Pit Group 32.6) lay on the slope within and around Enclosure 32.6 (Figure 32.8). These were variable in form and orientation, although the majority were sub-rectangular in shape. While some of these features may have been of early Roman date, they have currently been assigned to the later Roman period (see below).

A further field system of probable earlier Roman date located on the eastern edge of Area 2, extending across Area 3 (Field System 32.3; Figures 32.5 and 32.9). In places, this may have consisted of small paddocks, aligned approximately northeast to southwest, while in other areas the evidence suggests the presence of larger, more open fields on the same alignments.

Two cremation burials (Cremation Group 32.1) were found at the top of the hill in the centre of Area 1 (Figure 32.7), to the west of Enclosure 32.6. The westernmost cremation pit (323907) was circular, with a diameter of 0.34m and was 0.29m deep, with a U-shaped profile. Its fill produced 18 nails (SF 32655 – SF32672). There was no evidence for the cremated bone having been placed in a container for burial. The easternmost cremation pit (324048) was also circular, with a diameter of 0.5m and 0.28m deep, with a steep sided U-shaped profile. Its fill produced a single iron nail (F 32673). Again, there was no clear indication of the bone having been placed in a container prior to burial.

STRATIGRAPHIC SUB-PHASE 2 – LATER ROMANO-BRITISH

A later Roman enclosure (Enclosure 32.10) was constructed above earlier Roman enclosures (Enclosures 32.7-9) in the eastern part of Area 1 (Figure 32.8). The southern part of the new enclosure was irregular in plan with a curving edge to the east. Its termini and some of the internal features within it produced significant quantities of burnt/fired clay, with slag being found towards the northern limit of excavation. The northern part appeared to be the south-eastern corner of a rectangular enclosure running on a northwest to southeast orientation. The main enclosure ditch was 1.1–1.8m wide and 0.4–0.5m deep, whilst the associated curvilinear ditch was 1.28m wide and 0.34m deep.

The enclosure appeared to be centred on a large waterhole/sump (335267), which was c 15m wide and c 3.5m deep with peat-rich fills at its base. The feature may have formed either a drainage sump or

water storage point, possibly associated with surrounding irrigation systems. It may have been fed by a ditch which ran northwest to southeast (Ditch 32.11).

Cutting into the north-western edge of the large waterhole/sump was a quarry pit (335264) measuring 12m wide and c 0.66m deep. This was filled with peat-rich material. Further clay extraction pits (Pit Group 32.6) lay in the surrounding area, largely to the north of Ditch 32.11, on the east-facing slope in Area 1. The pits, which were randomly positioned, were generally small and sub-oval in plan with steep sides and relatively flat bases, although larger pits (335150 and 334965) were present. One quarry pit (335264) produced a significant assemblage of dressed building stone including a column base, suggesting that a large and important Roman masonry building was located to the north of the development area.

An area of ovens or kilns of uncertain function lay on the eastern side of an early Roman enclosure (Enclosure 32.6; Kilns 32.1). These extended beyond the limit of excavation to the north and consisted of a series of small bowl-shaped pits with shallow flues surrounded by *in-situ* burning. Their fills were consistently rich in charcoal and some contained significant fragments of burnt clay superstructure. These features were probably associated with the clay extraction pits (Pit Group 32.6).

Four badly truncated burials (321013, 322639, 322599 & 321705; Burial Group 32.1) of possible late Roman date were positioned along the cusp of the hill in Area 1 (Figure 32.7). The most intact example (321705) was an extended burial lying supine, only the legs and arms of which survived: its feet had been truncated by an Anglo-Saxon ditch (32.14), while the body and skull had been removed by ploughing. The remaining burials generally consisted of fragmentary long bones. Burial 322639 produced a fragment of coloured millefiori glass (SF 32246).

Two further ditches of apparent late Roman date were found in Area 3 (ditches 32.12 and 32.13; Figure 32.9).

Anglo-Saxon

Given that the Roman-period settlement within Area 1 continued until at least the end of the 4th century, it seems likely that, with its position on a well-drained gravel ridge adjacent to the main Roman road, settlement at the site would have continued into the 5th century. The presence of small numbers of decorated and stamped sherds (c 1.5%) within the handmade Anglo-Saxon pottery assemblage also indicates the likely presence of late 5th century Anglo-Saxon occupation, as does the fact that six contexts contained later Roman pottery alongside early Saxon pottery. This suggests that the site may have seen continuity of occupation across the Roman to Anglo-Saxon period. Approximately 1,800 sherds of hand-made early Saxon pottery were recovered from Area 1. None have thus far been identified from Areas 2 or 3. Large quantities of animal bone were also recovered, along with worked bone objects (needles, pints, pin beaters and combs), spindle whorls, loomweights and a small quantity of metalwork.

The main boundary/enclosure ditch on the southern side of the Roman settlement at the north of Area 1 was recut along its entire length, and was extended further to the west beyond the northern edge of excavation. Its upper fills contained a sizeable assemblage of handmade early Anglo-Saxon pottery (130

sherds), including some stamped/decorated sherds, alongside a small quantity of residual Roman pottery (17 sherds). The basal fills of the ditch, however, were largely sterile. Large boundary ditches (and in fact, any ditches) are extremely rare on otherwise open early Anglo-Saxon sites and the presence of this feature potentially adds weight to the suggestion of continuity of occupation through the 5th century within the Roman site to the north.

Early Saxon settlement-related features covered the gravel ridge of Area 1 in the area to the south and southwest of the Roman settlement. These features clearly extended to both north and south and thus represent only part of the wider, and largely unenclosed, settlement. The principal features recorded at this early period were the sunken-featured buildings. Twenty-four such structures were recorded, ranging from small to medium-large and with a relatively large group of small, shallow variants. Their construction and use probably spanned the latter part of the 5th century through until at least the late 7th or possibly early 8th century. The buildings produced a significant quantity of pottery amounting to over 40% of the total handmade assemblage from the site, alongside a significant animal bone assemblage (including a large number of dog skulls), unfired and fired clay loom weights and bone tools including weaving implements and an almost complete bone comb (around 200mm in length). While an assemblage of 770 sherds of contemporary pottery was recovered from the SFBs, this only provides an average of 32 sherds per feature, and none of this is interpreted as direct disposal. That said, the majority of this material was recovered from the primary fills and therefore entered the features during, or very shortly after, the period of use. Further study of this material, alongside the large deposits of unfired clay and 'small finds' assemblage will shed much needed light on the use-life of these features.

A substantial number of pits, in the region of 40-50, were probably contemporary with the use of the sunken-featured buildings, together with some of the wells and other features. The pits generally produced small quantities of contemporary pottery alongside residual material and none appeared to contain primary, or even secondary, refuse. The possible linkage of the pits to the surrounding buildings is a key question for the analysis stage.

Three post-hole structures (one isolated and two forming part of a complex) are currently assigned to the early Anglo-Saxon phase, although there are further post-hole lines to the south that may represent truncated post-built buildings. At least five buildings to the northwest, which are currently phased to the Middle Saxon phase, could be of earlier date. The complex of buildings in the eastern part of the area do not have the appearance of 'standard' Anglo-Saxon structures. The larger of the two may have been up to 13m in length and was of complex construction, while the smaller was trapezoidal and measured 10m long and 3.2m wide to the west, 1.8m to the east. A single radiocarbon date from one of the post-holes indicates that the disuse of these structures occurred in the late 6th/early 7th centuries.

The open settlement of the early Anglo-Saxon period was overlain by several phases of ditched enclosures. These originated as relatively slight ditches and became progressively larger and deeper over time. It cannot be known whether the earliest ditches were contemporary with any of the sunken-featured buildings; while it is perhaps likely that there was some overlap, it is equally possible that the construction of the enclosures marked the end of the earlier open settlement and coincided with the

end of the construction and use of the sunken-featured buildings, a third to a half of which were truncated by ditches and mostly by those of the earliest phase.

The pottery assemblage from this phase is still dominated by handmade Anglo-Saxon wares, although as the majority of features that can be assigned to the middle Saxon phase are ditches, and few contain definite primary dumping deposits, it is not yet clear how much of this material can be classed as residual; handmade pottery was still in production and use in this area into the 8th century. There are two well-defined (and non-imported) middle Saxon pottery types within the region and both are represented within the assemblage – Maxey Ware and Ipswich Ware. The former was produced across southern Lincolnshire and Northamptonshire from the second half of the 7th century, the latter in Ipswich from around the 720s. While Ipswich ware is ubiquitous (while not abundant) on middle Saxon sites across south Cambridgeshire, Maxey ware is extremely rare and is generally only found as single sherds or in very small quantities. The Maxey ware assemblage at this site, at over 100 sherds (mostly large and in good, fresh condition,) is by far the largest group in this part of the region. The Ipswich ware assemblage (at less than 50 sherds) occurs at the 'normal' level for a site of this size. Eight sherds of North French Blackware, indicating higher status, were also recovered.

STRATIGRAPHIC SUB-PERIOD 1 – EARLY SAXON

The outermost of the two main boundary/enclosure ditches at the southern side of the Roman settlement was recut (Ditch 32.14; Figure 32.7) to extend it further out to the west. Its upper fills contained a sizeable assemblage of handmade early Anglo-Saxon pottery (130 sherds), alongside a small quantity of Roman pottery (17 sherds). The basal fills of the ditch were largely sterile. A second ditch (Ditch 32.15) on a northeast to southwest alignment, at right angles to ditch 32.12, was dug along the line of a middle Iron Age boundary ditch (Ditch 32.5) and truncated the feet of one of the late Roman burials (Burial Group 32.1).

Early Saxon settlement-related features covered the gravel ridge exposed in Area 1, in the area to the south and southwest of the Roman settlement. The recorded features clearly extended to both the north and south of the excavation area, thus representing just a part of the wider, largely unenclosed, settlement. The principal features represented within this settlement were sunken-featured buildings (SFBs) or *Grubenhäuser*; a total of 24 such buildings was recorded (SFBs 32.1 to 32.24; Table 1), ranging from small (2 x 1.70m) to medium-large in size (5.3 x 4.1m). Seventeen of the features were aligned broadly WNW-ESE, with the other seven on five different alignments. The majority were based on a standard two-post structure, with the post-holes positioned either within or beyond the edge of the pit on the longer axis. There was great variation in the depths of the pits (from 0.03m to 0.70m deep) and they contained a sequence of one, two or three fills: three features contained only a primary fill, the majority (17 features) contained primary and secondary fills, and just four features contained a tertiary fill. The lack of tertiary fills probably reflects truncation by ploughing.

Table 32/33.1 The sunken-featured buildings

SFB No. (32.*)	Length (m)	Width (m)	Orientation	Unfired clay (kg)	Small Finds
1	4.6	3.7	WNW-ESE	8.9	-

2	3.9	3.2	NW-SE	3.4	F32443, F32444, F32445, F32458, F32459
3	3.1	1.9	NE-SW	-	-
4	4.8	3.4	WNW-ESE	1.3	F32633
5	5.1	3.6	WNW-ESE	32.9	F32630, F32614, F32618, F32612, F32613, F32620, F32628, F32629, F32631, F32616, F32617, F32622, F32621, F32626, F32632, F32623, F32624, F32625, F32627, F32619
6	3	2.4	WNW-ESE	-	-
7	4.4	3.3	WNW-ESE	4.3	-
8	2	1.9	WNW-ESE	0.2	-
9	3.2	3	NNE-SSW	0.3	F32229
10	4.2	3.8	ENE-WSW	5.8	-
11	5.2	4.1	NNW-SSE	16.9	F32141, F32131, F32142, F32138, F32132
12	3.3	2.6	NNE-SSW	3.7	F32245
13	4.2	4	NNE-SSW	3.9	F32145, F32150, F32147
14	2.7	2.4	NW-SE	-	F32133
15	2.1	2	WNW-ESE	0.2	-
16	2.6	2.5	WNW-ESE	2.7	F32136, F32137
17	2.8	2.4	WNW-ESE	1	F32182, F32183, F32184, F32185
18	4.3	2.8	WNW-ESE	0.2	F32081
19	3.8	2.5	WNW-ESE	5	F32228, F32225, F32227, F32226
20	4.7	3.8	WNW-ESE	1.9	-
21	4.8	4.1	WNW-ESE	22.1	F32635, F32637, F32638, F32634, F32639, F32640, F32641, F32643, F32644, F32771, F32645, F32646, F32647, F32650, F32649
22	3.9	3.4	WNW-ESE	-	F32022, F32039
23	3.3	3.1	WNW-ESE	-	F32029, F32030, F32031
24	3.8	3.4	WNW-ESE	-	F32775, F32038

The primary fills of the SFBs relate to the use-life of the structures, with the secondary fills representing backfilling. The finds assemblages within the primary fills were therefore recorded in detail and those of the secondary fills by context and quadrant. The principal finds types within the fills were pottery, animal bone and unfired clay fragments with relatively frequent 'small finds' including worked bone (pins, needles, pin beaters and combs), spindle whorls, loomweights and occasional metal objects. The majority of the finds, specifically the pottery, unfired clay and 'small finds' were recovered from the primary fills. From an assemblage of c 770 Anglo-Saxon pottery sherds within the buildings, 67% was recovered from primary fills and 28% from secondary fills. By comparison, 46% (73 sherds) of the (residual) Roman material was recovered from the secondary backfills, with just 26% from the primary

fills. Approximately 116kg of unfired clay fragments were recovered from the SFB fills, 95% of this from the primary fills.

Figure 32.11 shows the detailed recording of SFB 32.21 in the far northeast of the area, within the Roman enclosure. Table 2 sets out the finds assemblage from the feature.

Table 32/33.2 Finds assemblage from SFB 32.21

Fill	A-S pottery (No)	Roman pottery (No.)	Unfired clay (kg)	Small Finds
Primary	55	22	22	3 needles/pins, 3 loomweights, 5 metal objects
Secondary	50	40	-	1 comb, 1 needle/pin
Tertiary	12	36	-	1 comb, 1 loomweight

Sequencing the construction and use of the SFBs may be possible through further analysis of finds assemblages and a significant radiocarbon dating programme; however, construction probably began in the latter part of the 5th century and continued until the later 7th century. Almost a third of the features were partially truncated by 'middle Anglo-Saxon' ditches which may have dated to the later 7th century.

An extensive area of post-holes on the northwestern edge of Area 1 indicates the presence of perhaps five post-built structures and a number of fencelines. The date of these is unclear and, while they could belong to this early phase of occupation, they are currently phased as middle Anglo-Saxon (see below). Three further post-built structures lying to the southeast are currently thought to date to the early Anglo-Saxon period, one was isolated and the other two formed part of a complex; all three were aligned WNW-ESE. The isolated building (Building 32.7) sat over the northern ditch of Bronze Age Enclosure 32.1, and with the main structure measuring c 8.5m long and 4.8m wide may represent a 'standard' Anglo-Saxon hall-type building. Approximately 45m to the north-east was a complex of two potentially linked structures (Buildings 32.8 and 32.9). The larger of the two (Building 32.8) may have been up to 13m in length, although only 4m wide, and appears to have been of complex construction. The smaller example (Building 32.9), potentially linked by a short fenceline at the northeast, was slightly trapezoidal at 10m long, 3.2m wide at its western 'open' end and 1.8m at the closed eastern end. The main structural post-holes of all three buildings were relatively large and deep, at around 50cm diameter. The post-hole fills in the trapezoidal structure contained noticeably high concentrations of charcoal, some of it in large fragments. A radiocarbon date obtained from one of these produced a date within the latter half of the 6th or beginning of the 7th century (550-645 cal AD, 95.4%; GU48279). Small quantities – single sherds only – of handmade pottery were recovered from all three structures, along with residual Neolithic and Roman sherds from the larger buildings. Part of a penannular brooch was recovered from one of ten post-holes in Building 32.7 (321716; SF32140).

Approximately 40-50 pits were contemporary with the sunken-featured buildings, alongside a number of wells and other features. A large and deep (2.54m) well (322922), which was sub-rectangular on the surface (11.5 x 10m) and circular below (4.60m diameter), truncated the ditch of a Roman enclosure

(Enclosure 32.6) in the northern part of Area 1. No datable finds were recovered from its lower fills, although c 100 sherds of pottery came from the upper fills, with material of Roman and Saxon date in equal quantities. The date of construction and use of the feature – somewhere between late Roman to early Saxon – is uncertain but the basal fills contained waterlogged material suitable for radiocarbon dating.

Four pit groups have been identified at this stage, all on the western side of the site. They are described from south to north. One cluster (Pit Group 32.8) lay to the north of SFB 32.11 and truncated SFB 32.10. It comprised four intercutting pits, the deepest of which was over 1.2m deep. The pits had steep or undercutting sides and contained multiple fills. A second pit group (Pit Group 32.9) comprising c 9 pits lay immediately north of, and would presumably have been associated with, two adjacent buildings (SFBs 32.5 and/or 32.6). These pits were shallower, with bowl-shaped profiles and measured around 0.2 - 0.5m deep. A third group (Pit Group 32.10) lay to the northwest of SFB 32.5 and may have been associated with it. Consisting of seven features, these pits were generally deeper than surrounding pits, with one example being 1m in depth. Only one clearly defined pit group had no obvious potential association to an SFB (Pit Group 32.11). However, these features lay very close to the northern edge of excavation and it is possible that an associated building lay immediately to the north. This group consisted of relatively shallow bowl-shaped features around 0.3-0.6m deep.

The pits in all the groups intercut and their fills consistently contained small assemblages of general domestic occupation debris, none of which represented primary waste disposal. The contemporary pottery assemblages recovered from the four groups were small (amounting to 23, 18, 12 and 27 sherds respectively) and two of the groups contained residual prehistoric assemblages which were as large as their contemporary ones.

STRATIGRAPHIC SUB-PHASE 2A (MIDDLE ANGLO-SAXON - LATER 7TH CENTURY)

The open settlement of the early Anglo-Saxon period was overlain by several phases of ditched enclosures, which began as relatively slight ditches on a NNE-SSW (and perpendicular) alignment (Enclosure System 32.11; Figure 32.7). The ditches associated with this system were relatively slight, measuring up to 1.20m wide and c 0.50m deep. This later developed into a system of larger, deeper-ditched curvilinear enclosures (Sub-period 2b, see below). It is not known whether Enclosure System 32.11 was contemporary with any of the sunken-featured buildings, although up to half of the structures would appear to have been cut across by the construction of these early ditches. It is likely that there was some overlap, with a number of buildings continuing in use through the first enclosure period: however, it is equally likely that the construction of the enclosures marked the end of the earlier open settlement and coincided with the end of the construction and use of sunken-featured buildings both in general and here in particular.

A large well (322949) occupied the corner of the early curvilinear ditches at the east of the enclosure system. It was 1.5m in diameter and c 1.5m deep. A complete cattle skull was placed within it during backfilling and the top fill produced one of the three early 8th century *sceattas* recovered from the excavation (SF 32337).

A group of three very large, deep, narrow postpits at the centre of Area 1 appear to relate to this early enclosure phase (320655, 322193 and 321399). The three features were in line, on the same alignment as the NNE-SSW ditches (and those which followed) and separated by gaps of 29m and 16m. A fourth feature, which lay nearly 70m to the northeast (322138), was of similar form. The southernmost of these features (320655) had been completely infilled, post-use, by a dense grey ashy deposit. The northernmost (321399) clearly remained functional when the following phase of ditched enclosures were constructed and the ditch was dug elaborately around the feature.

The pottery assemblage associated with this early phase is still entirely dominated by handmade Anglo-Saxon wares, although as the majority of features that can be assigned to the phase are ditches, and few contain definite primary dumping deposits, it is not clear how much of this material can be classed as residual; handmade pottery remained in production and use in this area into the 8th century.

STRATIGRAPHIC SUB-PERIOD 2B (MIDDLE ANGLO-SAXON – 8TH CENTURY)

The early, largely rectilinear enclosure system (Enclosure System 32.11) appears to have developed rapidly into an arrangement of large, slightly more curvilinear, sub-square enclosures measuring 50 to 60m across (Enclosure System 32.12; Figure 32.7). Within this system were realignments and an almost complete re-cutting of some of the larger enclosures, perhaps suggesting at least two decades of occupation/use. There were gated entranceways into some of the enclosures, the most obvious at the southern limit of excavation. The ditches were now larger and deeper, measuring up to 1.50m wide and 1.20m deep. The ditch fills contained small and largely residual pottery assemblages throughout most of their circuits, with the exception of one area at the south of the system, 'inside' the gated entranceway leading to the south.

Part of the ditch running across the centre of Area 1 (Ditch 32.16) produced an assemblage of 54 sherds of Maxey ware pottery from excavated sections along the southern 25m of its length (along with four, presumably unrelated, handmade sherds). Further Maxey ware sherds were recovered, residually, from the recut of this ditch and further ditches at the south of the enclosure. The significance of this material is discussed below. An extensive spread of fired clay, potentially a demolition/clearance deposit from a nearby oven, was also found within this ditch, at the same level as the Maxey ware. Immediately to the east, the large earlier postpit (320655) was backfilled in its entirety with an ashy, oven/kiln-waste deposit.

A final, major expansion to the enclosure system saw large square enclosures constructed to the west and probably to the south, beyond the limit of excavation (Enclosure System 32.13). The ditches here were larger and deeper: their character suggests a possible defensive function. At the southern limit of excavation, the original entranceway was impressively re-built with the construction of a gateway with colossal post-holes measuring over 2m deep (Figure 32.7, detail). When this main gateway was removed and backfilled, the burial of a young adult female (Sk. 320836) was placed prone in the entranceway, above the post-hole. The burial was radiocarbon dated to 680-879 cal AD at 95.4% confidence (GU45482): however, taking the finds and stratigraphy into account, its date probably lies within the 8th century. While the removal of the gate and the burial may have marked a major change in the form of occupation of the settlement, it did not mark a complete end of use - a relatively minor ditch was cut across the gateway once backfilled, implying that the enclosure itself remained in use.

An area measuring 60 x 30m in the north-western part of Area 1 contained a large number of post-holes. No earlier or later ditches (except for medieval furrows) were found in this part of the site, and no sunken-featured buildings, pits, wells or similar features were found. A number of post-built structures can be recognised within the area, and it is possible that more lie beyond the edge of excavation to the north. Fence lines were also noted within the area, together with other potential post-built structures. Dating these buildings is problematic: while the mode of construction of Anglo-Saxon buildings did change in the 8th century this was not always the case, and their form and size often remained the same. At present, these buildings have been assigned to this sub-period largely as a result of the fact that no middle Anglo-Saxon ditches cut across the area, and a scatter of middle Saxon Ipswich ware pottery was found immediately to their southeast. Where clearly visible, the buildings were of 'standard' Anglo-Saxon size and shape (at c 4 x 8m) and with posts on the long axis walls set c 0.70m apart. The area had been plough-truncated and many of the post-holes were shallow; it is likely that many others have been completely removed.

Lying close to the edge of Area 1, one structure (Building 32.10) consisted of two lines of post-holes on a WNW-ESE alignment. It measured c 4m wide and c 8m long, its constituent post-holes being c 0.3m in diameter and 0.15m deep. Immediately adjacent and to the southwest of this structure lay another building (Building 32.11), aligned at right angles to it. This building was c 5m wide, 8m long and was at least partially constructed with paired posts: it consisted of eleven paired post-holes and at least nine single post-holes. These were c 0.2m in diameter and approximately 0.12m deep. A possible extension was attached to the south-western side of this building, beyond which lay a fence line.

Another structure (Building 32.12) lay on the same alignment as Building 21.10 and may represent the surviving, deeper half of a building. Two lines of six post-holes formed a square 4m long and 4m wide. The post-holes were approximately 0.2-0.3m wide and only c 0.1m deep, perhaps lending weight to the suggestion that half the building has been plough-truncated.

A large number of post-holes to the west, in short lines on the alignments of the other structures, probably contained another building (Building 32.13), though no footprint can currently be suggested. These post-holes were around 0.2-0.3m in diameter and approximately 0.15-0.2m deep. A further small structure, c 5.70m long and 4m wide, of mixed post-hole and beam-slot construction, was built in the vicinity of an earlier enclosure ditch in the central part of the enclosure system (Building 32.14)

At the western edge of Area 1 (Figure 32.3), trenching was conducted down the side of the clay slope. The main feature in this area, which lay at the bottom of the slope, was a pond, spring or pool (320944), filled with waterlain peaty deposits. The eastern edge of the feature had a hurdle built against it as a revetment. Several wells were dug to the east of the pool (320936, 320943 and 320952), measuring between 1 and 1.7m in diameter and up to 1.4m deep. The largest of these (320952) produced roundwood fragments from around the edge of the cut, suggesting that it too had a wicker lining. Another well was dug within one of the western enclosures (322614; Figure 32.7), truncating an earlier ditch. Given its elevated location on the gravels the well, while just 1.23m in diameter was c 2.50m deep.

Three Anglo-Saxon *sceattas*, all dated to the first half of the 8th century, were recovered from Area 1. Two were found in ditches, whilst the third came from the top fill of one of the wells.

Medieval/Post-medieval

Later medieval and post-medieval use of the site was dominated by furrows, which formed a substantial field system overlying Areas 1, 2 and 3 (Field System 32.4; Figure 32.14). The furrows were aligned northwest to southeast or NNE-SSW and truncated features attributed to all previous phases.

At least two field boundaries were created during this period of landscape use. The main example was aligned on a NNE-SSW orientation (Ditches 32.17 and 32.18; Figure 32.14), while the second ran on a WNW-ESE alignment, meeting the first boundary near a group of large strip quarry pits (Pit Group 32.12, Area 1). A second group of quarries (Pit Group 32.13) indicates small scale gravel extraction at the top of the hill (Area 2). These pits were over 1m deep with steep to vertical sides.

Finds and environmental summary

Tables 32/33.3 – 3/33.5 provides a quantification of the finds, bone, and environmental samples from TEA 32.

The early prehistoric pottery included a large assemblage (216 sherds) of early Neolithic plain bowl and Mildenhall Ware bowl, 86 sherds of middle Neolithic pottery (mainly Peterborough Ware from one of the pits), 23 sherds of early Bronze Age grog-tempered fabrics, and 32 sherds of middle Bronze Age shell-tempered vessels, mainly large barrel-shaped vessels. 654 worked flints were also recovered from the site and included cores, arrowheads and scrapers, indicating activity from the Mesolithic/early Neolithic into the early Bronze Age.

Low quantities of cereal grains were recovered from the earlier prehistoric features - occasional charred barley, hulled wheat, and fragments of hazelnut shells from the Neolithic pits; and low quantities of barley, hulled wheat, and hedgerow plants from the Bronze Age features. The animal bone assemblage from the earlier prehistoric features was dominated by sheep/goat.

The Iron Age pottery assemblage was the largest from the site and included 211 sherds of early Iron Age plain flint-tempered sherds, 1741 sherds of middle Iron Age sandy and shelly wares, and 422 sherds of late Iron Age grog-tempered Belgic type vessels. A single Iron Age loomweight was also uncovered. Low quantities of cereal grains, with very little chaff, was recovered from the Iron Age features, and the animal bone assemblage was predominantly cattle.

The Roman pottery assemblage was focused on coarse sandy greywares, from the whole Roman period. There was also a small number of finewares (particularly Nene Valley colour-coated wares), and a collection of 'trimmed' base sherds, modified for secondary (ritual?) use. Interestingly, six contexts contained Latest Roman pottery alongside early Saxon pottery, and may suggest 5th century activity.

Other Roman finds included 47 coins, a collection of dress accessories (including one reworked to resemble a phallus), and roofing tile (some with signature marks and some from a hypocaust). There

was also a small collection of Roman glass, including one cast millefiori bowl which accompanied an inhumation and may have been a treasured heirloom.

The environmental samples from the Roman features included higher quantities of grain, chaff and charcoal, reflecting an intensification in agricultural processing and focus on spelt wheat. The animal bone assemblage was focused on cattle, with sheep/goat, pig, horse, and game species.

The Saxon pottery assemblage was mainly early - middle Saxon undecorated pottery, from the 6th century onwards. There was also a collection of middle Saxon Ipswich and Maxey wares. Eight sherds of North French Blackware, indicating higher status, were also recovered. The Saxon registered finds were mainly objects associated with cloth production, including loomweights, spindle whorls, and thread pickers. There was also a small collection of dress accessories, items associated with hygiene, and two or three awls.

The Saxon plant remains included evidence for continued cultivation of hulled wheat into the early Saxon period (potentially indicating the continued use of Roman fields?) alongside the introduction of rye. The Saxon animal bone assemblage was more diverse in species than any of the other periods and included the main domesticates alongside wild bird and small mammals.

Table 32/33.3 Quantification of finds from TEA 32

Type	Count	Weight (g)	Date/type
Pottery	357	2,415	Early Prehistoric
	2,669	29,996	Iron Age
	1,715	23,872	Roman
	1,643	27,077	Post-Roman
Coins	59		
Small Finds	396		
Lithics	654 (worked)		
	234 (burnt unworked)		
Stone	228 fragments		
Glass	11		
Wood	5		
Building Materials	431	40,967	
Metalwork Residues	102	2,569	

Table 32/33.4 Quantification of bone from TEA 32

Type	Count	Weight	Date/type	% of bone assessed
Inhumations	9			
Cremations	3			
Disarticulated bone	1			
Animal Bone	4,116	81,85-		29

Table 32/33.5 Quantification of environmental samples from TEA 32

Type	Count	Date/type
Bulk Environmental Samples	1065	
Monoliths	1	

Provisional interpretation and potential

Early prehistoric

The excavations at TEA32/33 produced perhaps the largest assemblage of Neolithic flint and pottery from the project. The pottery assemblage numbers approximately 400 sherds and the worked flint around 600 pieces, the vast majority of which was recovered from Area 1 (TEA 32). The latter is principally early Neolithic in date, with finds coming from pits and from surface scatters surviving within remnant buried soils. Some of this material probably dates to the late Mesolithic. The main pottery type is Mildenhall ware, with an assemblage of later Peterborough ware being recovered from Area 2. Perhaps providing the project's only evidence for substantial early Neolithic occupation, the site warrants further analysis and radiocarbon dating where possible.

Bronze Age

Evidence for the early Bronze Age was largely absent across the three excavated areas, with just a handful of Collared Urn pits being found in Area 1 and occasional sherds of residual Beaker pottery. However, interpretation of the three small (c 7m diameter) ring ditches in Areas 2 and 3 warrants further research: they are tentatively interpreted here as small barrows and may relate to the ring bank monuments identified by Stuart Needham (pers. comm.) as a monument type associated with burial mounds but which are not always funerary.

The enclosures and field systems recorded across Areas 1, 2 and 3 represent the largest and most clearly defined middle Bronze Age landscape observed on the project. The very large enclosure within Area 3, set within its own field system and with associated entranceways, wells and a cattle burial, is particularly well preserved and was revealed in its entirety. Since the area was low-lying and damp, it saw little further development from the later Bronze Age onwards, with few features overlying it. The Area 3 enclosure and its re-working, together with associated features (given their depth and waterlogged fills) provide ideal candidates for radiocarbon dating and offer the best opportunity on the project to study the middle Bronze Age landscape. There are excellent comparative sites to both the north and east along the Fen Edge at Needingworth/Over/Willingham (eg The Barleycroft Paddocks: Evans and Knight 1997) and to the southeast in the Addenbrooke's landscape of Clay Farm, Trumpington (Phillips forthcoming).

Iron Age

Evidence for the early Iron Age is relatively rare in the local area and, at c 280 sherds, the site provides the largest assemblage of pottery of this date from the entire project. Early Iron Age features were recorded across Areas 1 and 2 and included pits and wells/waterholes. Quantities of residual pottery

were also found within later features. The findings from site TEA32/33 will enhance current understanding of early Iron Age occupation and land-use across the area covered by the project – while remains of this date are not dense at any of the TEA sites, they are present at many of them.

The middle Iron Age enclosures (Enclosures 32.3 and 32.5) have the potential to provide important information about this activity, since their ditches produced significant quantities of pottery and domestic waste; their deeper features were well-watered if not waterlogged. It is possible that the unusual double-ditched element of Enclosure 32.5 was a shrine, associated with a central pit.

Romano-British

The evidence from the Romano-British period attests to significant buildings and associated enclosures of the period, placed within a landscape of fields containing bedding trenches. It is possible that the remains indicate the presence of a masonry structure – perhaps a *mansio* or *mutatio* – on the *Via Devana*, though the settlement was clearly engaged in significant agricultural activities.

Associated with this building and the enclosures which surrounded it were distinctive fields of bedding trenches. Such fields are now known across the region and have been variously interpreted as relating to viticulture or to the production of specific food stuffs (such as asparagus or fruit trees) (cf Allen et al 2017, 73-4). However, associated environmental evidence is typically lacking. In this regard, material from the large waterhole/sump which may have been associated with use of the fields in the late Roman period, has clear potential to provide environmental evidence (including plant remains and pollen) to assist identification of the possible product of these fields. The bedding trenches here would appear to be typically early Roman in date, with agricultural activity of later date probably changing to larger open fields.

Identification of the character of the craft/industrial activity evident in the northern part of Area 2 requires further analysis, including the examination of related environmental samples. The location of this activity on the periphery of the main settlement is fairly typical for Roman rural settlements (Allen et al 2017, 186-8). The substantial waterhole found at the top of the hill in Area 1 requires clarification of its date, as do the large ditches, some of which may indicate 5th-century occupation of the site. The two groups of burials (cremations and inhumations) require radiocarbon dating. The evidence from the various tracks provides additional insights into local routes, particularly in relation to the nearby Roman road from Cambridge to Godmanchester.

Anglo-Saxon

One of the main objectives of the excavation was to seek evidence for continuity of occupation across the Roman to Anglo-Saxon period. While the occurrence of such continuity was probably relatively common (other than on sites that became waterlogged during this period), it has thus far been recorded on very few sites within the region. Full analysis of the remains from Area 1, with an intensive radiocarbon dating programme, has the potential to provide a wealth of new evidence for this period. The handmade pottery assemblage is both well stratified and the largest both on the project and in the immediate region: it spans the late 5th to early 8th centuries. Full analysis of this assemblage should enable a style and fabric chronology to be established for the period.

While 'normal' in many ways, the early Anglo-Saxon occupation of Area 1 is (alongside that recorded at sites TEA7, 10 and 12 at Brampton) the largest and densest thus far recorded in the locale. The numerous sunken-featured buildings, all of which were placed within a relatively tight area suggesting close inter-relationships, have been intensively excavated and recorded and perhaps provide the best dataset for such remains in the region. The main objective for the post-excavation analysis of these features will be to offer interpretations as to the construction, use and abandonment of the structures and the subsequent timber buildings. A secondary aim will be to attempt to phase, date and group the features into 'sets' of contemporaneous structures and suggest a likely start and end point for their construction and use.

The open 5th to 7th century settlement was overlain, perhaps in the late 7th century, by an extensive and multi-phased ditched enclosure system. The settlement was characterised by the presence of Maxey ware pottery and had gated entrances through deep, defensive ditched enclosures. Thus far, most of the middle Saxon settlement excavations undertaken in the region have been relatively small scale, with the exception of those to the west of Ely (Mortimer et al 2005; Mudd and Webster 2011), primarily as a result of the fact that many of them later developed into villages and towns. The discovery of a fossilised settlement within open fields was extraordinarily rare and its analysis has clear potential to provide key new information on a range of issues during the analysis phase. These will include the characterisation and, where possible, refined chronology of the sequence of buildings.

Maxey ware pottery was produced across southern Lincolnshire and Northamptonshire from the second half of the 7th century, although its exact chronology is still uncertain. Finds of Maxey ware are extremely rare across South Cambridgeshire and are generally only found as single sherds or in very small quantities. The Maxey ware assemblage from Conington (at more than 100 sherds, most of it in large fragments and in fresh condition) is by far the largest recovered in this part of the region. The dump of material in Ditch 32.16 (Area 1) would appear to represent an event, or a very limited period of time, during which a number of large Maxey ware vessels were brought to the site, used and discarded.

The western boundary of the parish forms the county boundary between Huntingdonshire and Cambridgeshire and may also have marked the boundary between two of the minor middle Anglian Kingdoms recorded in the Tribal Hidage of the 7th century. The place name Conington is a form of Kingston - 'Kings Enclosure'. Such enclosures are understood to have been deliberately planted settlements that were designed to aid the control and organisation of newly conquered lands. This is the first excavation of such a site and suggests its construction in the late 7th century under Mercian control, with abandonment no more than a century later. A recent publication by Jill Bourne (2017) indicates that the majority of the known settlements named Kingston were created by the Kings of Wessex during the 8th and 9th centuries, although the new evidence from Conington might suggest that this was a system and practice begun much earlier, by the Kings of Mercia.

The date at which the middle Anglo-Saxon occupation of the site ceased will form a particular focus of the analysis. At present it is thought that the settlement was abandoned at some point during the 8th century, certainly before the middle of the 9th century given the absence of late Saxon pottery types (St Neots, Stamford and Thetford wares). The burial of a young woman, face down in the southern gateway

ditch, atop the infilled gatepost post-hole, could mark the abandonment of the settlement, although finds, stratigraphy and a single radiocarbon date currently date the burial loosely within the 8th century. It seems likely that the cessation of settlement at this site coincided with the commencement of settlement, or at least of a larger phase of settlement, within the current village of Conington to the south.

Medieval and post-medieval

The area clearly formed part of the medieval open fields of Conington, evidenced by the extensive furrow system recorded. A post-medieval enclosure boundary bisected the site on a NNE–SSW alignment with another heading off to the southeast. These ditches remained on Ordnance Survey maps until at least the 1940s. Where the two boundaries met lay a number of small strip quarries, presumably of broadly contemporary date. While these features have relatively limited potential for further analysis, they will contribute to understanding of the development of agricultural use of the area during the relevant periods.

Recommendations

As noted above, further stratigraphic analysis and research is clearly required for the full potential of this multi-period site to be realised, including a comprehensive programme of radiocarbon dating from features of all periods. This should include modelling of dates from the early-mid Saxon period. Full analysis of the finds and environmental material will be crucial for enabling a greater understanding of chronology, alongside social and economic development. Broad intra-site spatial analysis of these data should provide indications of differing functional areas during the Iron Age, Roman and Saxon periods, while detailed analysis of the material within the sunken-featured buildings is of great importance for furthering our understanding of these structures.

TEA 34

Chris Pennell

Archaeological investigations carried out at TEA 34 (NGR: TL 3488 6623) were undertaken ahead of the construction of the south expansion to the A14 mainline, approximately 1 km west of Cambridge services in February 2017 (Figure 34.1). The site was 0.7ha in size. The underlying geology was Ampthill clay with high fossil content to the south (NERC 2019), and the site was situated at approximately 18.00m AOD.

The area was subject to a trial trench evaluation by Cambridge Archaeological Unit (CAU) in 2009. This identified two pits and two curvilinear ditches running on a variety of alignments, which contained middle Iron Age pottery as well as animal bone and a single worked flint (Patten, Slater and Standing, 2009).

Topsoil was removed by machine under archaeological supervision with no subsoil exposed. Colluvium, which was covering the southern half of the site, was also removed by machine under supervision exposing the archaeology beneath.

Summary of results (Figure 34.2)

Palaeochannel

A large palaeochannel was present in a natural valley across the centre of site, aligned northeast to southwest. It was likely this channel was active in the Iron Age when a field system was present to the east. This palaeochannel had a maximum depth of 0.62m and width of 5.60m and it contained two distinct clay fills. These fills are thought to be natural infilling and animal bone was recovered from the upper fill (320016). Three post-medieval land drains were located within the channel and these caused the feature to fill with water, which restricted recording.

Iron Age

An Iron Age enclosure (Enclosure 34.1) was identified to the east of the palaeochannel. This was first identified within Trench 207 during the 2009 trial trenching, and the excavation revealed it to be roughly rectangular with an internal area that was approximately 20m by 10m. It was open to the east and the terminals of the ditch flared to create a funneled entrance for animal control. This enclosure was formed by a single ditch with evidence of maintenance and re-shaping especially along the southern side where a major recut was noted. The ditch ranged from 0.70m to 1.80m wide and between 0.24m and 0.68m deep, being shallowest at its terminals. middle Iron Age pottery was present in the fills of the ditch.

Within this enclosure were two pits, the western one [340004] was 1.40m in diameter and 0.18m deep, and the eastern one [340033] was 0.70m diameter and 0.17m deep. The pits were filled with clay that contained small sherds of pottery and fragments of animal bone. One other pit [340062], 1.22m in diameter and 0.42m deep, was located cutting the southern edge of the enclosure ditch. This pit [340062] was backfilled with a stony clay (340061) that contained pottery and animal bone.

A segmented ditch (Ditch 34.1) was added to the south-eastern corner of Enclosure 34.1 to form part of

a possible paddock, heading south-east beyond the limit of excavation. Three lengths of the ditch were identified and investigated, and these varied in width between 0.95m and 0.40m, and ranged in depth between 0.09m and 0.25m. It was also possible that there was an entranceway between the northern and southern ditches, [340040] and [340048], which was later blocked by Ditch [340046]. Middle Iron Age pottery, animal bone and burnt clay was present in these ditches and within the backfill (340045) in ditch [340046] was a number of pottery sherds from one vessel.

A small ditch 34.2 was located to the west of enclosure 34.1. This heavily truncated ditch survived for a length of 1.42m and was 0.84m wide and 0.15m.

Finds and environmental summary

Tables 34.1 – 34.3 provides a quantification of the finds, bone, and environmental samples from TEA 34.

The pottery assemblage mainly comprised middle Iron Age pottery. This was dominated by handmade sandy-ware, mainly slack-shouldered and globular jars, with some scored markings. There were also six sherds of Roman pottery.

The environmental samples contained low quantities of charcoal and cereal grains. The small animal bone assemblage comprised cattle, then sheep/goat, horse, and pig.

Table 34.1 Quantification of finds from TEA 34

Type	Count	Weight (g)	Date/type
Pottery	170	2,339	Iron Age
	6	56	Roman
	1		Post-Roman
Lithics	2 (burnt unworked)		
Building Materials	61	43	
Metalwork Residues	3	16	

Table 34.2 Quantification of bone from TEA 34

Type	Count	Weight	Date/type	% of bone assessed
Animal Bone	90	2,400		100

Table 34.3 Quantification of environmental samples from TEA 34

Type	Count	Date/type
Bulk Environmental Samples	4	

Provisional interpretation and potential

The archaeological excavation at TEA 34 identified part of an Iron Age agricultural landscape. Enclosure 34.1 had a wide north-eastern entrance and was most likely used as a cattle corral. The enclosure had been managed and maintained with a possible annex or paddock, represented by segmented ditch

34.1, added later. There was no evidence for settlement associated with these enclosures although pottery was recovered from many features.

The archaeological excavation results from TEA 34 have limited potential, however they can be used to help inform the following research questions collated from the regional research framework (Medlycott 2011), the written scheme of investigation (HE 2015) and the site-specific specification (ACJV 2017d):

- Landscape and settlement: development of the character and form of the agricultural landscape in the Iron Age (Medlycott, 2011, 25-26,33-37)

Recommendations

No further work is required for TEA 34, but the information should be used in the wider context illustrating the Iron Age agricultural landscapes identified on the project.

TEA 37/38

Jim Burke

The 12.15ha archaeological excavation at TEA 37/38 (NRG: TL 3845 6426) was undertaken ahead of the construction of a new bridge, widening of the existing A14, new junctions with the A14 and Hattons Road (B1050) to the northwest and Dry Drayton Road to the southeast and associated earthworks. The archaeological excavations were carried out between September 2016 and November 2017 (Figure 37.1). The site was located on relatively level ground, on average 18m AOD, with the underlying geology being firm Kimmeridge Clay and Greensands (British Geological Survey 1993). Locally there was a gravel island located in the northern part of TEA 38.

Archaeological background

Aerial and satellite photographs suggested that there was a complex settlement of enclosures concentrated in the northern part of TEA 38, and Roman field systems and occupation across TEA 37. This was confirmed by a trial trench evaluation conducted by Cambridge Archaeological unit (CAU) in 2004/5, undertaken as part of the Northstowe new town development (Evens et al 2005). This was followed by a detailed geophysical survey by Stratascan in 2014 as part of the A14 enabling works (Davis 2016). Combined these evaluations identified a considerable number of Iron Age and Roman ditches and settlement remains on a variety of alignments but concentrated within the northern part of TEA 38. The excavation area did not encompass the entire known settlement complex, which continued beyond the northern boundary of the site.

Summary of results

The archaeological excavation revealed a long-established site dating from the middle Iron Age to the end of the Roman period, concentrated within the northern part of TEA 38 (Figure 37.2). It consisted of a complex area of settlement and enclosures measuring 3ha, with agricultural boundaries and field systems to the south and east. No evidence was present to indicate an earlier settlement. TEA 37 consisted of several short lengths of early Roman ditches located across the central part of the site.

The underlying geology had a direct influence on the location of settlement. Most of the archaeological remains were present in the north-eastern half of TEA 38, positioned on the gravel island, whereas on the clay to the south there was only a small isolated middle Iron Age roundhouse.

The site was heavily truncated by medieval and post-medieval ploughing and part of TEA 38 had also been subject to further truncation during the soil strip.

Middle Iron Age (Figure 37.3)

ENCLOSURES 38.1, 38.2 AND 38.3

The remains of two heavily disturbed roughly rectangular interconnected enclosures 38.1 and 38.2 were the earliest Iron Age features identified within the main area of TEA 38. The larger enclosure 38.1 was aligned north-west to south-east and measured 33m by 25m. It had entrances in the north-west and southeast corners and a further entrance along the south-east side that led into Enclosure 38.2. The

ditches for these enclosures had evidence of maintenance, and they were on average 1m deep and 1.60m wide. A roundhouse, 38.6, was associated with Enclosure 38.1, as it was positioned in a large gap in the ditch within the northeast corner of the enclosure. All that survived of Roundhouse 38.6 was the 9.4m diameter drip gully, with an east facing entrance. Attached to the south and east of Enclosure 38.1 and 38.2 was a large but very heavily disturbed extension or annex, that formed enclosure 38.3. Internally Enclosure 38.3 contained at least two roundhouses. The northern one, Roundhouse 38.5, was located close to the west side of Enclosure 38.1, and it had a drip gully that was approximately 10.7m in diameter. To the southwest were poorly preserved remains of Roundhouse 38.4. Cut into the southern corner ditch of Enclosure 38.1 was a pond 38.1, approximately 6m in diameter and 1m deep. This pond had been maintained and extended to the south and was presumably used for water storage for the enclosures.

Located just to the south of these enclosures were two roundhouses. The largest roundhouse 38.2 had a ring gully that was 15.5m in diameter and within the gully were at least three post-holes or pits along the southwest part. The ring gully had been re-cut at least twice. Roundhouse 38.2 had an east facing entrance, but the northern terminal had been truncated by later activity, suggesting an entrance 4.5m wide. To the east, the smaller roundhouse 38.3 had a ring gully 11.5m in diameter and had been heavily truncated, especially to the north and west. This roundhouse also had an east facing entrance and internally it contained a central pit (1.5m in diameter and 0.5m deep) that contained a fill of burnt stone pot boilers and charcoal. Two parallel ditches, aligned north to south, with a pit at the southern part, were later added to the south side of roundhouse 38.3. These may have represented a possible trackway.

ROUNDHOUSE 38.1 (FIGURE 37.2)

At the southern end of TEA 38, approximately 310m south of the main enclosures, was an isolated roundhouse 38.1, with a segmented drip gully approximately 11m in diameter. This also had an east facing entrance, and internally there were three post-holes that survived at the eastern side. Outside of the roundhouse were four pits, probably fire pits; all contained large amounts of burnt stones or pot boilers.

Late Iron Age (Figure 37.3)

DOUBLE DITCH ENCLOSURE 38.8, 38.9 AND ENCLOSURE 38.7

The enclosures (38.1, 38.2, 38.3) within the northern end of TEA 38 were later remodelled and a large double-ditched enclosure, 38.8 and 38.9, was added, removing the northwest corner of enclosure 38.3. The inner enclosure 38.8 measured approximately 44m by 38m and was bounded by a ditch that was on average 5.5m wide. The ditch had been maintained and extended by re-cutting at least five times, and a possible bank was noted to the outer part of the ditch, but re-cutting had removed most of this evidence. The remains of at least two possible entrances survived, one to the northeast and one to the southeast, both of which had been filled in by the remodelling of the enclosure. Postholes, pits and surviving elements of curvilinear gullies were present within the interior, predominately located in the southwest part, suggesting further buildings and associated structures. From within the largest curvilinear gully and some of the post-holes, small amphibian and fish bone was present. The outer

enclosure 38.9 was 53.35m by 51.50m, open to the southeast and connected to enclosure 38.8 to the north. The ditch of the outer enclosure 38.9 was 2.50m wide and 1.20m deep, and it had been re-cut several times suggesting a long period of use and maintenance.

Enclosure 38.7 was predominately a remodelled version of the earlier enclosures 38.1, 38.2 and 38.3. It formed an annex to the southeast of the double ditched enclosure 38.8 and 38.9. This annex was approximately 64m by 43m, bounded by a ditch that was 1.90m wide and 1.0m deep. A possible entrance was in the east side, at the southeast corner of the former enclosure 38.2, between these new and remodelled enclosures. It contained a number of sub-divisions, as well as the heavily truncated remains of post-holes, pits and gullies. In the space between the inner and outer ditches of the double-ditched enclosure, along the west side, was a possible trackway 38.1. This was aligned northwest to southeast and led to the northwest corner of annex enclosure 38.7.

Added to the northern end of Enclosure 38.6 was a sub-rectangular annex or Enclosure 38.10. The surrounding ditch measured 3.30m wide by 1m deep and it enclosed the remains of truncated curvilinear gullies, likely to have been the remains of at least three roundhouses 38.8, 38.9 and 38.10. Finds included querns, loom weights and abundant quantities of animal bone and pottery. On the northwest side of enclosure 38.10 were the truncated remains of a further enclosure 38.12. This oval shaped enclosure was 18m by 11m and the surrounding ditch was 1.20m wide and 0.40m deep. The enclosure had a narrow east-facing 1.5m wide entrance.

Early Roman (Figure 37.4)

ENCLOSURES 38.13, 38.14, 38.17, 38.15 AND 38.16

The late Iron Age farmstead continued to develop into the early Roman period. The existence of a large number of quernstones and millstones suggests that this settlement may have focused on crop-processing.

The existing double-ditched enclosure 38.08 and 38.09 had gone out of use but there was some remodelling of the existing annex enclosures, creating oval enclosure 38.13. This re-used part of the ditch of the earlier enclosure 38.07 and the new enclosure 38.13 measured 45m long and 35m wide. Its surrounding ditch was 2.70m wide and 0.90m deep, and internally it was divided into three areas.

Further predominantly rectangular enclosures were added to the north and south of enclosure 38.13. Remains of several possible buildings survived just north of this enclosure, in the form of post-holes, but no building layout was discernible. Notably several quern fragments were found to have been re-used as packing within some of the post-holes. Between Enclosure 38.13 and Enclosure 38.14 were the partially surviving remains of Roundhouse 38.12.

The northernmost rectangular enclosure 38.14 was approximately 28.5m wide, with a 2.2m wide north facing entrance. Between the terminals of the ditch entrance was a shallow gully that was possibly related to a gate or later blocking. No internal features were present within this enclosure. To the west of Enclosure 38.14 was a three-sided enclosure 38.17, open to the south, that was probably a field connected to Enclosure 38.14 by a ditch. To the south of this ditch were two interlinking short ditches

that represented the disturbed remains of a possible working area or corn-drying oven; the finds from this area included a large amount of pottery and industrial residues.

Added to the south of Enclosure 38.13 were two further enclosures 38.15 and 38.16. Enclosure 38.15 was irregular in shape and it contained a sub-division within its south-eastern corner. Two entrances were revealed, one along the eastern side and the other in the north-eastern corner. Enclosure 38.16 was attached to the south side of Enclosure 38.15, and was originally approximately 30m square in plan, but it was later remodelled and extended to the west, to form a rectangular enclosure that was 50m long. It had an east facing entrance and its outer ditch was approximately 4.5m wide and 1.10m deep and within the northern end of the entrance was a 1.8m wide and 0.70m deep pit 38.1. This contained several dumped fills that included large amounts of pottery.

PITS/WATERHOLES 38.10, 38.9 AND 38.8

Cut into the partially infilled south-western ditch of Enclosure 38.16 were two large pits that probably served as waterholes. The earliest waterhole 38.9 was 4.1m wide and 1.15m deep, and this was cut to the north-west by a larger waterhole 38.10, which was 5.3m wide and 2.5m deep. The latter narrowed at 1.2m deep to central shaft that was 1.2m wide. Fills within this waterhole contained wood and organic fragments throughout. A third pit/waterhole 38.8, 5.6m wide and 0.8m deep, was located just to the southwest of the enclosure. These features all contained pottery, animal bone and wood fragments.

BOUNDARIES

The main settlement area was at least partially surrounded by boundaries. A large ditch, aligned roughly northeast to southwest, formed the southern boundary 38.1 to the settlement and this was placed precisely to respect the change in geology. This ditch, which was on average 4.5m wide and 1.2m deep, had been maintained throughout the Roman period and it had been recut at least three times.

In the trench excavated in the far north-western corner of TEA 38 there were remains of three double ditches, two pairs aligned northwest to southeast the other northwest to southeast. It is possible that these formed boundaries or trackways related to the part of the settlement complex that lay beyond the northern extent of the excavation area.

Later Roman (Figure 37.4)

TRACKWAYS 38.2 AND 38.3

The settlement reached its greatest extent, in the excavated area at least, during the later Roman period, resulting in a series of larger rectangular enclosures linked via a series of trackways. A trackway 38.02 was aligned north to south along the eastern side of the site before it turned to a southeasterly direction to the south, parallel to boundary Ditch 38.1. West of the trackway were four large enclosures 38.18, 38.19, 38.20, and 38.21; the western trackside ditch was formed by the eastern side of these enclosures. Another perpendicular trackway 38.3 joined it from the northwest, between two of the large enclosures 38.18 and 38.19.

ENCLOSURES 38.18, 38.19, 38.20 AND 38.21

To the north of Trackway 38.3 was rectangular enclosure 38.18, which measured approximately 100m by 40m. There was an 8m wide entrance through the eastern ditch, joining trackway 38.2, and internally there were smaller rectangular sub-divisions either side of the entrance. Roundhouse 38.12 was located centrally between the western end of these two smaller enclosures; this was a re-build of the earlier Roman roundhouse 38.11. A large waterhole 38.11 was located within the terminal of the ditch forming the southern side of the main entrance. Internally, toward the western end of Enclosure 38.18, was a squared Enclosure 38.21 against the northern boundary ditch. This enclosure was extended northward beyond the north side of Enclosure 38.18.

Enclosure 38.19 was located south of Trackway 38.3. This was roughly rectangular with rounded corners and was approximately 80m by 45m. The southwest corner of the enclosure had multiple re-cuts. It contained shallow remains of buildings, some of which were probably roundhouses. In addition, three ponds or waterholes 38.4, 38.5 and 38.7 were positioned within this enclosure. The eastern waterhole 38.4 was 9m wide and 0.90m deep and it had a gradual slopping western edge. To the west was Waterhole 38.5 which was oval in plan, measured 9.8m by 7.7m and 1.9m deep, with steep slopping sides. It contained large amounts of pottery, bone, worked wood, and a comb that had been made from a human skull; this may have been a residual Iron Age object. This waterhole had been re-cut many times. At the western end of the enclosure was the third waterhole 38.7. This was located directly to the north of a pottery kiln 38.1 which may have been related. Remains of clay-lined pits were also located at the edge of the waterhole and near the kiln. Added to the south side of enclosure 38.19 was a squared enclosure 38.20. This contained the earlier waterholes 38.10, 38.9 and 38.8 which may have still been used.

Pottery Kiln 38.1 was keyhole-shaped with the chamber being 1.3m in diameter. An in-situ pedestal was still present within the chamber, and within the flue and stoke-hole were large amounts of Horningsea type pottery, kiln bars and collapsed daub kiln structure.

BURIALS

A small cemetery was located in the northwest corner of Enclosure 38.19. This consisted of a group of inhumation burials 38.1, 38.2, 38.3, 38.4, 38.5, 38.6, 38.7 38.8, 38.9, 38.10 and one cremation burial 38.11. Burials 38.1, 38.2, 38.3, 38.4 were aligned east-west and burials 38.5, 38.6 and 38.7 were aligned north-south. Burial 38.1 contained five complete pottery vessels placed near to the kneecaps and burial 38.06 also contained a pot. The female buried in burial 38.7 was wearing a necklace of jet and blue glass beads, a bronze bracelet on each wrist and five bronze rings on the fingers of the left hand. Coffin nails were present in burials 38.1, 38.2, 38.4, 38.5, 38.6 and 38.7. Three more burials 38.8, 38.9 and 38.10 were located just to the south of the main group and these were aligned north to south. These also contained coffin nails. A pottery vessel containing burnt bone was within this area and was probably a cremation Burial 38.11. Also, in this area were two animal burials, probably dogs, one in a gully terminal [382963] and one within a pit [383694].

Within the eastern part of this enclosure 38.19, next to Waterhole 38.5, were two sets of double burials. Burial 38.12 and 38.13 contained two neonates and burials 38.14 and 38.15 contained two juveniles. Both

burial pairs were sealed by a layer of gravel or metalling next to the waterhole, so they may have predated the waterhole.

To the north three isolated burials were located, burials 30.16 and 38.17 were in Enclosure 38.18 and Burial 38.16 in enclosure 38.21. Burial 38.16 was aligned north to south, Burial 38.17 was crouched and the heavily truncated Burial 38.18 was aligned east to west.

FIELD SYSTEM IN TEA 37 (FIGURE 37.5)

A series of ditches thought to date to the later Roman period were revealed to the southeast of the settlement. Most were orientated northeast to southwest, aligned towards to main Cambridge to Godmanchester road. They would appear to be part of a field system which developed on the clay soils near to the settlement.

Medieval to modern

Furrows related to medieval ridge and furrow cultivation were present across most of TEA 37 and TEA 38, aligned in a roughly northeast to southwest direction with a direction change at the eastern part of TEA 37. At the eastern part of TEA 37 the mortared brick foundations of a building were located. The building was aligned northeast to southwest and was approximately 5.2m wide. It is likely that the foundation related to the Rhadegund Buildings, which were present in this location on the 1951 Ordnance Survey map.

Finds and environmental summary

Tables 38.1 – 38.3 provides a quantification of the finds, bone, and environmental samples from TEA 38.

There was no earlier prehistoric pottery from TEA 37/38. There was a small collection of worked flint, mainly unretouched debitage suggesting a late Neolithic/early Bronze Age date, but no other evidence for activity predating the Iron Age.

The majority of the Iron Age pottery was middle - late Iron Age in date, with only 14 sherds of early Iron Age pottery. The middle Iron Age assemblage mainly comprised plain sandy wares, relatively typical of Cambridgeshire. The later Iron Age assemblage was a mixture of grog-tempered and sandy wares, and some 'Belgic' type vessels. Other Iron Age finds included three coins, a La Tene III bow brooch, two perforated dog canine amulets, a bone comb made out of human cranium, and finds associated with textile work.

The environmental samples from the Iron Age features included moderate quantities of cereal grains (focused on hulled barley), but very little chaff and weed seeds. This suggests that clean grain was being brought into and used in the settlement. The animal bone assemblage was focused on cattle and sheep/goat, with some horse, pig, and dog, and a small quantity of poultry, red deer and field vole. There was evidence for horn working, but little butchery or burning.

The Roman pottery assemblage was the largest assemblage from the site and demonstrated activity throughout the Roman period (declining slightly by the late Roman period). This mainly comprised local wares, particularly sandy grey wares, with a focus on jars. There were also some regional imports

(Horningsea, Oxfordshire), continental imports (samian ware), and examples of fineware (eg Colchester colour-coated beakers).

Other Roman finds included a large number of dress accessories (brooches, hairpins, finger rings, bracelets), a perforated boars' tusk amulet, and 11 Roman coins. There was also an interesting collection of finds associated with the burials, including hobnails and jewellery (necklace beads, two bracelets, and three finger rings) with burial [380591], and jet beads with burial [380618].

A total of 383 fragments of stone, comprising 41 quernstones, were also recovered, and included a range of forms and types of stone (including stone from Lodsworth and Folkestone, unusual in this area). The large number of these suggests there was an emphasis on crop processing on this site, potentially as a centralised operation.

Abundant hulled barley and spelt wheat was identified in the environmental samples from the Roman features, with little chaff. The animal bone assemblage was similar to that from the Iron Age (focus on cattle and sheep), but with more poultry, game, dog, and small mammal and amphibian bones. There were also some fossil shark teeth.

Table 38.1 Quantification of finds from TEA 38

Type	Count	Weight (g)	Date/type
Pottery	5,757	94,225	Iron Age
	15,487	245,673	Roman
	1	15	Post-Roman
Coins	15		
Small Finds	294		
Lithics	80 (worked)		
	272 (burnt unworked)		
Stone	383 fragments		
Glass	9 fragments		
Clay Tobacco Pipe	1		Post-medieval
Wood	Small assemblage		
Building Materials	1,856	53,430	
Metalwork Residues	1,121	10,011	

Table 38.2 Quantification of bone from TEA 38

Type	Count	Weight	Date/type	% of bone assessed
Inhumations	37			
Cremations	1			
Disarticulated bone contexts	1			
Animal Bone	35,829	490,560		100

Table 38.3 Quantification of environmental samples from TEA 38

Type	Count	Date/type
Bulk Environmental Samples	564	
Monoliths	1	

Provisional interpretation and potential

The results of the excavation have confirmed that the archaeological remains at TEA 38, identified as cropmark evidence and by field evaluation, are significant and form an important dataset for the study of the development of Iron Age and Roman farmsteads. The better drained gravel area of TEA 38 was continually occupied for a considerable period from the middle Iron Age until the later Roman period, with this occupation starting with enclosed Iron Age farmstead, and ending having evolved into a complex, regular, but still relatively small, Roman settlement. Such development is known from a number of farmsteads in the area (Smith et al 2016, 195-7), and the excavation results represent a promising opportunity to add to our understanding of settlement development.

In the Iron Age there was a concentration of irregular enclosures at the northern part of TEA 38, with just the single isolated roundhouse to the south. Although a number of roundhouses were located within the enclosures, these were not all contemporary, and it is likely that at any one time there was only one or two of these buildings in use. Such family-based farmsteads are common in the region, and more have also been revealed by this project, but what is significant about TEA 38 is the longevity of occupation in a relatively small area. This chronological development and spatial organisation of the Iron Age farmstead will be better understood following full analysis of the finds assemblages and environmental samples.

The more formally planned later Roman settlement, with its rectangular enclosures and system of minor trackways, can be linked to wider changes in the landscape during the mid- to late Roman period (Smith et al 2016, 195), which seem associated with developments in agricultural strategies, notably the expansion of agricultural production, possibly for external markets (Allen et al 2017, 154). The position of the settlement at TEA 38 just north of the road linking Roman Cambridge and Godmanchester may have been influential in the site's development, being well-integrated into important transport infrastructure. The economic and social relationships of rural farming communities such as TEA 38 to other contemporary communities, including the potential villa at Girton, just beyond the eastern part of TEA 37, and Northstowe further to the northeast, will form a key theme in future research.

Environmental factors may also have put pressure on land resources which may have influenced the layout, development and use of certain areas of the site. Certainly, increased wetness may have been the cause of the abandonment of the southern part of TEA 38 for the favoured northern end, and ultimately managing the water may have led to the need for large enclosure ditches and waterholes. It will also be interesting to compare the depths of the large enclosure ditches and the waterholes, to see if the enclosure ditches may have also acted as water sources.

Regarding the families that farmed this landscape, it is interesting to note the variation in burial practices. As is typical for the region (Smith et al 2018, 213), the 18 burials recovered from the site appear to be

associated with the later Roman phase, most within a small cemetery and others scattered around the settlement. The cemetery graves appear to include those with a rich array of grave goods, and there is some evidence for separation of adult from juvenile and infant burials.

Evidence for the agrarian based economy was plentiful and included a relatively large and interesting assemblage of quern and mill stones and a large assemblage of animal bone. There is also evidence for a single pottery kiln. This has been provisionally interpreted as producing a Horningsea type pottery and this adds to the known corpus of kiln sites for Horningsea. However, as only one kiln was present it is likely that this was for very local consumption.

The archaeological excavation results from TEA 38 can be used to help inform the following research questions collated from the regional research framework (Medlycott 2011), the written scheme of investigation (HE 2015) and the site-specific specification (ACJV 2017b):

- Landscape and settlement: development of the character and form of the agricultural landscape of the Iron Age and Roman period (Medlycott 2011, 25-26, 33-37 and 84),
- Late Iron Age/Roman transition (Medlycott 2011, 26-28), and
- Economic and social change and development during the Late Iron Age and Iron Age/Roman transition (Medlycott 2011, 26-28).

Iron Age

- Development of agricultural systems and the economy:
 - What is evident in the landscape?
 - Does field morphology offer any information?
 - What is the potential for faunal remains to inform study?
- Settlement chronologies and dynamics:
 - Activity at TEA 37 and TEA 38 dates from the Iron Age to the fourth century AD, indicating continued development and use of settlements
 - Is there evidence for abandonment/reuse/continuity?
- Settlement types:
 - Spatial use within settlements: are there clear working and living areas/zoning?
- Social organisation
 - What is the evidence for social organisation?

Roman

- Agriculture – consumption and production:

- what is being produced where?
- Rural settlements and landscapes:
 - How did their morphology develop?
 - What is the inter-relationship between settlement and agricultural land?
 - how far can the size and shapes of the fields be used to identify agricultural regimes?
- Infrastructure:
 - A number of Roman roads are known in the wider landscape, and how might TEA 38 have been connected to this network and could this have influenced its development? (ACJV 2017b, 17-18).

Recommendations

In order to fully understand the complex stratigraphic sequence, more detailed work is needed on the site archive. This will have to involve the analysis of the nuanced relationships between the enclosure dating from the late Iron Age and into the early Roman period, and also for the development of the settlement through the Roman period. To inform this detailed study, the information from the analysis of the finds assemblages and environmental samples will have to be available and a small programme of radiocarbon dating and modelling is advised.

The analysis of the excavation will also add a provisional interpretation of the part of the settlement that was not excavated for this project. This part is the area beyond the northern extent of the excavation. By comparing the cropmark and geophysical survey results, CAU's evaluation results, and any surrounding information from the HER, it is hoped that basic phasing could be identified, and a more complete site plan produced.

TEA 41

Gemma Hewitt

The archaeological excavation was undertaken ahead of the construction of a Bailey bridge at the western end of Borrow Pit 6, on the northern side of the A14 (NGR: TL 4039 6259). The excavation area was 4ha, although archaeological remains were only present in the north-westernmost 1ha. The archaeological excavation was undertaken between April 2017 and July 2017 (Figure 41.1). Previous evaluation work included geophysical survey undertaken in 2014 by Wessex Archaeology (Wessex 2014) and a trench evaluation by MHI in 2016 (Jeffery 2016); combined these identified an Iron Age to Roman enclosed settlement (Figure 41.2). The site was located on Gault formation clay with unidentified overlaying superficial and drift clay geology at a height of 17m AOD (NERC 2019).

Summary of results

Middle-Late Iron Age (Figure 41.3)

Occupation at the site started in the middle-late Iron Age with an unenclosed settlement of up to five roundhouses; a sixth roundhouse was recorded but this was a replacement. Several lengths of drainage gullies were also attributed to this period.

THE ROUNDHOUSES

The remains of at least six roundhouses were present, some with multiple recuts. Overall only parts of the drip gullies survived, but it is likely that five of the roundhouses were domestic and one, the smallest roundhouse 41.5 at 6.25m in diameter, probably represented an ancillary building. The diameters of the dwelling roundhouses are 11.5m for house 41.1, 10m for 41.2, 9m for 41.3, 11.5m for 41.4 and 11m for 41.6. It is likely that each roundhouse had an east facing entrance. Internal features consisted of short gullies, which may have been subdivisions, pits and post-holes. The possible subdivisions were present in roundhouses 41.2 and 41.4. These gully segments were roughly 5m long, 0.4m wide and 0.10m deep. Postholes were present within roundhouses 41.2, 41.3 and 41.4; these were between 0.20m and 0.40m in diameter and about 0.20m deep.

A small infant skeleton was recorded within the fill of the drip gully around roundhouse 41.2. The skeleton was in the foetal position and it had been laid into the open drip gully, not placed into a grave cut into the gully.

Late Iron Age (Figure 41.4)

Later in the Iron Age the settlement became enclosed by the addition of a substantial ditch that formed a large oval enclosure. It is possible that some of the earlier roundhouses were also maintained. The enclosure was divided internally into three or four separate areas and three additional enclosures were added to the south side of the main enclosure, forming annexes.

ENCLOSURE 41.1

In the later Iron Age, a substantial ditch was dug around the earlier settlement forming a large oval enclosure 41.1 that measured 81m north to south and 71m east to west. The ditch had a well-defined V-

shaped profile, which was on average 5m wide and 1.2m deep, and this have been cleaned on many occasions as several recuts were recorded. The sequence of fills from within the ditch suggested that a gravel rich bank was located on the outside of the enclosure, along the eastern side of the ditch only. Given the location of the annex ditches, there could not have been an external bank to the south. The main entrance to the settlement was on the western side and it was approximately 12m wide, with a secondary, smaller, entrance at the southwest of the enclosure to access one of the annex areas (Enclosure 41.3) to the south. This smaller entrance had been recut many times.

It is likely that some of the roundhouses first constructed during the unenclosed phase of the settlement where maintained into the later Iron Age, or at least there were replacements of some of the original roundhouses on similar footprints. Evidence for this was particularly noted with roundhouses 41.2 and 41.3, where one 41.3 replaced 41.2.

The skeleton of an adult female was found in a grave [410453] cut into the upper fill of the southern ditch of enclosure 41.1. The grave was 1.3m long and 0.5m wide, and the skeleton was in a flexed position but had unfortunately been heavily disturbed by a medieval furrow. It is possible that the burial, given that it had been placed in a grave cut into the infilled enclosure ditch, was Roman. A sample of the human bone was radiocarbon dated to 39 cal BC – 76 cal AD (95.4% probability; SUERC-85559; late Iron Age/early Roman). A small bread oven [411089] was in the west part of Enclosure 14.1. The oven had been constructed within a cut dug into the south edge of the drip gully of the earlier Roundhouse 41.1. It was orientated north-west to south-east, and was 2.5m long, 1.3m wide and 0.2m deep. The remains of the burnt clay superstructure for the oven were also disturbed by later furrows and land drains.

ANNEX ENCLOSURES 41.2, 41.3 AND 41.4

Constructed against the southern side of the main Enclosure 41.1 were three annexes. The largest Enclosure 41.2 was irregularly shaped and measured 66m long by 30m wide. It was bounded by a ditch to the east, south and west sides that was on average 4.8m wide and 0.56m deep, and the access into this enclosure was located at its western end. Enclosure 41.3 measured 60m by 66m and was accessed by an entrance, in its north-east corner, that led from the main Enclosure 41.1. Later Enclosure 41.4 was added to the east side of Enclosure 41.3. This roughly squared enclosure was 88m long by 66m wide and contained a small sub-division ditch that formed a small corner enclosure in its south-west corner, and there was a further sub-division ditch located to the northeast. The ditch around Enclosure 41.4 was less substantial than those around the other two earlier annexes. The function of these annexes is unclear, but they may be associated with livestock penning.

Roman (Figure 41.5)

In the early Roman period the existing main Enclosure 41.1 was maintained, although it was shortened on its eastern side with the addition of a substantial ditch. The space between this new ditch and the original eastern ditch became two new enclosures, and internally the main Enclosure 41.1 was sub-divided into three spaces. Of the earlier annexes to the south, Enclosure 41.4 was no longer used and

was filled in, and Enclosure 41.3 was added to the main enclosure with the removal of the ditch between them.

ENCLOSURE 41.5

The later Iron Age Enclosure 41.1 was retained in the Roman period, although it was remodelled, to form enclosure 41.5. The main change was the reduction in size of the enclosure with the cutting of new substantial eastern ditch [410039]; this V-shaped ditch was 5m wide and 1.3m deep, and it had been re-cut several times. A notable find within this ditch was a residual late Iron Age decorated weaving comb. The now smaller Enclosure 41.5 was 60m wide, and the interior was divided into three main areas by the addition of a Y-shaped arrangement of ditches, and the northern space was further sub-divided by a north to south aligned ditch. The entrance on the western side was also closed by the excavation of a ditch across it that was 2.5m wide by 0.95m deep. The part of the ditch that formed the division with Enclosure 41.3 was backfilled, so that the space within the former Enclosure 41.3 was now incorporated into the main enclosure. A metalled surface (411217) was laid across the backfilled ditch to consolidate the ground.

In the south-eastern corner of enclosure 41.5 was a small hayrick [410972]. The hayrick was surrounded by a continuous drainage ring-ditch that was 3.4m in diameter and 0.4m deep, and internally one post-hole was present slightly off centre to the north-east. The base of the hayrick was also metalled (411188) (Figure 41.7); one flint blade was found within the stones, but this was probably residual.

ANNEX ENCLOSURES 41.6 AND 41.7

The later Iron Age annex Enclosure 41.2 appears to have been retained into the early Roman period. Enclosure 41.3 was incorporated into the main enclosure 41.5, but enclosure 41.4 was removed. Two additional enclosures (41.6 and 41.7) were created to the east of Enclosure 41.5, incorporating the former eastern ditch of the Iron Age enclosure 41.1 as their eastern boundary. The southern enclosure 41.6 was 23m long and 25m wide and divided from Enclosure 41.7 by a narrow ditch; an entrance in the south-west corner provided access to the main enclosure 41.5. The northern end of Enclosure 41.7 was beyond the northern edge of the excavation.

The pottery assemblage suggests that activity at the site did not continue past AD 100.

Finds and environmental summary

Tables 41.1 – 41.3 provides a quantification of the finds, bone, and environmental samples from TEA 41.

The pottery assemblage was predominantly Iron Age and Roman in date, suggesting activity at the site from c 100BC – 100AD. There is the possibility that there may have been some earlier (middle Iron Age) activity on the site, based on the presence of EMPW and scored wares, however this cannot be proved at this stage. The late Iron Age pottery was mainly sandy wheelmade La Tene Belgic wares, EMPW, and scored wares. The Roman pottery assemblage was small (342 sherds) and mainly comprised greywares.

Other Iron Age finds included two brooches, two combs, two spindle whorls, and a decorated antler plaque. Roman finds included one coin, a brooch, finger ring, bead, tweezers, and spindle whorl.

The environmental samples from the Iron Age features identified occasional cereal grains (spelt, barley and oats), and one grape seed. The Roman features contained similar cereal grains, but in greater quantities. The animal bone assemblage from the Iron Age features was concentrated on sheep/goat, then cattle, pig, and horse, with some dog, domestic fowl, game, and frog. The Roman assemblage was similar to that from the Iron Age, but with more cattle, pig and horse and no dog, poultry or bird. A collection of large mammal skulls (2 cattle skulls, 2 equid, and 1 pig) were also retrieved from Iron Age features on the site, and some fossil shark teeth. These fossil shark teeth are relatively common on the Kimmeridge Clay, and it is possible that they were recognised and collected by the Iron Age occupants.

One post-medieval coffin handle, found in a context with human bone, was an enigmatic later find from the site.

Table 41.1 Quantification of finds from TEA 41

Type	Count	Weight (g)	Date/type
Pottery	4,862		Iron Age
	342		Roman
	13	141	Post-Roman
Coins	1		
Small Finds	43		
Lithics	13 (worked)		
Stone	6		
Glass	1		
Clay Tobacco Pipe	1		Post-medieval
Building Materials	1,571	20,399	
Metalwork Residues	293	2,945	

Table 41.2 Quantification of bone from TEA 41

Type	Count	Weight	Date/type	% of bone assessed
Inhumations	5			
Cremations	1			
Disarticulated bone contexts	6			
Animal Bone	14,501	156,630		100

Table 41.3 Quantification of environmental samples from TEA 41

Type	Count	Date/type
Bulk Environmental Samples	100	
Monoliths	1	

Provisional interpretation and potential

The site was a small, but relatively long-lived, isolated farmstead that started as an unenclosed settlement in the middle Iron Age before becoming enclosed in the later Iron Age and finally being

abandoned at some point in the early Roman period. The site was located on poor heavy clay soils, which probably explains its final abandonment in the Roman period despite its proximity to the main road between Roman Cambridge and Godmanchester. It is possible that the settlement was abandoned prior to these 'small towns' being fully established, although there is evidence for Cambridge being a relatively important local centre during the Iron Age.

This site does have good potential to contribute to our understanding of developments in Iron Age and Roman landscapes and farms, especially considered alongside the evidence from elsewhere on the project and from the previously known evidence for the later prehistoric and Roman periods on the clay around the Cambridge area.

The archaeological excavation results from TEA 38 can be used to help inform the following research questions collated from the regional research framework (Medlycott 2011), the written scheme of investigation (HE 2015) and the site-specific specification (ACJV 2017b):

- Landscape and settlement: development of the character and form of the agricultural landscape of the Iron Age and Roman period (Medlycott 2011, 25-26, 33-37 and 84),
- Late Iron Age/Roman transition (Medlycott 2011, 26-28), and
- Economic and social change and development during the late Iron Age and Iron Age/Roman transition (Medlycott 2011, 26-28).

Iron Age

- Development of agricultural systems and the economy:
 - What is evident in the landscape?
 - Does field morphology offer any information?
 - What is the potential for faunal remains to inform study?
- Settlement chronologies and dynamics:
 - Activity at TEA 41 dates from the middle Iron Age to early Roman period, indicating continued development and use of settlements
 - Is there evidence for abandonment/reuse/continuity?
- Settlement types:
 - Spatial use within settlements: are there clear working and living areas/zoning?
- Social organisation
 - What is the evidence for social organisation?

Roman

- Agriculture – consumption and production:
 - what is being produced where?
- Rural settlements and landscapes:
 - How did their morphology develop?
 - What is the inter-relationship between settlement and agricultural land?
- Infrastructure:
 - A number of Roman roads are known in the wider landscape, and how might TEA 38 have been connected to this network and could this have influenced its development? (ACJV 2017b, 17-18).

Recommendations

The field archive for the excavation is complete and checked. Further work is needed to refine the phasing and integrate the artefactual and ecofactual data with the stratigraphic narrative. A small number of radiocarbon dates may add chronological refinement of the change from unenclosed to enclosed settlement.

TEA 46

Chris Pennell

The archaeological excavation at TEA 46 (NGR TL 4091 6169) was undertaken ahead of the construction of a slip road between the A14 and the A428, a Local Access Road (LAR), a new roundabout and associated earthworks (Figure 46.1). The site was 6.5ha in size (Figure 46.2), and the excavation was undertaken piecemeal between December 2016 and September 2017.

Archaeological background

Two geophysical surveys were undertaken by Pre-construct geophysics in 2007 (Pre-construct Geophysics 2007) and Stratascan in 2016 (Davis 2016) with a trial trench evaluation completed by Cambridge Archaeology Unit (CAU) in 2009 (Patten et al 2009). These investigations identified archaeological remains associated with a Roman settlement and an isolated roundhouse drip gully. CAU also partially uncovered a possible human burial inserted into the drip gully but it was left in-situ.

Methodology

Excavation of TEA 46 was completed in three stages. The initial stage of excavations, to construct a piling mat and a haul road, was completed between December 2016 to January 2017. The next stage was ahead of the construction of the (LAR), completed in March 2017 and the final stage of excavation, for the slip road between the A14 and A428, excavated between August – September 2017. Most of these periods of excavation were undertaken during very inclement weather conditions and this combined with the fact that the site was very low lying at 15m aOD on Gault clay geology meant very poor working conditions.

Summary of results

Iron Age (Figure 46.3)

The Iron Age Roundhouse 46.1 identified in the 2009 trial trenching by CAU was confirmed at the western edge of the site. An associated field system 46.1 was also present to the north and east of the roundhouse.

ROUNDHOUSE 46.1

Roundhouse 46.1 had an east facing entranceway, but all that survived was the drip gully. The drip gully was approximately 14m in diameter and ranged between 1.2m and 1.9 in width and between 0.35m and 0.77m deep. It contained late Iron age pottery and animal bone. The burial identified in the trial trenching was revealed to be a partial human skull located within the fill (460466) of the drip gully, 3.50m to the north of the entrance to the roundhouse 46.1. The roundhouse was partially surrounded by what are interpreted as field ditches, but seems otherwise unenclosed.

FIELD SYSTEM 46.1

To the north and east of the roundhouse was a series of poorly-preserved ditches forming a field system 46.1. The system to the north consisted of three ditches running east to west for approximately 36m before shallowing out to nothing, and to the east one partial ditch ran north to south for 13.5m. The ditches were all approximately 0.20m deep and contained late Iron Age pottery and animal bone.

Roman (Figure 46.3)

A small enclosed Roman farmstead was located within the southern half of the site. This consisted of rectangular enclosure with smaller associated internal and external sub-enclosures; the function of these sub-enclosures is as yet unclear. A small number of post-holes and some pits, along with quantities of domestic refuse, were all that remained of structural evidence for buildings. A large north to south aligned boundary ditch was to the west of the main enclosure.

The pottery assemblage suggests that the Roman farmstead was dated to the middle Roman period, with an apparent hiatus between the late Iron Age activity and this farmstead.

DITCH 46.1

The settlement area was bounded on the western side by a large ditch 46.1 aligned north to south; no other large ditches were identified to the north, south or east. The ditch was 5.50 meters wide and 1.10 meters deep. The feature had a shallow recut to the west which was 1.50m wide and 0.35m deep.

ENCLOSURE 46.1

The main rectangular farmstead enclosure, 46.1, measured 100 x 70m and its surrounding ditch was 0.30m to 0.50m deep and on average 2m wide. The enclosure had a north-east facing entrance and internally it contained three sub-enclosures, 46.1, 46.2 and 46.3, a short length of curving ditch 46.2 in its northwest corner and several small pits and post-holes. A ditch 46.3 connected the southwest corner of the enclosure 46.1 to the outer boundary ditch 46.1.

POSTHOLES AND PITS WITHIN ENCLOSURE 46.1

Aside from the sub-enclosures, internally there was very little evidence for the internal organization of the main enclosure 46.1 due to severe post-medieval plough damage. Evidence for buildings was reduced to two post-holes (46.2) east of sub-enclosure 46.1 and two further post-holes (46.1) east of the southeast entrance to sub-enclosure 46.3.

Pit 46.4 was positioned within an extension to the west side of Sub-enclosure 46.3. It was wide at 2.30m in diameter but relatively shallow at 0.13m deep. To the east of the same sub-enclosure was a similar sized pit (Pit 46.2), which was slightly deeper at 0.45m. One further pit, Pit 46.1, was located toward the northeast corner of Enclosure 46.1. It measured 2.26m in diameter and 0.42m deep and contained two naturally silty fills. All three pits contained Roman pottery.

SUB-ENCLOSURE 46.1

Internally Sub-enclosure 46.1 was the best preserved of the four sub-enclosures and was located just off centre within Enclosure 46.1. It was rectangular, 25 x 14m, and it had an entrance in the southeast corner which led into both the internal area of the main enclosure and into the neighboring Sub-enclosure 46.2. The depth of the ditch varied between 0.10m and 0.40m. The eastern ditch of the sub-enclosure was remodeled reducing the size of the entrance and internally a small section of ditch was identified within the sub-enclosure, which was presumably an internal division. A human leg bone was recovered from fill (460369) of the ditch in the north-western corner of the sub-enclosure, but no other human bone was present.

SUB-ENCLOSURE 46.2

Sub-enclosure 46.2 was located immediately southeast of Sub-enclosure 46.1. It was also rectangular but smaller at 20 x 11m. It had an entrance in its north-west corner which allowed access to sub-enclosure 46.1, and internally there were two short lengths of ditch suggesting that it had subdivisions. The southern sub-enclosure ditch had been largely removed by the southern ditch of later Enclosure 46.2.

SUB-ENCLOSURE 46.3

Located to the south of Sub-enclosure 46.2 was Sub-enclosure 46.3. The north side of this rectangular sub-enclosure had been removed by later Enclosure 46.2 and an entrance was located within the southeast corner. Originally this sub-enclosure measured 40m by 14m, but it had been remodeled several times. A ditch was added to the southwest corner, that presumably connected to Enclosure 46.1 creating an additional enclosed area that measured 10m by 10m; within this extension was Pit 46.4. Other evidence of remodeling was the entrance, which either had been blocked off or modified by the addition of a small section of ditch and a small pit. A further internal division was later added to this sub-enclosure, and within the fills (460039, 460041 and 460043) of this ditch was a concentration of Roman pottery and iron nails. The latter suggests a timber structural element within the sub-enclosure.

SUB-ENCLOSURE 46.4

Sub-enclosure 46.4 was located c 10 m to the east of the main enclosure 46.1. It was rectangular and measured 27m x 14m. The sub-enclosure had a western entrance, although its north-eastern corner had been completely removed by later medieval furrows. The sub-enclosure had been altered with the later addition of a new southern ditch which replaced the original. If utilized for livestock, this may have allowed for the better funneling of animals into the sub-enclosure's western entrance.

ENCLOSURE 46.2

Enclosure 46.1 was remodeled and reduced in size, probably during the third century, by a re-cut Enclosure 46.2. The now 'U'-shaped enclosure 46.2, measured 51 x 60m and was open to the east or had a fence line superimposed on the infilled eastern side of the existing Enclosure 46.1. One notable find within the southern extent of this enclosure ditch (460226) was a very rare coin dating to the reign of Laelianus who reigned for only three months in AD269, making this only one of three coins of Laelianus found in Britain.

WATERHOLE 46.1

A probable waterhole 46.1 was present within Enclosure 46.2 and just outside of the larger internal Sub-enclosure 46.1. The feature was 5m across and was initially excavated by hand to a depth of 1m before the watertable was reached, but was later machine excavated to its full depth of 2m. It contained third century pottery.

PIT GROUP 46.3

A series of pits (Pit group 46.3) were positioned in the northeast terminal of the ditch forming enclosure 46.2, possibly forming the eastern terminus for the ditch. There were three intercutting pits with the latest measuring 3.40m in diameter and 0.90m deep. The other two pits were between 0.70 and 2.10

in diameter and up to 0.80m deep. All three were filled with natural silt sealed with a layer of later silting which contained Roman pottery.

Finds and environmental summary

Tables 46.1 – 46.3 provides a quantification of the finds, bone, and environmental samples from TEA 46.

The pottery assemblage was predominantly late Iron Age and Roman in date, with an apparent hiatus in the early Roman period. The late Iron Age pottery assemblage was domestic and utilitarian, comprising handmade sandy wares in plain and scored jar forms. The Roman pottery assemblage was similarly domestic and utilitarian, mainly derived from local industries, but with some regional (Dorset, Verulamium, Oxfordshire) and continental (Terra Sigillata) imports. The Roman vessels were mainly jars, but with some more unusual types including colanders, castor boxes, and a face-mask flagon.

Other finds including 13 Roman coins (including an incredibly rare coin of Laelianus, who reigned as emperor for a couple of months in AD269), three Roman metal objects, a collection of Roman daub, fired clay, and roof tile, and a relatively large collection of metalworking residues (smithing hearth bottoms and hammerscale) which indicates that there was iron smithing on the site.

Low quantities of plant remains were recovered from the samples, including occasional charcoal, barley and wheat. The animal bone assemblage only contained the major domesticates, mostly cattle, but with some sheep/goat, horse and pig.

Table 46.1 Quantification of finds from TEA 46

Type	Count	Weight (g)	Date/type
Pottery	617	7,380	Iron Age
	4,741	59,102	Roman
	13	319	Post-Roman
Coins	13		
Small Finds	89		
Lithics	2 (worked)		
	46 (burnt unworked)		
Stone	41		
Glass	2		
Clay Tobacco Pipe	1		Post-medieval
Building Materials	237	5,725	
Metalwork Residues	232	7,071	

Table 46.2 Quantification of bone from TEA 46

Type	Count	Weight	Date/type	% of bone assessed
Inhumations	2			
Animal Bone	2,384	39,150		100

Table 46.3 Quantification of environmental samples from TEA 46

Type	Count	Date/type
Bulk Environmental Samples	40	
Monoliths	1	

Provisional interpretation and potential

The archaeological excavation at TEA46 revealed a small and apparently unenclosed late Iron Age farmstead which consisted of a single roundhouse and associated elements of a field system, both of which were poorly preserved. It seems that there may well have been a hiatus between the abandonment of the late Iron Age farmstead, and establishment of a small enclosed farmstead, c 80m further to the south. The evidence from this enclosed farmstead suggest it was relatively short-lived between the second and third centuries AD. The function of the smaller sub-enclosures remains unclear, but they may have been for dividing various areas of activity such as domestic occupation and stock management. It does not appear that the settlement ever developed beyond a relatively simple enclosed farmstead, probably the result of poor heavy clay soils, despite its position just south of the main Roman road from Cambridge to Godmanchester.

The site does have the potential to contribute to our understanding of the development of Iron Age and Roman settlement and landscapes, especially considered alongside the evidence from elsewhere on the project and from the previously known evidence for the later prehistoric and Roman periods on the clay around the Cambridge area. The results from the archaeological excavation from TEA 46 can help provide information to further develop our understanding of the following research questions collated from the regional research framework (Medlycott 2011), the written scheme of investigation (HE 2015) and the site-specific specification (ACJV 2017c):

- Landscape and settlement: development of the character and form of the agricultural landscape of the Iron Age to the post-medieval period (Medlycott (ed) 2011, 25-26, 33-37 and 84)
- Iron Age/Roman transition changes in land use and settlement, examination of the artefact collections and development of ceramic typologies to add to the chronological sequence (Medlycott (ed) 2011, 29, 31)

Iron Age

- Development of the agricultural systems and economy
- Settlement chronologies and dynamics: evidence for abandonment/reuse/continuity
- Settlement types and spatial use within settlement: evidence for clear working and living areas/zoning
- Social organization- what evidence is there to indicate this?

Roman

- Agriculture- what is being produced where?
- Rural settlements and landscapes: morphological development and inter-relationships between settlement and agricultural land

Recommendations

The stratigraphic archive needs further consolidation and review. Further analysis of the artefactual collection and ecofactual assemblages from TEA 46 will help to further develop ceramic typologies to add to the chronological sequence across the project. This analysis will also further understanding the function and development of enclosures 46.1 and 46.2 and its internal features throughout the second and third centuries AD.

The information from TEA46 should be used in the wider context illustrating the diverse Iron Age and Roman agricultural landscape and their development over time, especially along the line of the main Roman road from Cambridge to Godmanchester.

STATEMENT OF POTENTIAL

This section discusses the archaeological potential of the A14 investigations, based on the stratigraphic information, to answer research questions outlined in the WSI (Highways England 2015; Atkins CHS2M 2016a-k), the East of England Research Framework (Medlycott 2011), and other specific research frameworks. A more detailed discussion of this, incorporating the finds and environmental information and creating revised research questions, is included in Volume 2.

The real potential of the A14 archaeological investigations lies in the scale of the project. Rather than seeing small 'windows' into the past use of the area, as is the case with smaller archaeological projects, the A14 has involved the excavation of whole landscapes. Complete prehistoric monumental landscapes have been investigated, settlements and their surrounding agricultural land have been excavated in their entirety, all alongside the infrastructure network which connected these areas. This is particularly the case with the larger blocks of land such as Borrow Pit 1 (TEAs 7-12) and Borrow Pit 3 (TEAs 27-29).

The scheme crosses a variety of different landscapes (River Terrace Gravels, the Great Ouse Valley, and the clays). There is therefore the potential to gain an understanding of how past peoples used and adapted to different environments, and whether different activities and types of settlement occupied different landscapes.

Furthermore, remains from all archaeological periods, and the transitions between the periods, have been uncovered. There is therefore the potential to gain a more nuanced view of these transitions – what the changes were, how and why they happened, and how and why they differed between different areas.

The dataset gained from this project, covering a wide range of periods and types of archaeology, has huge potential to answer numerous questions about wide-ranging subjects. Some of the key areas of research potential are outlined below.

Palaeolithic and Mesolithic

The prehistoric lithic material (and, to a lesser extent, the prehistoric pottery assemblage), although largely residual, provides evidence for how prehistoric peoples moved across and used the landscape. This is particularly interesting in relation to the earlier (Palaeolithic and Mesolithic) finds, and those areas with significant concentrations of early material (eg the Mesolithic flints and pottery from Area 1 in TEA 32/33).

The Mesolithic flints from TEA 19, combined with the geoarchaeological work from this area, has the potential to further our understanding of the early use of this riverine landscape. This is an area of research which was highlighted in the DCO WSI:

- Riverine landscape – development of the landscape, possibility of identifying events such as seasonal flooding, and date sequences?
- Utilisation of marginal land – what evidence of use, activity specific?

Analysis of the wider collection of Mesolithic flints, from across the scheme, also has the potential to increase our understanding of activity across the landscape in this period.

Analysis of prehistoric tree throws also has the potential to infer episodes of tree clearance across the landscape, to further understand population movement and colonisation. An excellent comparative example of such a study is the Framework excavations around Stansted Airport (Cooke et al 2008).

It should be noted that the ongoing Palaeolithic watching brief in Borrow Pit 3 has the potential to make a significant contribution to our understanding of the Palaeolithic in this region and more widely. The full potential of this will be discussed in a separate report once the watching brief has been completed.

Neolithic ring ditch monuments

The Neolithic ring ditch monuments at TEA 2 and TEA 12 and the oval monument at TEA 16 are excellent examples of these types of 'ring ditch' monument. They are highlighted in the Research Framework as a type of monument which warrant investigation:

'The chronology of Neolithic ring-ditches in the region...would benefit from further study'
(Medlycott 2011, 13)

Detailed analysis of these, combined with a radiocarbon dating programme, will contribute to our understanding of prehistoric settlement and landscape in the Great Ouse Valley. This will include their position in relation to landscape features and other prehistoric sites, such as those at Brampton and Buckden-Diddington (Malim 2000).

There is also the potential to gain a greater understanding of the function of these monuments. This will involve analysis of the finds and environmental evidence, their morphology, and their location in the landscape.

Bronze Age burial practices

The Bronze Age barrow at TEA 16, two possible barrows at TEA 10, and three possible barrows at TEA 32/33, have the potential to answer questions concerning the development of prehistoric funerary monuments, funeral practices, and the role of these within the wider landscape. These are all areas of research identified in the DCO WSI and the Research Framework:

'Patterns of burial practice need further exploration. This should include the relationship between settlement sites and burial, and the development and use of monuments, including burial mounds, as key elements in determining and understanding the landscape' (Medlycott 2011, 20)

This includes questions about the local environment in which the monuments were positioned; their siting in relation to other prehistoric monuments; chronology (including reuse); constructional practices; and function. This dataset also has the potential to answer specific questions about Bronze Age funerary practices, including the practice of cremation (pyres, temperatures) and deposition (urns, other

containers, grave goods, proportions of bone). The other, non-barrow, burials at TEAs 7A, 12, and 27 have the potential to increase our understanding of non-monumental burial practice in the Bronze Age.

The landscape scale of the A14 investigations means that there is significant potential to study the relationship between funerary landscapes and settlement, particularly at TEA 32/33 where both Bronze Age burial and agriculture has been identified, and TEA 15 where settlement was recorded close to the TEA 16 barrow.

Bronze Age settlement and agriculture

The evidence for Bronze Age settlement and agriculture identified across the scheme has the potential to answer questions about the development of the Bronze Age landscape, an area highlighted in the DCO WSI:

- Development of agricultural landscapes in the Neolithic and Bronze Age – what is the evidence for the interdependency of settlement, funerary elements and agricultural land?

In particular, the large and clearly defined middle Bronze Age agricultural landscape at TEA 32 (enclosures and field systems) offers an opportunity to study the middle Bronze Age landscape in its entirety. Elsewhere, there is the potential to identify how the Bronze Age landscape was organised on a wider scale, through tracing the remnants of co-axial field systems across sites (particularly those to the west of the A1). Palaeoenvironmental evidence from these may provide information about the type of agriculture being practiced, as highlighted in the Research Framework:

'More extensive palaeoenvironmental evidence would enable past landscapes and economies to be recreated' (Medlycott 2011, 20)

There is less potential for investigation into Bronze Age settlement, as the only site with evidence for this was TEA 15. Nonetheless, the landscape nature of the A14 investigations means that all evidence for Bronze Age settlement, even when it is ephemeral (eg individual pits and waterholes), can be considered en masse, potentially providing a clearer understanding of the nature of early settlement.

The late Bronze Age/early Iron Age pit alignments identified at TEAs 13, 15, and 16 may provide information about the function of these 'monuments', which are relatively rare in Cambridgeshire (although well known in Bedfordshire, Buckinghamshire, and Northamptonshire). They are generally thought of as boundaries, which may have carried a common, deeply symbolic meaning to the communities that constructed them (Pryor 1993, 142).

Iron Age

Excavations across the scheme have revealed an intensively occupied Iron Age landscape, providing a fantastic dataset to increase knowledge of Iron Age activity in this part of Cambridgeshire. This has the potential to contribute towards the research areas identified in the DCO WSI, particularly:

- Development of the agricultural systems and economy – what is evident in the landscape, does field morphology offer any information, potential of faunal remains to inform study?
- Settlement chronologies and dynamics – is there evidence for abandonment/reuse/continuity?
- Settlement types - spatial use within settlement; are there clear working and living areas/zoning?
- Social organisation- what evidence is there to indicate this?

The corpus of Iron Age rural settlements has the potential to answer numerous questions about the nature of Iron Age settlement. This includes questions about the different types of settlement (dispersed 'open' settlements, simple enclosed settlements and concentrated 'complex' settlements); their size and density; form (including zonation and planning); how they changed and developed over time (including abandonment and reuse); and the types of activities that took place within them. These all have the potential to answer questions highlighted in the Research Framework:

'Settlement types. Distribution, density, and dynamics need further study: zonation of use/internal spaces, interaction with hinterland, location with ref to topography and geology, resources, communication routes, etc' (Medlycott 2011, 31)

Similarly, the wide range of agricultural landscapes provides a valuable dataset for understanding the Iron Age agricultural economy. There is the potential to answer questions about livestock management, through analysis of the form and layout of the pastoral landscapes and faunal remains (the relative proportions of animals, their size and stature, and mortality profiles). For arable agriculture, the palaeoenvironmental evidence has the potential to increase our understanding of the different proportions of cereal grains; field morphology may provide information about how this was organised; and individual features (eg grain storage structures) may provide information on agricultural practices. These are all areas highlighted in the Research Framework:

'The nature of the agrarian economy needs further study...What are the relative proportions of cereals and livestock and is there a changing dynamic throughout the period' (Medlycott 2011, 31).

Evidence for other Iron Age industrial activities have more specific research potential. For example, the two early Iron Age iron metalworking tools from TEA 27 are some of the earliest iron metalworking tools found in the country and so have unparalleled research potential in understanding early metalworking. Equally, the evidence for wood-working from the TEA 29 wells has the potential to increase knowledge about this particular activity. The variety of axes used on the ladders informs us of craft skills and traditions.

Roman

The excavations across the scheme have revealed an intensively occupied and utilised Roman landscape, with rural settlements, agriculture, industry (particularly pottery production), infrastructure, and burials. This has huge potential to contribute towards the research areas identified in the DCO WSI, particularly:

- Iron Age/Roman transition – artefact collections; economic and social change and development?
- Agriculture – consumption and production; what is being produced where?
- Rural settlements and landscapes – how did their morphology develop and what is the inter-relationship between settlement and agricultural land?
- Social and economic change – what were the processes that led to social and economic changes within the local populations and how were these manifested (incorporating the ‘Romanisation’ debate)?
- Infrastructure – are minor roads evident in the immediate landscape?

Late Iron Age – Roman transition

Most of the Iron Age rural settlements continued in use, to some extent, after the Roman Conquest. Evidence from these settlements can provide information about the nature of the late Iron Age – Roman transition, the impact of the Conquest on everyday people and the agricultural economy, and how (and why) this varied between different sites. There is therefore the potential to answer questions highlighted in the Research Framework:

‘Understanding both the continuity of Iron Age into Roman settlement and the 2nd century ‘Romanisation’, identifying continuity as well as new settlement structure and land use’
(Medlycott 2011, 47)

Settlement

There are more settlements dating to the Roman era on the A14 scheme than from any other period and they therefore have the potential to provide significant information on a wide range of research questions. This includes questions about the different types of settlement; their size and density; form and morphology; how they changed and developed over time (including evidence for abandonment and reuse); the types of activities that took place within them; how the settlements were connected to each other; and how they differed across landscapes. These all have the potential to answer questions highlighted in the Research Framework:

‘Are there chronological/regional/landscape variations in settlement location, density, or type?’
(Medlycott 2011, 47)

The Roman settlements were positioned within the hinterland of the Roman towns of Godmanchester and Cambridge. Although the true ‘urban’ status of these larger, walled nucleated settlements remains

uncertain, it is likely that they had some economic and social influence over the surrounding rural settlements, and the investigation of these rural settlements therefore has potential in relation to this.

Some of the Roman settlements were slightly unusual in type, such as TEA 28 which may have functioned as a supply depot; and the suggested 'mansio' at TEA 32/33. They therefore have research potential in their own right, particularly in relation to the potential economic and social impact of the Roman military/state.

The A14 excavations revealed a range of Roman period buildings of different form, scale and construction methods/materials. These include an aisled building with the remains of elm posts from TEA 20, which is exceptionally rare, as elm has not been securely identified as a construction timber in the Roman period before. Work on identifying the species of elm involved, and confirming whether elm was present in the landscape or whether it was imported, is therefore a priority.

The relationships between the different rural communities across the scheme and in the wider area (eg Northstowe) will form a key theme in future research. There is the potential to consider questions about how they were related physically (via tracks and roads), economically (trade and specialisation), and socially.

Agriculture

Evidence for the Roman agricultural landscape was identified across much of the scheme. There is the potential to answer questions about livestock management, through analysing the form and layout of pastoral landscapes (enclosure systems, droveways, waterholes etc.) and faunal remains (the relative proportions of different animals, their size and stature, and mortality profiles). For arable agriculture, the palaeoenvironmental evidence has the potential to increase our understanding of the different proportions of cereal grains; field morphology may provide information about the organisation of this; and individual features (corn dryers and the hayrick) may provide further information about agricultural processes. These are all areas of interest highlighted in the Research Framework:

'The nature of the agrarian economy needs further study. Is a real understanding of continuity and change emerging? What are the relative proportions of cereals and livestock and is there a changing dynamic throughout the period' (Medlycott 2011, 31).

Palaeoenvironmental evidence from the early Roman closely-spaced cultivation trenches, identified across the central part of the scheme, may provide information about this specific aspect of Roman agriculture. Advancements in pollen analysis may provide a chance to understand how these cultivation systems were used, and what crops they were used for.

Changes in the layout and organisation of agricultural activity over the course of the Roman period have been highlighted on a number of sites. These may reflect changes in agricultural practices, potentially brought about by the Roman Conquest or the 2nd Century agricultural expansion, and the dataset

provided by the A14 investigations has the potential to understand this further. This is a key question raised in the *'Rural Economy of Roman Britain'* volume:

'Examining how this (the 2nd century expansion in farming) occurred, through different forms of farming practice, is crucial for understanding the agricultural economy of Roman Britain' (Allen 2017b, 145).

Pottery Production

The forty pottery kilns identified across the scheme, particularly the thirty-seven around Brampton, form a new pottery industry and have significant research potential for understanding pottery production in the Roman period. This is an area which is highlighted in the Roman Pottery Research Agenda:

'Knowledge of pottery production sites is fundamental to our study of pottery' (Perrin 2011, 41)

Analysis of these kilns, their assemblages, and date ranges, will further our understanding of rural craft production, including seasonality, specialisation, and the status of the potters. The 'potters' workshop' at TEA 14 has the potential to provide specific information about the nature of pottery production centres.

Industry

Evidence for other Roman industrial activities is relatively slight but includes the bone working at TEA 4, the blacksmiths at TEA 20, which have the potential to further our understanding of these aspects of the Roman rural economy. This will focus on the scale and organisation of the industries.

Infrastructure

The landscape scale of the A14 investigations means that the course of various roads, tracks, and other routes can be plotted, alongside those already known about from aerial photographs, geophysical surveys and other archaeological investigations. This has the potential to provide a clearer understanding of how people and goods were connected and moved through the landscape.

Burials

Surprisingly few Roman burials were identified across the scheme, with no significant sized cemeteries. Those which were identified have some research potential for understanding burial practices, including the small late Roman cemeteries at TEAs 28 and 38, and the unusual burials from TEA 7A and TEA 28.

Roman-Saxon transition

Evidence for later Roman (4th/5th century) activity was identified on some sites (TEAs 5, 7A, 20, 32/33), while a more comprehensive programme of radiocarbon dating may reveal further indications of activity spanning the late Roman-early post-Roman periods. This has the potential to contribute to the understanding of the morphology and development of late Roman rural settlements and the end of the Roman period, highlighted in the East of England Research Framework as an area of potentially national importance:

'Characterising the actual nature of settlement forms and patterns, material culture and so on for the 4th and 5th centuries AD in this region is of major national and international importance with regard to assessing the impact or otherwise of Germanic settlers' (Medlycott 2011, 48).

Furthermore, there are nine Roman settlements also had some evidence for early Saxon activity, though at present there are few indications of continuity in terms of the organization of the landscape.

Saxon

The Saxon settlement remains identified around Brampton and Conington have significant research potential. Saxon archaeology is often relatively 'invisible', often lying under modern villages or simply being too ephemeral to identify in evaluations. These discoveries therefore go some way to address this issue, identified in the Research Framework:

'There is still a problem in locating and identifying Anglo-Saxon settlements' (Medlycott 2011, 57)

The Saxon period is often considered to be when 'modern' settlement patterns emerged and, as such, these sites are of immense importance in understanding the development of this. This is highlighted as a key question in the (draft) revised Research Framework for the East of England:

'This period saw the transition from the localised and largely transitory practices of the early Anglo Saxon period, which gave way to the emergence of the Anglo-Saxon kingdoms, the foundation of towns, bishoprics, monastic houses, churches and almost all of the settlements which we know today' (Hoggett 2018, 1)

The Saxon discoveries from the A14 investigations are comparative to the larger and well-known excavations at Mucking (Hamerow 1993), Flixton (Boulter et al 2012) and West Stow (West 1985). The scale of the A14 excavations allows a unique opportunity to look at Anglo-Saxon settlement data on a grand scale.

Saxon settlement - Brampton

The collection of 34 sunken-featured buildings in this area offers the clear potential to enhance our understanding of these structures as a feature type, in terms of their construction and intended use (living-houses, weaving houses, apiaries, etc – see Tipper 2004). Questions about their chronology, form, and function may be answered, through analysis of their morphology, associated features, and finds assemblages.

The middle and late Saxon settlements in TEA 7C have the potential to further our understanding about Saxon settlement forms and layout; building form and structure; agricultural and economic activities; population (estimates of size, demography, social make-up, beliefs); and potential external influences over the settlements (eg from the church, local and regional lordships, and the continent).

Furthermore, the excavations in this area present an opportunity to explore continuities and changes in land utilisation over time - from the Roman into the Saxon period, over the course of the Saxon period, and from the late Saxon into the medieval period.

There is also the potential to answer questions about the choice of location of Saxon settlement, particularly the apparent association between Saxon settlement and prehistoric monuments, in contrast to the disconnect between areas of Roman activity and Saxon settlement.

Saxon settlement - Conington

The early Saxon unenclosed settlement at Conington, comprising 24 sunken-featured buildings, 3 post-built structures, and 40-50 pits and wells, is the largest and densest thus far recorded in the area. This offers an unparalleled opportunity to analyse an early Saxon settlement from this region.

Analysis of the middle Saxon enclosed settlement has the potential to provide new information on a range of questions including settlement layout, building form and structure, and population size. Other areas of particular research potential include the Maxey ware assemblage (more than 100 sherds, mostly in large fragments and fresh condition), which is the largest in the region.

The place name Conington is a form of Kingston - 'Kings Enclosure'. These are thought to have been settlements designed to aid the control of newly-conquered lands. This is the first excavation of such a site, and therefore it has the potential to understand the form and function of such 'Kings Enclosures'.

Medieval and post-medieval

Medieval Rural Settlement

The remains of the 11th-13th century deserted medieval village of Houghton (TEA 7C) has the potential to answer numerous questions about medieval rural settlement. This is an area of interest highlighted in the Research Framework:

'The origins and development of the different rural settlement types need further research, also the dynamics of medieval settlement... More data will add to our understanding of the way places appear, grow, shift and disappear.' (Medlycott 2011, 70)

This site has the potential to answer questions about the development of villages over time (their origins, lifespan, and desertion); village layout; buildings (their function, materials, construction techniques, and longevity); and social structure (population size, land ownership, and social organisation).

Furthermore, the 'industrial' element of the village (the blacksmiths workshop, retting pits, ovens etc.) has the potential to increase our understanding of medieval rural industry. This is highlighted as a particular area of interest in the (revised) Research Framework:

'Rural industries require further study – milling, potteries, iron works etc' (Martin 2018).

Post-medieval industry

There is the potential to answer research questions about post-medieval brick making, through further analysis of the two brick kilns from TEA 7C. *'The development and diversity of rural industry'*, including brick-making, is identified as an area of interest in the Research Framework (Medlycott 2011, 78).

Other

The other medieval and post-medieval remains mainly comprised evidence for agriculture and have limited archaeological potential. The landscape histories of the sites will have to be followed into the post medieval periods; in particular the survival of earlier boundaries, roads, tracks and streams. This will be useful to connect the past to the present and to allow consideration of the survival of elements of the historic landscape into the future.

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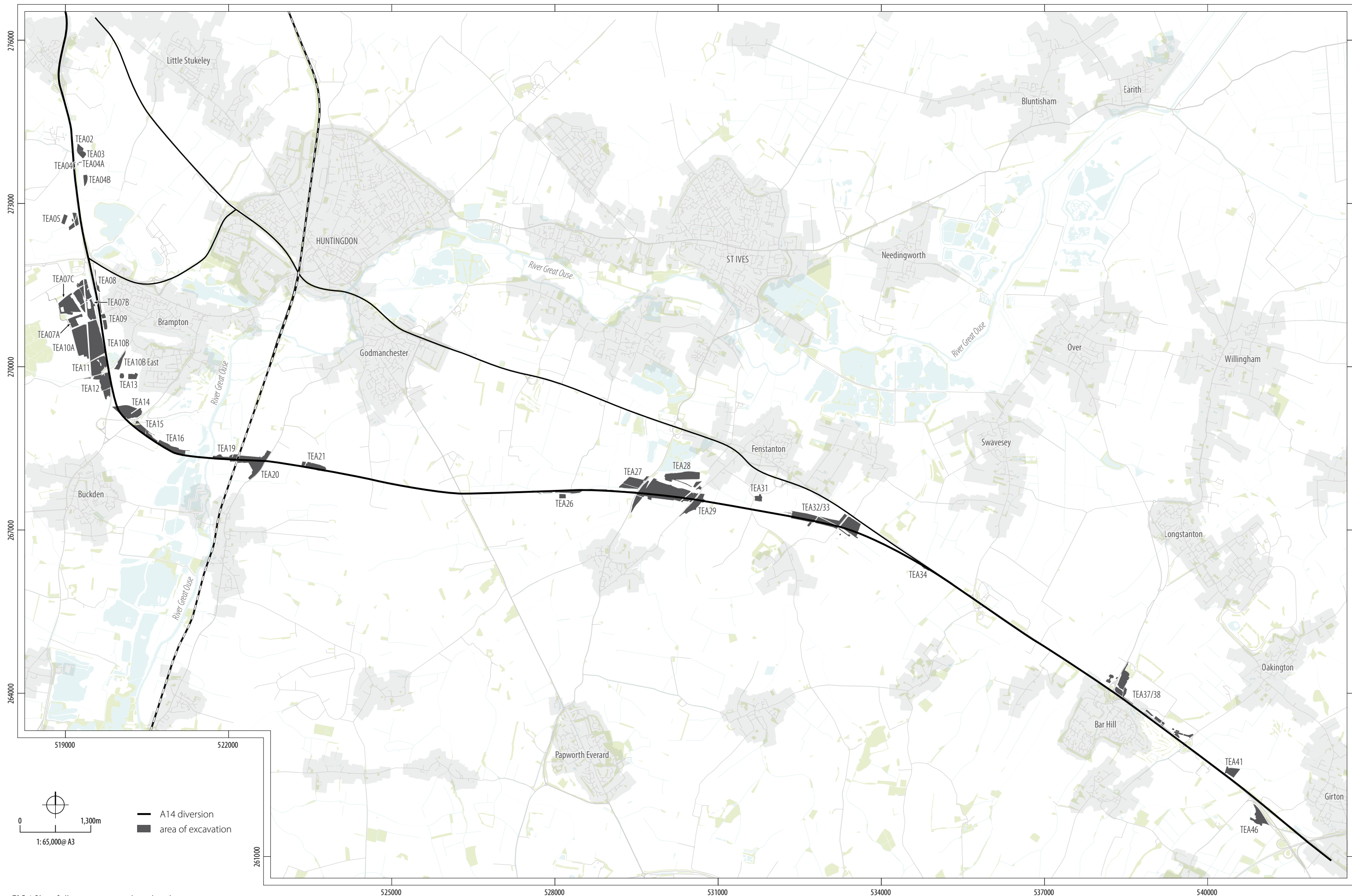


FIG 1 Plan of all excavation sites along the scheme

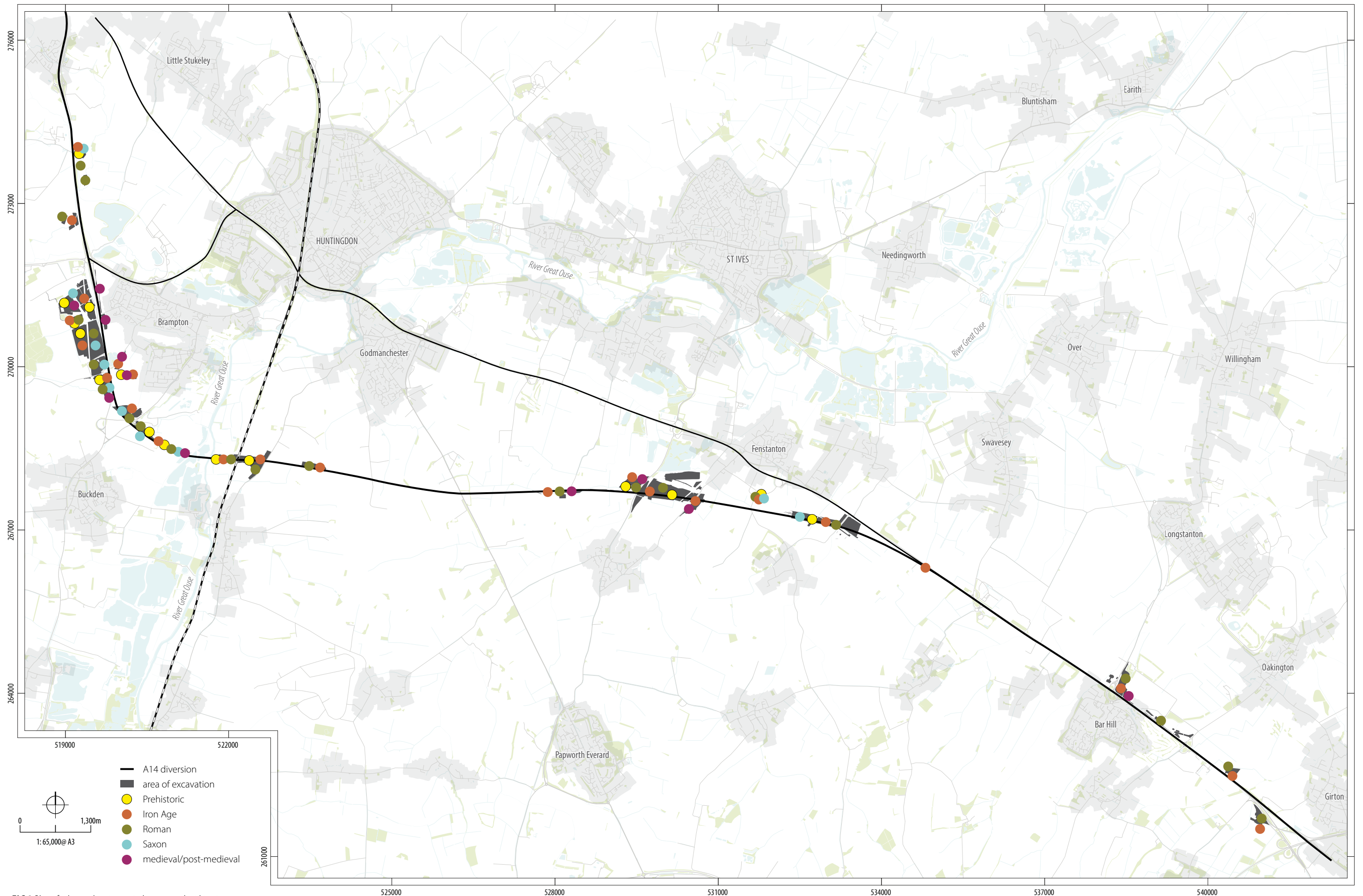


FIG 2 Plan of scheme showing periods uncovered within sites

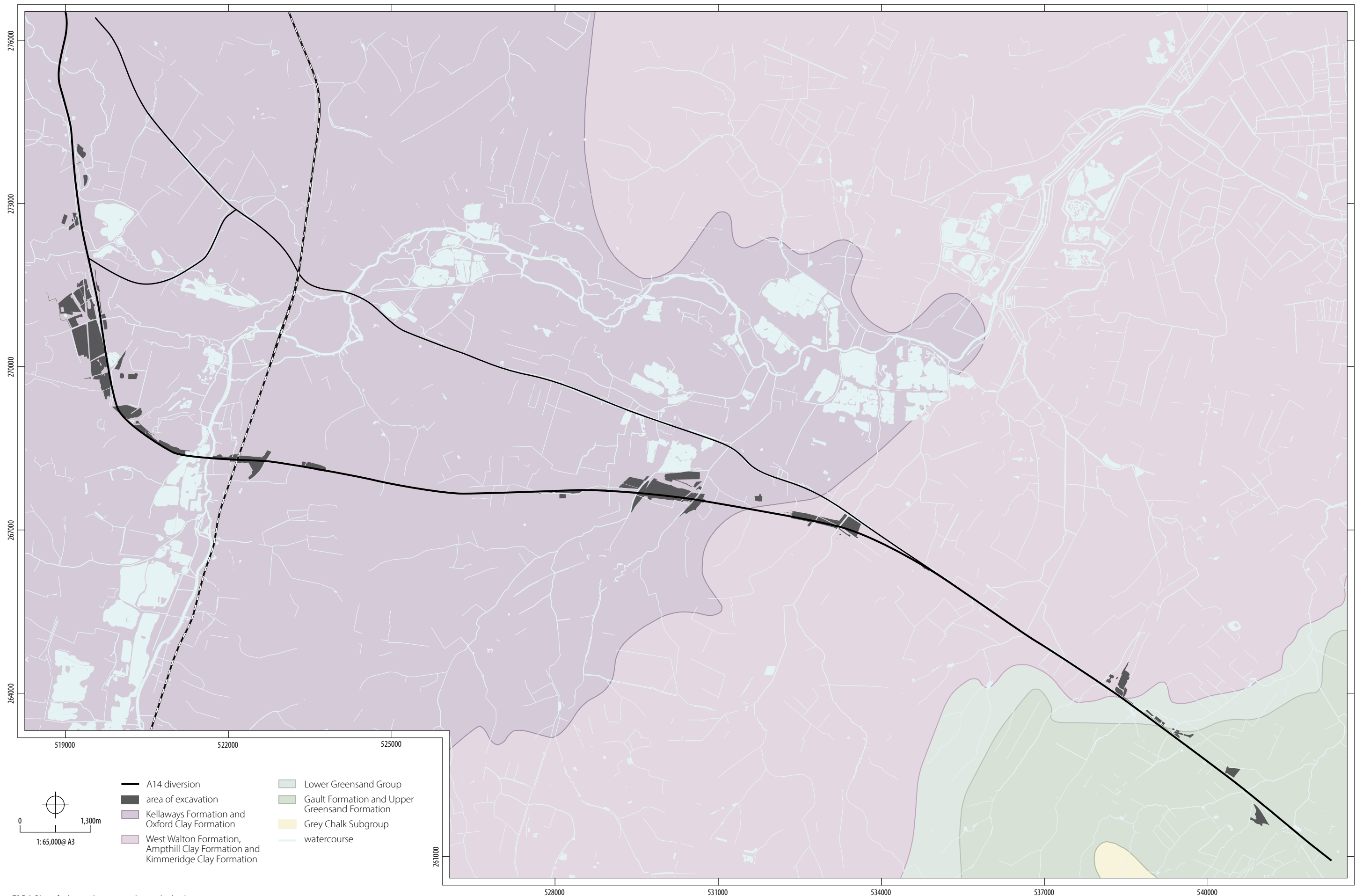


FIG 3 Plan of scheme showing geology – bedrock

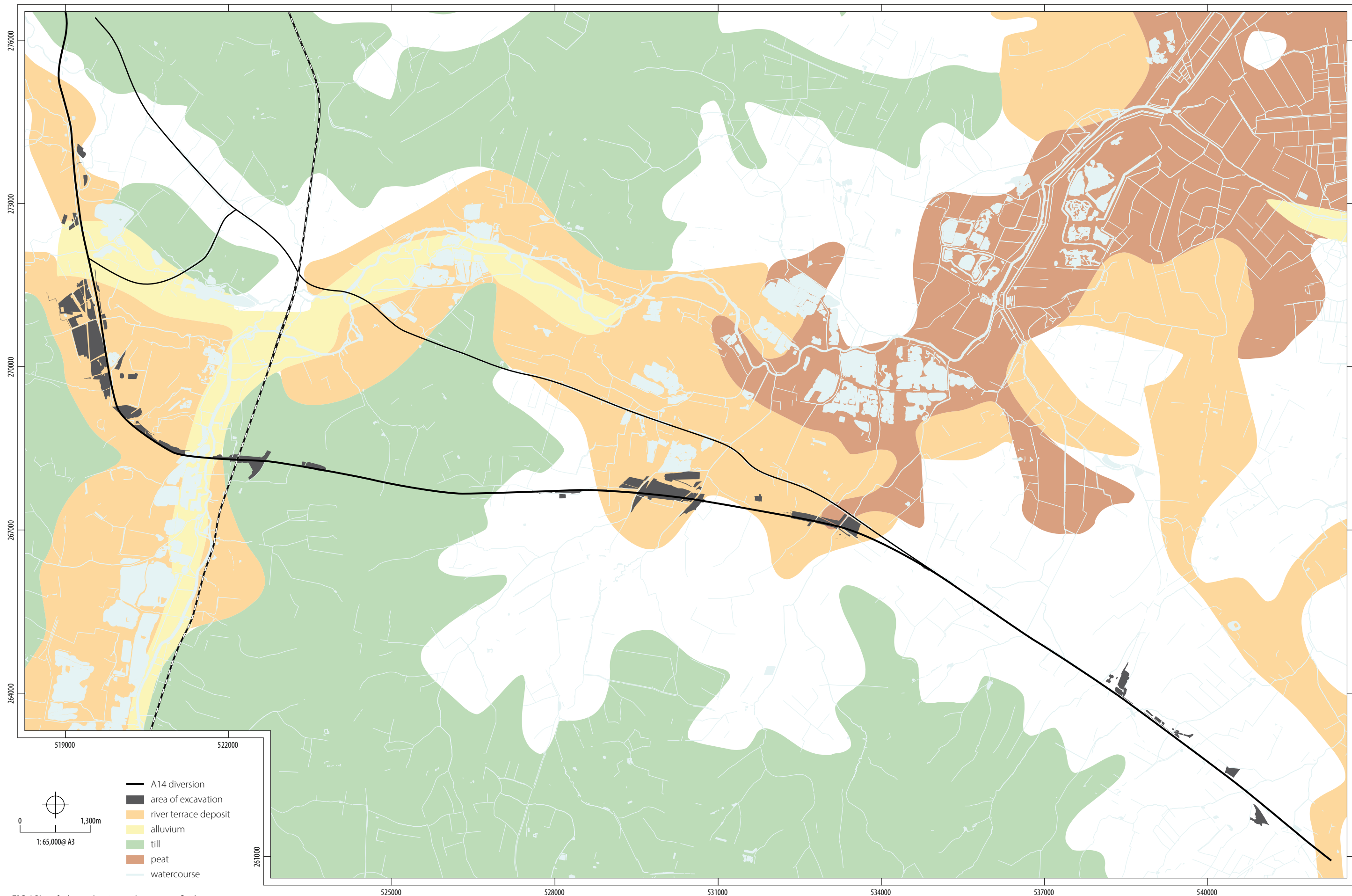


FIG 4 Plan of scheme showing geology – superficial

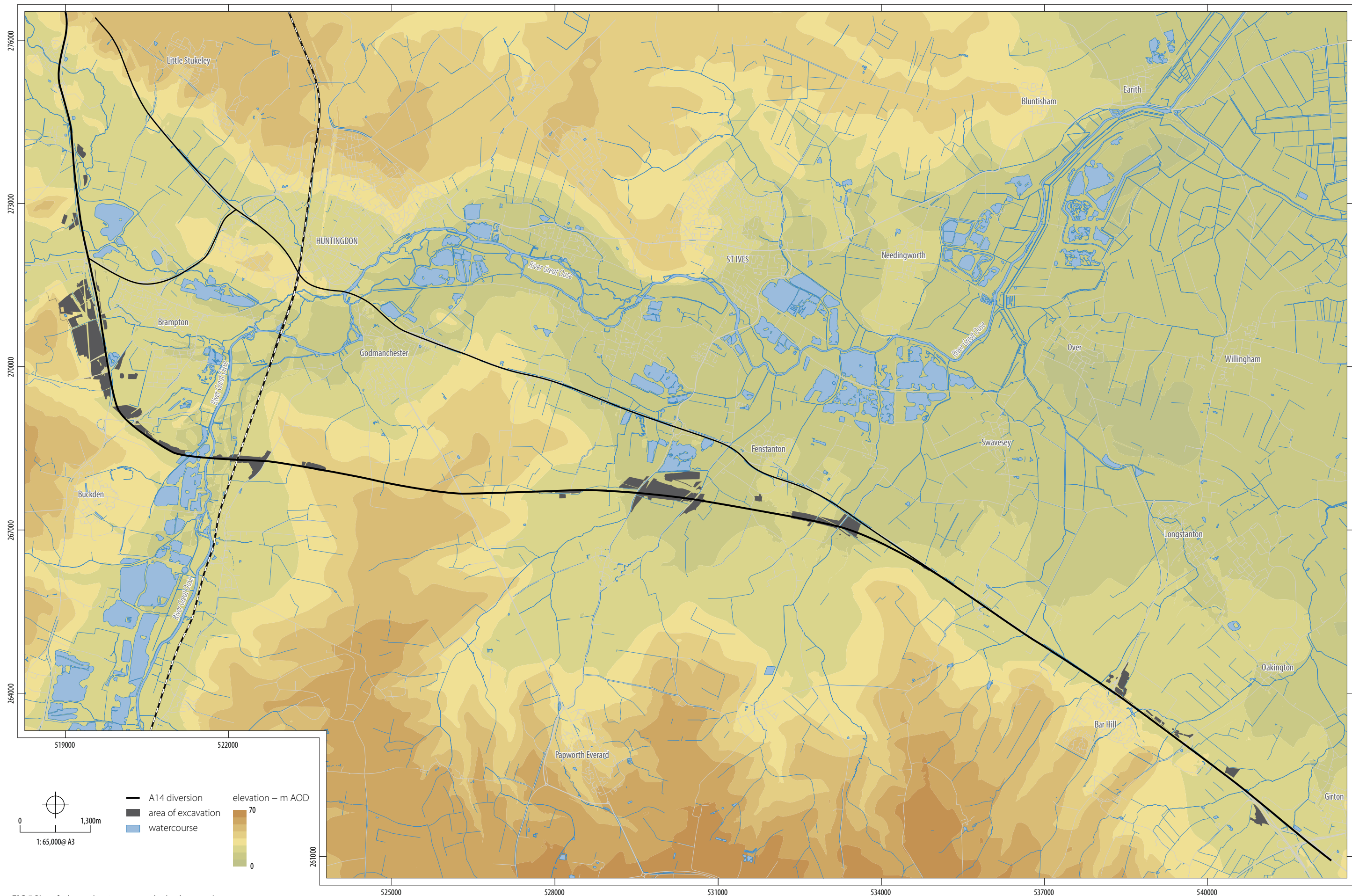


FIG 5 Plan of scheme showing topography, land-use, and watercourses



FIG 6 Plan of scheme against archaeological background – Prehistoric



FIG 7 Plan of scheme against archaeological background – Iron Age



FIG 8 Plan of scheme against archaeological background – Roman

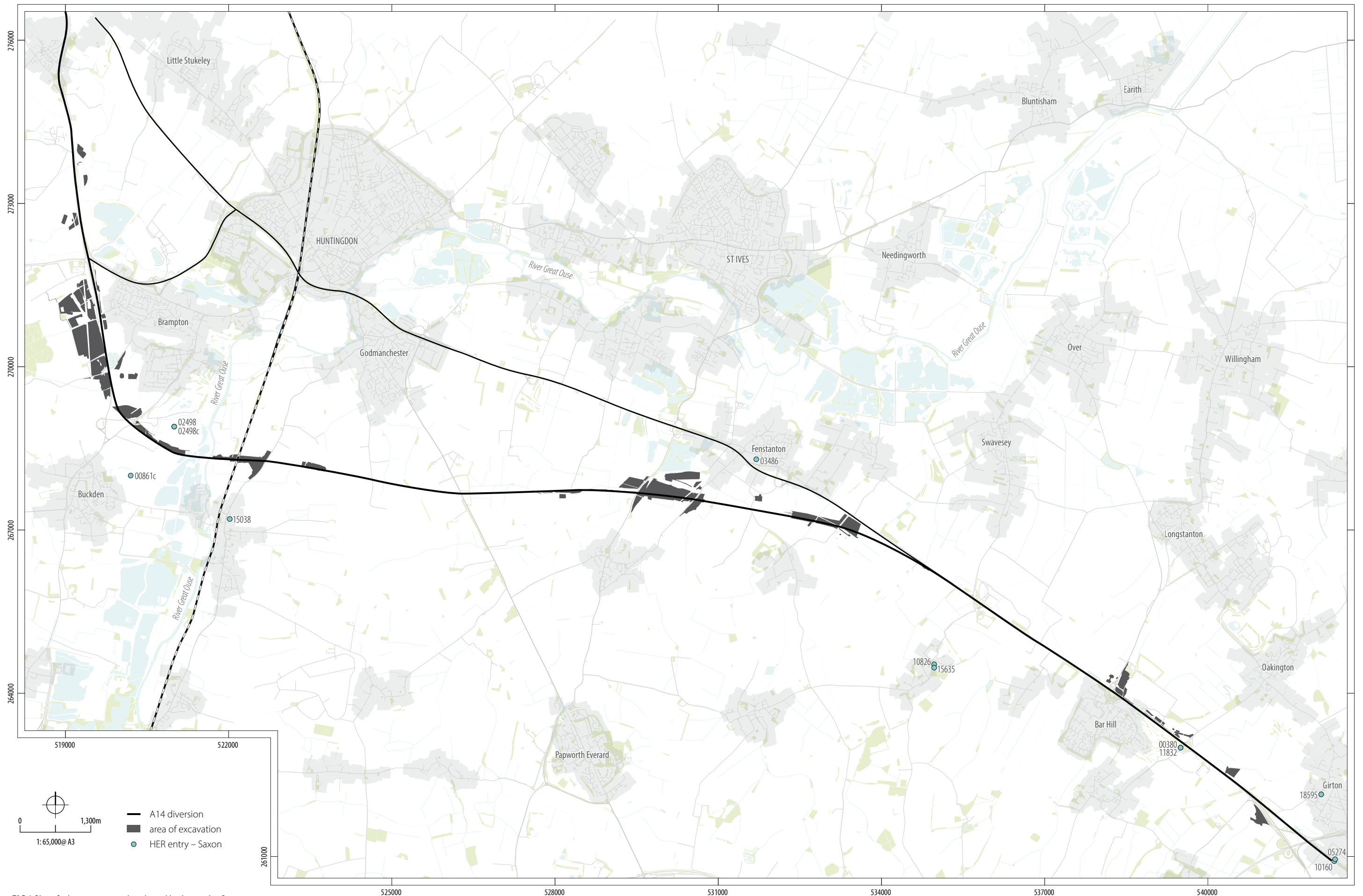
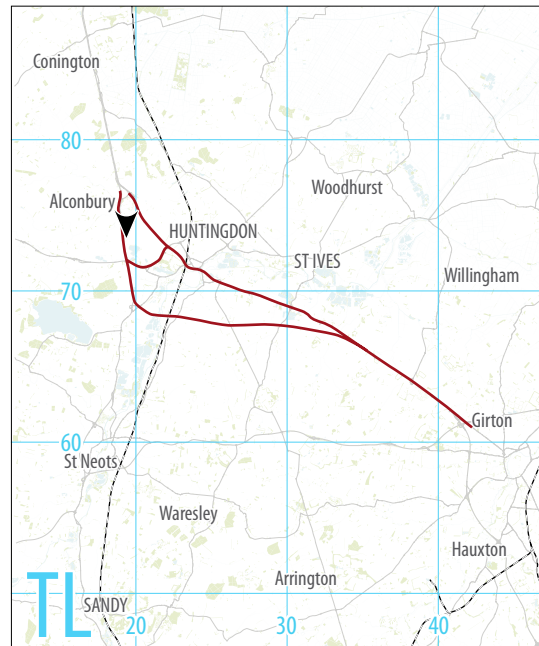
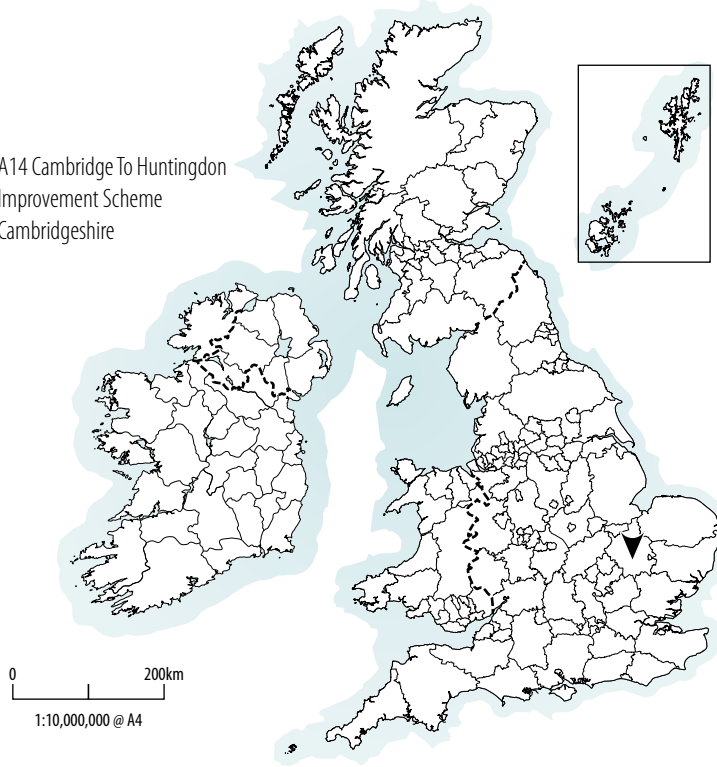


FIG9 Plan of scheme against archaeological background – Saxon



FIG 10 Plan of scheme against archaeological background – medieval and post-medieval

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Improvement Scheme
Cambridgeshire



limit of excavation

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FIG 2.1 Site location

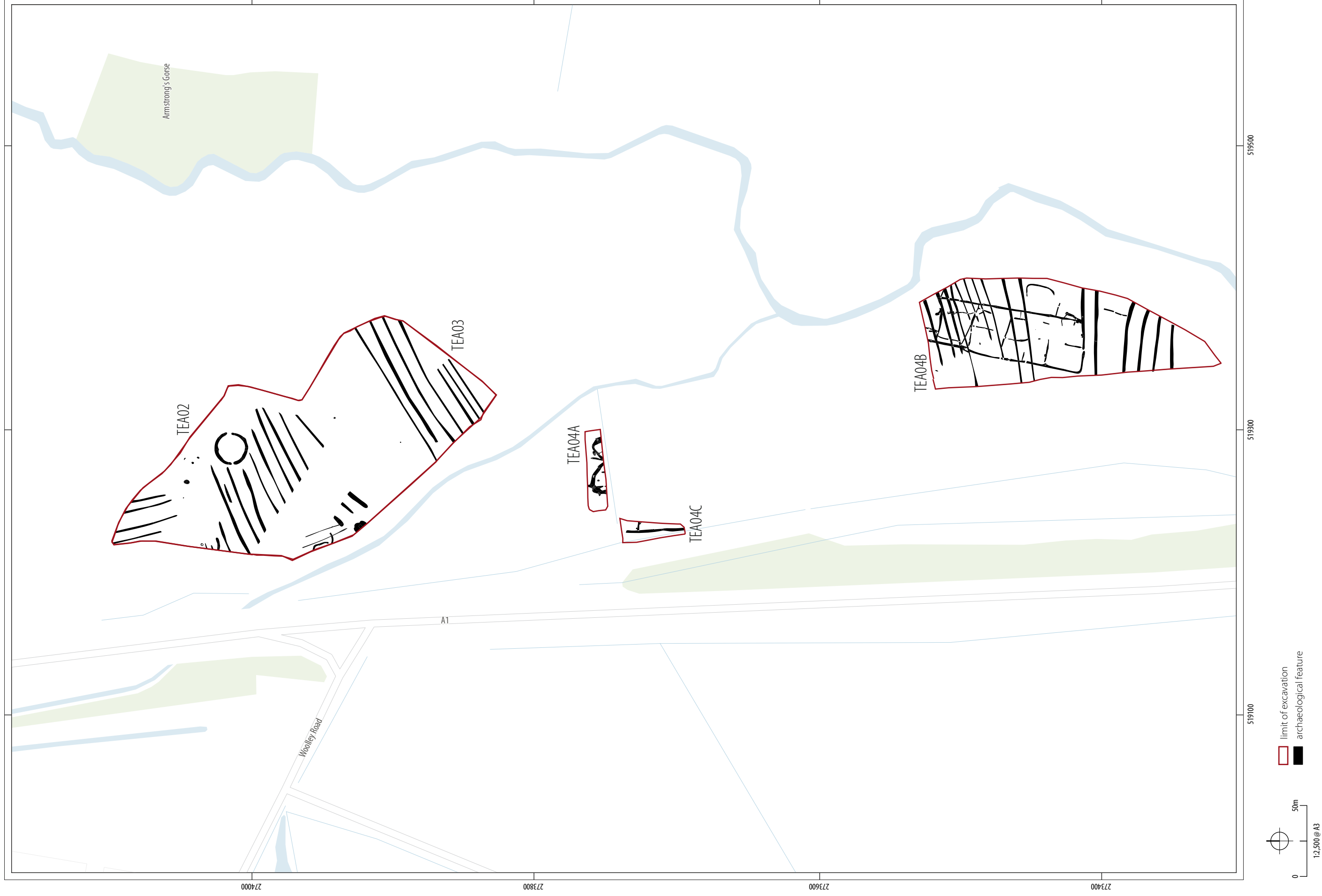


FIG 2.2 Plan of all archaeology in TEA 2-4

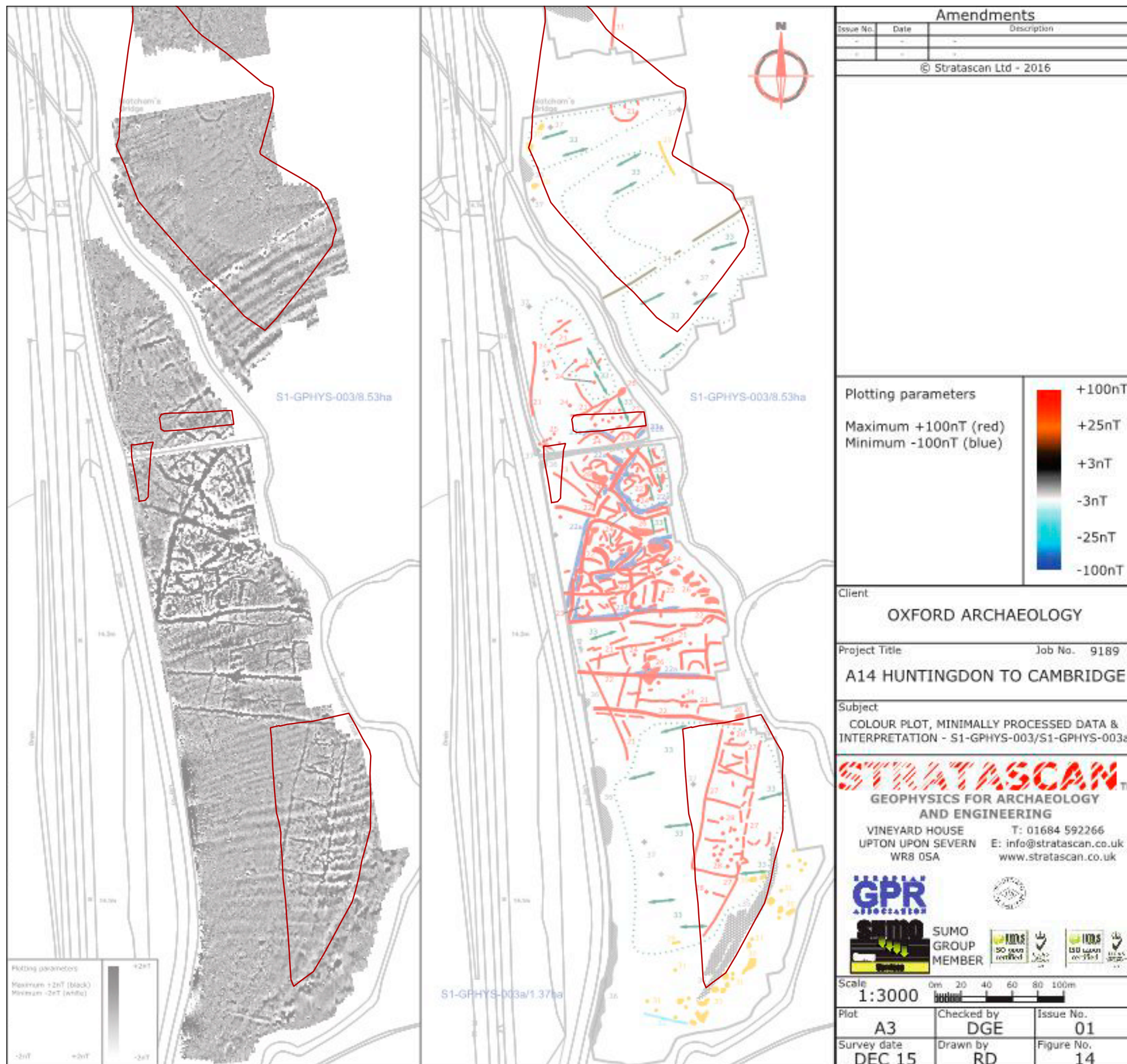


FIG 2.3 Geophysics plan of TEA 2–4, with areas excavated

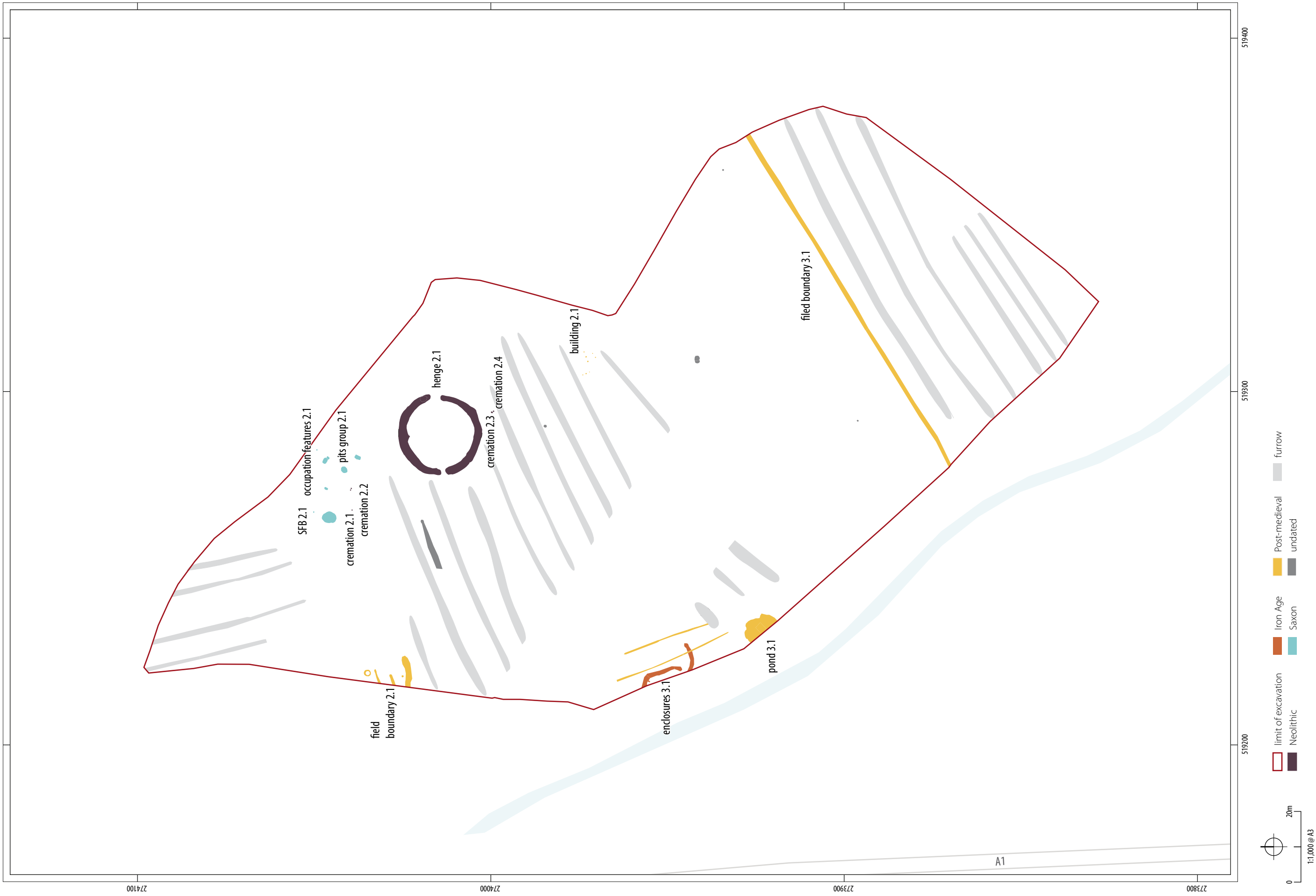


FIG 2.4 Phase plan showing archaeology in TEA.2 and 3

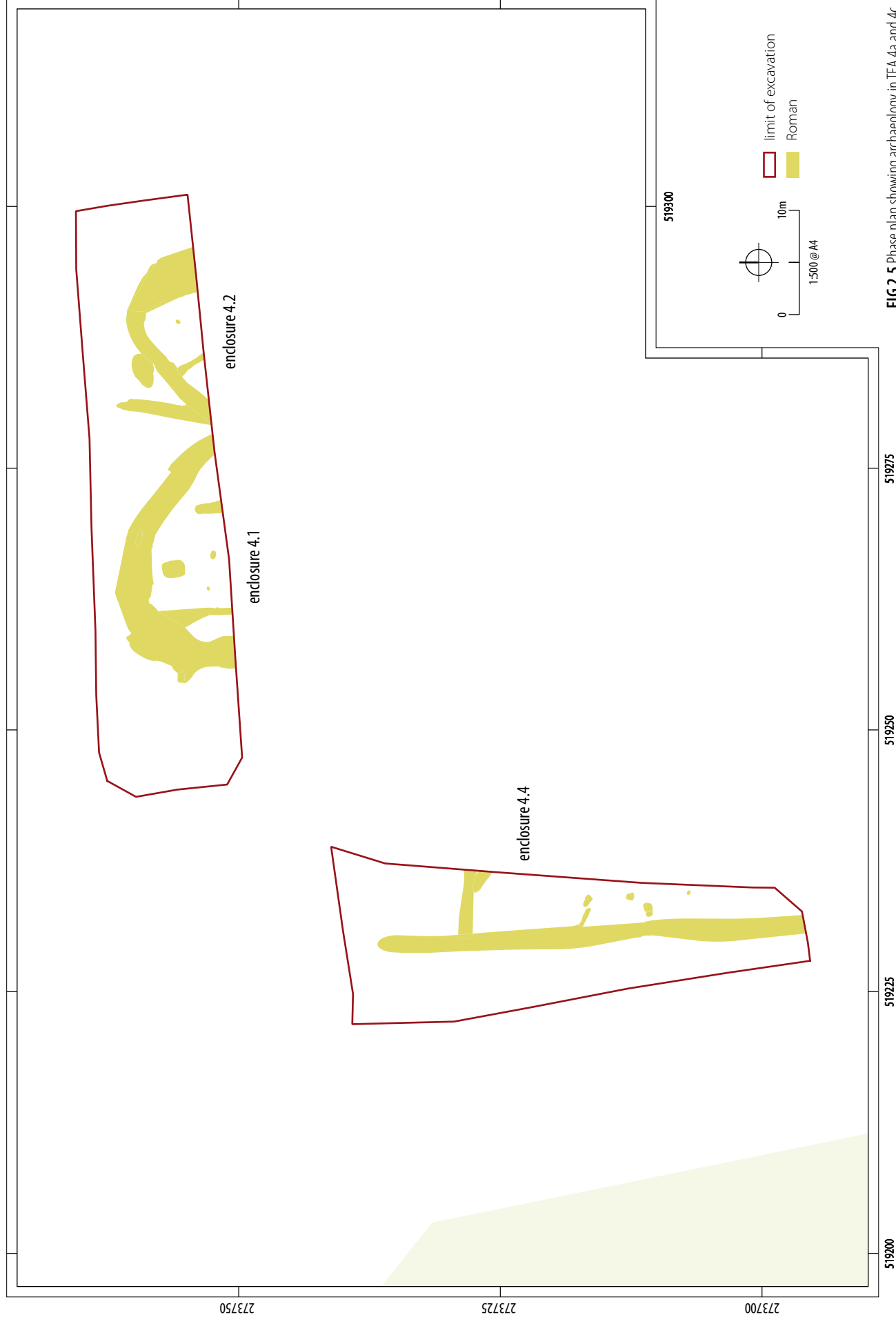


FIG 2.5 Phase plan showing archaeology in TEA 4a and 4c



FIG 2.6 Phase plan showing archaeology in TEA 4B



FIG 2.7 Drone photo, looking NW, showing henge and sunken-featured building in TEA 2



FIG 2.8 Photo of worked and inscribed bone, from (40418)

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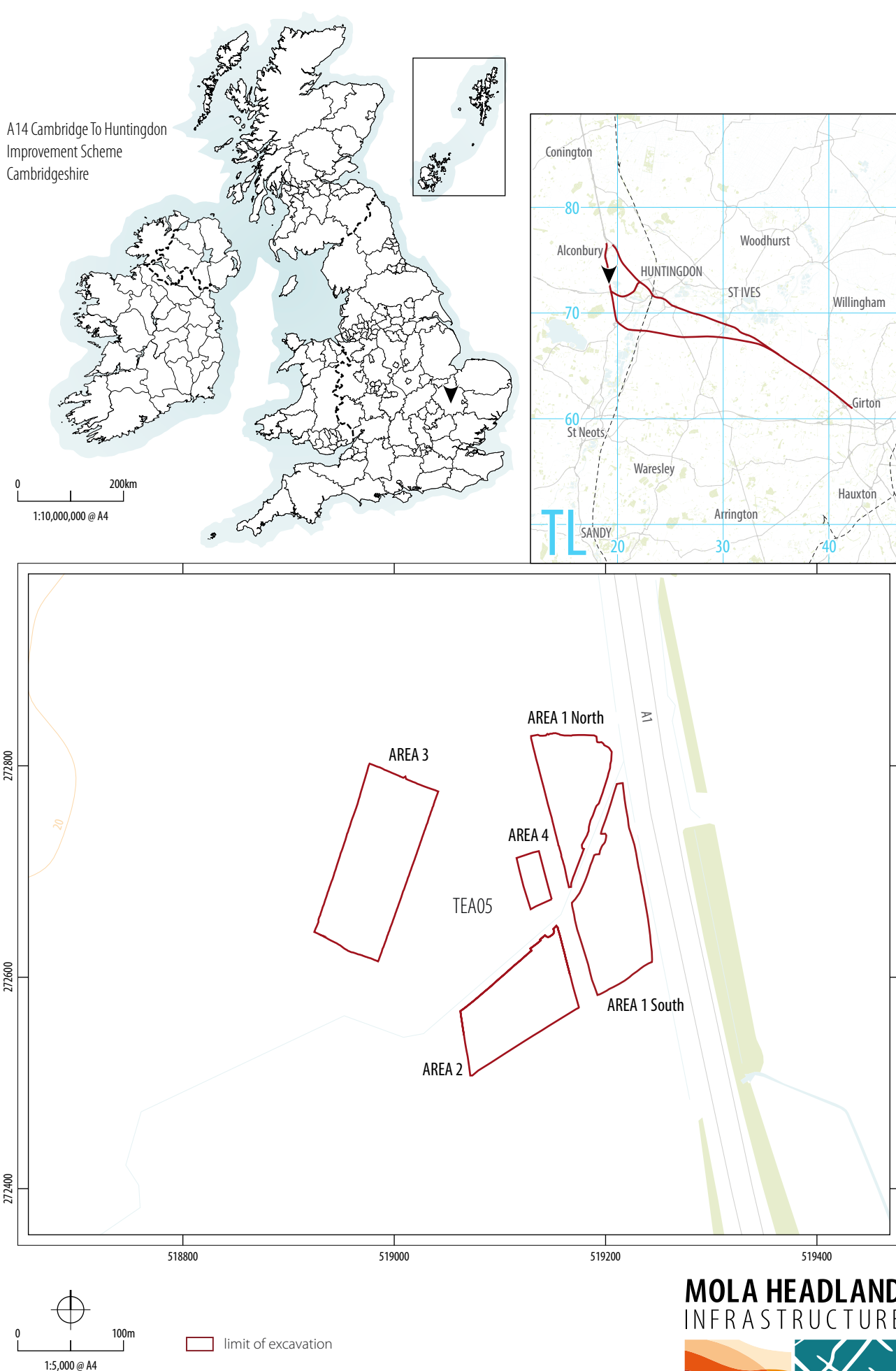


FIG 5.1 Site location



FIG 5.2 Site plan



FIG 5.3 Phase plan - Iron Age



FIG 5.4 Aerial photo with Iron Age crop marks

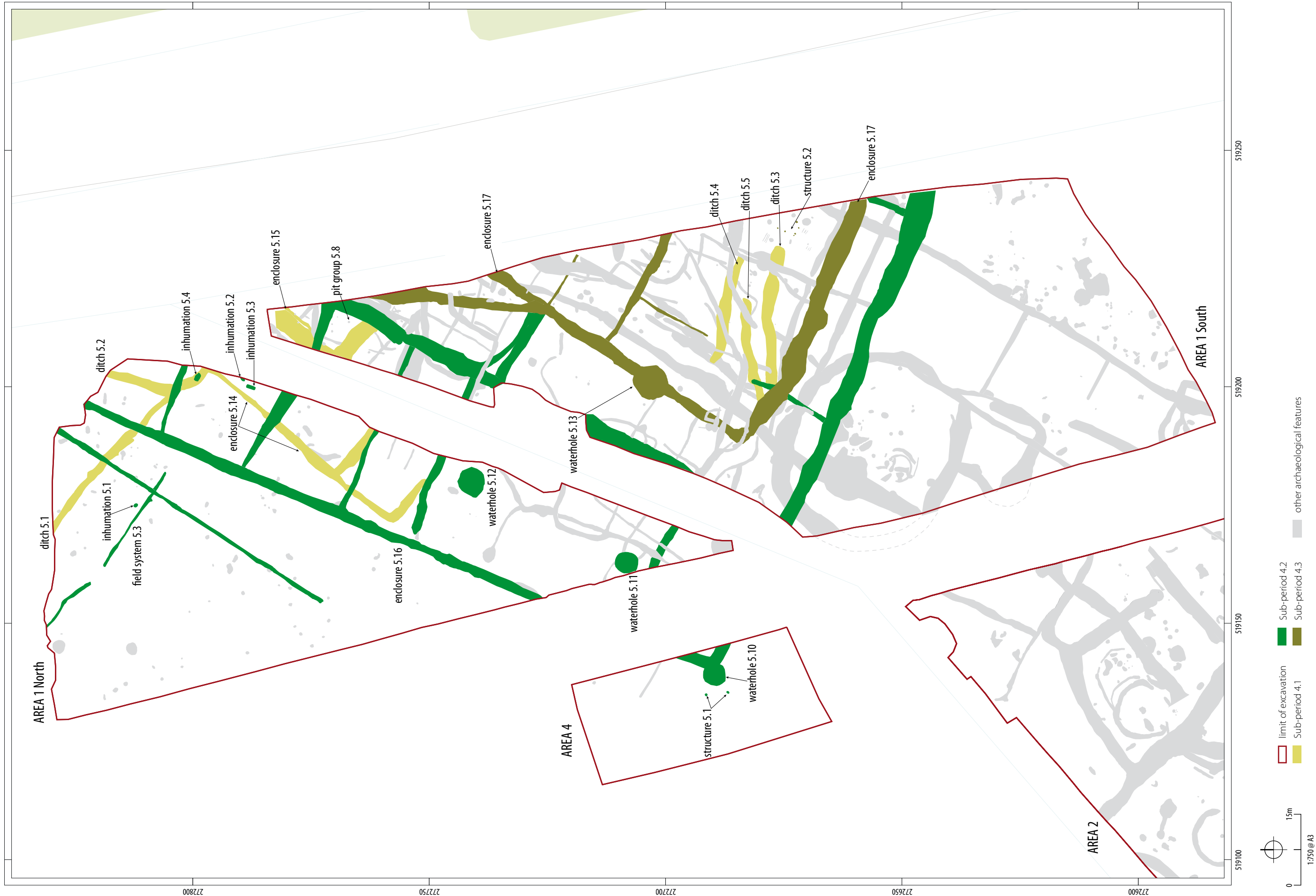


FIG 5.5 Phase plan - Roman



FIG 5.6 Aerial photograph of dark earth spread

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FIG 7A.1 Site location

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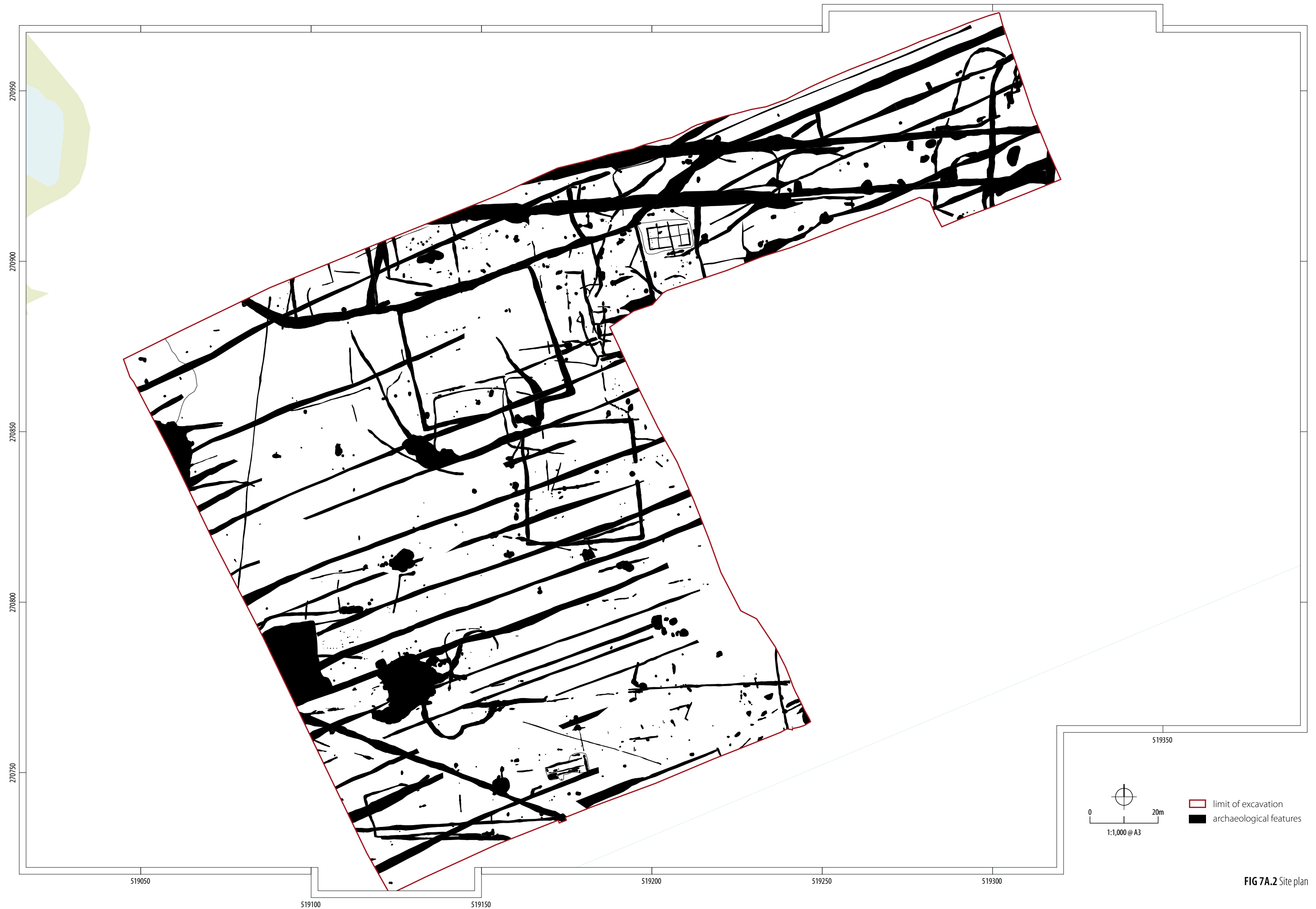


FIG 7A.2 Site plan

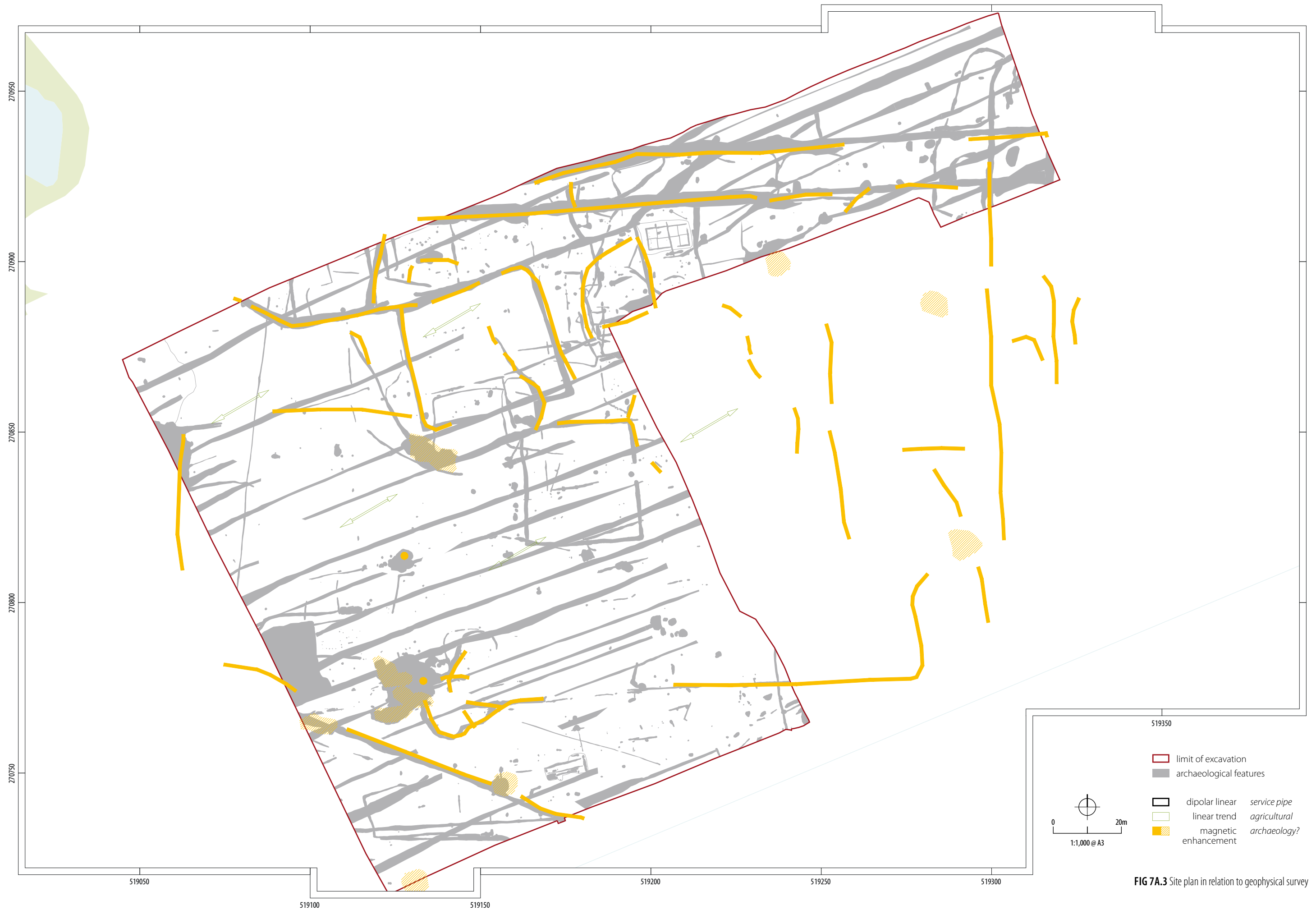


FIG 7A.3 Site plan in relation to geophysical survey

inhumation burial 7A.5

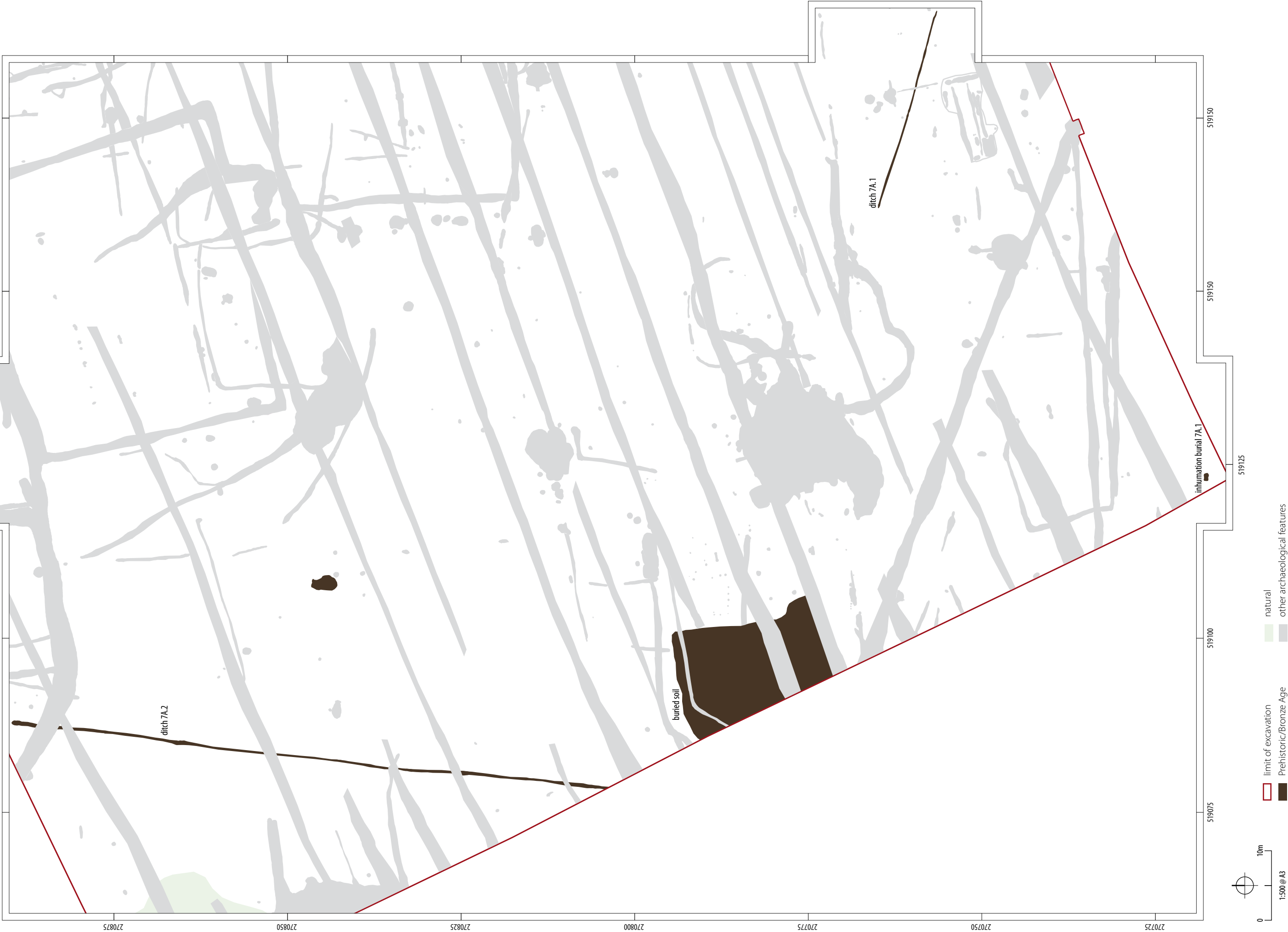


FIG 7A.4 Phase plan - Bronze Age

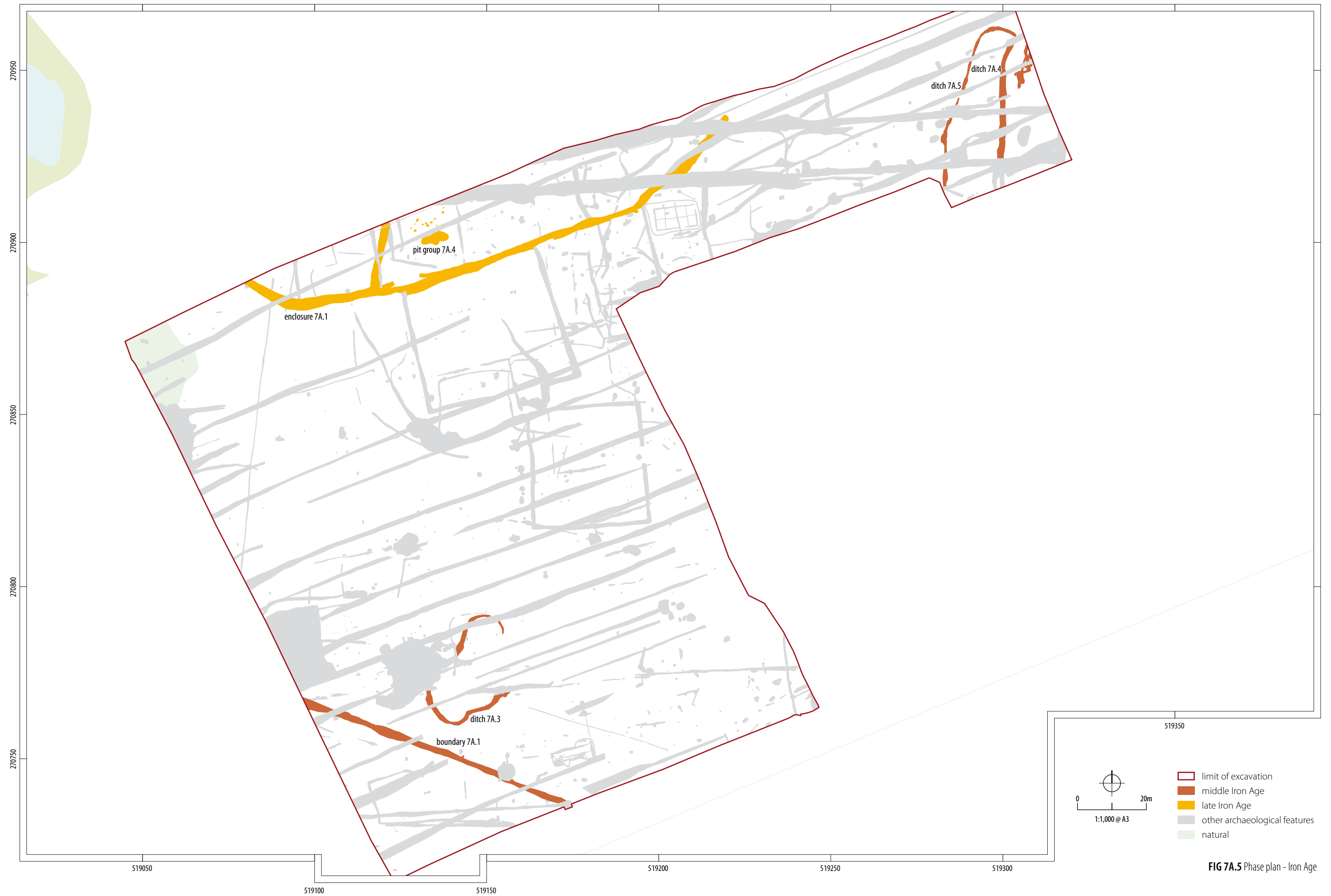


FIG 7A.5 Phase plan - Iron Age



FIG 7A.6 Phase plan - Roman



FIG 7A.7 Phase plan - medieval/post-medieval

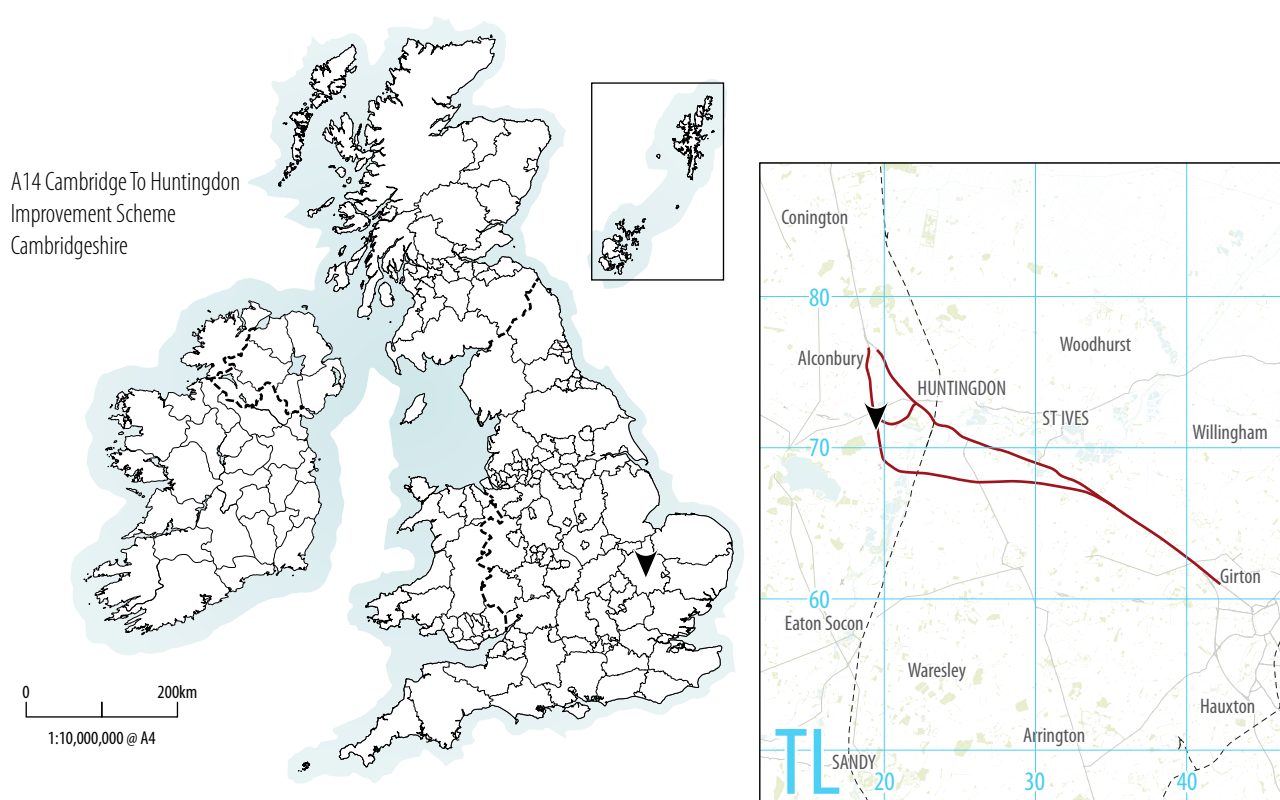


FIG 7A.8 Area shot of site 7A, photo taken from northeast



FIG 7A.9 Inhumations Burials 7A.3 and 7A.4, photo taken from above

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FIG 7BC.1 Site location



FIG 7BC.2 Plan of all archaeology in TEA 7B + 7C



FIG 7BC.3 Phased plan showing all archaeology in TEA 7B + 7C



FIG 7B.C.4 Plan of Iron Age archaeology in TEA 7C East and 7B



FIG 7BC.5 Plan of prehistoric (Neolithic and Iron Age) archaeology in TEA 7C main field

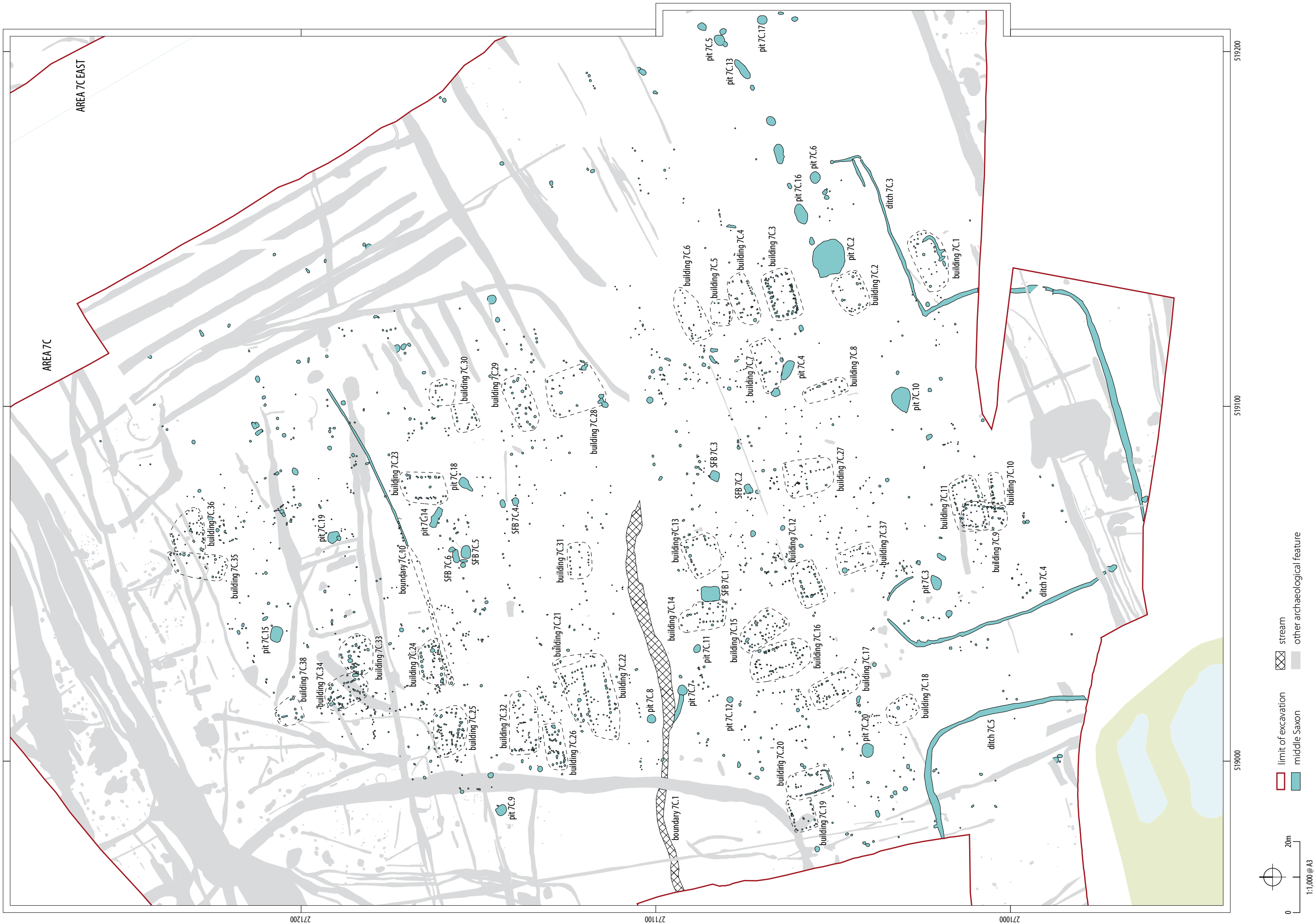


FIG 7B.C.6 Plan of middle Saxon settlement in TEA 7C main field



FIG 7BC.7 Plan of late Saxon activity in TEA 7B and 7C East



FIG 7BC.8 Plan of medieval village in TEA 7C main field

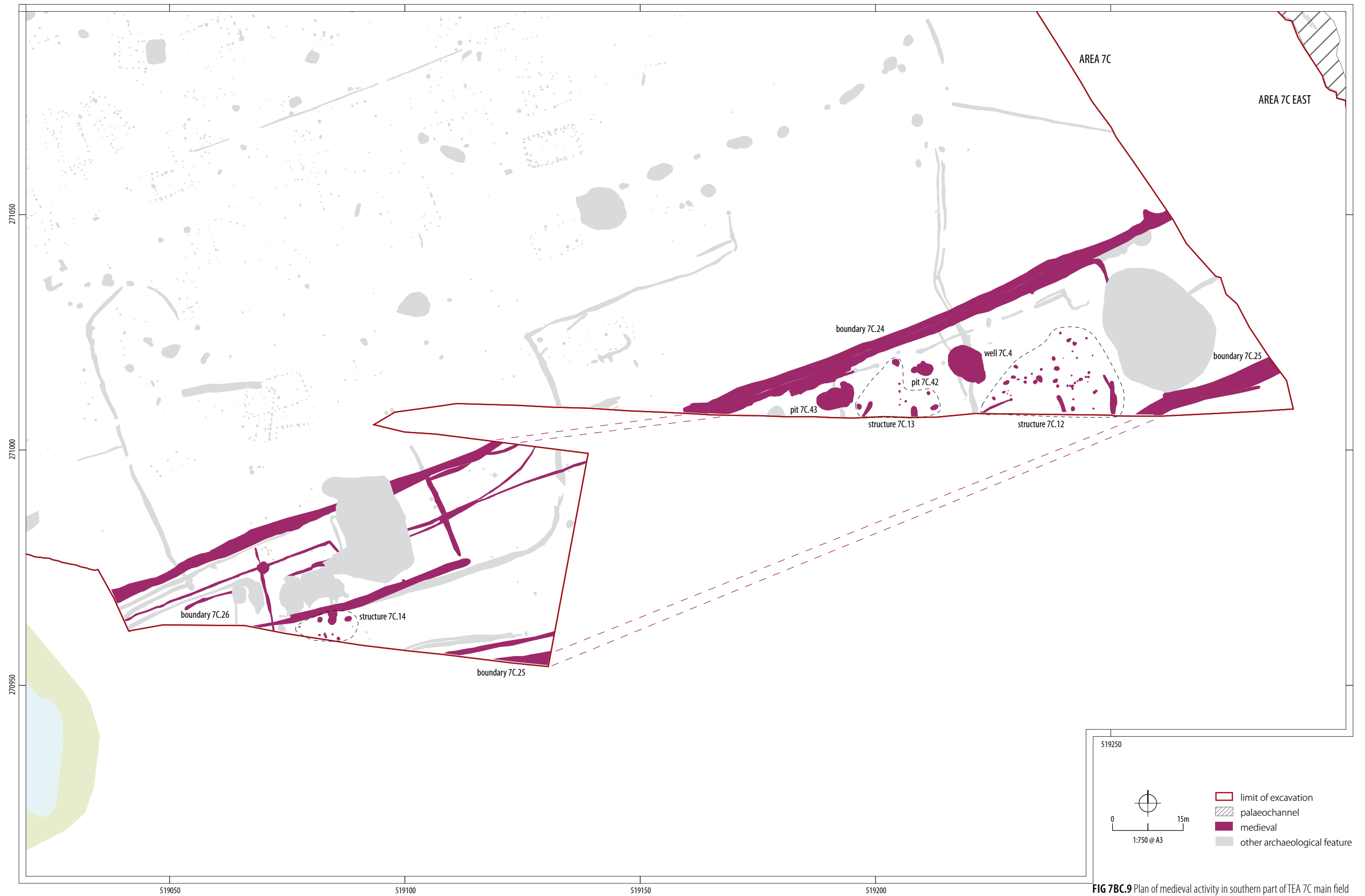


FIG 7BC.9 Plan of medieval activity in southern part of TEA 7C main field



FIG 7BC.10 1772 Inclosure Plan, with our site boundary superimposed on it



FIG 7BC.11 Plan of later (post-medieval / modern) archaeology across whole site



FIG 7BC.12 Drone photo of Iron Age enclosures in TEA 7C East



FIG 7BC.13 Photo of Saxon Pit 7C.20, with possible cooking vessel **FIG 7BC.14** Photo of medieval trackway 7C.2 through Houghton village (GROUP NO)
FIG 7BC.15 Photo of medieval blacksmiths-building 7C.39 (GROUP NO) **FIG 7BC.16** Photo of 19th century brick clamp 7B.1

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Cambridgeshire

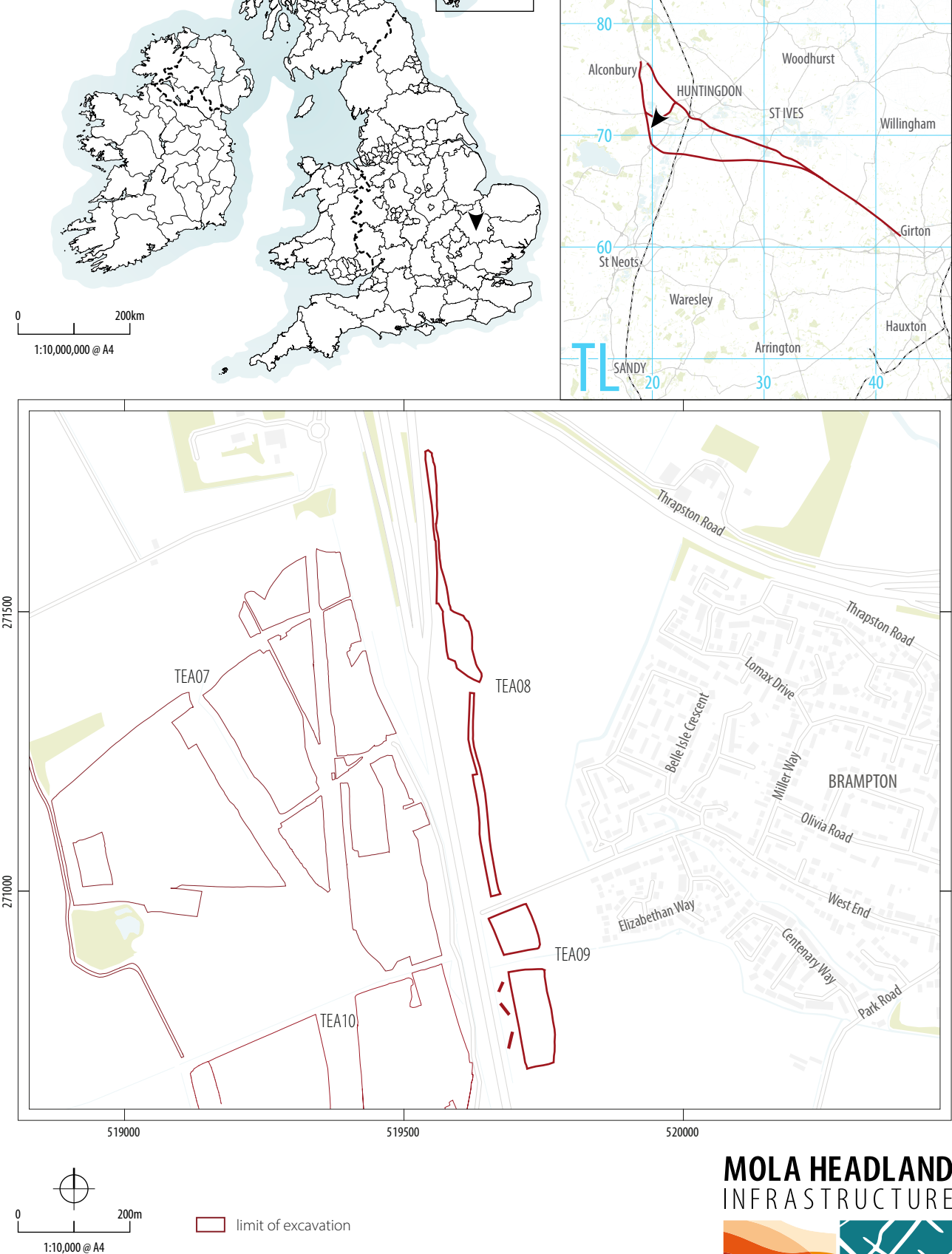


FIG 8.1 Site location

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FIG 8.2 Site plan TEA08

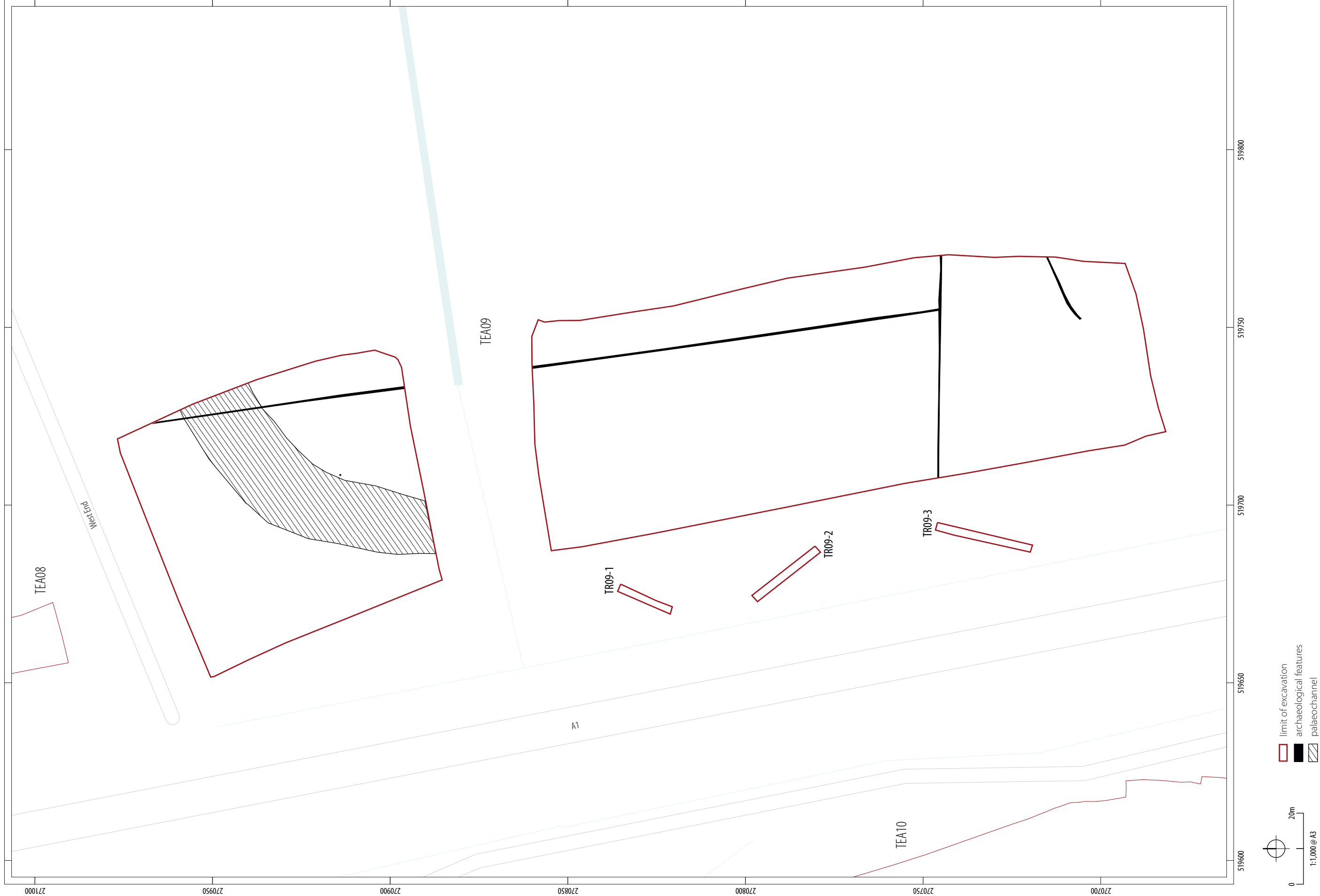


FIG 8.3 Site plan TEA09

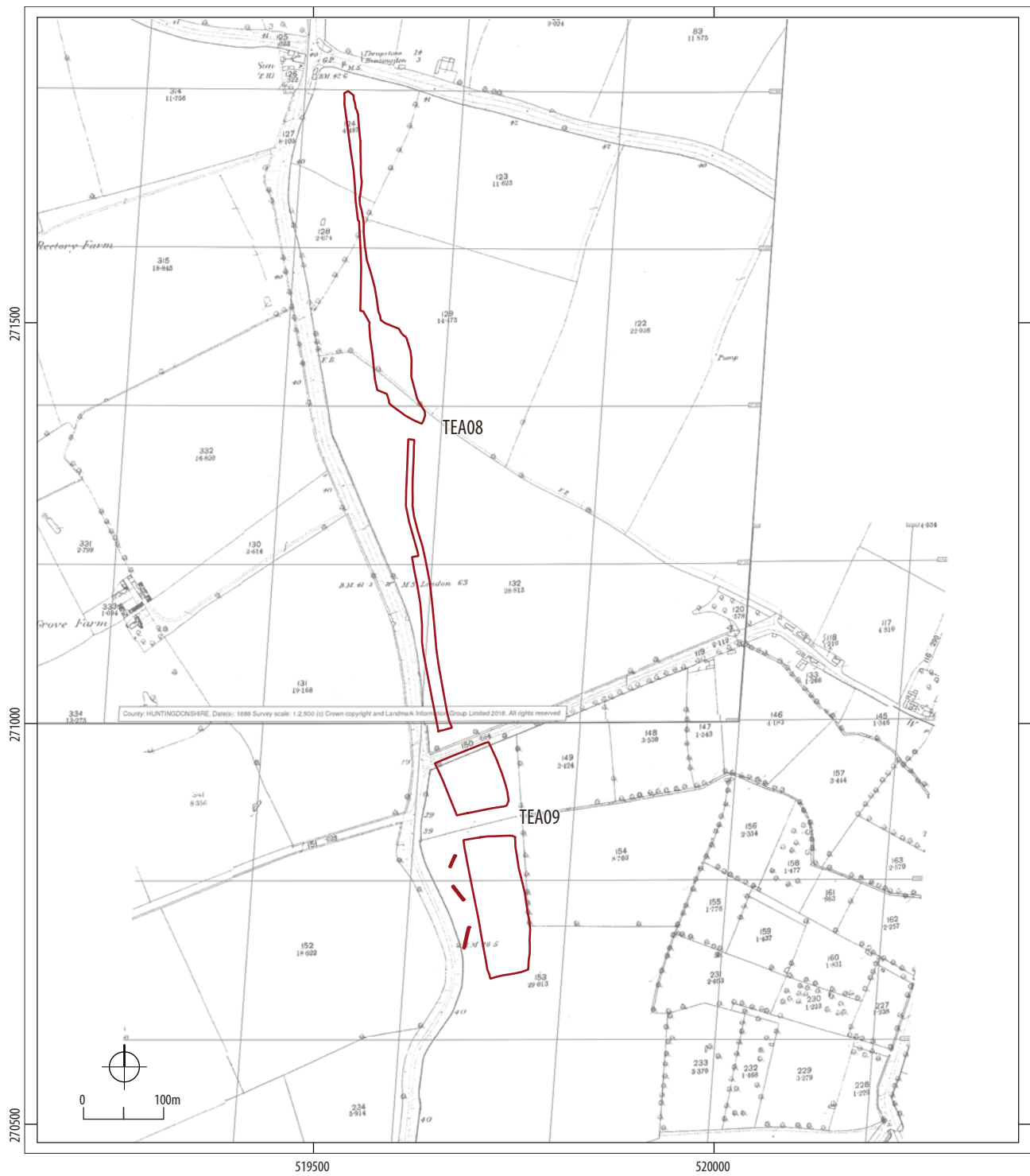


FIG 8.4 1888 OS Map showing TEA08-09



FIG 8.5 Post-medieval gravel extraction

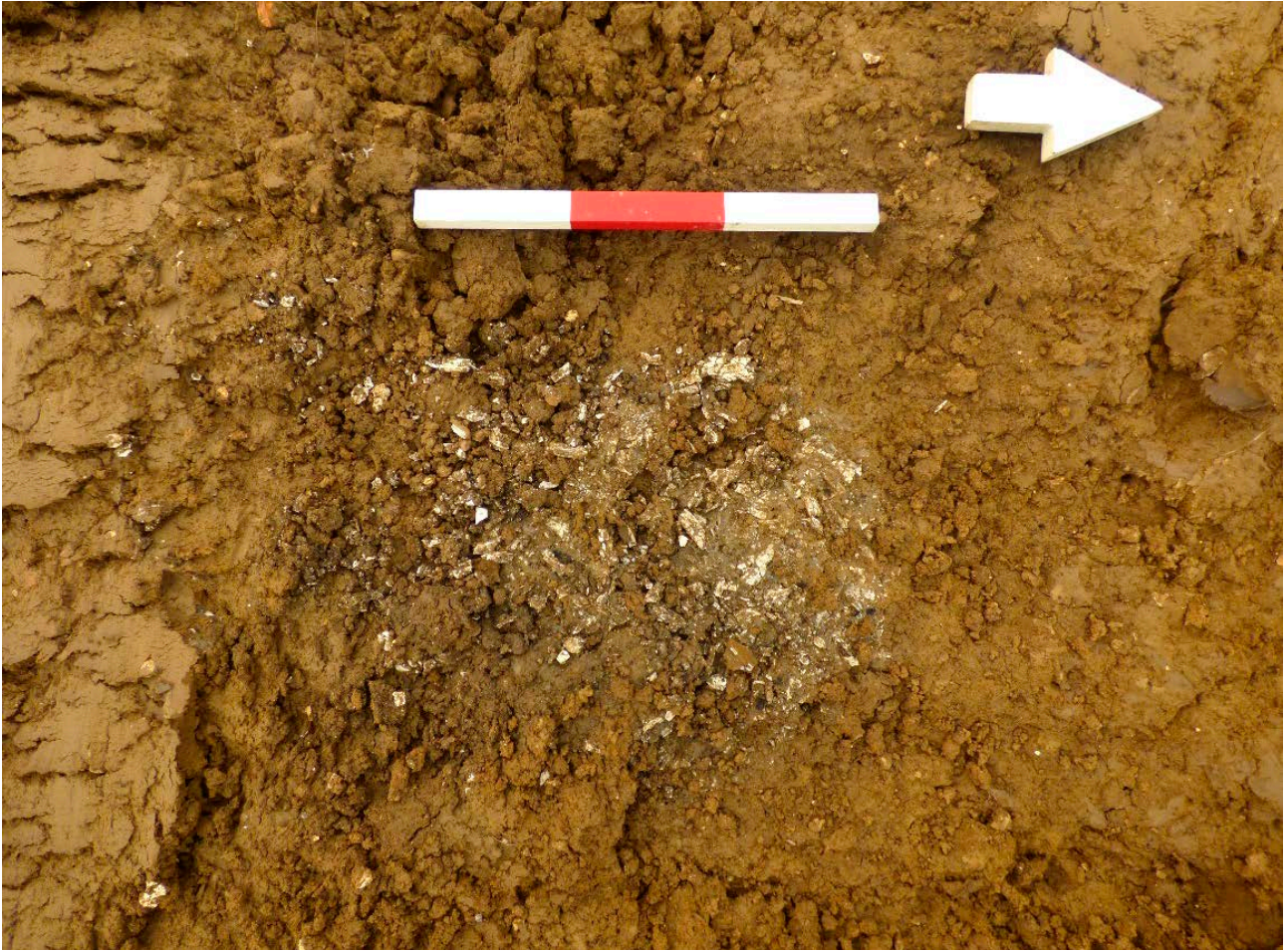


FIG 8.6 Unurned cremation identified before removal

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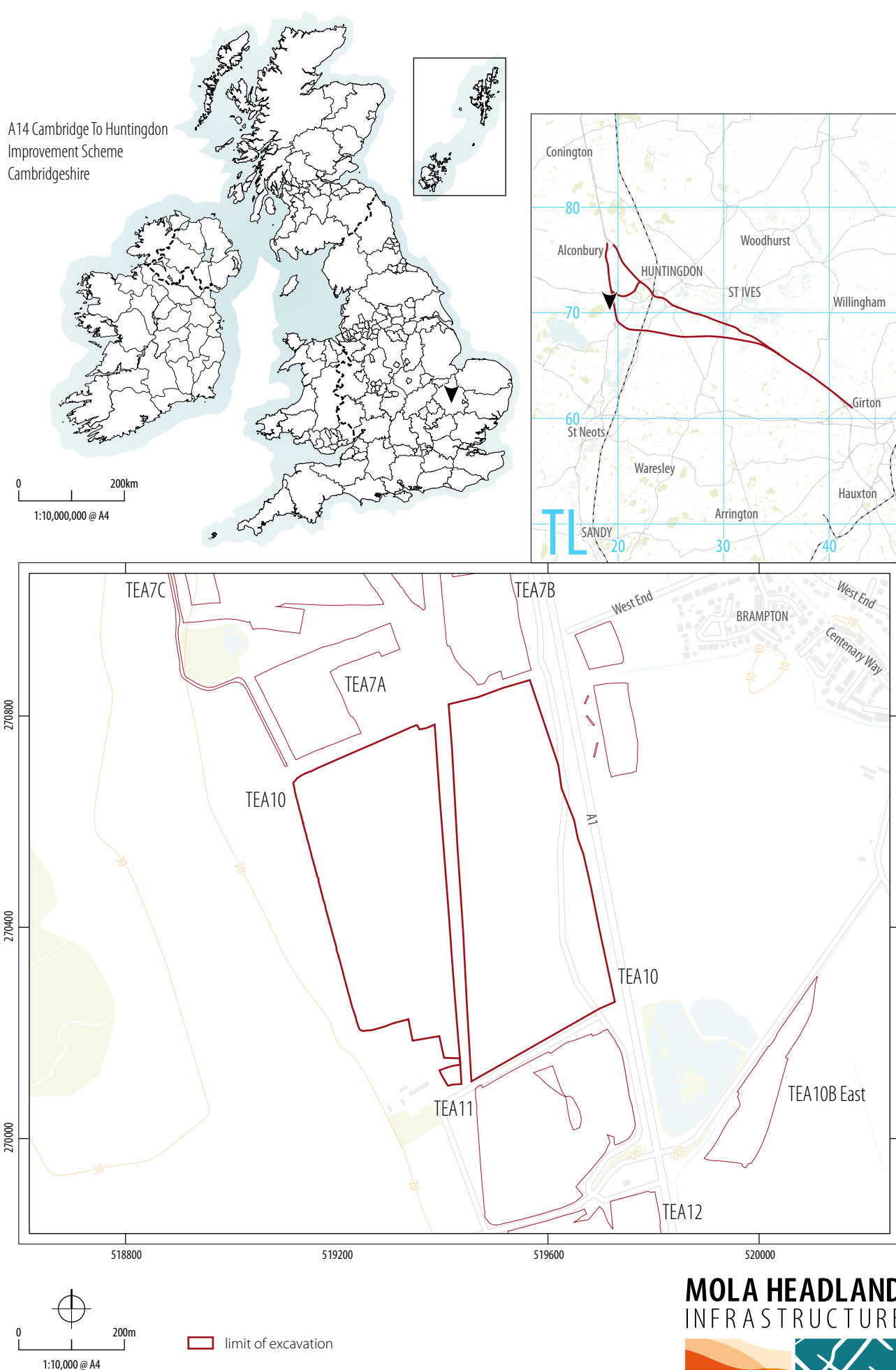


FIG 10.1 Site location

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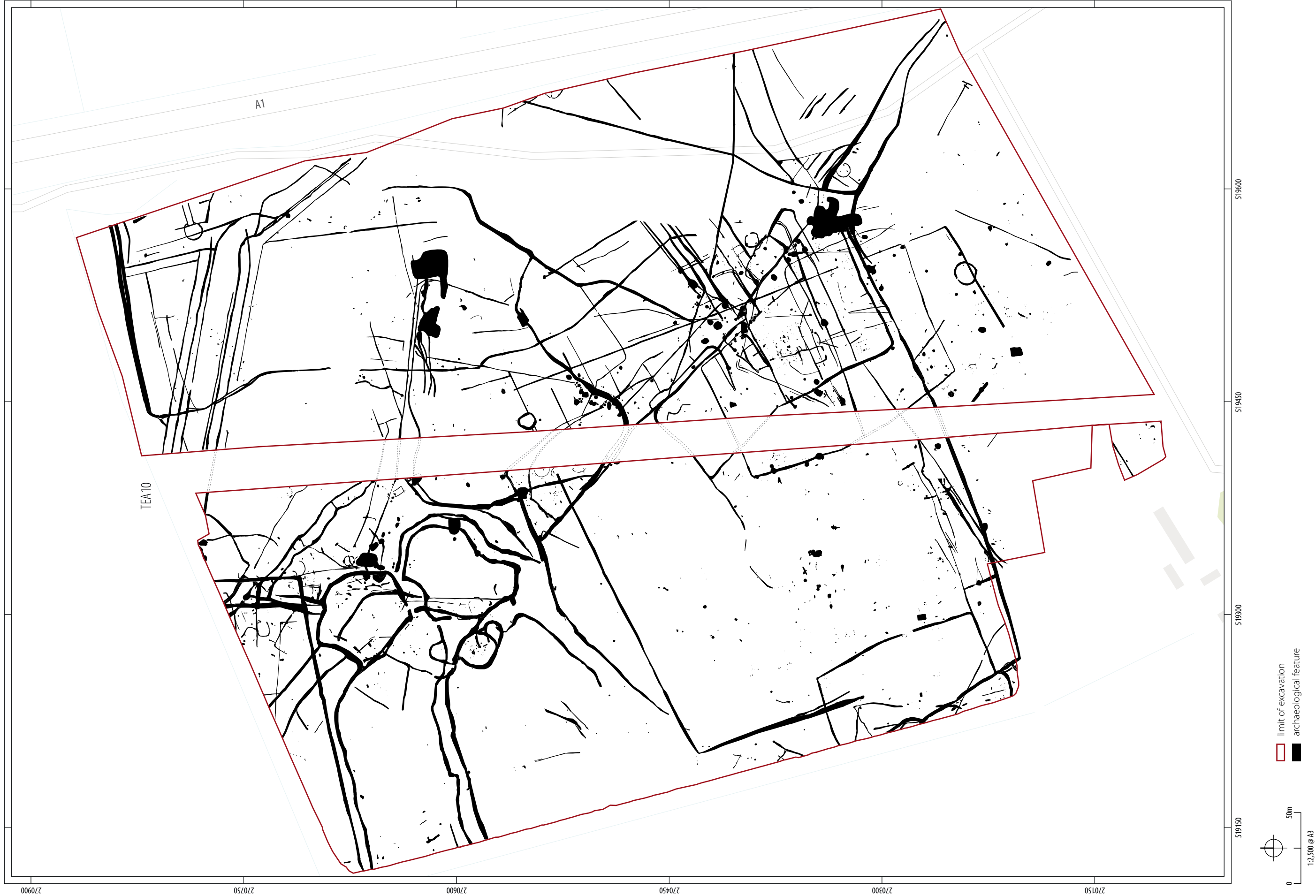


FIG 10.2 Site plan

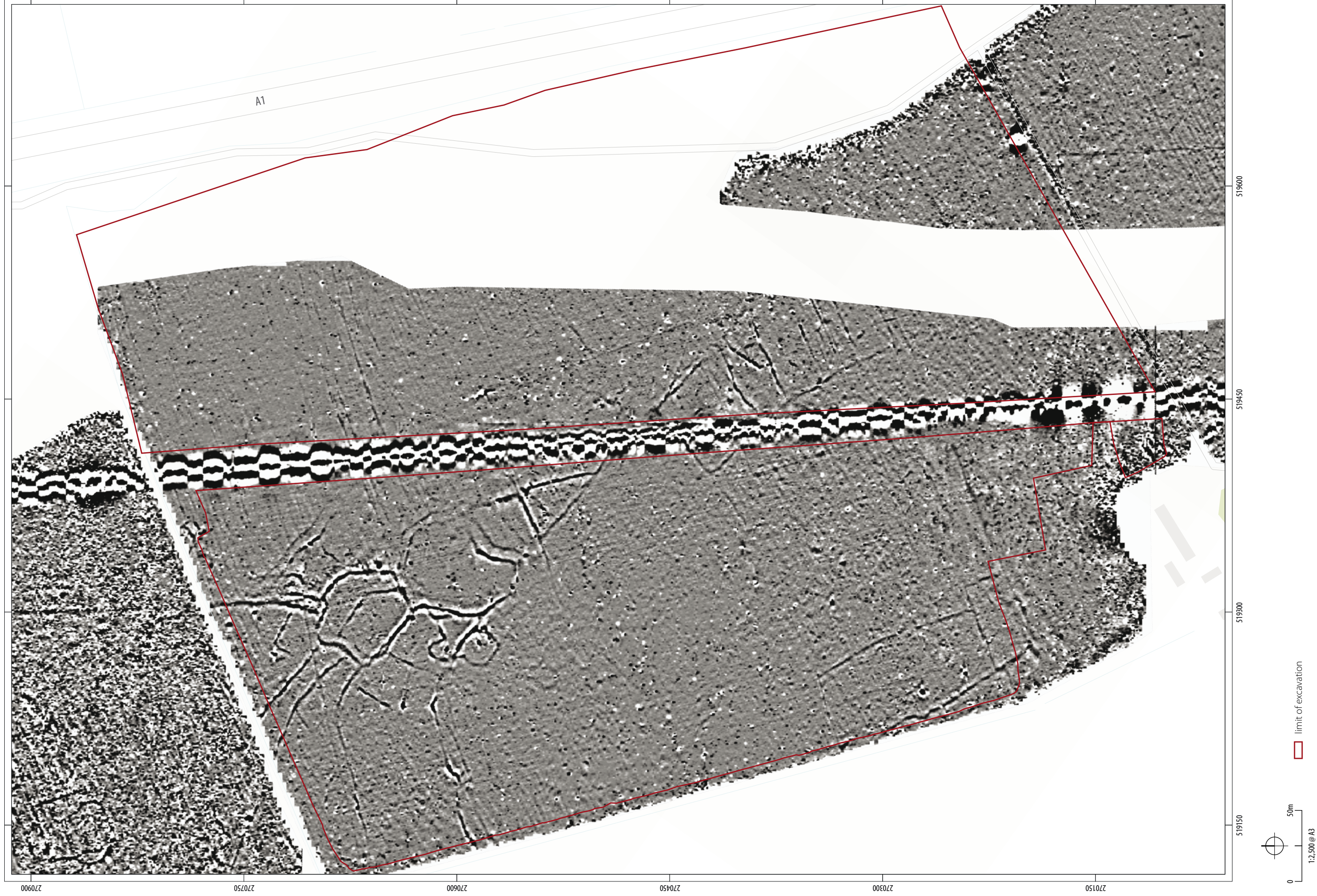


FIG 10.3 Geophysical survey of TEA 10 after Bartlett in 2009

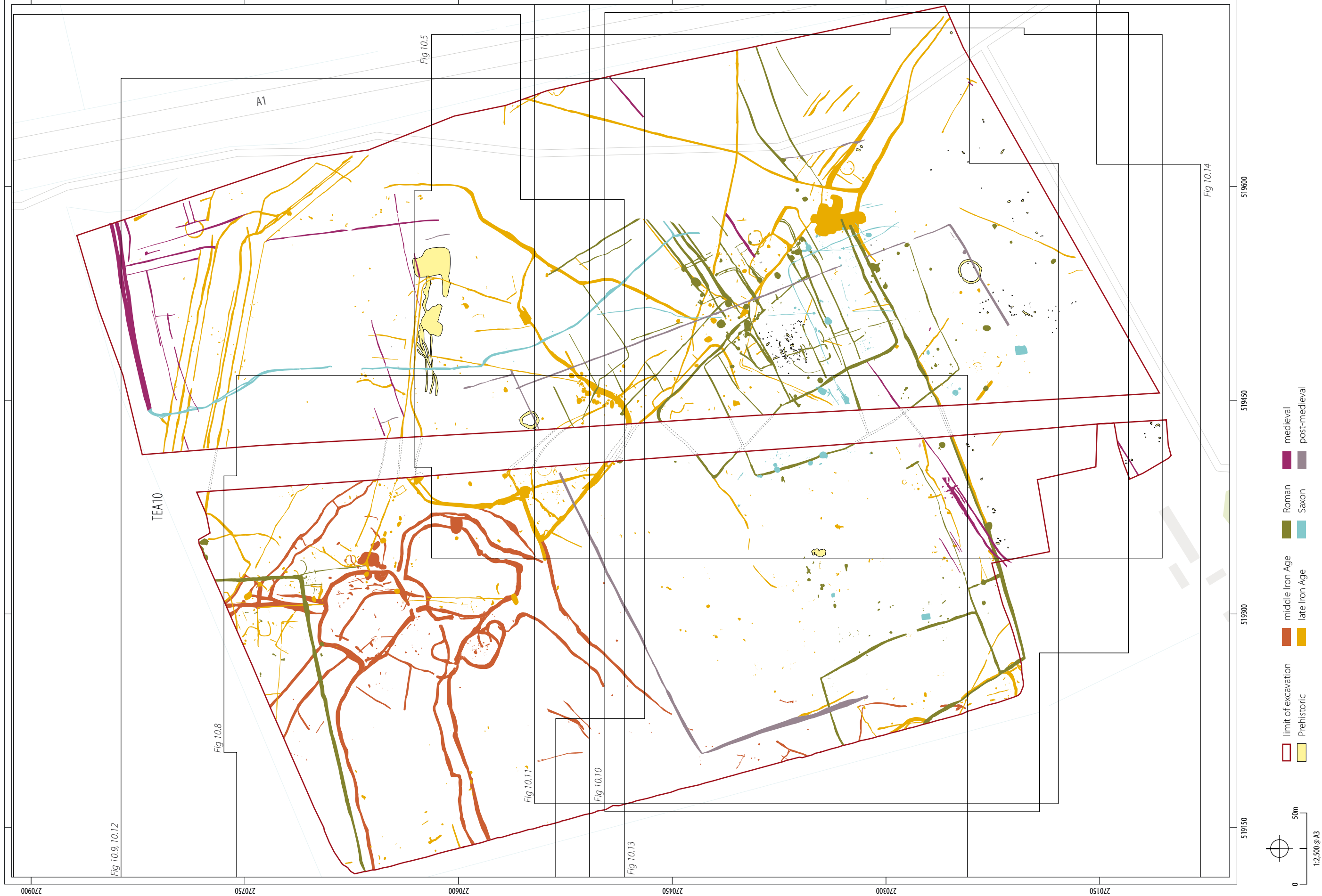


FIG 10.4 Site plan with all pahases



FIG 10.5 Phase 1 plan – Prehistoric



FIG 10.6 Phase 1 plan – Prehistoric, pits and cremations, Group 1.2.2

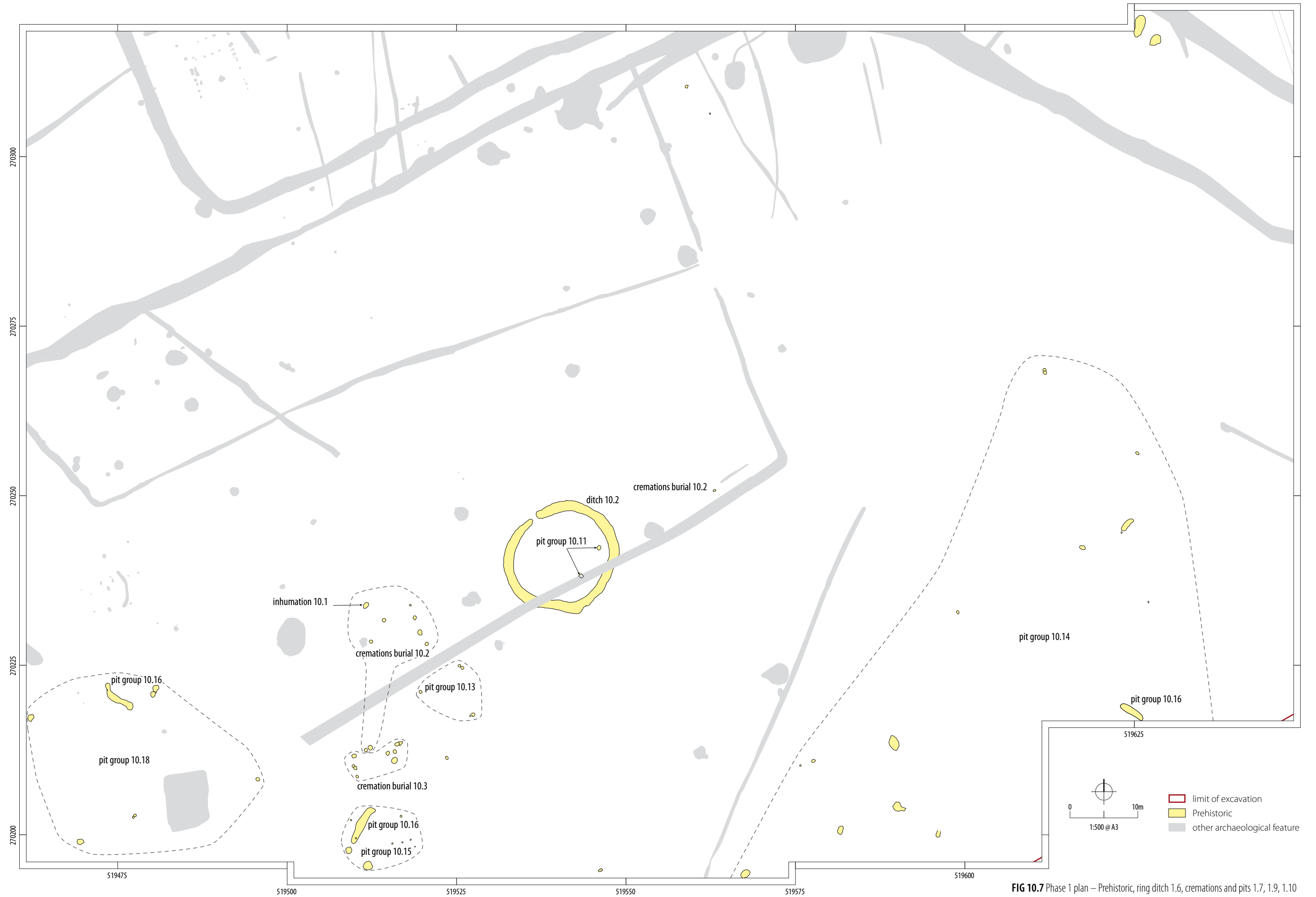


FIG 10.7 Phase 1 plan – Prehistoric, ring ditch 1.6, cremations and pits 1.7, 1.9, 1.10

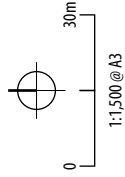


FIG 10.8 Phase 2 plan – middle Iron Age

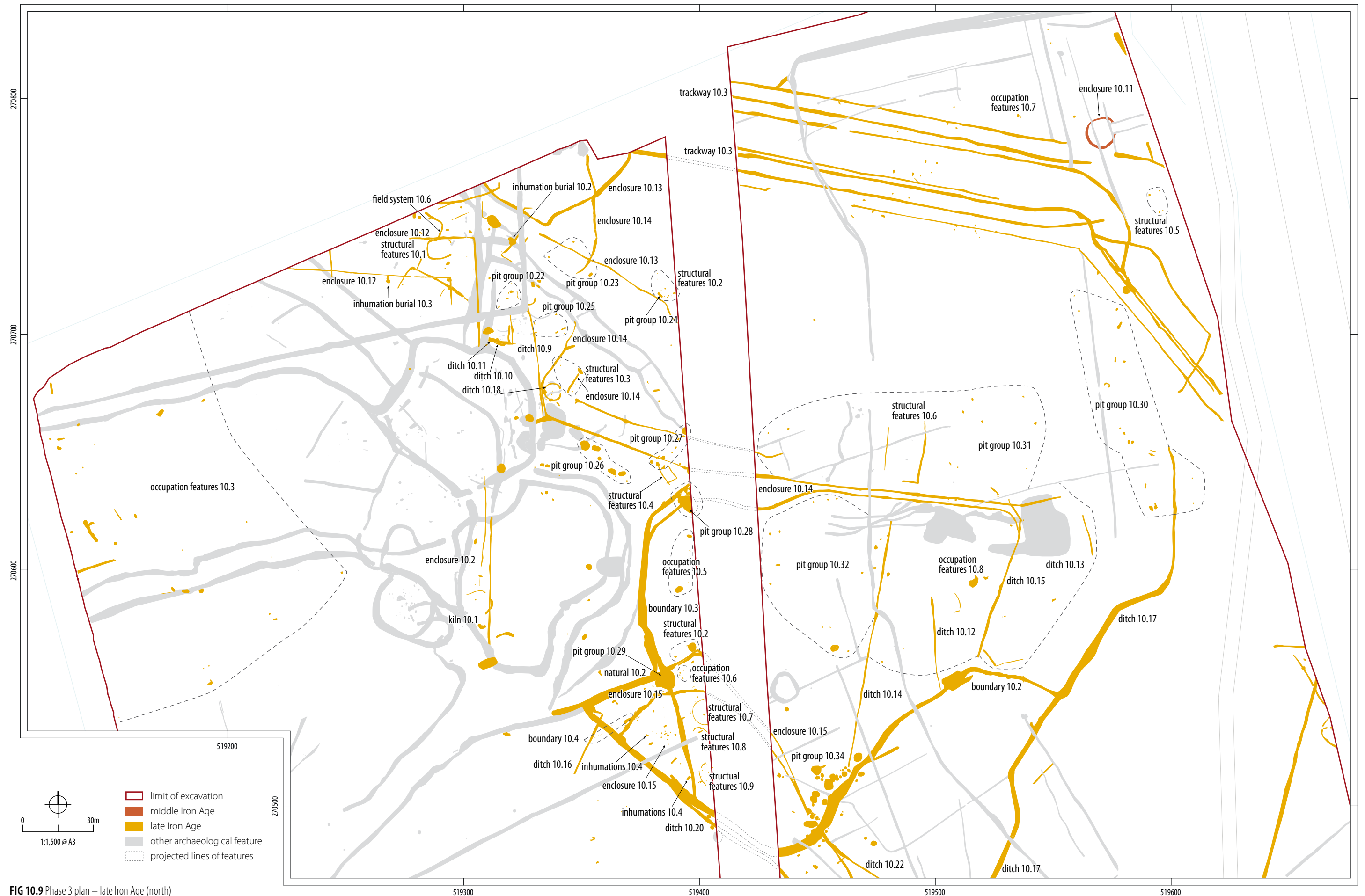


FIG 10.9 Phase 3 plan – late Iron Age (north)

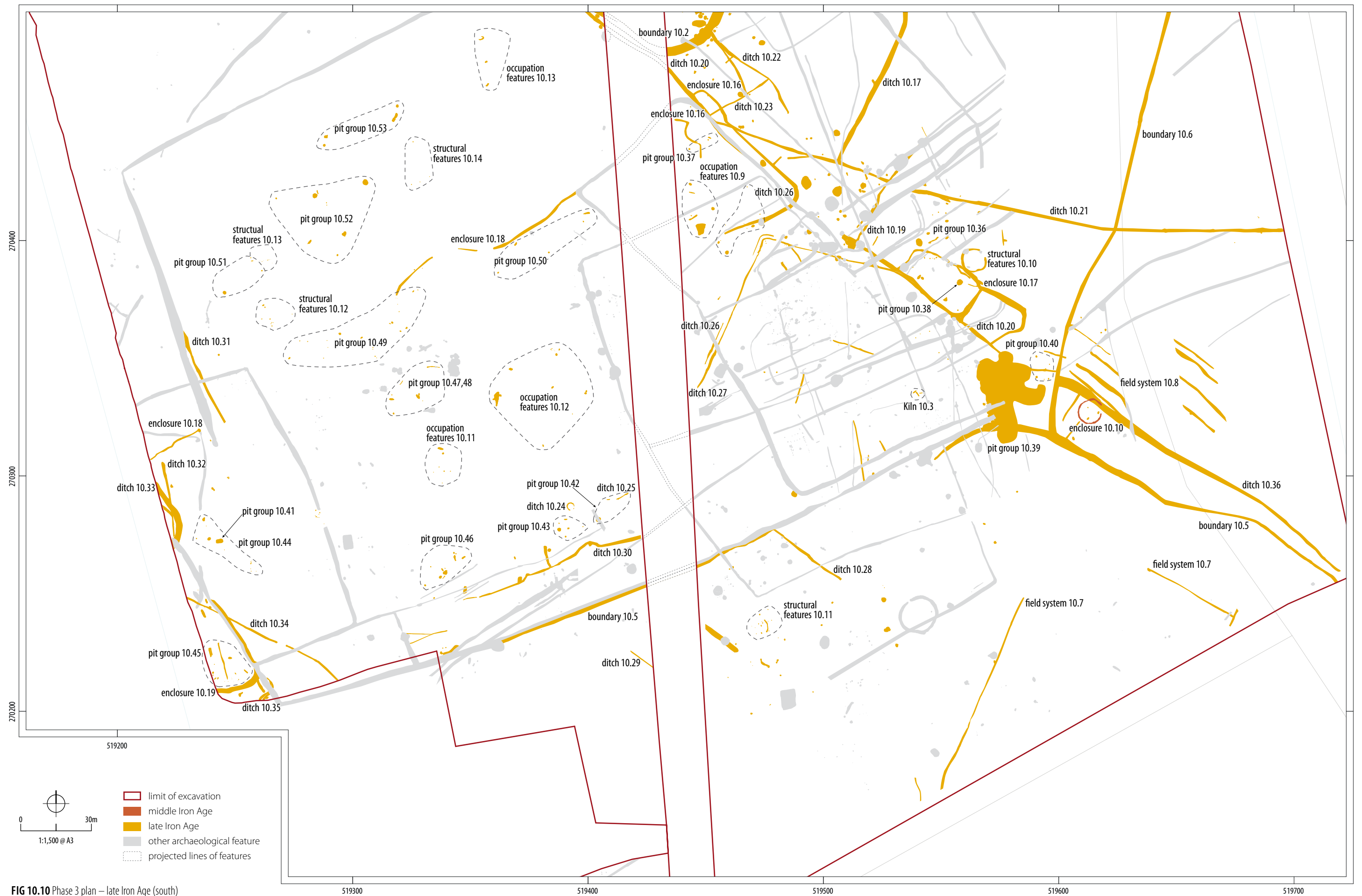


FIG 10.10 Phase 3 plan – late Iron Age (south)

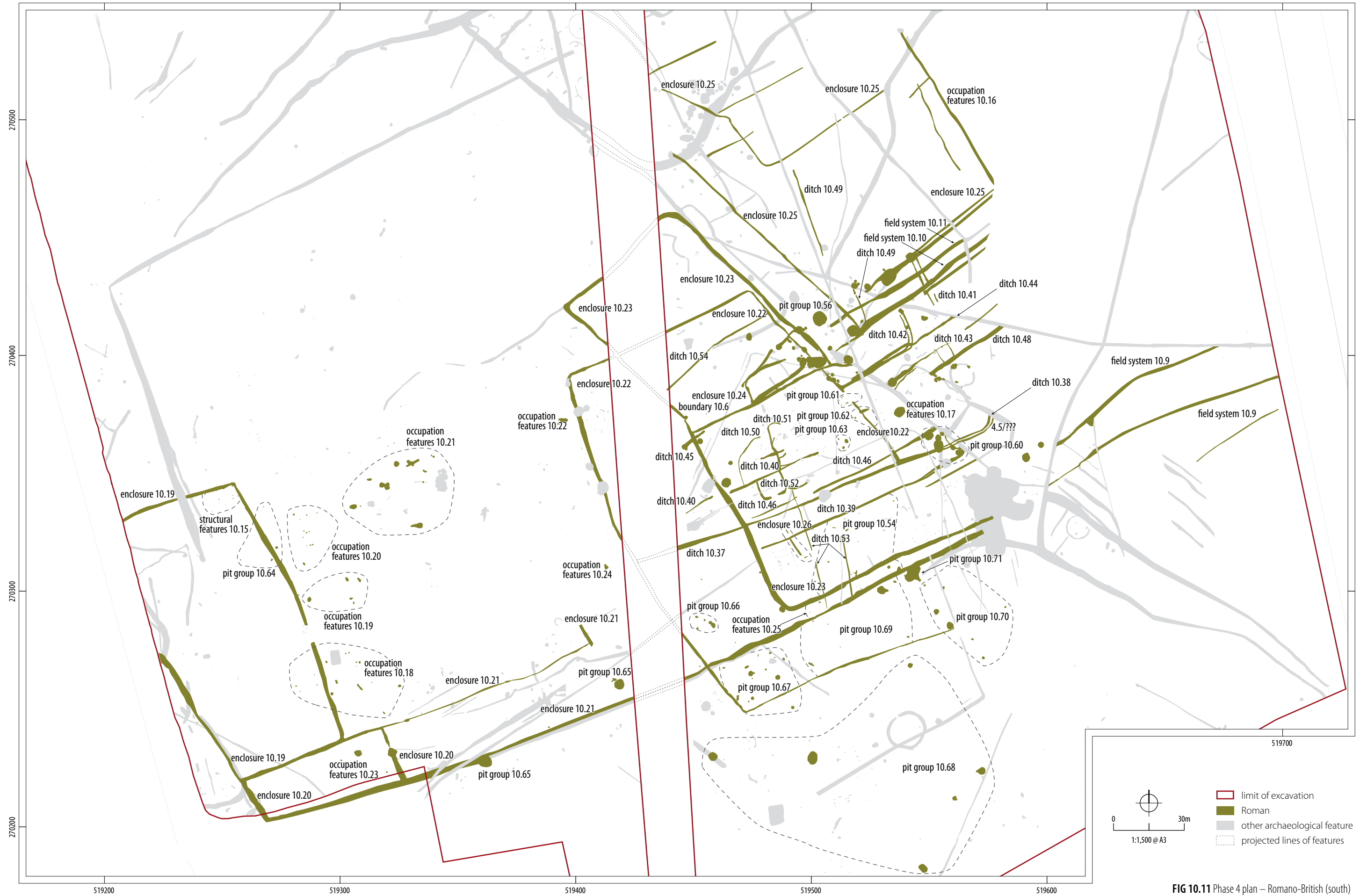


FIG 10.11 Phase 4 plan – Romano-British (south)

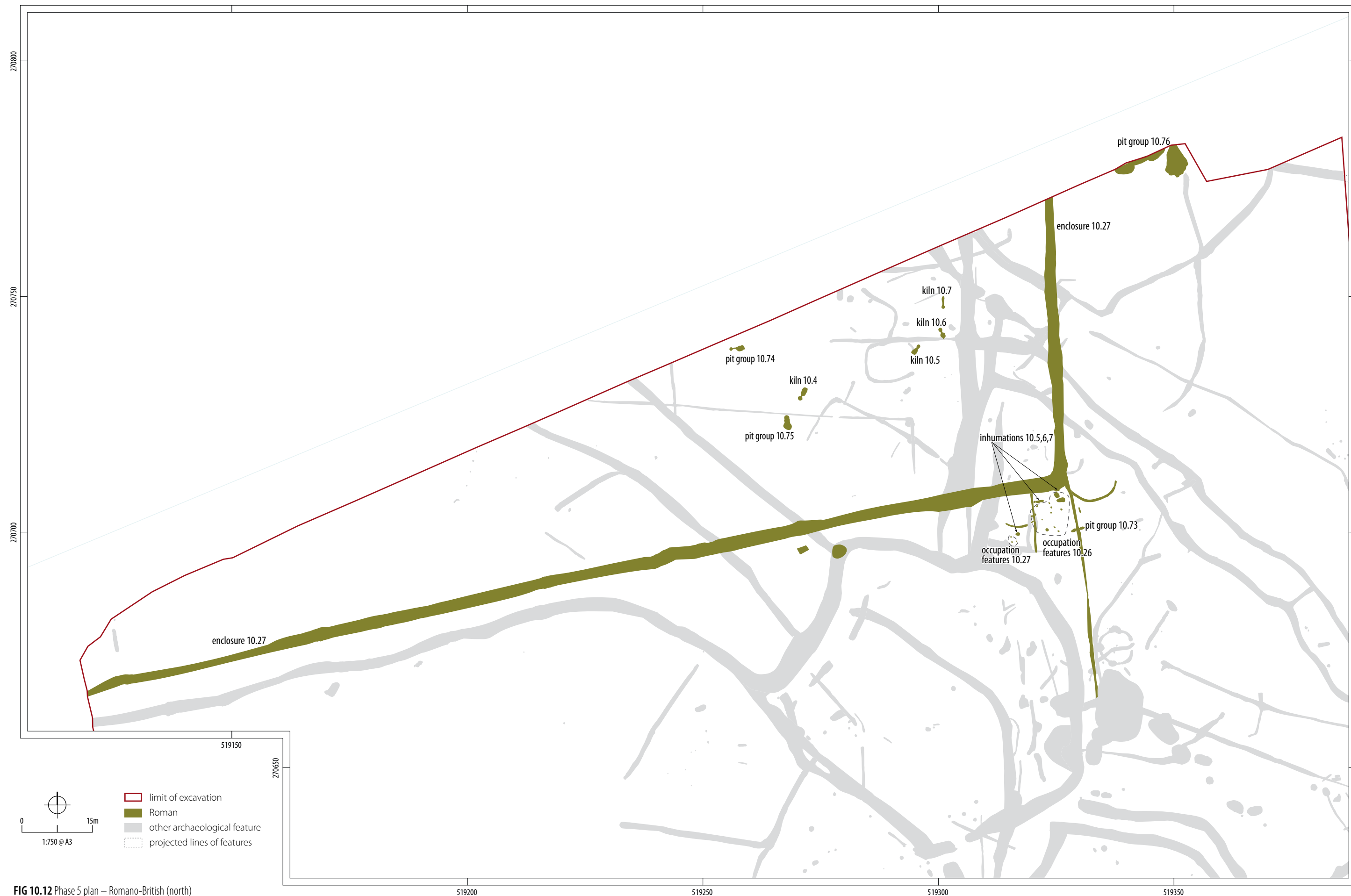


FIG 10.12 Phase 5 plan – Romano-British (north)

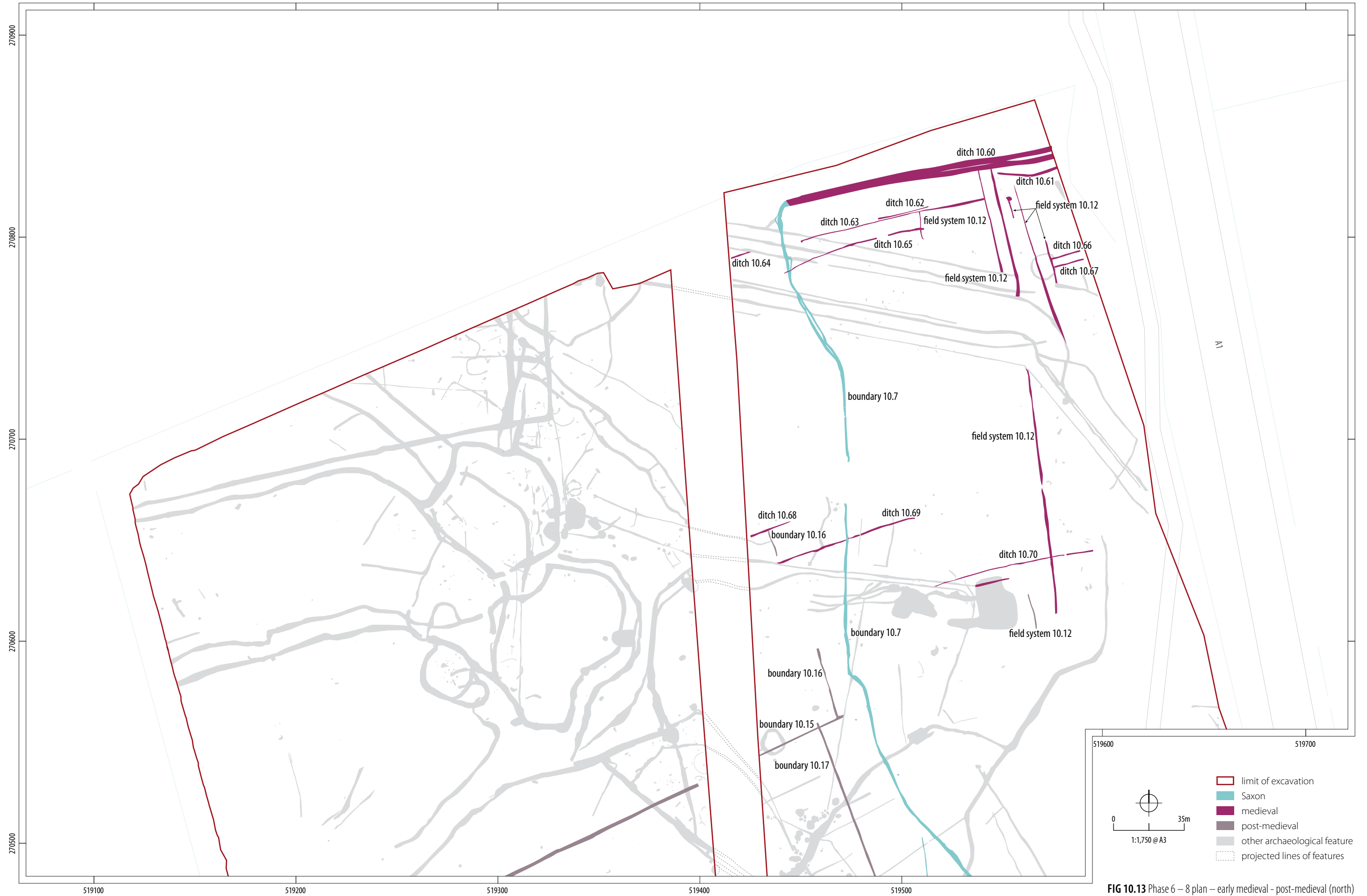


FIG 10.13 Phase 6 – 8 plan – early medieval – post-medieval (north)

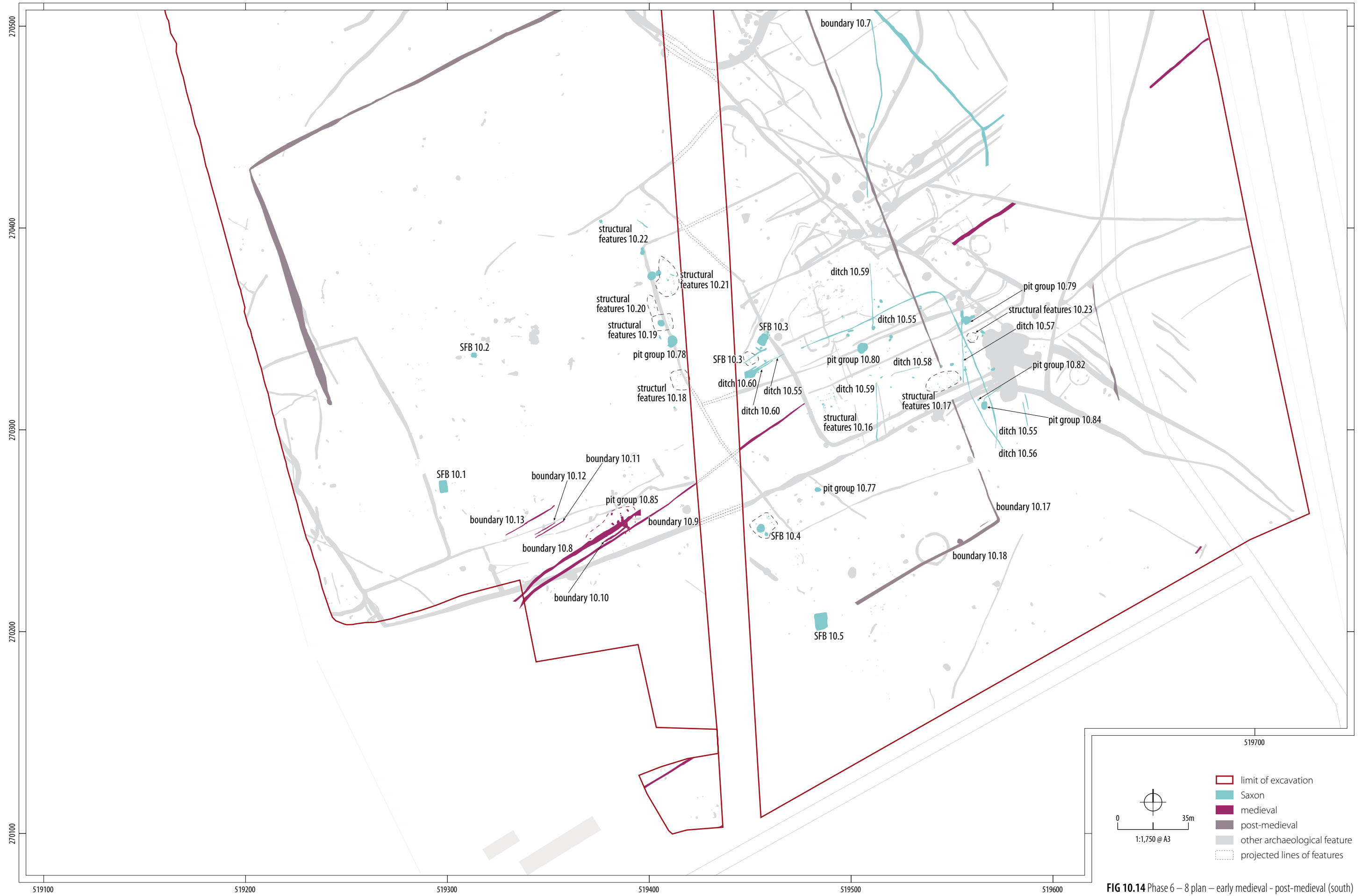
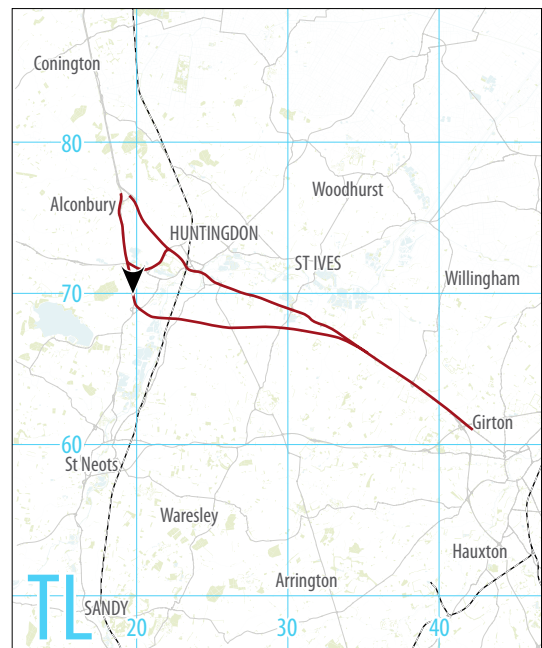
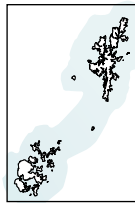


FIG 10.14 Phase 6 – 8 plan – early medieval – post-medieval (south)

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Cambridgeshire

0 200km
1:10,000,000 @ A4



0 100m
1:5,000 @ A4

limit of excavation

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FIG 10B.1 Site location

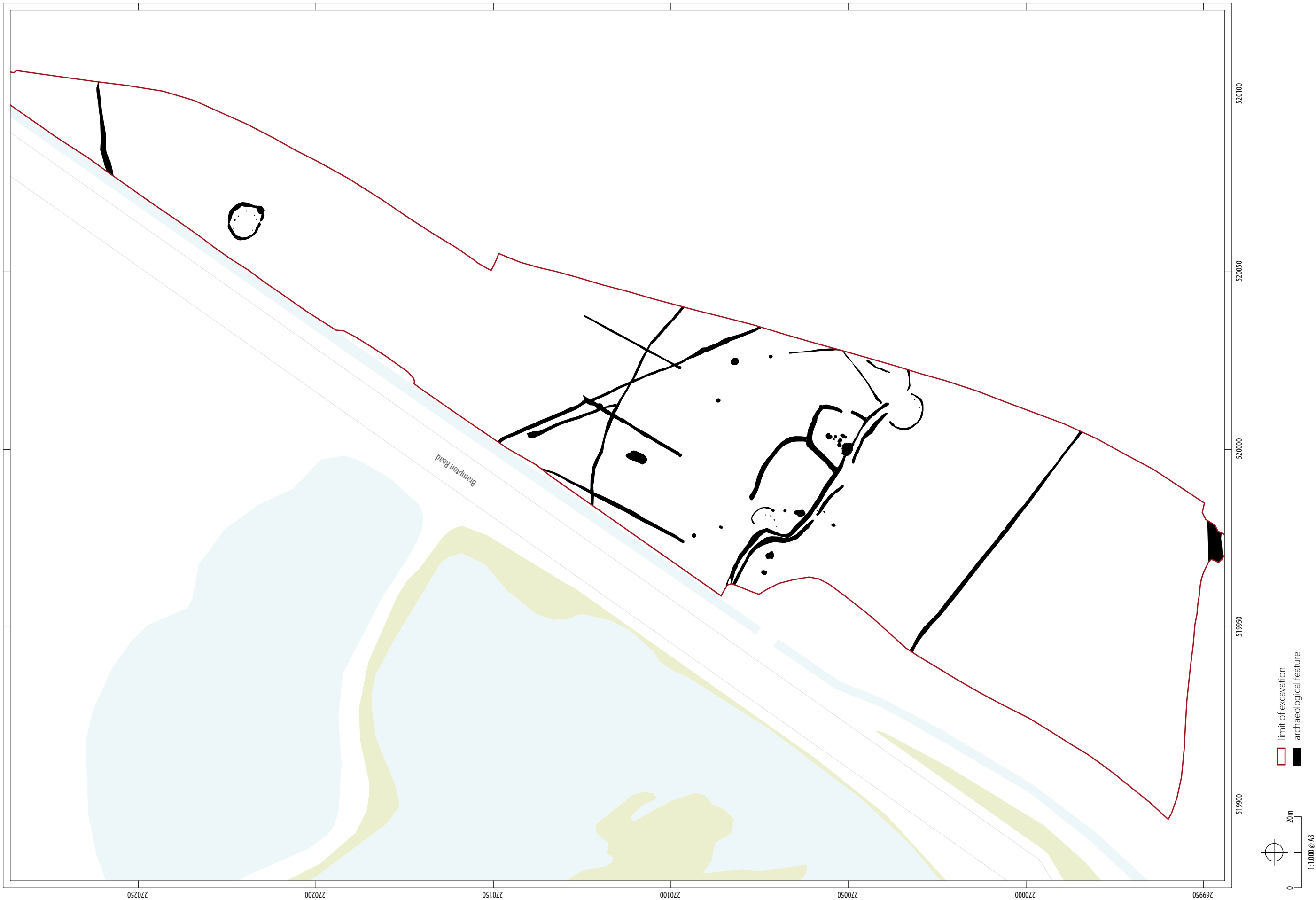


FIG 10B.2 Site plan



FIG 10B.3 Phase plan — Iron Age phase I

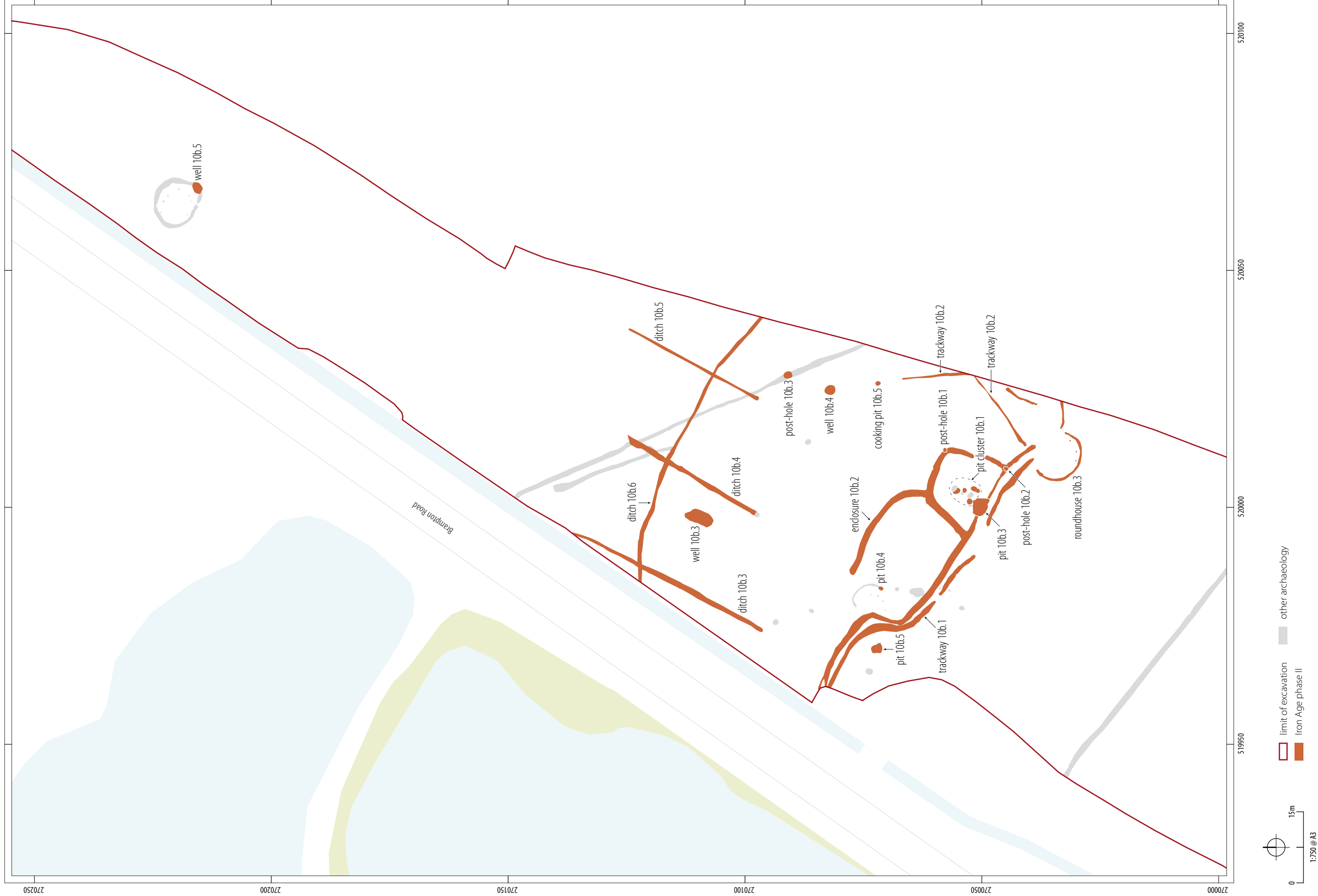
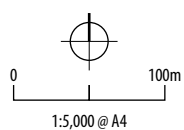
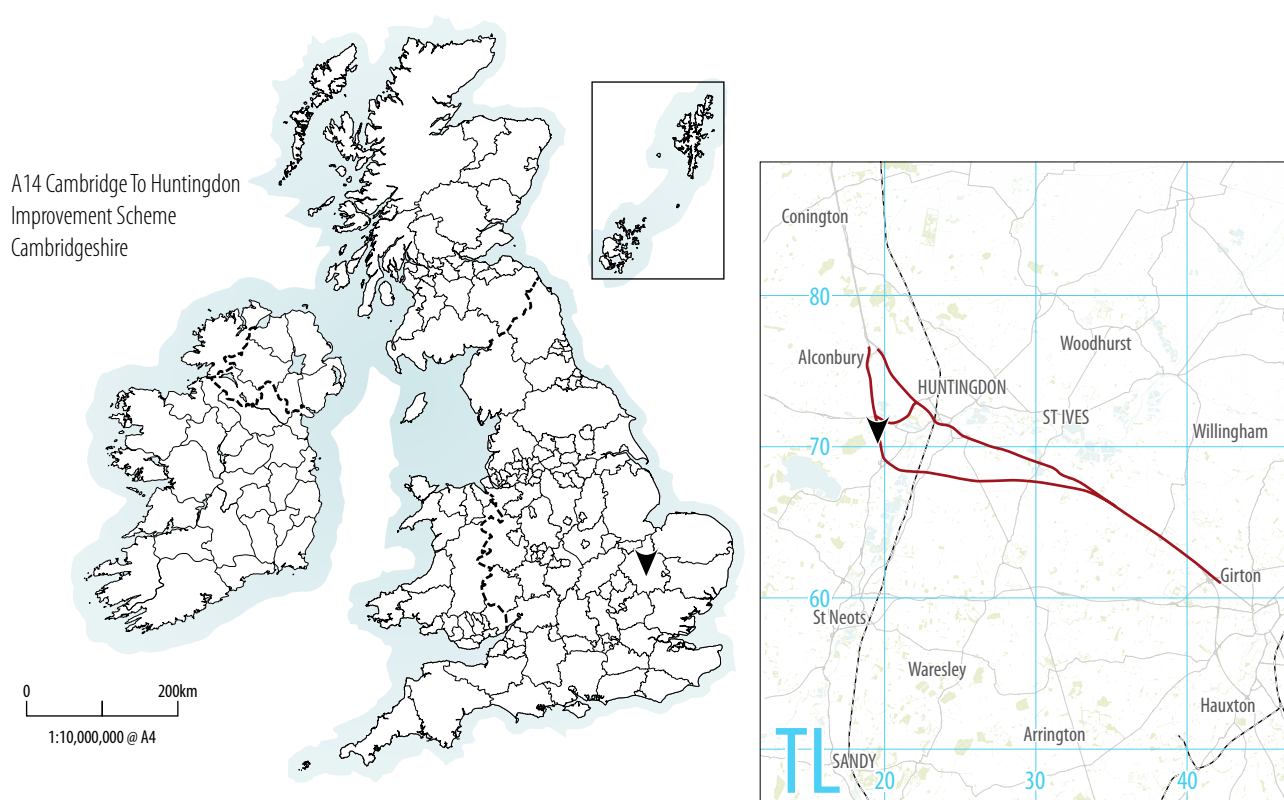


FIG 10B.4 Phase plan – Iron Age phase II



FIG 10B.5 Phase plan – Post-medieval and undated features

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limit of excavation

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FIG 11.1 Site location



FIG11.2 Site plan



FIG 11.3 Phase plan



FIG 11.4 Phase plan - Roman (TEA 11 South)



FIG 11.5 Phase plan - enclosure 11.3



FIG 11.6 Phase plan - Roman (TEA 11 East)

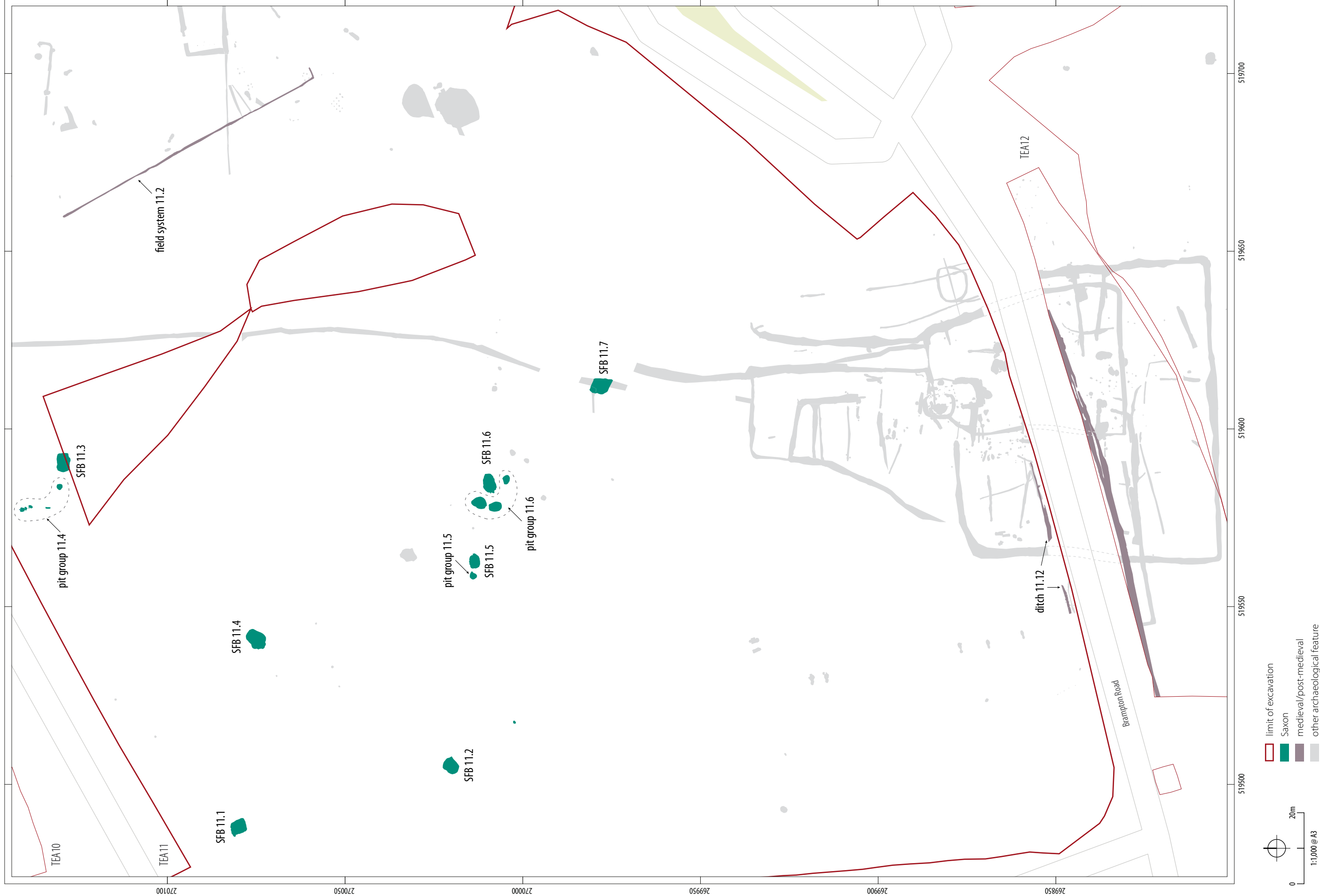
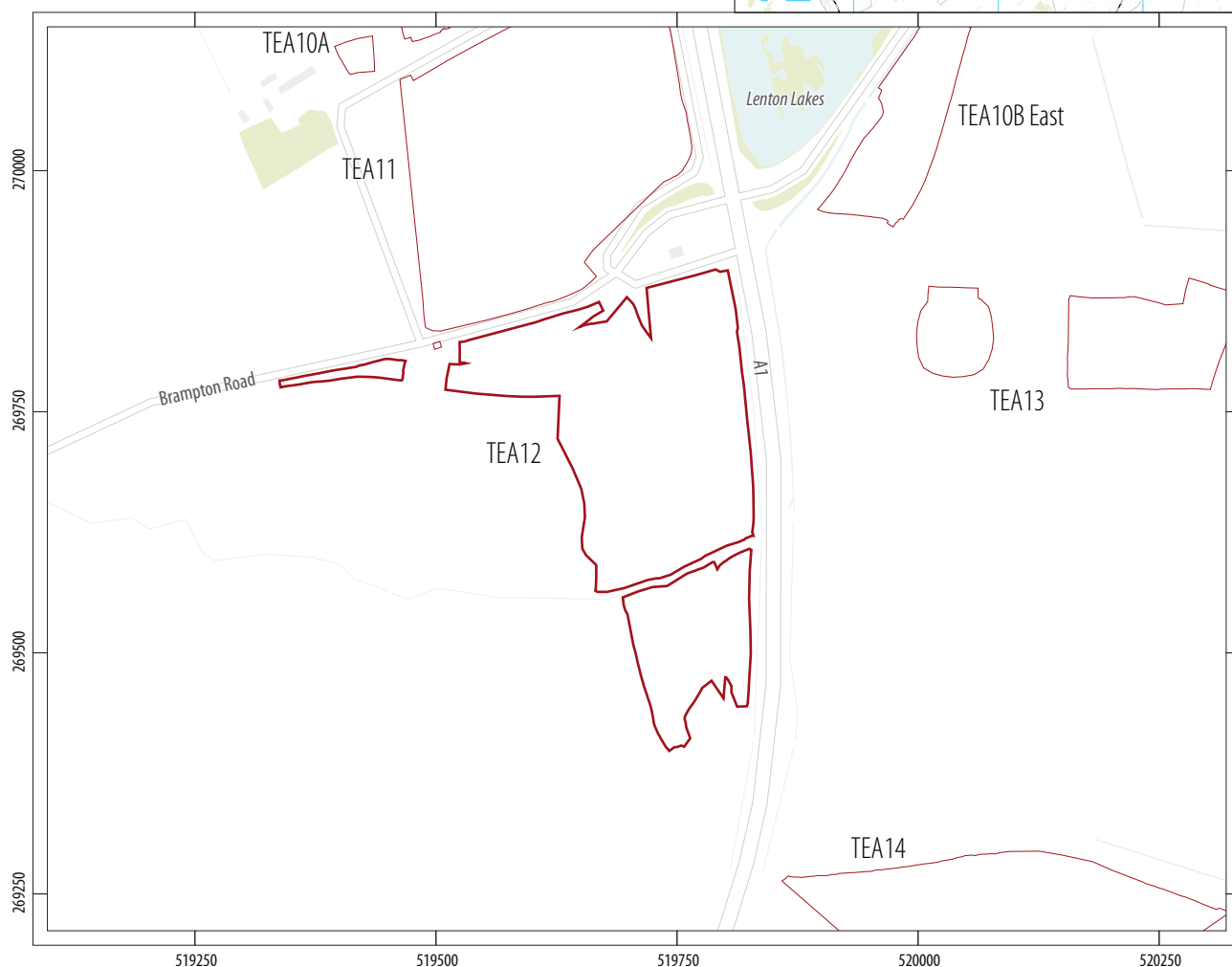
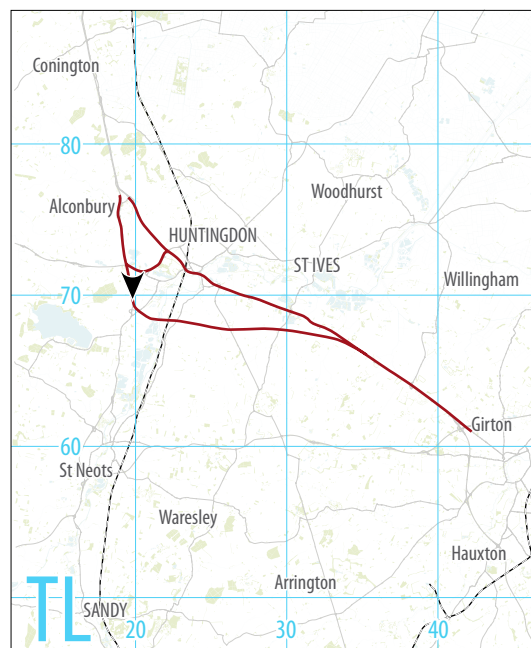


FIG 11.7 Phase plan - Saxon and medieval/post-medieval

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Cambridgeshire

0 200km
1:10,000,000 @ A4



0 150m
1:7,500 @ A4

limit of excavation

MOLA HEADLAND
INFRASTRUCTURE



FIG 12.1 Site location

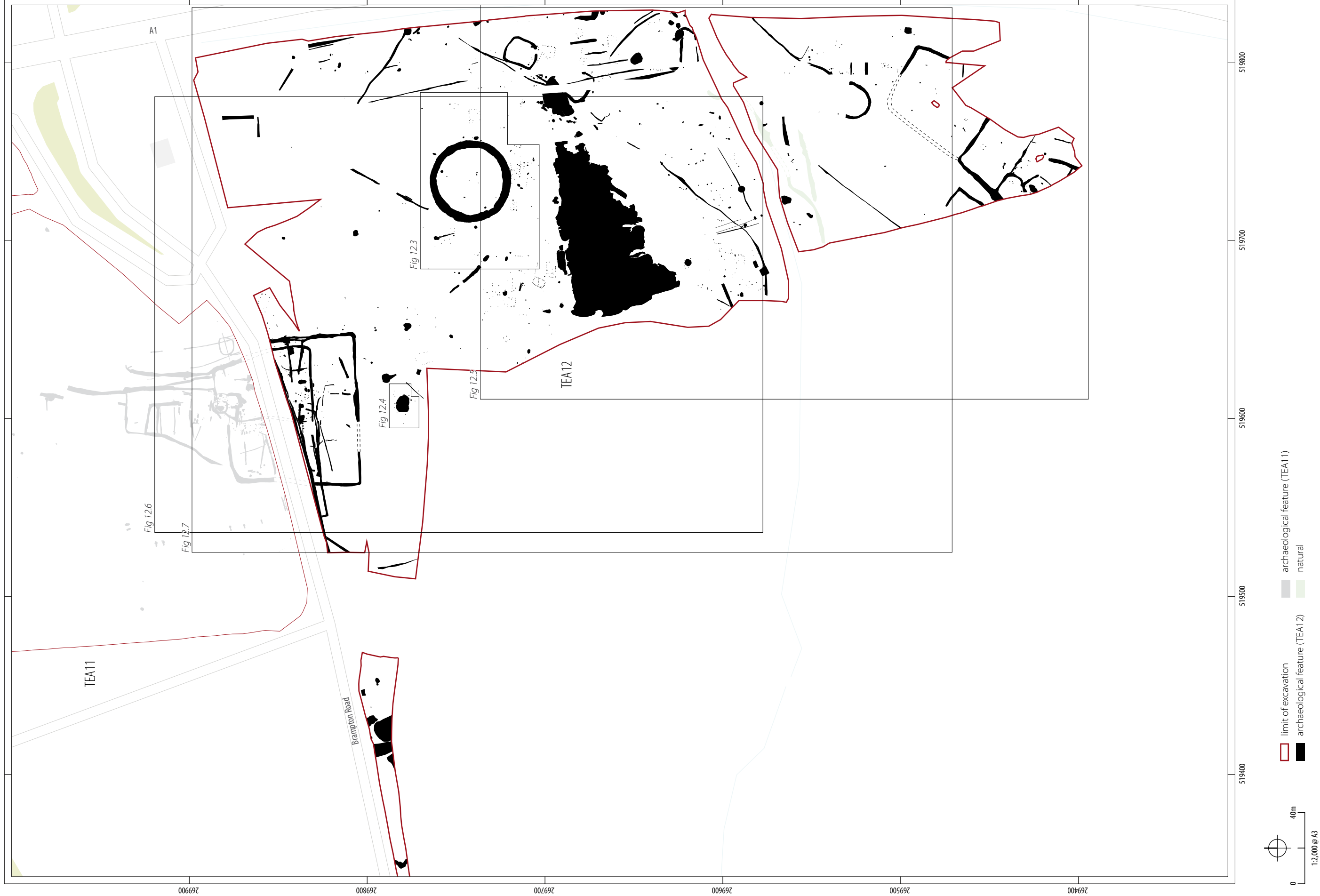


FIG 12.2 Site plan

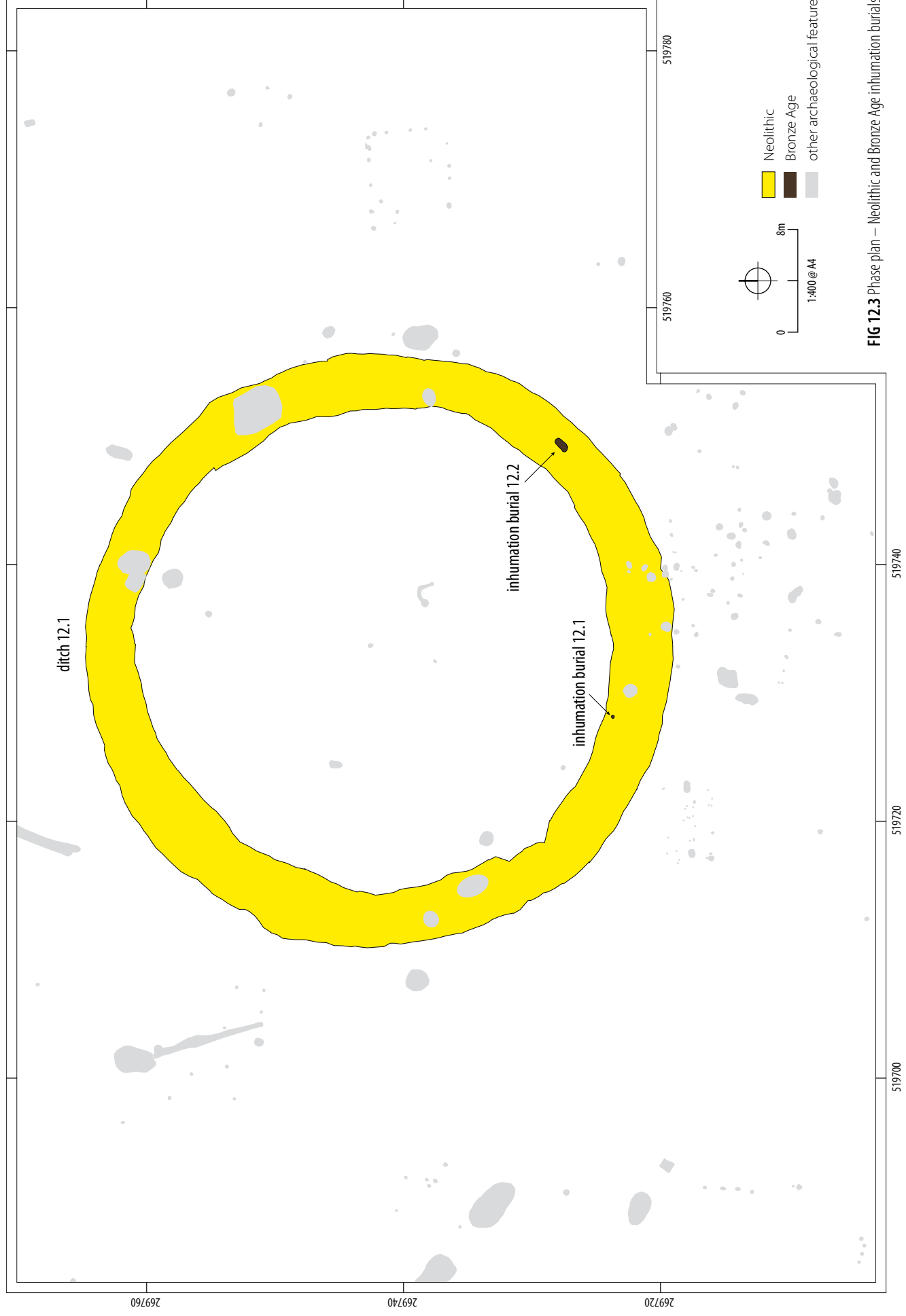


FIG 12.3 Phase plan – Neolithic and Bronze Age inhumation burials

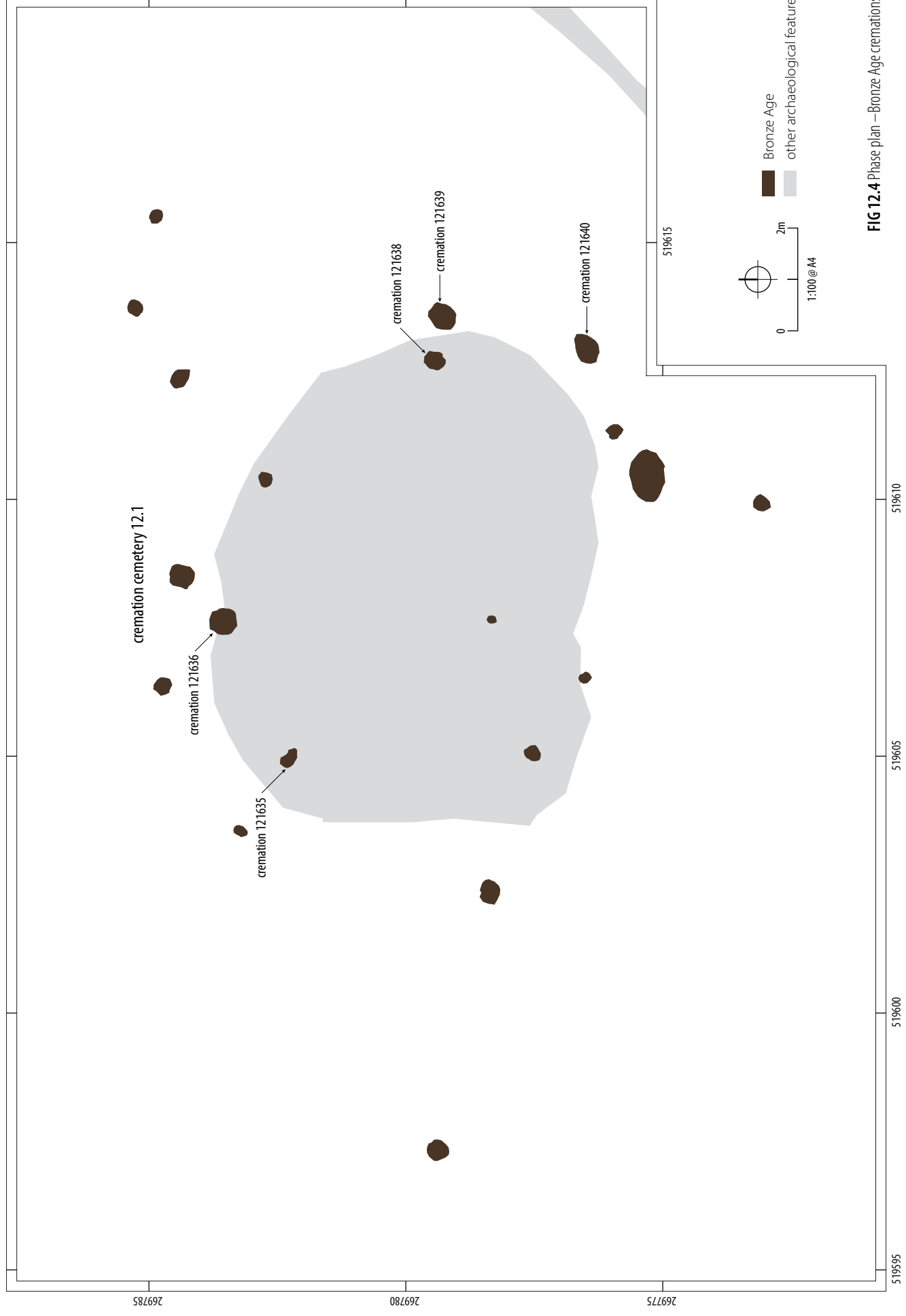


FIG 12.4 Phase plan –Bronze Age cremations

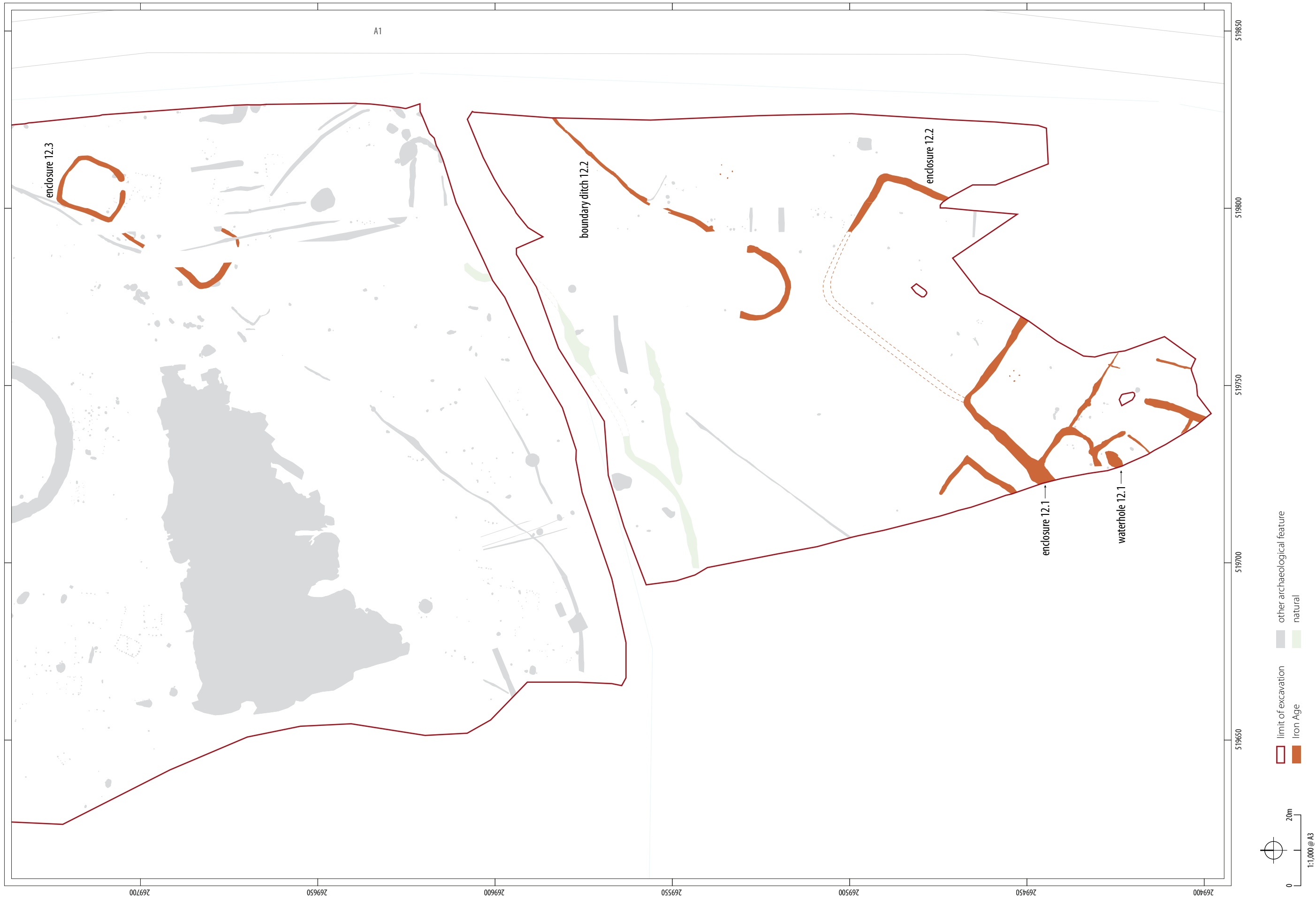


FIG 12.5 Phase plan – Iron Age

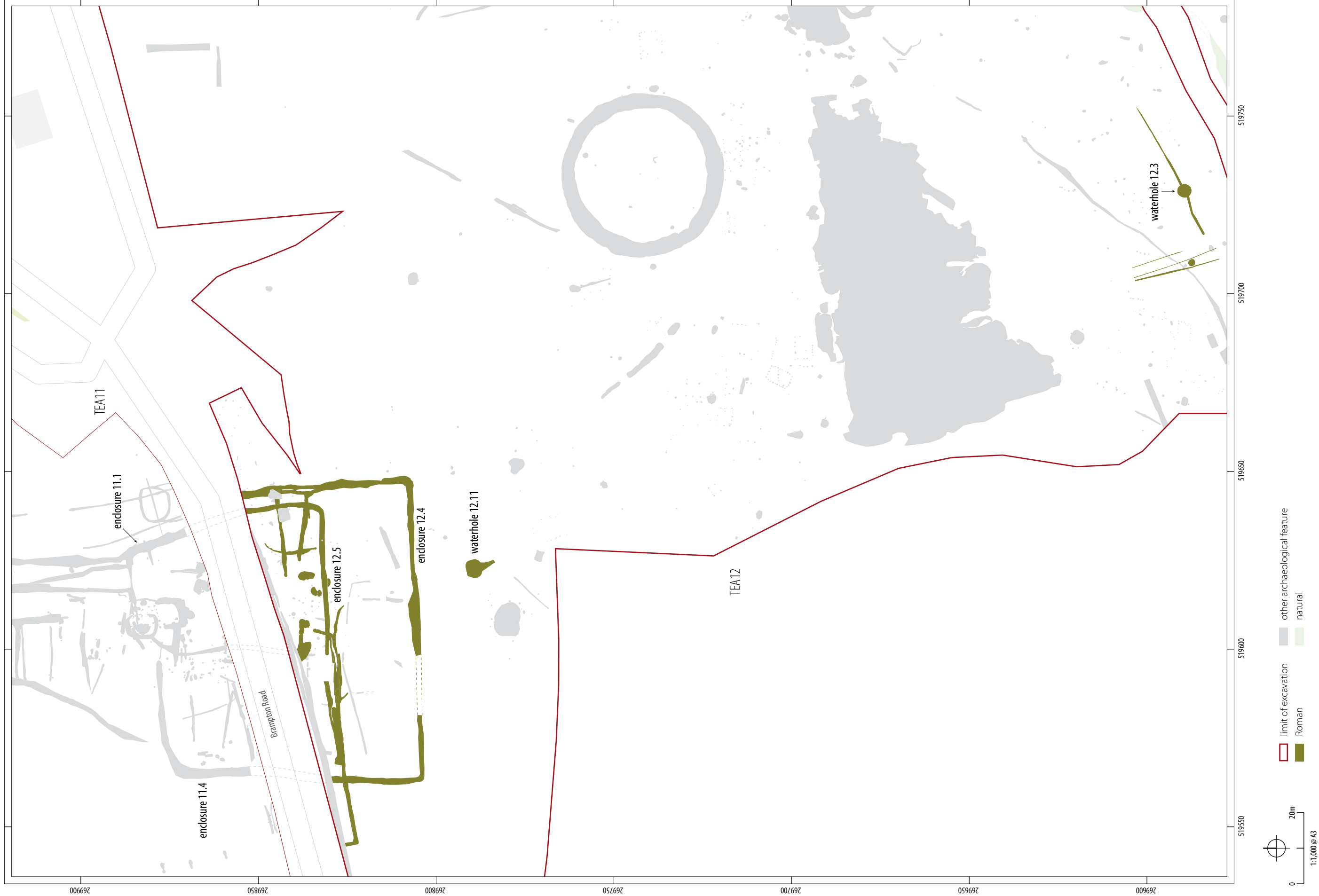


FIG 12.6 Phase plan — Roman

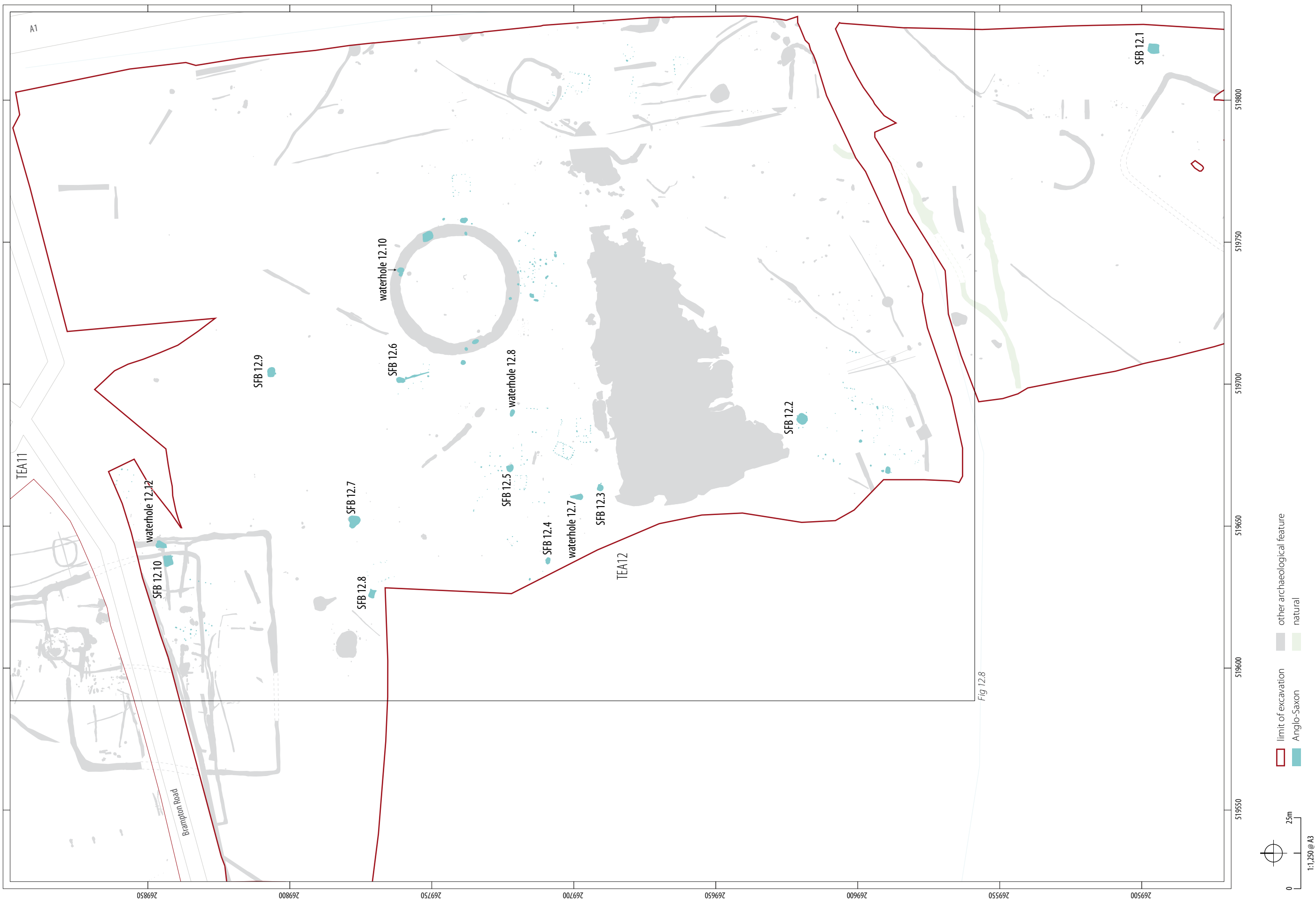


FIG 12.7 Phase Plan – Saxon



FIG 12.8 Saxon structures



FIG 12.9 Phase plan – post-medieval and modern



FIG 12.10 Phase plan – undated features



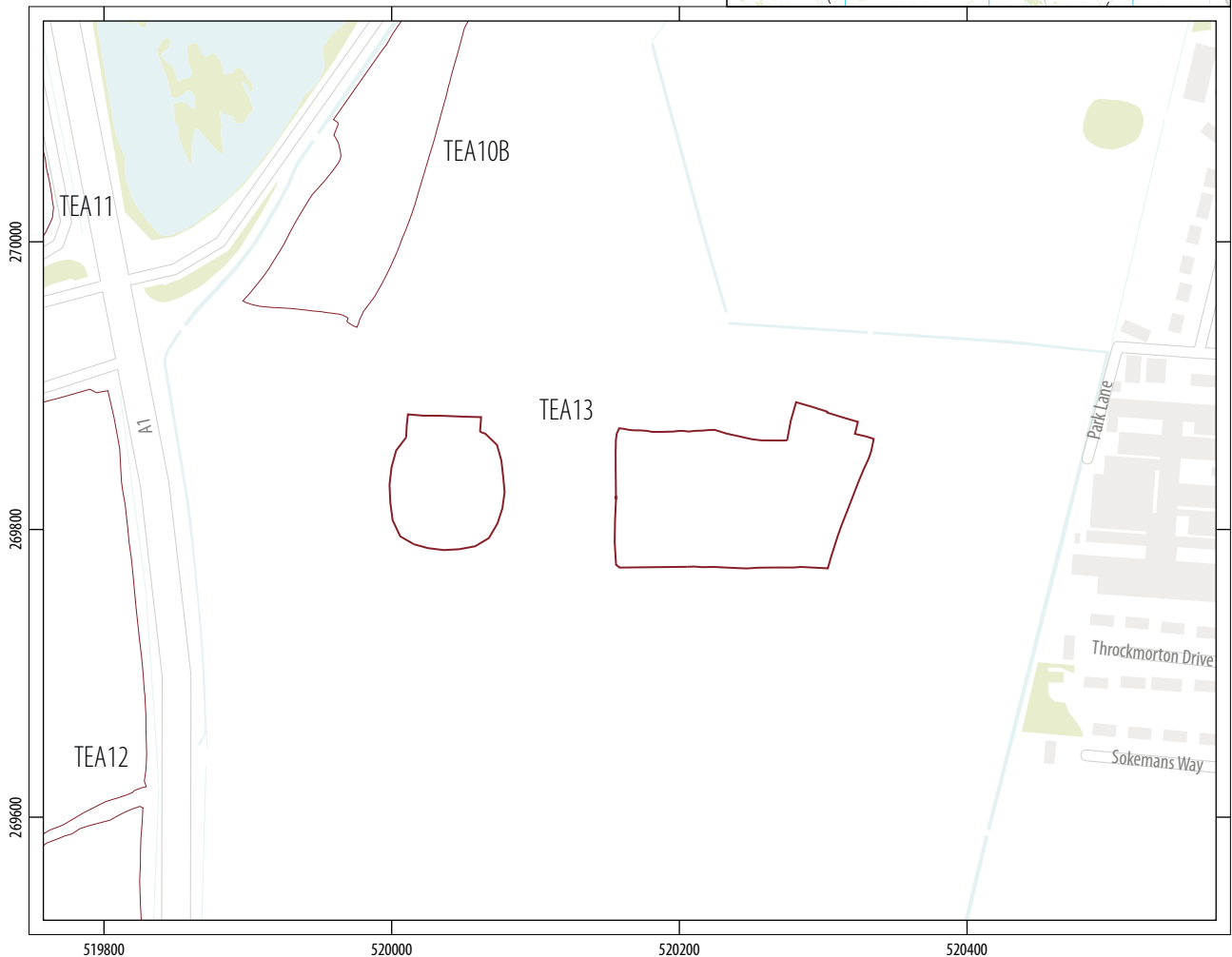
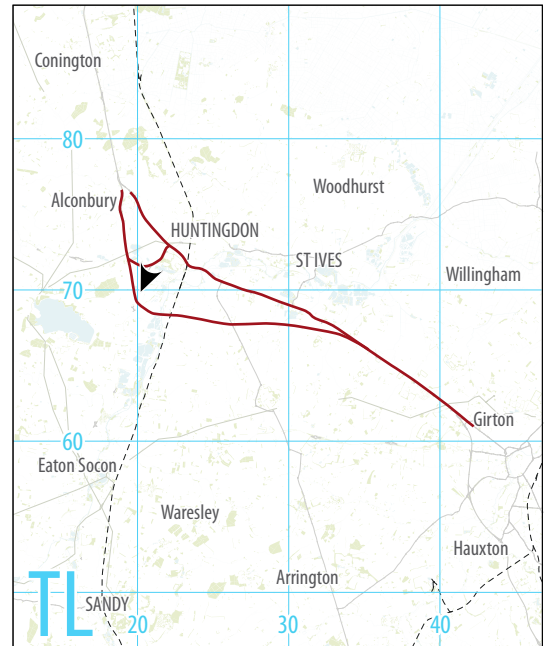
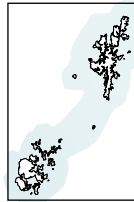
FIG 12.11 Ring-ditch monument, 50% excavated, view to the south-west



FIG 12.12 Working shot of Inhumation Burial 12.2, view to the north-east

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0 200km
1:10,000,000 @ A4



0 100m
1:5,000 @ A4

limit of excavation

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FIG 13.1 Site location

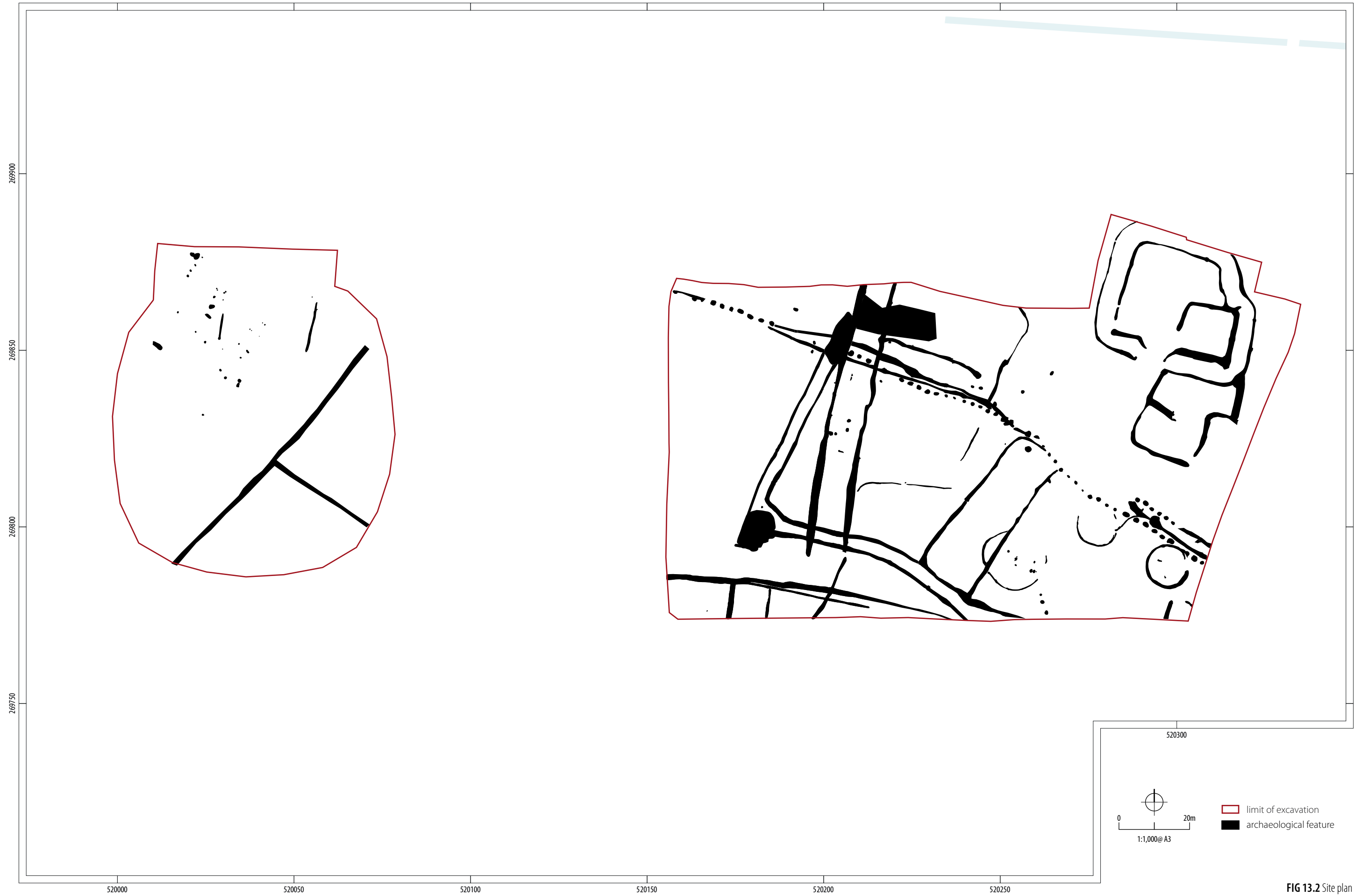


FIG 13.2 Site plan



FIG 13.3 Aerial photograph

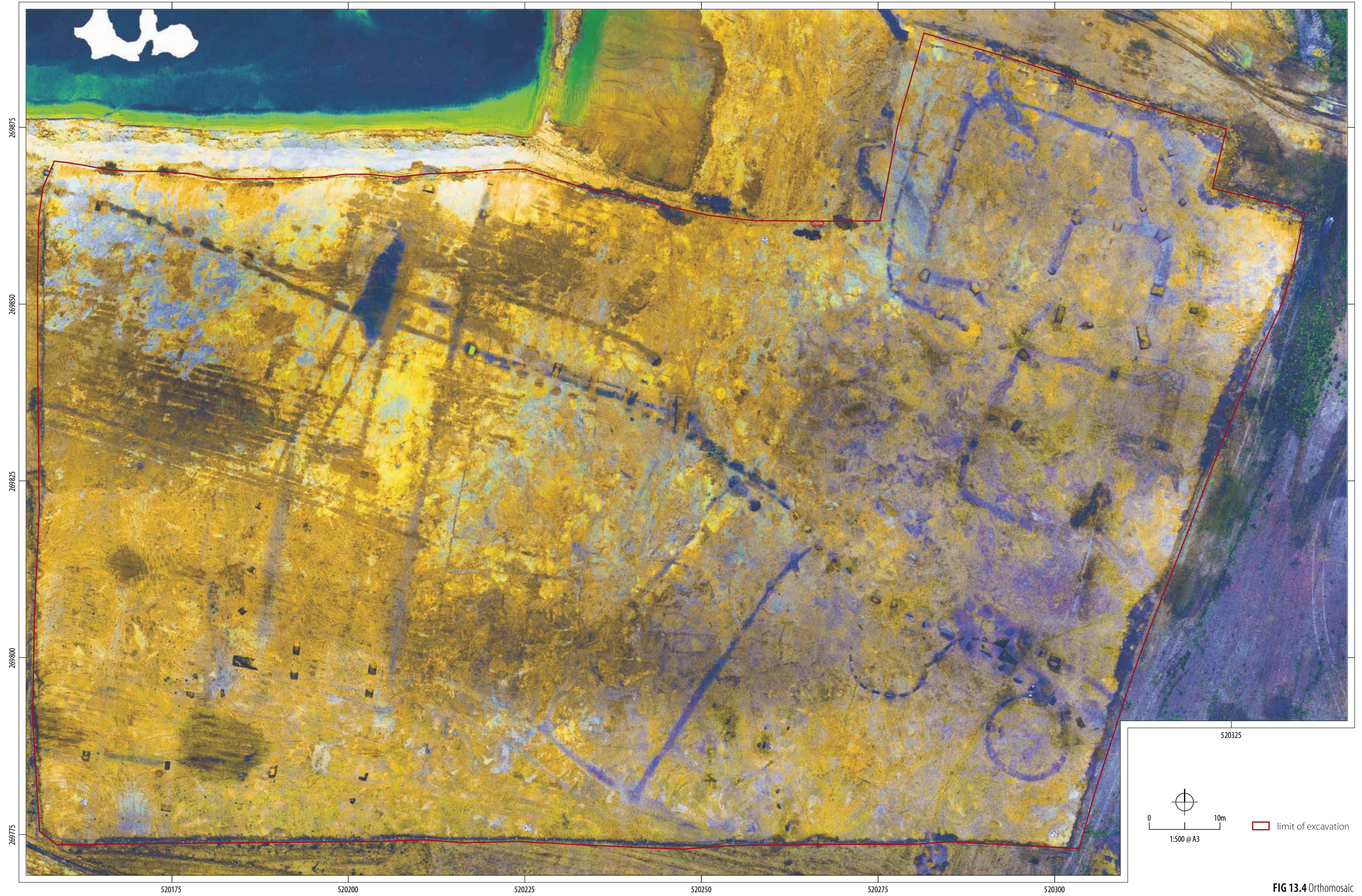


FIG 13.4 Orthomosaic

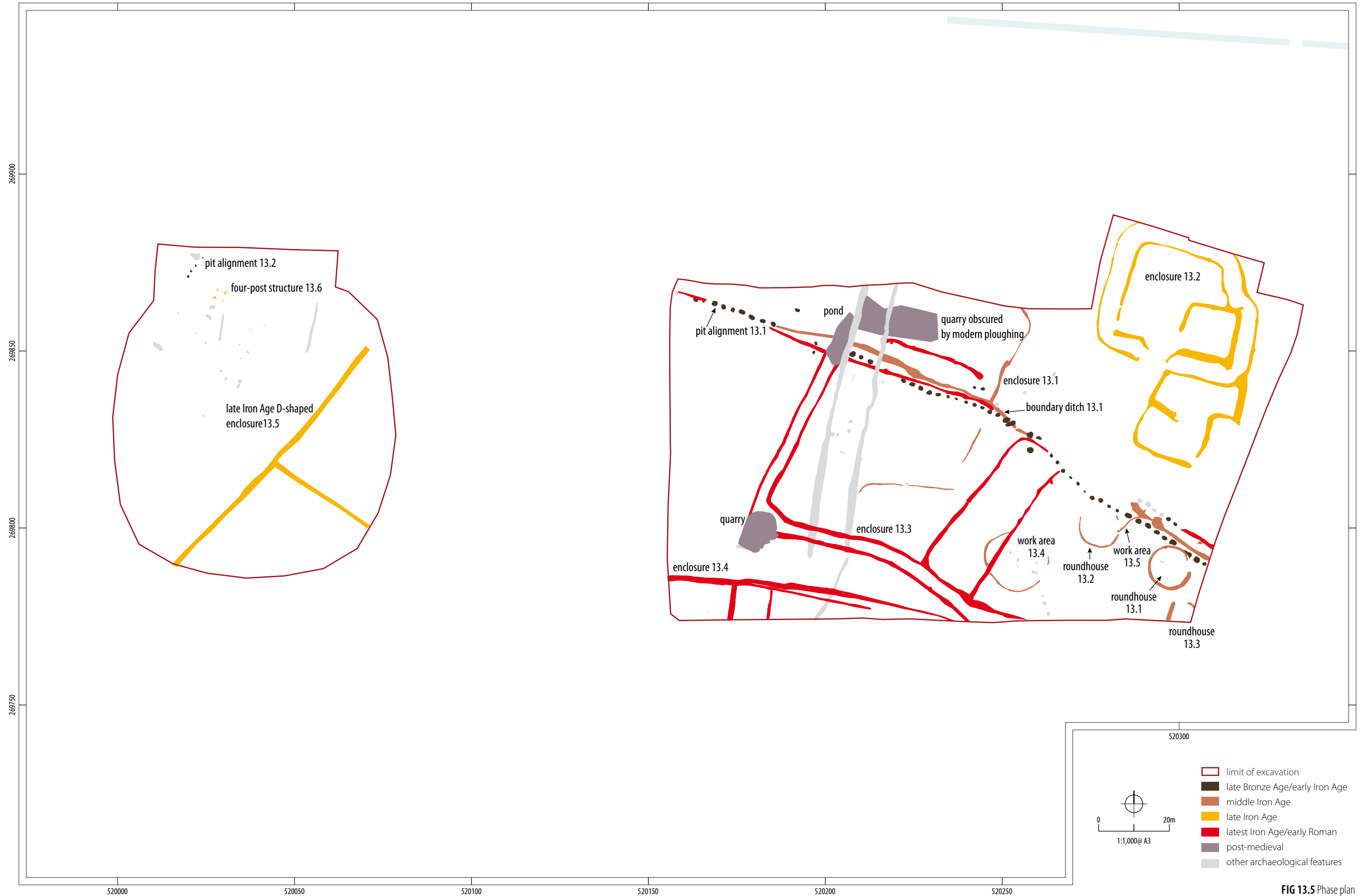
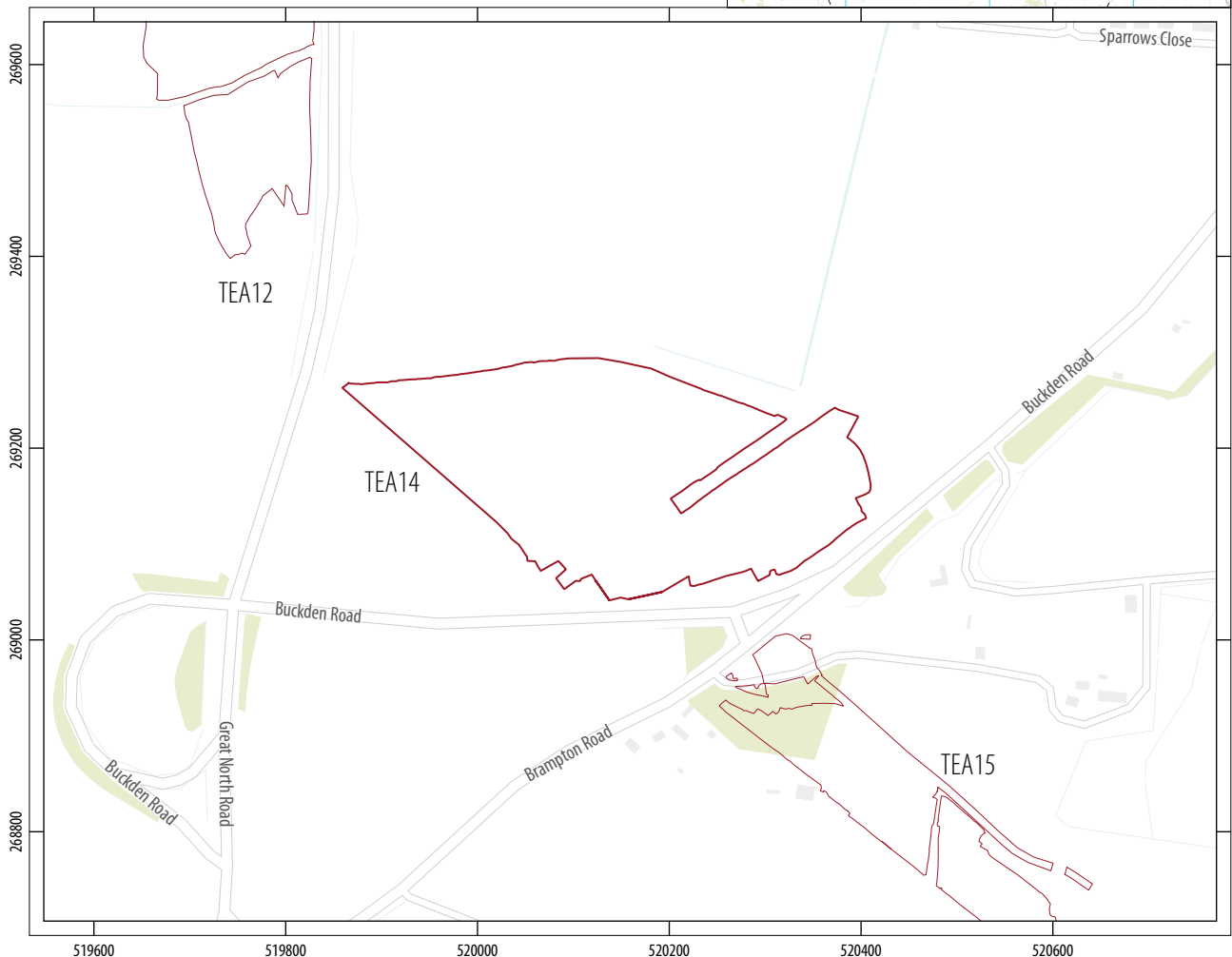
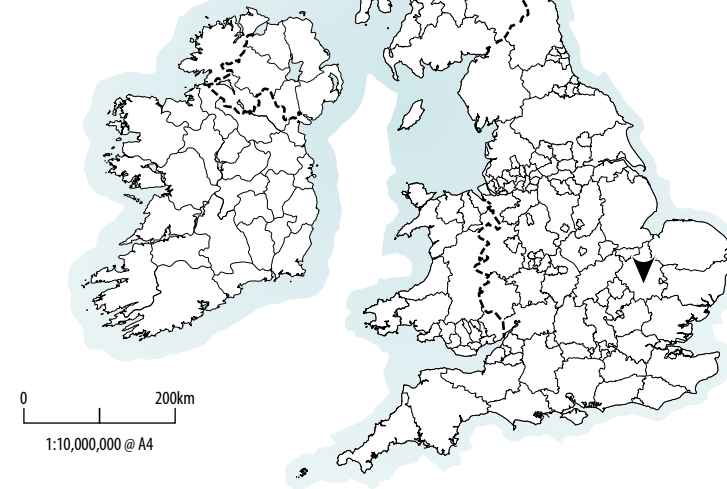


FIG 13.5 Phase plan

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Cambridgeshire



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FIG 14.1 Site location



FIG 14.2 Site plan



FIG 14.3 Phase plan

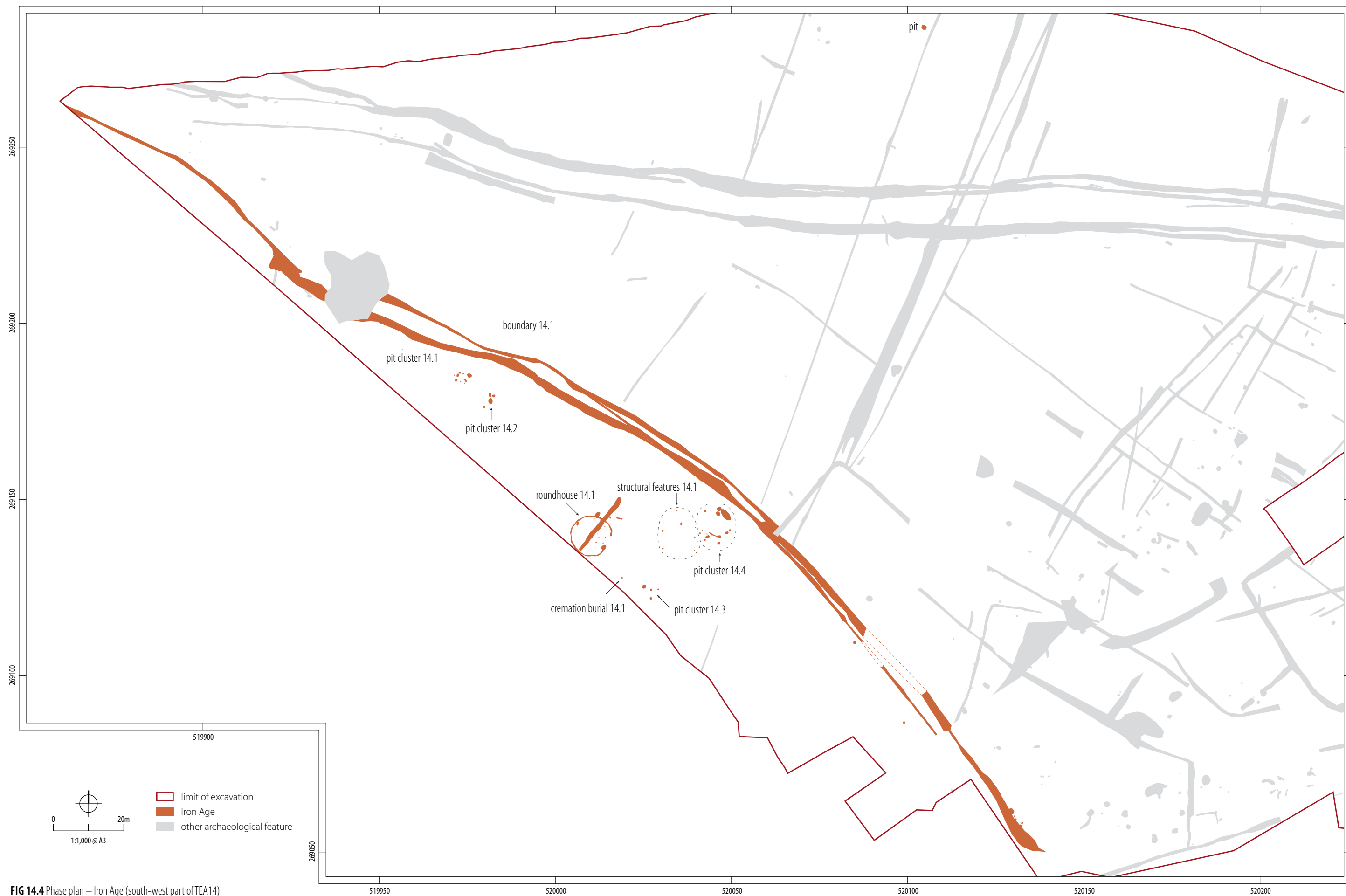


FIG 14.4 Phase plan – Iron Age (south-west part of TEA14)

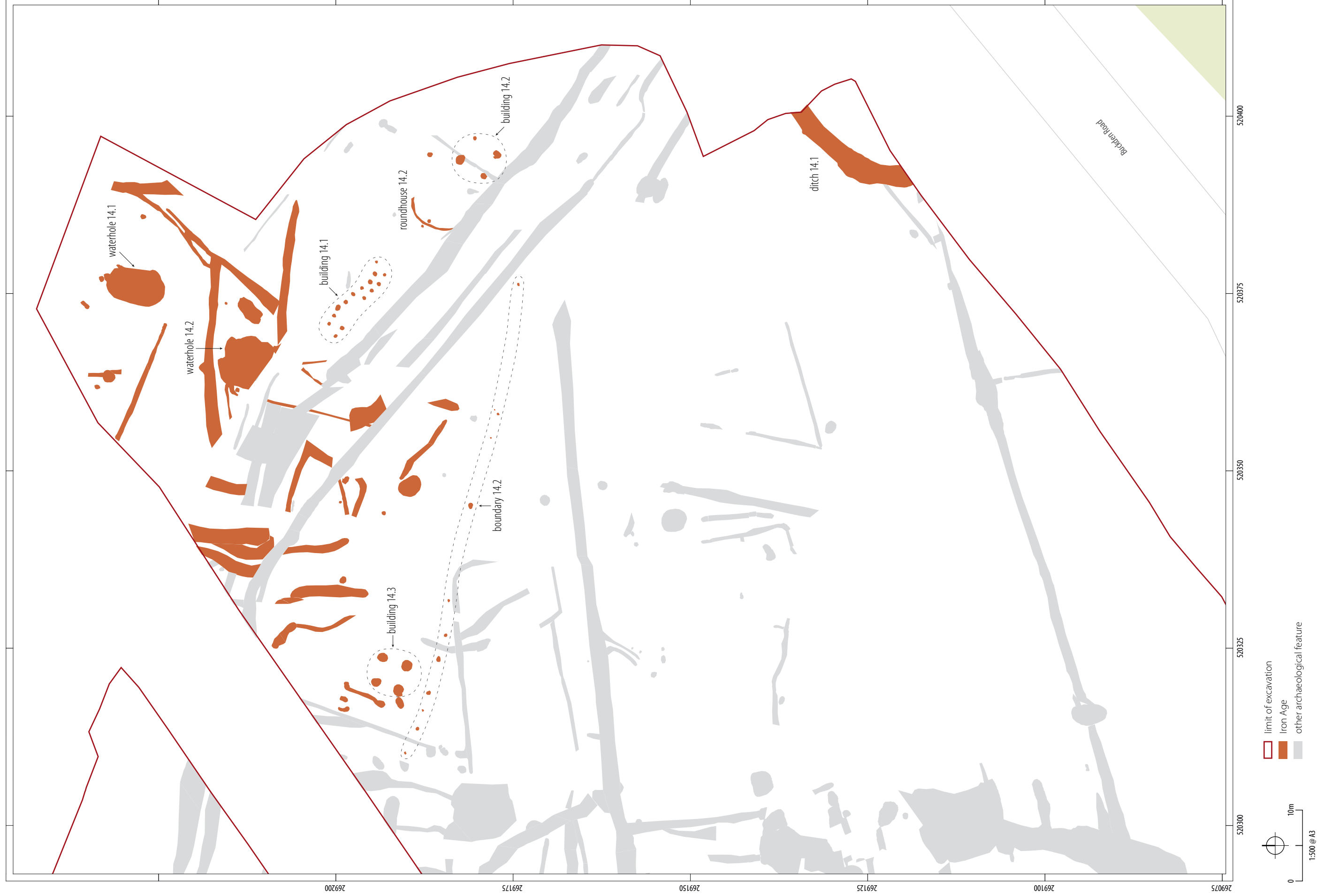


FIG 14.5 Phase plan – Iron Age (north-east part of TEA14)

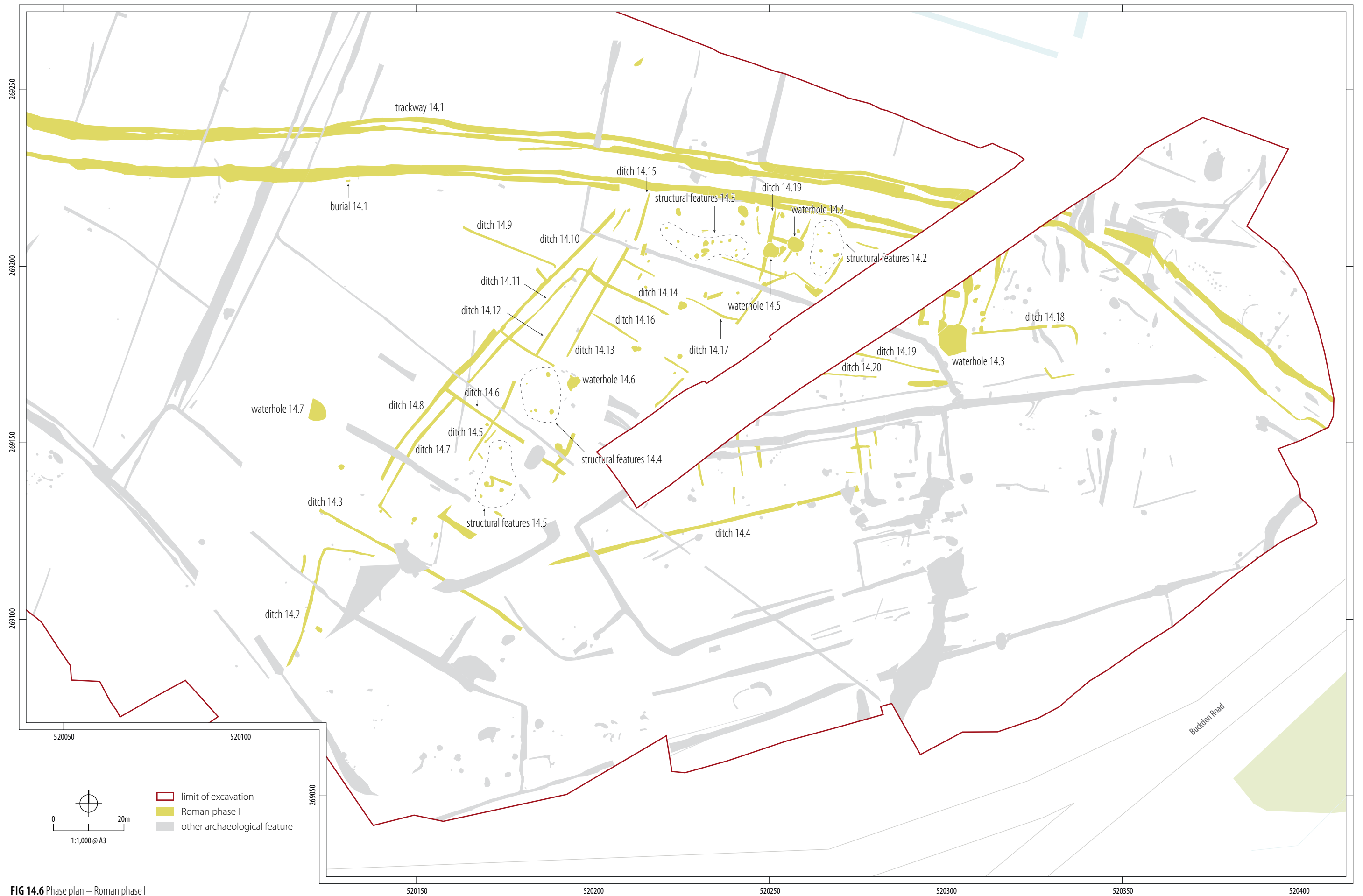


FIG 14.6 Phase plan – Roman phase I



FIG 14.7 Phase plan – Roman phase II



FIG 14.8 Phase plan – Roman phase III



FIG 14.9 Phase plan – Saxon, medieval and post-medieval



FIG 14.10 Roundhouse 14.1 looking west



FIG 14.11 Kiln 14.1 and possible workshop area, looking north-west

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Cambridgeshire

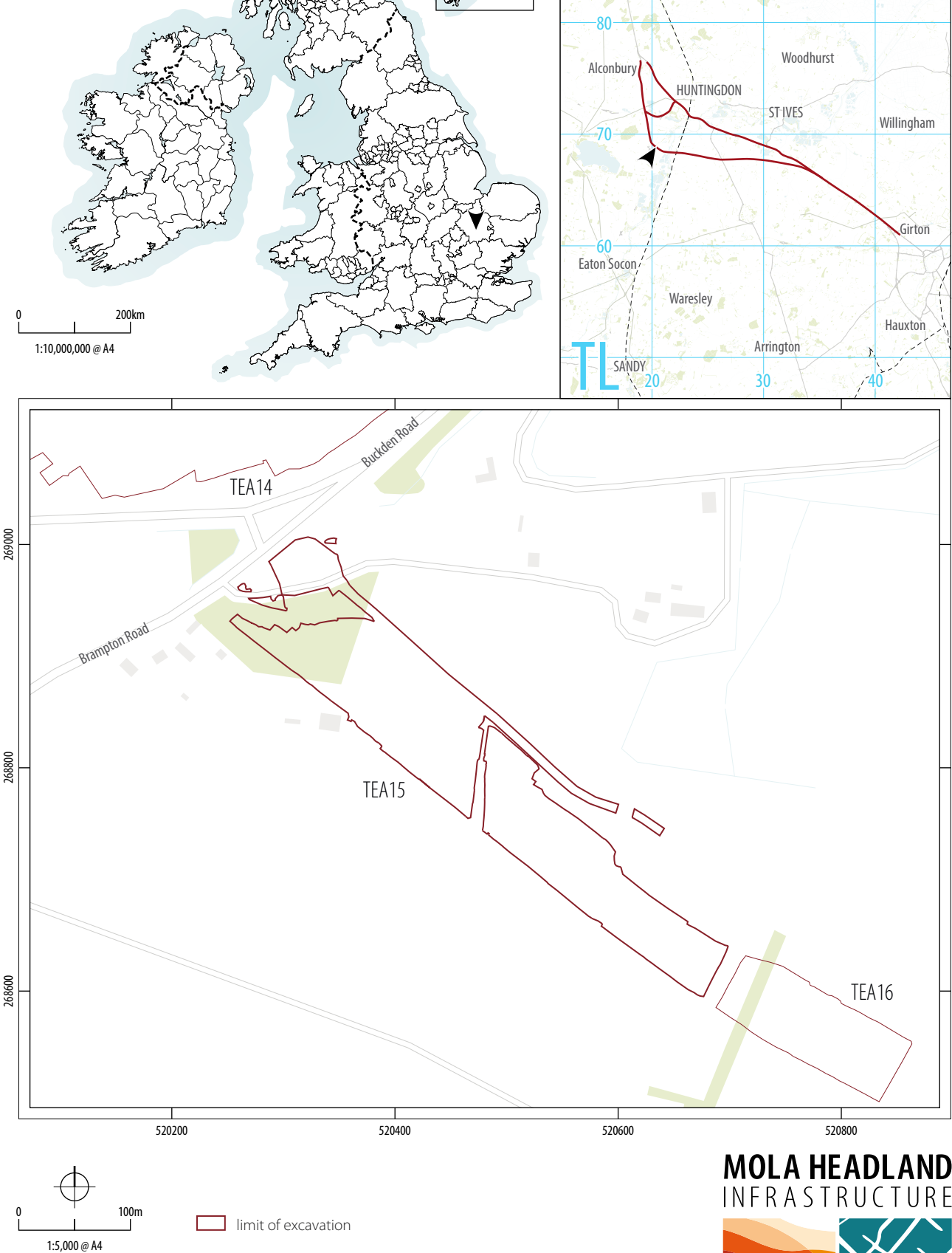
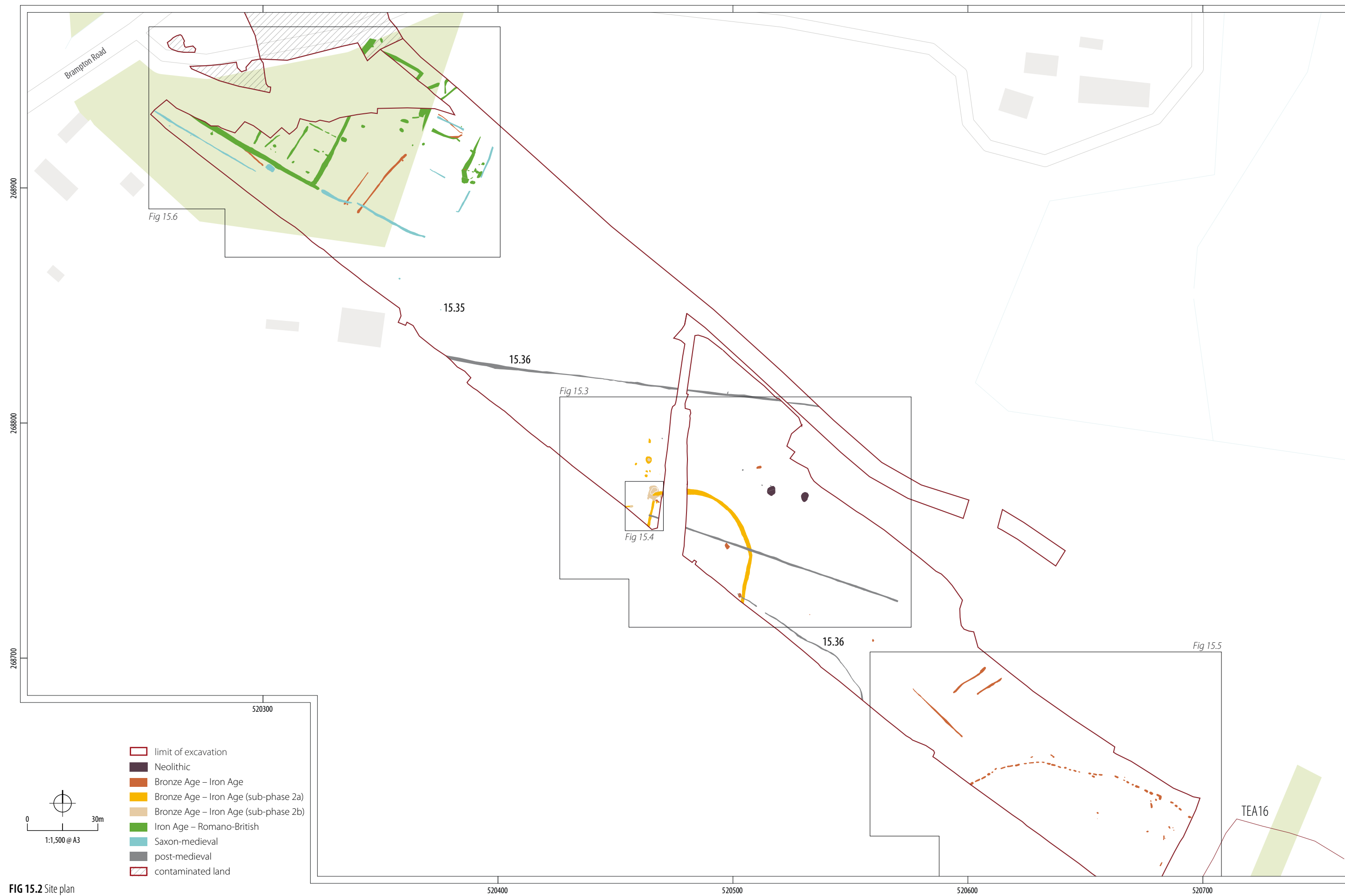


FIG 15.1 Site location

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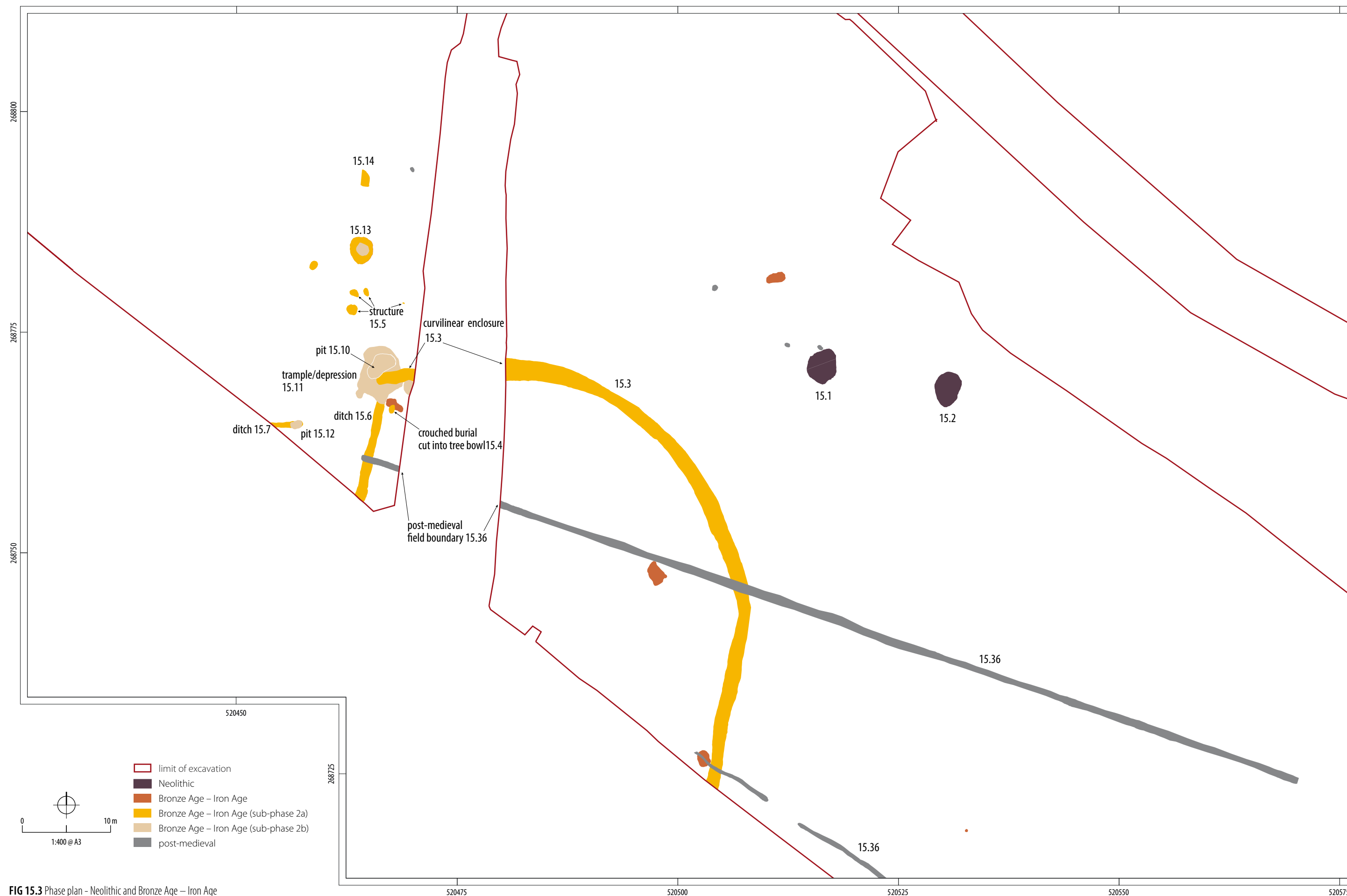


FIG 15.3 Phase plan - Neolithic and Bronze Age – Iron Age

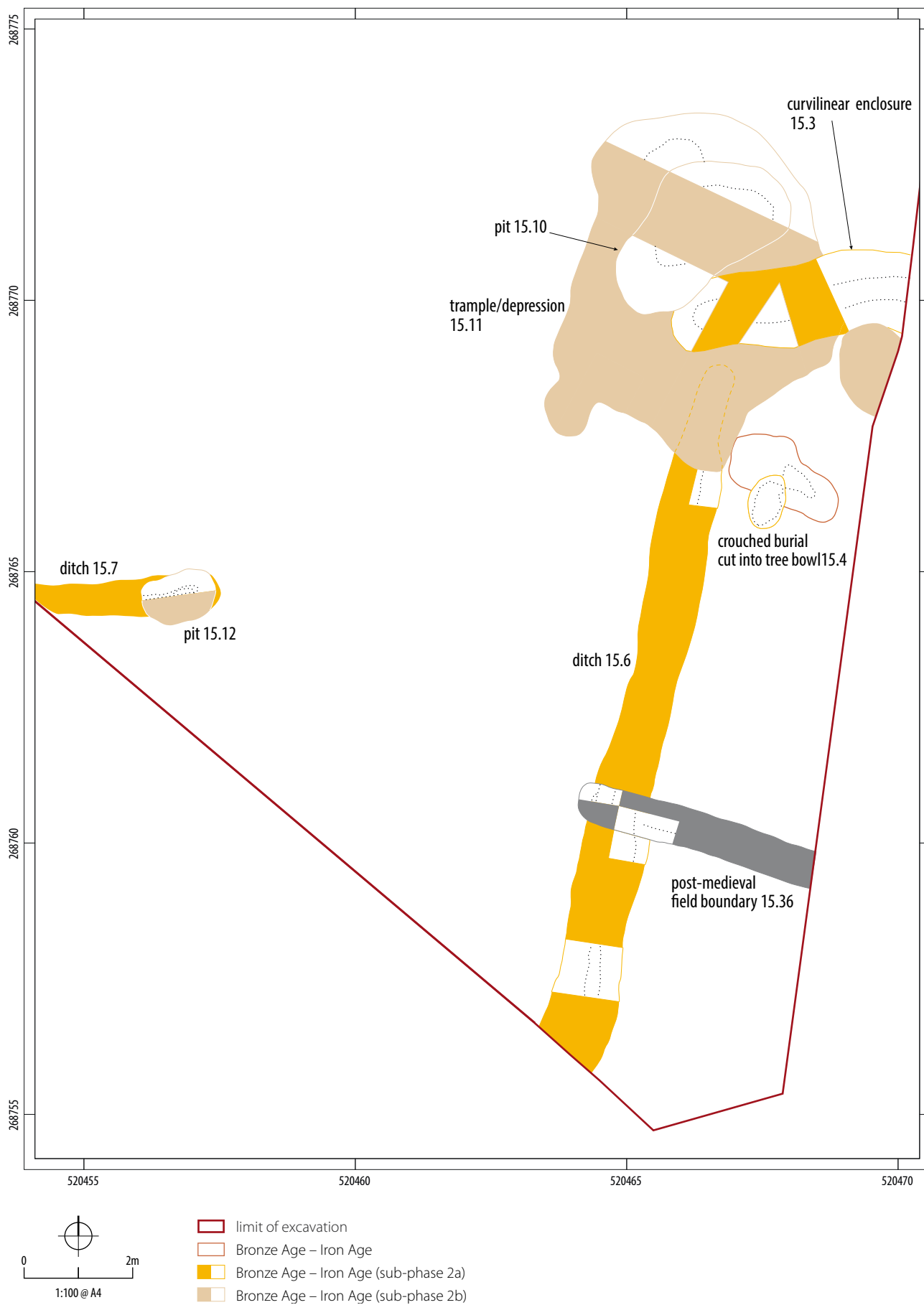


FIG 15.4 Phase plan - Bronze Age – Iron Age

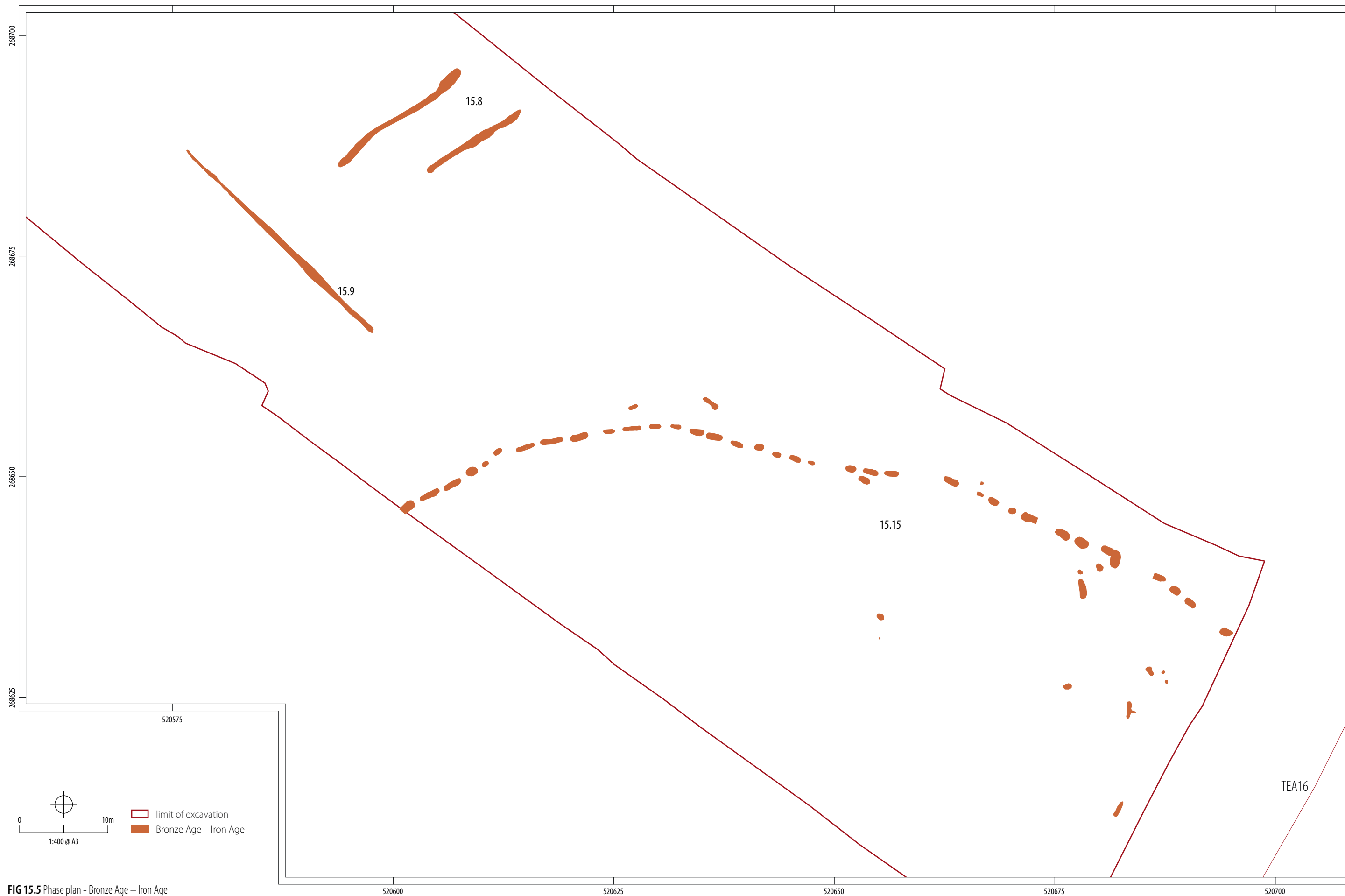


FIG 15.5 Phase plan - Bronze Age – Iron Age

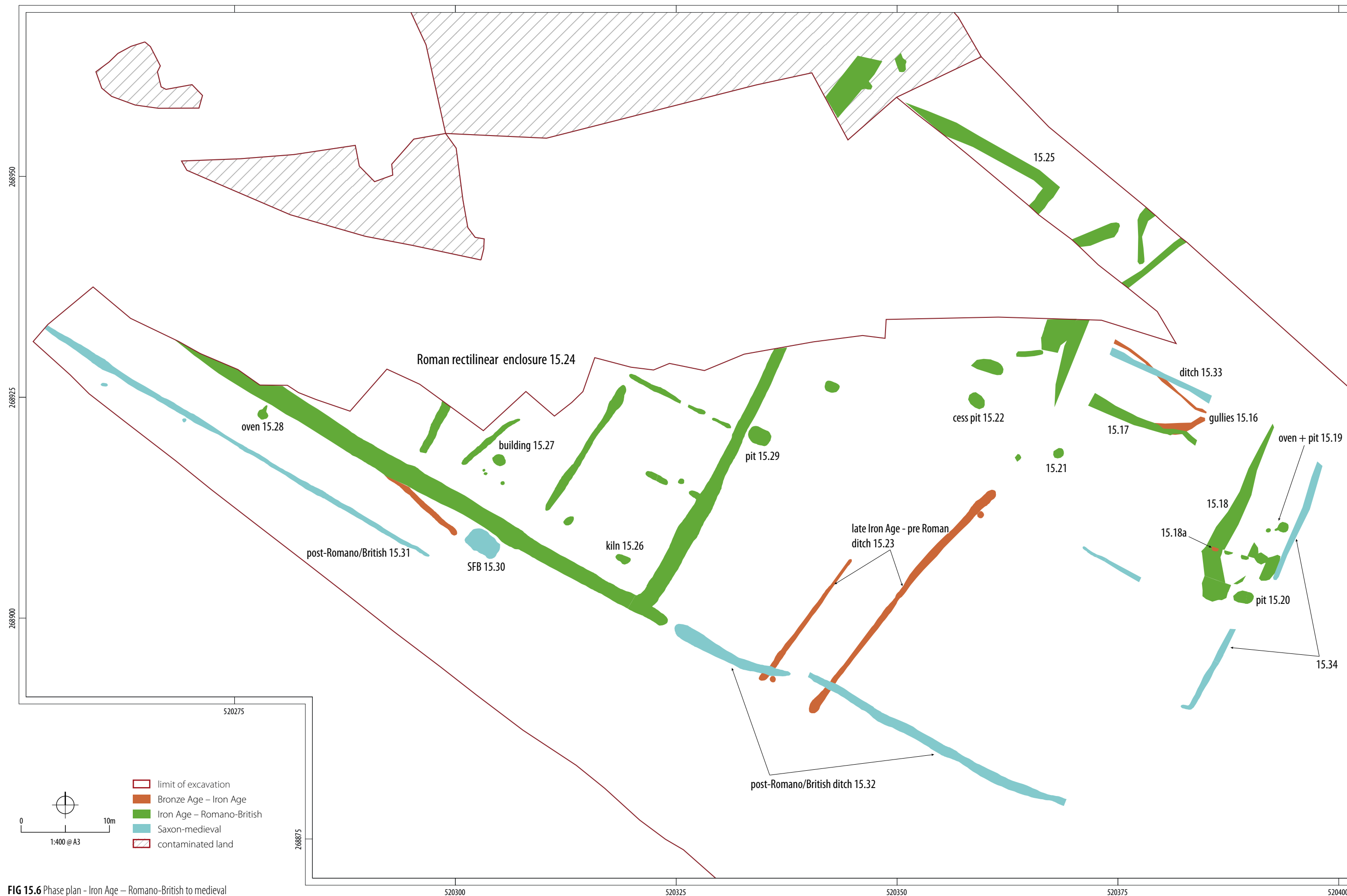


FIG 15.6 Phase plan – Iron Age – Romano-British to medieval

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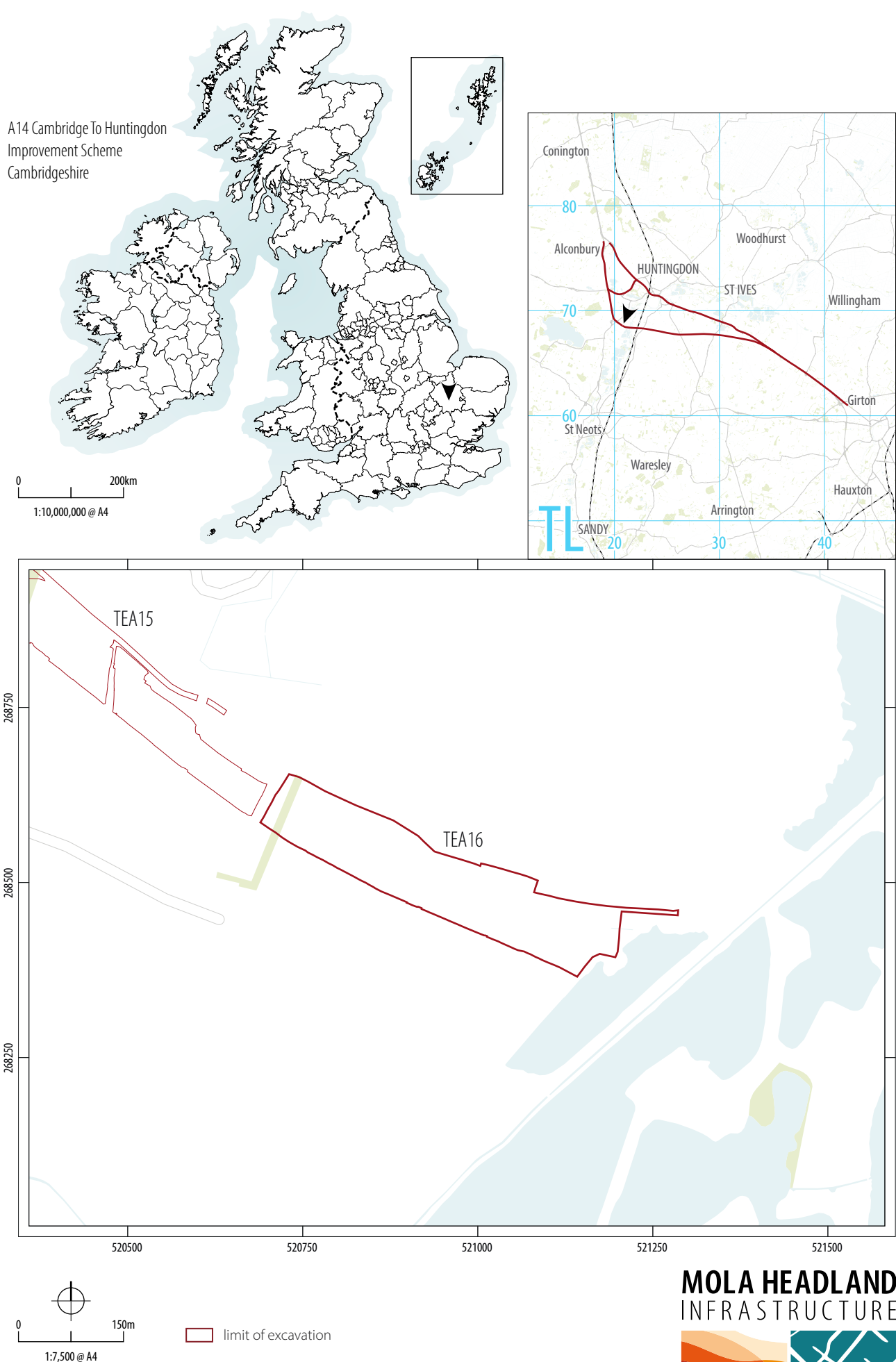


FIG 16.1 Site location

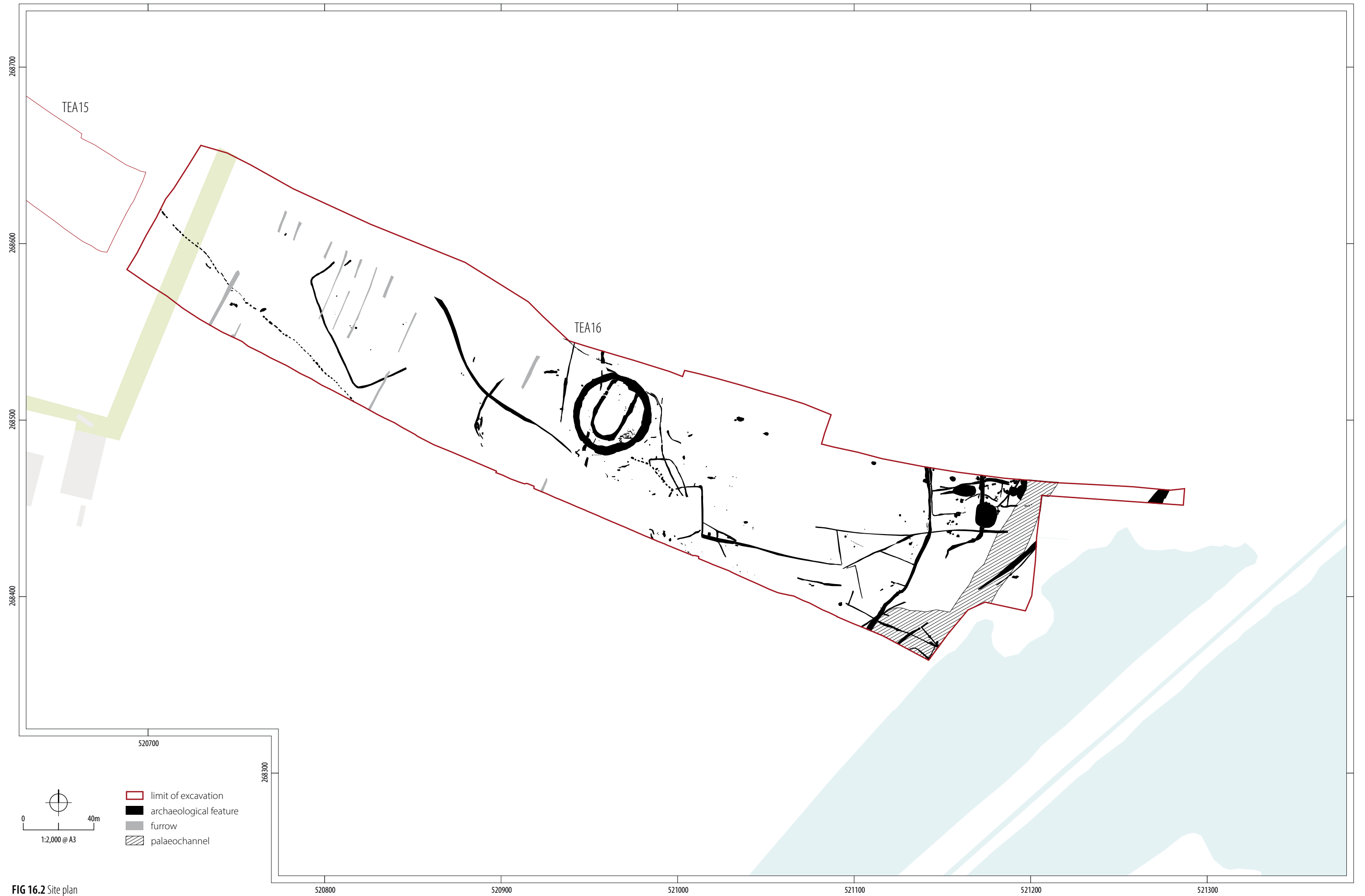


FIG 16.2 Site plan

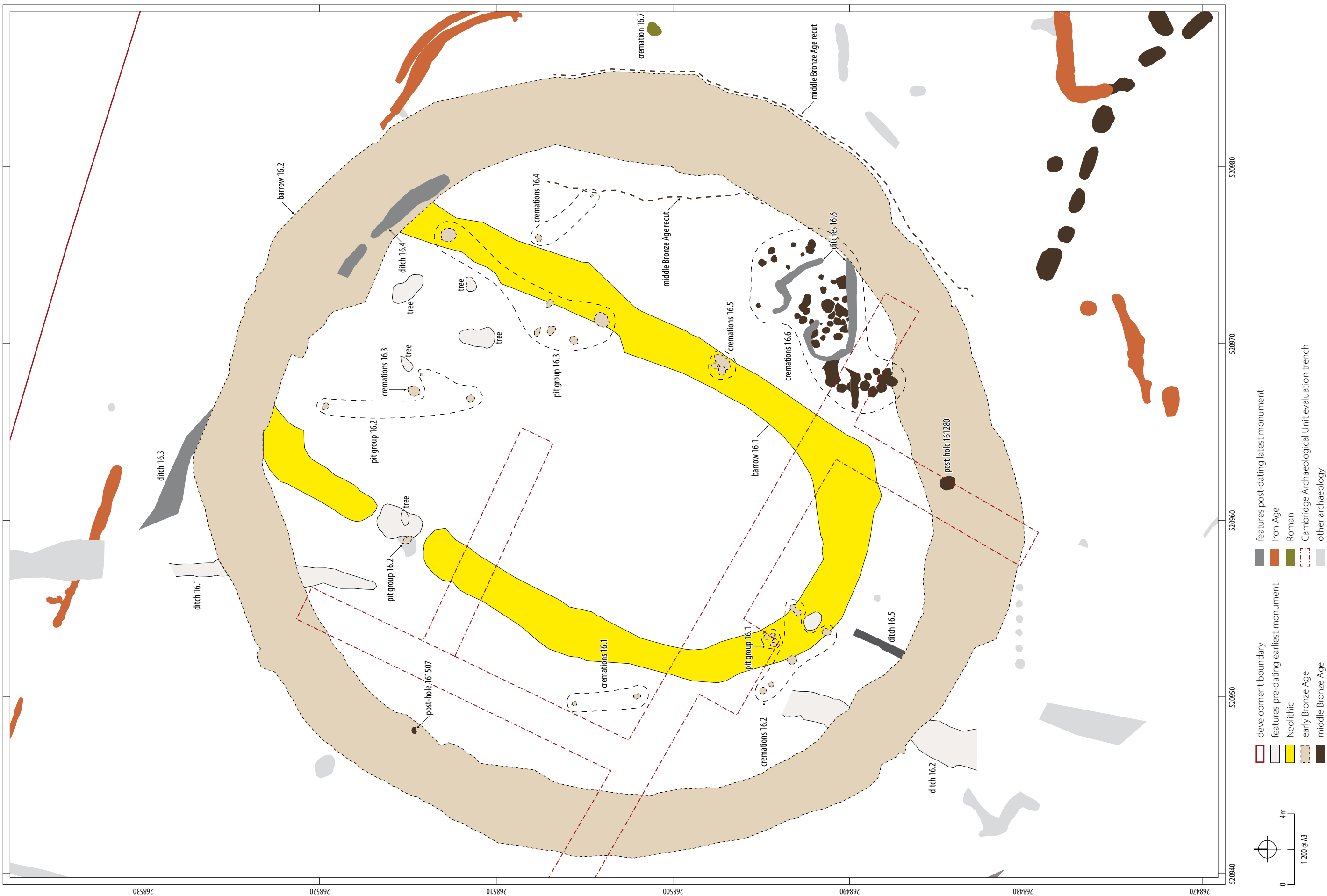


FIG 16.4 Close-up plan of Neolithic - Bronze Age barrow and associated features

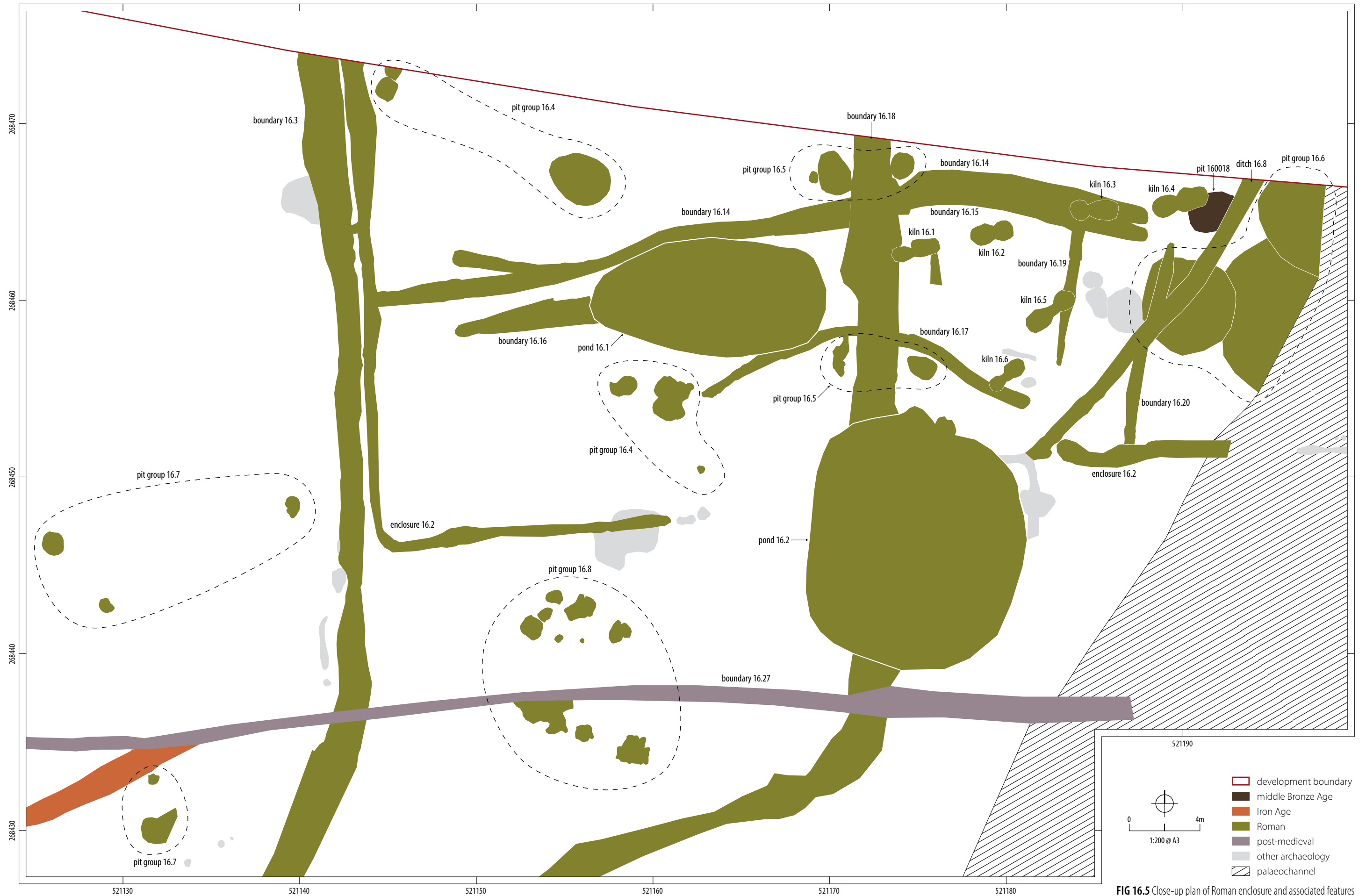


FIG 16.5 Close-up plan of Roman enclosure and associated features



6



7

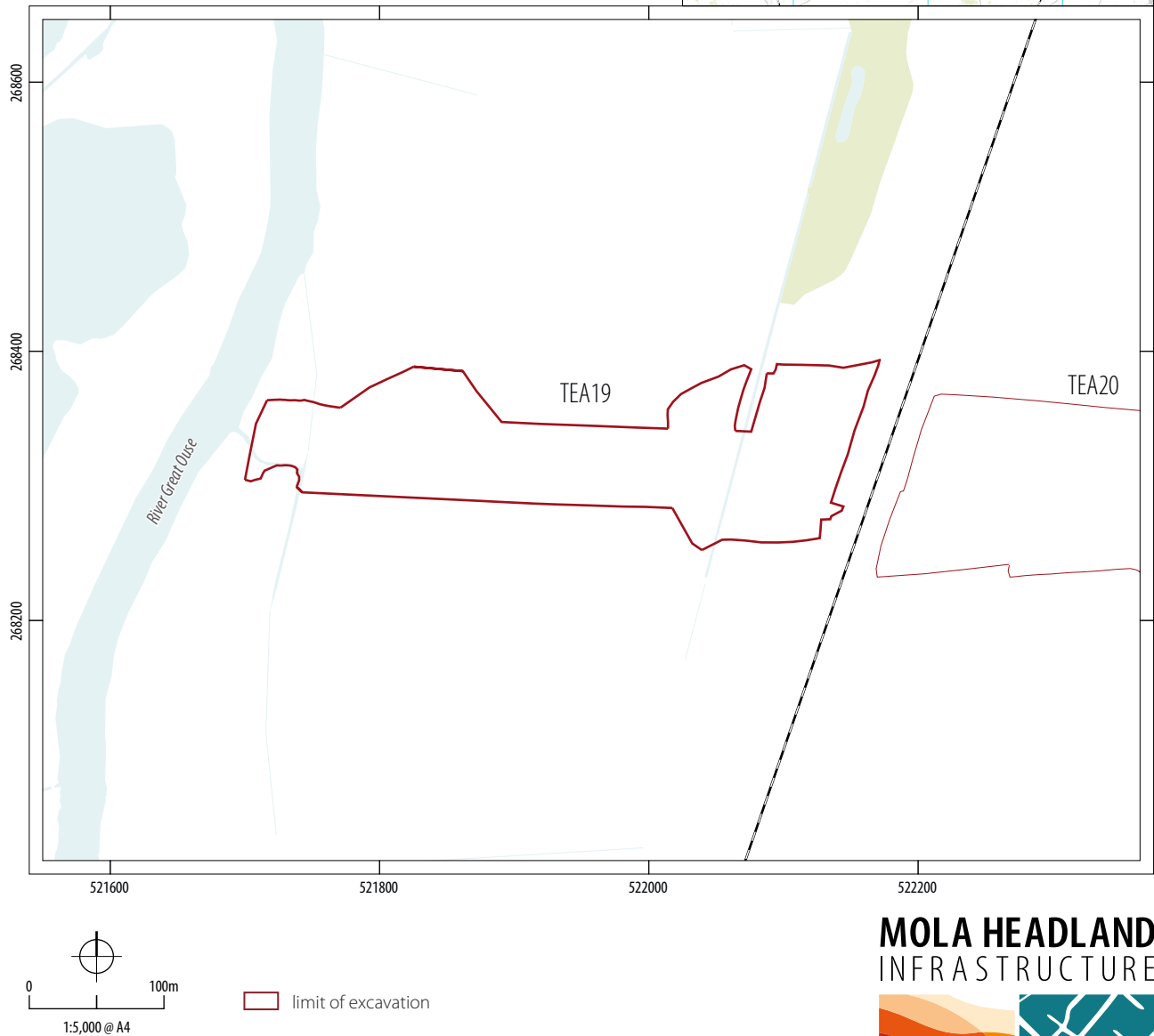
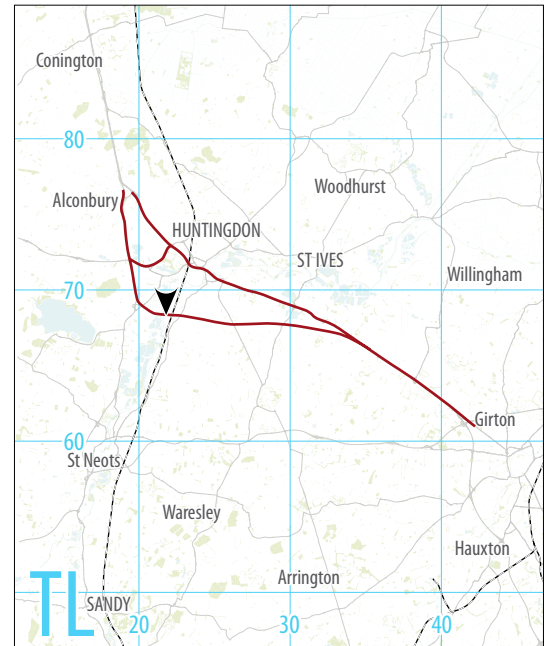
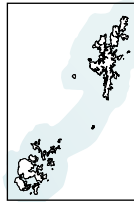
FIG 16.6 Drone photo of barrow **FIG 16.7** Cremation vessel under excavation



FIG 16.8 Roman kiln under excavation

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Cambridgeshire

0 200km
1:10,000,000 @ A4



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FIG 19.1 Site location

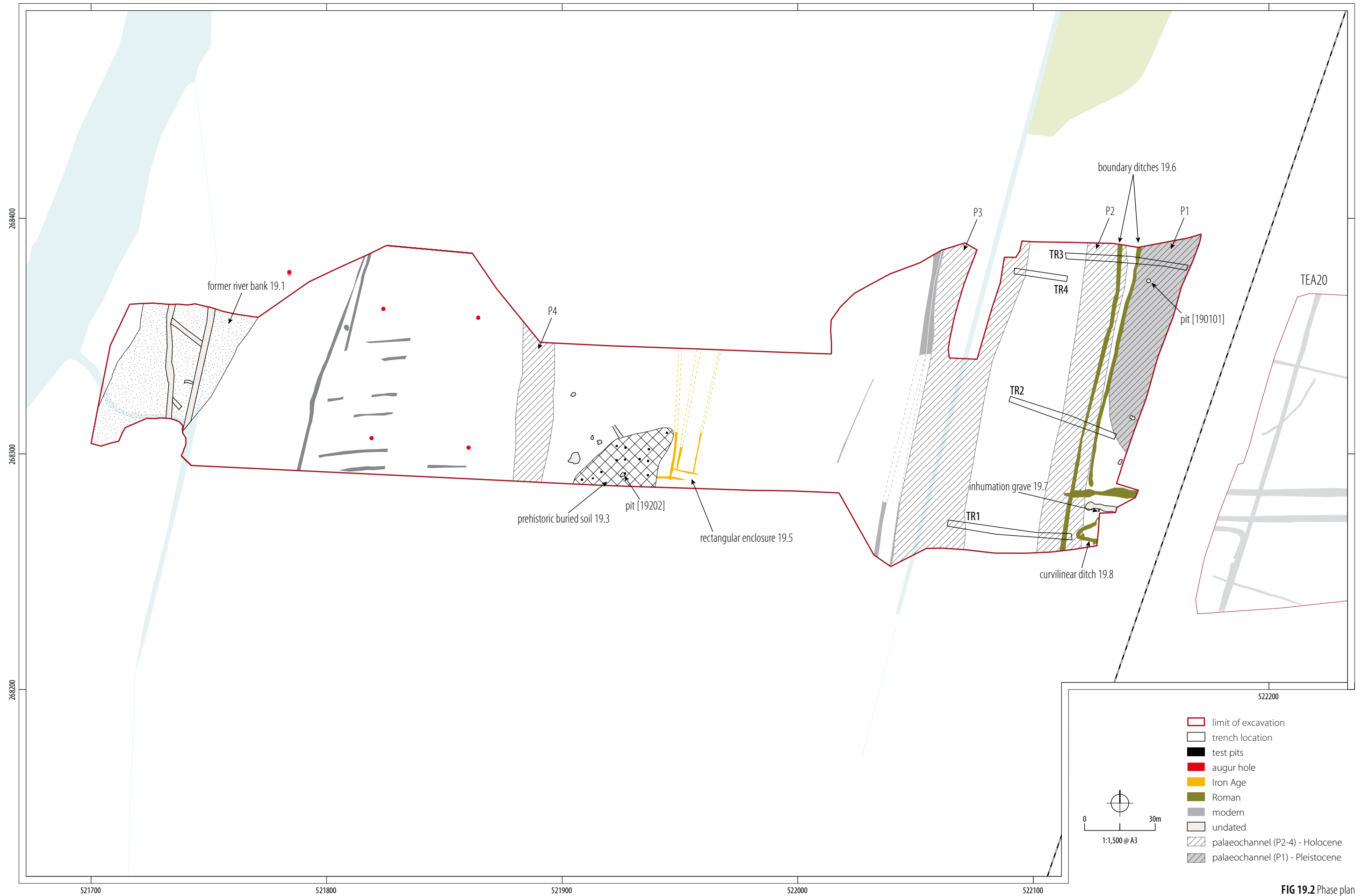


FIG 19.2 Phase plan



FIG 19.3 Mid-dark brown peat deposits

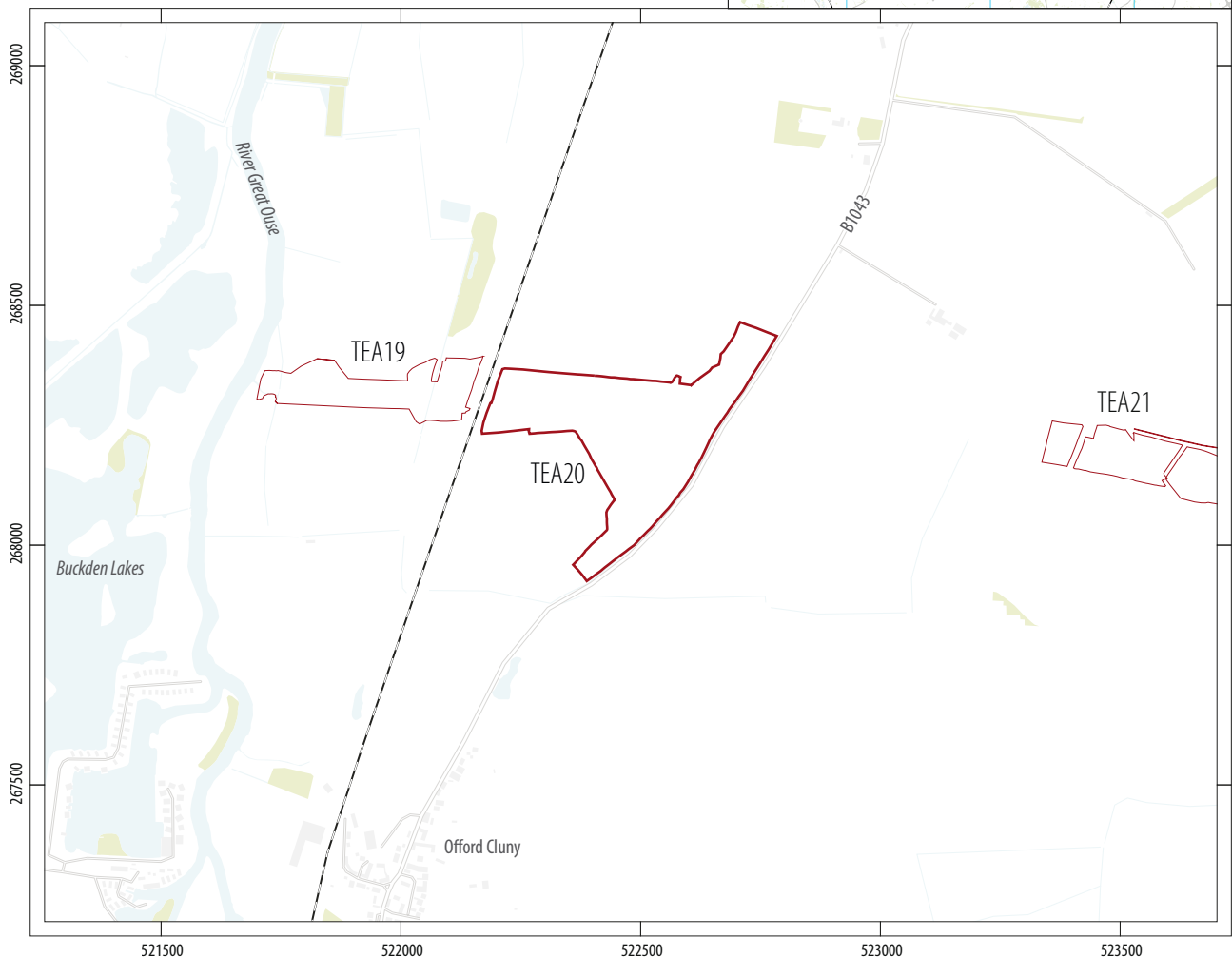
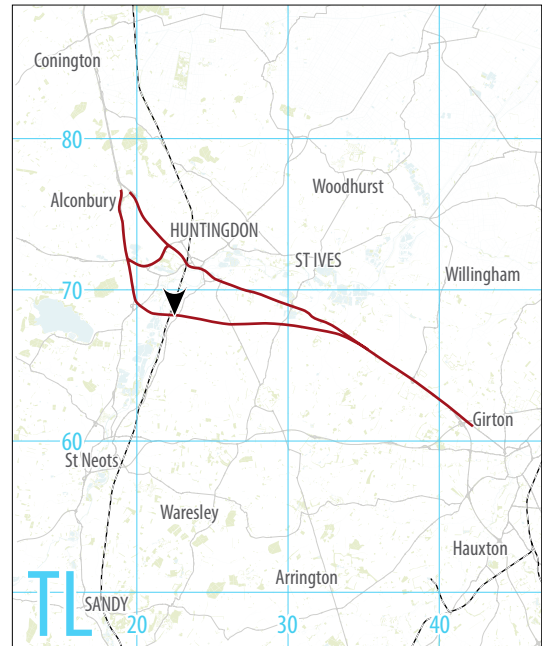
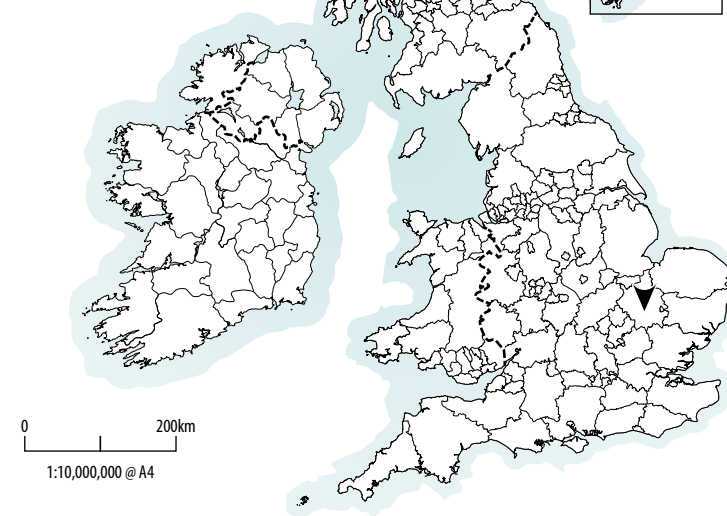


FIG 19.4 Late Bronze Age wood beam



FIG 19.5 Inhumation Burial 19.7

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Cambridgeshire



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FIG 20.1 Site location

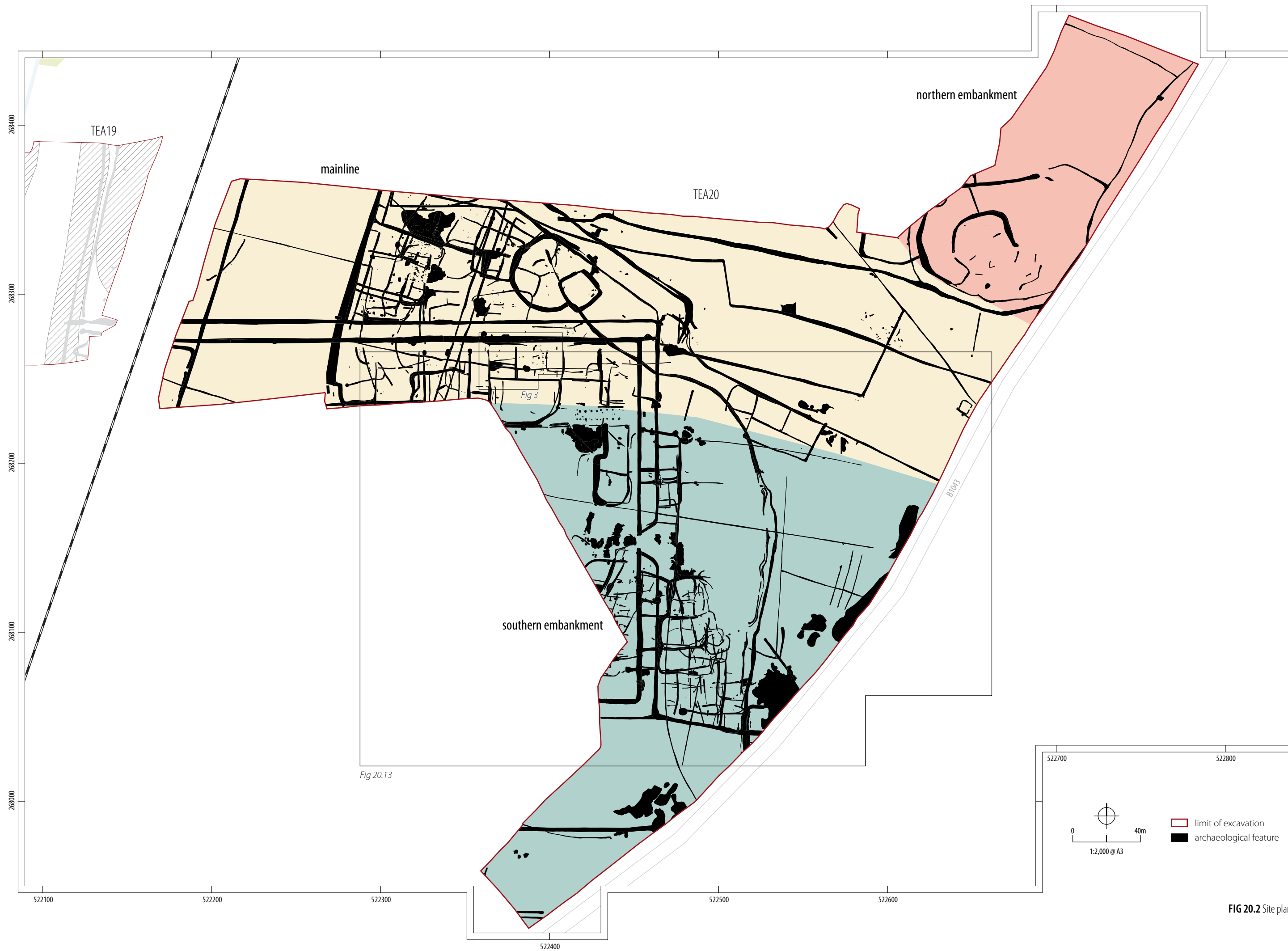


FIG 20.2 Site plan

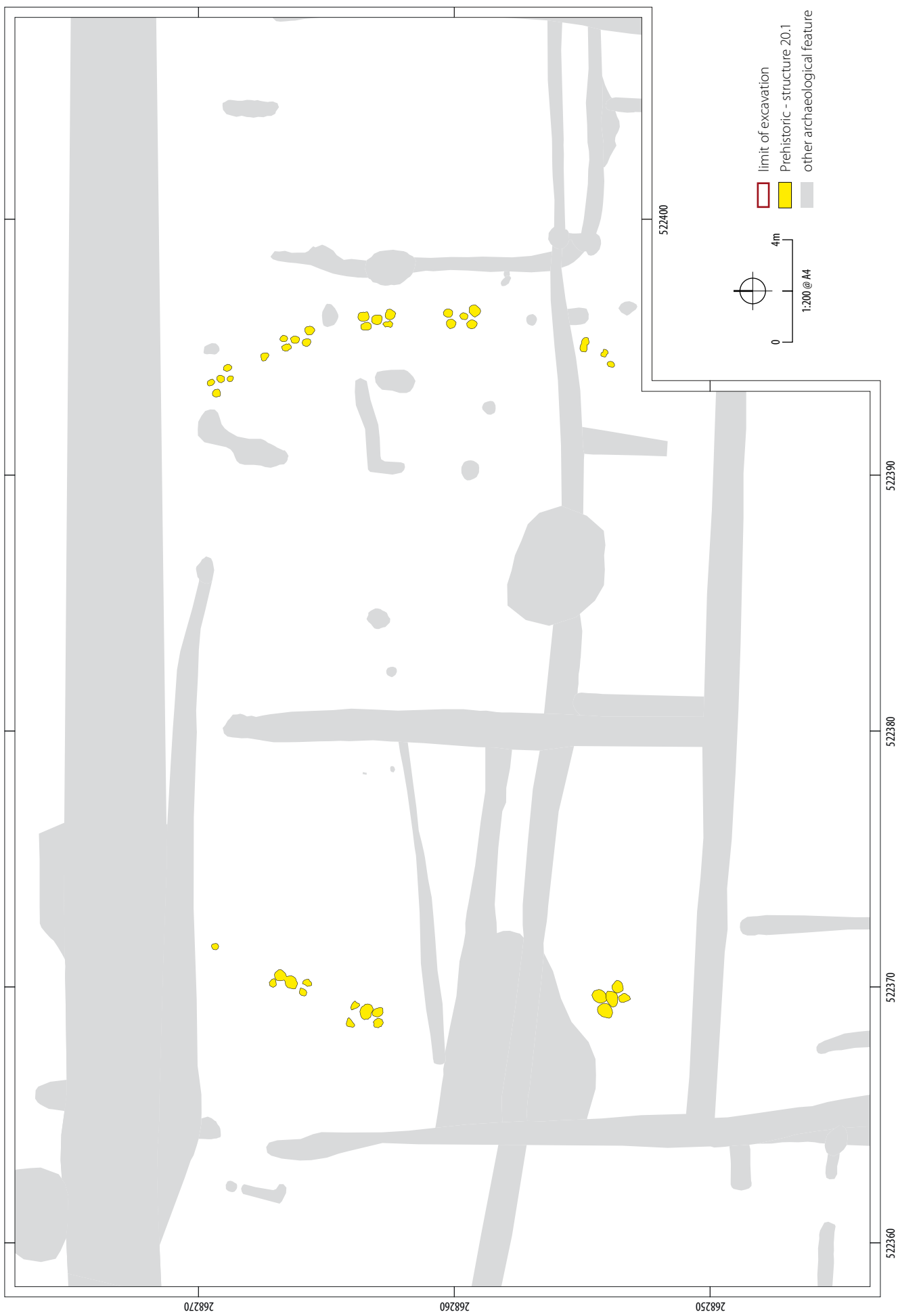


FIG 20.3 Phase plan – Prehistoric. Structure 20.1



FIG 20.4 Phase 1 and 2 plan – Iron Age



FIG 20.5 Trackway 20.1



FIG 20.6 Iron Age enclosures 20.2 and 20.3

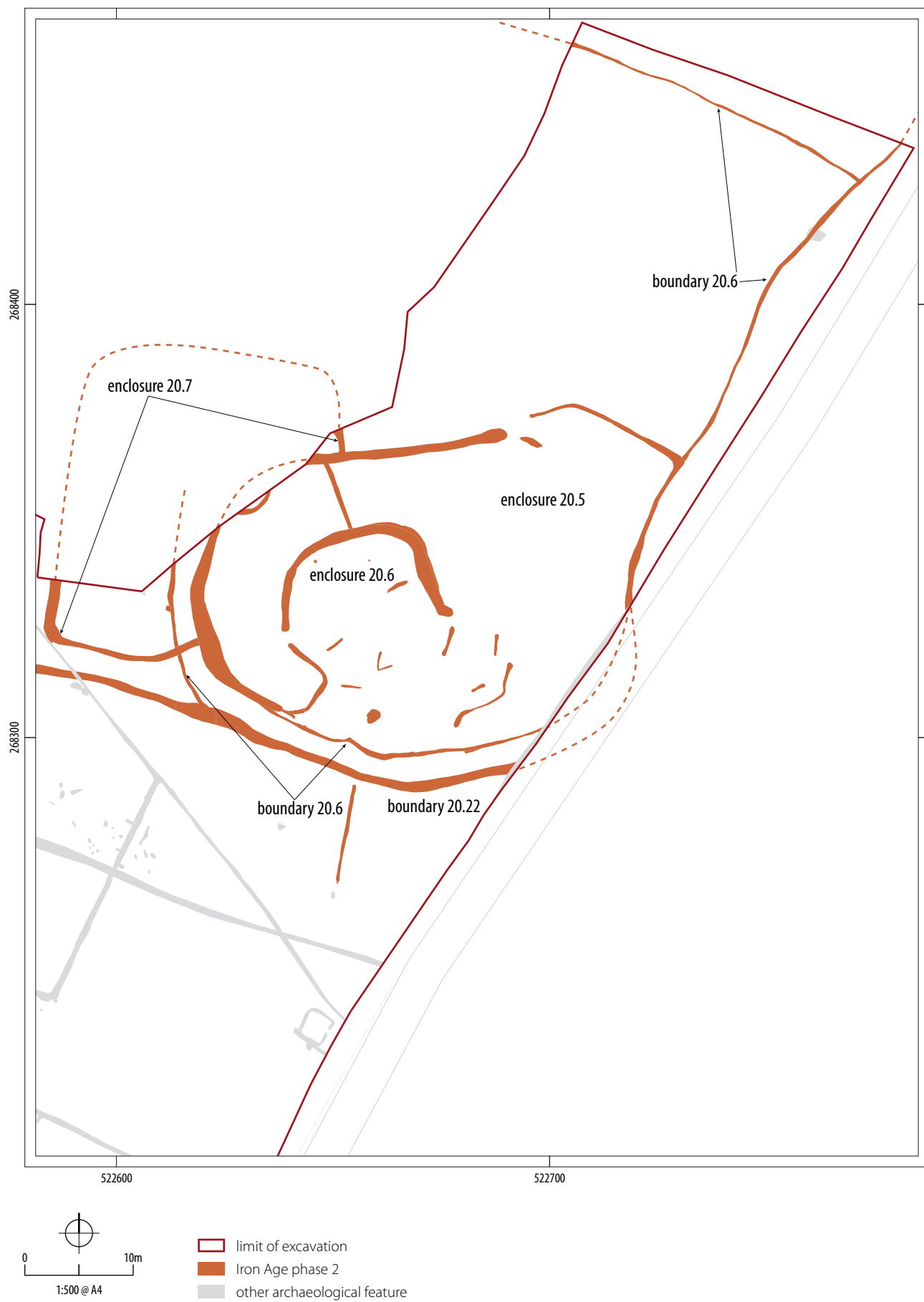


FIG 20.7 Iron Age activity in the northern embankment

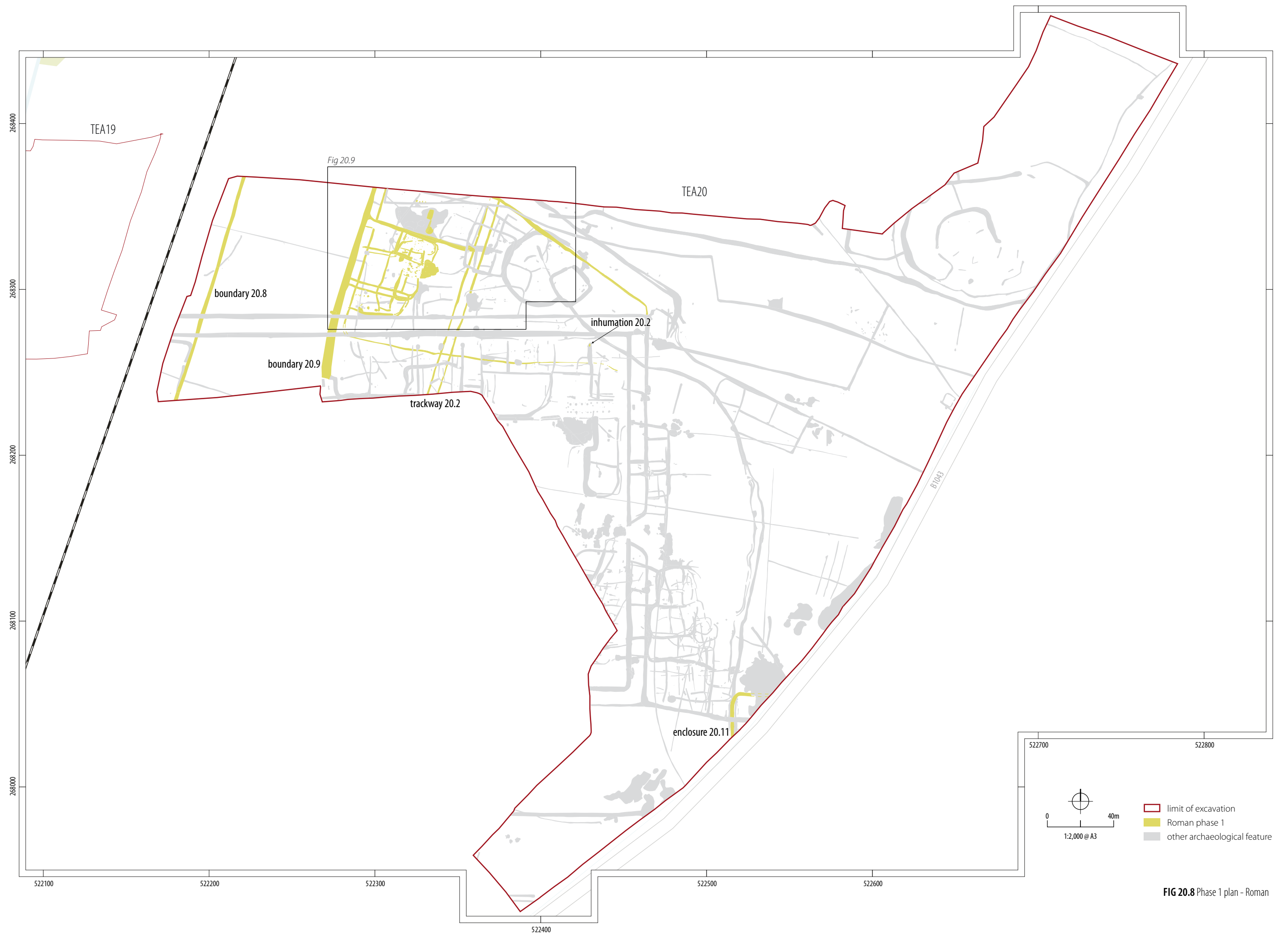


FIG 20.8 Phase 1 plan - Roman

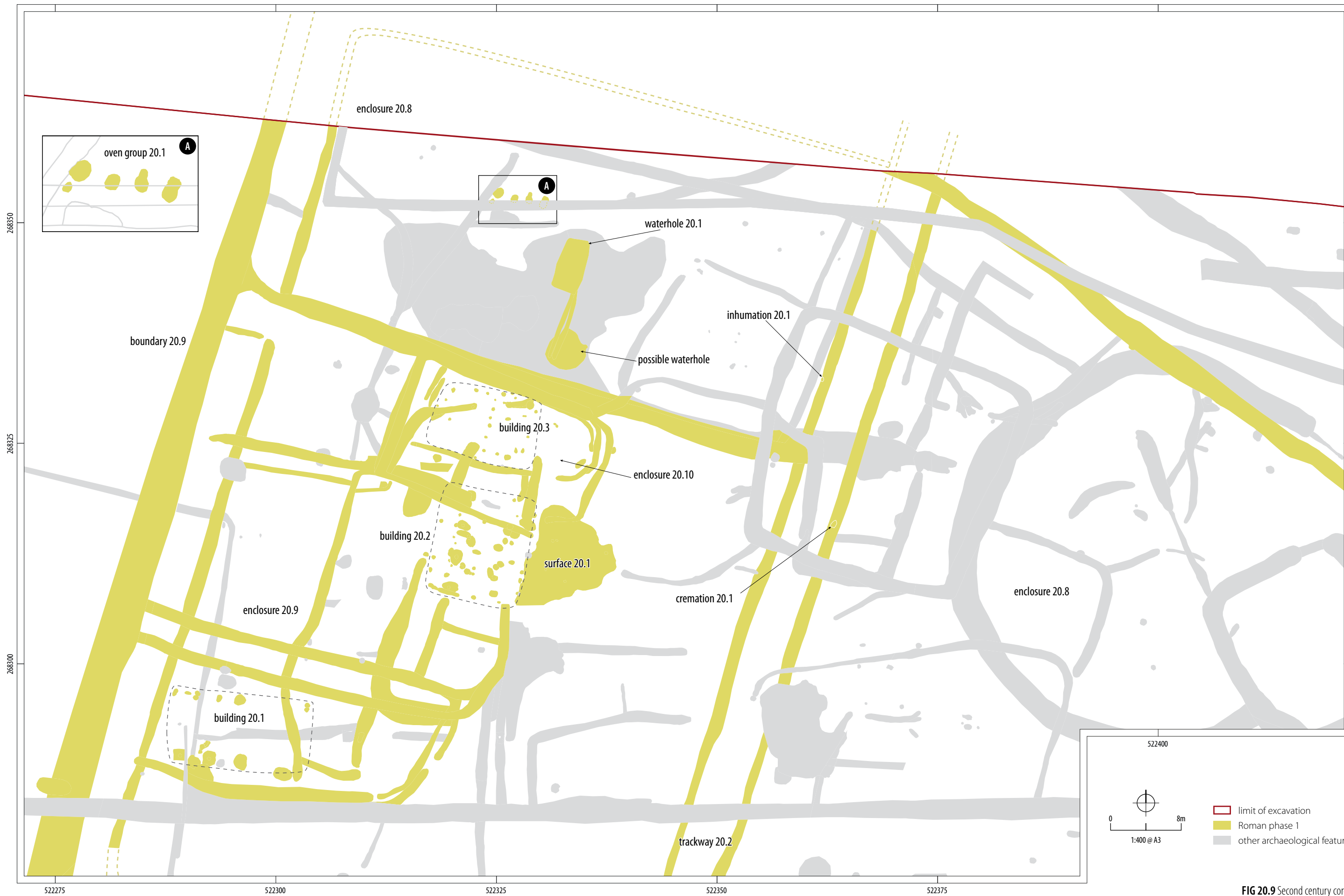


FIG 20.9 Second century core



FIG 20.10 Elm post-base in situ in post-hole [202542]



FIG 20.11 Phase 2 and 3 plan - Roman



FIG 20.12 Eastern entrance to enclosure 20.12

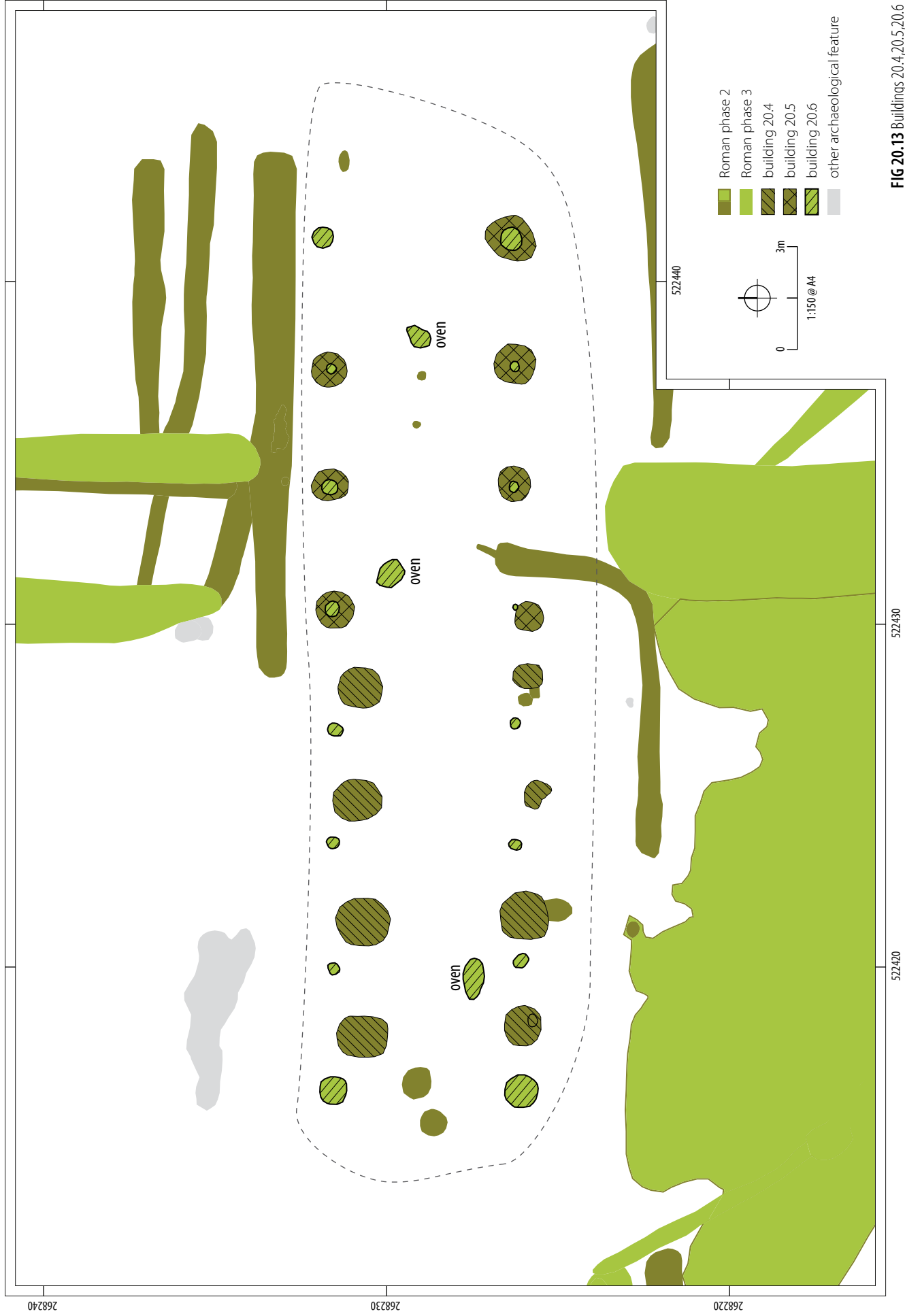


FIG 20.13 Buildings 20.4,20.5,20.6



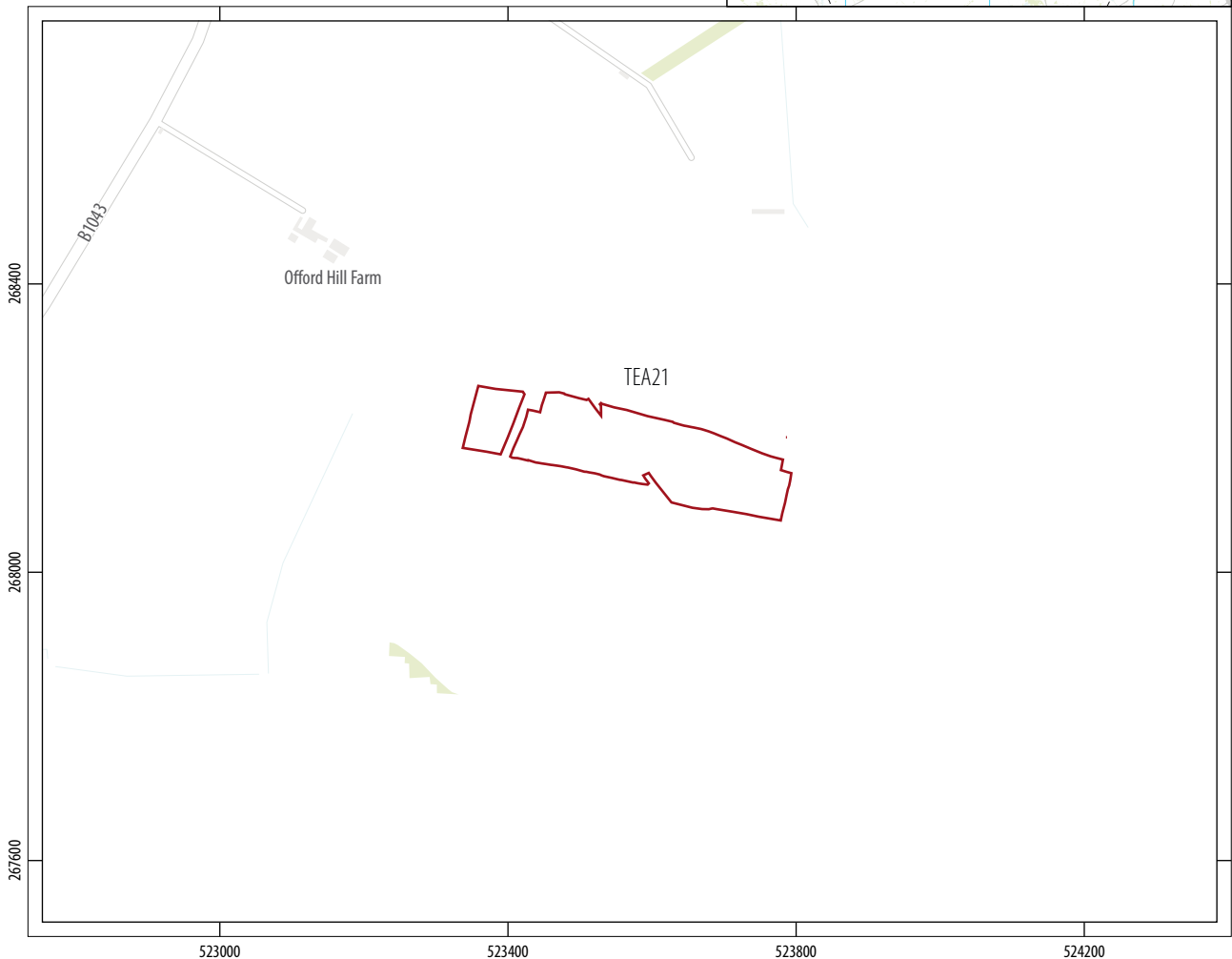
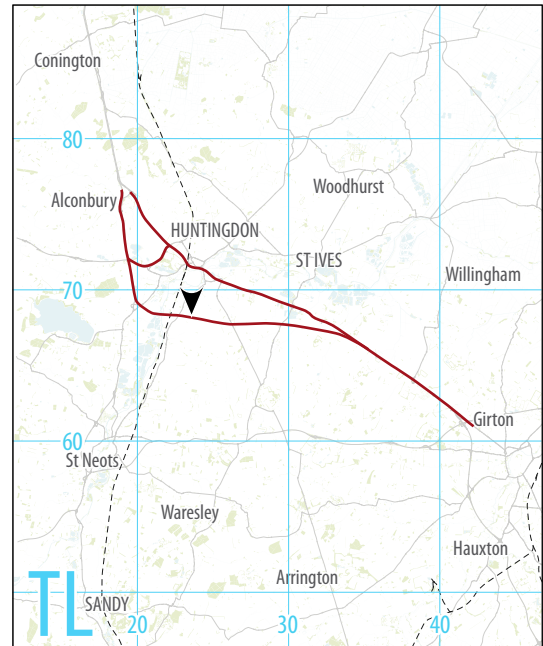
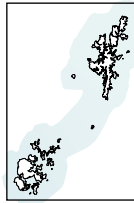
FIG 20.14 Phase 4 plan - Roman



FIG 20.15 Phase plan - medieval and post-medieval

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0 200km
1:10,000,000 @ A4



0 200m
1:10,000 @ A4

limit of excavation

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FIG 21.1 Site location

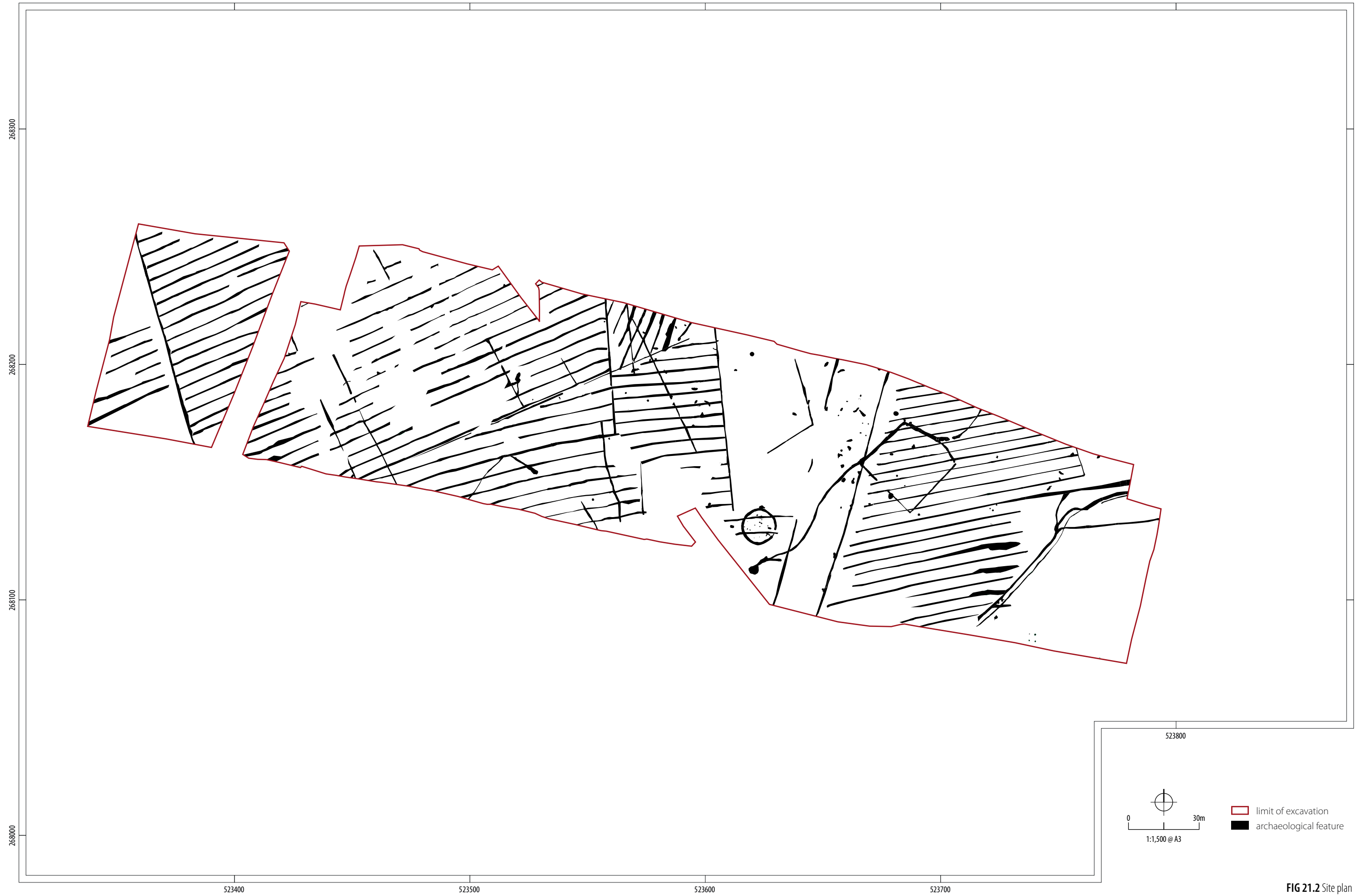


FIG 21.2 Site plan



FIG 21.3 TEA 21, facing west

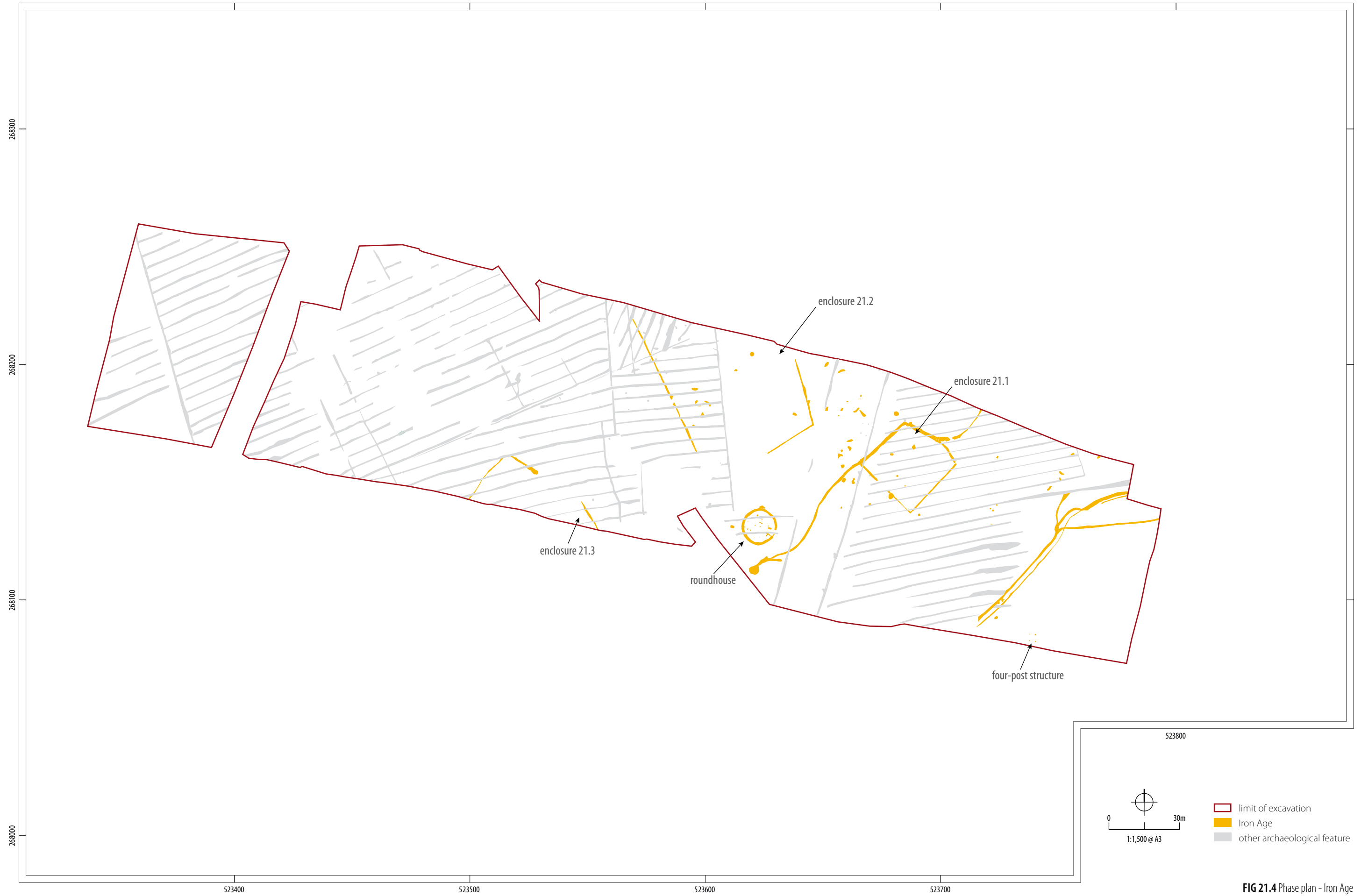
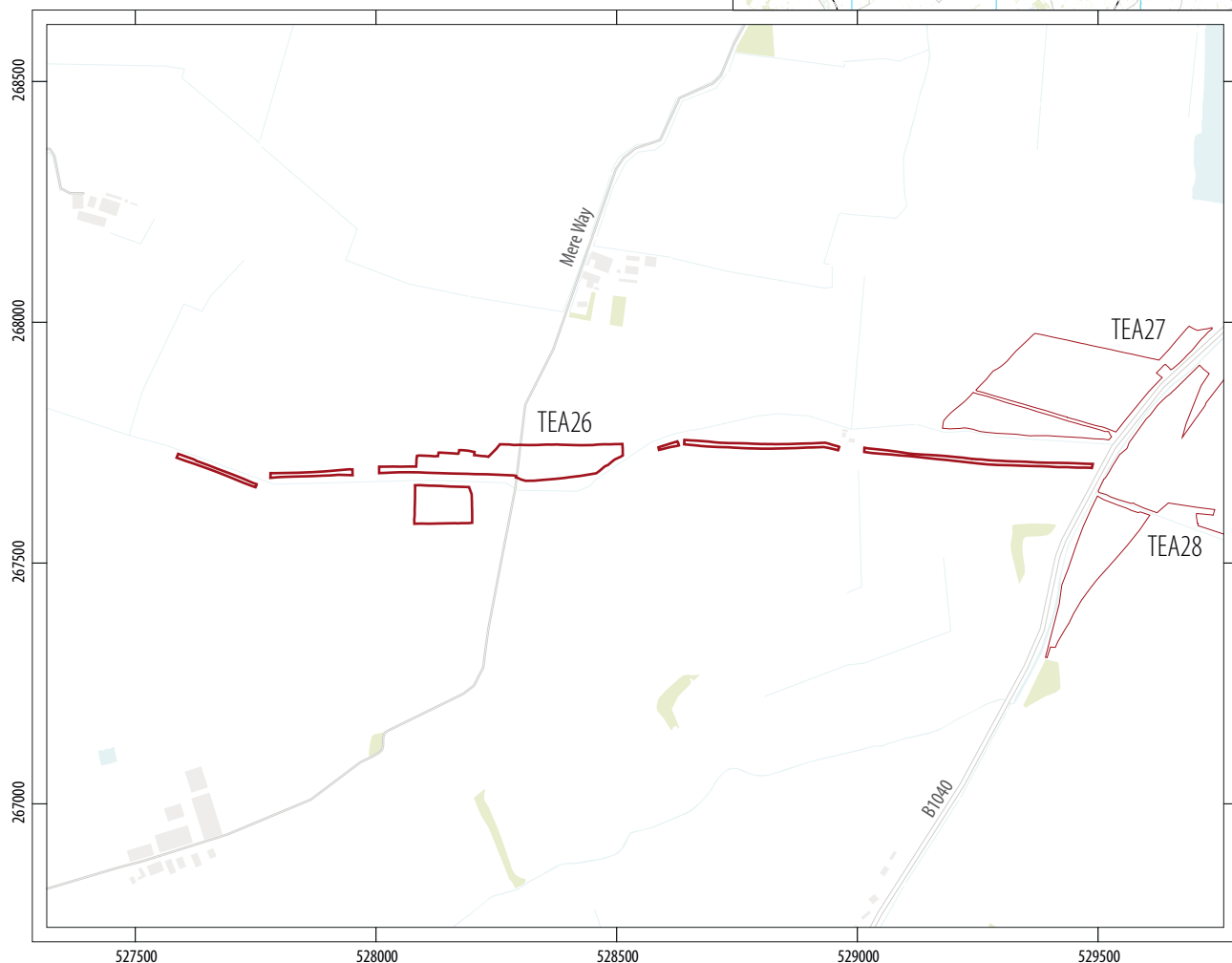
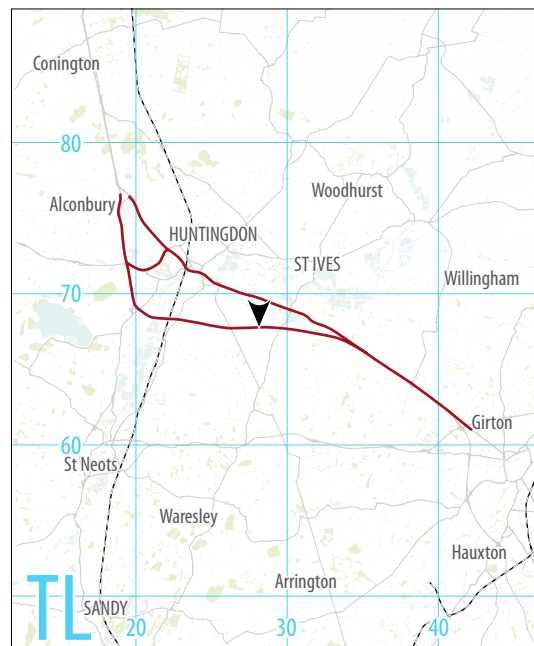
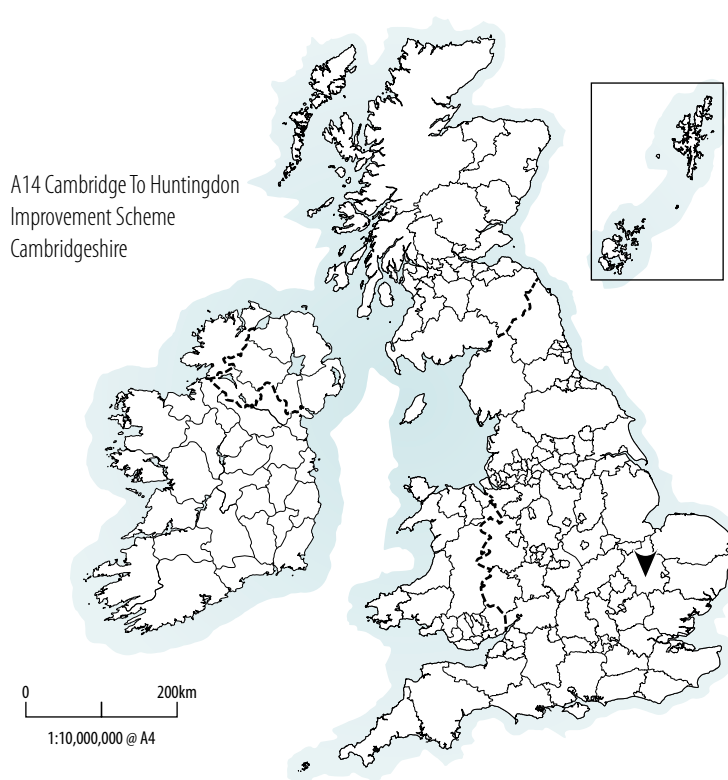


FIG 21.4 Phase plan - Iron Age



FIG 21.5 Phase plan - Roman

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Improvement Scheme
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FIG 26.1 Site location

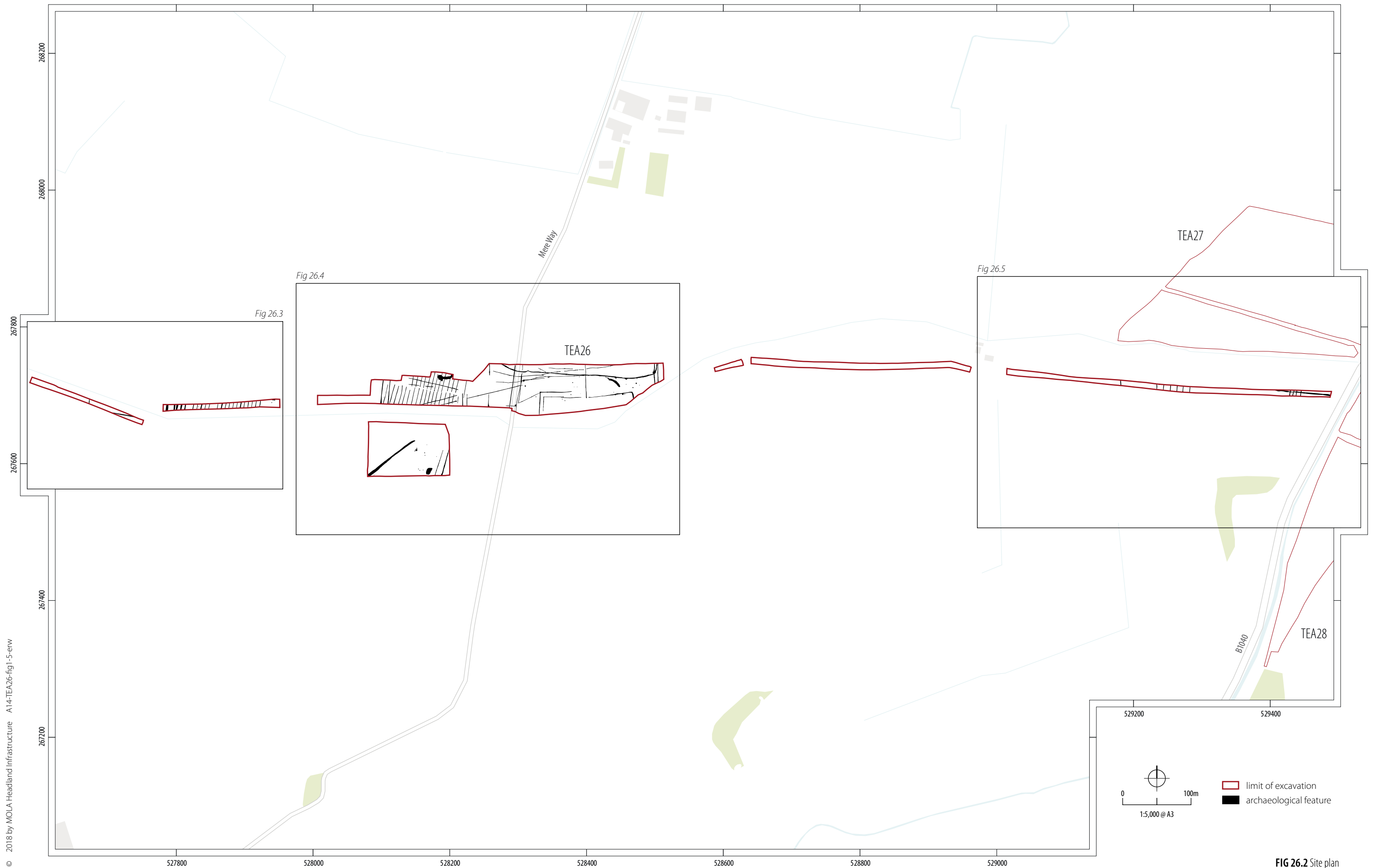


FIG 26.2 Site plan



FIG 26.3 Phase plan - west

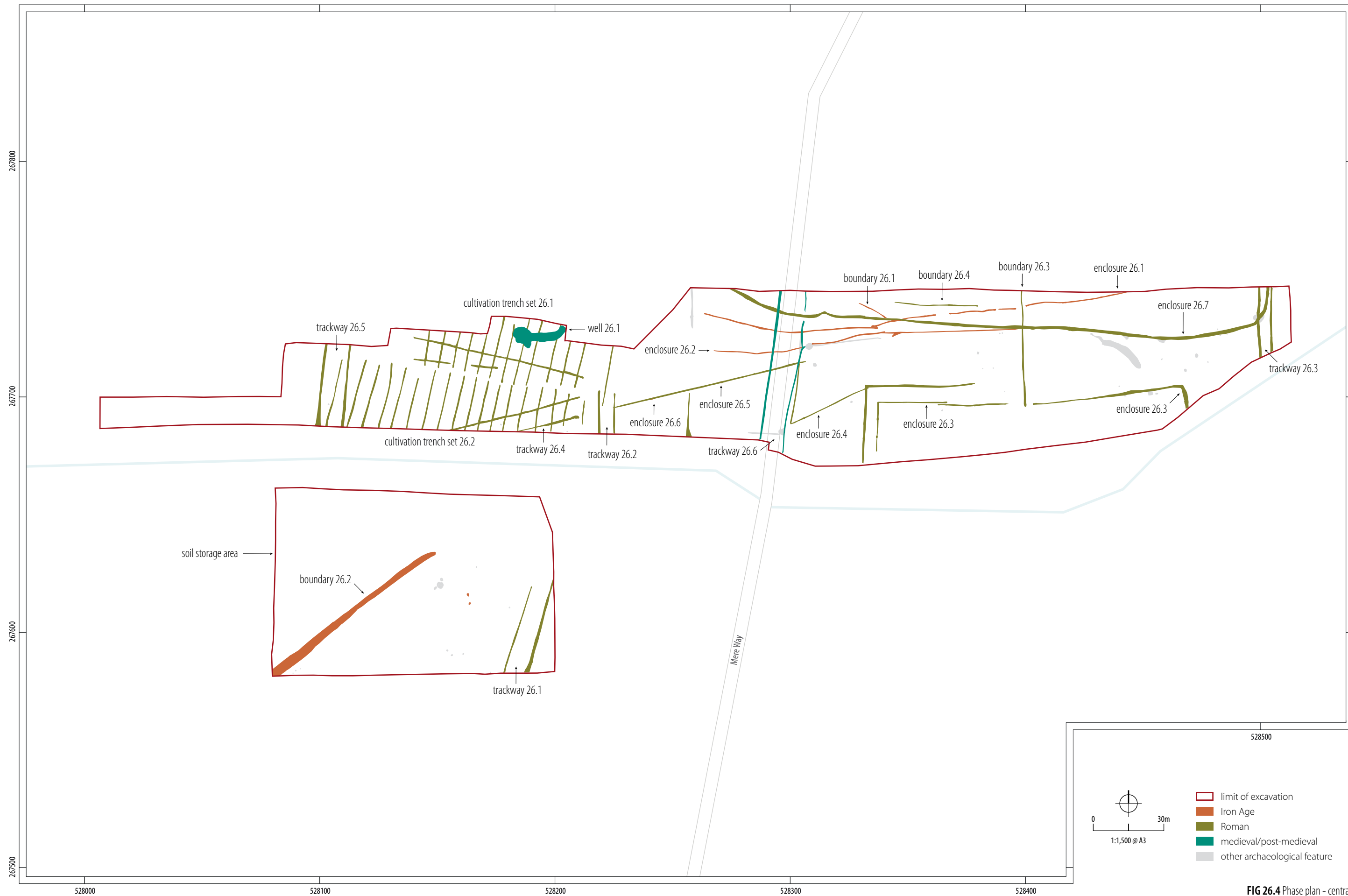


FIG 26.4 Phase plan - central

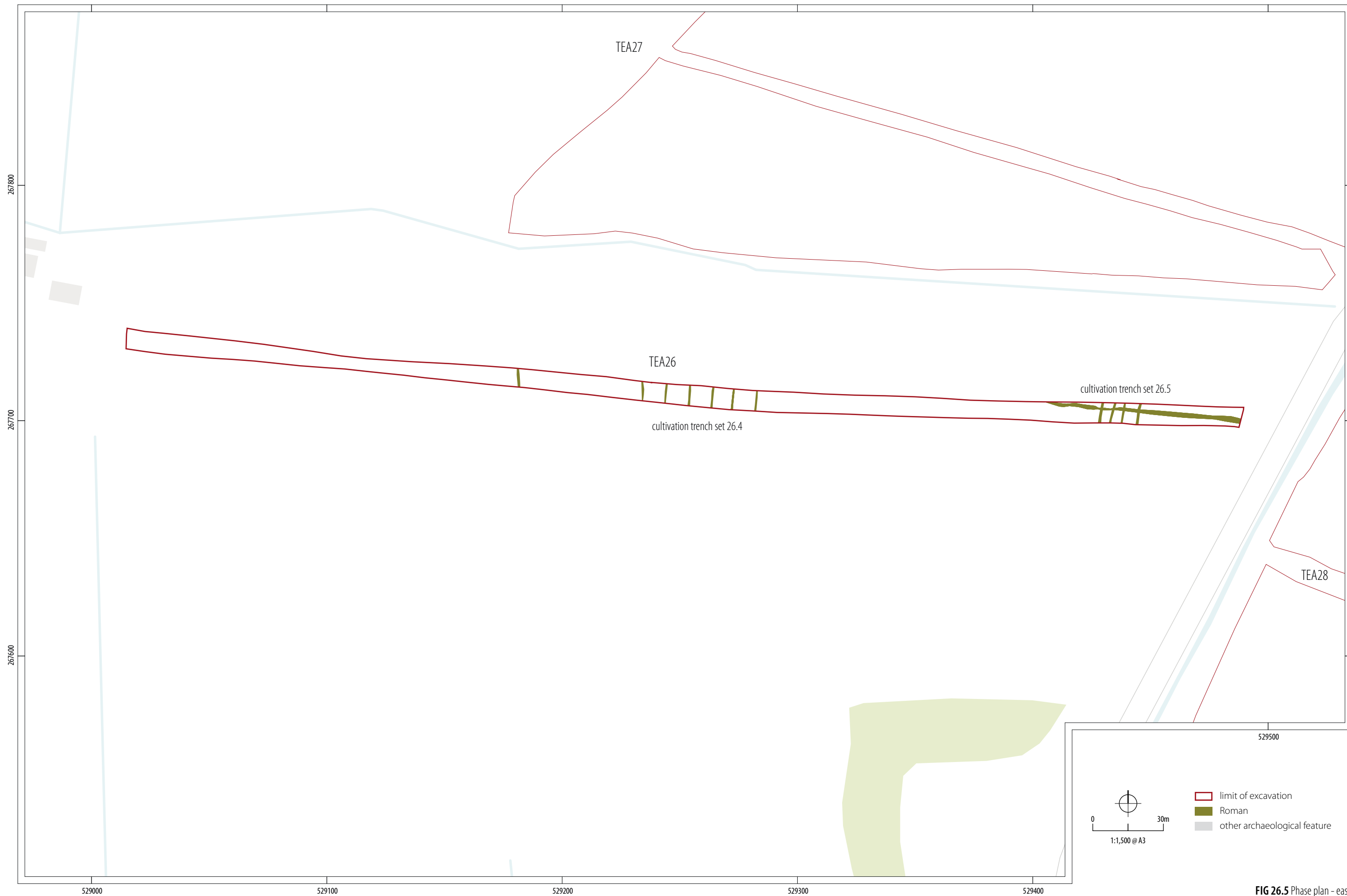


FIG 26.5 Phase plan - east

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Cambridgeshire

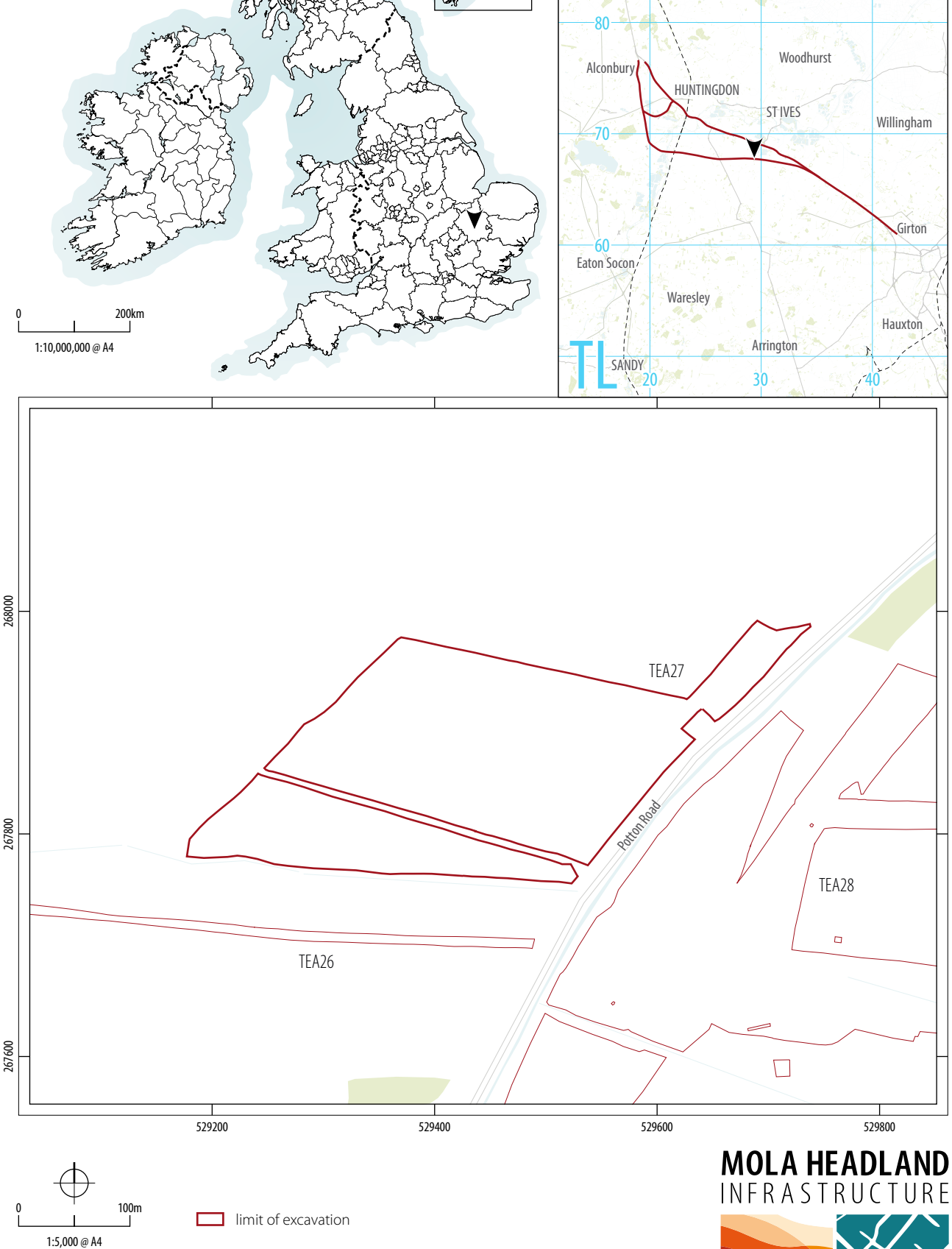


FIG 27.1 Site location

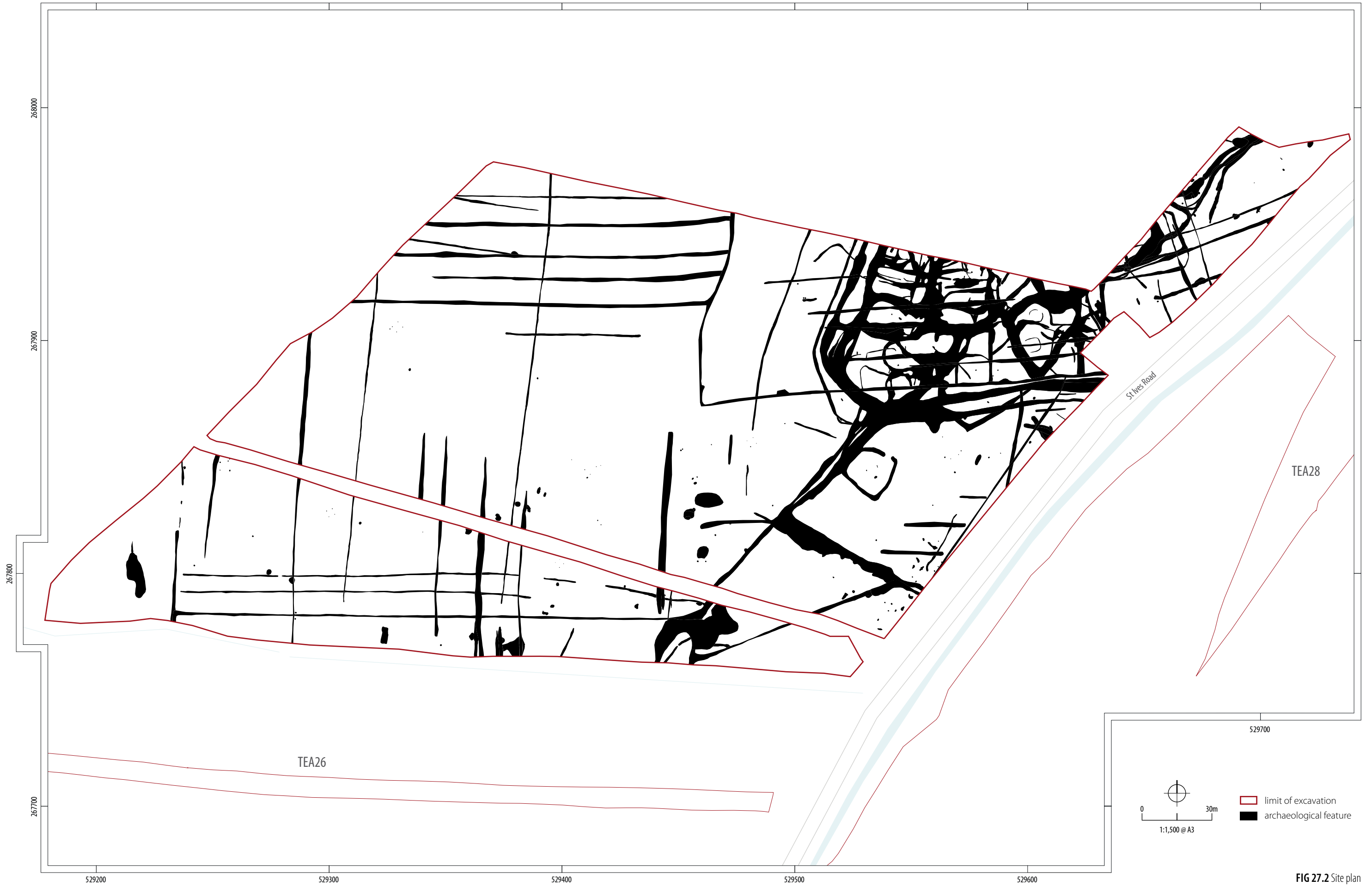


FIG 27.2 Site plan

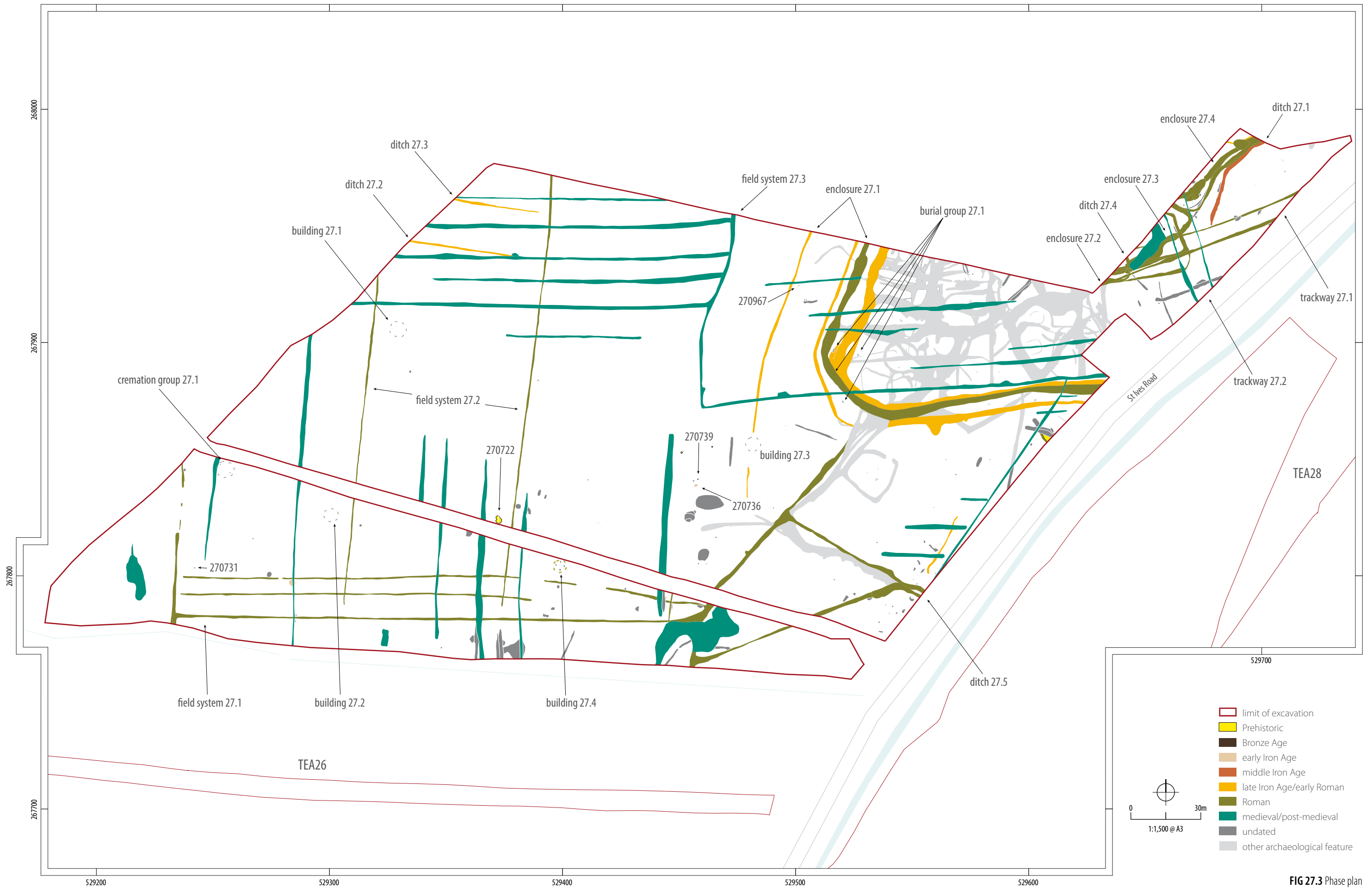


FIG 27.3 Phase plan

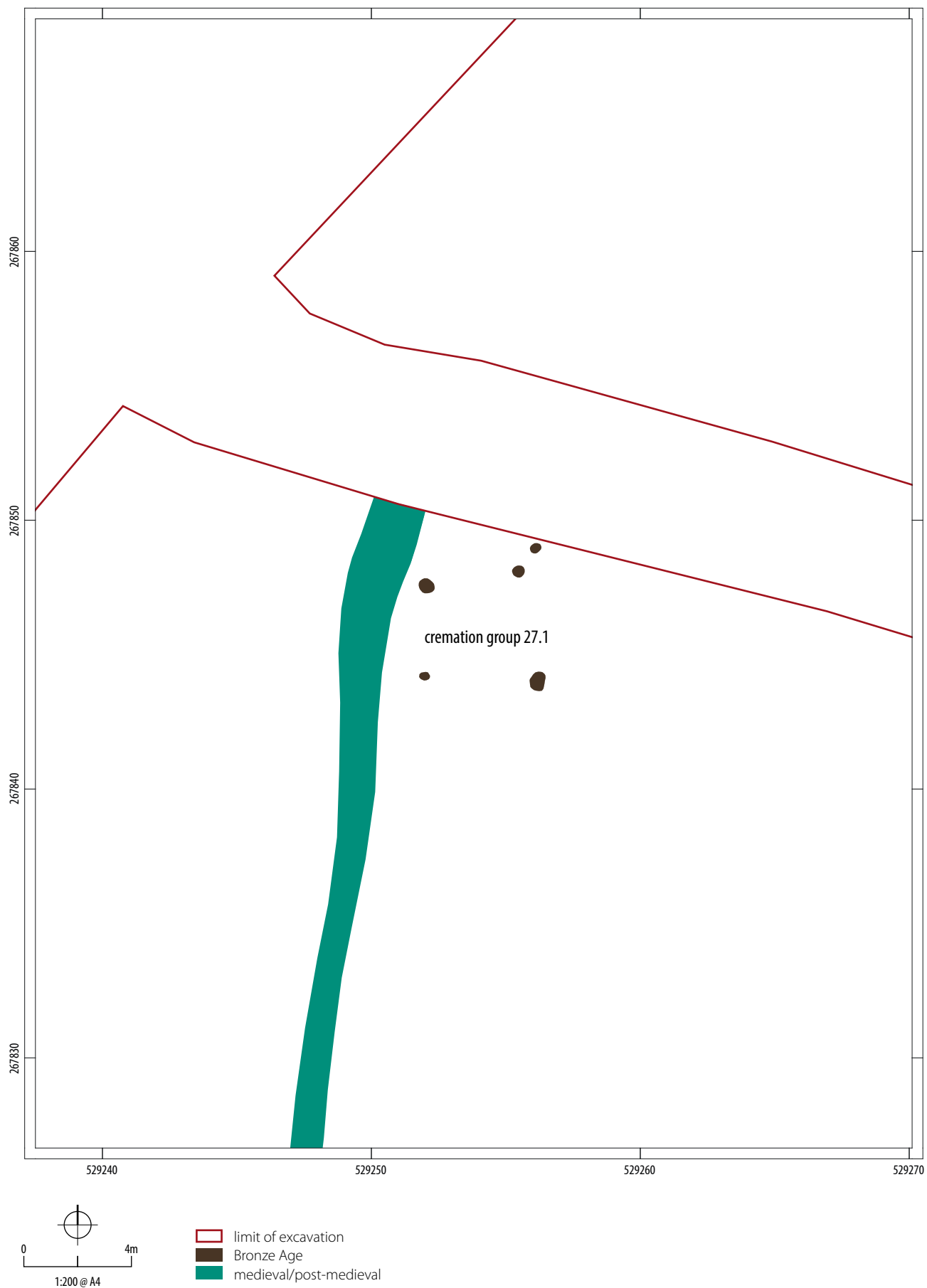


FIG 27.4 Cremation group 27.1

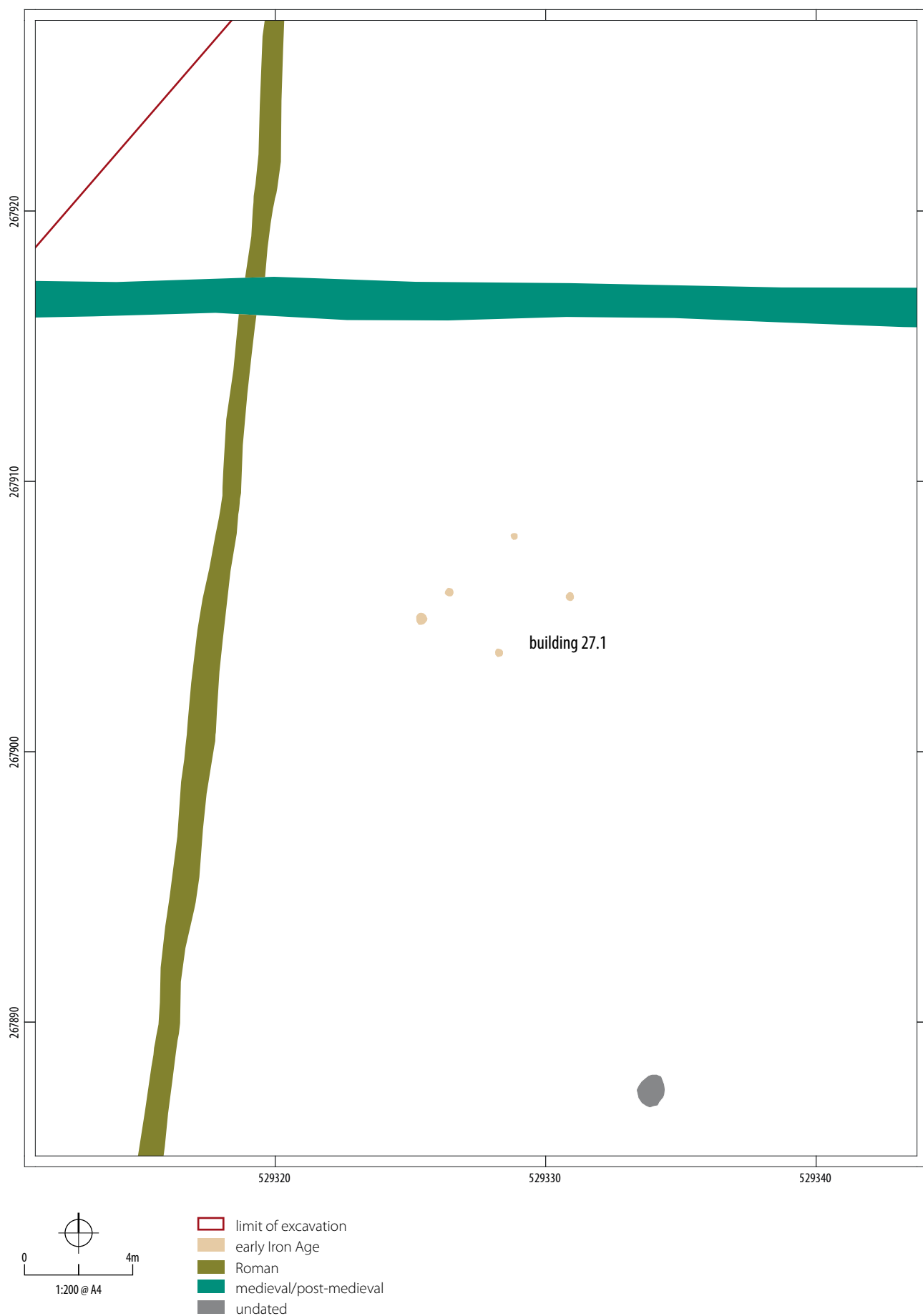


FIG 27.5 Building 27.1

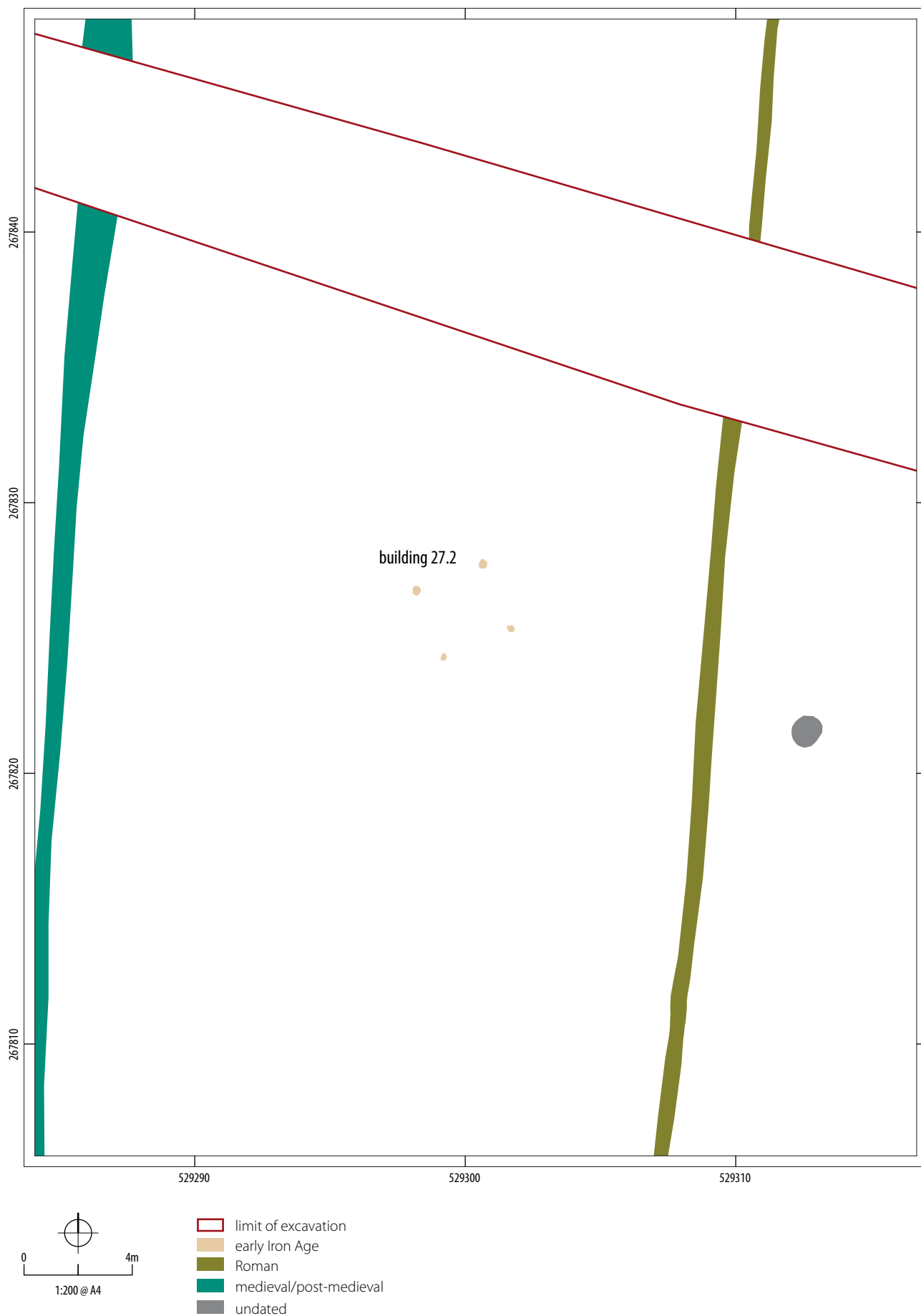


FIG 27.6 Building 27.2



FIG 27.7 Building 27.3

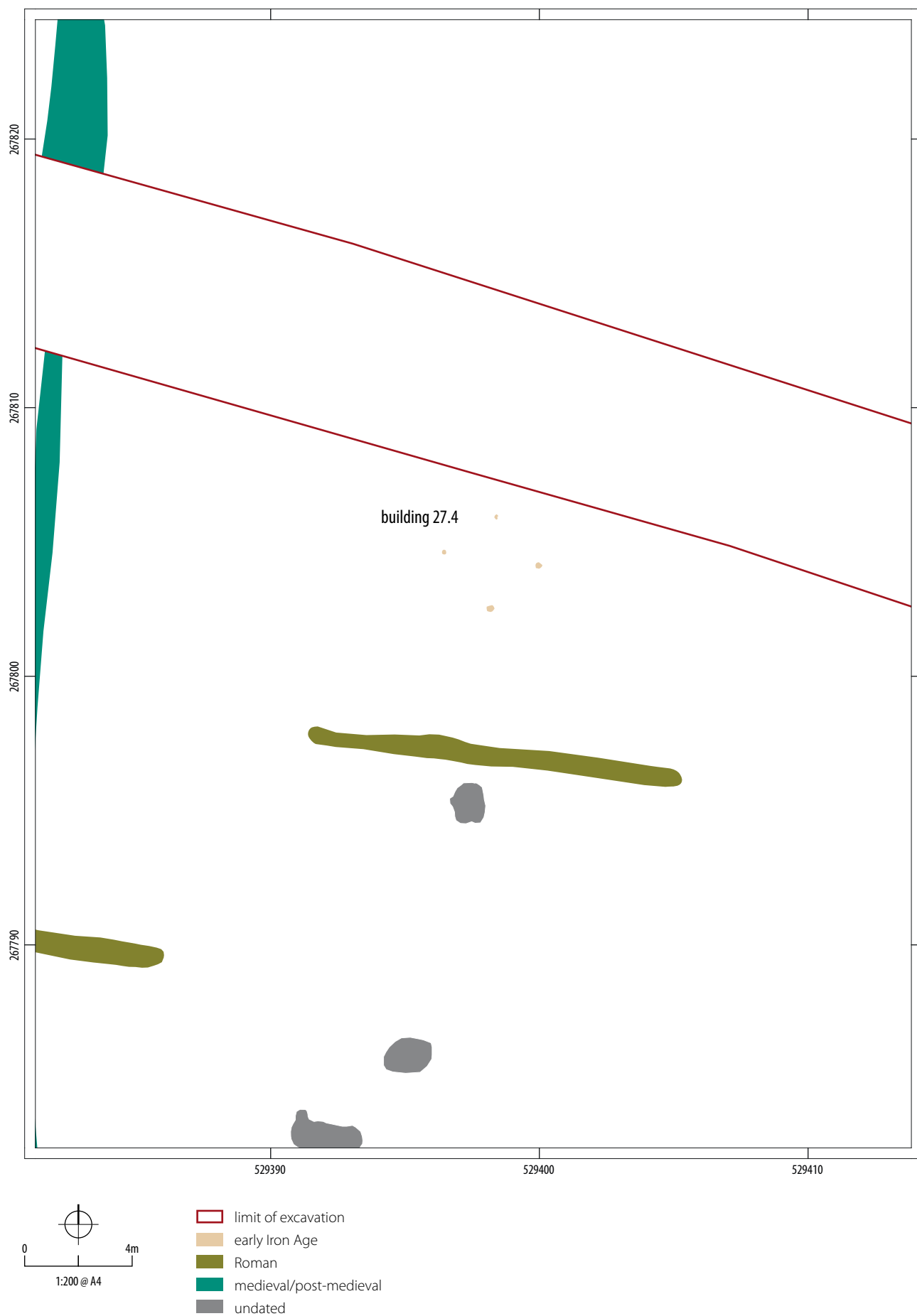


FIG 27.8 Building 27.4

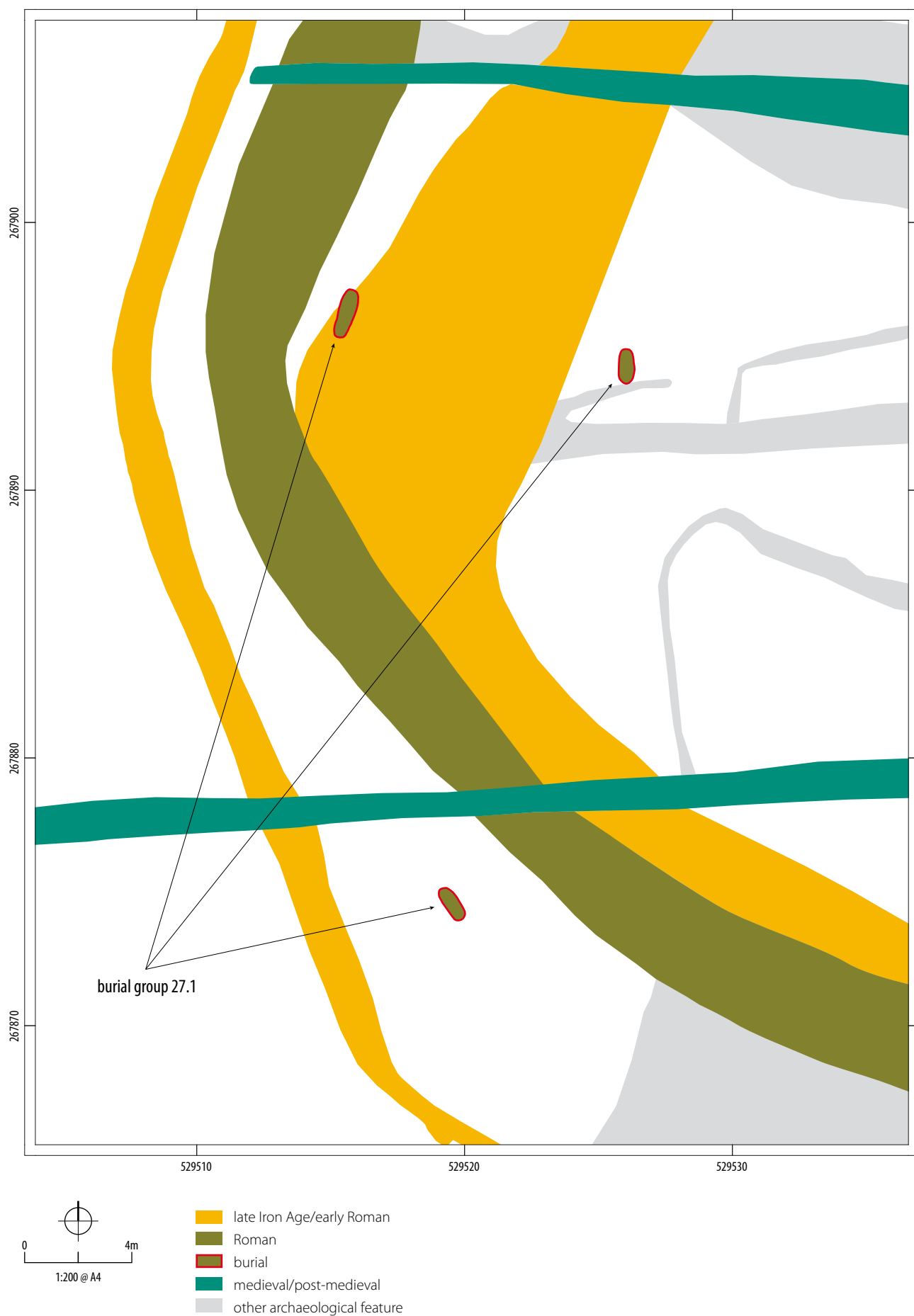


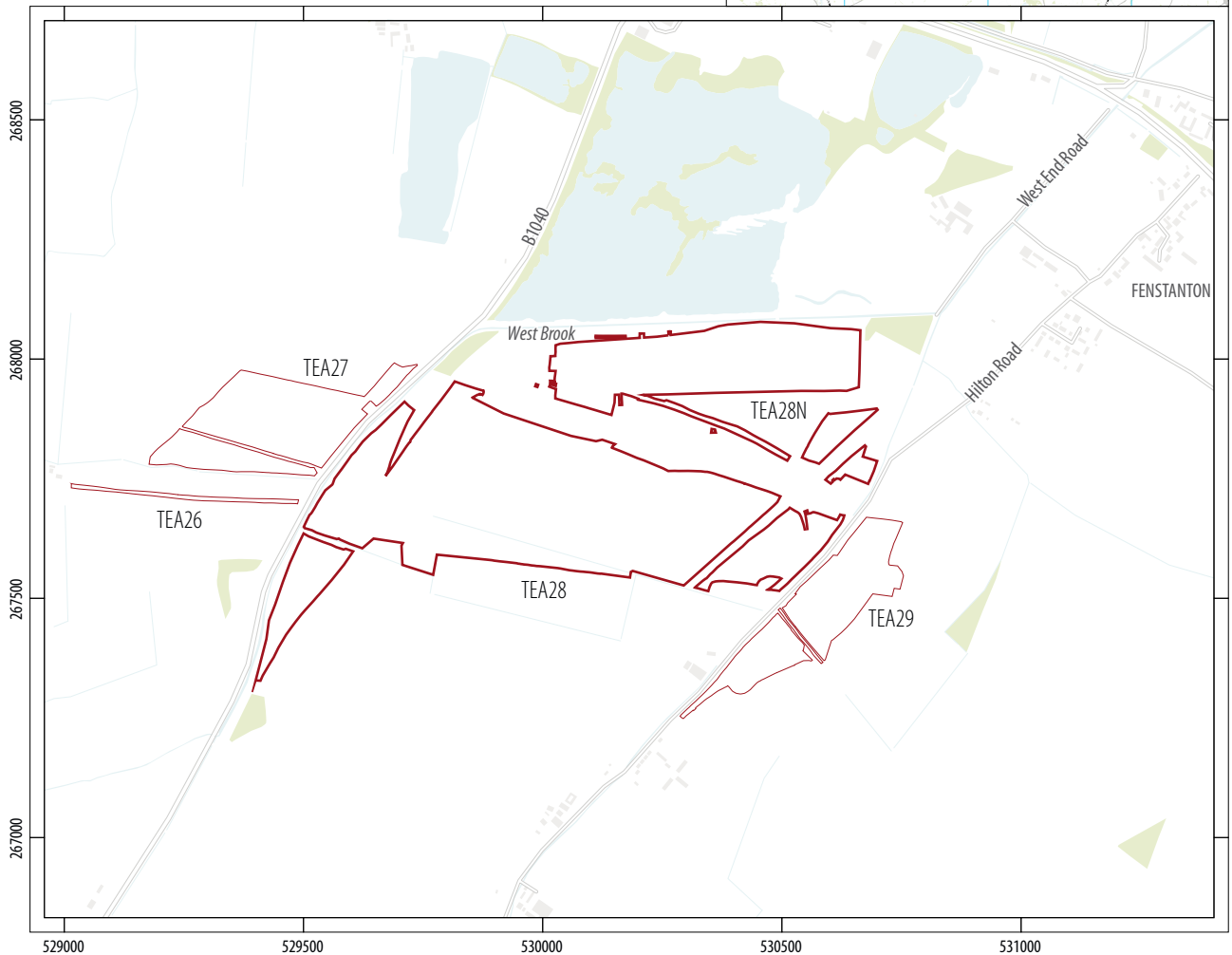
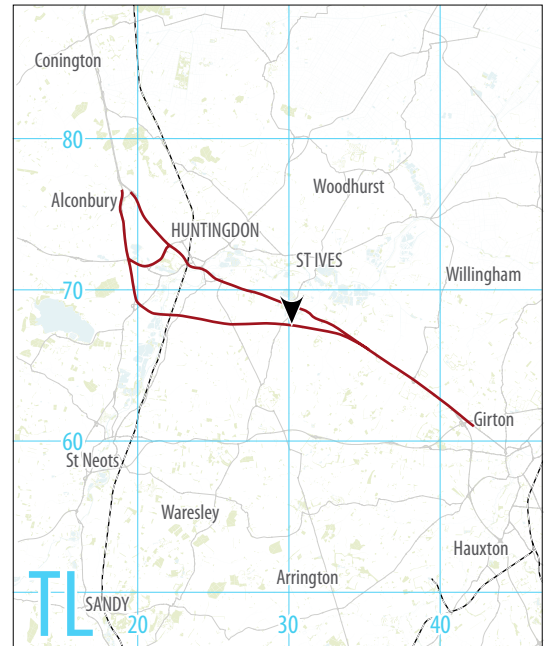
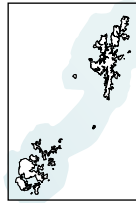
FIG 27.9 Burial group 27.1



FIG 27.10 Iron Age pit with metalwork

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Cambridgeshire

0 200km
1:10,000,000 @ A4



0 250m
1:15,000 @ A4

limit of excavation

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INFRASTRUCTURE



FIG 28.1 Site location



FIG 28.2 Site plan

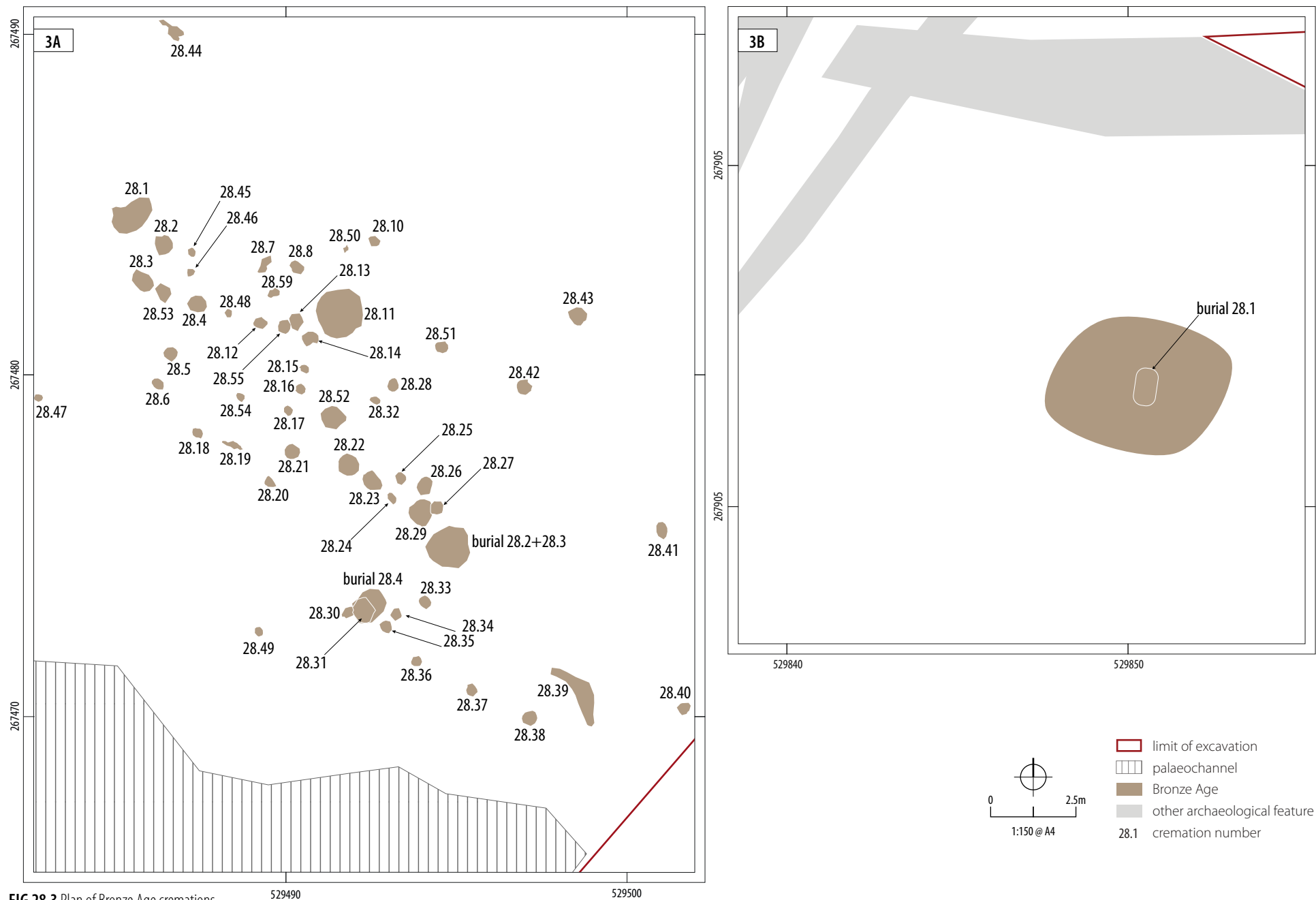




FIG 28.4 Iron Age phase 1 with enclosure and boundary labels



FIG 28.5 Iron Age phase 1 with enclosure 28.33



FIG 28.6 Iron Age phase 1 with buildings

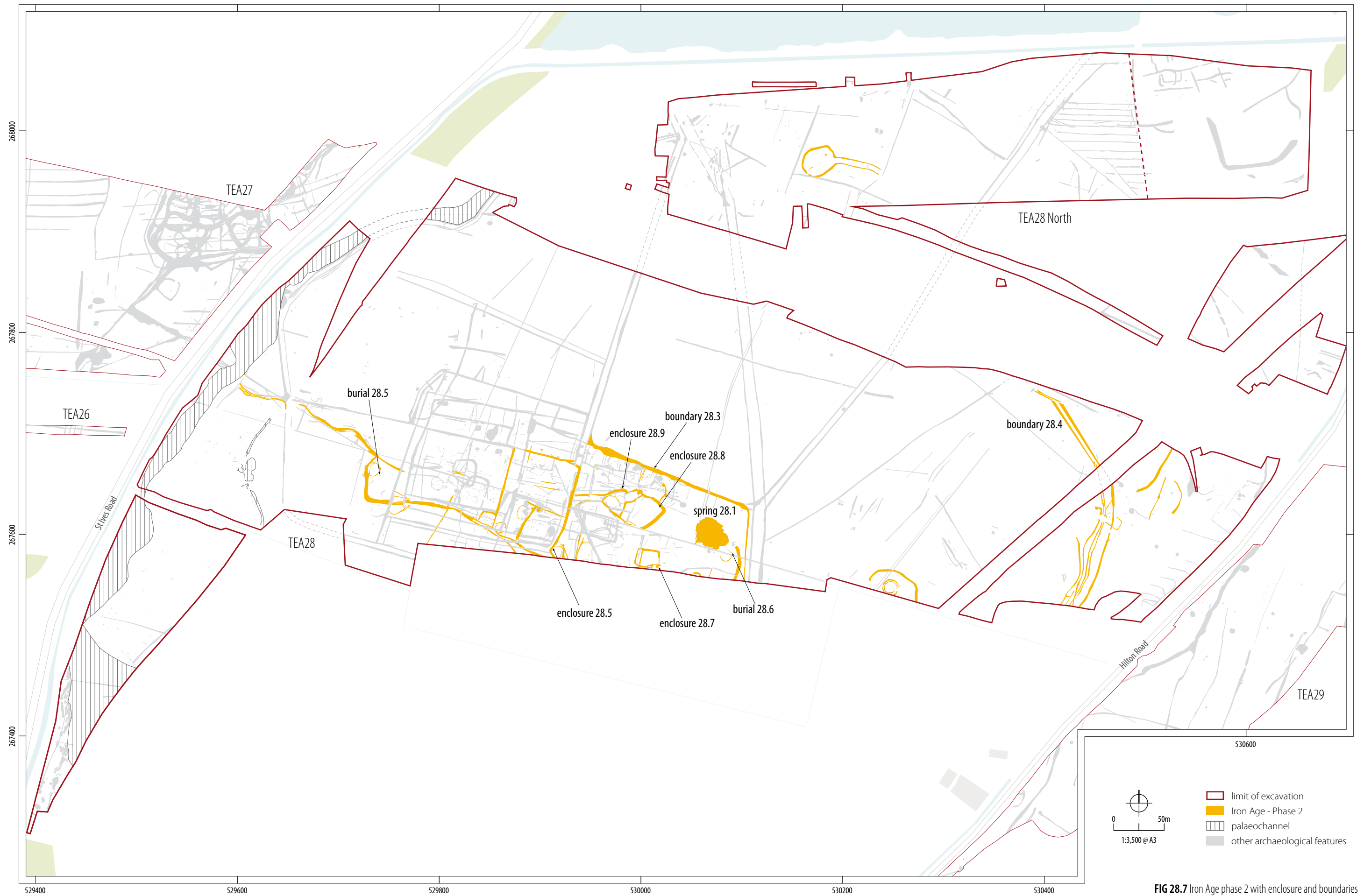


FIG 28.7 Iron Age phase 2 with enclosure and boundaries

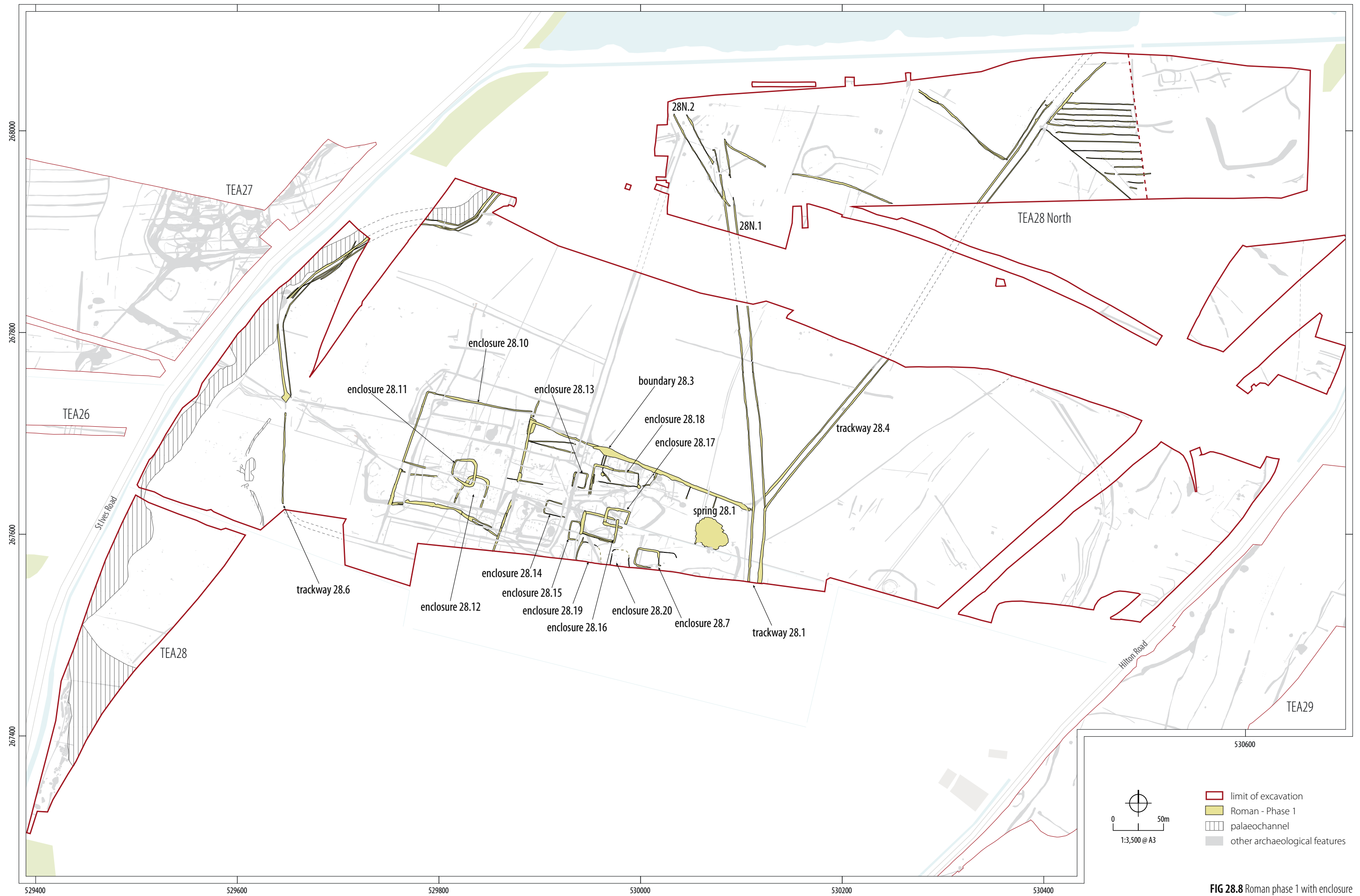


FIG 28.8 Roman phase 1 with enclosure

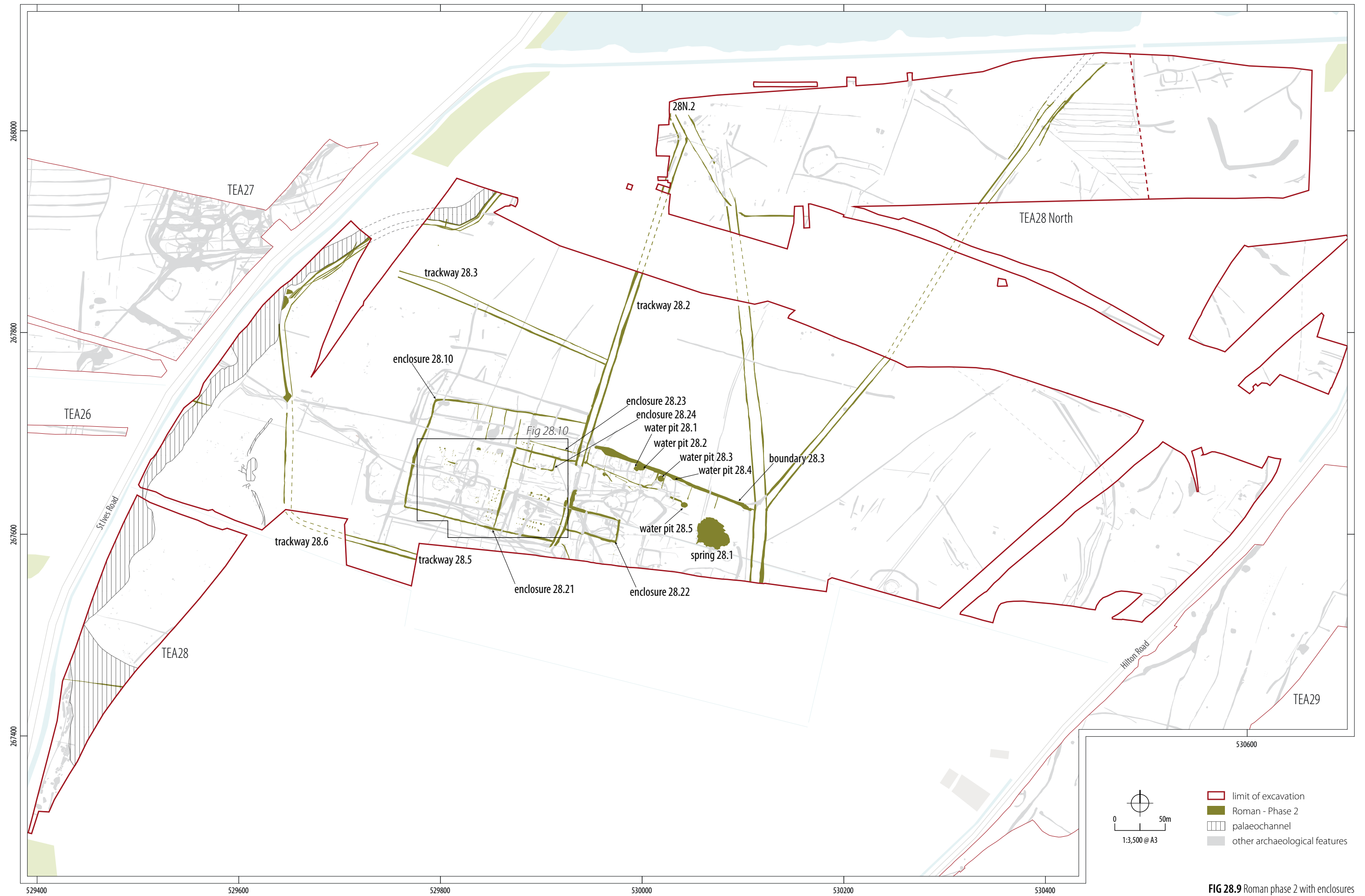


FIG 28.9 Roman phase 2 with enclosures



FIG 28.10 Roman phase 2 zoomed in of buildings



FIG 28.11 Roman phase 3 with enclosures

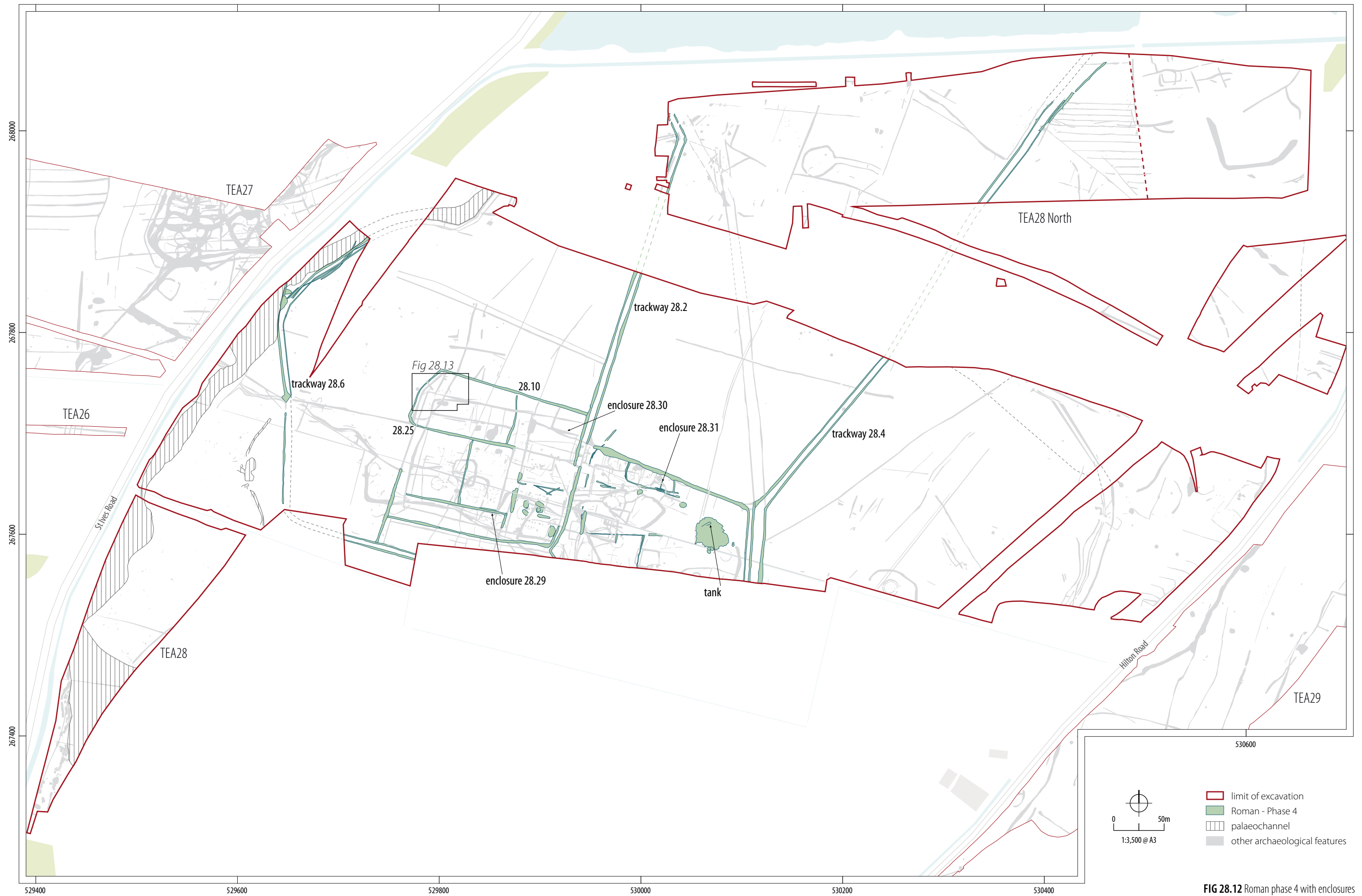


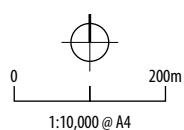
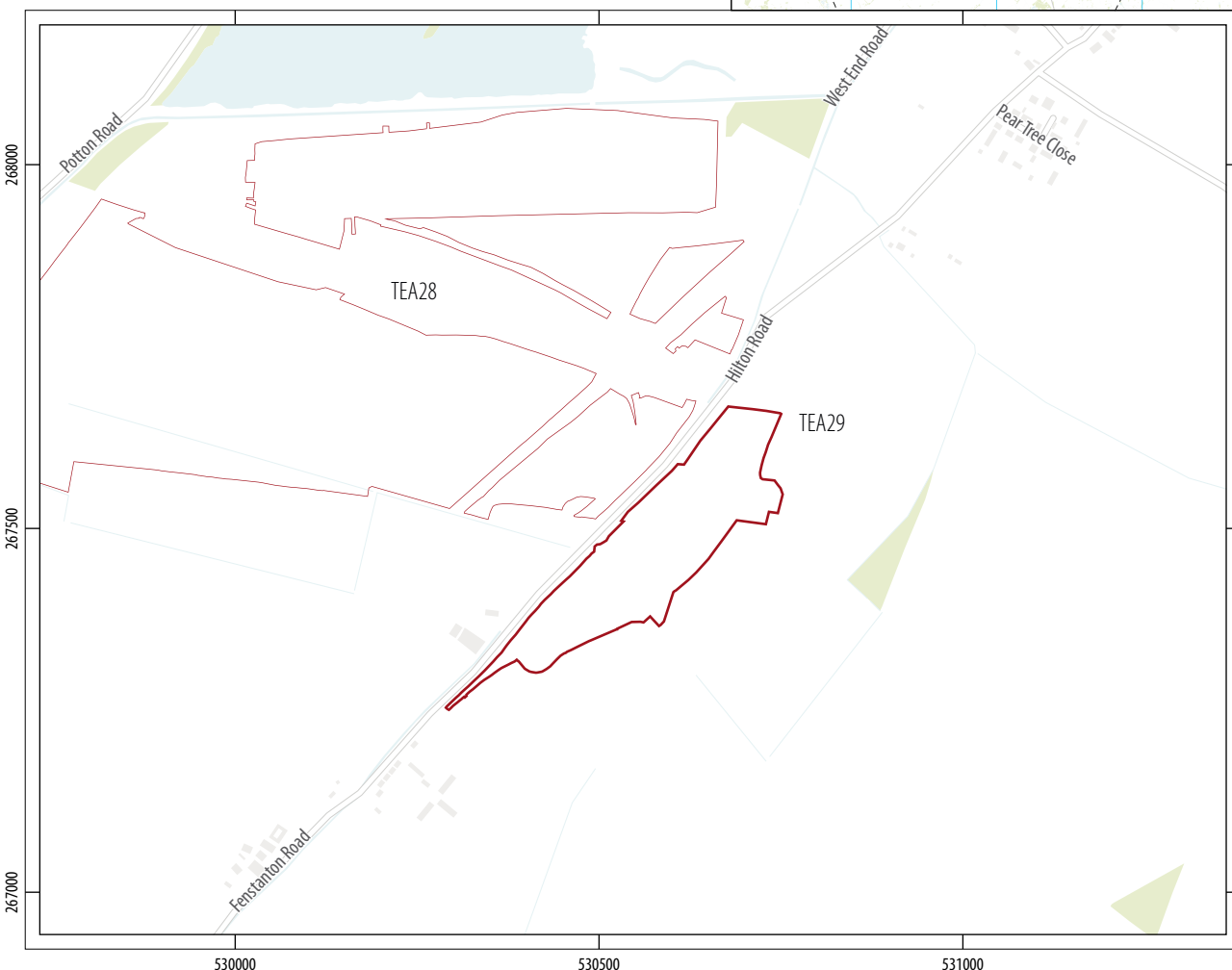
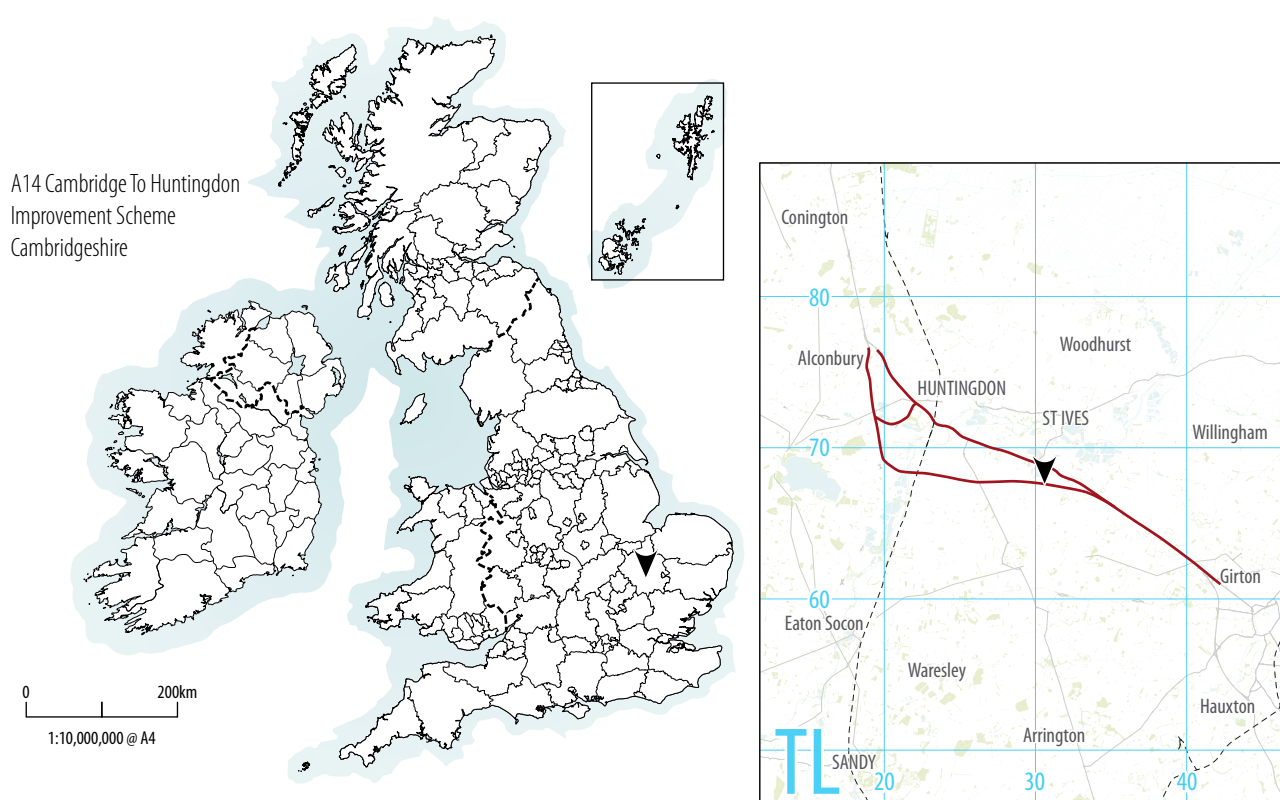
FIG 28.12 Roman phase 4 with enclosures





FIG 28.14 Medieval and post-medieval

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Cambridgeshire



limit of excavation

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FIG 29.1 Site location



FIG29.2 Site plan



FIG 29.3 Phase plan – early – middle Iron Age

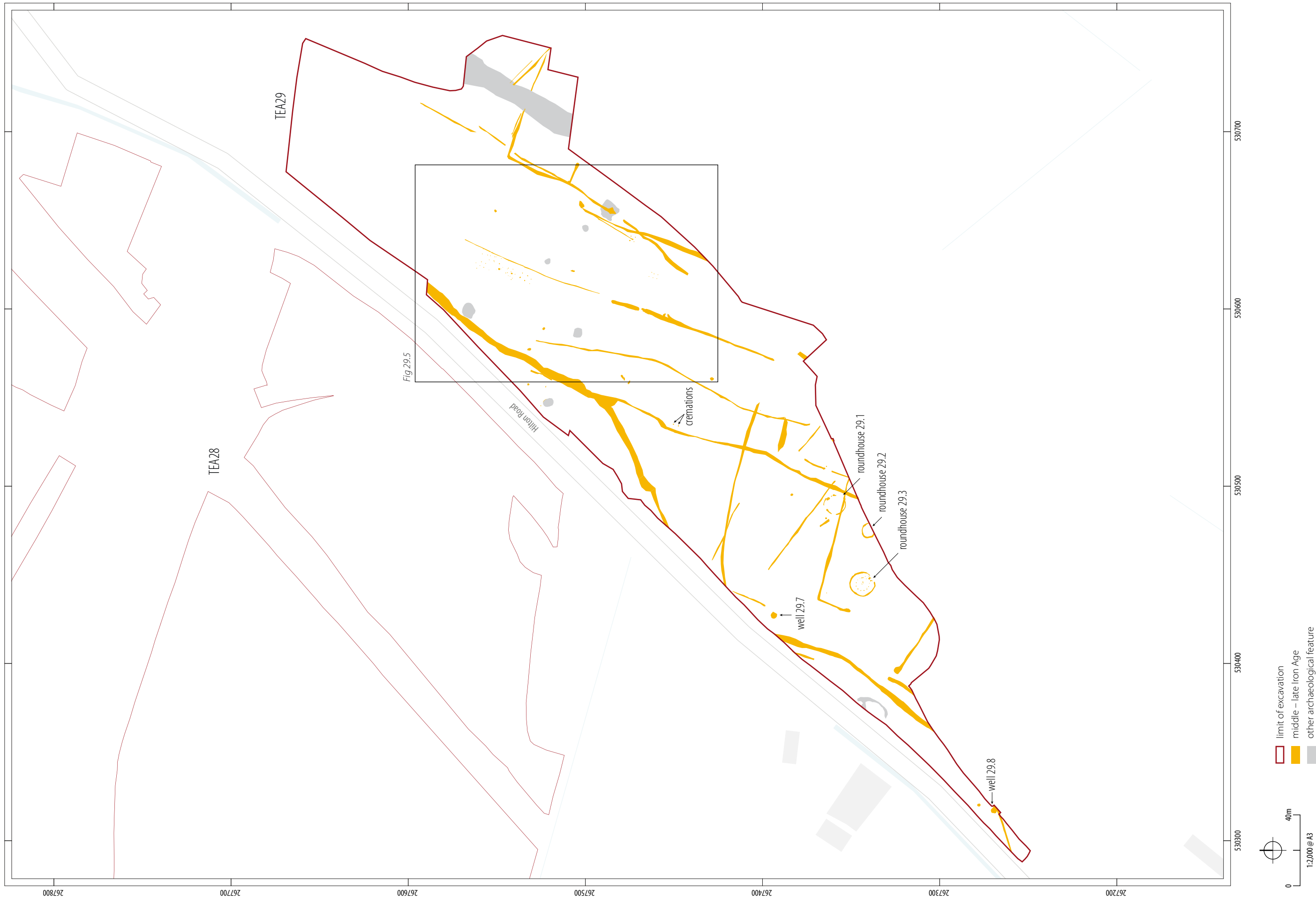


FIG 29.4 Phase plan - middle - late Iron Age

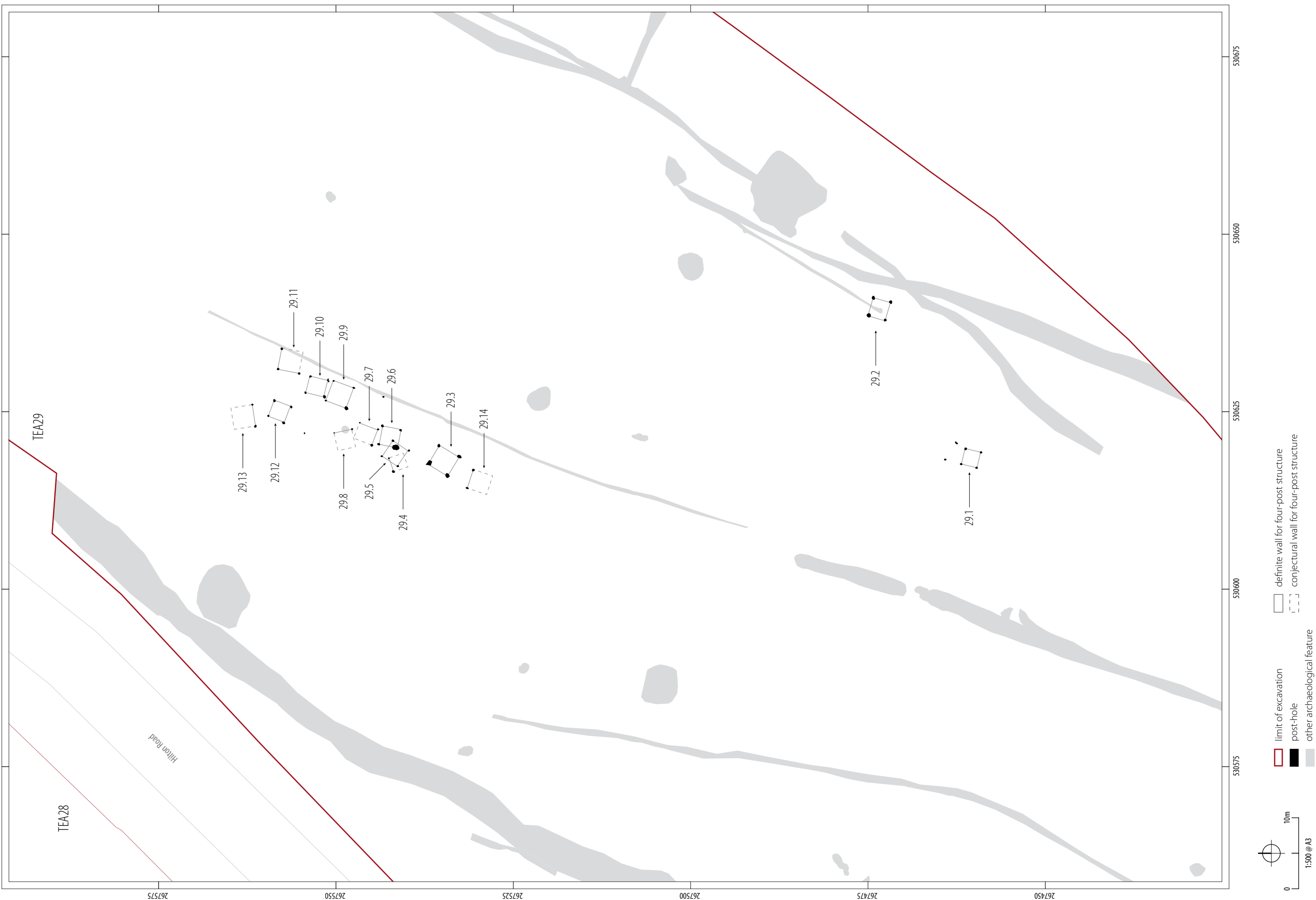


FIG 29.5 Close-up of four-post structures



FIG 29.6 Roundhouse 29.3 fully excavated, looking north-west

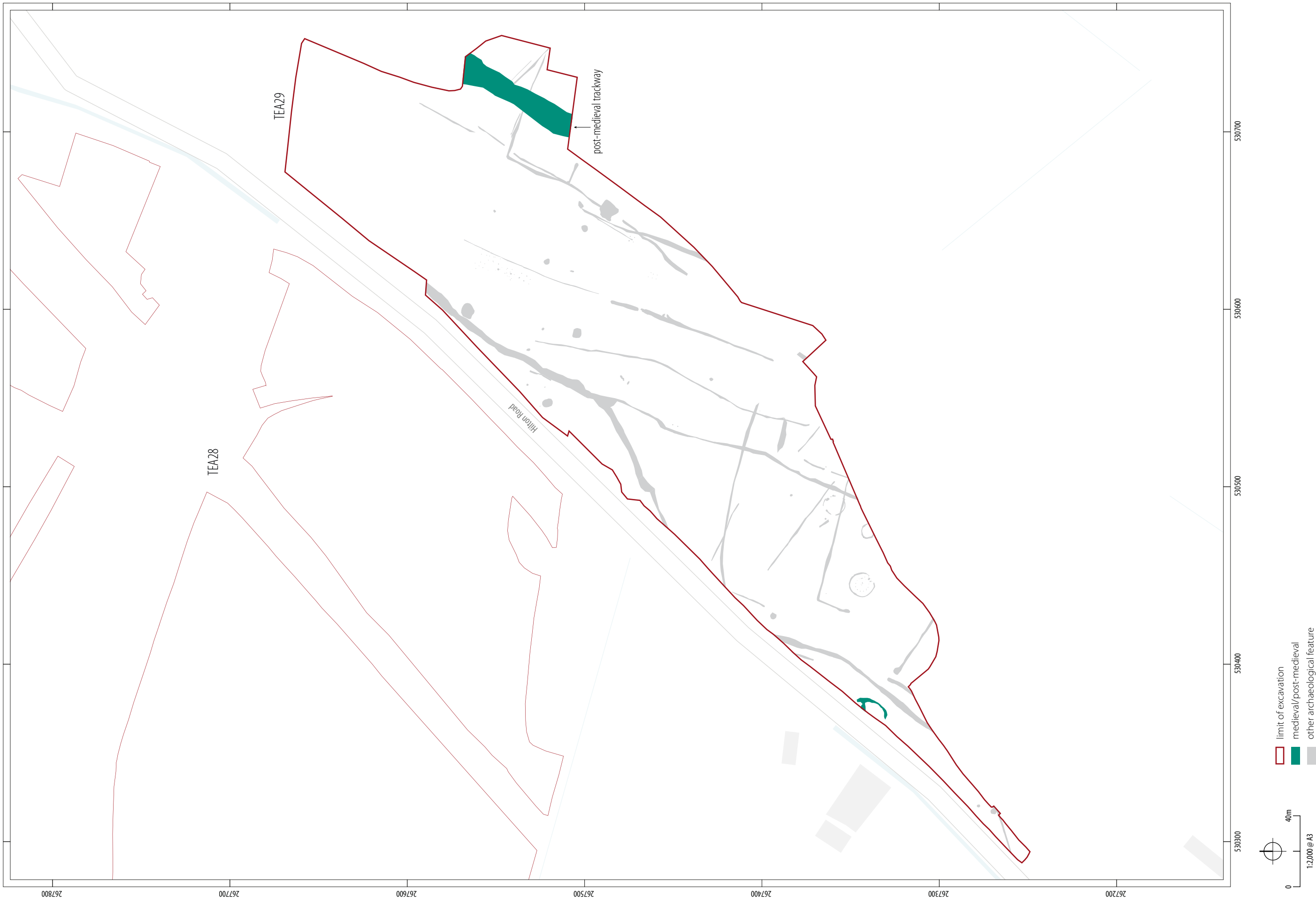


FIG 29.7 Phase plan - medieval — post-medieval

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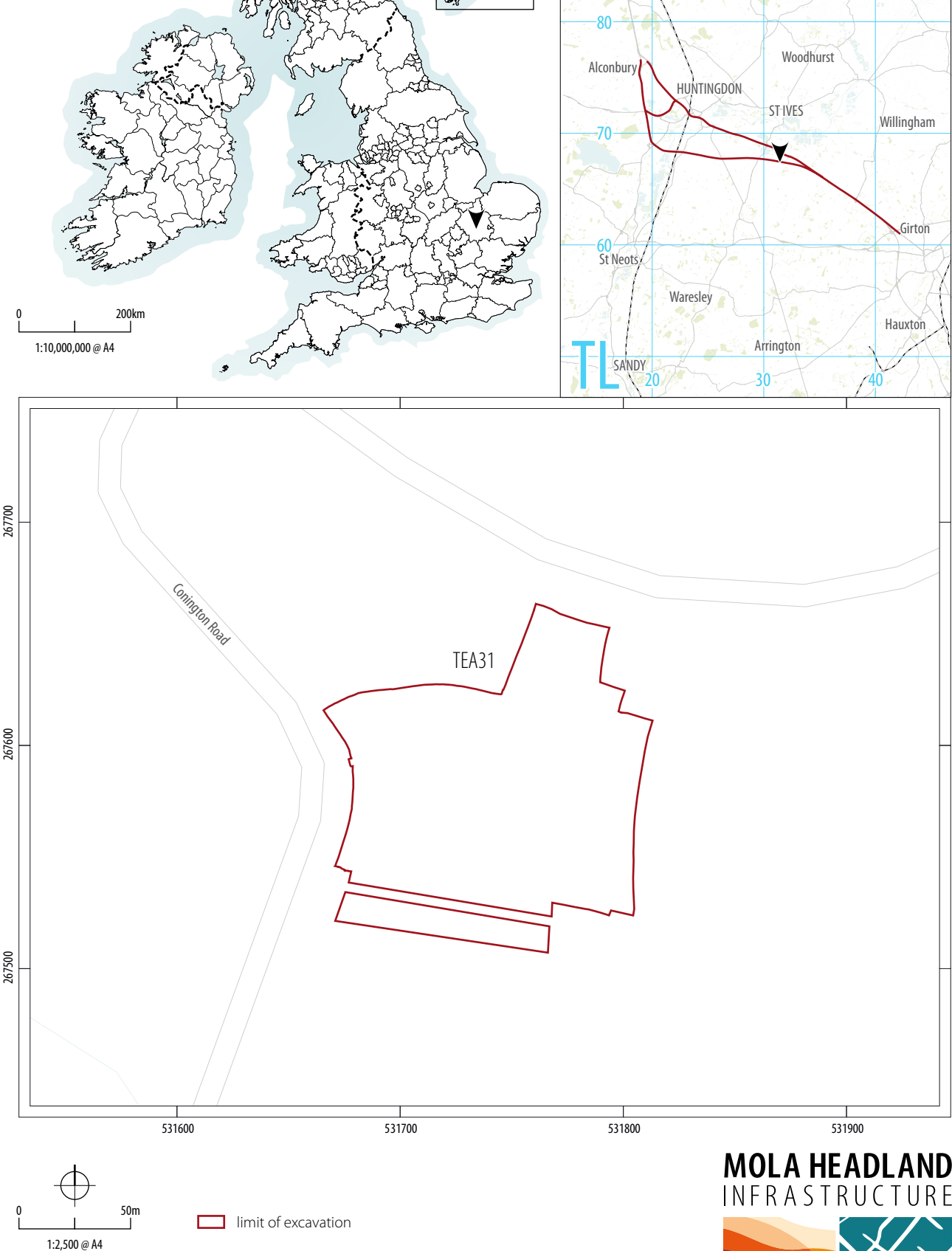


FIG 31.1 Site location

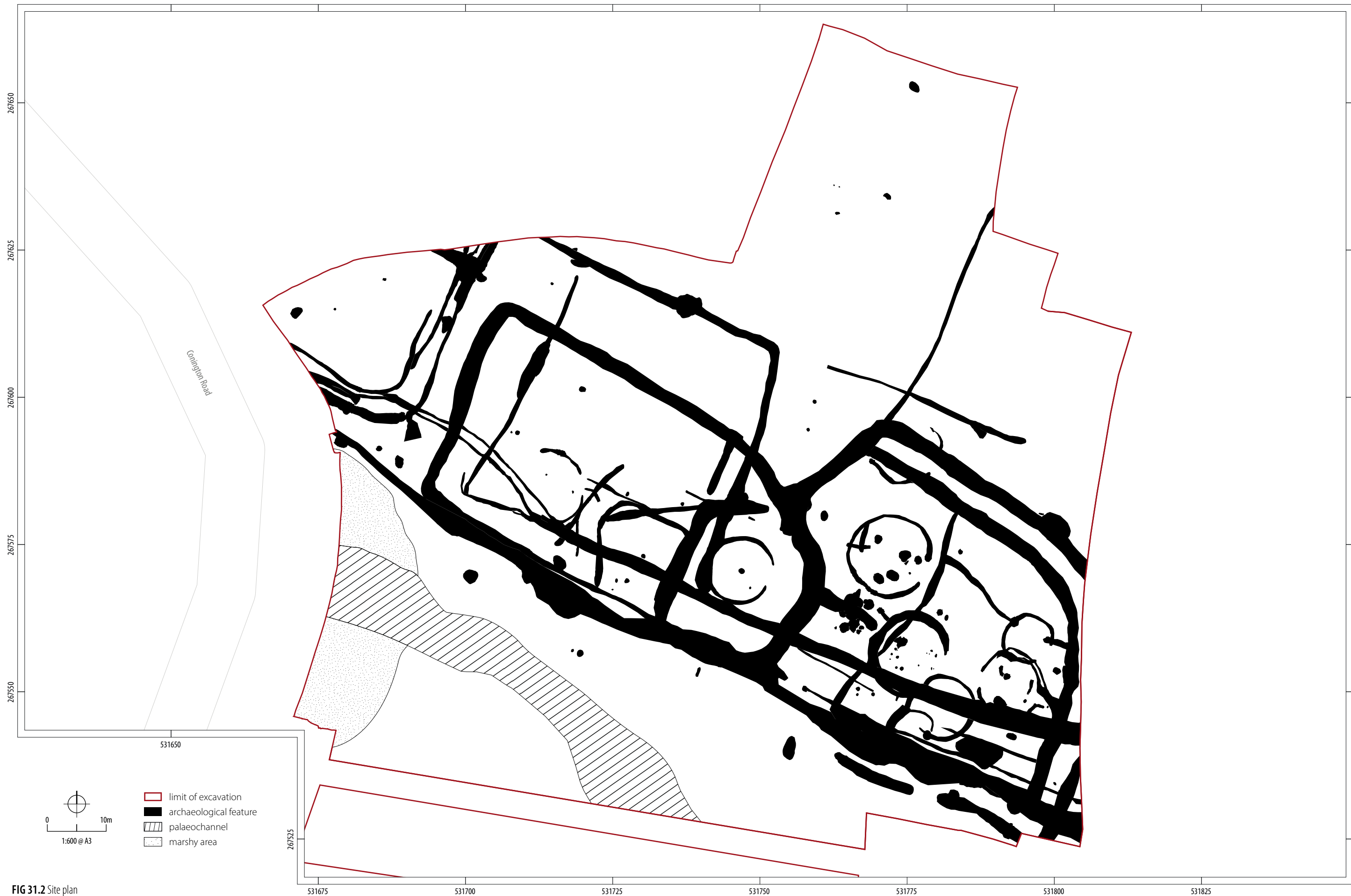


FIG 31.2 Site plan



FIG 31.3 Phase plan – Late Neolithic/Bronze Age and Iron Age Phase I

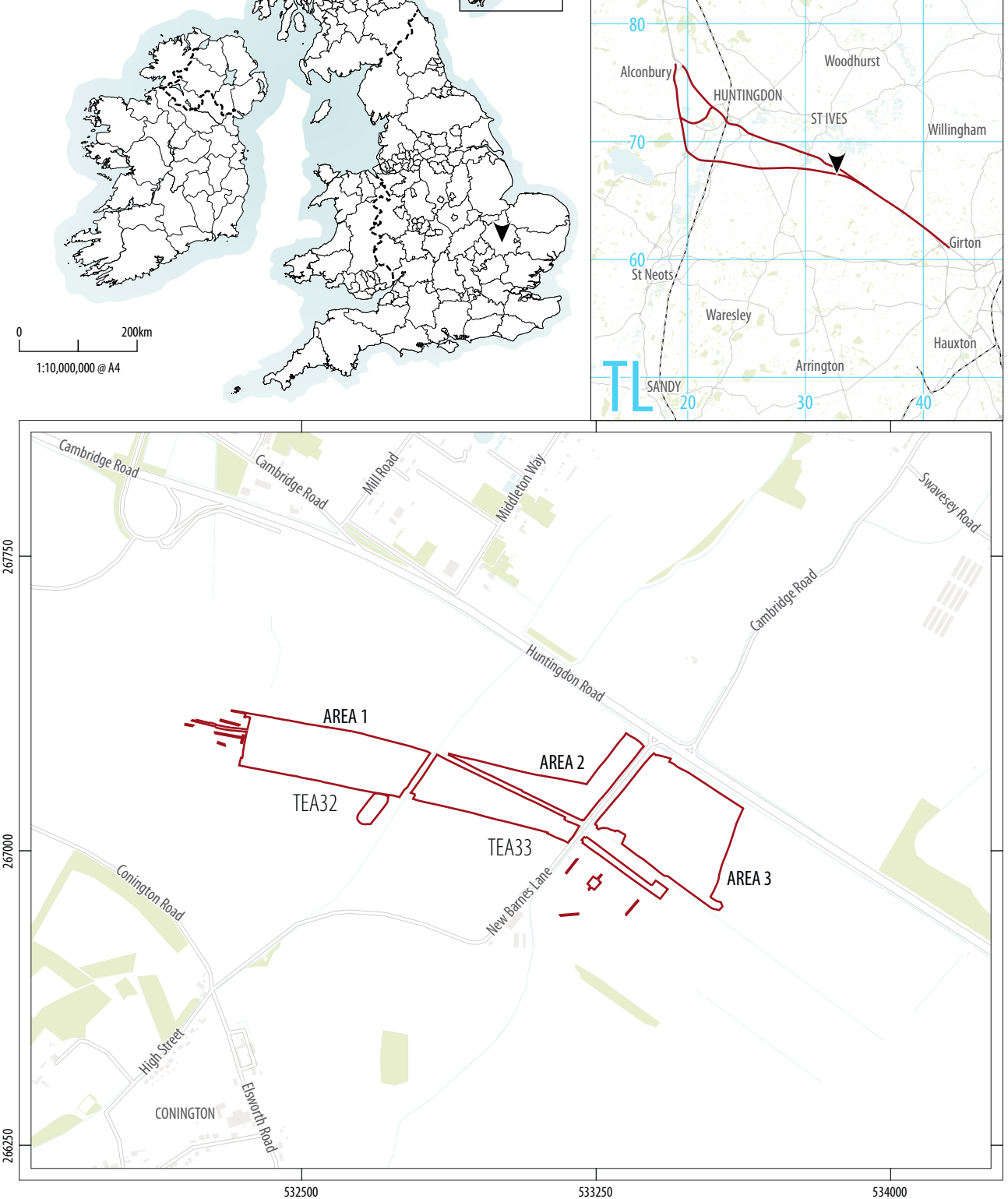


FIG 31.4 Phase plan – Iron Age Phase II



FIG 31.5 Phase plan – Roman and Saxon

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Improvement Scheme
Cambridgeshire



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FIG 32.1 Site location

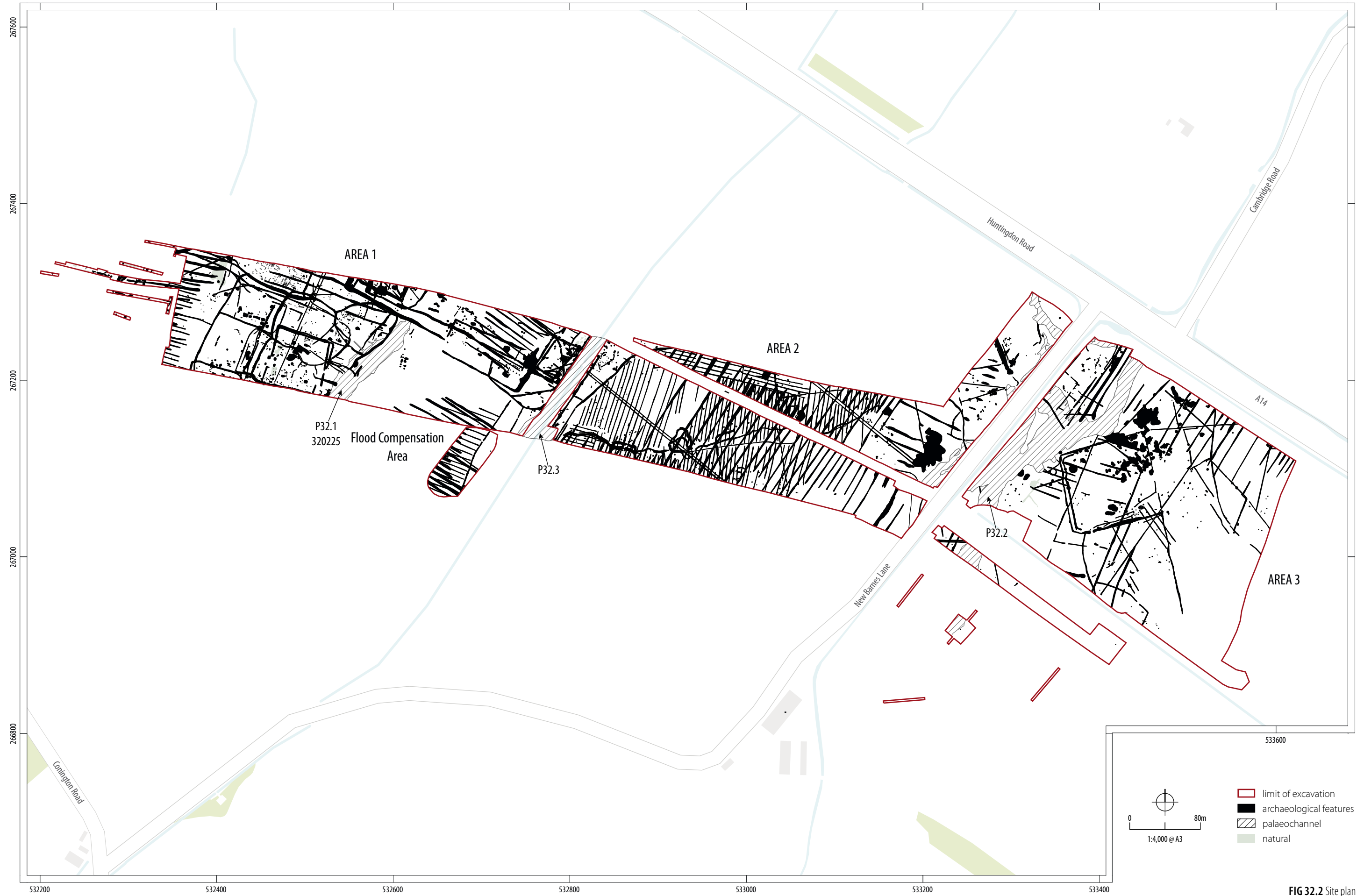


FIG 32.2 Site plan

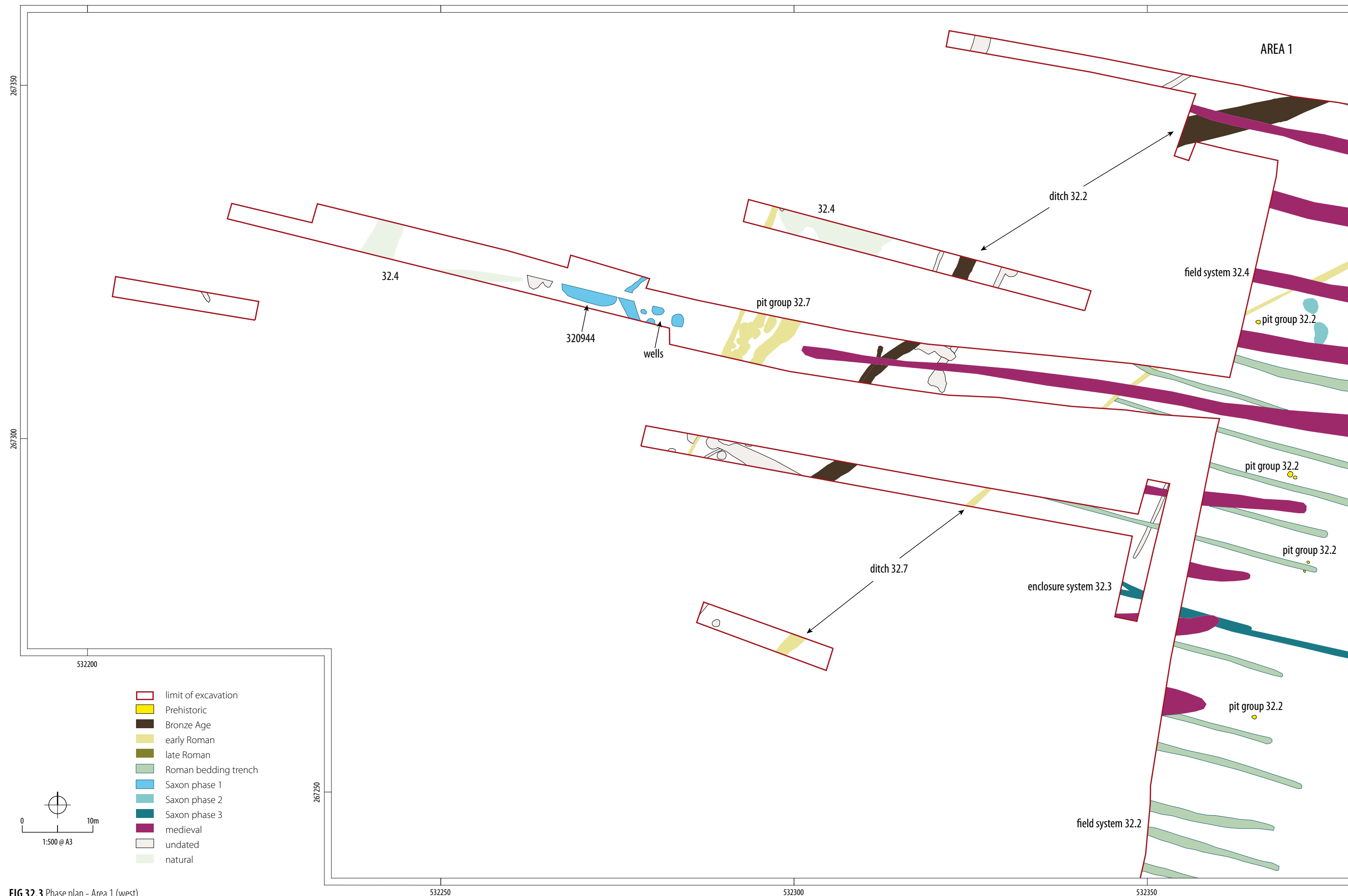


FIG 32.3 Phase plan - Area 1 (west)

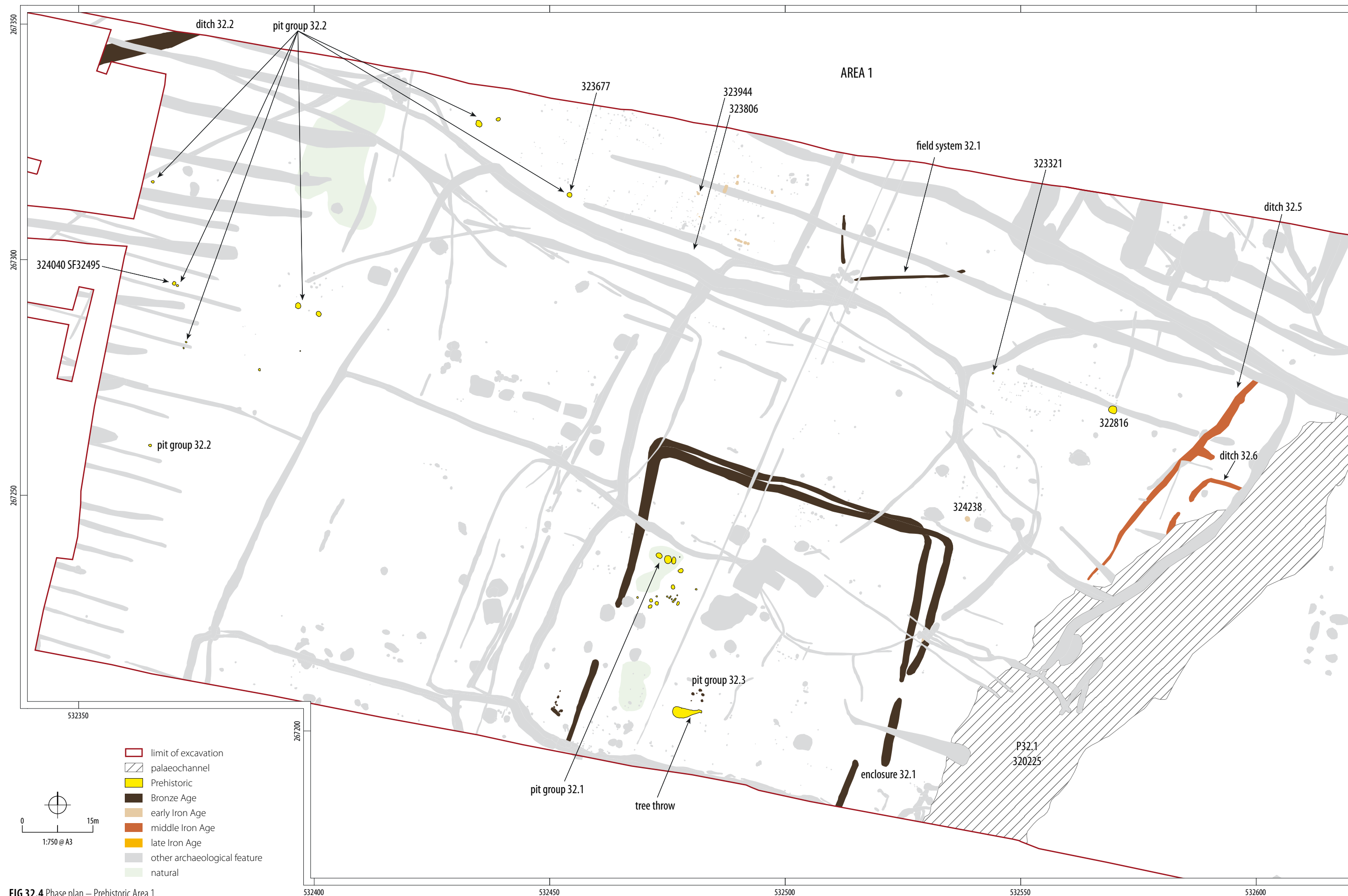


FIG 32.4 Phase plan – Prehistoric Area 1

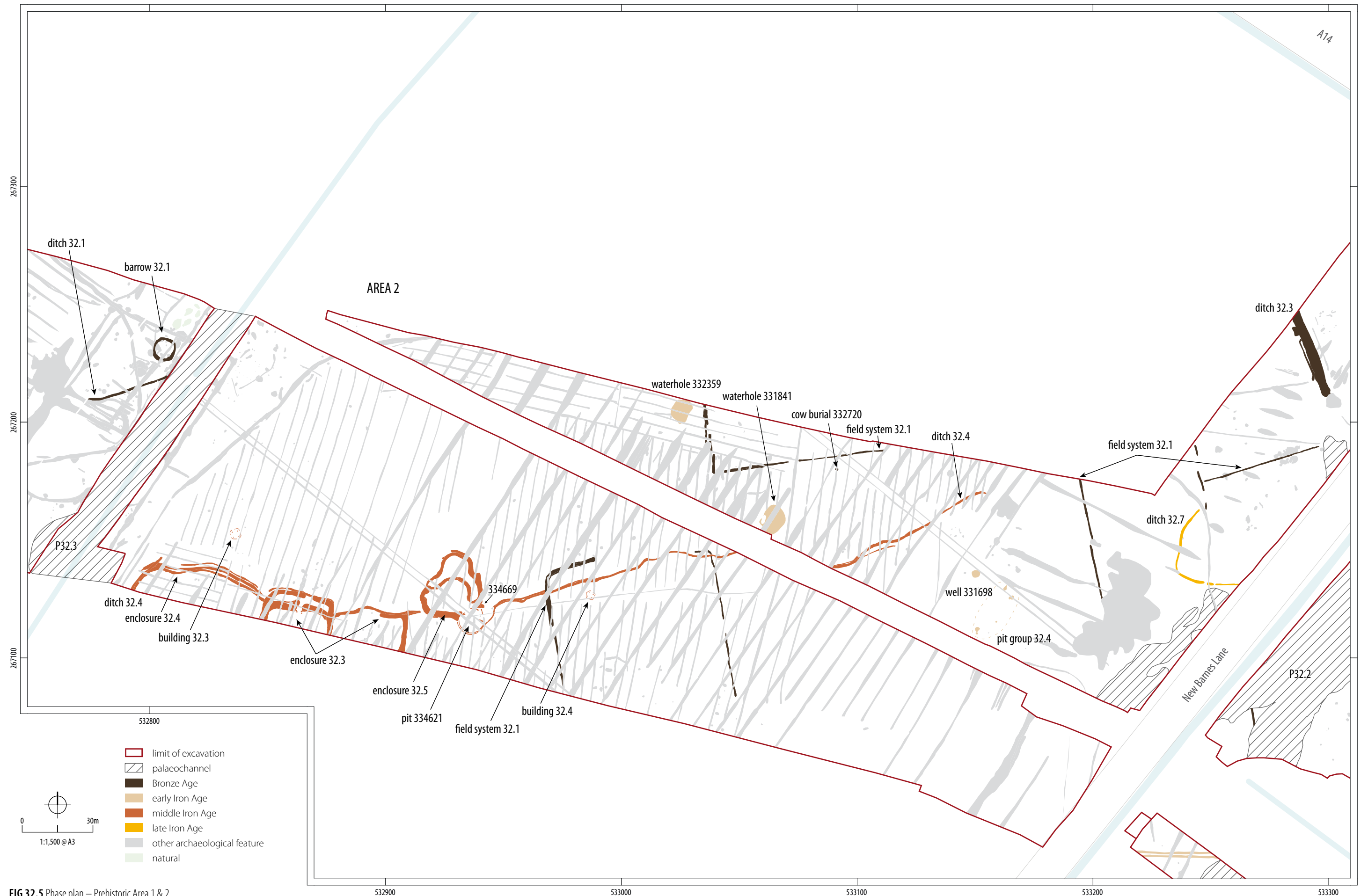


FIG 32.5 Phase plan – Prehistoric Area 1 & 2

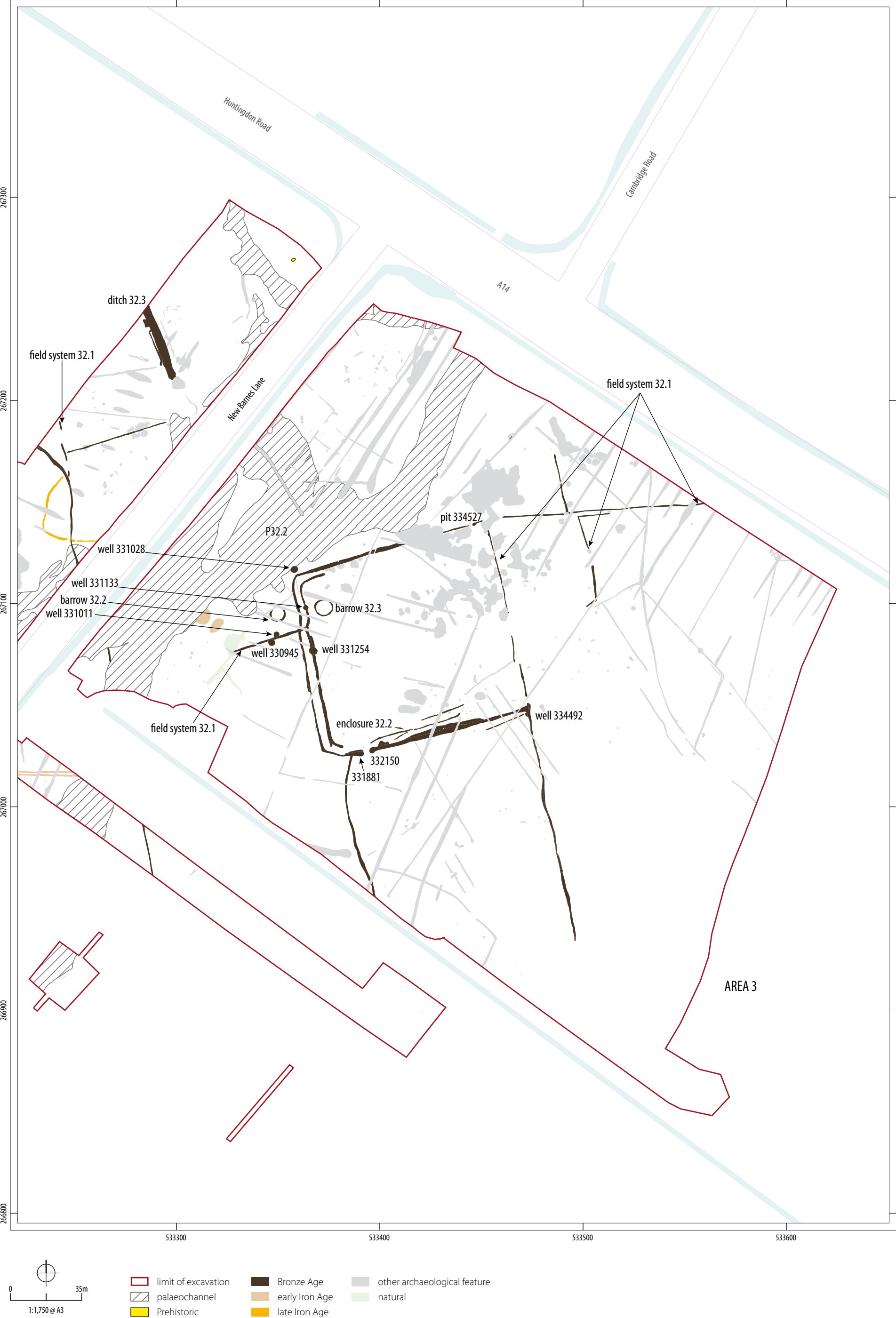
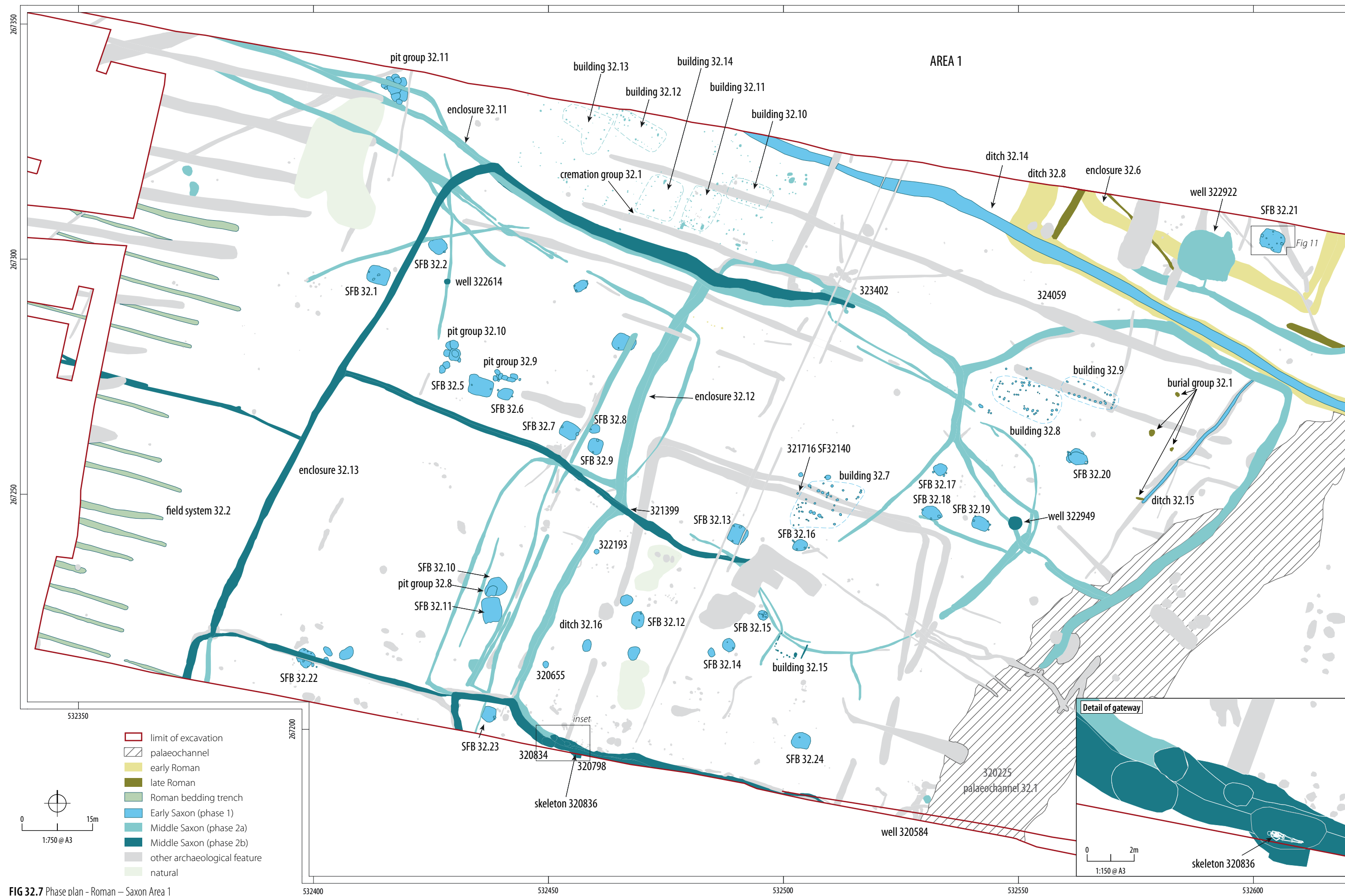


FIG 32.6 Phase plan – Prehistoric Area 3



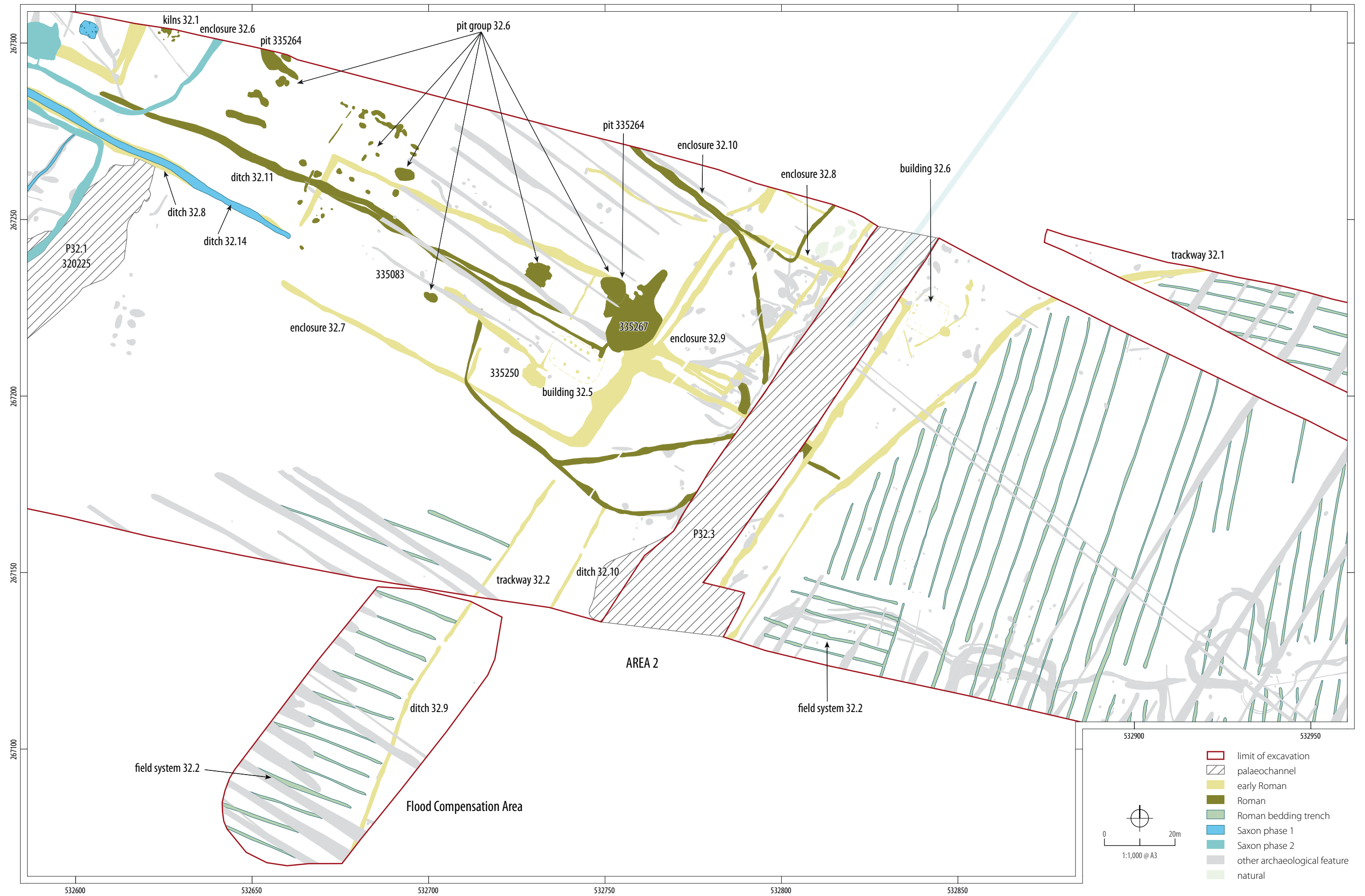


FIG 32.8 Phase plan - Roman - Saxon Area 2

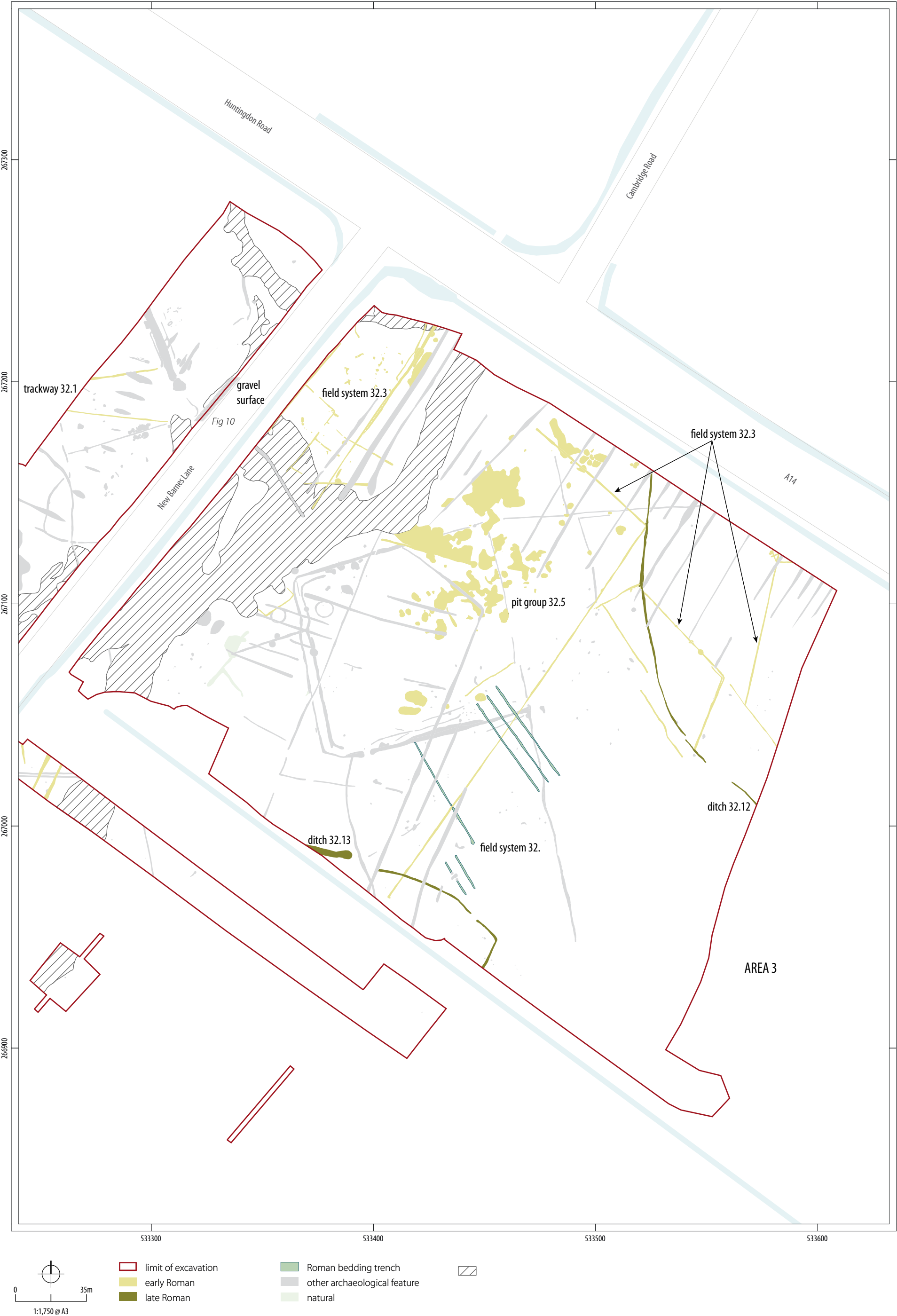


FIG 32.9 Phase plan - Roman - Area 3

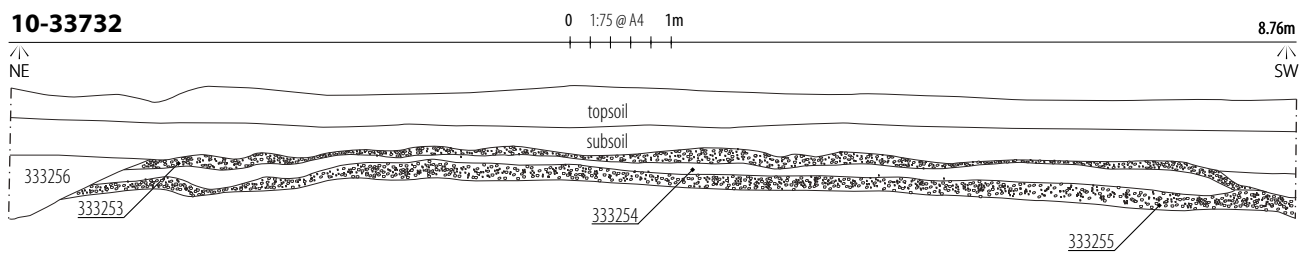


FIG 32.10 Section of gravel surface

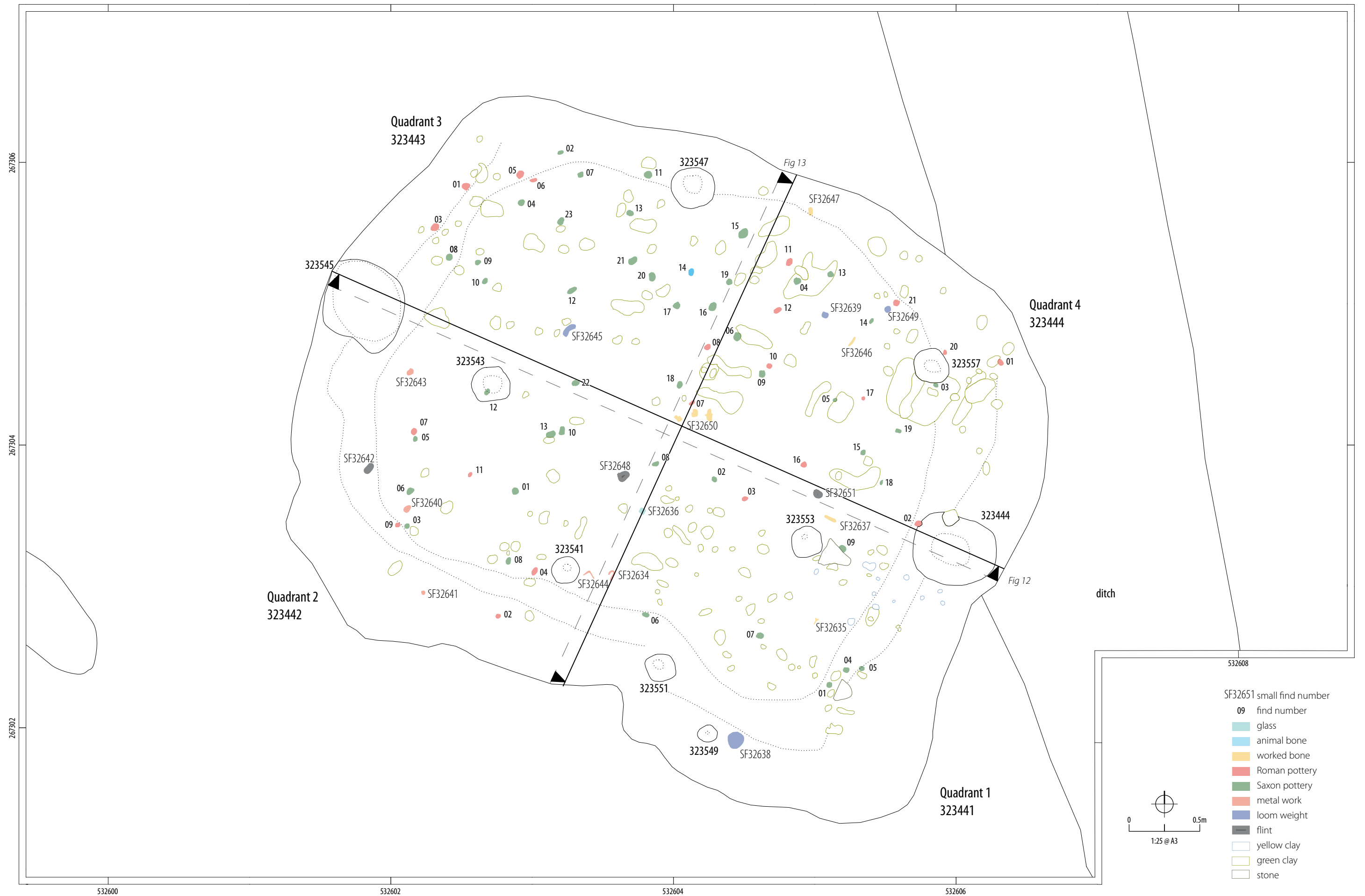


FIG 32.11 Plan of SFB 32.21

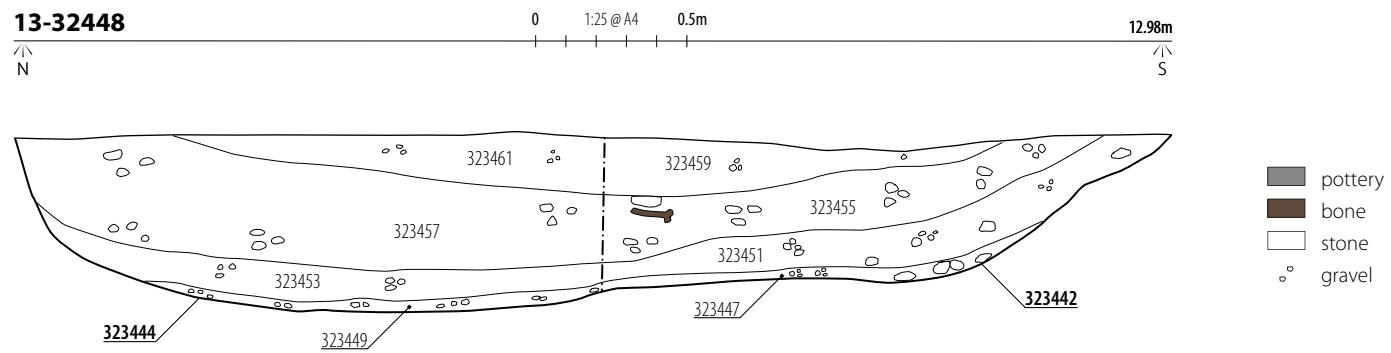
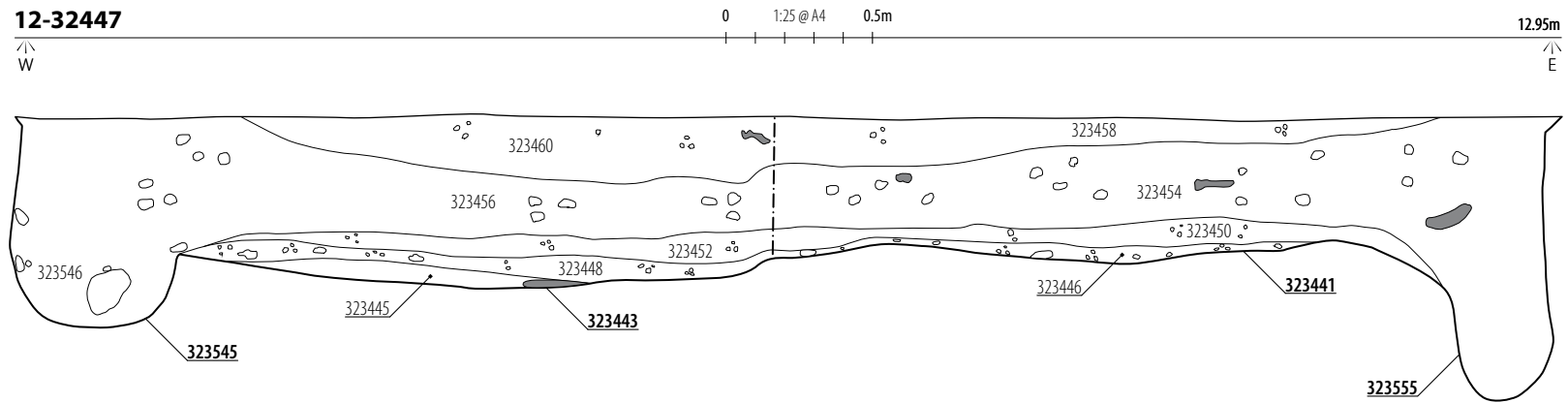


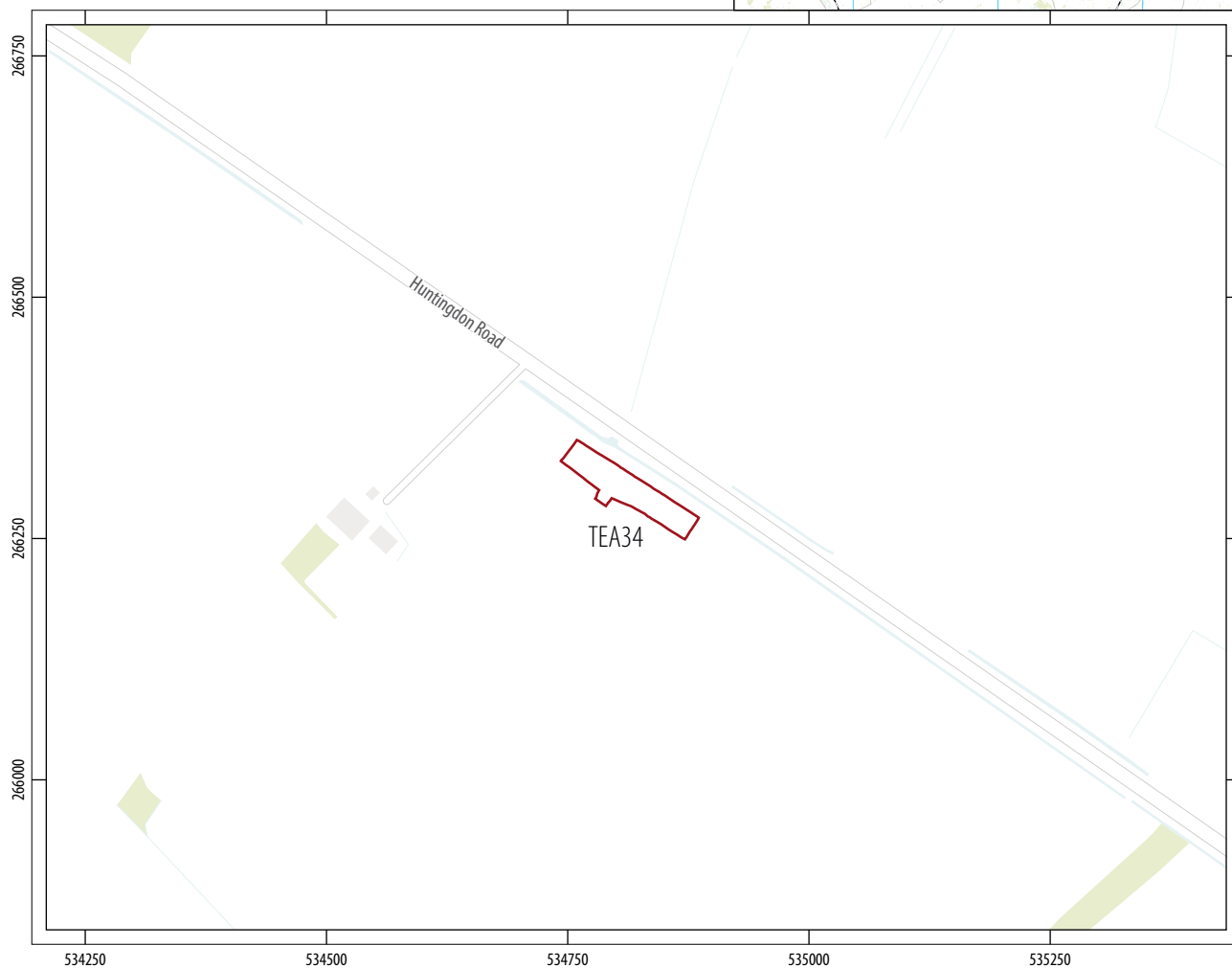
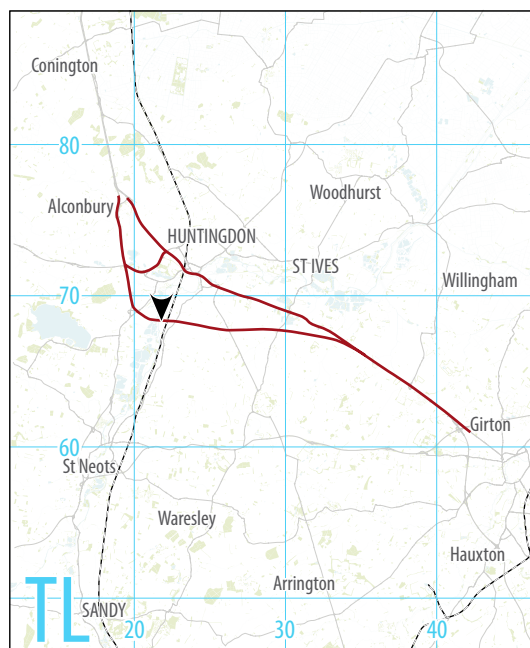
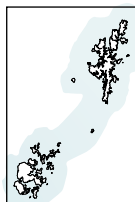
FIG 32.12-32.13 Sections of SFB 32.21



FIG 32.14 Phase plan – Medieval – Post-medieval

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0 200km
1:10,000,000 @ A4



0 150m
1:7,500 @ A4

limit of excavation

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FIG 34.1 Site location

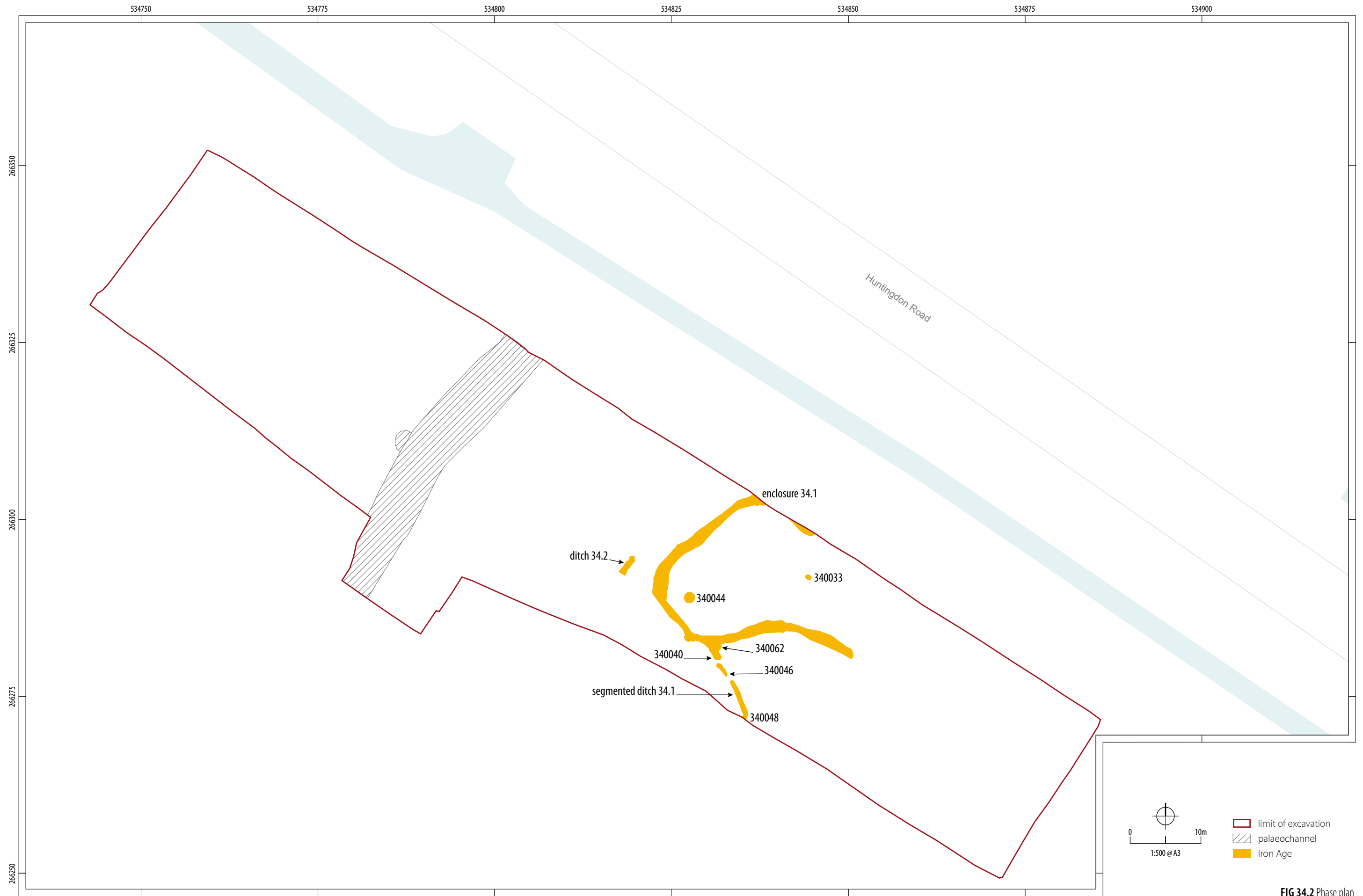
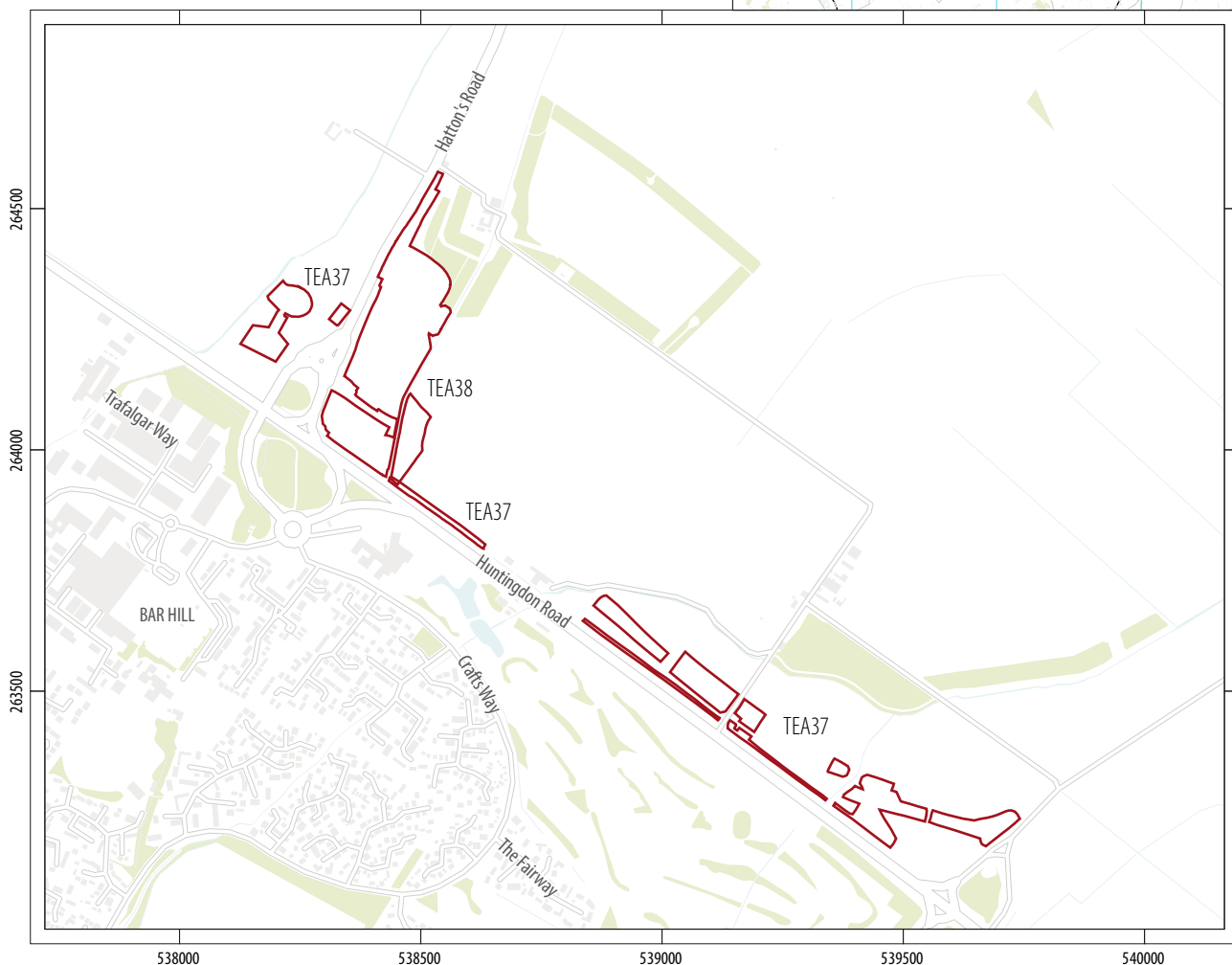
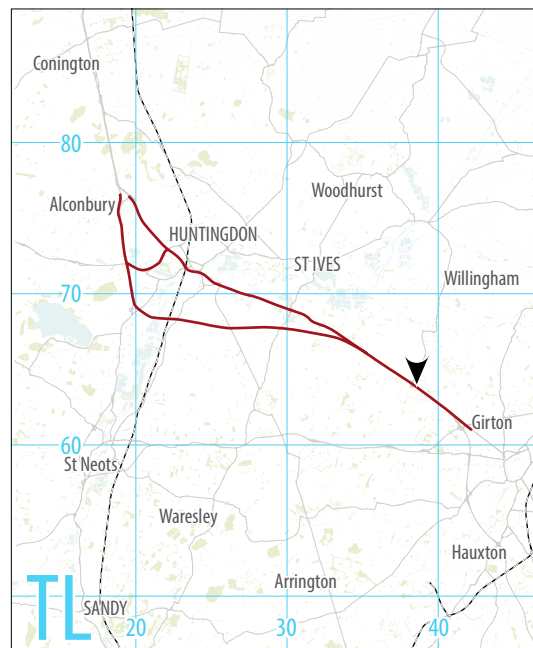
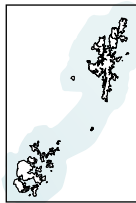


FIG 34.2 Phase plan

A14 Cambridge To Huntingdon
Improvement Scheme
Cambridgeshire

0 200km
1:10,000,000 @ A4



0 20m
1:1,000 @ A4

limit of excavation

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FIG 37.1 Site location

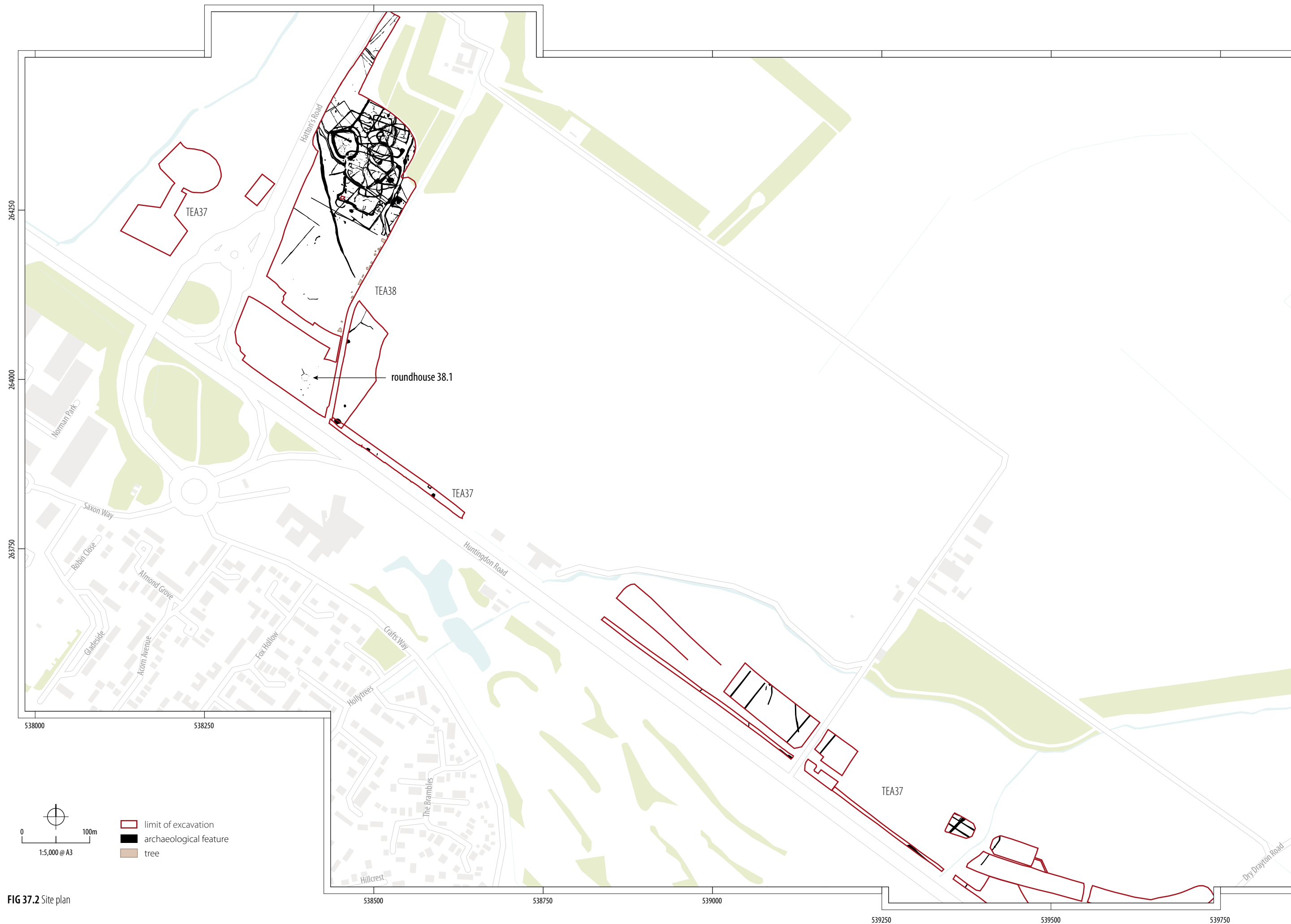


FIG 37.2 Site plan



FIG 37.3 Phase plan - Iron Age TEA 38



FIG 37.4 Phase plan – Roman TEA 38

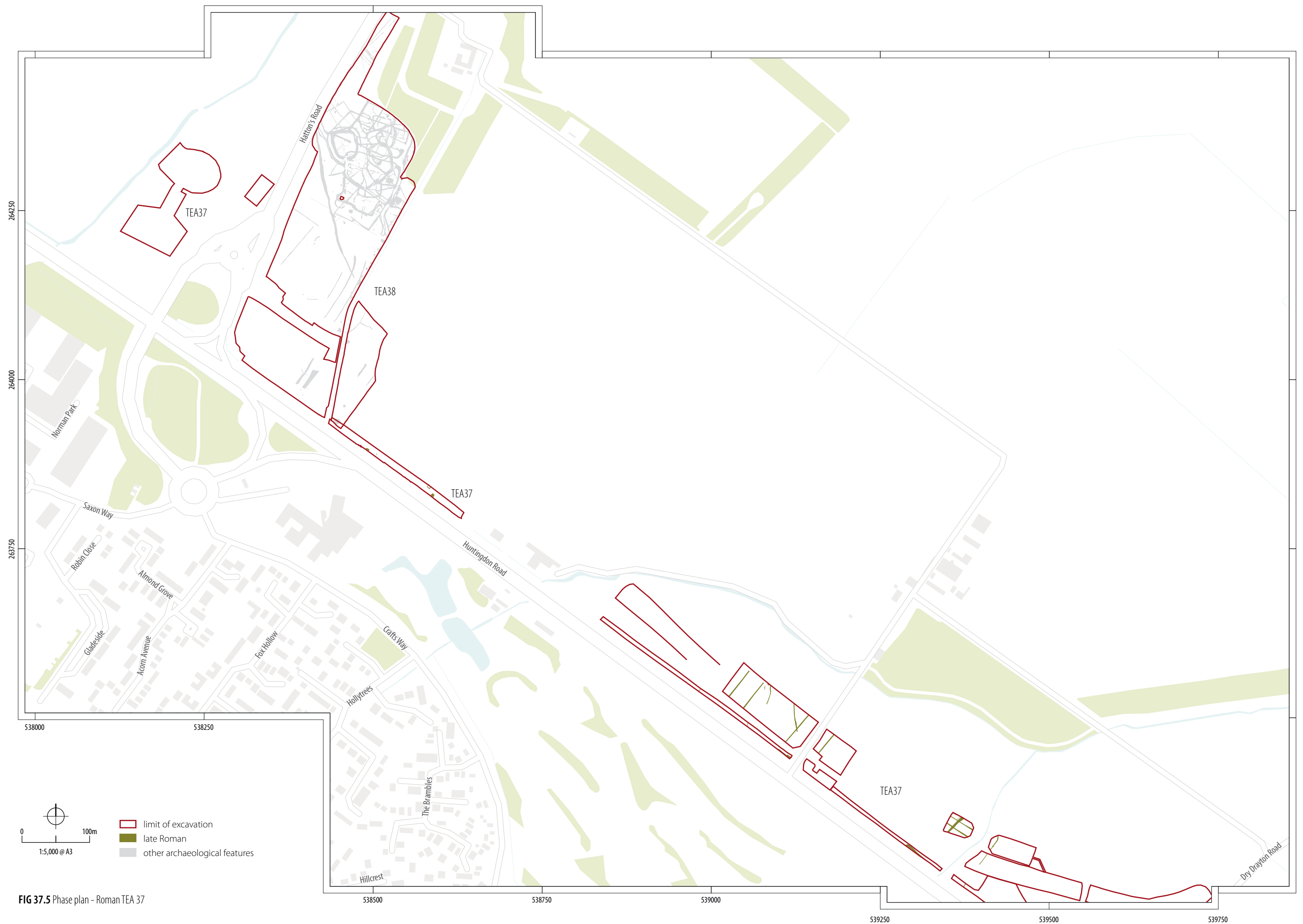
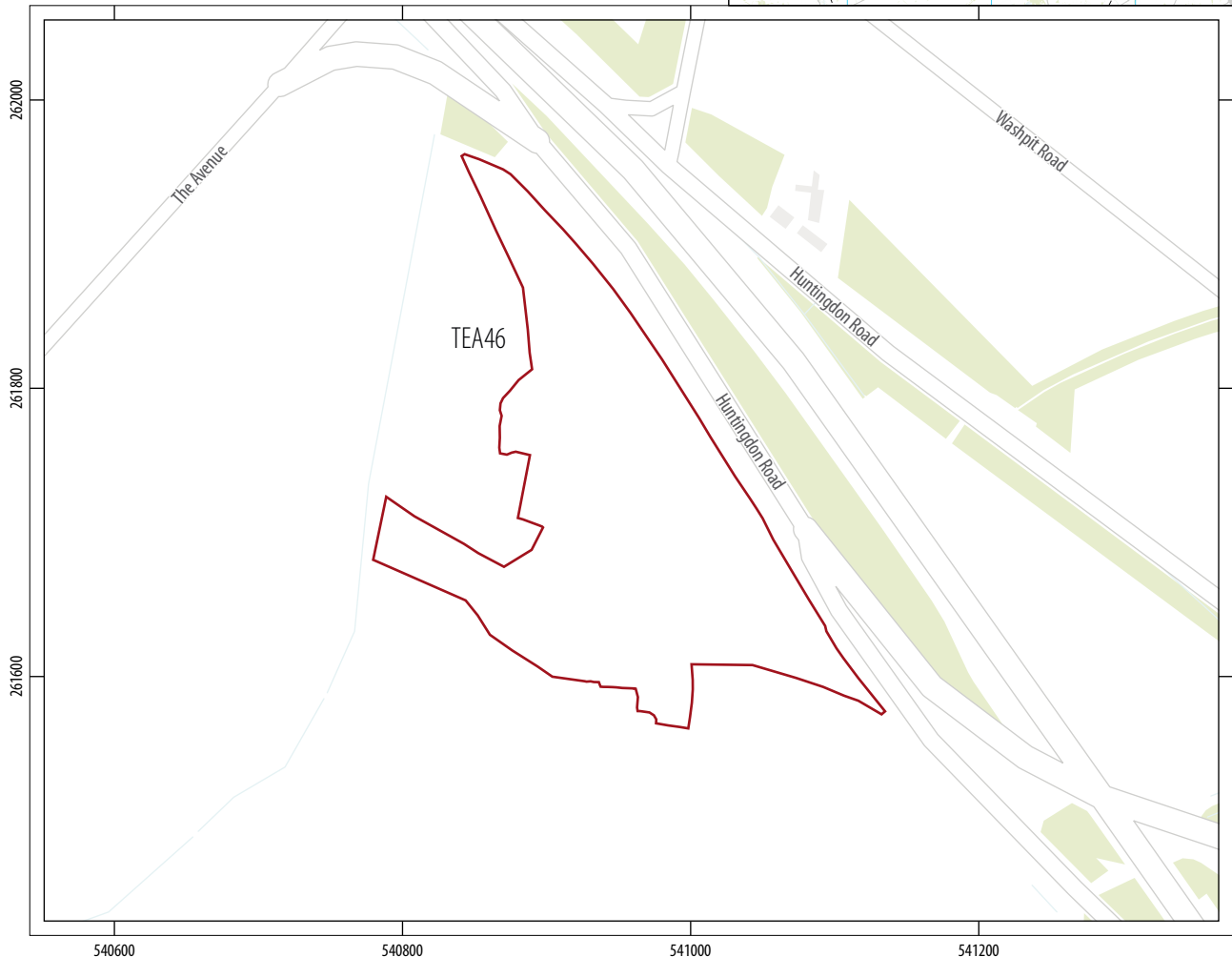
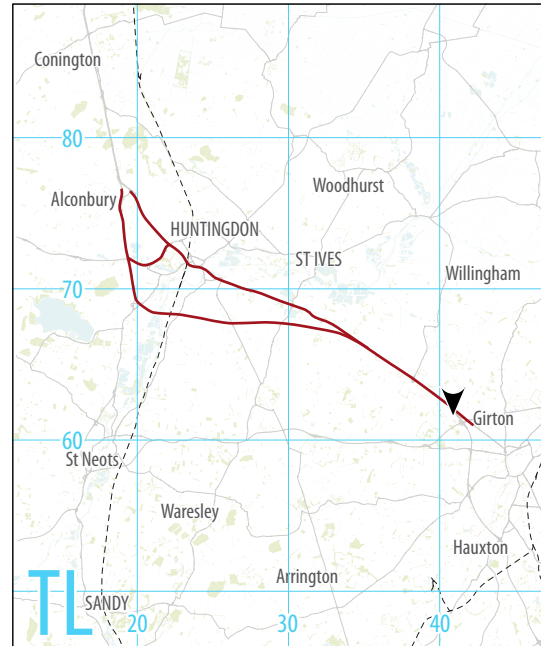
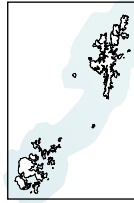


FIG 37.5 Phase plan - Roman TEA 37

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Improvement Scheme
Cambridgeshire

0 200km
1:10,000,000 @ A4



0 100m
1:5,000 @ A4

limit of excavation

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FIG 46.1 Site location



FIG 46.2 Site plan



FIG 46.3 Phase plan

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