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Archaeological Geophysical Survey and Trial Trench Evaluation Report




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Archaeological Evaluation Report

by Steve Lawrence and Paul Murray

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Summary

Throughout 2010 Oxford Archaeology undertook a two-stage field evaluation of land along the proposed route of a new access road and bridge crossing for Langford Lane around the perimeter of the Scheduled Monument of Alchester Roman Town. This took the form of a magnetometer and resistivity geophysical survey followed by the excavation of 48 trial trenches. The trench arrangement was informed by previously identified cropmark features and by the current geophysical survey although this did not substantially add to the existing body of data.

The trial trench phase of the evaluation covered a cross section of the Roman landscape and confirmed the accuracy of the cropmark evidence. All targeted features were identified whilst Trenches 43-48 upon the high ground west of the floodplain and Trenches 6-18 where previous evidence was negative, failed to encounter any significant remains confirming this absence. However, some trenches within the latter area were moved from their intended location and there is a hint that some of the enclosures to the west and north extend only very slightly into this area.

Each of the large enclosures aligned on the Dorchester road were identified although there was scant evidence of occupation and other substantial activity within the interiors of these. Artefactual evidence was also reasonably limited although that which was encountered suggested a bias towards the 2nd century AD. The recovery of charred processed cereals from a ditch in Trench 21 perhaps indicates a primary agricultural function for these enclosures. Settlement or increased densities of features associated with the roadside zones along the Dorchester road were not encountered with any certainty although Trench 21 did produce the only posthole from the evaluation, suggesting that some form of structure may be present.

Road surfaces were encountered in Trench 2 with an associated flanking ditch and a channel that probably diverted or canalised a stream alongside one of the roads. Other localised areas of surfacing indicate roadside activity within this area although the nature of this could not be established within the confines of the evaluation. A dense collection of ditches and possible other features/deposits was recorded in Trench 3 and the combined pottery assemblages indicate 1st century AD activity. These features may have an origin or connection with the military phase of the occupation of Alchester.

Of more certain military association are the access road or track ditches leading to the military parade ground that were excavated within Trench 4. These were generally unremarkable, although a single probable casket cremation burial was positioned adjacent to one of the ditches. This may also be military by association although there were no characteristic traits to confirm this interpretation.

Excellent palaeoenvironmental remains were recovered in the form of snails and waterlogged plant and insect remains from selected ditches. Snail preservation was noted across a broad spatial and chronological range of features. Waterlogged deposits are likely to exist reasonably regularly within the evaluation area as, although only a single occurrence was excavated, most deep features could not be fully investigated due to the water table being encountered within the features.

All trenches upon the floodplain demonstrated only minimal or, in the case of Trenches 2 and 3, no post-Roman truncation or plough damage. The trenches



within the arable fields to the west of the rail line did display a buried ploughsoil horizon across much of the field although this does not appear to have substantially affected the levels of archaeological preservation. Indeed, Trench 41 included a buried soil horizon that possibly predated a Roman boundary ditch with later alluvial layers infilling the upper part of the ditch and extending over the lower sequence of soils. However, it should be noted that no clear evidence for contemporary Roman land surfaces was identified. Likewise, within the area to the east of the rail line and within the pasture fields there was no evidence for deep ploughing damage with the thin topsoil and turf directly overlying gravel and archaeological deposits across most of this area. The clearest example of the excellent state of preservation of sealed deposits without any post-Roman intrusion was the presence of a road surface only 0.2 m directly below the topsoil within Trench 2. This was also partly sealed by alluvial deposits that sealed pristine archaeological deposits to a greater depth across the remainder of this trench and within Trench 3. The planning archaeologist for Oxfordshire County Council has requested that provision be made within the design to ensure preservation in situ of this area due to the high quality and significance of these deposits.



1 INTRODUCTION

1.1 Location and scope of work

- 1.1.1 Throughout 2010, Oxford Archaeology (OA) was commissioned by Environmental Resources Management Limited (ERM) on behalf of Chiltern Railways to undertake a two-stage evaluation of the proposed Langford Lane diversion and railway crossing. The new route diverts the existing Langford Lane rail crossing around the southern side of Alchester Roman Town Scheduled Monument (SM OX18).
- 1.1.2 The Scheduled Monument of Alchester is located 2 km SW of Bicester and west of Graven Hill. The existing Langford Lane runs through the northern part of the Scheduled Monument bordering the northern side of the Roman town. The proposed new access route borders the eastern, southern and western side of the Scheduled Monument boundary (Fig. 1). A variation to the access from the west was also proposed (the preferred option) and included within the evaluation. This approaches the southern border of the scheduled area along an existing field boundary to the north of Wendlebury and avoids sensitive impacts along the western boundary, particularly adjacent to the bath house earthworks and the Roman road that enters the town from the west. The evaluation was broadly centred upon Ordnance Survey national grid reference SP 57200 19600.
- 1.1.3 The first part of the evaluation took the form of a non-intrusive geophysical survey utilising both gradiometer magnetometer and resistivity methods of data capture. The fieldwork was undertaken between May and August in intervals dependent upon the accessibility of arable land, with a review of the draft results undertaken at each stage. Oxfordshire County Council (OCC) issued a Brief for the geophysical survey specifying how this was to be undertaken and OA issued a Written Scheme of Investigation (WSI) in accordance with that Brief prior to the start of fieldwork. Both route proposals were included within the primary survey stage. Subsequently, summary results of that investigation were presented and discussed with OCC and a scope of works and a layout for the second stage of trial trench evaluation was agreed without the formal issue of a Brief for this phase. The trial trench locations were informed by the existing cropmark evidence and the results of the geophysical survey (Fig. 2). Prior to undertaking the trial trench fieldwork, OA produced a detailed WSI in agreement with OCC. This stage of works did not investigate the original western access proposal to avoid damage to potentially significant and sensitive archaeological deposits that would not be impacted upon once the preferred route was agreed. The trial trench fieldwork was undertaken between 18th October to 1st December 2010.

1.2 Geology and topography

- 1.2.1 The surface topography within the majority of the development boundary is generally flat at c 61 m to 63 m above Ordnance Datum (aOD) across a low lying floodplain. The underlying solid geology is predominantly Peterborough Member Mudstone of the Oxford Clay formation with sand and gravel and areas of alluvium across the floodplain.
- 1.2.2 The site is bisected by the Bicester to Oxford rail line which is raised and bordered by drainage ditches. The land to the east is characterised by pasture fields and paddocks divided by hedge lines and drainage ditches/streams with the land to the west of the railway comprising the western side of the floodplain at 61 m aOD before gently rising to the north-west along the preferred western route to a maximum of 68 m aOD at its highest point before sloping down to 63 m aOD at the western limit of the site where it



meets the existing Langford Lane north of Wendlebury. This land is characterised by agricultural fields divided by hedge lines and dry ditch boundaries.

1.3 Archaeological and historical background

- 1.3.1 It is not the intention nor within the scope of this document to provide a detailed history of all that is known about Alchester as this is both varied and extensive. However, a short account of key points is given to provide a general background. Information on the most recent fieldwork by Sauer should be viewed in the numerous publications (1999a and b, 2001 a and b, 2002, 2003, 2004 and 2005a and b) and a good overview of the site is also provided in *Roman Oxfordshire* (Henig and Booth 2000) from which much of the following is summarised.
- 1.3.2 The site of the Roman settlement of Alchester was first recorded in 1724 by Stukeley who noted its defences and a major north-south road and various earthworks to the north-east of the town which he interpreted correctly as associated extra-mural settlement. Stukeley also recorded that the town defences were protected with four towers.
- 1.3.3 The town lies c 300 m to the south of a junction of two major Roman roads; an east-west road (Akeman Street) running between Cirencester and Verulamium, and a north-south road running between Dorchester and Towcester. This latter road also served as the central axis through the town although the date of origin of this part of the alignment as it extended south and directly through Otmoor is a topic of debate. The present Langford Lane is partly aligned upon the eastern entrance to the town and was part of the main east-west road through the settlement. The defences of the town enclose an area of approximately 10.5 hectares, making Alchester the largest Roman town in Oxfordshire. and this contained at least six *insulae*, as recognised from aerial photographs, as well as extensive extra-mural settlement recorded to the north and south of the town. Consideration of the extramural occupation suggests that settlement may have extended to as much as 45 hectares.
- 1.3.4 The town has considerable and significant early military activity associated with it and aerial photographs and subsequent excavation have recorded a possible vexillation fortress annexe west of the town and apparently attached to its defences. Conclusive dating evidence for the construction of the vexillation fortress annexe has been provided by the excavation of the gatehouse entrance structure on the western side which produced substantial wooden posts that were probably felled late in AD 44 (Sauer 2001 and 2004). The lack of a defended eastern side strongly suggests that an earlier fort or fortress lies beneath the later Roman town.
- 1.3.5 To the south-east of the town aerial photography recorded a large rectangular enclosure with rounded corners that can be reliably interpreted as a temporary camp. This was succeeded by a parade ground with a trackway access defined by ditches and an internal raised gravel surface (PRN 15986). The most recent intrusive investigations that targeted these features are summarised by Sauer (1999b).
- 1.3.6 The town defences were substantial and date from no earlier than the 2nd century AD, based on analysis of material recovered from the rampart. A later re-cut of the defensive ditch contained material of the 4th century AD. The defences comprised a c 6 m wide rampart made of sand and gravel with a possible timber revetment to the rear. The rampart was fronted with a limestone wall c 2.5 m wide. In front of the wall was c 7 m wide ditch. Evidence for civilian life within the town includes substantial stone structures focused around the core axial road alignments.



- 1.3.7 A bath house that survives in the modern landscape as a large mound and which lies to the west of the town was partially excavated in the 18th century and robbed for stone in the early 19th century (PRN 1585). This is located to the north of the western road out of the town with temple structures opposite this on the southern side of the road (see Sauer 2003, fig. 23). Extensive cropmarks of the extramural settlement to the south of the town have been recorded, consisting of large enclosures (PRN 12751).
- 1.3.8 A total of 28 burials were recorded to the south-east of the town in 1848. The burials were all aligned east-west, with no burial goods, which might suggest they are late Roman in date, although they have not been positively dated. A Romano-British cremation and urn was recorded to the south of the town (PRN 3166). Further inhumations were recorded to the north of the town during the widening of the A41 along with domestic settlement (PRN 16214) (Booth *et al.* 2001).

2 EVALUATION AIMS AND METHODOLOGY

2.1 Aims

- 2.1.1 Aims of the investigation were identified within the respective WSIs prior to both stages of the evaluation. These are outlined below.

Geophysical survey aims

- 2.1.2 The aims of the geophysical survey were:

- (i) to establish the presence or absence of archaeological remains within the site and the ability of the survey techniques to identify these;
- (ii) to determine and interpret the nature, extent, and potential significance of any below ground archaeological features or structures;
- (iii) to inform and assess the requirement for resistivity survey over a larger area through the comparison of results from gradiometer and selected areas of resistivity survey;
- (iv) to report on the results of the geophysical survey;
- (v) to inform the second stage of intrusive trial trench evaluation.

General aims of the trial trench investigation

- 2.1.3 The aims of the trial trench investigation were:

- (i) to establish the presence/absence of archaeological remains within the proposal area and to determine the extent, condition, nature, character, quality and date of any archaeological remains present;
- (ii) to establish the ecofactual and environmental potential of archaeological deposits and features. Particular attention was to be paid to the recovery and assessment of potential waterlogged deposits/features that may be encountered;
- (iii) to establish the national/regional/local importance of any archaeological remains in relation to the Scheduled Monument;
- (iv) to establish the need for any subsequent mitigation strategy;
- (v) to make available the results of the investigation to inform any mitigation strategies and further detailed research objectives.



Specific aims of the trial trench investigation

- 2.1.4 Several of the evaluation trenches were positioned upon features identified by the geophysical survey and cropmark evidence (Fig. 2). Specific details for these trenches are outlined below.
- 2.1.5 Trench 2 was targeted upon a geophysical anomaly and cropmark that comprises an area of disturbance and a linear feature. This broadly coincides with the suspected alignment of an early Roman phase access route now largely occupied in the modern landscape by the farm track that heads to the south-east. The excavation of this trench aimed to characterise and date these remains and establish if this is a significant Roman route associated with the early military history of the site.
- 2.1.6 Trench 4 was targeted upon a faint geophysical anomaly that coincides with the cropmark alignment of the access road into the parade ground to the south-east of Alchester fort and town.
- 2.1.7 Trenches 7-18 were positioned to investigate an area that does not display cropmark evidence although the resistivity survey does suggest the presence of some enclosure ditches within this area. These appear to relate to the alignments of enclosures recorded as cropmarks to the immediate north and west. The excavation of these trenches aimed to establish the extent of these enclosures and the reasons that these do not show clearly as cropmarks.
- 2.1.8 Trenches 19-23 were targeted upon features identified by the resistivity survey and cropmark evidence. These also target the areas immediately east and west of the Roman road to Dorchester. The Roman road alignment partly coincides with the existing drainage ditch and it is unlikely that remains of the road would be encountered within the evaluation trenches. However, there was a very high potential that the areas bordering the road may produce evidence for the presence of structures or other significant features and these trenches were specifically arranged to investigate this.
- 2.1.9 West of the rail line Trenches 30, 36, 38, 40, 41 and 42 were all targeted upon ditches associated with the enclosure and division of the land adjacent to the Dorchester road. The other trenches within this range were aimed at investigating the interior of these enclosures away from the road frontage in an attempt to identify activities that may have been taking place within these areas.

2.2 Methodology

- 2.2.1 The detailed geophysical survey methodology is presented within Appendix E.
- 2.2.2 A 3% trial trench sample of the proposal area was agreed with OCC excluding the original western route proposal along the boundary of the Scheduled Monument. This equated to approximately 1,550 m of linear trench at 2 m wide which translated to an arrangement of 48 trenches, mostly of 30 m lengths but with some 50 m and 20 m trenches (Fig. 3). This was agreed with OCC and was designed to provide the best coverage within the boundary to include targeted features as outlined in the Aims section above. In the event a wheeled machine with a narrower bucket was utilised for the trench excavation due to the ease and safety for the crossing of the rail line. This resulted in trench widths of c 1.5-1.6 m thus reducing the actual percentage of evaluation undertaken. This was discussed with the planning archaeologist and has been agreed that this did not unduly affect the results as the majority of the trenches were targeted upon known features that were encountered.



- 2.2.3 Once on site, and after consideration of the intended trench locations, it was clear that several would be subject to adjustment due to the proximity constraints imposed by active badger setts or overhead power lines. This varied from minor alignment changes or slight displacement, to others being moved and realigned by 10 m plus, to the complete abandonment of one trench (Trench 42). Trench 42 was targeted upon a known feature and was comparatively small at only 20 m long. As it was not possible to reposition this beyond the limit of the badger exclusion area and upon the intended target, this trench was discarded with the agreement of OCC.
- 2.2.4 Trenches 43 to 48 within the preferred western access route were all repositioned to varying degrees. A badger sett located within the central part of this route affected the spatial arrangement and these trenches were repositioned accordingly. Trench 45 was moved by the greatest distance of 80 m to the west of the original intended location. However, none of these trenches were targeted upon known features and the actual arrangement provided an equal level of evaluation.
- 2.2.5 Trenches 1, 4, 5 and 6 were each moved to the east and south-east of their original locations although these remained targeted upon specific features. However, this did result in these trenches being either partly or entirely beyond the development (red line) boundary. Trenches 8-13 were subject to considerable rearrangement due to the combination of adjacent overhead power lines and active badgers setts within the field boundary. As a result it was not possible to target several of the intended features within this field and the implications for the results are discussed below within the relevant parts of Sections 3 and 4. Trenches 19 and 20 were similarly moved to the extent that they did not fully evaluate the intended targets, although the impact of this was less than that resulting from the repositioning of Trenches 8-13.
- 2.2.6 Machine excavation of each trench was undertaken using a JCB wheeled mechanical excavator fitted with a toothless bucket operating under direct archaeological supervision. Within each trench excavation proceeded to the surface of the undisturbed natural geology or the top of the first archaeological horizon dependent upon whichever was encountered first. Topsoil, subsoil and exposed trench surfaces/features were each scanned by a competent metal detectorist for the identification and recovery of metal artefacts prior to hand excavation of the exposed features.
- 2.2.7 Those trenches excavated within the pasture fields each had a temporary barrier membrane laid between the turf and resultant spoil and particular care was taken to backfill upon completion in the same order reinstating as much of the original turf/root stock as possible at surface level. Local soil conditions and the bulking of excavated spoil made this difficult within some trenches immediately east of the rail line although an effort was made to restrict the raised soil to the limit of the trenches. In addition Trenches 4-20 were located within fields under Environmental Stewardship Schemes and specified seed mixes were sown upon the bare reinstated soil surfaces to aid the recovery of the pasture. All other pasture or paddock fields were also reseeded with a suitable grass mix.
- 2.2.8 Within each trench an adequate sample of exposed archaeological features and deposits was hand-excavated to characterise and date them and fulfil the aims outlined above. Full excavation was not undertaken unless necessary, in order to avoid potential damage to significant remains. All excavation was undertaken through agreement with the OCC planning archaeologist through frequent site visits and updates.
- 2.2.9 The potential for the preservation of environmental remains was also evaluated during the course of the investigation. Particular care was taken to identify and sample those



deposits that displayed the best potential to inform upon the contemporary Roman environment and specifically to establish if waterlogged material was present or had the potential to be present within the development boundary.

3 RESULTS

3.1 Presentation of results

- 3.1.1 This section of the report presents outline results from the geophysical survey followed by the detailed findings from the intrusive trial trench investigation. The full geophysical survey report is included as Appendix E, including illustrations. Where appropriate, the trenches have been described in associated groups and are accompanied by illustrated plans and sections where archaeological deposits and features were encountered. Selected cropmark evidence and results from the geophysical survey have also been illustrated with the trench results to provide a collated view of the available evidence. The illustrations that accompany the main report are presented before the Appendices.
- 3.1.2 Artefact evidence is discussed where relevant within the appropriate trench descriptions. Summary descriptions of the individual artefactual assemblages are also presented following the trench descriptions. Detailed specialist reports are included within the Appendices and an inventory of all finds by trench and context is provided in Appendix A.
- 3.1.3 A general description of the soils and ground conditions encountered during the fieldwork precedes the detailed trench results. Elevations of the current ground and geological surfaces are given in metres aOD within Appendix A.

3.2 Geophysical survey

- 3.2.1 The entire route proposal area, including that bordering the western boundary of the scheduled area, was subject to a gradiometer (magnetometer) survey. This was undertaken in stages dictated by the accessibility of the arable land. Following magnetometer survey and at each stage, additional selective resistivity survey was undertaken. The total areas covered by the two techniques were approximately 11.9 ha and 6.4 ha respectively.
- 3.2.2 The graphical results of this survey are produced in full in Appendix E although selected parts are also illustrated alongside the trial trench results below. For the purpose of the geophysical survey the fields were numbered for reference along the route from NW to NE (see Appendix E Fig. E1).
- 3.2.3 Within the route option corridor that borders the western side of the Scheduled Monument (Fields 1 and 2) the magnetometer survey identified two strong linear features likely to represent ditches (labelled as A and B on Appendix E Figs E5 and E15. See also Appendix E Figs E2 and E10). The road into the Roman town from the west is known to exist between these features, although traces of this were not positively detected by either the magnetometer or resistivity survey. However, a number of possible pit-like features were confined to the area between the ditches suggestive of occupation or other roadside activity. The resistivity survey here also identified other linear arrangements, although these appear to bear more of a relationship to the existing field boundaries rather than any of the likely archaeological feature/boundary arrangements anticipated for this location.
- 3.2.4 The favoured western approach route (Fields 3 and 4) produced no responses likely to represent archaeological remains.



- 3.2.5 Within the area to the south of the Scheduled Monument (Fields 5-7) numerous cropmarks have been identified as representing and being associated with the axial Dorchester to Towcester road aligned through the central part. Field 5 was subject to a magnetometer survey alone whilst Fields 6 and 7 underwent a full magnetometer and resistivity survey. The magnetometer survey produced poor archaeological results although a slight increase in magnetic activity near the eastern boundary of Field 6, and to the west of Field 7 coinciding with the roadside areas was noted (Appendix E Figs E3, E7 and E8). The resistivity survey within Fields 6 and 7 identified several linear features corresponding to those known from the existing cropmark evidence. These appear to form small enclosures aligned on the axial road.
- 3.2.6 There is limited cropmark evidence for the fields to the east of the Scheduled Monument boundary (Fields 8-13) within none evident whatsoever in Field 8. Magnetometer results were again limited although resistivity did identify a few interpretable linear features that align well with the enclosure cropmarks evident in the adjacent fields to the north (Appendix E Figs E3, E8, E11 and E13).
- 3.2.7 Fields 9-13 were examined by magnetometer survey alone (Appendix E Figs E4 and E9). A number of magnetic responses were present labelled as E, F and G (Appendix E Figs E9 and E16). The character of E is unclear and this may represent a previous archaeological trench investigation. The faint response recorded at F may relate to the track leading to the Roman parade ground although this is rather tentative and based largely upon correlation of location rather than a clearly identified geophysical response.
- 3.2.8 There is a more clearly identifiable group of magnetic disturbances at G in Field 10. Findings include a ditch-like linear feature that corresponds to a ditch alongside an adjacent Roman road. Road metalling was seen here beneath alluvium in one of the 1996-8 trenches, but the road itself (as is usual) was not detected in the magnetometer survey (Sauer 1999a). Other magnetic anomalies at G could perhaps indicate roadside activity (as in Field 1).

3.3 Trial trenches

General soils and ground conditions

- 3.3.1 The undisturbed natural deposit identified in Trenches 1-42 was sand and gravels corresponding to the flat low lying topography of the floodplain. The surface of the sand and gravel was characterised by the presence of frequent irregular patches of blue grey clay also of natural origin. These were investigated within Trench 5 at the first instance of identification to confirm the interpretation. As these deposits could be easily distinguished from the archaeological features, no other obvious examples were sample excavated although their presence was recorded on the trench plans. However, in any cases where this was unclear additional sample sections were excavated. The blue grey clay deposits were generally directly sealed by topsoil and turf within the pasture fields and ploughsoil and a thin horizon of buried ploughsoil within the arable fields without evidence of significant alluvial deposits being present. The only exceptions to this were within Trenches 2 and 3 where a thick alluvial deposit sealed the archaeological horizon and within Trench 41 where a localised sequence of probable alluvial origin also sealed the Roman features and deposits.
- 3.3.2 Trenches 43-48 were positioned upon the high ground to the west of the floodplain and a clay natural deposit corresponding to the Peterborough Member Mudstone was encountered within each, overlain by the current ploughsoil. Faint traces of a buried



ploughsoil horizon were noted between the current ploughsoil and natural deposits, accompanied by faint traces of furrows.

- 3.3.3 The current maintenance of the fields within the evaluation was split between grazing meadow/paddocks and arable with the rail line forming the division between the two. Trenches 1-3 were arranged within grass paddocks within the NE part of the evaluation area with Trenches 4-27 to the south arranged across the floodplain and the flat pasture meadow. Trenches 28-42 were also arranged within the floodplain although these were to the west of the rail line and within an arable field recently sown with rape seed. Trenches 43-48 were located in an arable field upon the high ground to the west of the floodplain and had also recently sown with a wheat crop.
- 3.3.4 No significant ground condition obstructions were encountered during the machine excavation of each trench, although Trenches 29, 30 and 31 did become infilled with water within a short period after excavation and before detailed hand excavation could be undertaken. Due to the low elevation of the flood plain and the relatively high water table, water was also frequently encountered within the excavated features making full investigation difficult or impossible, although this did not significantly affect the ability to satisfactorily identify the archaeological deposits.
- 3.3.5 The average depth of the topsoil and turf or ploughsoil identified within all the trenches was 0.35 m thick, +/-0.10 m. This was generally thicker within the arable fields and thinner in the pasture areas suggesting that relatively little arable cultivation has historically been undertaken within those field to the east of the rail line. The only exception was recorded in Trench 2 where some of the archaeological remains were artificially elevated resulting in a thin covering of only 0.2 m of topsoil and turf at the shallowest point. The evidence and implications of previous land use within this part of the site is discussed in greater detail within Section 4.

Trenches without archaeological remains

- 3.3.6 Trenches 6-9, 11, 13-18, 26, 32-34, 37, 39 and 43-48. did not contain any significant archaeological features or deposits and Trench 42 was not excavated. These trenches are referred to in the following descriptions for information pertinent to the discussion section. Full details for these trenches are presented in Appendix A.

Trench 1 (Figs 4 and 5)

- 3.3.7 The position of Trench 1 within the paddock was altered to avoid overhead power lines and possible underground services. Identification of geological deposits (clay or primary sand and gravel floodplain deposits) within this trench proved elusive and machine excavation of a trial pit demonstrated that all of the sand, gravel, silt and clay deposits encountered were likely to have derived from the natural silting and movement of former water channels across this landscape. The investigated sequence (1001 and 1011-1015) comprised grey/blue silts and clays and various layers of redeposited sand and gravel mixed with silts. Each was relatively sterile although snail preservation was noted within the fine sediments. Comparison with the exposed sections within the sides of the existing drainage ditches/stream adjacent to the trench and for a considerable distance to the south (400 m and more) suggests that similar sequences are present in association with this channel. Observations along the current stream cutting also noted that these deposits exist to a considerably greater depth than the undisturbed gravel surface levels recorded in the nearby Trenches 4, 5, 6 etc. appearing to confirm that they do derive from various movements and silting of the channel. Reference to the course of the stream in the 19th century as depicted by Sauer (1999a, 292 fig. 7) also



suggests that the recent historic pre-channelled route passed very close to the location of Trench 1.

- 3.3.8 At the surface level of the uppermost channel silting deposit (1001), three recent linear features (1002, 1006 and 1008) and a posthole (1004) were identified (Fig. 5). Excavation of 1002 ceased once a concrete service pipe was encountered towards the base of this feature. Modern surface finds including glass bottles were noted in the top of probable ditch 1006 and with the combination of the dark humic loose fill, it was decided not to investigate this feature. Similarly, the same factors were also present and applied to the probable ditch 1008. The posthole was also clearly of modern origin with 20th century pottery present (not retained) and was not excavated.

Trench 2 (Figs 4 and 6)

- 3.3.9 Trench 2 was targeted to cross the NW-SE alignment of the Roman road that closely follows part of the existing Langford Lane and shows as a distinctive cropmark where the lane diverges from this straight alignment (Fig. 4). The Roman road has previously been investigated by Sauer (1999a and b) through geophysical survey and excavation close to the location of Trench 2. The current gradiometer survey had also identified at least one ditch associated with the road and an area of disturbance thought likely to represent surfacing material. Comparison of the excavated trench, the gradiometer plot and the cropmark data clearly shows a close correlation between features including the flanking drainage ditch(es) to the NE although the area of disturbance lies to the SW side of the parallel ditches and the road alignment as previously investigated by Sauer.
- 3.3.10 Machine excavation of the trench revealed a complex sequence of deposits with the archaeological horizons encountered at varied heights and with no obvious undisturbed sand and gravel evident (Fig. 6). In summary, and following considerable cleaning and sample excavation, two distinct limestone paved surfaces (2011/2012 and 2015) were identified with associated flanking ditches/drainage channels (2017 and 2019). Other localised areas of surfacing (2029 and 2036) were also present to the SW of 2011/2012. The major surfaces are thought both to be roads upon the same alignment and constructed of similar material, although these differed in width and vertical elevation in relation to landscape. However, the stratigraphic relationship between the two suggests a very close or contemporary existence. This is explained below following the descriptions of both surfaces and associated ditches.
- 3.3.11 Other features/deposits that remained unexcavated and without interpretation were recorded at surface level to the SW side of surface 2011. Some of these may have represented a roadside ditch along this margin although it should also be noted that both geophysical survey and cropmark evidence have not identified an obvious flanking ditch here.
- 3.3.12 Once the specific evaluation aims had been satisfactorily achieved within this trench only limited investigation was undertaken to avoid further excavation damage to what were clearly significant archaeological remains. As a result, only selected areas of the major surfaces were cleaned and revealed in detail and no excavation was undertaken to remove any part of these.
- 3.3.13 Surface 2015 represents the smaller of the two roads, being 9.5 m wide, and is constructed of small limestone fragments laid and compacted onto the underlying sand and silt sequences (Plate 1). The surface includes fragments of tile (noted and left *in situ*) and is generally flat at c 62.25 m aOD. The north-east boundary of this was flanked by a broad ditch or channel (2017). This was partly investigated during the initial machine excavation before further cleaning and recording was undertaken by



hand once its association with the road was recognised. Full excavation of this feature was not undertaken due to the depth and tall vertical section at the trench edge. The channel was at least 4 m wide and excavated to a depth of 0.75 m below the level of the adjacent road surface and 1.4 m below the current ground surface (Fig. 6 section 200). It contained water-deposited silts and sands within the lower part of the sequence with an alluvial clay (2002/2003) sealing these within the upper portion of the channel. Snail shell was abundantly preserved within the lower silts of this sequence and assessment of two samples showed a dominance of species present that favour clean slow-moving water habitats. These suggest that this feature was an active water channel as opposed to existing solely to provide drainage for the road surface. A smaller component of the snail assemblage indicated the presence of marginal plants such as reeds or sedges and adjacent water meadow. Artefactual finds were relatively sparse, in part a result of machine excavation. However, the most significant recovery was a single sherd of Central Gaulish samian ware bowl (Drag 37) that is dated AD 120-250 from the lower part of the sediment sequence.

- 3.3.14 The south-western side of the road was flanked by a much more clearly-defined ditch (2019) with a sharp V-shaped profile 1.7 m wide at its surface horizon and 0.7 m deep in comparison to the road surface (Fig. 6 section 201). This contained basal silting fills with an upper fill comprising alluvial clay comparable to deposit 2002/2003 within the roadside channel flanking the north-east side (Plate 2). No substantive assemblages of finds were encountered during the excavation of this sequence.
- 3.3.15 Ditch 2019 also defined the north-east edge of the second, more substantial road surface (2011/2012). This surface remains *in situ* and is constructed at a higher level than that of 2015. However, ditch 2019 had an apparent contemporary relationship with both surfaces with neither appearing to have been truncated by the ditch. This is further supported by the presence of an overlying alluvial deposit (2001) described below. Road surface 2011/2012 is 16 m wide and constructed in the same manner as 2015 with compacted limestone pieces and tile fragments. The sequence underlying the road was not investigated by excavation as the road is preserved *in situ*, although redeposited gravels and silt are likely to be present in order to have raised the road and create its slightly agger-like profile. Hints of these were noted in gaps between the surface material (2013/2038).
- 3.3.16 The highest point at the centre of surface 2011/2012 is 62.7 m aOD, 0.45 m above that of surface 2015. At this point the road lies directly under a 0.2 m thickness of the current paddock topsoil and turf. Overlying the road surface along its margins were thin layers of silting (2014/2037), with the north-west edge of the road where it sloped down to ditch 2019 sealed by a distinctive alluvial clay (2001) (see Fig. 6 sections 200 and 201). This deposit did not extend over the raised part of road 2011/2012 but did exist as a thick layer up to 0.5 m deep directly sealing the contents of ditch 2019, road surface 2015 and the infilled channel 2017 (see Plate 2 for the sequence over ditch 2019). This deposit, or at least an equivalent, also existed to the south-west of road 2011/2012 sealing the features described below. This alluvial deposit may have accumulated over many years effectively sealing the lower road surface whilst the higher surface remained in use. However, consideration of the stratigraphic relationships between the roads, ditch 2019 and the associated and overlying deposits certainly suggests that both surfaces may have existed together at some point.
- 3.3.17 Two additional areas of limestone surfacing (2029 and 2036) were investigated within the trench to the south-west of road 2011/2012. Both were revealed in plan but remain *in situ*. Of these 2029 appears to be set within a shallow hollow approximately 4 m wide



and 0.4 m deep. A silt deposit sealed this (2030/2033) with a further silting deposit (2031/2034) levelling the hollow. The upper fill produced 30 sherds (529 g) of pottery dated to AD 120-250 and also produced a quantity of tile and a stone sharpening stone (hone). The alluvial layer 2001 overlay the fills of this feature and other unexcavated deposits within the south-west part of the trench to a maximum depth of 0.4 m. It was in turn overlain by the current topsoil and turf.

Trench 3 (Figs 4 and 7)

- 3.3.18 Machine removal of the paddock turf and topsoil (3000) and an underlying alluvial horizon (3001) revealed a complex sequence of archaeological deposits that were not easily understood within the confines of the evaluation trench. However, selected sample excavations did identify a sequence of ditches on east-west and north-south alignments. Of these, and within the southern end of the trench, ditches 3004 and 3005 (Fig. 7 section 300) on the east-west alignment conform to the location of cropmarks known to exist either side of the trench (Fig. 4). Both ditches were 0.45 m deep with broad flat-based profiles containing fills that comprised a mixture of gravelly sand and silts indicative of being deposited by moving water. Silty fine sediments deriving from standing or slow moving water filled the upper part of the ditches. Both ditches produced moderate quantities of pottery (24 sherds, 413 g and 14 sherds, 469 g respectively) with a middle to late 1st century AD date range.
- 3.3.19 North-east of ditch 3004 was a layer of mottled clay (3033), probably of an alluvial origin, that masked the underlying gravel. This made distinction of any features difficult. Indeed, even the identification of this deposit is not conclusive and this may actually represent, either in full or part, the upper fill of a large feature. This extended to the north-east for at least 10 m before its boundary was defined by another east-west aligned ditch (3010) and the sequence of north-south aligned ditches (3020, 3025, 3026 and 3033).
- 3.3.20 The north-south ditches appeared to be in paired parallel arrangements of which the earliest two (3033 and 3026) were not substantially investigated through excavation. These ditches were fully silted before being redefined upon the same alignments as ditches 3025 and 3020 respectively (Fig. 7 section 301 and 302). The well defined V-shaped profile of ditch 3025 contained a sequence of fine sediment fills indicative of being deposited in standing or slow-moving water. Combined, these deposits also produced a significant quantity (75 sherds, 1084 g) of 1st century AD pottery including forms typical of late Iron Age production that briefly continued into the post-conquest period. The pottery was also accompanied by animal bone (37 fragments, 789 g) and a single small fragment of fine blue glass. Ditch 3020 was broader and flat-based and contained two fills that contained greater quantities of sand and gravel, suggesting that a bank may have been close by providing material to erode into the ditch. These produced a similarly dated but smaller (17 sherds, 262 g) assemblage of pottery.
- 3.3.21 Truncating the upper fills of ditch 3025 was the remaining identified east-west aligned ditch (3010). This was the smallest of the ditches being only 0.5 m wide and 0.24 m deep (Fig. 7 section 301). Again, the fine sediments that were present within this ditch indicate silting in standing or slow moving water conditions. Pottery recovered from this ditch was also dated to the 1st century AD.

Trenches 4, 5 and 6 (Figs 4 and 8)

- 3.3.22 Trenches 4, 5 and 6 were positioned to investigate the cropmarks and interior of the camp ditch and the access track to the parade ground located to the south-east of



Alchester town. Trench 4 was specifically targeted upon a clear cropmark that was also tentatively noted as faint traces during the geophysical survey (see above and Appendix E). Excavation identified two parallel ditches (406 and 411) enclosing a corridor 6.7 m wide. The route did not display any clear evidence for a surface although the natural sand and gravel appeared more compacted here (424) compared to that beyond the ditches.

- 3.3.23 The ditches were of similar appearance and dimensions with the western version being slightly narrower at 2.8 m wide and that to the east at 3.4 m (Fig. 8 sections 401 and 402). However, both shared a common depth between 0.7 m and 0.8 m suggesting that this was sufficient for the drainage and definition purposes of the route. The profile of the eastern ditch was more splayed suggesting that the edges had eroded considerably which probably accounts for the wider dimension. The western ditch had steeper sides and a flat base. Both ditches contained fill sequences characteristic of erosional slumping and silting with the basal fill (413) of ditch 411 displaying fine lamination demonstrating that this accumulated in a standing/slow-moving low energy water environment. Gravel fills (420 and 421) along the upper edges of the eastern ditch may represent erosion of the road surface along the inner boundary of the ditch and a bank along the outer. Neither ditch demonstrated any evidence for cleaning or recutting. The small quantity of pottery that was recovered from the fills was not particularly characteristic although fill 413 did produce sherds of South Spanish amphora, fine grey ware and sandy grey ware dated AD 50-250, suggesting an early to middle Roman bias.
- 3.3.24 To either side of the track ditches were large quarry pits (402 and 419). The identification of 419 is slightly questionable as this did not penetrate the sand and gravel to any great extent and the fill was sterile (Fig. 8 400 and 404). This may alternatively represent a treehole. However, quarry 402 was much clearer being steep-sided, flat-based and up to 0.56 m deep. This contained primary silting fills (403 and 404) suggesting that it remained open for some time prior to the backfilling of the remaining void with deposit 405. This deposit produced a very small assemblage of abraded roof tile and animal bone fragments and a small assemblage of pottery (15 sherds, 74 g) that included fine wares dated to AD 120-250.
- 3.3.25 Cut into the top of the quarry backfill (405) was a small sub circular cremation pit (417). This appears to have only ever been buried at a relatively shallow depth and was only cut 0.12 m deep into the top of the quarry backfill. The pit contained the cremated remains of an adult mixed with substantial amounts of charcoal derived from the pyre (418). The presence of iron nails evenly spaced within the pit suggests that this may have been buried within a small box although the spread of the charcoal and cremated bone suggests that this was not the case. If so then the nails may represent a box placed within the pit that contained other items now decayed. Analysis of the cremated bone also identified a neonate pig and possible bird/fowl. The piglet remains appear to be that of a single animal and, combined with the fowl, suggest that animal offerings were included within the cremation rite.
- 3.3.26 The only feature encountered within Trench 5 was a single pit 2 m wide and 0.3 m deep (not illustrated). This may also be a quarry pit as it appears to have had little other clearly identifiable function. The single silty fill contained within this produced 3 sherds (17 g) of pottery dated to the mid-late 1st century AD.
- 3.3.27 Trench 6 was targeted to evaluate the possibility that the ditch defining the western side of the camp continued beyond the clear cropmark limit. This was not the case and no archaeological features were present, apparently confirming that the ditch must



terminate or at least cease to exist at the point indicated by the cropmark. This was similarly concluded by Sauer (1999a) following the excavation of a similarly positioned trench closer to the known line of the ditch.

Trenches 7 to 18

- 3.3.28 Trenches 7-18 did not encounter any archaeological remains that could be related to the clear enclosure cropmarks present immediately to the north within the scheduled monument boundary. This indicates a clear absence of archaeological features as opposed to any other factors, although the repositioning from the intended locations avoided the only obvious response and possible ditch identified by the resistivity survey to the west of the excavated Trench 12 (see Fig. 2).
- 3.3.29 Trenches 10 and 12 did identify and investigate parallel linear ditches aligned north-south and some 32 m apart. These had matching dimensions, profiles and fills being up to 1.2 m wide and 0.3 m deep with shallow rounded profiles containing relatively loose humic fills (Fig. 9). No finds were present within either ditch but the character of the fills suggests a possible recent origin as these deposits closely resembled the topsoil and were clearly different to the Roman deposits excavated within trenches close by.

Trenches 19 and 20 (Figs 10, 11 and 12)

- 3.3.30 Trenches 19 and 20 were arranged to investigate the immediate roadside area and enclosures evident from the cropmarks to the east of the Dorchester to Alchester road. Trench 20, closest to the road edge, produced scant evidence for occupation or other activity within this zone although it should be noted that the trench was moved to the east away from the intended roadside margin location due to the proximity of an active badger sett. Excavation revealed a single pit (2002) that was circular in plan that contained two sterile fills with the exception of some very small fragments of animal bone (Fig. 11). The fill sequence and appearance of the pit were generally unremarkable. Also excavated was a large shallow feature (2005) 3.9 m across but only 0.3 m deep. This contained a sequence of three silty fills that produced two sherds (43 g) of Roman grey ware. This may represent a shallow gravel quarry, although this is a very tentative interpretation and largely based upon its roadside location.
- 3.3.31 A number of ditches were identified in Trench 19 (Fig. 12). Of these a single ditch (1901) was aligned NNW-SSE across the centre of the trench and was 2 m wide and 0.5 m deep. This contained a sequence of three sterile silting fills (Fig. 11 section 1901). Within the north-eastern end of the trench was a sequence of three intercutting ditches (1908, 1910 and 1914) aligned north-south parallel to the line of the Dorchester road. These corresponded both to the alignments of a cropmark recorded to the south and to the existing drainage ditch where it runs parallel to the line of the Dorchester road shortly before it turns to the west. Each of these ditches had broad rounded profiles between 0.4 m and 0.45 m deep and was filled with sequences of sterile silting deposits (Fig. 11 section 1903). A slightly less convincing feature that was recorded as an animal burrow (1905) was located 10 m to the west of ditch 1901. This was poorly defined with apparent irregular edges. However, it contained two fills (1906 and 1907) that appeared similar to those encountered within the other ditches. The alignment of this feature also corresponds to that of a ditch identified by cropmarks immediately to the south. It is therefore possible that this may represent the disturbed remains of that feature. West of this again was another large shallow possible quarry (1917), very similar to that recorded in Trench 20 (2005). This was 4.5 m across and 0.53 m deep and, as with the ditches, contained a sterile sequence of silting fills.



Trenches 21, 23 and 25 (Figs 10, 13, 14 and 15)

- 3.3.32 Trenches 21, 23 and 25 principally targeted a linear feature identified as cropmarks and confirmed by the resistivity survey. These comprised an apparent double ditch arrangement orientated ENE-WSW at a slight angle to the Dorchester road and continuing the alignment of the existing ditch and field boundary immediately to the east of the Roman road in the adjacent field. The cropmark and resistivity survey suggested that the double ditch arrangement did not continue as far west as Trench 25, with only the single southern ditch continuing this alignment.
- 3.3.33 Excavation confirmed this arrangement and identified two parallel ditches (21002 and 21007), 2.25 m apart within Trench 21, that were also recorded in Trench 23 (23007 and 23017) (Figs. 13 and 14). The cropmark plots show the northern ditch (21002, 23007) terminating c 45 m to the west of Trench 23 and before the location of Trench 25. The southern ditch (21007, 23007) continued and was recorded in Trench 25 as ditch 25002 (Fig. 15).
- 3.3.34 The profiles and fill sequences of these ditches were comparable at each location with flat or slightly rounded bases approximately 0.55 m below the surface of the sand and gravel and with straight sloped edges that displayed varying degrees of erosion (Figs 13 and 14 sections 2100, 2101, 2301 and 2303). The southern ditch was the wider of the parallel features although the surface width along the individual ditches only varied slightly, probably as a result of the variable edge erosion. The southern ditch had a surface width greater than 2 m that increased as this continued to the west with ditch 25002 being nearer 3 m wide. It was not possible to investigate this specific ditch location in detail due to the high water table so other comparisons are not possible (Fig. 15 section 2500). The excavated sections within Trenches 21 and 23 each displayed a sequence of silting and slumping erosion fills with varying quantities of gravel inclusions that appear to suggest a bias to the northern side of ditch 21007/23017. This may indicate the former presence of a parallel bank. The close correspondence between the ditch alignments also suggests that these were a contemporary arrangement.
- 3.3.35 Artefactual material was relatively sparse although pottery assemblages were recovered from the primary fill (21003, 13 sherds, 232 g) of ditch 21002 and the upper fill (21010, 4 sherds, 130 g) of ditch 21007. The pottery from the primary fill suggests a deposition date between AD 50 and 120 whilst the small assemblage from the upper fill of the adjacent ditch provided a date range of AD 50-250.
- 3.3.36 Within Trench 23 an additional linear feature (23012) that was aligned parallel to the double ditch arrangement was investigated. The origin of this is not clear as although the feature superficially appeared to be archaeological, the fill sequence interpretation suggests a natural origin. This did not produce any artefactual material.
- 3.3.37 Several other more varied archaeological features were identified within Trench 21. To the immediate south of ditch 21002 was a large, poorly defined feature (21020) that may represent a shallow quarry. This was 6 m wide and only penetrated the sand and gravel surface by 0.25 m (Fig. 13 section 2104). It contained a single silting deposit (21021) that produced a moderate quantity (20 sherds, 236 g) of pottery dated to the mid-late 1st century AD. The character and relatively close roadside location of this feature are comparable to those of the possible quarries identified within Trenches 19 and 20.
- 3.3.38 Approximately 10 m to the south of ditch 21002 and also south of the possible quarry was another ditch (21011). This appeared to be aligned parallel to the double ditches and although it was not possible to investigate the feature to its full depth due to the



high water table level, the upper part suggested a steep-sided profile (Fig. 13 section 2102). The upper fills (21012-21015 and 21025) that were excavated produced a combined assemblage of 26 sherds (483 g) predominantly dated to the 2nd century AD. Fill 21012 was also sampled for environmental remains as a high charred content was noted during the course of excavation. The deposit contained abundant charcoal fragments with a seed assemblage dominated by cereals of barley and oat with some wheat. Charred fragments from other parts of the cereal plants and the character of the weed seed assemblage suggested that this represented crop processing waste. Also notable within this ditch was the presence of small limestone pieces between fills 21025 and 21015. These appear to have derived from a possible dry stone wall or bank edge revetment (21027) that bordered the southern edge of the ditch. This was constructed directly onto the surface of the sand and gravel and overlain by the topsoil.

- 3.3.39 A smaller ditch (21016) partly truncated the southern edge of 21011 and ended in a rounded terminal within the trench. This was steep-sided and flat based and, in common with the other ditches, was aligned ENE-WSW and filled with silting deposits that produced a single sherd of Roman grey ware (Fig. 13 section 2103).
- 3.3.40 The final feature to be identified and investigated within Trench 21 was a probable posthole (21022). This was roughly circular in plan and had a diameter of 0.66 m and was 0.44 m deep. This was near vertical sided and flat based with a primary fill that comprised redeposited gravel (21023) that may originally been used as packing material (Fig. 13 section 2105). An upper silting fill (21024) produced three sherds (31 g) of pottery including a fragment of a South Gaulish samian ware cup (Drag 27) dated to the mid-late 1st century.
- 3.3.41 All of the upper fills within the features and the sand and gravel surface within Trench 21 were sealed by a thin buried ploughsoil horizon, suggesting that a degree of horizontal truncation may have occurred within this area. However, there was no evidence for significant truncation as a result of deep ploughing or other subsoiling processes.

Trench 22 (Figs 10 and 16)

- 3.3.42 This trench was positioned to target three linear features identified by the cropmark data although the resistivity survey only confirmed the presence of a single north-south aligned ditch. The latter feature clearly lay east of the cropmark plot alignment, suggesting a degree of inaccuracy or uncertainty for some of the data from this field. However, it is also clear from the resistivity survey results that the responses for this localised area are also difficult to interpret and it is likely that some features of natural origin may have appeared as archaeological features within the cropmarks.
- 3.3.43 Within the western half of the trench and aligned north-south was a substantial ditch (22003) 2.5 m wide at its surface level and 0.8 m deep (Fig. 16 section 2200). This contained a sequence of fine silting accumulations with gravel and sand slumping deposits (22007 and 22008) interleaved along its western slope suggesting the possible former presence of an upcast bank along this edge. All fills were sterile of finds with the exception of the final silting deposit (22004) that levelled the ditch. This produced an assemblage of 14 sherds (49 g) dated to the late 1st century AD although the small sherd size and abraded appearance of these suggests that they may be residual. Two other investigated features close to ditch 22003 proved to be of natural origin.



- 3.3.44 Within the eastern end of the trench a ditch (22015) aligned parallel to 22003 and was generally unremarkable. This was smaller, at 1.2 m wide and 0.58 m deep, and contained three sterile silting deposits (Fig. 16 section 2202).

Trenches 24, 26 and 27 (Figs 10 and 17)

- 3.3.45 Trenches 24 and 26 were situated over 40 m away from the Dorchester-Alchester road within the central area of an enclosure aligned on this (Fig. 10). No archaeological features were encountered within these, suggesting a relatively low level of activity within the enclosure. Trench 27 was also mostly positioned within this enclosure and similarly did not identify any features within the ditched boundary. However, this trench also investigated the east-west aligned ditch that formed the northern boundary to the enclosure and was clearly evident both as a cropmark and in the resistivity survey. Ditch 2701 was 2.5 m wide at the surface level although excavation was only able to investigate the upper silting fills within the top 0.35 m of the ditch before the rapid ingress of ground water made further excavation impractical (Fig. 17). Neither silting fill produced any artefactual material, confirming the apparent low level of activity here also suggested by the lack of archaeological features within the enclosure's interior.

Trench 28, 36 and 37 (Figs 10 and 18)

- 3.3.46 Trenches 28, 36 and 37 investigated the interior of the enclosure immediately north of that investigated by Trenches 31-34 (Fig. 10). Each trench produced limited evidence of activity in the form of possible ditches although none of these were convincing. In Trench 28 this was limited to the identification of a possible linear ditch (28003) aligned NW-SE prior to the trench becoming inundated with water and unworkable. However, it is quite possible that this tentatively identified feature had a natural origin (not illustrated).
- 3.3.47 The most convincing feature was a narrow ditch or gully (36003) excavated within Trench 36 (Fig. 18). This was steep-sided and 0.5 m wide at the surface and 0.4 m deep and contained a single sterile silting fill. The gully was aligned NW-SE, a shared alignment with the possible ditch in Trench 28.
- 3.3.48 A similarly aligned feature was excavated in Trench 37 (37005) although it was not clear if this was actually a ditch or a feature of natural origin (not illustrated). The line of this feature was also matched by a field drain inserted into the silty fills of this, although it was similarly not clear if this was incidental or intended.
- 3.3.49 A thin buried ploughsoil horizon was identified within each of these trenches below the current ploughsoil and sealing each of the natural or possible archaeological features.

Trenches 29, 30 and 35 (Figs 10 and 19)

- 3.3.50 A main enclosure boundary aligned east-west and clearly visible as a cropmark was investigated by Trenches 29, 30 and 35 (Fig. 10). This was identified within each trench (29003, 3003 and 35003) although the rapid ingress of water within Trenches 29 and 30 excluded the possibility of excavation at these locations. These trenches are not illustrated in any greater detail than in Fig. 10. Initially the ditch was not encountered within Trench 35 until a small extension was specifically excavated to locate and evaluate this due to the obstruction in Trenches 29 and 30 (Fig. 19).
- 3.3.51 Where the ditch was excavated in Trench 35, it proved to be reasonably substantial at 2.8 m wide and 0.7 m deep and comparable to the main north-south boundary on the west side of the roadside enclosures investigated within Trench 41. The fill sequence



included a series of fine silting deposits (35007 and 35009) within the upper part of the ditch interleaved with silty sand and gravel deposits (35004, 35005/35006 and 35008) tipping into the ditch from the south clearly indicating the presence of a former bank constructed from the upcast content of the ditch. No artefactual remains were encountered from this ditch. A probable buried ploughsoil was present across the full extent of the trench and sealed the infilled ditch without any indication that this filled any remaining hollow along the surface of the ditch as seen in Trench 41. The modern ploughsoil completed the sequence.

3.3.52 No other features were encountered within any of these trenches.

Trenches 31-34 (Fig. 10)

3.3.53 These trenches were arranged within the same enclosure aligned off the Dorchester to Alchester road as Trenches 24 and 26 to the east. However, these were positioned approximately 200-330 m to the west of the road edge but only 60-180 m from the boundary ditch that defined the rear of this enclosure. The rear boundary identified from the cropmark evidence was investigated within Trench 41 and is described below.

3.3.54 No archaeological remains were encountered and investigated within this group of trenches although very wet ground conditions obstructed the excavation of a possible ditch (31002) aligned north-south within Trench 31. Another possible ditch (3402) aligned east-west was excavated in Trench 34 but this did not produce any artefactual remains. The general absence of archaeological features and artefacts within this part of the enclosure is consistent with that observed to the east closer to the roadside.

Trenches 38 and 40 (Figs 10, 20 and 21)

3.3.55 One of the principal east-west aligned dividing ditches between the large roadside enclosures that had been previously identified as a cropmark was investigated by Trenches 38 and 40. Excavation of these trenches identified a single ditch (3803) in Trench 38 (Fig. 20) and two parallel ditches (4003 and 4009) in Trench 40 (Fig. 21) that closely matched the line of the cropmark. Based upon the excavated evidence and alignment, it is thought that ditch 4009 equated to ditch 3803. The ditch had a surface width of 1.6-2.0 m and a consistent depth of 0.75 m with a V-shaped profile that displayed only slight evidence of significant edge erosion prior to becoming infilled with a sequence of silting deposits (Figs 20 and 21 sections 3800 and 4001). The preservation of snail shell was noted during excavation of the primary silting fill (3806) of ditch 3803 although no finds were encountered within any part of the fill sequence. Parallel to this and 2.5 m to the north was the adjacent ditch (4003). This had very similar profile, dimensions and fills (Fig. 21 section 4000).

3.3.56 Several natural features were present within Trench 38, each of which were sample excavated to aid the identification of similar features within the surrounding trenches. This trench provide the main sample of this class of feature within this field.

3.3.57 All of the upper levels of archaeological horizons and natural deposits were sealed by a layer of buried ploughsoil that was, in turn, overlain by the current ploughsoil.

Trenches 39, 41 and 42 (Figs 10 and 22)

3.3.58 Trench 39 was excavated within the interior of the enclosure to the north of that containing Trenches 36 and 37. A single ditch (3903) was identified within this trench, although the fills were more humic than those of the Roman ditches and had also been truncated by a field drain suggesting a more recent origin for this feature. Two



geological or treehole features were also investigated. No artefacts were present within any of the investigated deposits.

- 3.3.59 Trench 42 was designed to investigate the ditch boundary for the northern side of this enclosure as identified by the cropmark data. However, the proximity of an active badger sett made it impossible to excavate or relocate the trench and achieve the same aims. Therefore this trench was excluded from this evaluation. However, Trench 41 was excavated upon the intended target of the rear boundary to this enclosure which appeared as a double ditch on the cropmark plot. This coincides approximately with the base of the high ground to the west and the start of the floodplain now marked by an active drainage ditch immediately to the west of the trench.
- 3.3.60 The results from Trench 41 were particularly interesting (Fig. 22). Within the western end of the trench the earliest archaeologically significant deposit appeared to be an alluvial layer or buried soil (41006), that was a maximum of 0.2 m thick (Fig. 22 section 4100). This appeared to be cut through by ditch 41002, although it was not entirely clear if this was the case or if the soil horizon actually eroded into the upper part of the ditch. It also seems rather coincidental that the ditch also defined the eastern limit of this deposit as if it had influenced its deposition. A single sherd (52 g) of oxidised fine ware from Oxford was recovered from this deposit although this was not closely datable other than to the Roman period.
- 3.3.61 The ditch (41002) was 2.6 m wide and was excavated to a depth of 0.8 m before encountering the water table which restricted investigation to its full depth. It contained a variety of distinctive fills representing erosion and slumping of sand and gravel deposits along the edge (41011, 41012 and 41013), fine sediment silting (41017) and a fine gleyed clay (41014). None of these deposits produced any artefactual material although these are clearly of Roman origin and part of the arrangement of enclosure boundaries that extend off the axial Dorchester to Alchester road.
- 3.3.62 Two environmental samples were recovered from this ditch. Most interesting was that from the basal clay fill (41018) that was not fully excavated due to being inundated with water. The deposit contained well preserved waterlogged plant and insect remains. Although detailed identification has not been undertaken at this stage, numerous species of disturbed open ground have been noted such as thistle, bramble, chickweed and nettle. Analysis of snails from the clay fill (41014) within the main body of the ditch also suggested that this contained clean flowing water and was possibly lined with sedges or reeds.
- 3.3.63 Only 1.6 m to the east of ditch 41002 and representing the easternmost of the parallel ditches, was a much more shallow ditch (41021). This was approximately 2 m wide and 0.4 m deep with a broad flat-based profile filled with two sterile silting deposits (Fig. 22 section 4100). The cropmark evidence suggests that this ditch is the same as that intended to be investigated within Trench 42 as it turns to form the corner of the enclosure (Fig. 10).
- 3.3.64 Another ditch (41004) of reasonable proportions and similarly aligned north-south was investigated within the eastern end of the trench 9 m to the east of ditch 41021. This had a sharp V-shaped profile with a flat base suggesting a reasonably rapid infill without the ditch edges becoming eroded (Fig. 22 section 4102). The sequence of fills similarly comprised fine silting sediments interleaved with sand and gravel erosion slumps along the western edge possibly indicating the presence of a former bank.



- 3.3.65 Two indistinct soil marks (41007 and 41003) were also investigated and may represent treeholes or natural features. These were not considered to be significant to the archaeology identified within this trench.
- 3.3.66 All the features were overlain by an alluvial deposit (41005). This was noted in section throughout the trench and was removed by machine as part of the primary excavation. It varied in thickness from 0.3 m to 0.1 m and partly infilled the remaining hollow along the top of ditch 41002 (Plate 3). Overlying 41005 was a similar deposit (41001) that may also have had an alluvial origin that similarly reduced in thickness from west to east. It was not entirely clear if this soil horizon had actually been ploughsoil at some point or if this had even resulted from erosion from the adjacent slope as opposed to having a true alluvial origin. This deposit produced a single sherd of samian ware (Drag 37 bowl origin not clear) dated to AD 120-240 although this seems very likely to be residual. The overlying current ploughsoil completed the sequence.

Trenches 43-48 (Fig. 2)

- 3.3.67 These trenches investigated the high ground to the west of the floodplain beyond the identifiable western rear boundary of the Roman roadside enclosure arrangement. It was evident that this field had suffered greater plough truncation with traces of furrows and/or buried ploughsoil horizons present. The depth of the current ploughsoil and underlying ploughsoil horizons varied according to the topography with Trenches 43 and 48 located at the base of slopes demonstrating the greatest accumulations. None of these trenches produced any archaeological remains and no finds of Roman origin were noted within the ploughsoil either within the trenches or within the immediately surrounding ploughsoil surface areas.

3.4 Finds summaries

Roman pottery

- 3.4.1 A total of 346 sherds, weighing 5292 g, was recovered from all trenches. Overall, the assemblage had an early Roman character and most items can be placed within the 1st and 2nd centuries AD. Pottery recovered from the individual excavated context groups from Trenches 2 and 3 produced the earliest material, including some likely not to extend many years into the post-conquest period after AD 43. These trenches also produced assemblages containing pre-conquest style pottery mixed with post-conquest wares suggesting an overall early Roman bias within the 1st century AD.
- 3.4.2 Smaller quantities of pottery dated to the mid Roman period (c AD 120-250) were also recovered from some Trench 2 contexts and Trenches 21 and 41, including products from the Oxford kilns produced from the mid 2nd century to mid 3rd century.

Ceramic building material

- 3.4.3 A total of 69 fragments of ceramic building material, weighing 4090 g, was recovered from all trenches. However, the vast majority of the assemblage (62 fragments, 3666g) was recovered from Trench 2 alone. The material was generally soft and abraded and only part of the assemblage could be conclusively identified to type. Of the identifiable fragments roofing tile dominates.

Worked stone

- 3.4.4 A small stone sharpening hone of probable Roman origin was recovered from a fill of a ditch within Trench 2.



Iron nails

- 3.4.5 A small group of iron nails (minimum of 15) was recovered from a cremation deposit (418) excavated within Trench 4. These were partly hand recovered and partly retrieved from the sample of the cremation deposit during processing. The nails are likely to derive from the construction of a box or casket that held the cremation at burial or accompanied this as a grave good or container.

3.5 Palaeoenvironmental summaries

Land and freshwater snails

- 3.5.1 Snails were recovered from three selected ditch fill deposits in Trenches 2 and 41. Both produced similar assemblages with a high diversity of species represented. These were dominated by freshwater species indicative of clean slow-moving water environments with reeds and/or sedges present. A smaller terrestrial element to the assemblages included marsh and floodplain grassland species.

Charred and waterlogged plant remains

- 3.5.2 Samples were recovered from three individual selected contexts within Trenches 4, 21 and 41 for the recovery and assessment of charred and waterlogged plant remains (CPR and WPR). The cremation deposit within Trench 4 produced good quantities of charcoal with only scant remains from other plants indicative of this being derived solely from fuel material selected for the pyre without significant other inclusions.
- 3.5.3 A sample from a ditch fill within Trench 21 produced good quantities of CPR, much of which had become mineralised. The cereal assemblage was dominated by barley with oat and wheat also present. The identifiable remains included detached sprouts and straw fragments indicating charred waste from crop processing. The accompanying weed seed assemblage included species that favour damp meadow habitats.
- 3.5.4 Waterlogged material was noted during excavation of a ditch fill within Trench 41. WPR from a sample of this deposit identified fair to good preservation of both plant and insect remains. The plant remains indicate a disturbed nitrogen-rich habitat such as may be encountered in a yard or animal paddock. The presence of insect remains was noted but these were not identified to species as part of this evaluation.

3.6 Animal and human bone summaries

Animal bone

- 3.6.1 Excluding cremated items, a total of 151 fragments of animal bone weighing 1806 g was recovered from the evaluation of which 44 (29%) were identifiable to taxon. The identifiable animals represented are cattle, sheep/goat and horse. A small number of bones were burnt and a few bones exhibited evidence of gnawing, probably by dogs, though this was fairly minimal suggesting that the remains had been buried relatively quickly. Butchery was visible on a small number of cattle/large-mammal bones, and exclusively comprised chop marks. The fragmented nature of the assemblage from a few contexts also suggested deliberate pre-depositional smashing of the bones, possibly for marrow extraction.
- 3.6.2 In addition to the material summarised above, a small assemblage of cremated animal bone was recovered from the cremation deposit excavated within Trench 4. This comprised items most likely to derive from one individual pig of foetal or neonatal size.



In addition several limb shaft fragments from a medium size bird (fowl-sized) were tentatively identified.

Cremated human remains

- 3.6.3 Cremated human bone was recovered from the cremation burial encountered within Trench 4. The total weight of cremated human bone was 575 g, all of which was white in colour with occasional blue patches. Patterns of warping and cracking indicate that the bone was wet/green (ie fleshed) when burnt. Identifiable fragments (total 36 g or 6%) comprised skull vault, mandible, tooth roots (14 g), ribs and vertebrae (5 g), right scapula, lower arm, lunate, phalanges and scaphoid (11 g), epiphyses and long bone fragments (6 g). The presence of third molar roots indicate an adult individual although it was not possible to determine sex. A small amount of cremated animal bone accompanied the burial.

4 DISCUSSION

4.1 Evaluation aims and results

- 4.1.1 This section considers the results set against the principal aims of the evaluation established at the outset of the investigation and outlined at the beginning of this document. This considers general aims (i) and (ii) as defined in Section 2 (2.1.3) and makes reference to the specific aims with relevance to these sections. The aims outlined in (iii) and (iv) are discussed thereafter in relation to the significance of the findings whilst this document and previous discussions with OCC have fulfilled aim (v) without the requirement further mention below. Consideration in detail of the geophysical survey aims is not undertaken as the primary objective of this exercise was to inform the layout of the trial trenches for the intrusive stage of the evaluation. Where relevant the data acquired from the geophysical survey are included in the discussion.
- 4.1.2 The primary aim of the evaluation was;
- to establish the presence/absence of archaeological remains within the proposal area and to determine the extent, condition, nature, character, quality and date of any archaeological remains present.*
- 4.1.3 Excellent data existed prior to the investigation informing on the presence and likely absence of archaeological remains within the evaluation area. This evidence was largely substantiated during the evaluation with a number of points particularly worthy of note. The negative results from Trenches 43-48 set upon the high ground with an underlying clay geology provide a clear indication that archaeological remains do not extend into this area. This emphasises the significance of the western boundary of the roadside enclosures as investigated in Trench 41, suggesting that this very clearly marks the westward boundary of the activities likely to leave archaeological traces. Of course, approximately 200 m to the north of these trenches linear features (probably boundaries) are present associated with the route heading east-west out of Alchester. However, based upon the relatively little evidence available here it also seems that the southern boundary of these features may mark a limit of that activity. Where these features were encountered in the geophysical survey within the original western corridor proposal, the resultant plots indicate that 'activity' was confined to the area between them.
- 4.1.4 The only other area that lacked convincing evidence for the presence of archaeological remains prior to the fieldwork and following the extensive geophysical survey was that



to the south-east of Alchester between the eastern roadside enclosures and the camp and parade ground. Here the intention was to evaluate and understand the reasons for this and why the roadside enclosures do not extend as far back from the road as those to the west. In the event, these trenches all proved not to contain any remains, although it is noted that the one very localised area where a possible feature was identified was not able to be evaluated. This was in the corner of the field near to Trench 12 where it may still be possible that the north-south aligned boundary known to exist immediately to the north does continue into this area. However, this is relatively unimportant set against the clear lack of any other evidence for activity within this field and the fact that the development should not directly impact upon this small part of the field.

- 4.1.5 The reason for the lack of activity in this area is not immediately obvious. Consideration of the existing boundaries and cropmarks may go some way to suggest an answer. The existing north-south drainage ditch along the western boundary of this field very clearly follows a well defined linear cropmark to the north linking to the eastern defences of Alchester and extending for a short way to the south as encountered in Trench 19 (ditch 1914). These indications strongly support the notion that this is an extant Roman feature marking the eastern boundary to the adjacent roadside enclosures. It is also very likely that the modern sinuous (but generally NE-SW) drainage ditch/channel along the northern part of this field closely follows a significant former Roman boundary with enclosures to the north of it and open fields to the south. Of course, this does not exactly explain why this boundary was established here. Given its proximity, it is tempting to see the location of the early camp and subsequent parade ground as a possible influencing factor, although this does not address the fact that no enclosures extend into this area even after the likely abandonment or disuse of the parade ground, unless this area retained a public function or ownership or was simply used as meadow grazing. Clearly there were no drainage or flood issues as this area appears to have remained dry with no evidence of alluvial deposition and very little soil cover existing to the modern day. This is in stark contrast to that viewed to the north of Gagle Brook in Trenches 2 and 3.
- 4.1.6 Within the eastern side of the evaluation area the results were conclusive in identifying known remains and this study cemented the importance of these. In Trench 4 the presence of the flanking ditches defining the access to the parade ground was confirmed. A date for the construction and infill of these remains elusive as similarly experienced by Sauer (1999a and b) in his more extensive investigations, although the presence of a cremation burial demonstrates that the archaeological remains are not confined to the sterile construction elements of this feature (ditches and quarries). Unfortunately there were no grave goods in association with the burial that may date it although the possibility that other burials are present in the vicinity remains high. Immediately north-east of this were Trenches 2 and 3 which provided considerable evidence for 1st century activity. The road surface remains within Trench 2 are preserved in remarkable condition with associated features. The full character of these was not firmly established due to the relatively limited extent of the excavation here to avoid unnecessary damage. Similarly it was not possible to investigate if the tile present purely reflected secondary material utilised as surfacing or if a roofed structure exists in the near vicinity, although the former seems most likely. Although most of the deposits within this trench including the road surface construction were not dated, the sequence was preserved in pristine condition by a thick layer of alluvium sealing the upper archaeological horizons. Only where the larger road surface was raised to its highest point did this become elevated above the alluvial layer. Here topsoil directly overlay the road surface and associated silt deposits and even here there was no



evidence of any post-Roman agricultural truncation, suggesting that this field has been under meadow since the alluvial accumulation ceased. The quality of these remains and state of preservation has led to a request that they remain *in situ* and that the road design must allow for this. The significance of this road sequence is discussed further below.

- 4.1.7 Trench 3 also produced significant archaeological remains and produced the largest assemblage of pottery from a single trench within this study. Although the archaeology is not easily understood due to the density and complexity of deposits encountered, the stark bias towards conquest period and early Roman pottery forms points to a military or possible pre-conquest origin for these archaeological remains. These deposits are also sealed by an alluvial accumulation providing an excellent state of preservation of the high quality remains.
- 4.1.8 The same factors are, perhaps, less easy to understand for the archaeological remains associated with the activities alongside the Dorchester road. Archaeological remains were encountered here over the expected extent. However, generally these were unremarkable with little range of feature types represented and relatively poor artefact assemblages present. The features generally comprised ditches with clear drainage and boundary definition functions and there were few signs of significant occupation within these. The pottery assemblages encountered suggest a mid Roman date range, although it should be noted that high ground water levels obstructed excavation at several locations which reduced the effective sample of features. However, these initial factors should not outweigh others. This enclosure arrangement has a clear association with the scheduled monument to the north and preservation was also good with limited post-Roman truncation. Palaeoenvironmental evidence was of excellent quality (see discussion of aim (ii) below) and Trench 21 did produce a substantial posthole suggesting that the roadside area may have an increased potential here for the presence of structural remains. The presence of a localised area of limestone rubble along the surface edge of a ditch also indicates an excellent level of preservation and may hint at a possible structure. It is also noted that Trench 20 was 20 m distant from the roadside on the eastern side and not at the immediate road edge where any structural potential is increased.
- 4.1.9 It is clear that the evaluation and existing data define the extent of the archaeological remains with little doubt. The nature and character of these are also reasonably clear with agricultural land divisions associated with the civilian activities of the mid Roman period south of Alchester along the Dorchester road and military, 1st century AD, activities within the eastern part of the evaluation area but not exclusive of the possibility that late pre-conquest deposits may also exist here. The quality and condition of these range from excellent to average with sealed deposits present in some trenches (Trenches 2, 3 and 41) and relatively few disturbed deposits elsewhere generally across the evaluation area. The contributing significance of the palaeoenvironmental preservation is outlined below.
- 4.1.10 The evaluation also principally aimed to;
- establish the ecofactual and environmental potential of archaeological deposits and features. Particular attention will be paid to the recovery and assessment of potential waterlogged deposits/features that may be encountered*
- 4.1.11 Previous investigations largely undertaken by Sauer (eg 2004) have provided remarkable palaeoenvironmental remains and demonstrated that waterlogged conditions survive at relatively high vertical elevations. The current evaluation



confirmed this with WPR recovered in good quantities from a ditch in Trench 41 at an elevation of 60.7 m aOD. Items recovered from these conditions have a clear potential to inform on both the contemporary immediate landscape and that within the slightly broader catchment of pollen accumulation. Although similar deposits were not encountered across the whole of the evaluation area, the potential for these to exist remains high as the bases of several features were not excavated due to high water levels. This evidence is particularly important with regard to the understanding of the apparently otherwise unremarkable areas of archaeology as noted above. The ditch within Trench 41 was part of the enclosure arrangement that lacks any significant defining activities within its interior. However, the presence of plants indicative of disturbed nitrogen-rich habitats allows the interpretation of these as likely stock enclosures.

- 4.1.12 Also with regard to understanding the character and nature of activity within the roadside enclosures, a sample of a ditch fill from Trench 21 produced significant quantities of charred cereals and other plant species indicative of crop processing. Likewise, this demonstrates that arable crop processing was also being undertaken within the fields south of Alchester at roadside locations. This could imply that crops were being gathered here from the broader landscape via the road or, conversely, that crops grown within these enclosures was being processed prior to transporting to the town. Whatever the actual circumstances, good CPR assemblages are present that can clearly inform the understanding of the archaeological deposits present within the evaluation area.
- 4.1.13 In addition rich snail assemblages were noted across a much broader spatial range. The assessed samples similarly demonstrate excellent preservation and provide an indication of the deposition habitats. Clearly many of the ditches functioned as drainage channels carrying clean moving water as opposed to these acting purely drainage ditches with standing water. This was also evident to some degree from the size and sorting of the sediments within the ditches. Combined, the evidence permits the suggestion that the arrangement of Roman ditches reflects active management and straightening of the waterways across the floodplain. This was most evident within Trench 2 where the north-east flanking drainage feature for road surface 2015 was quite clearly an active channel probably canalising the existing stream. The arrangement of boundaries as part of the water management within the floodplain also appears to have continued into the present day where some of the Roman alignments form current field boundaries and active drainage courses.
- 4.1.14 With regard to palaeoenvironmental remains, the evaluation clearly demonstrated the excellent preservation of several significant sources of evidence and that these are likely to be well preserved across the spatial range of archaeological feature types and dates.

4.2 Interpretation and significance

- 4.2.1 The results have largely been interpreted alongside the presentation of evidence and with reference to the aims as discussed above. However, this section draws together the significant parts of the site as a whole and considers them against the broader background of Alchester and its environs. This is particularly relevant for assessment of the significance of the remains encountered. The most notable features with regard to this are those encountered in Trench 2 and the implication these have for the understanding not only of the primary road network but also of the later development of



the civilian settlement and activities including the establishment of enclosures adjacent to the Dorchester road south of the town.

- 4.2.2 The road surfaces revealed in Trench 2 were not closely dated, although provisional data from excavations undertaken by Sauer (1999a and b) close to the current Trench 2 suggest a Claudio-Neronian date for large sherds of pottery recovered from the base of the western ditch that was the equivalent of ditch 2019 within this evaluation. It has long been proposed that this road alignment did exist and this was confirmed by Sauer's investigations, although the route of this road to the south-east past Merton Road has never been established with any certainty and there are only faint traces of possible alignments within the modern landscape. However, it is suggested with some degree of likelihood, that this is an early road that skirted around Otmoor to avoid the low ground before linking to the straight alignment to Dorchester. This may well be the case if the construction date after 95 AD for the small wooden bridge at Fencott with Murcott is an accurate means of dating the direct north-south route of the Dorchester road across Otmoor and into the southern entrance at Alchester (Chambers 1987). The mid Roman pottery dates from the trenches that investigated the Dorchester roadside enclosures certainly seem to support this. Concentrations of early material were confined to Trenches 2 and 3 with only a smaller element of late 1st century AD material present in Trench 21 adjacent to the Dorchester road.
- 4.2.3 Another particularly significant observation with regard to the road surfaces in Trench 2 is the direct correlation to Sauer's excavation (1999a and b). Surface 2015 and the associated flanking ditch and channel 2019 and 2017 are, without doubt, those investigated by Sauer with a road surface c 8 m wide, or just over 9 m in this case, and sealed by a moderate depth of alluvial sedimentation. The likelihood of the north-east drainage channel actually being that of a diverted or active stream is suggested by Sauer (1999b, 62) and is very much supported by the current evaluation and its analysis of the snail assemblage. The feature profile, recorded sediment sequence and snail assemblage leave little doubt on this matter. However, the substantial difference between the evidence encountered within the evaluation and that recorded by Sauer is the presence of a much larger (16 m wide) road (2011/2012) immediately to the south-west of the flanking ditch 2019 that was constructed at a much higher elevation and remained above the level of alluvial deposition. The stratigraphic relationships suggest that this may have been partly contemporary with the lower surface 2015. Also, a securely recovered sherd of samian ware from within the channel fill suggest that this was open into the 2nd century and that the alluvial deposition was a much later occurrence and therefore not the primary reason for moving the road to the south-west. Other traces of the larger road have not been identified and it is not known if this continues the alignment of the smaller road and acted as a replacement once frequent inundation had started. The presence of the 2nd century pottery makes this even more difficult to understand as it is certain that the direct north-south alignment of the Dorchester road was in existence by that date.
- 4.2.4 It is quite clear from this discussion that the remains encountered within Trench 2 make a significant contribution to the understanding of the broader pattern of military and post-military development of the scheduled monument and its surroundings. The presence of large quantities of 1st century AD material within Trench 3 that may also have an immediate pre-conquest element only underlines the importance of this particular area to that of the settlement as a whole. This may also be extended to the vicinity of Trench 4 and the access to the parade ground, although the archaeological remains are maybe less well preserved at this point. The presence of a cremation burial here in a roadside context does raise the possibility that similar features may be



present with a specific military association. Such a specific association is normally very difficult to define and, if this was indeed the case, should be considered as particularly significant. However, it is worth noting that the cropmark evidence for this area (See Sauer 1999a, Plate XXIV) is particularly clear and there is no suggestion of even a relatively small defined cemetery.

- 4.2.5 One final point worth consideration with regard to the access to the parade ground is the meeting of this with the current field drainage boundary. It has already been suggested that this was a boundary that may have been established early in the Roman period as none of the enclosures to the north extend into the field to the south. If this was the case then a crossing would have been needed to gain access towards the parade ground. Certainly the evidence of water management during all periods is obvious and the larger ditches and channels that crossed the floodplain would have required crossing points. It may well be that the parade ground access did cross the drainage ditch or channel at this point and, as a result, holds a high potential for the presence of significant waterlogged structures.



APPENDIX A. TRENCH SUMMARY DESCRIPTIONS AND CONTEXT INVENTORY

Trench 1						
General description				Orientation	N-S and NW-SE	
Trench 1 was positioned to avoid overhead power lines and underground services and arranged in a slight dog-leg manner. This trench contained four modern features cut through an alluvial deposit. A sondage was machine excavated to investigate the alluvial layer and underlying alluvial/channel deposits. Undisturbed clay or sand and gravel was not identified within this trench. The paddock turf was at c 63.0 m aOD.				Avg. depth (m)	0.38 m	
				Width (m)	1.5 m	
				Length (m)	30 m	
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
1000	Layer	-	0.38	Paddock turf and topsoil	-	-
1001	Layer	-	0.22	Alluvium	-	-
1002	Cut	1.66	0.64	Modern service trench	-	-
1003	Cut	0.64	0.64	Backfill of 1002	-	-
1004	Cut	0.3	0.64	Modern posthole	-	-
1005	Deposit	-		Fill of 1004 unexcavated	-	-
1006	Cut	1.65		Modern linear feature	-	-
1007	Deposit			Fill of 1006 unexcavated	-	-
1008	Cut	2.5		Modern linear feature	-	-
1009	Deposit	-		Fill of 1009 unexcavated	-	-
1010	Geology			Not encountered	-	-
1011	Layer	0.14		Alluvium	-	-
1012	Layer	0.12		Silt and gravel overbank/channel fill	-	-
1013	Layer	0.16		Silt and gravel overbank/channel fill	-	-
1014	Layer	0.04		Silt and gravel overbank/channel fill	-	-
1015	Layer			Blue/grey silt clay alluvium/channel fill	-	-



Trench 2						
General description				Orientation	NE-SW	
Trench 2 was targeted on the known alignment of a Roman road. At least two phases of road surface (2011 etc and 2015) were identified with roadside drainage ditches and a possible canalised water course along the north-east edge of the lower road surface. A surfaced area within a shallow hollow was also identified adjacent to the western edge of the road. The higher road surface was raised compared to the surrounding contemporary levels with only thin soils sealing this. Thicker alluvial deposits sealed the features beyond. Undisturbed sand and gravel was not clearly identified. The paddock turf was at c 62.8 m aOD.				Avg. depth (m)	0.38 m	
				Width (m)	1.5 m	
				Length (m)	60 m	
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
2000	Layer	-	0.2-0.38	Paddock turf and topsoil	-	-
2001	Layer	-	0.5	Alluvium sealing road surface 2015	-	-
2002	Layer		0.32	Clay silting/ eroded alluvium	-	-
2003	Layer	2.64	0.32	Alluvial clay silting over the former channel 2017	-	-
2004	Layer	0.66	0.22	Sand/silt alluvial/slow moving water deposit	-	-
2005	Layer	1.04	0.12	Water deposited sand over the upper part of channel 2017	Pottery 8, 42 g CBM 2, 42 g	LIA/early Roman
2006	Layer	3.4	0.28	Alluvial fill within the upper part of 2017	-	-
2007	Layer	1.2	0.36	Sand overbank accumulation along the edge of channel 2017	-	-
2008	Layer	2.38	0.22	Fine slow water deposited sediment within 2017	CBM 1, 286 g	-
2009	Layer	2.84	0.26	Silting deposit fill of 2017	CBM 1, 195 g Animal bone 6, 47 g	Roman
2010	Deposit	1.12	0.12	Silting deposit fill of 2017	Pottery 1, 36 g	AD 120-200
2011	Layer	16		Limestone road surface	-	-
2012	Layer			Same as 2011	-	-
2013	Layer			Redeposited sand, gravel and silt build up for raised road surface 2011etc	-	-
2014	Layer			Silting deposit overlying road surface 2012	-	-
2015	Layer	9.5		Limestone road surface	-	-
2016	Deposit		0.12	Sand fill within 2017	-	-
2017	Cut	3.5+	0.7+	Channel	-	-
2018	Deposit	0.5	0.04	Localised sand deposit within 2017	-	-
2019	Cut	1.68	0.68	Roadside drainage ditch	-	-
2020	Fill		0.22	Primary sand and gravel fill of 2019	-	-



2021	Fill	0.72	0.12	Secondary silting fill of 2019	-	-
2022	Fill			Upper alluvial fill of 2019	Pottery 1, 2 g CBM 3, 72 g Animal bone 1, 17 g	1st/2nd c AD
2023	Deposit			Not excavated. Layer or fill of a feature or channel	-	-
2024	Deposit			Not excavated. Layer or fill of a feature or channel. Charcoal inclusions noted.	-	-
2025	Deposit			Not excavated. Probable redeposited gravel fill of a feature or channel.	-	-
2026	Deposit			Not excavated. Clayey deposit. Probably the upper fill of a feature	Pottery 3, 24 g CBM 1, 211 g	LIA/early Roman
2027	Deposit			Not excavated. Likely feature fill or layer adjacent to the SW edge of road surface 2011	-	-
2028	Cut	4.4	0.34	Shallow hollow or undulation containing surface 2029	-	-
2029	Layer	1.4	0.3	Limestone surface within 2028 with fragments of tile noted.	-	-
2030	Fill		0.18	Silt and clay deposit sealing surface 2028	-	-
2031	Fill		0.08	Upper silting deposit within hollow 2028/surface 2029	Pottery 7, 184 g CBM 35, 1639 g	AD 120-250
2032	Cut			Same as 2028	-	-
2033	Fill	1.3	0.28	Same as 2030 (fill of 2032)	-	-
2034	Fill	1.38	0.1	Same as 2031 (fill of 2032)	Pottery 23, 345 g CBM 13, 1101 g Animal bone 3, 48 g Stone hone 1, 46 g	AD 120-250
2035	Layer	1.65	0.14	Clayey deposit around surface 2036	-	-
2036	Layer	1.65		Localised limestone surface	-	-
2037	Layer			Same as 2014	-	-
2038	Layer	1.65		Same as 2013	-	-
2039	Layer		0.05	Thin layer of blue/grey alluvial silt and clay	CBM 6, 121 g Animal bone 11, 99 g	Roman
2040	Layer		0.08	Sandy silt filling a shallow undulation SW of 2036	Pottery 9, 65 g Animal bone 5, 245 g	Mid-late 1st c AD
2041	Layer		0.2	Probable alluvial clay deposit	-	-
2042	Layer			Sand fill within 2017	-	-
2043	Geology			Sand and gravel	-	-



Trench 3						
General description				Orientation	NE-SW	
A series of at least seven linear ditches and associated alluvial deposits were recorded in Trench 3. The full sequence of deposits and arrangement of features was difficult to understand within the limits of the trench. Surface of paddock turf was at c 62.7 m aOD with the underlying sand and gravel at c 62.25 m aOD although very little of the gravel surface was evident within the trench due to the density of features.				Avg. depth (m)	0.6 m	
				Width (m)	1.5 m	
				Length (m)	30 m	
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
3000	Layer		0.38	Paddock turf and topsoil	-	-
3001	Layer		0.32	Alluvium	-	-
3002	Fill		0.44	Single clay, sand and gravel fill of 3004	Pottery 24, 413 g Animal bone 7, 46 g	Mid-late 1st c AD
3003	Fill	1.65	0.7	Upper fill of 3005. Probable alluvial origin	Pottery 14,469 g Animal bone 10, 10 g	Mid-late 1st c AD
3004	Cut	1.65	0.44	Ditch aligned E-W	-	-
3005	Cut	1.65	0.72	Ditch aligned E-W	-	-
3006	Fill	1.65	0.65	Primary silting fill of 3005	-	-
3007	Fill	1.1	0.1	Final silting fill of 3010	Pottery 13, 196 g	LIA/early Roman
3008	Fill	1.5	0.12	Secondary silting fill of 3010	Pottery 10, 107 g	LIA/early Roman
3009	Fill	0.9	0.06	Fine sediment primary silting fill of 3009	Pottery 3, 32 g	Roman
3010	Cut	0.5	0.24	Ditch aligned E-W	-	-
3011	Fill	1.34	0.1	Final silting fill of 3025	Pottery 23, 375 g Animal bone 6, 62 g	1st c AD
3012	Fill	1.16	0.14	Silting fill in the upper part of 3025	-	-
3013	Fill	1.5	0.18	Fine sediment clay and silt fill within the upper part of 3025	Pottery 22, 183 g Animal bone 11, 79 g Glass 1, 2g	Mid-late 1st c AD
3014	Fill	0.74	0.1	Fine sediment clay and silt fill within the upper part of 3025	-	-
3015	Fill	0.9	0.16	Fine sediment clay and silt fill within 3025	-	-
3016	Fill	0.7	0.1	Silting fill of 3025	-	-
3017	Fill	0.7	0.08	Secondary silting fill of 3025	Pottery 11, 116 g Animal bone 6, 89 g	LIA/early Roman
3018	Fill	0.6	0.06	Single silting fill of ditch 3033. Possibly the same as 3029.	Pottery 16, 285 g Animal bone 3, 49 g	Mid-late 1st c AD
3019	Fill	0.24	0.12	Primary fine sediment silting fill of 3025	Pottery 3, 125 g Animal bone 11, 510 g	LIA/early Roman
3020	Cut	1.65	0.32	Ditch aligned N-S	-	-



3021	Fill	1.65	0.3	Primary fill of 3020	Pottery 9, 153 g Animal bone 1, 37 g	Mid-late 1st c AD
3022	Layer		0.12	Possible upcast debris from 3020	-	-
3023	Fill	1.65	0.32	Upper fill of 3020	Pottery 8, 109 g Animal bone 1, 2 g	Mid-late 1st c AD
3024	Layer	1.65	0.12	Alluvium	-	-
3025	Cut			Ditch aligned N-S	-	-
3026	Cut			Ditch aligned N-S unexcavated	-	-
3027	Fill			Fill of 3026 unexcavated	-	-
3028	Layer			Possible alluvial deposit or unexcavated fill of a ditch	-	-
3029	Layer			Possible alluvial deposit or unexcavated fill of 3033. Possibly the same as 3018.	-	-
3030	Layer			Unexcavated deposit within the top of ditch 3025	-	-
3031	Geology			Sand and gravel	-	-
3032	Layer			Probable alluvial soil horizon	-	-
3033	Cut			Ditch aligned N-S		

Trench 4						
General description				Orientation	NE-SW	
Trench 4 targeted and confirmed the known alignment of the access route to the Roman parade ground. This had flanking drainage ditches although no clear evidence of a track surface survived between the ditches. A possible quarry pit was identified at the east of the track. A pit containing a cremation was cut into the top of the infilled quarry pit. This may have been contained within a wooden box and the cremated adult remains (sex unknown) included cremated neonatal pig remains and possible bird/fowl bones. Surface of modern pasture was at c 62.25-62.7 m aOD with the surface of the underlying sand and gravel at c 61.9-62.1 m aOD. The trench slopes up gently from west to east.				Avg. depth (m)	0.26 m	
				Width (m)	1.5 m	
				Length (m)	30 m	
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds (no. weight)	date
400	Layer		0.26	Pasture turf and topsoil	-	-
401	Layer			Subsoil/buried ploughsoil	-	-
402	Cut	1.5	0.56	Possible quarry pit	-	-
403	Fill		0.2	Primary fill of 4002	-	-
404	Fill		0.18	Secondary silting of 402	-	-
405	Fill		0.5	Backfill and upper deposit within 402	Pottery 15, 74 g CBM 2, 272 g Animal bone 3, 4 g	AD 120-250
406	Cut	1.8	0.7	Eastern flanking ditch to parade ground access	-	-



Trench 4						
407	Fill		0.37	Basal silting/erosion fill of 406	Pottery 4, 15 g Animal bone 29, 58 g Slag 9, 111 g	Roman
408	Fill		0.38	Silting fill of 406	-	-
409	Fill		0.15	Gravel erosion fill within the upper part of 406	-	-
410	Fill		0.1	Uppermost silting fill of 406	Pottery 3, 4 g Animal bone 1, 40 g	Roman
411	Cut	2.8	0.8	Western flanking ditch to parade ground access	-	-
412	Fill		0.1	Slumping fall along the eastern edge of 411	-	-
413	Fill		0.24	Primary laminated silting fill of 411	Pottery 8, 147 g	AD 50-250
414	Fill		0.1	Secondary sand erosion silting fill of 411	-	-
415	Fill		0.24	Fine silting fill of 411	-	-
416	Fill		0.28	Uppermost fine silting fill of 411	Pottery 1, 8 g	Roman
417	Cut	0.48	0.12	Cremation pit	-	-
418	Fill		0.12	Cremation deposit fill of 417	Cremated human bone (575 g) Cremated animal bone 62, 11 g Iron nails (x15)	Roman
419	Cut	1.5	0.15	Treehole or shallow quarry	-	-
420	Fill	1.8	0.31	Slumping erosion fill along the western edge of 406	-	-
421	Fill	1.8	0.48	Primary slumping erosion fill along eastern edge of 406	-	-
422	Fill	1.5	0.15	Single sterile fill of 419	-	-
423	Geology			Sand and gravel	-	-
424	Layer	6.7	0.01	Possible track surface		

Trench 5							
General description				Orientation		NE-SW	
A single possible pit was identified with the majority of the trench otherwise occupied by shallow natural (peri glacial) features infilled with sterile blue-grey clay. These were sample excavated to investigate their origin and to inform the excavation of features within the remaining trenches. Surface of modern pasture was at c 62.0 m aOD with the surface of the underlying sand and gravel at c 61.7-61.55 m aOD.				Avg. depth (m)		0.45 m	
				Width (m)		1.5 m	
				Length (m)		30 m	
Contexts							
context no	type	Width (m)	Depth (m)	comment	finds	date	
5000	Layer		0.3	Pasture turf and topsoil	-	-	
5001	Layer		0.1	Subsoil/buried ploughsoil	-	-	



5002	Geology			Sand and gravel	-	-
5003	Layer			Blue-grey clay fill of 5004	-	-
5004	Cut	5	0.26	Geological (periglacial) feature	-	-
5005	Fill		0.3	Uppermost silty fill of 5007	-	-
5006	Fill		0.24	Blue-grey clay fill of 5007	-	-
5007	Cut	1.38	0.5	Probable geological (periglacial) feature	-	-
5008	Fill		0.3	Single fill of 5009	Pottery 3, 17 g	Mid-late 1st c AD
5009	Cut	2	0.3	Possible shallow quarry/pit	-	-

Trench 6						
General description				Orientation		NE-SW
No archaeological features or deposits present. Sterile blue-grey clay-filled natural features present at the surface of the sand and gravel. Surface of modern pasture was at c 61.8-61.6 m aOD with the surface of the underlying sand and gravel at c 61.45-61.25 m aOD sloping gently down from the east to west.				Avg. depth (m)		0.30 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
6000	Layer		0.3	Pasture turf and topsoil	-	-
6001	Geology			Gravel	-	-

Trench 7						
General description				Orientation		NE-SW
No archaeological features or deposits present. Sterile blue-grey clay-filled natural features present at the surface of the sand and gravel. Surface of modern pasture was at c 61.5 m aOD with the surface of the underlying sand and gravel at c 61.2 m aOD.				Avg. depth (m)		0.30 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
7000	Layer		0.3	Pasture turf and topsoil	-	-
7001	Geology			Sand and gravel	-	-

Trench 8						
General description				Orientation		NNE-SSW
No archaeological features or deposits present. Sterile blue-grey clay-filled natural features present at the surface of the sand and gravel. Surface of modern pasture was at c 61.4 m aOD with the surface of the underlying sand and gravel at c 61.1 m aOD.				Avg. depth (m)		0.30 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
8000	Layer		0.3	Pasture turf and topsoil	-	-



8001	Geology			Sand and gravel	-	-
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Trench 9						
General description				Orientation		NW-SE
No archaeological features or deposits present. Sterile blue-grey clay-filled natural features present at the surface of the sand and gravel. Surface of modern pasture was at c 61.4 m aOD with the surface of the underlying sand and gravel at c 61.1 m aOD.				Avg. depth (m)		0.30 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
9000	Layer		0.3	Pasture turf and topsoil	-	-
9001	Geology			Sand and gravel	-	-

Trench 10						
General description				Orientation		NNE-SSW
A single linear ditch aligned N-S was identified and excavated. The relatively loose and humic main fill of the shallow ditch suggests that it was of historic (recent) origin rather than Roman. Similar to ditch 12004 in Trench 12. Surface of modern pasture was at c 61.35 m aOD with the surface of the underlying sand and gravel at c 61.05 m aOD.				Avg. depth (m)		0.30 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
10000	Layer		0.3	Pasture turf and topsoil	-	-
10001	Geology			Sand and gravel	-	-
10002	Cut	1.1	0.3	Linear ditch aligned N-S	-	-
10003	Fill		0.2	Sterile main fill of 10002	-	-
10004	Fill		0.1	Primary silting fill of 10002	-	-

Trench 11						
General description				Orientation		NW-SE
No archaeological features or deposits present. Shallow sterile blue-grey clay-filled natural features present at the surface of the sand and gravel. Surface of modern pasture was at c 61.3 m aOD with the surface of the underlying sand and gravel at c 61.0 m aOD.				Avg. depth (m)		0.30 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
11000	Layer		0.3	Pasture turf and topsoil	-	-
11001	Geology			Sand and gravel	-	-



Trench 12						
General description				Orientation		E-W
A single linear ditch aligned N-S was identified and excavated. The relatively loose and humic fill of the shallow ditch suggests that it was of historic (recent) origin rather than Roman. Similar and parallel to ditch 10002 in Trench 10. The topography is very gently sloped along the line of Trench 12 with the surface of modern pasture at c 61.3 m aOD at the east and 61.2 m aOD at the west and the surface of the underlying sand and gravel accordingly at c 61.0 to 60.9 m aOD.				Avg. depth (m)		0.30 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
12001	Layer		0.25	Pasture turf and topsoil	-	-
12002	Layer		0.05	Thin contact zone between topsoil and the sand and gravel	-	-
12003	Geology			Sand and gravel	-	-
12004	Cut	1.2	0.25	Linear ditch aligned N-S	-	-
12005	Fill		0.25	Fill of 12004	-	-

Trench 13						
General description				Orientation		NNW-SSE
No archaeological features or deposits present. Shallow sterile blue-grey clay-filled natural features present at the surface of the sand and gravel. Surface of modern pasture was at c 61.2 m aOD with the surface of the underlying sand and gravel at c 60.85 m aOD.				Avg. depth (m)		0.30 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
13000	Layer		0.3	Pasture turf and topsoil	-	-
13001	Geology			Sand and gravel	-	-

Trench 14						
General description				Orientation		N-S
No archaeological features or deposits present. Shallow sterile blue-grey clay-filled natural features present at the surface of the sand and gravel. Surface of modern pasture was at c 61.25 m aOD with the surface of the underlying sand and gravel at c 60.9 m aOD.				Avg. depth (m)		0.30 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
14000	Layer		0.3	Pasture turf and topsoil	-	-
14001	Geology			Sand and gravel	-	-



Trench 15						
General description				Orientation		E-W
No archaeological features or deposits present. Shallow sterile blue-grey clay-filled natural features present at the surface of the sand and gravel. Surface of modern pasture was at c 61.2 m aOD with the surface of the underlying sand and gravel at c 60.9 m aOD.				Avg. depth (m)		0.30 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
15000	Layer		0.3	Pasture turf and topsoil	-	-
15001	Geology			Sand and gravel	-	-

Trench 16						
General description				Orientation		N-S
No archaeological features or deposits present. Shallow sterile blue-grey clay-filled natural features present at the surface of the sand and gravel. Surface of modern pasture was at c 61.1 m aOD with the surface of the underlying sand and gravel at c 60.8 m aOD.				Avg. depth (m)		0.30 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
16000	Layer		0.3	Pasture turf and topsoil	-	-
16001	Geology			Sand and gravel	-	-

Trench 17						
General description				Orientation		NNE-SSW
No archaeological features or deposits present. Shallow sterile blue-grey clay-filled natural features present at the surface of the sand and gravel. Surface of modern pasture was at c 61.05 m aOD with the surface of the underlying sand and gravel at c 60.7 m aOD.				Avg. depth (m)		0.30 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
17000	Layer		0.3	Pasture turf and topsoil	-	-
17001	Geology			Sand and gravel	-	-

Trench 18						
General description				Orientation		NNE-SSW
No archaeological features or deposits present. Shallow sterile blue-grey clay-filled natural features present at the surface of the sand and gravel. Surface of modern pasture was at c 61.0 m aOD with the surface of the underlying sand and gravel at c 60.7 m aOD.				Avg. depth (m)		0.30 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
18000	Layer		0.3	Pasture turf and topsoil	-	-



18001	Geology			Sand and gravel	-	-
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Trench 19							
General description				Orientation		ENE-WSW	
Trench 19 identified the continuation of a linear cropmark as a sequence of three intercutting ditches. A previously unknown ditch was also identified along with the disturbed alignment of a further ditch suggested by the cropmark evidence. A shallow possible quarry was recorded. Surface of modern pasture was at c 61.0 m aOD with the surface of the underlying sand and gravel at c 60.75 m aOD.				Avg. depth (m)		0.30 m	
				Width (m)		1.5 m	
				Length (m)		50 m	
Contexts							
context no	type	Width (m)	Depth (m)	comment	finds	date	
1900	Layer		0.34	Pasture turf and topsoil	-	-	
1901	Cut	2	0.5	Ditch aligned NNW-SSE	-	-	
1902	Fill		0.3	Upper silting fill of 1901	-	-	
1903	Fill		0.3	Secondary erosion fill of 1901	-	-	
1904	Fill			Primary silting fill of 1901	-	-	
1905	Cut		0.3	Possible ditch or bioturbation	-	-	
1906	Fill		0.24	Upper fill of 1905	-	-	
1907	Fill		0.3	Primary fill of 1905	-	-	
1908	Cut	0.4	0.18	Primary ditch aligned N-S	-	-	
1909	Fill		0.18	Single silting fill of 1908	-	-	
1910	Cut	1.0	0.44	Ditch aligned N-S	-	-	
1911	Fill		0.16	Primary silting fill of 1910	-	-	
1912	Fill		0.16	Secondary slumping fill of 1910	-	-	
1913	Fill		0.26	Upper silting fill of 1910	-	-	
1914	Cut	1.5	0.38	Ditch aligned N-S	-	-	
1915	Fill		0.1	Primary silting fill of 1914	-	-	
1916	Fill		0.3	Upper silting fill of 1914	-	-	
1917	Cut	4.5	0.53	Possible quarry pit	-	-	
1918	Fill		0.2	Primary fill of 1917	-	-	
1919	Fill		0.36	Upper silting fill of 1917	-	-	
1920	Geology			Sand and gravel	-	-	



Trench 20						
General description				Orientation		ENE-WSW
Trench 20 targeted the roadside area east of the Dorchester-Alchester road. However, the trench was moved away from road margin due to the proximity of an active badger sett. Two archaeological features were identified; a shallow possible quarry and a pit. Surface of modern pasture was at c 60.8-61.0 m aOD with the surface of the underlying sand and gravel at c 60.6-60.7 m aOD sloping down gently from the east to the west.				Avg. depth (m)		0.24 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
20001	Layer		0.3	Pasture turf and topsoil	-	-
20002	Cut	1.22	0.46	Pit	-	-
20003	Fill		0.2	Primary fill of 20002	Animal bone 5, 6 g	-
20004	Fill		0.28	Secondary fill of 20002	-	-
20005	Cut	3.9	0.3	?Quarry pit	-	-
20006	Fill		0.08	Upper fill of 20002	-	-
20007	Fill		0.12	Upper fill of 20005	Pottery 2, 43 g	Roman
20008	Fill		0.1	Primary fill of 20005	-	-
20009	Geology			Sand and gravel	-	-

Trench 21						
General description				Orientation		N-S
Trench 21 targeted and confirmed two parallel cropmark ditches aligned ENE-WSW. Of these ditch 21002=23007=25002 and ditch 21007=23017. An additional sequence of two intercutting ditches also parallel and one of which terminated within the trench were also investigated. Of these ditch 21011 may have had a small bank revetting stone structure along one surface edge. The height of the water table affected the excavation within this trench. A posthole and a large shallow probable quarry pit was also investigated. Surface of modern pasture was at c 61.1 m aOD with the surface of the underlying sand and gravel at c 60.75 m aOD.				Avg. depth (m)		0.38 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
21000	Layer	-	0.3	Pasture turf and topsoil	-	-
21001	Layer	-	0.12	Subsoil/buried ploughsoil	-	-
21002	Cut	2.8	0.5	Ditch aligned E-W	-	-
21003	Fill		0.2	Primary silting of 21002	Pottery 13,232 g	AD 50-120
21004	Fill		0.2	Slump erosion fill of 21002	-	-
21005	Fill		0.2	Secondary silting fill of 21002	-	-
21006	Fill		0.28	Upper silting fill of 21002	-	-
21007	Cut	1.7	0.34	Ditch aligned ENE-WSW	-	-
21008	Fill		0.16	Primary erosion fill of 21007	-	-



21009	Fill		0.2	Secondary silting fill of 20007	-	-
21010	Fill		0.14	Upper silting fill of 21007	Pottery 4, 130 g CBM 1, 8 g Animal bone 1, 19 g	AD 50-250
21011	Cut	1.96	0.4	Ditch aligned ENE-WSW	-	-
21012	Fill		0.22	CPR rich fill of 21011	Pottery 8, 93 g Animal bone 1, 7 g	2nd c AD
21013	Fill		0.08	Silting fill of 21011	-	-
21014	Fill		0.26	Gravel erosion fill of 21011	Pottery 6, 109 g	?2nd c AD+
21015	Fill		0.2	Silting fill of 21011	Pottery 12, 281 g	Early Roman
21016	Cut	0.64	0.26	Ditch terminal	-	-
21017	Fill		0.06	Primary erosion fill of 21016	-	-
21018	Fill		0.18	Secondary silting fill of 21016	Pottery 1, 27 g CBM 1, 92 g	Roman
21019	Fill		0.08	Upper silting fill of 21016	-	-
21020	Cut	6.1	0.26	Large shallow quarry	-	-
21021	Fill		0.26	Single silting fill of 21020	Pottery 20, 236 g CBM 2, 9 g	Mid-late 1st c AD
21022	Cut	0.66	0.24	Posthole	-	-
21023	Fill		0.42	Primary gravel fill of 21022	-	-
21024	Fill		0.2	Upper silting fill of 21022	Pottery 3, 31 g	Mid-late 1st c AD
21025	Fill			Upper of 21011	Pottery 11, 426 g Animal bone 3, 30 g	2nd c AD
21026	Geology			Sand and gravel	-	-
21027	Structure	0.3	0.25	Low stone wall or revetment	-	-

Trench 22							
General description				Orientation		ENE-WSW	
Trench 22 was targeted upon three linear cropmarks of which only one appeared to be confirmed by the resistivity survey although this was further east than plotted from the cropmark. Excavation identified this ditch (22003) aligned N-S along with an additional ditch to the east that only approximately corresponds to the cropmark data. Shallow geological features that had an appearance similar to the ditches at surface level were also investigated. Surface of modern pasture was at c 61.0 m aOD with the surface of the underlying sand and gravel at c 60.7 m aOD.				Avg. depth (m)		0.38 m	
				Width (m)		1.5 m	
				Length (m)		30 m	
Contexts							
context no	type	Width (m)	Depth (m)	comment	finds	date	
22000	Layer		0.38	Pasture turf and topsoil	-	-	
22001	Layer		0.12	Subsoil/buried ploughsoil	-	-	
22002	Geology			Sand and gravel	-	-	
22003	Cut	2.5	0.78	Ditch aligned N-S	-	-	
22004	Fill		0.15	Final silting fill of 22003	Pottery 14, 49 g CBM 1, 43 g Animal bone 1, 15 g	Late 1st c AD	



22005	Fill		0.3	Upper silting fill of 22003	-	-
22006	Fill		0.4	Silting fill of 22003	-	-
22007	Fill		0.2	Possible bank erosion fill of 22003	-	-
22008	Fill		0.18	Possible bank erosion fill of 22003	-	-
22009	Fill		0.12	Primary silt of 22003	-	-
22010	Fill		0.21	Single sterile fill of 22011	-	-
22011	Cut	1.5	0.21	Probable natural feature	-	-
22012	Fill	0.64	0.1	Fill of 22014	-	-
22013	Fill		0.16	Fill of 22014	-	-
22014	Cut	0.64	0.26	Probable natural feature	-	-
22015	Cut	1.2	0.58	Ditch aligned N-S	-	-
22016	Fill		0.28	Primary fill of 22015	-	-
22017	Fill		0.14	Secondary fill of 22015	-	-
22018	Fill		0.3	Upper fill of 22015	-	-

Trench 23							
General description				Orientation		NNW-SSE	
Trench 23 targeted, identified and investigated parallel linear ditches. Ditch 23007 = 21002 = 25002 and ditch 23017 is the same as 21007. Surface of modern pasture was at c 61.1 m aOD with the surface of the underlying sand and gravel at c 60.8 m aOD.				Avg. depth (m)		0.26 m	
				Width (m)		1.5 m	
				Length (m)		30 m	
Contexts							
context no	type	Width (m)	Depth (m)	comment	finds	date	
23000	Layer		0.34	Pasture turf and topsoil	-	-	
23001	Fill		0.16	Upper silting fill of 23007	-	-	
23002	Fill		0.15	Silting fill of 23007	-	-	
23003	Fill		0.38	Secondary slumping erosional fill of 23007	-	-	
23004	Fill		0.28	Primary silting and slumping fill of 23007	-	-	
23005	Fill		0.2	Primary fill of 23012	-	-	
23006	Fill		0.26	Secondary fill of 23012	-	-	
23007	Cut	2.3	0.58	Ditch aligned WSW-ENE	-	-	
23008	Fill		0.08	Fill of 23012	-	-	
23009	Fill		0.18	Silting fill of 23012	-	-	
23010	Fill		0.6	Silting fill of 23012	-	-	
23011	Fill		0.32	Upper fill of 23012	-	-	
23012	Cut	1.9	0.6	Possible ditch aligned WSW-ENE	-	-	
23013	Geology			Sand and gravel	-	-	
23014	Fill		0.08	Upper silting fill of 23017	-	-	



23015	Fill		0.2	Silting fill of 23017	-	-
23016	Fill		0.3	Secondary slumping erosional fill of 23017	-	-
23017	Cut	1.4	0.4	Ditch aligned WSW-ENE	-	-
23018	Fill		0.2	Primary silting and slumping fill of 23017	-	-

Trench 24						
General description				Orientation		E-W
No archaeological features or deposits identified. Sterile clay/silt-filled natural features present at the surface of the sand and gravel and sample excavated to confirm the interpretation. Surface of modern pasture was at c 61.2 m aOD with the underlying sand and gravel at c 60.9 m aOD.				Avg. depth (m)		0.26 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
2400	Layer		0.32	Pasture turf and topsoil	-	-
2401	Cut		0.45	Natural feature	-	-
2402	Fill			Fill of 2401	-	-
2403	Fill			Fill of 2401	-	-
2404	Fill			Fill of 2401	-	-
2405	Fill			Fill of 2401	-	-
2406	Fill			Fill of 2401	-	-
2407	Geology			Sand and gravel	-	-

Trench 25						
General description				Orientation		NNW-SSE
Trench 25 targeted, identified and investigated a linear ditch. Only the upper 0.3 m of this ditch was excavated due to the high water table levels. Same as ditches 21002 and 23007. Surface of modern pasture was at c 61.0 m aOD with the underlying sand and gravel at c 60.7 m aOD.				Avg. depth (m)		0.26 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
25000	Layer		0.3	Pasture turf and topsoil	-	-
25001	Layer		0.08	Subsoil	-	-
25002	Cut	2.24	0.3	Ditch aligned ENE-WSW		
25003	Fill		0.3	Upper fill of 25002		
25004		Geology		Sand and Gravel		



Trench 26						
General description				Orientation		NW-SE
No archaeological features or deposits identified. Sterile clay/silt-filled natural features present at the surface of the sand and gravel. Surface of modern pasture was at c 61.1 m aOD with the surface of the underlying sand and gravel at c 60.8 m aOD.				Avg. depth (m)		0.26 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
26000	Layer		0.3	Pasture turf and topsoil	-	-
26001	Geology			Sand and gravel	-	-

Trench 27						
General description				Orientation		N-S
Trench 27 targeted, confirmed and excavated a ditch aligned E-W. Not possible to investigate the full depth of the ditch due to high ground water levels flooding the feature upon excavation. Surface of modern pasture was at c 61.2 m aOD with the underlying sand and gravel at c 60.9 m aOD.				Avg. depth (m)		0.26 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
2700	Layer		0.32	Pasture turf and topsoil	-	-
2701	Cut	2.4		Ditch aligned E-W	-	-
2702	Fill			Silting fill of 2701	-	-
2703	Fill		0.3	Upper silting of 2701	-	-
2704	Geology			Sand and gravel	-	-

Trench 28						
General description				Orientation		NE-SW
Trench 28 identified a probable ditch aligned NW-SE although unexcavated due to the flooding of the trench. Surface of modern ploughsoil was at c 61.3 m aOD with the surface of the underlying sand and gravel at c 60.9 m aOD.				Avg. depth (m)		0.36 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
28000	Layer		0.24	Ploughsoil	-	-
28001	Layer		0.12	Buried ploughsoil	-	-
28002	Geology			Sand and gravel	-	-
28003	Cut	1		Ditch aligned NW-SE	-	-
28004	Fill			Upper fill of 28003	-	-



Trench 29						
General description				Orientation		NW-SE
Trench 29 targeted and confirmed the location of a cropmark ditch boundary aligned E-W, unexcavated due to the flooding of the trench. Same as ditches 30003 and 35003. Surface of modern ploughsoil was at c 61.2 m aOD with the underlying sand and gravel at c 60.8 m aOD.				Avg. depth (m)		0.4 m
				Width (m)		1.5 m
				Length (m)		40 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
29000	Layer		0.28	Ploughsoil	-	-
29001	Layer		0.1	Buried ploughsoil	-	-
29002	Geology			Sand and gravel	-	-
29003	Cut	2		Ditch aligned E-W	-	-
29004	Fill			Upper fill of 29003	-	-

Trench 30						
General description				Orientation		NE-SW
Trench 30 targeted and confirmed the location of a cropmark ditch boundary aligned E-W, unexcavated due to the flooding of the trench. Same as ditches 29003 and 35003. Surface of modern ploughsoil was at c 61.2 m aOD with the underlying sand and gravel at c 60.85 m aOD.				Avg. depth (m)		0.4 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
30000	Layer		0.35	Ploughsoil	-	-
30001	Layer		0.12	Buried ploughsoil	-	-
30002	Geology			Sand and gravel	-	-
30003	Cut	1.5		Ditch aligned NE-SW	-	-
30004	Fill			Upper fill of 28003	-	-

Trench 31						
General description				Orientation		NW-SE
One possible ditch aligned N-S. Unexcavated due to trench flooding. Surface of modern ploughsoil was at c 61.1 m aOD with the surface of the underlying sand and gravel at c 60.8 m aOD.				Avg. depth (m)		0.26 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
31000	Layer		0.24	Topsoil	-	-
31001	Geology			Sand and gravel	-	-
31002	Cut	1		Ditch	-	-
31003	Fill			Fill of 31002	-	-



Trench 32						
General description				Orientation		NE-SW
No archaeological features or deposits identified. Thin probable buried ploughsoil of alluvial origin below current ploughsoil. Trench flooded after machine excavation. Surface of modern ploughsoil was at c 61.15 m aOD with the surface of the underlying sand and gravel at c 60.75 m aOD.				Avg. depth (m)		0.3 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
32000	Layer		0.3	Ploughsoil	-	-
32002	Layer		0.1	Buried ploughsoil or possible alluvial horizon	-	-
32003	Geology			Sand and gravel	-	-

Trench 33						
General description				Orientation		NE-SW
No archaeological features or deposits identified. Trench flooded following machine excavation. Surface of modern ploughsoil was at c 61.05 m aOD with the surface of the underlying sand and gravel at c 60.7 m aOD.				Avg. depth (m)		0.28 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
33000	Layer		0.28	Ploughsoil	-	-
33001	Geology			Sand and gravel	-	-

Trench 34						
General description				Orientation		N-S
A single possible ditch aligned E-W was identified within this trench. Surface of modern ploughsoil was at c 61.2 m aOD with the surface of the underlying sand and gravel at c 60.85 m aOD.				Avg. depth (m)		0.35 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
3401	Layer		0.34	Ploughsoil	-	-
3402	Cut	0.8	0.3	Ditch aligned E-W	-	-
3403	Fill		0.3	Single silting fill of 3402	-	-
3404	Geology			Sand and gravel	-	-



Trench 35						
General description				Orientation		NW-SE
Trench 35 targeted and confirmed the location of a cropmark ditch boundary aligned E-W. Same as ditches 29003 and 30003. Surface of modern ploughsoil was at c 61.3 m aOD with the surface of the underlying sand and gravel at c 61.0 m aOD.				Avg. depth (m)		0.26 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
35000	Layer		0.3	Ploughsoil	-	-
35001	Layer		0.1	Buried ploughsoil	-	-
35002	Geology			Sand and gravel	-	-
35003	Cut	2.8	0.7	Ditch aligned E-W	-	-
35004	Fill		0.2	Primary sand and gravel slumping erosion fill of 35003	-	-
35005	Fill		0.26	Secondary sand and gravel slumping erosion fill of 35003	-	-
35006	Fill		0.12	Secondary sand and gravel slumping erosion fill of 35003	-	-
35007	Fill		0.2	Silting fill of 35003	-	-
35008	Fill		0.18	Silt and gravel slumping erosion fill of 35003	-	-
35009	Fill		0.14	Upper silting fill of 35003	-	-

Trench 36						
General description				Orientation		NE-SW
Trench 36 contained a single narrow gully or small ditch aligned NW-SE. Surface of modern ploughsoil was at c 61.35 m aOD with the surface of the underlying sand and gravel at c 61.0 m aOD.				Avg. depth (m)		0.35 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
36000	Layer		0.26	Ploughsoil	-	-
36001	Layer		0.08	Buried ploughsoil	-	-
36002	Geology			Sandy gravel	-	-
36003	Cut	0.48	0.4	Gully aligned NW-SE	-	-
36004	Fill		0.4	Silting fill of 36003	-	-



Trench 37						
General description				Orientation		NW-SE
Several features of likely natural origin were identified within Trench 37. One possible ditch was excavated (37005) although the significance of this was not easily understood within the trench. Surface of modern ploughsoil was at c 61.5-61.3 m aOD with the surface of the underlying sand and gravel at c 61.1 m aOD.				Avg. depth (m)		0.32 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
37000	Layer		0.28	Ploughsoil	-	-
37001	Cut	1	0.4	Geological feature	-	-
37002	Fill		0.4	Fill of 37001	-	-
37003	Geology			Sandy gravel	-	-
37004	Geology			Geological feature	-	-
37005	Cut			Possible ditch aligned NW-SE	-	-
37006	Layer		0.2	Geological layer	-	-
37007	Layer		0.2	Alluvium?	-	-
37008	Geology			Sand and gravel	-	-
37009	Fill		0.22	Fill of 37005	-	-
37010	Fill		0.16	Fill of 37005	-	-
37011	Layer		0.11	Buried ploughsoil	-	-

Trench 38						
General description				Orientation		NNW-SSE
Trench 38 contained an enclosure division ditch aligned E-W. A series of probable geological features were investigated (not all recorded by individual context numbers below). Surface of modern ploughsoil was at c 61.6-61.4 m aOD with the surface of the underlying sand and gravel at c 61.3-61.1 m aOD sloping gently down from the north to south.				Avg. depth (m)		0.45 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
3800	Layer		0.38	Ploughsoil	-	-
3801	Layer		0.06	Buried ploughsoil	-	-
3802	Geology			Sand and gravel	-	-
3803	Cut	1.56	0.72	Ditch aligned W-E	-	-
3804	Fill		0.08	Upper fill of 3803	-	-
3805	Fill		0.18	Secondary silting fill of 3803	-	-
3806	Fill		0.72	Primary silting fill of 3803	-	-
3807	Cut	0.5	0.4	Probable geological feature or possible pit/treehole.	-	-
3808	Fill		0.06	Upper fill of 3807	-	-
3809	Fill		0.2	Secondary fill of 3807	-	-



3810	Fill		0.4	Primary fill of 3807	-	-
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Trench 39						
General description				Orientation		E-W
Trench 39 contained a ditch aligned N-S with a field drain cut into this. Two geological or treehole features were also investigated. Surface of modern ploughsoil was at c 61.65 m aOD with the surface of the underlying sand and gravel at c 61.35 m aOD.				Avg. depth (m)		0.26 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
3900	Layer		0.28	Ploughsoil	-	-
3901	Layer		0.1	Buried ploughsoil	-	-
3902	Geology			Sand and gravel	-	-
3903	Cut	1.15	0.26	Ditch aligned N-S	-	-
3904	Fill		0.12	Upper silting fill of 3903	-	-
3905	Fill		0.14	Primary silting fill of 3903	-	-
3906	Cut	0.7	0.24	Possible treehole	-	-
3907	Fill		0.24	Fill of 3906	-	-
3908	Cut	1	0.36	Probable geological feature	-	-
3909	Fill		0.2	Fill of 3908	-	-
3910	Fill		0.14	Fill of 3908	-	-

Trench 40						
General description				Orientation		N-S
Trench 40 contained two parallel ditches aligned E-W and corresponding to an enclosure division boundary. Surface of modern ploughsoil was at c 61.7 m aOD with the underlying sand and gravel at c 61.4 m aOD.				Avg. depth (m)		0.4 m
				Width (m)		1.5 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
4000	Layer		0.33	Ploughsoil	-	-
4001	Layer		0.06	Buried ploughsoil	-	-
4002	Geology			Sand and gravel		
4003	Cut	1.4	0.6	Ditch aligned E-W		
4004	Void					
4005	Fill		0.18	Basal gravel fill of 4003		
4006	Fill		0.2	Secondary gravel erosion fill of 4003		
4007	Fill		0.5	Main silting fill of 4003	Pottery 7, 5 g Animal bone 14, 4 g	Roman
4008	Fill		0.14	Upper silting fill of 4003	Pottery 1, 43 g	Roman
4009	Cut	1.6	0.75	Ditch aligned E-W		
4010	Fill		0.12	Primary silting fill of 4009		



4011	Fill		0.16	Secondary silting fill of 4009		
4012	Fill		0.5	Main silting fill of 4009		
4013	Fill		0.1	Upper fill of 4009		

Trench 41							
General description				Orientation		E-W	
<p>Trench 41 targeted the cropmark of the rear boundary to the roadside enclosures. This was identified as a reasonably substantial ditch with a smaller parallel ditch to the east confirming the double ditch cropmark for this part of the enclosure. A previously unidentified ditch, also parallel to the rear boundary, was excavated within the interior area approximately 10 m to the east. A comparatively thick sequence of alluvial soils sealed and dipped into the top of the major ditch boundary. Surface of modern ploughsoil was at c 62.2-61.9 m aOD sloping down from west to east with the underlying sand and gravel comparatively flat at c 61.5 m aOD.</p>				Avg. depth (m)		0.5 m	
				Width (m)		1.5 m	
				Length (m)		30 m	
Contexts							
context no	type	Width (m)	Depth (m)	comment	finds	date	
41000	Layer		0.32	Ploughsoil	-	-	
41001	Layer		0.3	Alluvium/possible buried ploughsoil horizon	Pottery 1, 9 g	AD 120-240	
41002	Cut	2.6	0.76+	Ditch aligned N-S	-	-	
41003	Cut	1.6	0.46	Treehole	-	-	
41004	Cut	1.5	0.62	Ditch aligned N-S	-	-	
41005	Layer		0.26	Alluvium	-	-	
41006	Layer		0.2	Alluvium	Pottery 1, 52 g Animal bone 1, 42 g	Roman	
41007	Layer			Bioturbation	Animal bone 9, 137 g	-	
41008	Layer		0.28	Sand and gravel natural?	-	-	
41009	Layer		0.12	Sand and gravel natural?	-	-	
41010	Geology			Gravels	-	-	
41011	Fill		0.7	Sand and gravel erosion fill of ditch 41002	-	-	
41012	Fill		0.28	Sand and gravel erosion fill of ditch 41002. Probably the same as 41011	-	-	
41013	Fill		0.18	Sand and gravel erosion fill of ditch 41002	-	-	
41014	Fill		0.36	Gleyed clay fill of 41002	-	-	
41015	Fill		0.12	Sand and gravel erosion fill of ditch 41002	-	-	
41016	Fill		0.12	Silting erosion fill of ditch 41002	-	-	
41017	Fill		0.36	Alluvial fill within the upper part of 41002	-	-	
41018	Fill			Basal clay fill of 41002. Not properly excavated as under water but sampled for WPR.	-	-	



41019	Fill		0.18	Upper silting fill of 41021	-	-
41020	Fill		0.14	Primary silting fill of 41021	-	-
41021	Cut	1.8	0.45	Ditch aligned N-S parallel to 41002	-	-
41022	Fill		0.41	Upper silting fill of 41004	-	-
41023	Fill		0.3	Fill of 41003	-	-
41024	Fill		0.44	Fill of 41003	-	-
41025	Fill		0.26	Silting fill of 41004	-	-
41026	Fill		0.04	Gravel erosion fill of 41004	-	-
41027	Fill		0.46	Main primary silting fill of 41004	-	-
41028	Fill		0.46	Primary gravel slumping fill of 41004	-	-

Trench 42		
General description	Orientation	N-S
Trench 42 was not excavated due to the proximity of an active badger sett.	Avg. depth (m)	
	Width (m)	
	Length (m)	20 m

Trench 43						
General description				Orientation	NW-SE	
No archaeological features or deposits present. Surface of modern ploughsoil was at c 63.45-63.0 m aOD with the underlying clay at c 63.1-62.1 m aOD sloping down from west to east.				Avg. depth (m)	0.3 m	
				Width (m)	1.6 m	
				Length (m)	30 m	
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
43000	Layer		0.3	Ploughsoil	-	-
43001	Geology			Sandy clay	-	-

Trench 44						
General description				Orientation	NW-SE	
No archaeological features or deposits present. Surface of modern ploughsoil was at c 65.35-64.8 m aOD with the underlying clay at c 65.0-64.4 m aOD sloping down from west to east.				Avg. depth (m)	0.36 m	
				Width (m)	1.6 m	
				Length (m)	30 m	
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
44000	Layer		0.36	Ploughsoil	-	-
44001	Layer		0.3	Buried ploughsoil horizon	-	-
44002	Geology	1.6	0.76	Sandy clay	-	-



Trench 45						
General description				Orientation		NW-SE
No archaeological features or deposits present. Surface of modern ploughsoil was at c 67.8-67.3 m aOD with the surface of the underlying clay at c 67.5-66.9 m aOD sloping down from west to east.				Avg. depth (m)		0.45 m
				Width (m)		1.6 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
45000	Layer		0.3	Ploughsoil	-	-
45001	Layer		0.15	Buried ploughsoil horizon	Clay pipe	18th - 19th c
45002	Geology			Sandy clay	-	-
45003	Layer		0.06	Buried ploughsoil horizon	-	-

Trench 46						
General description				Orientation		NW-SE
No archaeological features or deposits present. Surface of modern ploughsoil was at c 68.1 m aOD with the surface of the underlying clay at c 67.9 m aOD. Trench 46 was positioned upon the crest of the valley overlooking Alchester. Trenches 47 and 48 slope down to the west with Trenches 45-43 on the land sloping to the east and the floodplain.				Avg. depth (m)		0.26 m
				Width (m)		1.6 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
46000	Layer		0.26	Ploughsoil	-	-
46001	Geology		0.3	Clay	-	-

Trench 47						
General description				Orientation		NW-SE
No archaeological features or deposits present. Surface of modern ploughsoil at c 66.6-65.9 m aOD with the surface of the underlying clay at c 66.3-65.7 m aOD sloping down from east to west.				Avg. depth (m)		0.3 m
				Width (m)		1.6 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
47000	Layer		0.3	Ploughsoil	-	-
47001	Geology			Clay	-	-



Trench 48						
General description				Orientation		NW-SE
No archaeological features or deposits present. Surface of modern ploughsoil level was at c 63.8 m aOD with the surface of the underlying clay at c 63.4-63.2 m aOD sloping down from west to east.				Avg. depth (m)		0.58 m
				Width (m)		1.6 m
				Length (m)		30 m
Contexts						
context no	type	Width (m)	Depth (m)	comment	finds	date
48000	Layer		0.36	Ploughsoil	-	-
48001	Layer		0.22	Buried colluvial/ ploughsoil horizon	-	-
48002	Geology			Clay	-	-



APPENDIX B. FINDS REPORTS

B.1 Pottery

by Edward Bidduph

- B.1.1 A total of 346 sherds, weighing 5292 g, was recovered from the evaluation. Each context-group was quantified and assigned a date range based on the forms and fabrics present. In general, much of the assemblage can be placed within the 1st and 2nd centuries AD.
- B.1.2 Seven context-groups (2005, 2026, 3007, 3008, 3011, 3017 and 3019) were potentially among the earliest in the assemblage. These groups were characterised by the presence of grog-tempered ware or shelly ware and absence of Roman-period wares, with the exception of a possible Dressel 2-4 amphora fragment in context 3011. Forms included a barrel-shaped jar in context 2005. A late Iron Age date, or one extending only a matter of years after AD 43, is likely. Thirteen context-groups (2040, 3002, 3003, 3013, 3018, 3021, 3023, 5008, 21003, 21015, 21021, 21024 and 22004) were dated to the early Roman period (c AD 43-120). Some of these contained grog-tempered or shelly wares, though in association with post-conquest sandy grey wares. Other material diagnostic of this period includes South Gaulish samian cups (Drag 27 and Drag 46), and a fine oxidised ware flanged bowl (Young 1977, type O40, reminiscent of samian ware form Drag 36) from the Oxford region. Fine grey ware seen in a number of contexts is also likely to have been Oxford-region products. The industry there began to manufacture the ware from the later 1st century AD (Young 1977, 207). Of note, too, is a grey ware with sand and calcareous inclusions recorded in context 21015.
- B.1.3 Eight context-groups (405, 2010, 2031, 2034, 21012, 21014, 21025 and 41001) were assigned to the mid Roman period (c AD 120-250). A sandy white-ware ring-necked flagon, probably fired in the Oxford kilns, dated deposition of context 21025 to the 2nd century or later. A fine grey carinated bowl (Young 1977, type R68) from context 21012 is of similar date. Context 2034 contained sandy grey ware bead-rimmed dishes, while context 2031 contained flange-rimmed dishes. Both types generally have a mid 2nd to mid 3rd century date range. Imported ware arrived in the form of Central Gaulish samian ware – decorated Drag 37 bowls were represented – and amphorae from southern Spain. Other wares present included fine and sandy white wares and a calcareous sandy grey ware.

Table B1.1 Pottery assemblage summary by context

Context	Sherds	Weight (g)	Description	Spot date
405	15	74	Central Gaulish samian ware (Drag 37), fine white ware, sandy oxidised ware, fine grey ware	AD 120-250
407	4	15	Fine grey ware, Oxford fine white ware	Roman
410	3	4	Oxford fine oxidised ware, sandy oxidised ware	Roman
413	8	147	South Spanish amphora, fine and sandy grey wares	AD 50-250
416	1	8	Coarse sandy grey ware	Roman
2005	8	42	Shelly ware ?barrel-shaped jar	?LIA/early Roman
2010	1	36	Drag 37 bowl in Central Gaulish samian ware. Rivet holes denoting ancient repair	AD120-200
2022	1	2	Fragment from samian ware beaker or jar.	Late 1st/2nd century
2026	3	24	Grog-tempered ware	LIA/early Roman
2031	7	184	Sandy grey ware flanged dishes, South Spanish amphora rim (Dressel 20)	AD 120-250
2034	23	345	Grey ware bead-rimmed dishes, fine grey ware beaker, shelly ware, sandy grey ware globular jar	AD 120-250
2040	9	65	South Gaulish samian ware, sandy grey ware, grog-	Mid-late 1st century AD



Context	Sherds	Weight (g)	Description	Spot date
			tempered ware, shelly ware	
3002	24	413	Shelly ware lid-seated jar, grog-tempered ware, sandy grey ware	Mid-late 1st century AD
3003	14	469	Sandy grey ware, grog-tempered ware, platter base	Mid-late 1st century AD
3007	13	196	Grog-tempered ware jar	LIA/early Roman
3008	10	107	Grog-tempered ware	LIA/early Roman
3009	3	32	Sandy grey ware	Roman
3011	23	375	Shelly ware, grog-tempered ware, amphora fragment, ??Dressel 2-4	1st century AD
3013	22	183	Sandy grey ware, grog-tempered ware, shelly ware bead-rimmed jar, ?Drag 27 South Gaulish samian ware	Mid-late 1st century AD
3017	11	116	Shelly ware, grog-tempered ware	LIA/early Roman
3018	16	285	Sandy grey ware, grog-tempered ware, shelly ware	Mid-late 1st century AD
3019	3	125	Grog-tempered ware perforated jar base	LIA/early Roman
3021	9	153	Fine grey ware, sandy grey ware, white ware, grog-tempered ware	Mid-late 1st century AD
3023	8	109	Sandy grey ware jar, shelly ware, grog-tempered ware	Mid-late 1st century AD
5008	3	17	Fine grey ware, oxidised grog-tempered ware	Mid-late 1st century AD
20007	2	43	Sandy grey ware	Roman
21003	13	232	Oxford fine oxidised ware flanged bowl (Young 1977, type O40), sandy grey ware carinated bowl	AD 50-120
21010	4	130	South Spanish amphora fabric, fine grey ware	AD 50-250
21012	8	93	Sandy grey ware, fine grey ware jar and carinated bowl (Young 1977, type R68)	2nd century AD
21014	6	109	Sandy grey ware jar or bowl, fine white ware, sandy/calcareous grey ware	?2nd century AD+
21015	12	281	Fine grey ware, sandy/calcareous grey ware, coarse grog-tempered ware	Early Roman
21018	1	27	Sandy grey ware	Roman
21021	20	236	Grog-tempered ware, sandy grey ware necked jar, fine grey ware	Mid-late 1st century AD
21024	3	31	South Gaulish samian cup (Drag 27), fine grey ware	Mid-late 1st century AD
21025	11	426	Oxford sandy white ware ring-necked flagon, fine grey ware globular beaker or jar, coarse grog-tempered ware, oxidised sandy/calcareous fabric, fine oxidised ware	2nd century AD
22004	14	49	South Gaulish samian ware (Drag 46), fine grey ware, coarse oxidised grog-tempered ware, coarse sandy grey ware	Late 1st century AD
40007	7	5	Sandy grey ware	Roman
40008	1	43	Grog-tempered storage jar fabric	Roman
41001	1	9	Drag 37 bowl Central (or ?East) Gaulish samian ware	AD 120-240
41006	1	52	Oxford fine oxidised ware	Roman
TOTAL	346	5292		



B.2 Ceramic building material

by Leigh Allen

- B.2.1 A total of 69 fragments of ceramic building material, weighing 4090 g, was recovered from the evaluation. The assemblage is in reasonable condition although the fabric is fairly soft with many of the fragments quite worn and abraded. The assemblage is listed below by context in Table B2.1 and by tile type in Table B2.2. Only complete dimensions (mostly thickness and tegula flange heights) have been recorded.
- B.2.2 Of the identifiable fragments within the assemblage, those most easily recognisable are from roofing material, (tegula and imbrex fragments). These comprise 5 imbrex fragments and 10 tegula fragments, four of which have complete flanges. A further 14 fragments are recorded as simple 'flat' pieces that have no discernible features and have only a measurable thickness. They may derive from tegula or imbrex but are too small to be definitely identified as such. In addition there are two 'flat' fragments that have thicknesses of 31 mm and 40 mm and these are probably pieces from floor tiles. Thirty-eight fragments are classified as miscellaneous as they have no measurable dimensions.
- B.2.3 Overall the assemblage is small and roofing tile appears to predominate. The assemblage was recovered from contexts containing pottery dating from the early and mid Roman period although there is no discernible difference between the fragments recovered from these periods, with all forms and fabrics represented in features of both dates.



Table B2.1 Ceramic building material assemblage summary by context

Ctx	No. of frags	Weight (g)	Type	Thickness (mm)	Comments
405	1	171	imbrex	19	
405	1	101	flat	23	
2005	1	28	tegula	-	just the very top of the flange
2005	1	13	misc	-	-
2008	1	286	flat	23	
2009	1	195	flat	15	
2022	2	67	imbrex	14	
2022	1	5	misc	-	-
2026	1	211	tegula	24	flange height 46 mm, cutaway visible (no groove), joins with fragment from 2034
2031	2	203	tegula	21	flange height 45 mm (no groove)
2031	1	115	imbrex	16	
2031	1	183	flat	31	
2031	4	343	flat	20	
2031	1	131	tegula	21	flange height 50 mm, joins with fragment from 2034
2031	1	114	flat	40	
2031	4	160	misc	-	
2031	1	67	tegula	-	just the very top of the flange
2031	17	187	misc	-	-
2031	1	54	flat	25	-
2031	1	58	flat	22	-
2031	1	24	imbrex	16	
2034	1	210	tegula	25	flange height 46 mm (no groove)
2034	2	137	misc	-	
2034	4	299	flat	20	
2034	1	24	misc	-	-
2034	1	243	tegula	25	joins with flange fragment from 2026
2034	1	105	tegula	21	flange height 47 mm joins with fragment from 2031
2034	3	83	misc	-	-
2039	6	121	misc	-	probably fragments from a flat tile
21010	1	8	misc	-	-
21018	1	92	tegula	28	Flange incomplete, groove at base of flange
21021	2	9	misc	-	-
22004	1	43	flat	19	
TOTAL	69	4090			

Table B2.2 Fragment count/weight of tile type

Tile type	Fragment count	Weight (g)
Tegula	10	1290
Imbrex	5	377
Flat tiles	14	1379
Floor tiles	2	297
Misc	38	747
TOTAL	69	4090



B.3 Worked stone

by Ruth Shaffrey

- B.3.1 A single fragment of worked stone was recovered from context 2034, a fill of a ditch. This comprised a small flat stone (46 g) utilised as a hone with extensive wear on one face and made from a fine-grained micaceous sandstone, a typical lithology for hones and whetstones. It could be either Iron Age or Roman in origin although the association with 2nd century pottery within the feature makes this very likely to date from the Roman period.

B.4 Iron nails and slag

by Ian Scott

- B.4.1 A total of 15 iron nails or nail heads were recovered from cremation deposit 418. Hand excavation recovered 7 nails (8 fragments). Another 8 nails, 91 stem fragments and a possible hobnail head were recovered from sample <400> of the cremation deposit. Detailed tabulated recording data are included within the site archive although not presented here.
- B.4.2 The complete nails and nail heads are all of Manning Type 1 (1985, 134, fig. 32). All the nails are hand-made wood nails. Only 4 nails were complete or almost complete: 3 nails measure 43-46 mm long, and one measures 65 mm long. One of the incomplete nails measured at least 80 mm, and originally was substantially longer. Another incomplete nail was at least 55 mm long. These nails may have been used to construct a box to contain the cremated remains and the arrangement of those identified and located during the course of excavation suggest that they might be from such a box or casket.
- B.4.3 The nails and nail fragments recovered during sieving are unusually weighted towards very small stem fragments (n = 91). There are only 8 nail heads and one possible hobnail head although the identification of the latter is far from certain. Two points can be made: (1) the stem fragments are very fragmentary and are from small nails; (2) there are very few nail heads given the number of nail stem fragments. The numbers involved and the small size of the fragments suggest that they might be hobnail stems, but for the fact that there is only one possible hobnail head identified. Hobnails heads usually survive well. An alternative interpretation is that the fragments are the remains of small nails which were used as part of the construction of a small box or casket to hold the cremated remains. Alternatively they might be in pyre material scooped up for burial with the cremation.
- B.4.4 The only other iron finds are a single nail stem fragment from context 21012 sample <2100>, and 9 pieces of slag or cinder (111 g) recovered from ditch fill deposit 407. The latter material is light and full of air bubbles.



APPENDIX C. ENVIRONMENTAL REPORTS

C.1 Land and freshwater snails

by Elizabeth Stafford

- C.1.1 Three samples were submitted for the assessment of Mollusca. Shell was abundant in the flots from samples <200> and <201>, but much was fragmented suggesting mechanical damage during processing of the samples. Of the individuals identified diversity was quite high. A species list is presented in Table C1.1 by sample and context number. Freshwater species dominated, particularly *Valvata piscinalis*, *Planorbis planorbis*, *Anisus vortex* and *Bathyomphalus contortus*. Valves of *Pisidium* sp. were also numerous, with occasional specimens of *Sphaerium corneum* and *Pisidium amnicum*. This assemblage is consistent with an aquatic environment of clean slow-moving water. The terrestrial component was much smaller and probably derived from the immediate ground level surroundings or transported by the water body. This element of the assemblage was a little more prominent in sample <200> and mostly comprised marsh species or other species that can tolerate damp conditions such as those found in floodplain grassland. The presence of *Oxyloma/Succinaea* sp. may suggest tall erect vegetation such as reeds or sedges in the vicinity. Sample <4101> produced much fewer shells but of a similar character to that described above.
- C.1.2 The habitats indicated by the snail assemblages within each of these samples are consistent with the site feature and deposit interpretations. Both samples <200> and <201> were recovered from sediments recorded as being part of the silting sequence within a large roadside drainage channel/ditch. The snail assemblages clearly indicate that this was a flowing channel rather than a drainage ditch with standing water. Similarly the assemblage from sample <4101> recovered from a ditch is consistent with flowing water indicating that this boundary/drainage ditch was part of a managed water network. There is little indication that these features held standing water.



Table C1.1 Mollusca species and quantification

Context		Habitat	2009	2042	41014
Sample			201	200	4101
Taxa	Common name				
FRESHWATER					
Bivalvia					
<i>Sphaerium corneum</i>	Horny orb mussel		+	+	
<i>Pisidium amnicum</i>	River pea shell			+	
<i>Pisidium</i> sp.			++	++	+
Gastropoda					
<i>Valvata cristata</i>	Flat valve snail	D		+	+
<i>Valvata piscinalis</i>	Common valve snail	F	++	+	
<i>Bithynia tentaculata</i>	Common Bithynia	F	+	+	
<i>Bithynia leachii</i>	Leach's Bithynia	F	+		
<i>Lymnaea</i> sp.		M S D C F			+
<i>Lymnaea stagnalis</i>	Great pond snail	C	+		
<i>Lymnaea peregra</i>	Common or wandering pond snail	C			
<i>Planorbis planorbis</i>	Margined ram's horn	D	++	++	+
<i>Anisus leucostoma</i>	Button or white lipped ram's horn	S	+	++	
<i>Anisus vortex</i>	Whirlpool ram's horn	D	++	++	
<i>Bathyomphalus contortus</i>	Twisted ram's horn	C	++	++	+
<i>Gyraulus crista</i>	Nautilus ram's horn	C		+	
TERRESTRIAL					
Gastropoda					
<i>Carychium cf. minimum</i>	Herald snail, sedge snail	(m)s		+	+
<i>Oxyloma/Succinea</i> sp.		mo	+	+	
<i>Cochlicopa</i> sp.		c	+	+	
<i>Vertigo antivertigo</i>	Marsh whorl snail	m		+	+
<i>Vertigo pygmaea</i>	Common whorl snail	(m)o		+	
<i>Vallonia</i> sp.		(m)o			+
<i>Vallonia costata</i>	Ribbed grass snail	o		+	+
<i>Vallonia pulchella</i>	Smooth grass snail	(m)o		+	
<i>Discus rotundatus</i>	Rounded snail, radiated snail	s		+	+
<i>Oxychilus cf. cellarius</i>	Cellar snail	s			+

+ = present, ++ = abundant

D = ditch species, F = flowing water species, C = catholic species, S = slum species, m = marsh species, (m) = marsh species that can tolerate damp conditions, c = catholic, s = shade-loving, o = open-country



C.2 Charred and waterlogged plant remains

by Julia Meen with Rebecca Nicholson

Introduction

C.2.1 A total of six individual deposits from four separate features were sampled during the course of the evaluation. Of these, three were sampled specifically for the recovery and identification of snail residues and are reported separately above (Samples <200>, <201> and <4101>, see report Appendix C1). Of the remaining three, Sample <400> represents an entire cremation deposit collected for the recovery of cremated bone and charred plant remains (CPR). Sample <4100> was recovered specifically to evaluate the presence of waterlogged plant remains (WPR) and sample 2100 was recovered for CPR. Table C2.1 summarises the sample details (context, volume, processed flot) and results.

Processing and identification methodology

C.2.2 A total volume of 1 litre from sample <4100> was hand-floated for the recovery of WPR. The flot and residue were collected separately on 250µm meshes and stored in water-filled containers in cold storage, with the remaining sediment retained. The waterlogged flot was scanned for WPR and insects using a binocular microscope at approximately x15 magnification. 2L from each of samples <4101>, <200> and <201> were hand-floated for the recovery of snails, with the flots and residues collected separately on 500µm meshes and dried in a heated room. Samples <400> and <2100> were processed for the recovery of CPR by water flotation using a modified Siraf style flotation machine. The flots were collected on a 250µm mesh and the heavy residue sieved to 500µm, and both were dried in a heated room, after which the residue was sorted by eye for artefacts and ecofactual remains. The flot was scanned for charred plant remains using a binocular microscope at approximately x15 magnification. Identifications were made with guidance from Katherine Hunter but without reference to Oxford Archaeology's reference collection and therefore, should all be seen as provisional. Nomenclature for the plant remains follows Stace (1997). Animal bone and artefacts recovered from the samples have been included within the relevant specialist reports.

Results

C.2.3 Sample <2100> produced a flot of 200 ml, much of which comprised modern root and mineral material. Assessment of the flot revealed that the mineral material had formed an iron concretion over much of the charred material present. This had resulted in an increase in the density of the charred plant remains and a poor level of floating which was noted during processing. Therefore, in addition to an assessment of the flot, the heavy residues for this sample were also scanned and retained for CPR. The flot itself contained common charcoal pieces, including pieces greater than 4 mm in size. Cereal grains were common, with *Hordeum* sp. (barley) the dominant type, and with a smaller quantity of *Avena/Bromus* sp. (oat/bromus grass) and occasional *Triticum* sp. (wheat) grains present. The presence of an awn of *Avena* sp. demonstrates that some of the *Avena/Bromus* grains are likely to be oat. There were two examples noted of *Triticum* sp. and *Hordeum* sp. showing sprouting and two further detached sprouts of indeterminate species. Two glume bases of *Triticum* sp. were observed, as well as two indeterminate internode straw fragments. The flot shows a fair wild seed assemblage, including isolated or rare examples of *Galium* sp. (bedstraw), *Rumex* sp. (dock), *Tripleurospermum inodorum* (scentless mayweed), *Mentha* sp. (mint), *Viola* sp. (violet), *Potentilla* sp. (cinquefoil), a possible *Carex* sp. (sedge) and a small grass (Poaceae) seed.

C.2.4 Within the 10-4 mm heavy residue charcoal was noted as being very abundant. This was also scanned by eye for non-charcoal plant material and a selection of CPR was recovered for assessment. Cereal grains were noted as being abundant although the assemblage was consistent with the flot material being dominated by barley, with a lesser quantity of wheat grains. One of the barley grains was noted to have germinated. A rough initial count indicated



that the ratio of barley to wheat in this fraction was in the region of 8:3. Many of the cereal grains showed very good preservation, and in two instances, two wheat grains were fused together, suggesting that they may have become charred whilst still in the glume. Oat/bromus grass was also recovered, along with a single fragment of *Corylus avellana* (hazel) nut shell. Scanning a proportion of the 2-0.5 mm heavy residue using a binocular microscope at approximately x15 magnification showed that a small quantity of *Triticum* sp. (wheat) glume bases were present, as well as occasional examples of oat/bromus grass and rare examples of smaller weed seeds. Scanning part of the the 4-2 mm heavy residue in this manner showed that cereal grains were again common, with barley and wheat grains present in similar proportions to that seen in the 10-4 mm fraction.

- C.2.5 The CPR flot recovered from the cremation deposit sample <400> contained abundant modern root and small fragments of cremated bone. Charcoal was fairly common, with occasional items greater than 4 mm in size. Cereal grains were limited to two indeterminate fragments, with a small quantity of chaff including an indeterminate cereal/grass internode fragment. Weed seeds were rare, with a single example of probable *Lolium* sp. (rye-grass). Two examples of what have been provisionally identified as tubers of *Arrhenatherum elatius* ssp. *bulbosus* (onion couch grass), along with associated fragments of this species, were noted.
- C.2.6 The waterlogged flot of sample <4100> showed fair to good preservation of both WPR and insect remains. The weed seed assemblage included *Rubus* sp. (bramble), *Stellaria media* (common chickweed), *Urtica* sp. (nettle) and probable *Carduus* sp. (thistle), as well as several other species. Insects occurred fairly frequently, including Coleoptera (beetles) elytra and numerous indeterminate fragments, as well as a mite (Acarina). A piece of waterlogged wood approximately 25 mm in length was present.

Discussion

- C.2.7 Charcoal was common in both of the samples assessed for CPR and present in the sample assessed for WPR. Sample <2100> is worthy of particular note for the clear form of many identifiable cereal grains and the recovery of fragile items such as internode fragments. These indicate favourable site conditions for the preservation of CPR which can be expected to be encountered more broadly across the site. However, the mineralisation of some fragments and the resultant heavy state of these items makes a combined approach to the processing and recovery methodology essential for the analysis of representative assemblages.
- C.2.8 This good preservation, and the presence of material related to crop processing activities in sample <2100>, suggests that other features at the site may have considerable potential for the recovery of charred plant remains which would relate directly to the contemporary economy of this site.
- C.2.9 The sampled cremation deposit contained several charred items provisionally identified as *Arrhenatherum elatius* ssp. *bulbosus* (onion couch grass). Tubers of this plant have been found in cremation graves across England, particularly from those dating to the Neolithic and Bronze Age, and it has been suggested that the dried stems of this plant were used as tinder (K. Hunter, pers comm; Robinson cited in Anon, 2010).
- C.2.10 The deposit sampled for WPR also proved to have fair to good preservation for both insects and waterlogged plant remains. Although not subject to detailed analysis at this evaluation stage, the sample has the clear potential to inform in comparative detail on the contemporary habitat surroundings through the identification of the plant and insect species. The presence of these categories also indicates the potential for significant success from other specialist sampling strategies such as for the recovery of preserved pollen from similar deposits.



Table C2.1: Quantification of the charred and waterlogged plant remains

Sample No.	Ctxt No.	Feature Type	Sample Vol (l.)	Flot vol (ml)	Grain	Chaff	Weeds	Other CPR	Other WPR	Insects	Charcoal	Comments on CPR / WPR
400	418	Cremation	20	200	+	+	+	+			+++	c 20% of flot scanned. Abundant modern root and small fragments of cremated bone. Charcoal fairly common, with occasional items greater than 4 mm in size. Cereal grains limited to two indeterminate fragments, with a small quantity of chaff. Weed seeds rare, including single probable <i>Lolium</i> sp. (rye-grass). Two examples of what have been provisionally identified as tubers of <i>Arrhenatherum elatius</i> ssp. <i>bulbosus</i> (onion couch grass) were noted. Molluscs remains present.
2100	21012	Ditch	20	200	+++	+++	++	+			++++	Flot: c 20% scanned. Abundant modern root and mineral material. Common charcoal pieces, including pieces greater than 4 mm in size. Cereal grains common, with <i>Hordeum</i> sp. (barley) the dominant type, and with a smaller quantity of <i>Avena/Bromus</i> sp. (oat/bromus grass) and occasional <i>Triticum</i> sp. (wheat) grains present. Two examples of <i>Triticum</i> sp. and <i>Hordeum</i> sp. showing sprouting and two detached sprouts of indeterminate species were noted. Two glume bases of <i>Triticum</i> sp. were observed, as well as two indeterminate internode straw fragments. The flot shows a fair wild seed assemblage, including isolated or rare examples of <i>Galium</i> sp. (bedstraw), <i>Rumex</i> sp. (dock), <i>Tripleurospermum inodorum</i> (scentless mayweed), <i>Mentha</i> sp. (mint), <i>Viola</i> sp. (violet), <i>Potentilla</i> sp. (cinquefoil), a possible <i>Carex</i> sp. (sedge) and a small grass (<i>Poaceae</i>) seed. Occasional molluscs were also present. Heavy residues also assessed and demonstrated the presence of abundant cereal grains dominated by barley, with a lesser quantity of wheat. A rough initial count indicated that the ratio of barley to wheat in this fraction was in the region of 8:3 consistent with the flot analysis. Other CPR species identified within the heavy residue include a single fragment of <i>Corylus avellana</i> (hazel) nut shell, Oat/bromus grass and rare examples of smaller weed seeds
4100	41018	Ditch	1	150			++		++	+	+	1 tsp scanned. The weed seed assemblage included <i>Rubus</i> sp. (bramble), <i>Stellaria media</i> (common chickweed), <i>Urtica</i> sp. (nettle) and probable <i>Carduus</i> sp. (thistle), amongst other species. Insects occurred fairly frequently. Waterlogged wood fragments noted. Small fragments of charcoal present and molluscs present occasionally. Preservation of both WPR and insect remains was fair to good.

Key: + = < 10 items, ++ = 10 – 50 items, +++ = 50 – 100 items, ++++ > 100 items.



APPENDIX D. BONE REPORTS

D.1 Animal bone

by Rebecca Nicholson

D.1.1 With the exception of the cremated animal bone recovered from cremation 418 (Sample <400>), all of the mammal bone reported below was hand collected during the sample excavation of the archaeological deposits.

Methods

D.1.2 The animal bone was recorded following the protocol and zoning method outlined in Serjeantson (1996). Where possible fragments were identified to species using the Oxford Archaeology Zooarchaeological reference collection and published manuals. Fragments that could not be identified to species were put into categories: large mammal sized (eg cattle, horse or large deer) and medium-mammal (sheep, goat, roe deer, dog and pig-sized). Condition was recorded on a 6-point scale, where grade 0 equates to very well preserved bone and grade 5 indicates that the bone had suffered such structural and attritional damage as to make it unrecognisable.

D.1.3 Where possible, measurements were taken following von den Driesch (1976). Tooth wear stages were recorded according to Grant (1982). Fusion data was analysed according to information from Silver (1963).

D.1.4 Full recording data are included within the site archive although not presented here.

Results

D.1.5 Excluding the cremated bone, the assemblage comprised just 151 fragments weighing 1806 g. of which 44 fragments (29%) were identifiable to taxon. Cattle, sheep/goat (including a certain identification of sheep) and horse were present. Apart from indeterminate fragments (85 or 56% of the assemblage), the rest of the unidentified fragments consist mainly of long bones and ribs from medium-sized and large mammal respectively. The quantities and measurements are summarised below by species in Tables D1.1 and D1.2. In general, the bone was in good condition with fairly minimal surface etching (scoring 1-3 on the scale above). A small number of bones were burnt and a few bones exhibited evidence of gnawing, probably by dogs, though this was fairly minimal suggesting that the remains had been buried relatively quickly. Butchery was visible on a small number of cattle/large-mammal bones, and exclusively comprised chop marks. The fragmented nature of the assemblage from a few contexts also suggested deliberate pre-depositional smashing of the bones, possibly for marrow extraction.

D.1.6 The scant tooth wear data recovered indicated that one of the cattle was killed as a sub-adult, while fusion evidence from a cattle phalange indicated an individual of over 18 months. A cattle humerus fused at both epiphyses indicated an older individual of over 3.5 years, as did a cattle tibia, fused proximally. No mandibular evidence was available for sheep/goat, but the fusion evidence indicated individuals of over 18 months old and, in one instance, under 2.5 years old.

D.1.7 The results clearly show that bone is well preserved where present within the evaluated deposits. The relative dominance of cattle and presence of horse, though based on a very small sample, is in keeping with findings from previous excavations at Alchester (Powell and Clark 2001).

D.1.8 The animal bone recovered from the human cremation deposit (context 418, sample <400>) is of interest indicating funeral pyre and burial rites. This assemblage included calcined tooth crowns positively identified as pig and fragments of cranium, humeri (left and right side) and phalange probably from one individual, probably pig. All tooth crowns were unworn and probably unerupted (eruption evidence suggests an individual of under 12 months old) and the very small size of the limb bones suggests foetal or neonatal pig. Several other small limb bone shaft



fragments are consistent with a medium (fowl-sized) bird ulna and humerus, although this identification is very tentative.

D.1.9 A recent survey of faunal pyre goods in Roman cremation burials (Worley 2009) identified 32 Romano-British sites in the UK with cremated animal remains recovered alongside human cremated bone. Of these, only two sites (Derby Racecourse and Birch Abbey Burials) were located in the midlands. Since then excavations along the Birmingham Northern Relief Road (WARYS01 BNRR Site 12) have also produced Roman cremations containing cremated animal offerings, probably food offerings or sacrifices (Worley 2006). Immature pig was the most commonly represented animal in the cremations from Derby Racecourse (Harman 1985) and this is also true for other sites in south east England and the Midlands, including WARYS01 (Worley 2009). The pig pyre goods often comprised forelimbs with cranial parts also well represented (Davis 1989) and this was also the case for the unurned cremations at WARYS01, although bird remains (probably fowl) were also common.

Table D1.1 Number of fragments recovered by Hand Collection (NISP).

	Cattle	Sheep/goat	Horse	Medium mammal	Large mammal
Horn core	3				
Skull (occipital)	2				
Mandible	3			1	
Loose teeth	6	3	1		
Atlas					
Axis					1
Vertebra					10
Rib					1
Scapula					6
Humerus	5				
Radius	2	2	2		
Ulna					
Carpal	1				
Metacarpal	2	1			
Pelvis				1	1
Sacrum					1
Femur		1	1		
Tibia	1	3			
Fibula					
Astragalus					
Calcaneus					
Metatarsal		2			
Tarsal bone					
Phalanx 1	2				
Phalanx 2					
Phalanx 3					
Metapodial		1		2	
Indeterminate				17	68
TOTAL	27	13	4	21	88
Weight (g)	994	90	111	33	578

Table D1.2 Biometric data

Species	Element	Side	GL	GLI	GLm	Bp	Bd	SD/SC	DD	Other measurement
Cattle	Humerus	right								BT=64.6
Cattle	Phalange 1		55.2			27.8	27.3			
Sheep	Metacarpal	right	112.4			20.6	22.3	12.1		



D.2 Cremated human remains

by Sharon Clough

Introduction

- D.2.1 An undated and unurned cremation burial (context 418) was recovered close to a Roman ditch in Trench 4. The depth of the burial feature, 0.12 m, may imply that truncation had occurred, removing or incorporating some of the feature/deposit into the overlying topsoil and turf horizon.

Methodology

- D.2.2 The remains were examined in accordance with standard guidelines (McKinley 1994; Mays *et al.* 2004). The entire contents of the pit were recovered as an environmental sample, (Sample <400>). This was processed by wet sieving at 3 fraction sizes. These were <10, 10-4 and 4-2 mm mesh sizes. The human bone was extracted from the samples in the <10 and 10-4 mm fractions and the 4-2 mm fraction was retained for detailed examination should this be required at a later date. The weight of the bone retained in each fraction and spit was recorded and its percentage of the total weight of the cremation was calculated. This enabled the degree of fragmentation to be quantified. The degree of fragmentation may indicate if further processing of the cremated bones had occurred after the burning of the body on the pyre.
- D.2.3 The bones retained from each sieve size were examined in detail and sorted into the following identifiable bone groups: skull (including mandible and dentition); axial (clavicle, scapula, ribs, vertebra and pelvic elements); upper limb and lower limb. The separation of the bone into these groups helps illuminate any deliberate bias in the skeletal elements collected for burial. Each sample was weighed on digital scales and details of colour and largest fragment were recorded. Detailed recording is not presented here but has been included within the archive. Where possible, the presence of individual bones within the defined bone groups was noted. Any unidentifiable fragments of long bone shafts or cancellous bone were weighed and incorporated into any subsequent quantitative analysis. The prevalence of unidentifiable bone is largely dependent on the degree of fragmentation; larger fragments are easier to identify than smaller ones.

Results

- D.2.4 The total weight of sorted cremated human bone was 575 g (80 g <10 mm; 495 g 10-4 mm). Unsorted material from the 4-2 mm fraction amounted to a further 714 g, but fragmented bone only accounted for a very small proportion of this. All the bone was white in colour with occasional blue patches. Patterns of warping and cracking indicate that the bone was wet/green (ie fleshed) when burnt. Charcoal and five iron nails were also recovered from the pit. Identified fragments (total 36 g or 6%) comprised skull vault, mandible, tooth roots (14 g), ribs and vertebrae (5 g), right scapula, lower arm, lunate, phalanges and scaphoid (11 g), epiphyses and long bone fragments (6 g). The presence of third molar roots indicate an adult individual although it was not possible to determine sex.
- D.2.5 Two fragments of long bone exhibited the striations of periostitis, inflammation of the outer layer of bone that is indicative of non-specific infection.



APPENDIX E. GEOPHYSICAL SURVEY

E.1 Magnetometer and resistivity survey

by A. D. H. Bartlett with H. David (Bartlett-Clark Consultancy)

Introduction

- E.1.1 This geophysical survey report represents the initial non-intrusive stage of the archaeological field evaluation along the route of a proposed new road to the south of Langford Lane. The survey was commissioned by Oxford Archaeology on behalf of Chiltern Railways in response to a brief issued by Oxfordshire County Council Archaeological Services (OCCAS). The project brief specified that both magnetometer and resistivity surveys should be employed. The total areas covered by the two techniques were approximately 11.9ha and 6.4ha respectively.
- E.1.2 Fieldwork for the survey was completed in stages between May and August 2010. Plans and summaries of findings from the various parts of the project were supplied at each stage to inform the evaluation process. The collated results are presented for the record in this report.
- E.1.3 Elements repeated within this report (site location, geology, and background) have been omitted here but are presented in full within the main report. The original full report produced by the geophysical survey specialist is included within the project archive (OA ed.).

Geology and soil properties

- E.1.4 At the outset of the survey the underlying geology was described as Oxford Clay and Kellaways Beds. Such conditions should not present any unusual difficulties for magnetometer surveying, although the strength of response on the Oxford Clay is unlikely to be as strong as would be the case on solid Jurassic bedrock. This is confirmed in part by the magnetic susceptibility readings taken during the course of the survey (as plotted in fig. E14i). These are mainly in a range 5-15 ($\times 10^{-5}$ SI), which is relatively low, although productive surveys have previously been undertaken in comparable conditions.
- E.1.5 Soil properties are also determined by localised variations in the composition of the mixed clays and sands of the Kellaways Beds. This variability affects the resistivity response. Readings are relatively low and uniform (suggesting a mainly clay soil) in areas surveyed to the east and south of the Roman town (fields 1-6 as numbered on fig. E1), but are much higher and less uniform to the east (field 8). The subsoil here appears to be mainly gravel (as is mentioned in the description of the fill of a 1999 excavation trench (trench 9 in Sauer 1999a) and as subsequently demonstrated by the current evaluation. Minor variations in the depth of soil cover above a well-drained gravel subsoil would account for the unusual variability of the resistivity response seen in field 8.

Survey procedure

- E.1.6 The full area of the proposed route (including the alternative western approach) was investigated by means of a magnetometer survey, supplemented by selective resistivity coverage as specified through discussion with OCCAS. The magnetometer survey could not be completed at the time of the original fieldwork in May-June 2010 because of rape crops in fields 1, 2, and 4. Narrow unplanted strips were surveyed initially in these fields, and indicated the probability of archaeological findings in field 1. The survey was completed as originally proposed once the crops were removed in August.
- E.1.7 An initial resistivity survey was completed in fields 6 and 7 to the south of the town (in June 2010). The route here passes close to crop-marks indicating possible extramural settlement. This was extended into field 8 in July by request of OCCAS and after assessment of the initial results. The resistivity survey was finally enlarged to cover most of the magnetometer survey area in field 8, and the eastern approach route (fields 1, 2, and part of 4) in August.



- E.1.8 The magnetometer readings were collected along transects 1 m apart using Bartington 1m fluxgate gradiometers, and are plotted at 25 cm intervals along each transect. The results of the magnetometer survey are presented as a grey scale plot (figs E2-4), and as graphical (x-y trace) plots in figures E5-9. These plots allow findings to be seen in plan and profile respectively.
- E.1.9 Resistivity readings were collected on a 1 m grid with a Geoscan RM15 meter using 0.5 m mobile probe separation. The readings are presented similarly to the magnetometer survey in figures E10-11 (grey scale plots) and E12-13 (graphical plots).
- E.1.10 The graphical plots (figs E5-9 and E12-13) are included also to meet the requirement as stated in the brief for unprocessed data plots. The magnetometer data as shown in these plots has been subject only to minimal pre-processing (to correct for variations in the instrument zero setting, and truncation of extreme values), and the resistivity data is unfiltered. Both the magnetometer and resistivity grey scale plots show the readings after minimal numeric smoothing to reduce background noise levels, but the data is not otherwise modified.
- E.1.11 An interpretation of the findings is shown superimposed on the graphical plots (for both surveys), and is reproduced separately to provide a combined summary of the findings (figs E15-16). Figure E14ii shows findings in relation to cropmarks and other known archaeological features.
- E.1.12 Colour coding has been used in the interpretation to indicate different effects. The interpretation is intended to be schematic and illustrative, and not to reproduce the detail of the grey scale plots. Features are indicated by coloured outlines, or broken lines.
- E.1.13 A small number of magnetic anomalies which are not of clearly recent or natural origin are outlined in red. Groups of strong magnetic anomalies which are likely to be of recent origin are shown in brown, and smaller (possibly natural) disturbances in a light brown. Other linear markings representing land drains are indicated by broken brown lines. Strong magnetic anomalies which are likely to represent iron objects are in blue.
- E.1.14 The most significant findings from the resistivity survey are negative linear anomalies, as indicated by broken blue lines. Some of these correspond to cropmark ditches. A few positive resistance anomalies can also be identified, and are shown in green. (Ditches in resistivity surveys may give positive or negative anomalies, depending on the texture of the fill in relation to the surrounding natural soil).

Magnetic susceptibility tests

- E.1.15 The magnetometer survey was supplemented by a background magnetic susceptibility survey based on readings taken at 30 m intervals with a Bartington MS2 meter. Susceptibility readings can (sometimes) be used to provide a broad indication of previously occupied or disturbed areas in which burning associated with past human occupation has enhanced the magnetic susceptibility of the topsoil, although the readings are usually affected also by non-archaeological factors, including geology and land use. A background survey of the kind done here is undertaken mainly to test the (largely) geologically determined magnetic properties of the soil. This information provides an indication of the strength of magnetic response to be expected from the site, and can be of help when interpreting the magnetometer survey. Susceptibility readings are shown on a plot inset in figure E14.

Survey geo-reference

- E.1.16 The survey grid was set out and tied to the OS grid using a differential GPS system. The plans are therefore geo-referenced, and precise OS co-ordinates of map locations are obtainable from the AutoCAD data. The OS grid is shown on all figures.



Results

- E.1.17 Fields have been numbered arbitrarily for reference along the route from NW to NE. Findings from sections of the route are described in turn.

Western approach (fields 1 and 2)

- E.1.18 The proposed route here passes within 100 m to the west of the remains of the (early) Roman fort rampart and (later) Roman bathhouse. The route in field 1 is also intersected by the line of the east-west Roman road through the town.
- E.1.19 The magnetometer survey produced a number of positive findings, including pit-like magnetic anomalies, some of which are contained between two linear features (A and B as labelled on figs E5 and E15). Anomaly B lies close to a crop-mark ditch as shown on figure E14. The east-west road lies between A and B, but does not itself appear to have been detected. Roman roads are often not seen in a magnetometer survey unless they have distinct side ditches. They might be detected by resistivity if there is a well-preserved stone surface, but that does not appear to be the case here. (*Britannia* 30 mentions large scale stone robbing in this area around 1800.)
- E.1.20 The magnetometer findings in field 1 suggest the presence of small pits and settlement features which are unlikely to be detectable by resistivity, although some small positive resistivity anomalies have been outlined (in green) on figure E12.
- E.1.21 The more conspicuous resistivity findings on this section of route are negative linear features (as indicated by broken blue lines on figs E12 and E15). These do not clearly relate to features in the archaeological plan (fig. E14), and some are parallel to field boundaries. It is possible they reflect increased water retention in compressed soil along uncultivated trackways at the field edges.
- E.1.22 Magnetometer findings in the southern part of the western approach (field 2) are minimal. This suggests that the Iron Age settlement (indicated in fig. E14 in the adjacent field to the east) is unlikely to extend this far to the west.

Alternative western approach (fields 3-4)

- E.1.23 These two fields are at a greater distance from the Roman town than other parts of the survey, and produced no clearly significant findings.
- E.1.24 A few small magnetic anomalies (including one possible pit-like feature in red) are marked at the western end of field 3, but these are very isolated, and such disturbances are often seen near field boundaries.
- E.1.25 A larger group of disturbances (at C) in field 4 does not contain any substantial pit-like features as seen in field 1, and could be natural (caused by magnetic stones in a gravel outcrop) or recent. There are minor disturbances in the resistivity survey at the east of field 4, but they do not form an interpretable plan.

South of the Roman Town (fields 5-7)

- E.1.26 The crop-mark plan (fig. E14) suggests that fields 5-6 contain only outlying enclosures, which will not necessarily be detectable in a magnetometer survey (although there may be extramural settlement near to the north-south Roman road). The magnetometer plots (figs E3 and E7) show strong disturbances near pylons and the railway, but findings otherwise are mainly limited to land drains. These extend across fields 5 and 6, and the western half of field 7. (The drains are represented on the grey scale magnetometer plot by alternating positive and negative readings, caused by segments of clay drain pipe).
- E.1.27 Other findings as marked in field 5, and much of field 6, are too small and isolated to be of any clear significance, although there is a slight increase in magnetic activity near the eastern boundary of field 6, and to the west of field 7. These findings include a possible linear feature (D on fig. E8).



- E.1.28 The field boundary here corresponds to the line of the Dorchester to Alchester Roman road as it approaches the town from the south. It is possible therefore that there could be a scattering of roadside archaeological features, although the survey does not suggest the same density of activity as in field 1. (Susceptibility readings also remain lower here than in field 1).
- E.1.29 The resistivity survey in fields 6 and 7 has detected a number of distinct (mainly negative) linear features (particularly E, F, G as indicated on fig. E6). These all align with enclosure boundaries visible in figure E14, as do positive anomalies also marked (in green) in field 7.
- E.1.30 Resistivity readings in the eastern half of field 7 are higher and more disturbed than in the previous fields. This must reflect a change in subsoil, probably from clay to sand or gravel, as noted above.

Eastern approach (fields 8-13)

- E.1.31 It is probable that the fields and enclosures to the south and east of the town extend into field 8, but they do not (according to fig. E14) appear to be visible here as crop-marks.
- E.1.32 Magnetometer findings in field 8 are sparse, except for some drains (as in field 5), and the resistivity response is again affected by the gravel subsoil. The plotting sensitivities used in figures E11 and E13 for the (more disturbed) resistivity data from field 8 are lower than for the previous fields. A few interpretable linear resistivity features remain visible in field 8, against the variable background, and can be seen in figure E14 to align well with enclosure boundaries to the north and west. The survey therefore suggests that the crop-mark enclosures extend into this field, although the detected plan is probably incomplete, and the ditches are difficult to trace for any distance.
- E.1.33 The remainder of the eastern approach was surveyed by magnetometer only, with findings which include an uncertain group of small magnetic anomalies at E at the NE corner of field 8. This is close to the location of the 1996-9 trench 12 (as indicated in Sauer 1999a, fig. 7). This trench was located to test for the northern rampart of the Roman training camp, but was unproductive. It is possible that the minor magnetic disturbances around E relate to the excavation, rather than archaeology.
- E.1.34 It is tempting, in field 9, to try and identify faint linear markings (particularly in the grey scale plot) at the location F (as labelled in figs E9 and E15). Such markings could represent the edges (or side ditches) of the track leading to the Roman parade ground (as identified in fig. E14). The track (if it is detectable) does not here appear to be associated with any other features. Susceptibility readings are high in field 9, which could mean that isolated ditches are more readily detectable here than elsewhere.
- E.1.35 There is a more clearly identifiable group of magnetic disturbances at G in field 10. Findings include a ditch-like linear feature which can be seen in figure E14 to correspond to a ditch alongside the adjacent Roman road. Road metalling was seen here beneath alluvium in one of the 1996-8 trenches (trench 15, Sauer 1999a, fig. 7), but the road itself (as is usual) was not detected in the magnetometer survey. Other magnetic anomalies at G could perhaps indicate roadside activity (as in field 1), although some of the disturbances are strong enough to be recent.
- E.1.36 Findings from the remaining small paddocks (fields 11-13) are difficult to interpret. A curving stream channel appears to have been filled in here, and most of the magnetic activity is likely to derive from imported debris used for the filling.



Conclusions

- E.1.37 The survey has produced results which relate quite closely in their character and location to previously identified archaeological findings at the site.
- E.1.38 These include areas of possible roadside settlement both to the west of the town and bathhouse in field 1, and next to another Roman road to the east of the town in field 10. There are further possible traces of roadside activity in fields 6 and 7, where the survey intersects the main north-south road to the south of town. Findings otherwise are limited to traces of ditched enclosures or field systems, which were detected by the resistivity survey in fields 6, 7 and 8. The magnetometer findings from these fields do not suggest the enclosures contain any identifiable settlement or other remains, apart from the roadside disturbances mentioned above. It is probable that further ditched enclosures could be found by resistivity surveying in field 5, but the magnetometer survey here, and on the alternative western approach (fields 3-4) did not detect any clearly interpretable findings.

Inventory of selected findings

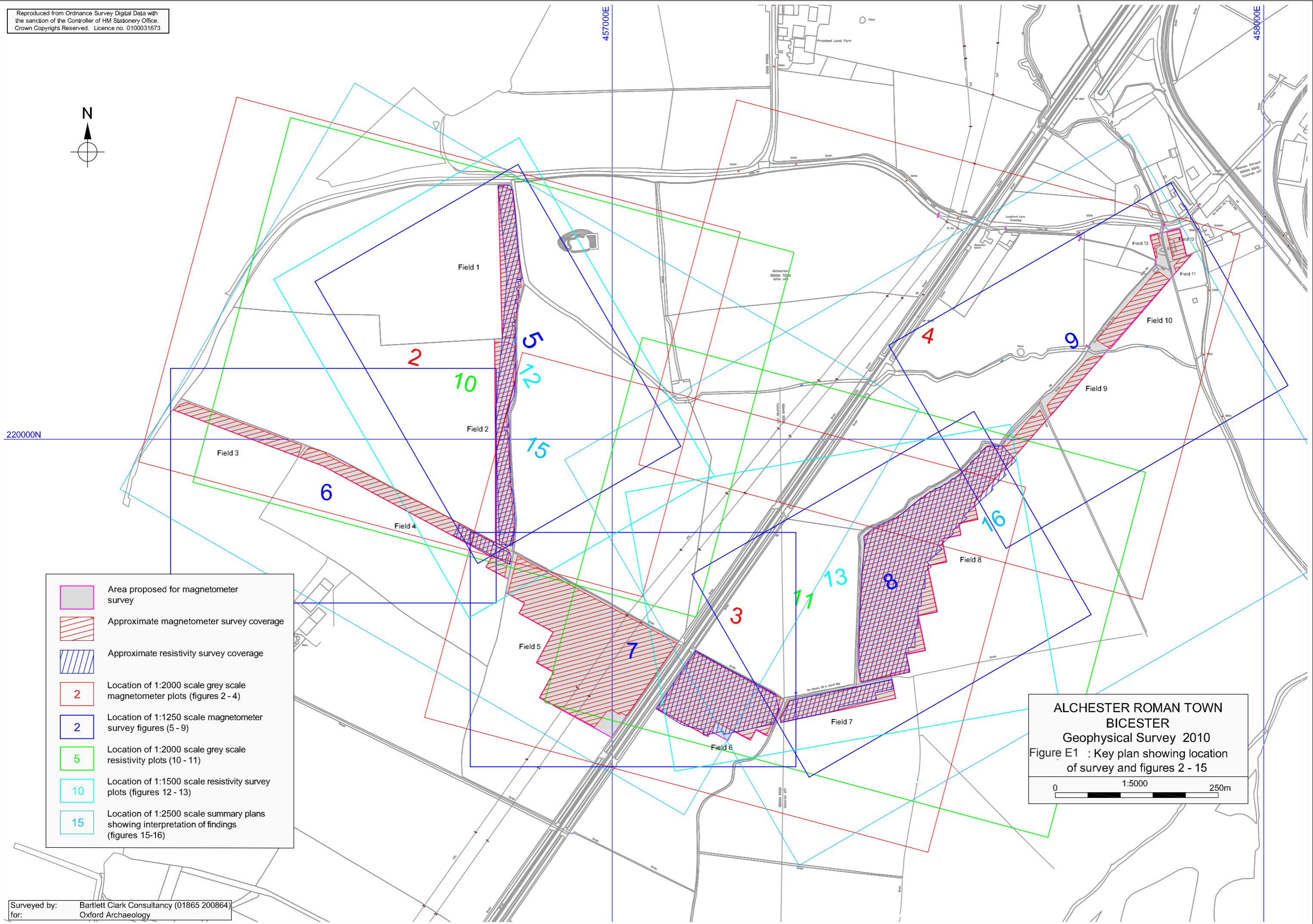
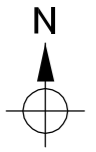
- E.1.39 This list notes the more significant findings from this magnetometer survey. The grading (1-4) given alongside each entry refers to the reliability of the geophysical evidence rather than the archaeological significance of the findings.
- (vi) Grade 1: Distinct magnetic anomalies of probable archaeological origin.
 - (vii) Grade 2: Magnetic anomalies possibly including natural or recent disturbances, but which could in part be archaeologically significant.
 - (viii) Grade 3: Weak or isolated features; not necessarily archaeologically significant.
 - (ix) Grade 4: Magnetic anomalies of probably non-archaeological origin.
- E.1.40 This summary list includes only selected magnetic findings, particularly those which may be of potential archaeological interest, or which may require further investigation for their significance to be established. Magnetic disturbances which may be mentioned in the text or indicated on plans are not necessarily included if they appear to be of natural or non-archaeological origin.









Feature (Field)	Feature Description	Grade
A (1)	Ditch-like linear feature defining apparent northern limit to area of possible settlement activity alongside E-W Roman road.	1
B (1)	Feature similar to A at approximate southern limit of roadside activity.	1
C (4)	Cluster of small magnetic anomalies: possibly recent or natural	3
D (7)	Linear feature parallel to N-S Roman road + other nearby magnetic anomalies to each side of Roman road.	1-2 2
E (8)	Cluster of small magnetic anomalies (possibly relating to 1996-9 excavation).	3
F (9)	Weak linear features could represent ditches alongside track to Roman parade ground.	2
G (10)	Cluster of magnetic anomalies including linear feature on line of Roman roadside ditch.	1-2
H (6)	Linear resistivity anomaly corresponds to cropmark enclosure boundary.	1
J (6)	Double linear resistivity feature corresponds to cropmark trackway.	1
K (6)	N-S linear resistivity anomaly aligns with cropmark enclosure boundary (but also with land drain).	1-2



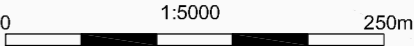
A3 plans of the Geophysical Survey Results at the following scales are included in this Appendix report:

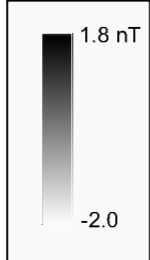
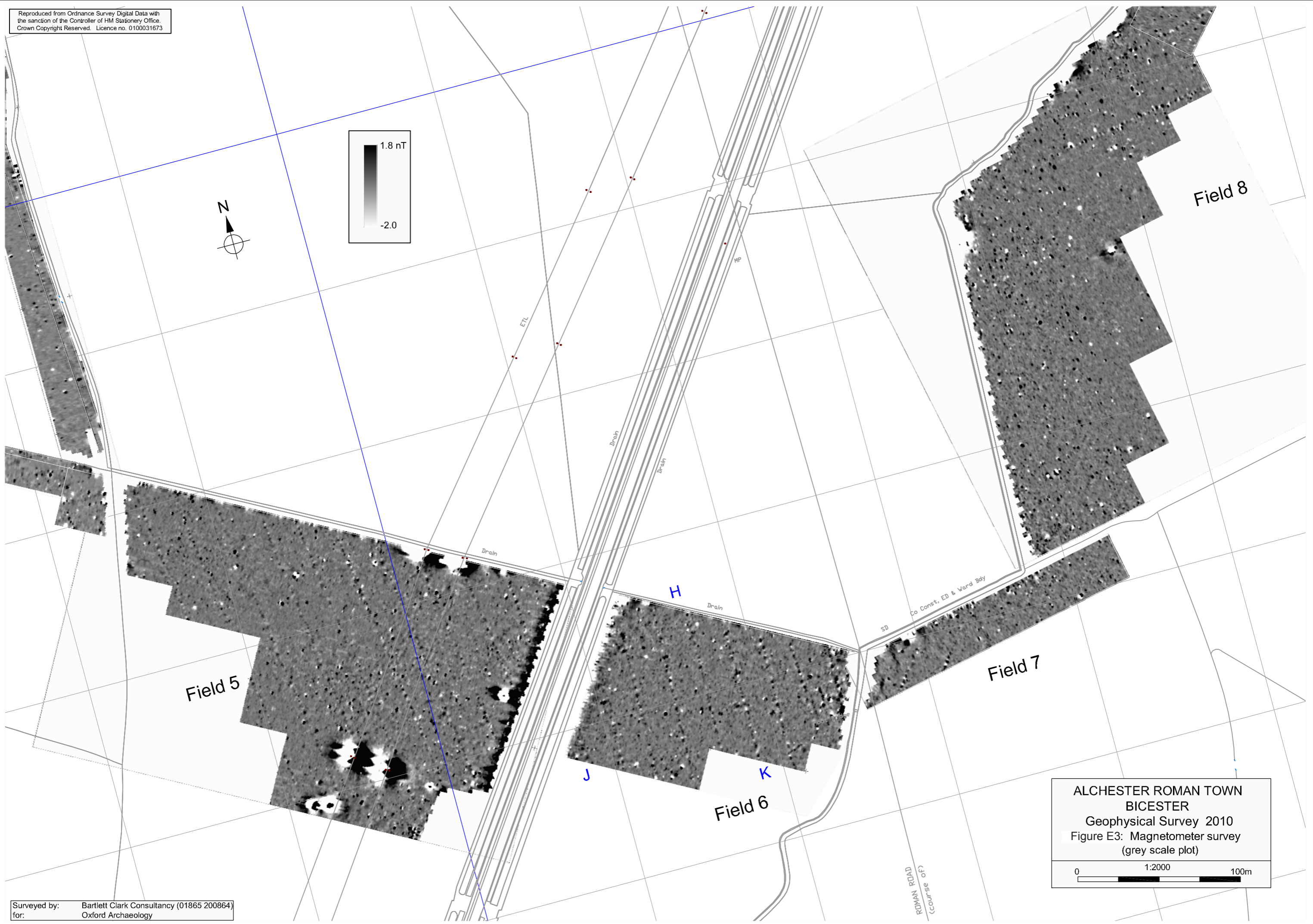
Figure E1	Survey location plan, 1:5000
Figures E2-4	Grey scale plots of magnetometer data, 1:2000
Figures E5-9	Graphical plots of magnetometer survey data (with interpretation), 1:1250
Figures E10-11	Grey scale plots of resistivity survey data, 1:2000
Figures E12-13	Graphical plots of resistivity survey data (with interpretation), 1:1500
Figure E14	Summary of findings (with archaeological site plan, and magnetic susceptibility data), 1:6250
Figures E15-16	Summary plans showing interpretation of survey findings, 1:2500



-  Area proposed for magnetometer survey
-  Approximate magnetometer survey coverage
-  Approximate resistivity survey coverage
-  Location of 1:2000 scale grey scale magnetometer plots (figures 2 - 4)
-  Location of 1:1250 scale magnetometer survey figures (5 - 9)
-  Location of 1:2000 scale grey scale resistivity plots (10 - 11)
-  Location of 1:1500 scale resistivity survey plots (figures 12 - 13)
-  Location of 1:2500 scale summary plans showing interpretation of findings (figures 15-16)

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Figure E1 : Key plan showing location
of survey and figures 2 - 15





Field 5

Field 6

Field 7

Field 8

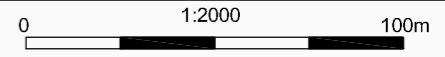
H

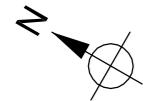
J

K

ROMAN ROAD
(course of)

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Figure E3: Magnetometer survey
(grey scale plot)










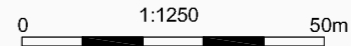
Field 1

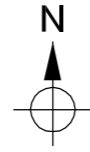
Field 2

45 m

-  magnetic anomalies (archaeological ?)
-  magnetic disturbances (recent / non-archaeological)
-  magnetic anomalies (natural / non-archaeological ?)
-  strong (ferrous) magnetic anomalies
-  land drains

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Figure E5: Magnetometer survey
(with interpretation)










Field 2

Field 3

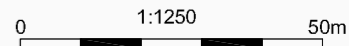
C

Field 4

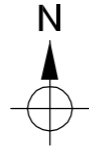
-  magnetic anomalies (archaeological ?)
-  magnetic disturbances (recent / non-archaeological)
-  magnetic anomalies (natural / non-archaeological ?)
-  strong (ferrous) magnetic anomalies
-  land drains

45 nT

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Figure E6: Magnetometer survey
(with interpretation)



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Field 5

45 nT






Drain

Drain

Drain

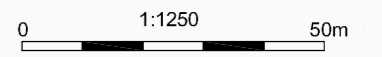
Drain

D

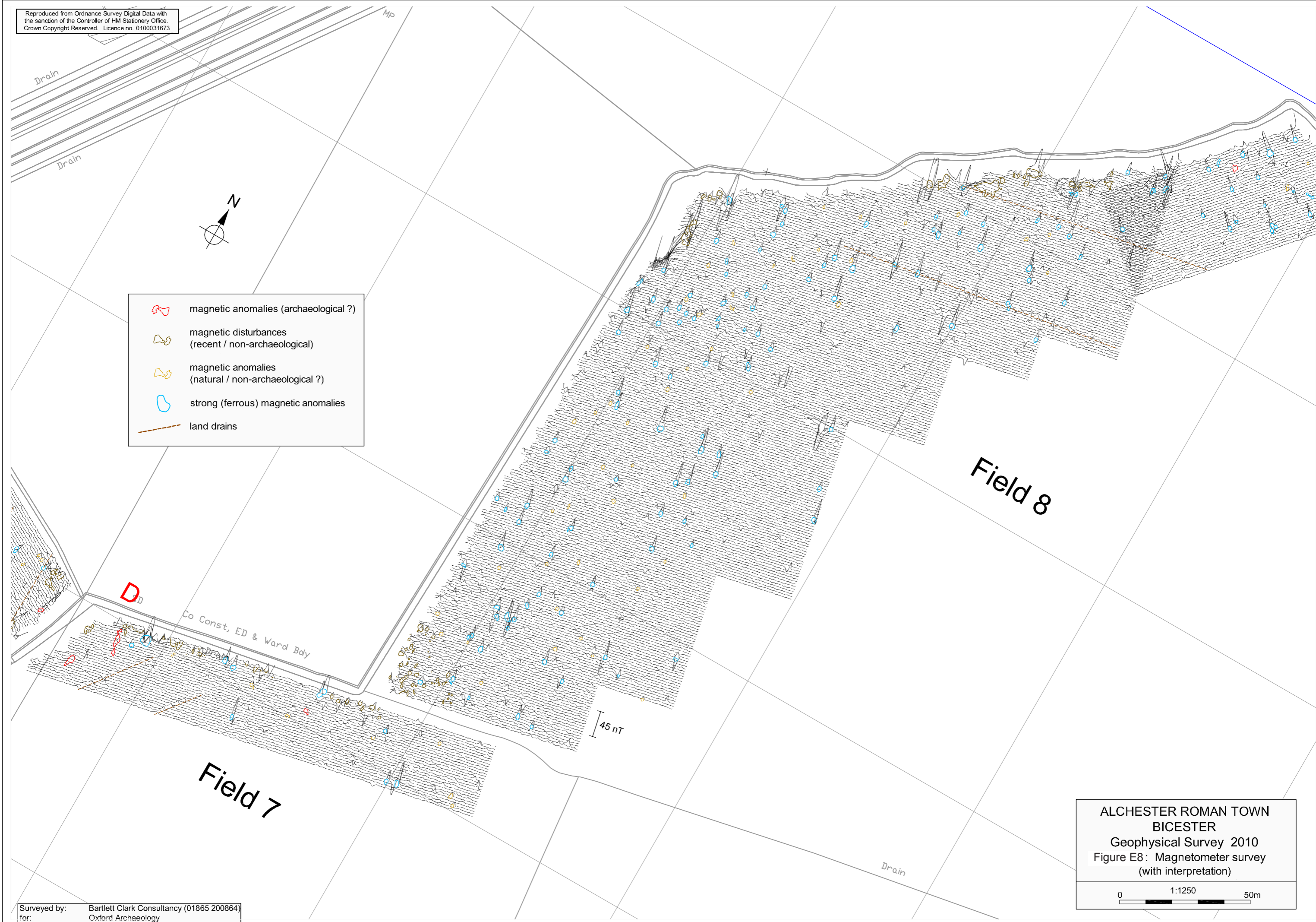
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-  magnetic disturbances (recent / non-archaeological)
-  magnetic anomalies (natural / non-archaeological ?)
-  strong (ferrous) magnetic anomalies
-  land drains





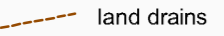
Field 6

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Geophysical Survey 2010
Figure E7: Magnetometer survey
(with interpretation)



Surveyed by: Bartlett Clark Consultancy (01865 200864)
for: Oxford Archaeology








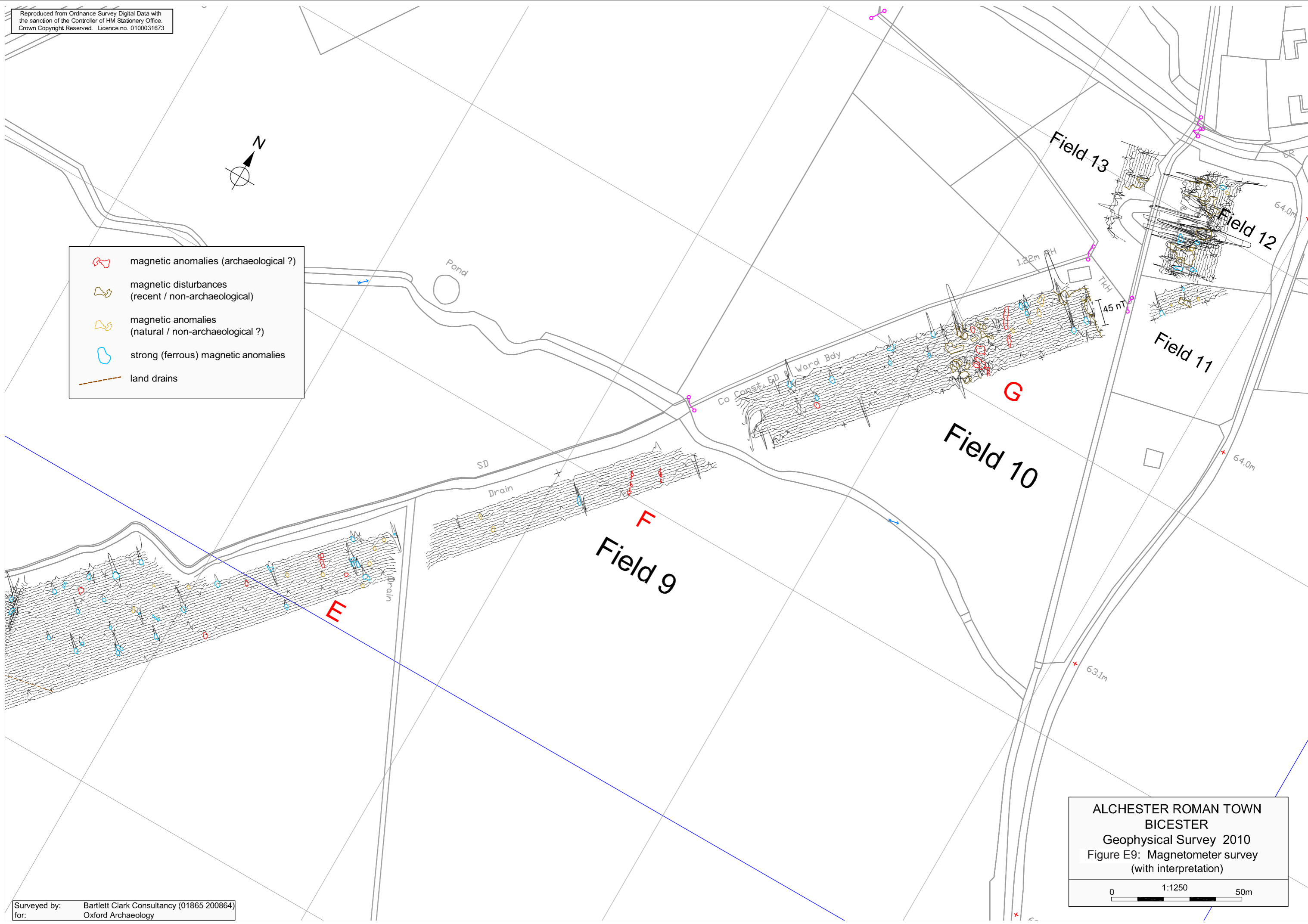
-  magnetic anomalies (archaeological ?)
-  magnetic disturbances (recent / non-archaeological)
-  magnetic anomalies (natural / non-archaeological ?)
-  strong (ferrous) magnetic anomalies
-  land drains

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Geophysical Survey 2010
Figure E8: Magnetometer survey
(with interpretation)

0 1:1250 50m

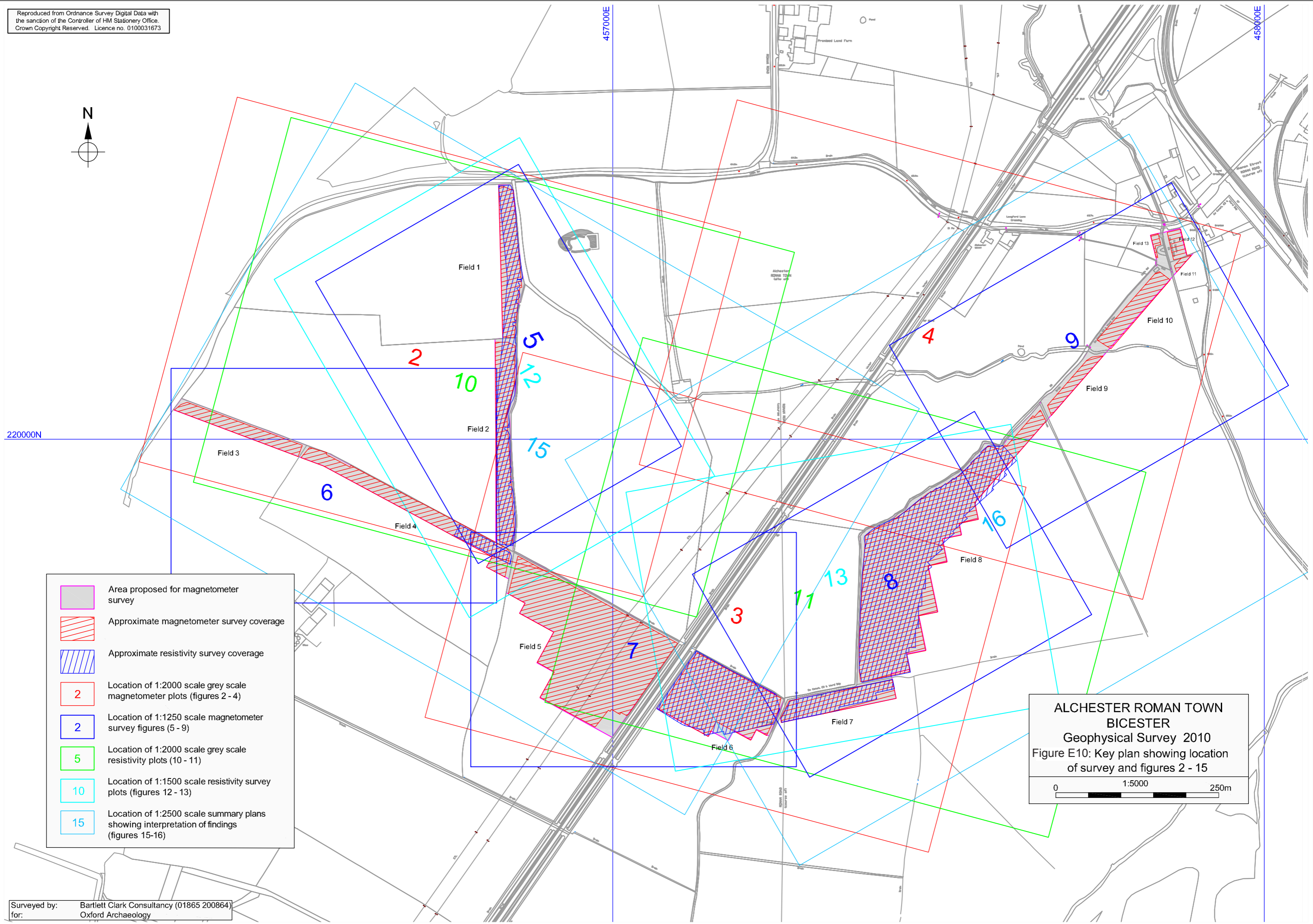
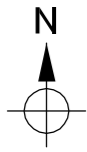










-  magnetic anomalies (archaeological ?)
-  magnetic disturbances (recent / non-archaeological)
-  magnetic anomalies (natural / non-archaeological ?)
-  strong (ferrous) magnetic anomalies
-  land drains



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Geophysical Survey 2010
Figure E9: Magnetometer survey
(with interpretation)

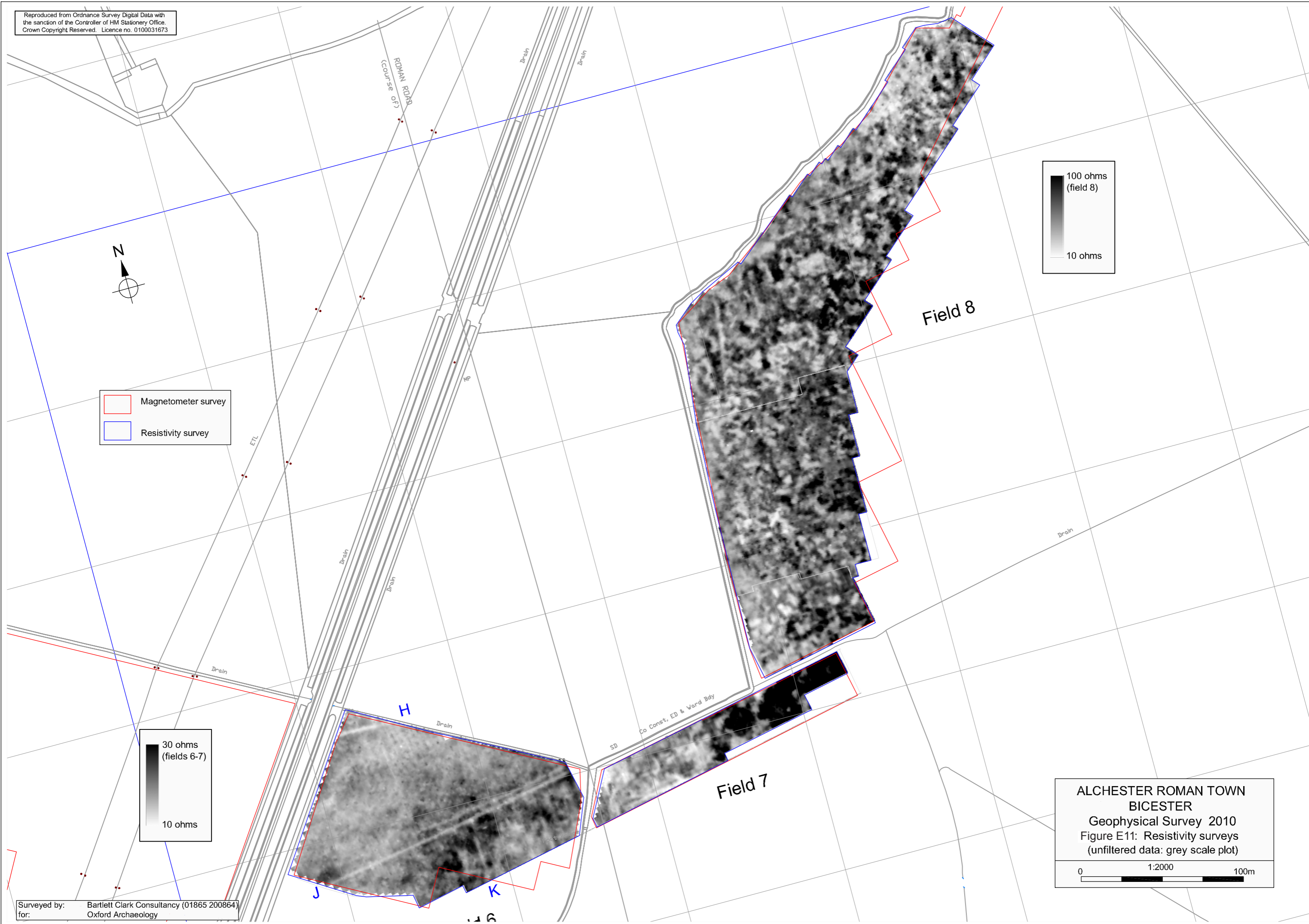
0 1:1250 50m



-  Area proposed for magnetometer survey
-  Approximate magnetometer survey coverage
-  Approximate resistivity survey coverage
-  Location of 1:2000 scale grey scale magnetometer plots (figures 2 - 4)
-  Location of 1:1250 scale magnetometer survey figures (5 - 9)
-  Location of 1:2000 scale grey scale resistivity plots (10 - 11)
-  Location of 1:1500 scale resistivity survey plots (figures 12 - 13)
-  Location of 1:2500 scale summary plans showing interpretation of findings (figures 15-16)

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Figure E10: Key plan showing location
of survey and figures 2 - 15

0 1:5000 250m



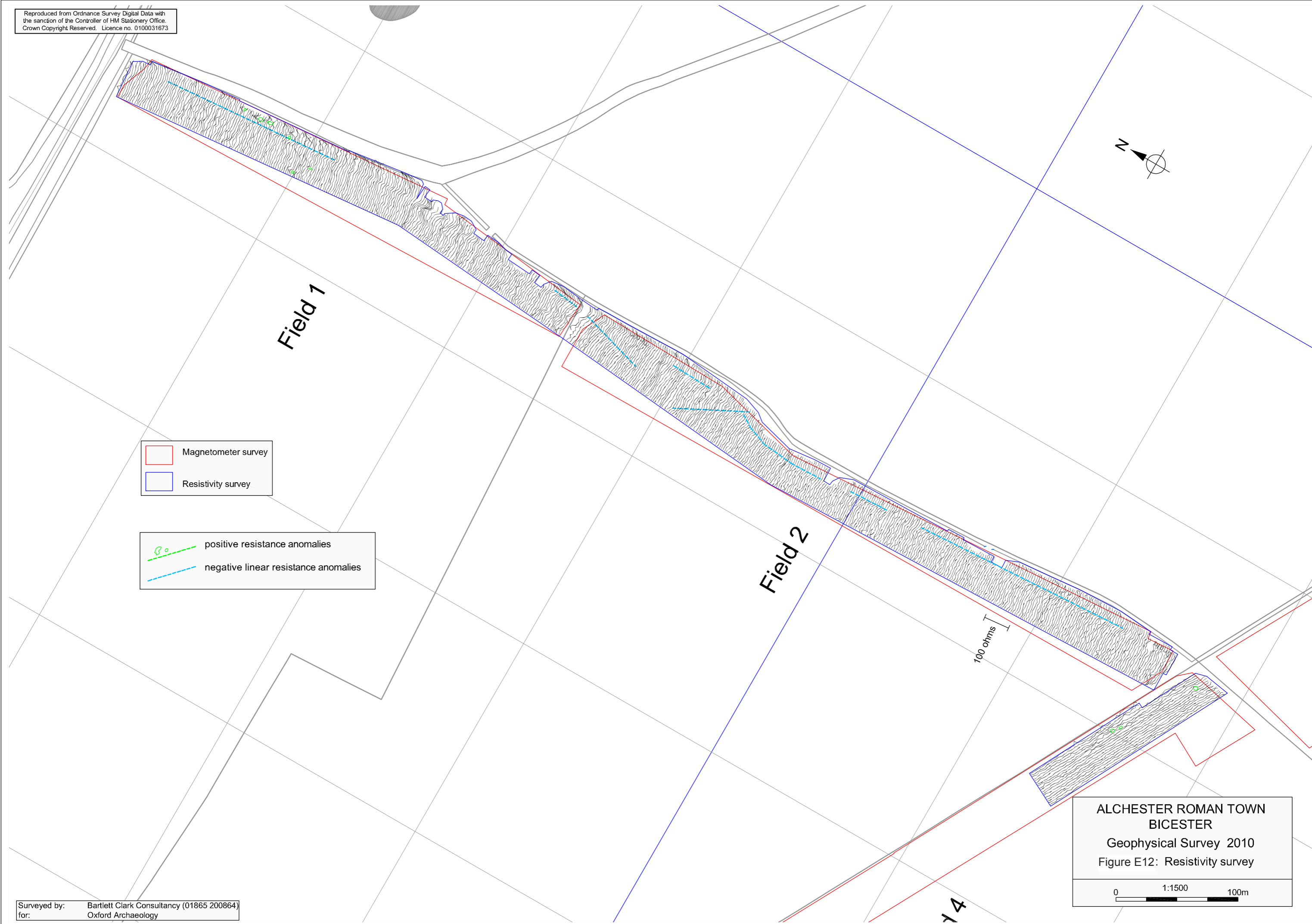
Magnetometer survey
Resistivity survey



30 ohms
(fields 6-7)
10 ohms



100 ohms
(field 8)
10 ohms

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Figure E11: Resistivity surveys
(unfiltered data: grey scale plot)

0 1:2000 100m

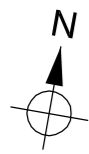




 Magnetometer survey
 Resistivity survey



 positive resistance anomalies
 negative linear resistance anomalies

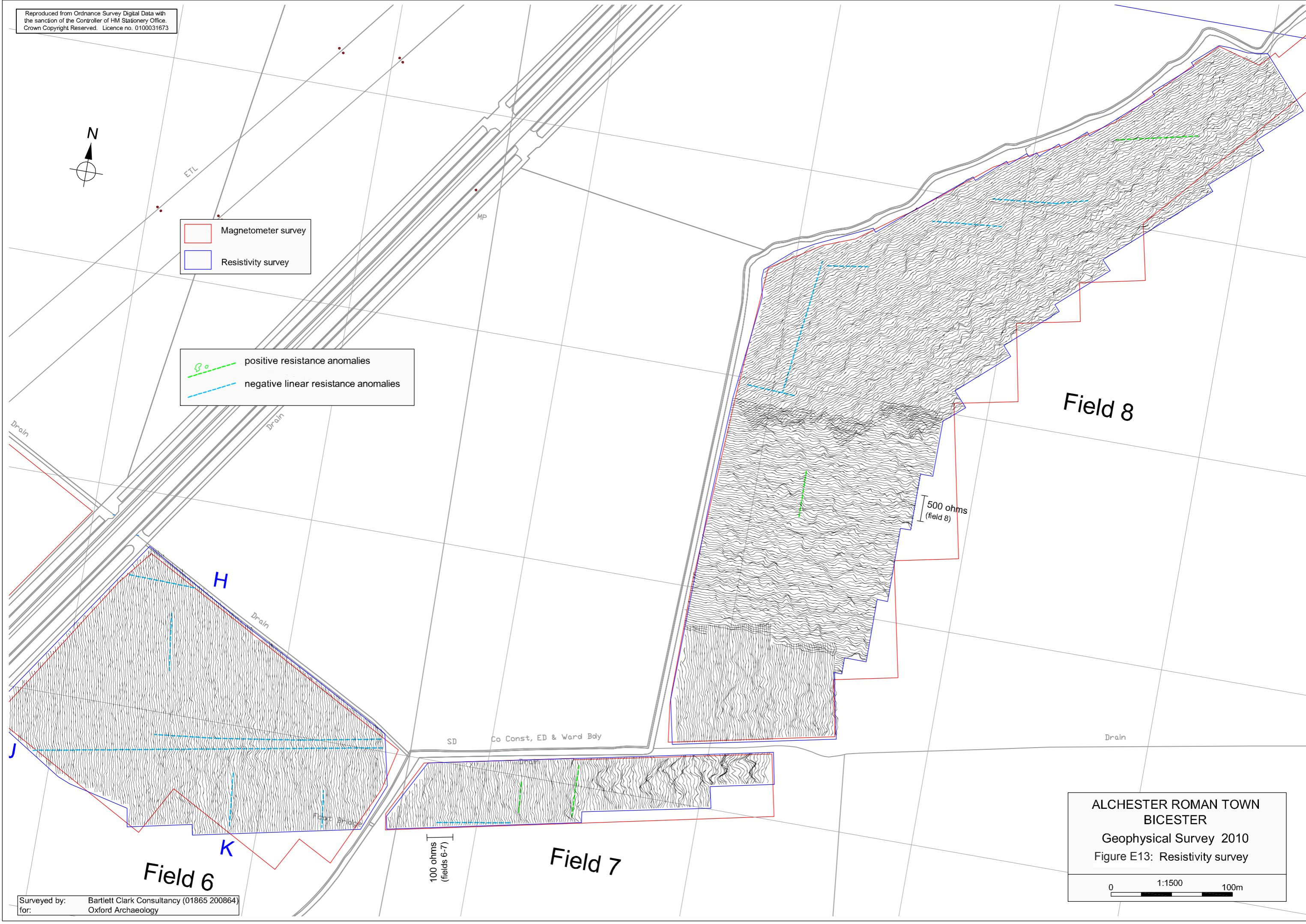
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Geophysical Survey 2010
Figure E12: Resistivity survey

0 1:1500 100m

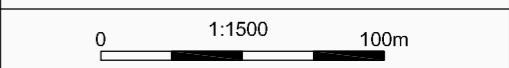


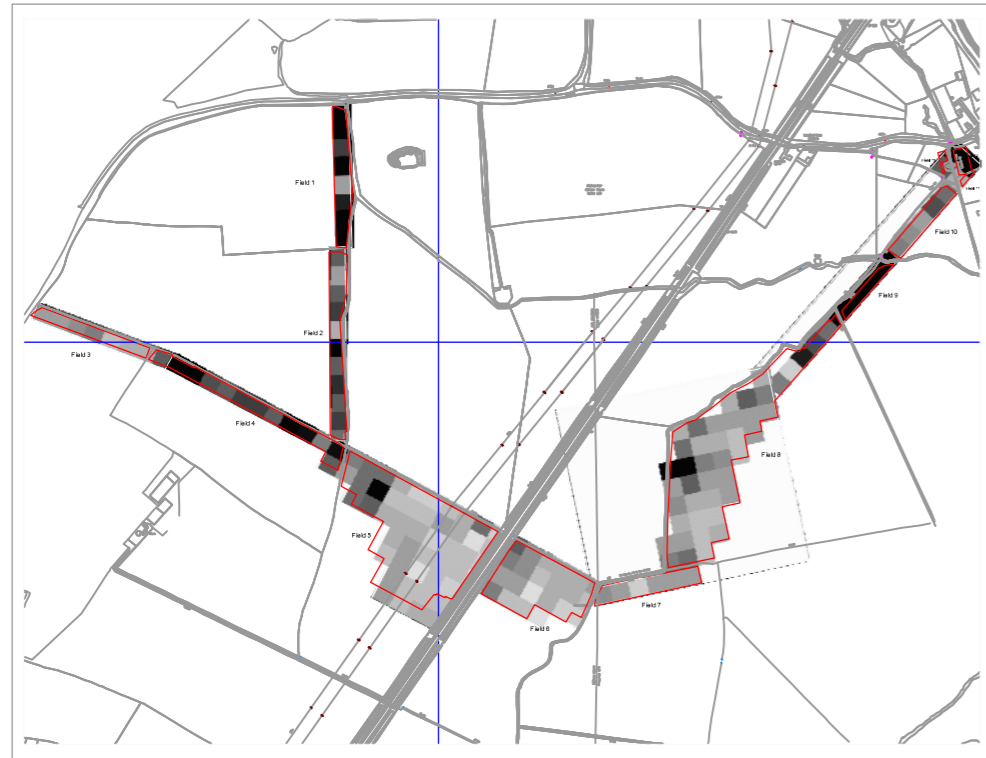
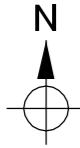
 Magnetometer survey
 Resistivity survey

 positive resistance anomalies
 negative linear resistance anomalies

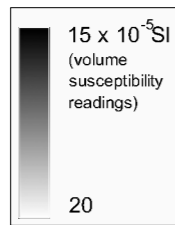


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Geophysical Survey 2010
Figure E13: Resistivity survey

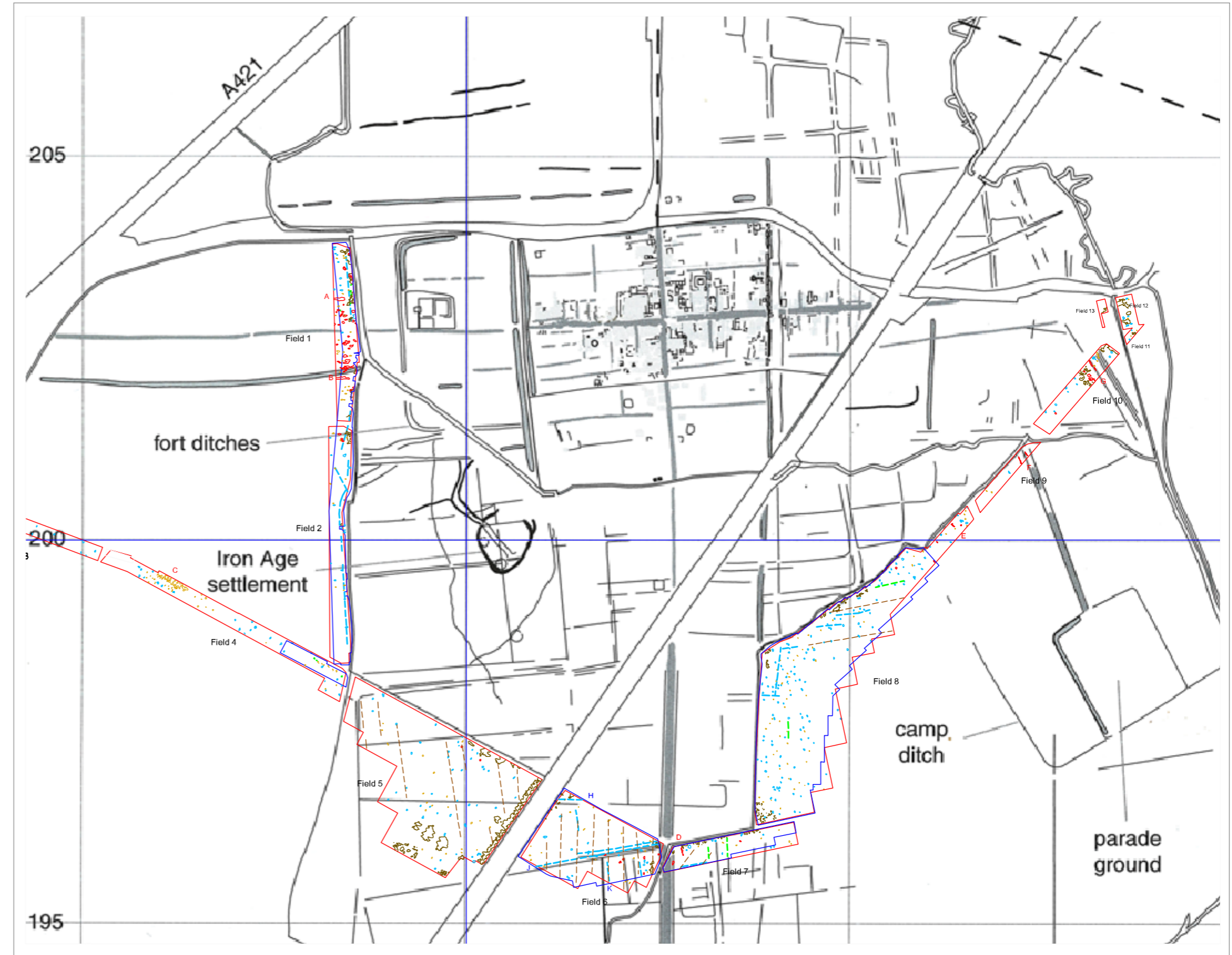




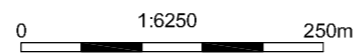
(i) Magnetic susceptibility survey



- magnetic anomalies (archaeological ?)
- magnetic disturbances (recent / non-archaeological)
- magnetic anomalies (natural / non-archaeological ?)
- strong (ferrous) magnetic anomalies
- land drains
- positive resistance anomalies
- negative linear resistance anomalies

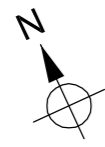


(ii) Survey findings superimposed on archaeological site plan (supplied by Oxford Archaeology)



- Magnetometer survey
- Resistivity survey

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Figure E14: Summary of findings (i)
with known archaeological features
(and magnetic susceptibility survey)



- magnetic anomalies (archaeological ?)
- magnetic disturbances (recent / non-archaeological)
- magnetic anomalies (natural / non-archaeological ?)
- strong (ferrous) magnetic anomalies
- land drains
- positive resistance anomalies
- negative linear resistance anomalies

- Magnetometer survey
- Resistivity survey

Field 1

Field 2

Field 4

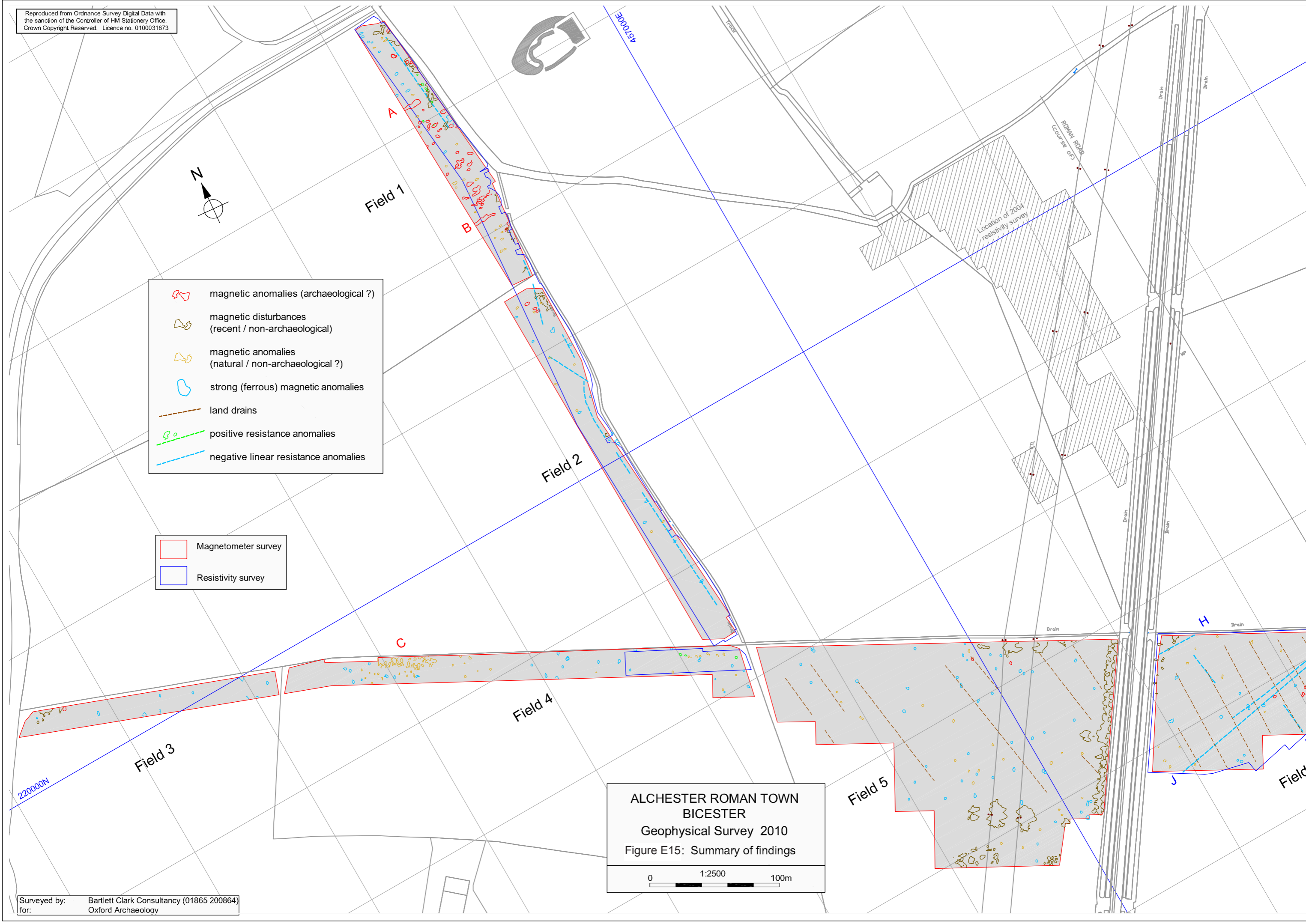
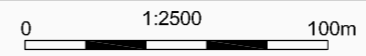
Field 3

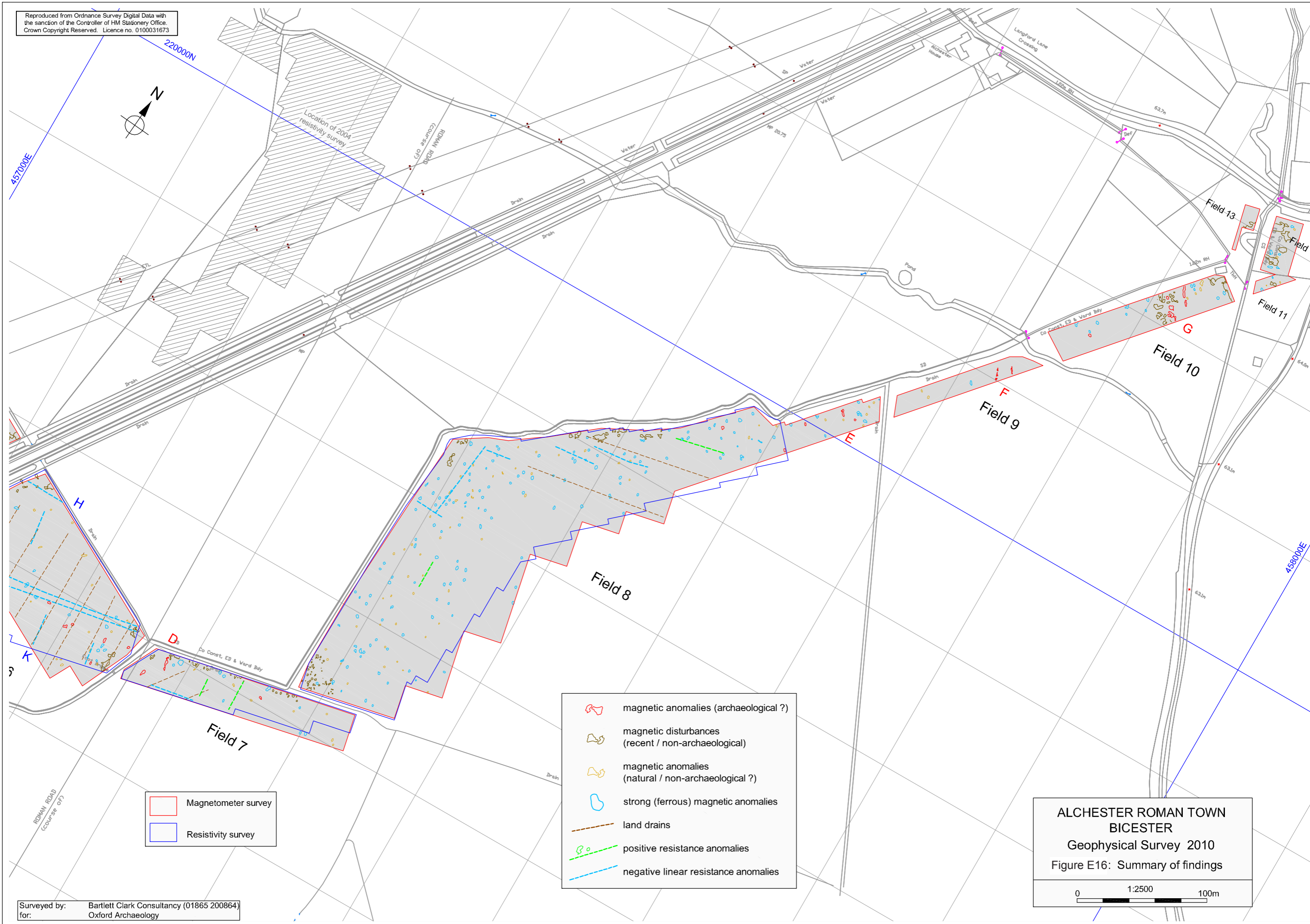
Field 5

Field

Location of 2004 resistivity survey

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Figure E15: Summary of findings





Magnetometer survey
 Resistivity survey

- magnetic anomalies (archaeological ?)
- magnetic disturbances (recent / non-archaeological)
- magnetic anomalies (natural / non-archaeological ?)
- strong (ferrous) magnetic anomalies
- land drains
- positive resistance anomalies
- negative linear resistance anomalies

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 Figure E16: Summary of findings

0 100m
 1:2500



APPENDIX F. BIBLIOGRAPHY AND REFERENCES

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APPENDIX G. SUMMARY OF SITE DETAILS

Site name:	Langford Lane
Site code:	WEME 10
Grid reference:	SP 57050 19650
Type:	Evaluation
Date and duration:	Geophysical Survey was completed in stages between May and August 2010 Trial Trench Evaluation was completed between 18th October and 1st December 2010
Area of site:	approximately 11ha

Summary of results:

Throughout 2010 Oxford Archaeology undertook a two-stage field evaluation of land along the proposed route of a new access road and bridge crossing for Langford Lane around the perimeter of the Scheduled Monument of Alchester Roman Town. This took the form of a magnetometer and resistivity geophysical survey followed by the excavation of 48 trial trenches. The trench arrangement was informed by previously identified cropmark features and by the current geophysical survey although this did not substantially add to the existing body of data.

The trial trench phase of the evaluation covered a cross section of the Roman landscape and confirmed the accuracy of the cropmark evidence. All targeted features were identified whilst Trenches 43-48 upon the high ground west of the floodplain and Trenches 6-18 where previous evidence was negative, failed to encounter any significant remains confirming this absence. However, some trenches within the latter area were moved from their intended location and there is a hint that some of the enclosures to the west and north extend only very slightly into this area.

Each of the large enclosures aligned on the Dorchester road were identified although there was scant evidence of occupation and other substantial activity within the interiors of these. Artefactual evidence was also reasonably limited although that which was encountered suggested a bias towards the 2nd century AD. The recovery of charred processed cereals from a ditch in Trench 21 perhaps indicates a primary agricultural function for these enclosures. Settlement or increased densities of features associated with the roadside zones along the Dorchester road were not encountered with any certainty although Trench 21 did produce the only posthole from the evaluation, suggesting that some form of structure may be present.

Road surfaces were encountered in Trench 2 with an associated flanking ditch and a channel that probably diverted or canalised a stream alongside one of the roads. Other localised areas of surfacing indicate roadside activity within this area although the nature of this could not be established within the confines of the evaluation. A dense collection of ditches and possible other features/deposits was recorded in Trench 3 and the combined pottery assemblages indicate 1st century AD activity. These features may have an origin or connection with the military phase of the occupation of Alchester.

Of more certain military association are the access road or track ditches leading to the military parade ground that were excavated within Trench 4. These were generally unremarkable, although a single probable casket cremation burial was positioned adjacent to one of the

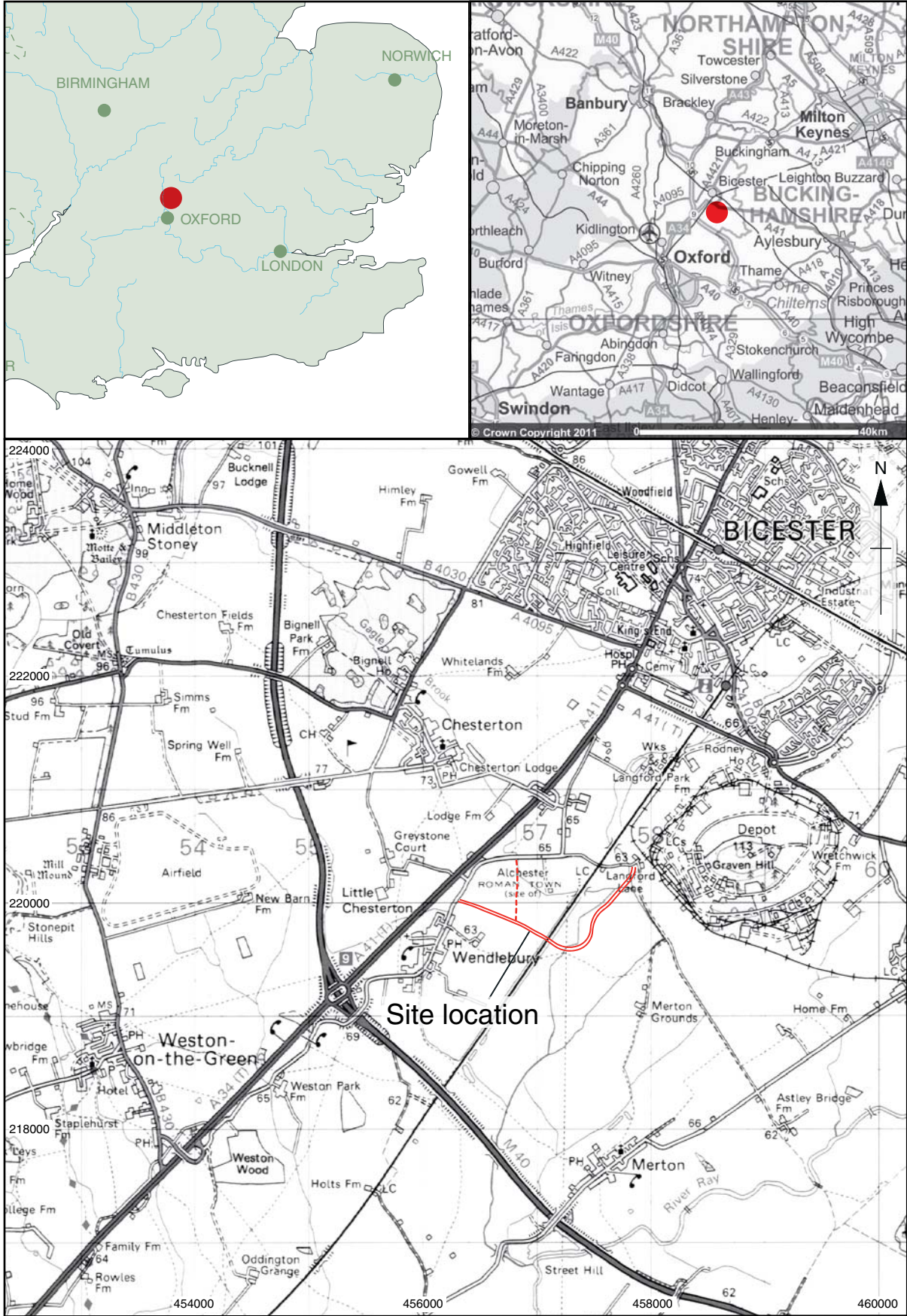


ditches. This may also be military by association although there were no characteristic traits to confirm this interpretation.

Excellent palaeoenvironmental remains were recovered in the form of snails and waterlogged plant and insect remains from selected ditches. Snail preservation was noted across a broad spatial and chronological range of features. Waterlogged deposits are likely to exist reasonably regularly within the evaluation area as, although only a single occurrence was excavated, most deep features could not be fully investigated due to the water table being encountered within the features.

All trenches upon the floodplain demonstrated only minimal or, in the case of Trenches 2 and 3, no post-Roman truncation or plough damage. The trenches within the arable fields to the west of the rail line did display a buried ploughsoil horizon across much of the field although this does not appear to have substantially affected the levels of archaeological preservation. Indeed, Trench 41 included a buried soil horizon that possibly predated a Roman boundary ditch with later alluvial layers infilling the upper part of the ditch and extending over the lower sequence of soils. However, it should be noted that no clear evidence for contemporary Roman land surfaces was identified. Likewise, within the area to the east of the rail line and within the pasture fields there was no evidence for deep ploughing damage with the thin topsoil and turf directly overlying gravel and archaeological deposits across most of this area. The clearest example of the excellent state of preservation of sealed deposits without any post-Roman intrusion was the presence of a road surface only 0.2 m directly below the topsoil within Trench 2. This was also partly sealed by alluvial deposits that sealed pristine archaeological deposits to a greater depth across the remainder of this trench and within Trench 3. The planning archaeologist for Oxfordshire County Council has requested that provision be made within the design to ensure preservation in situ of this area due to the high quality and significance of these deposits.

Location of archive: The archive is currently held at OA, Janus House, Osney Mead, Oxford, OX2 0ES, and will be deposited with the Oxfordshire County Museum in due course, under the accession number 2010.96.



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— Langford Lane diversion
 - - - Original western route

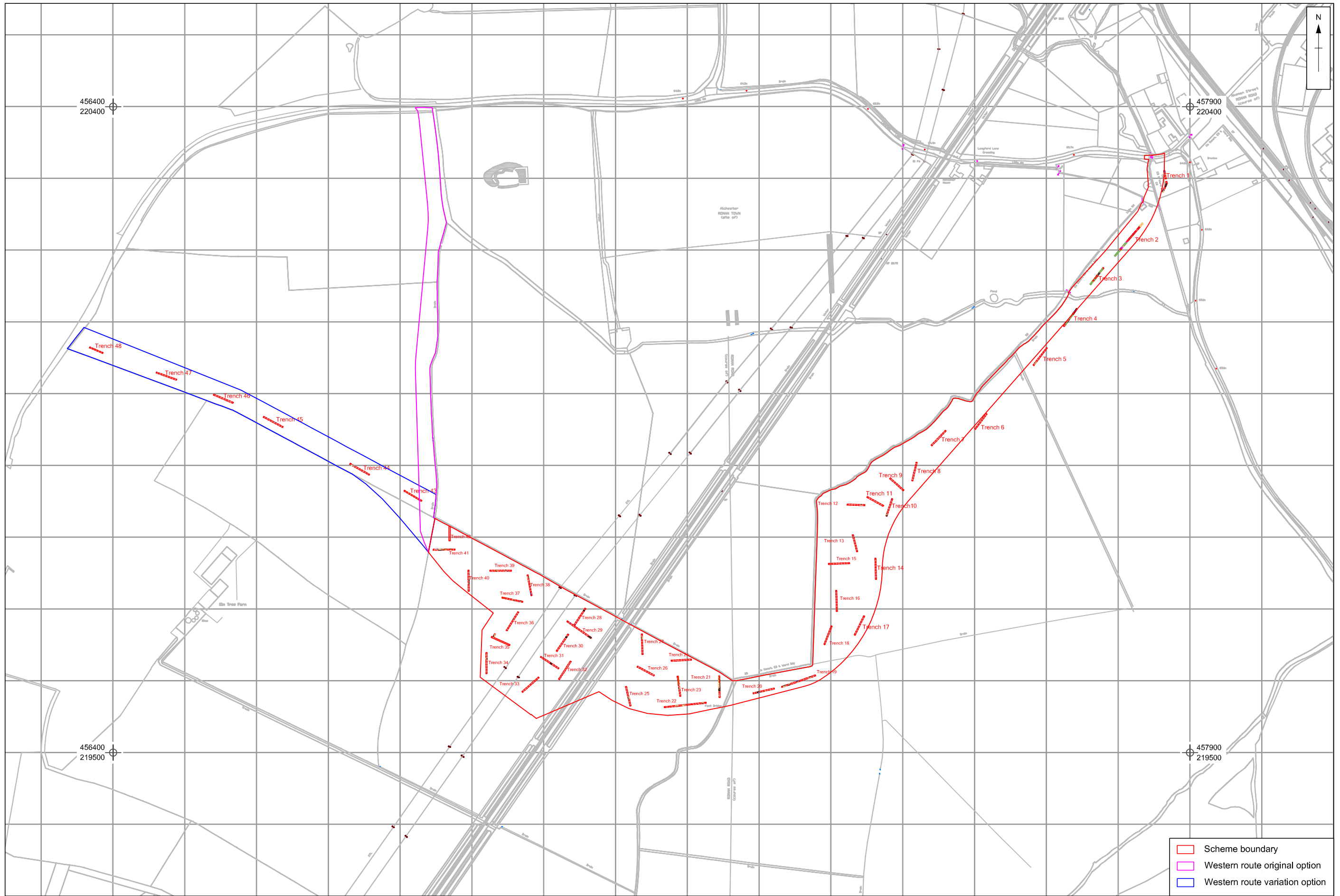
Figure 1: Site location



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0 200 m
Scale at A3 1:5000

Figure 2: Trench locations in relation to cropmarks and selected geophysical survey results



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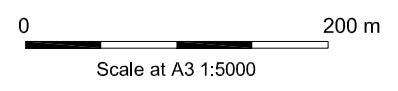
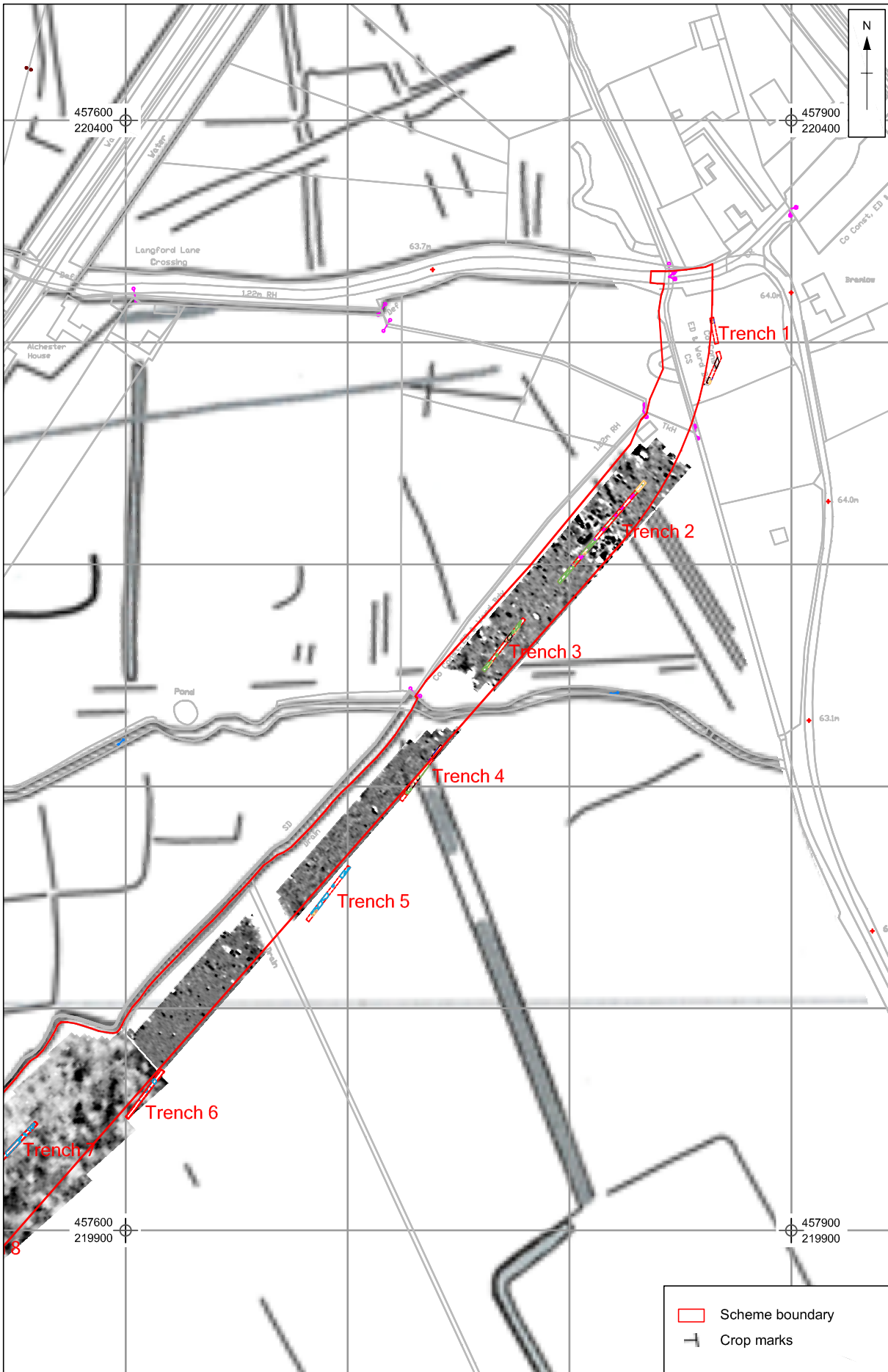


Figure 3: Trench location plan (no archaeological data)



0 100 m
Scale at A4 1:2500

Figure 4: Trenches 1-6 with cropmarks and geophysical survey results

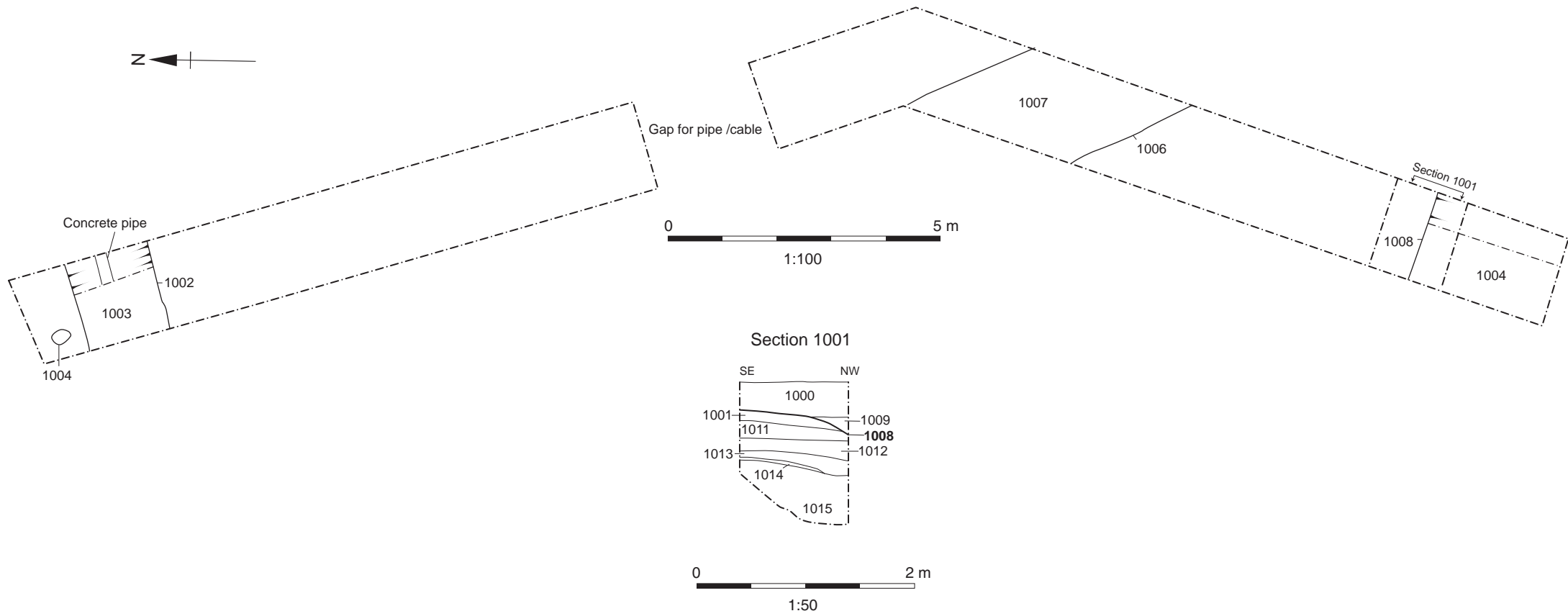


Figure 5: Trench 1, plan and section

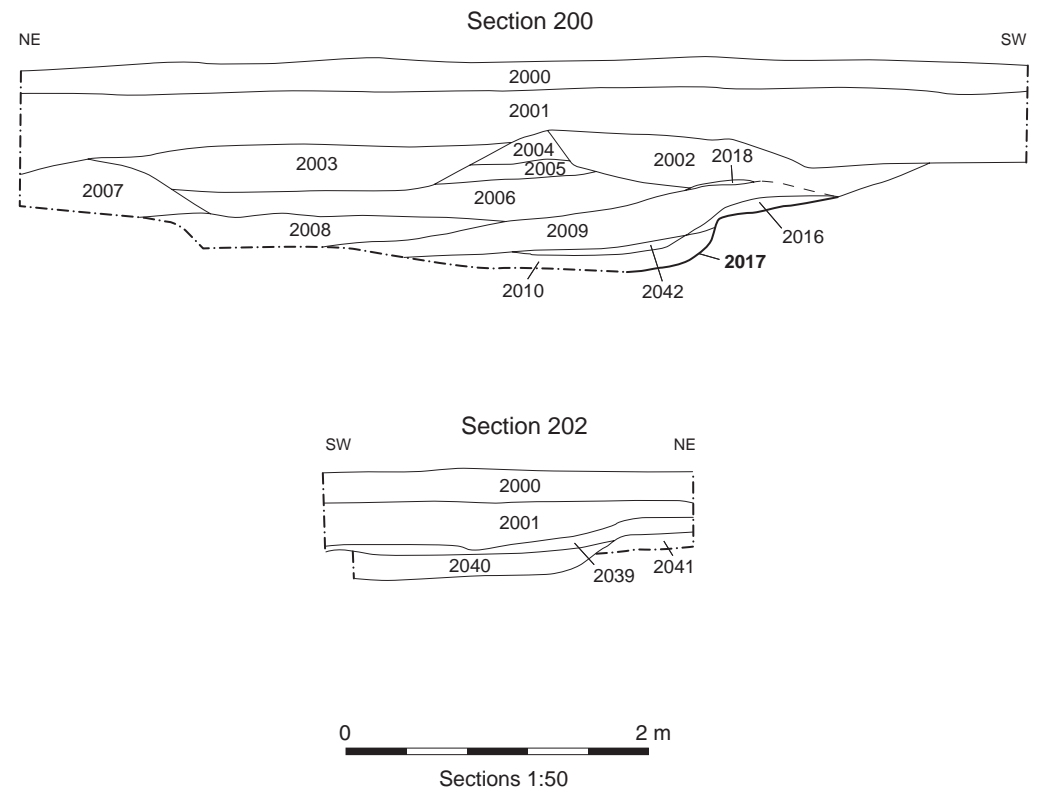
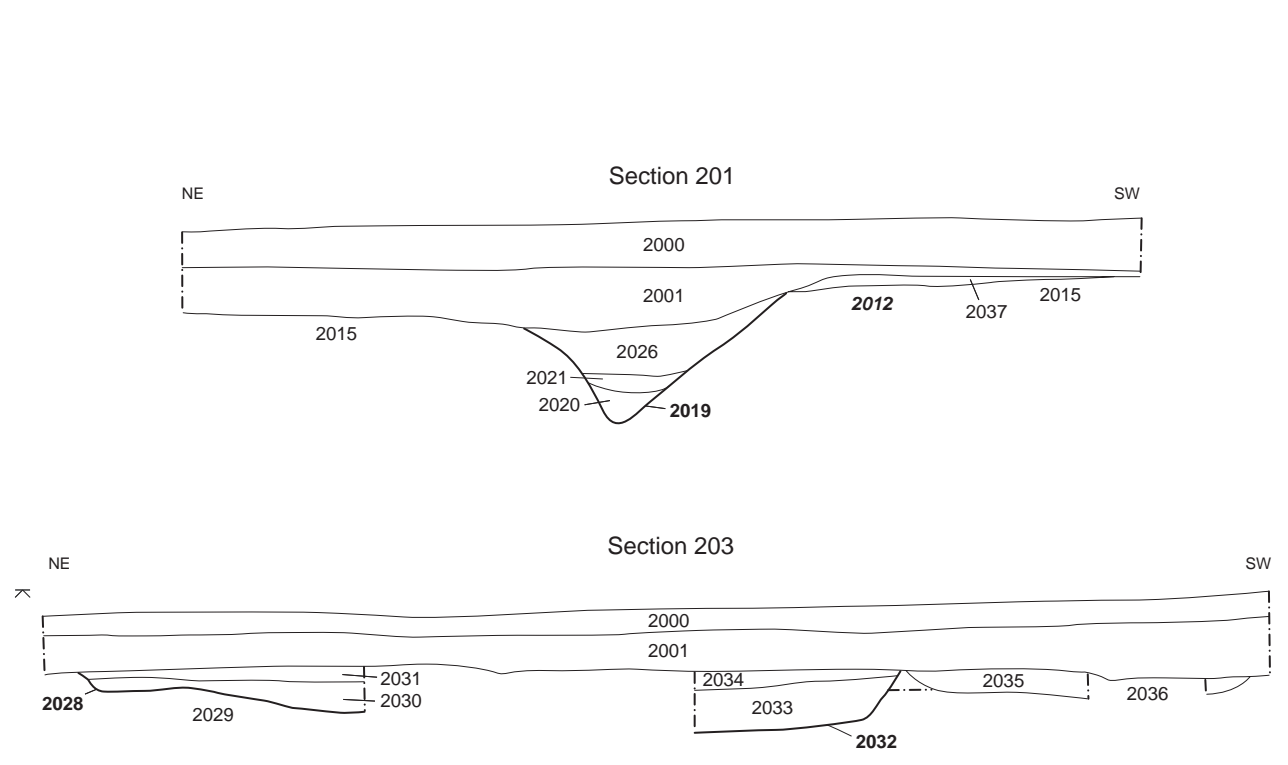
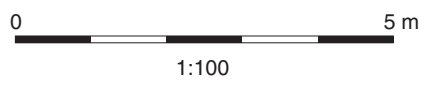
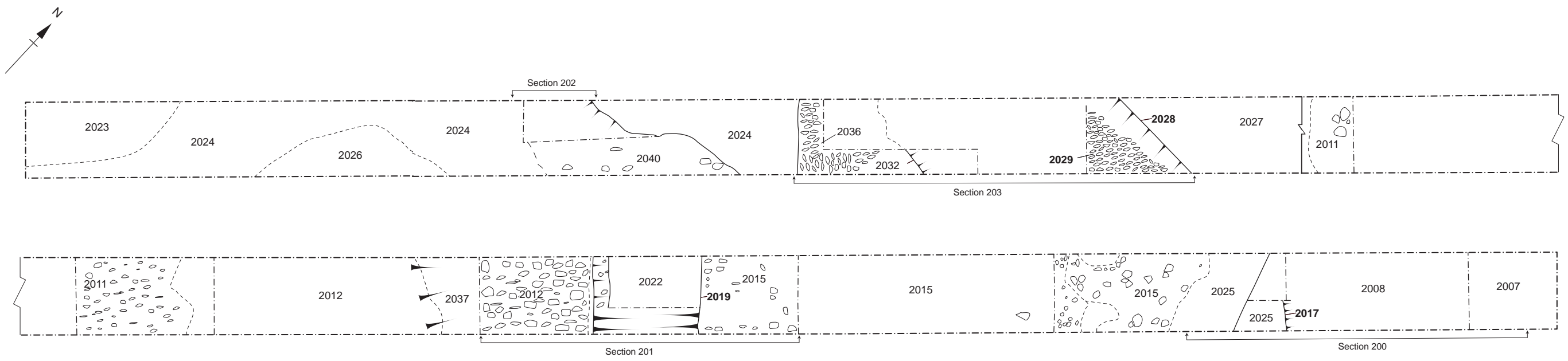


Figure 6: Trench 2, plan and sections

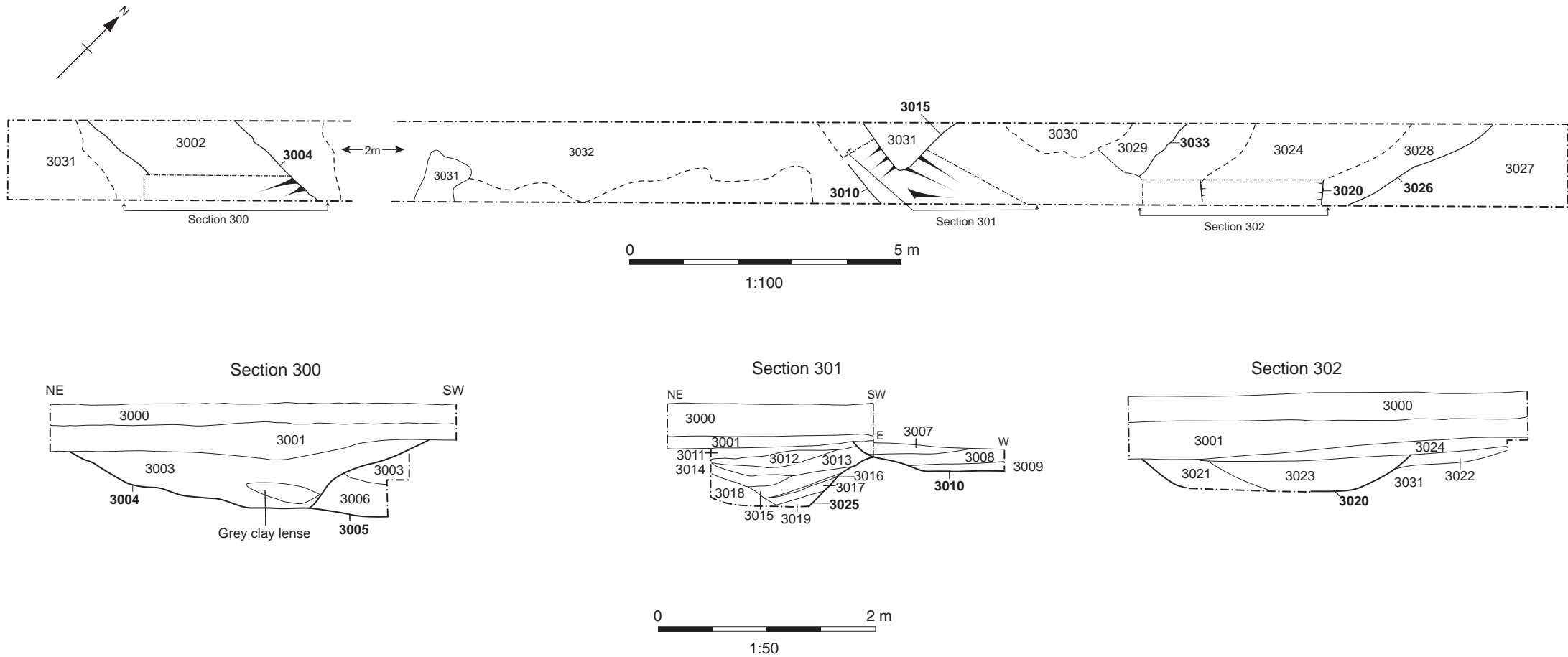


Figure 7: Trench 3, plan and sections

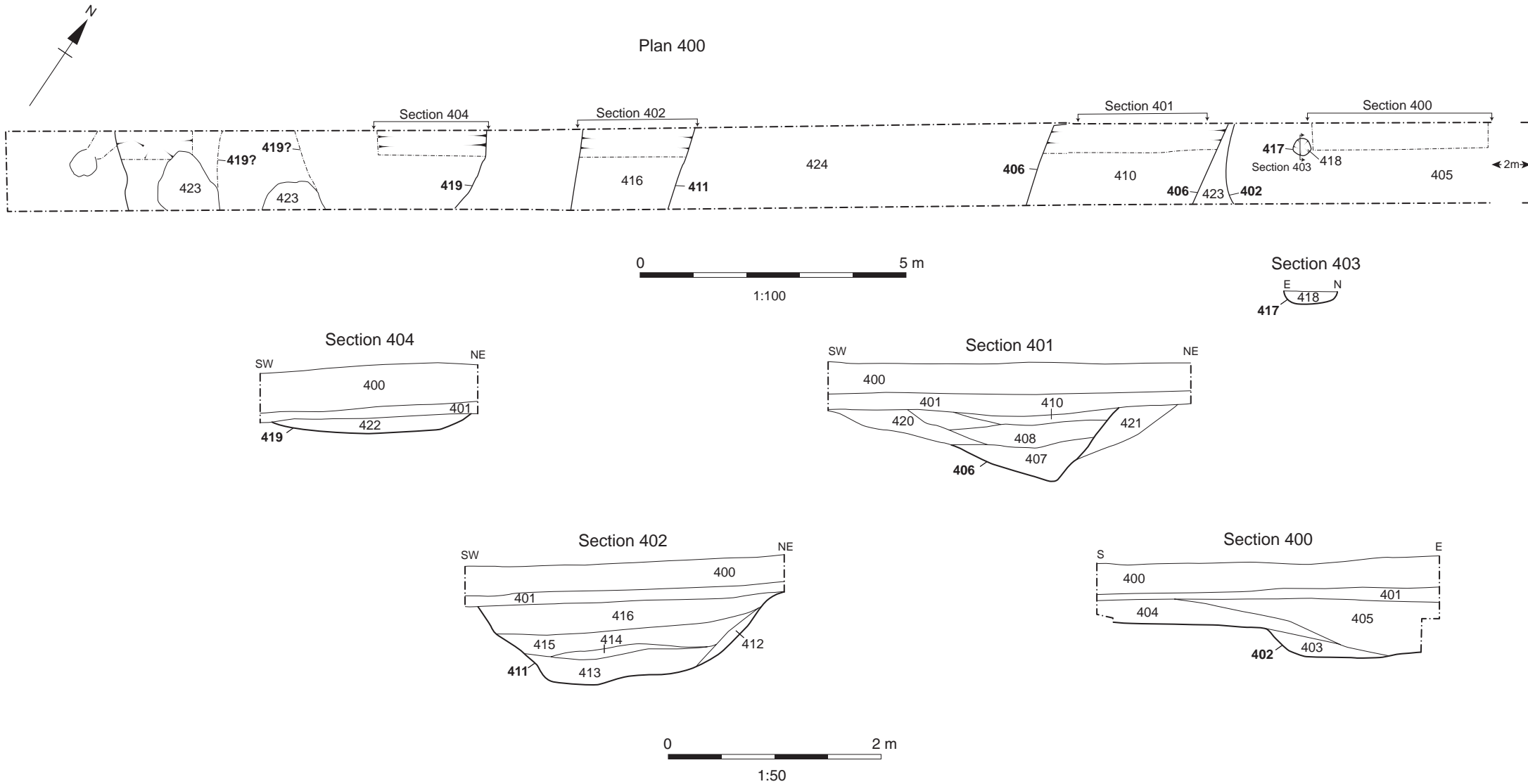


Figure 8: Trench 4, plan and sections

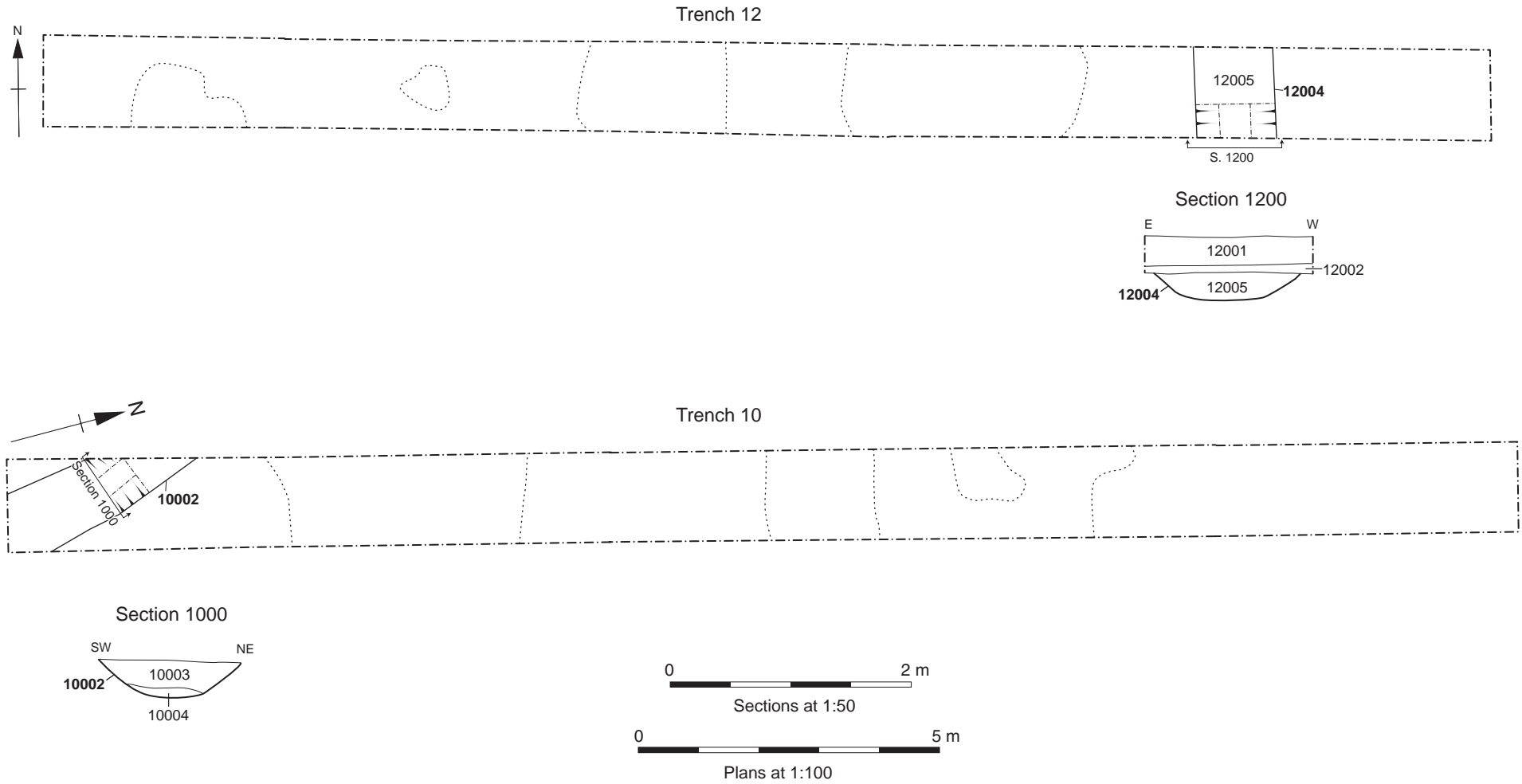
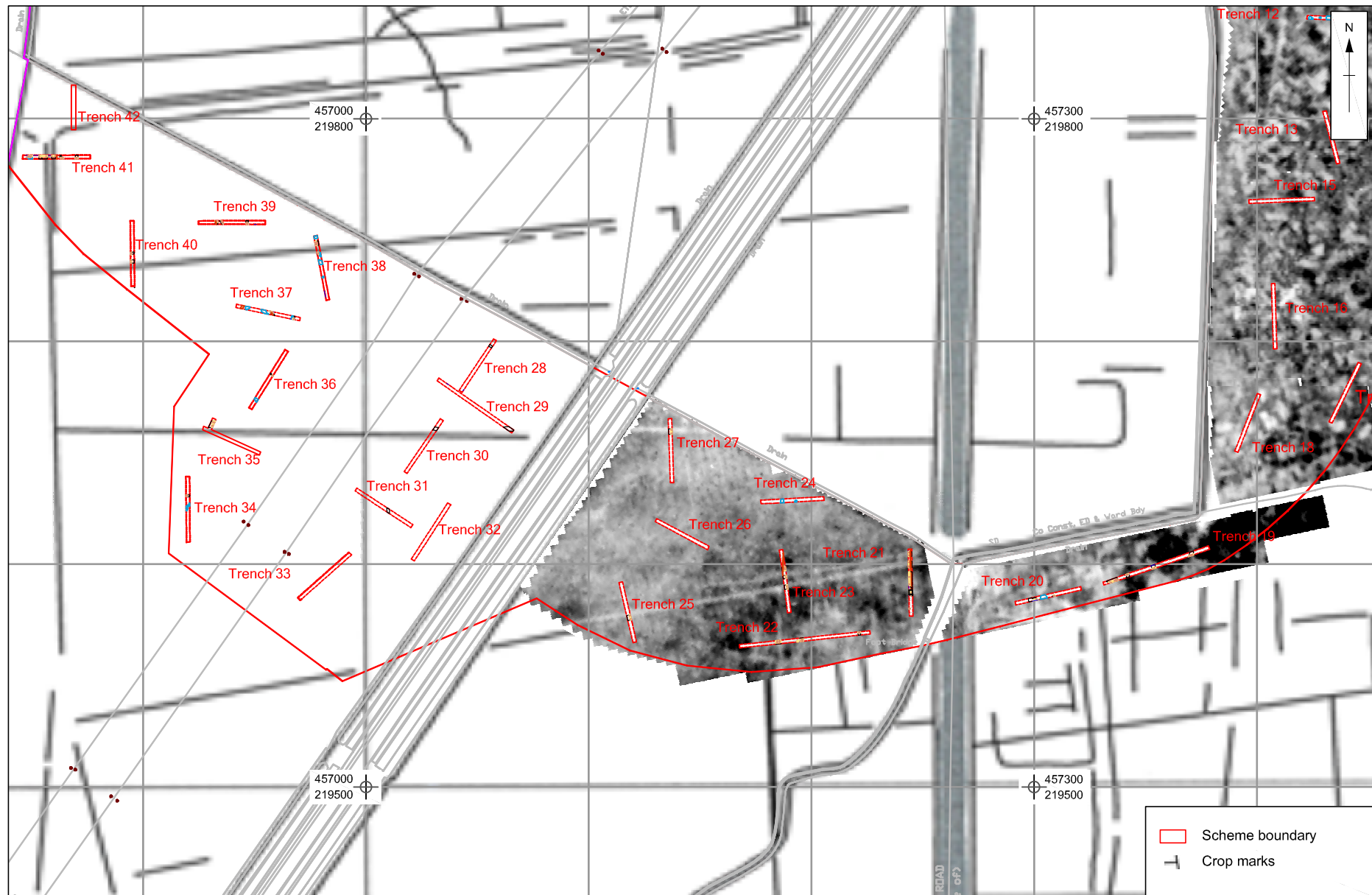


Figure 9: Trench 10 and Trench 12, plans and sections



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0 100 m

Scale at A4 1:2500

Figure 10: Trenches 19-42 with cropmarks and selected geophysical survey results

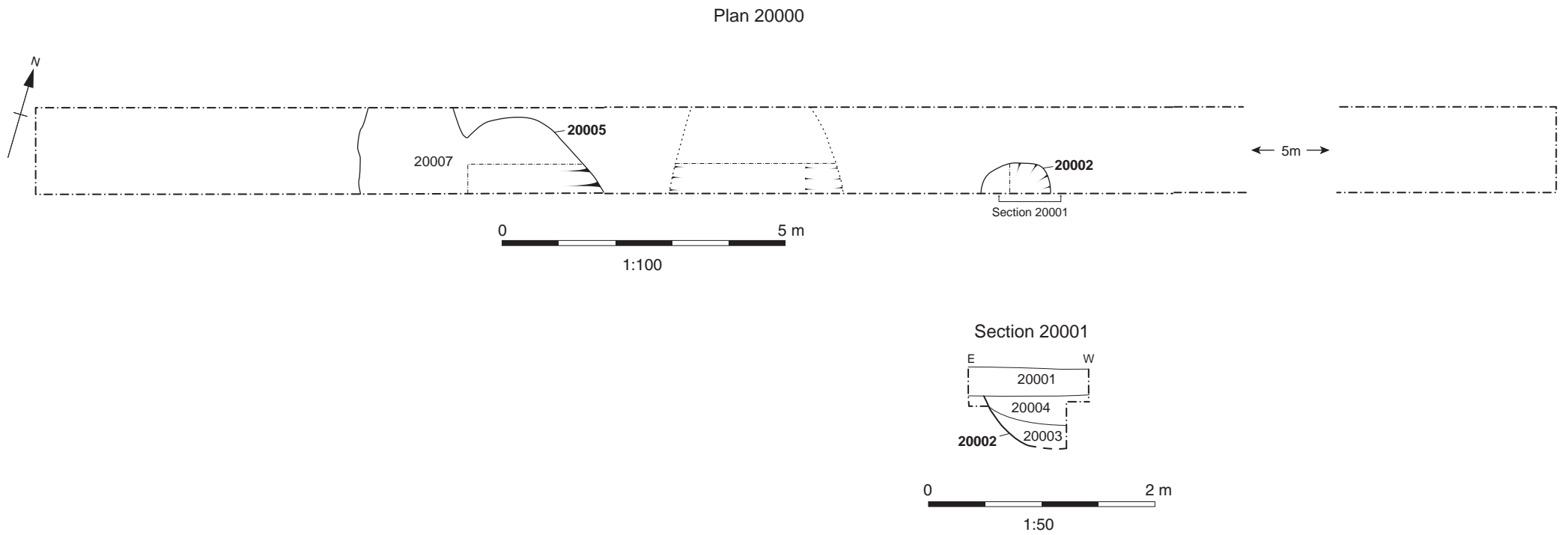


Figure 11: Trench 20, plan and section

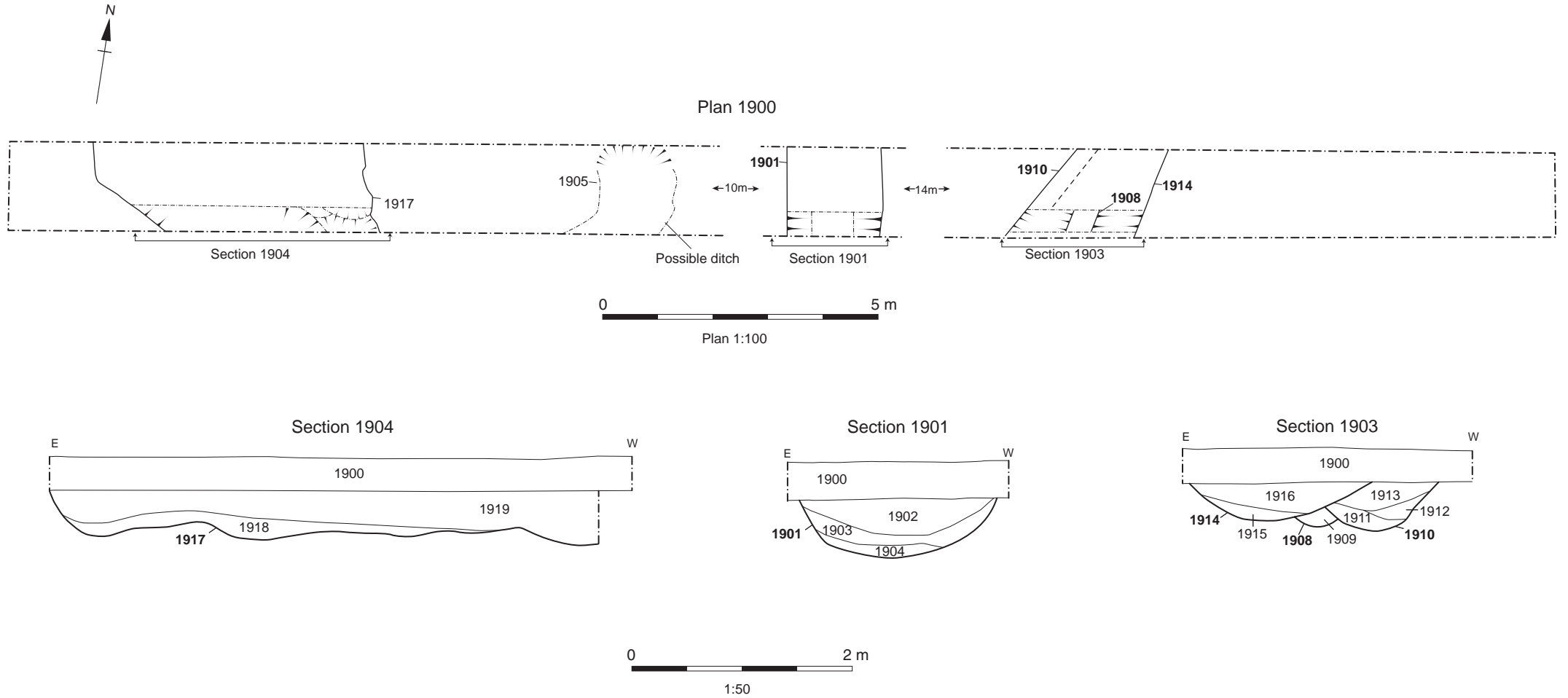


Figure 12: Trench 19, plan and sections

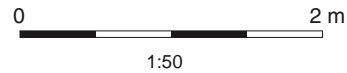
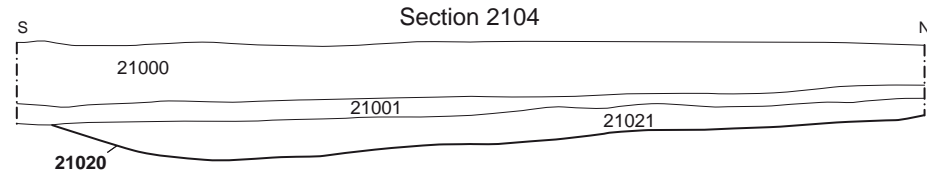
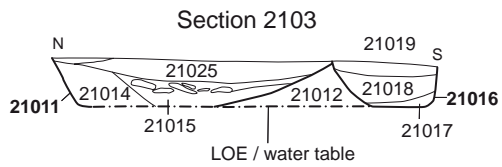
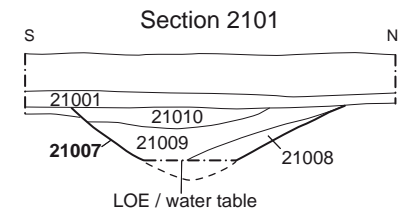
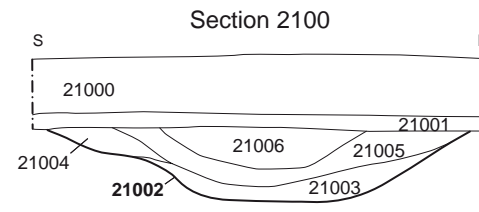
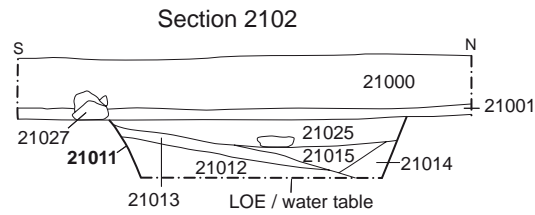
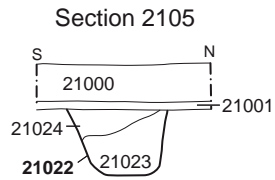
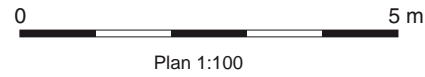
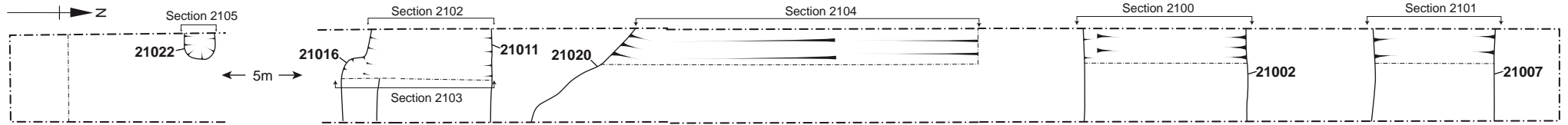


Figure 13: Trench 21, plan and sections

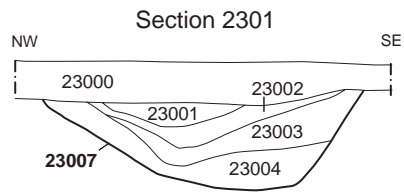
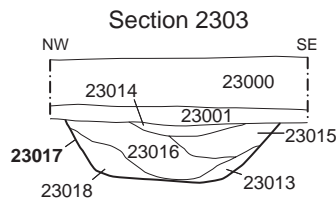
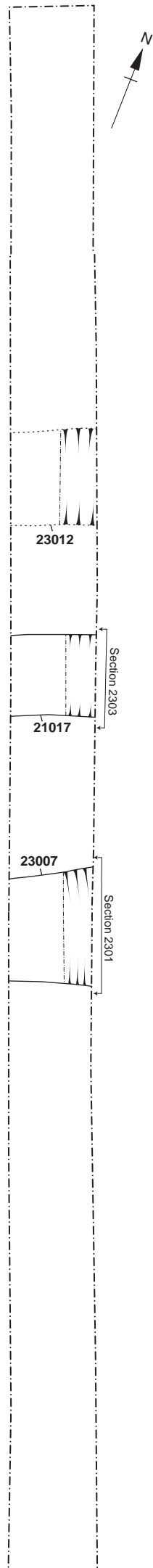


Figure 14: Trench 23, plan and sections

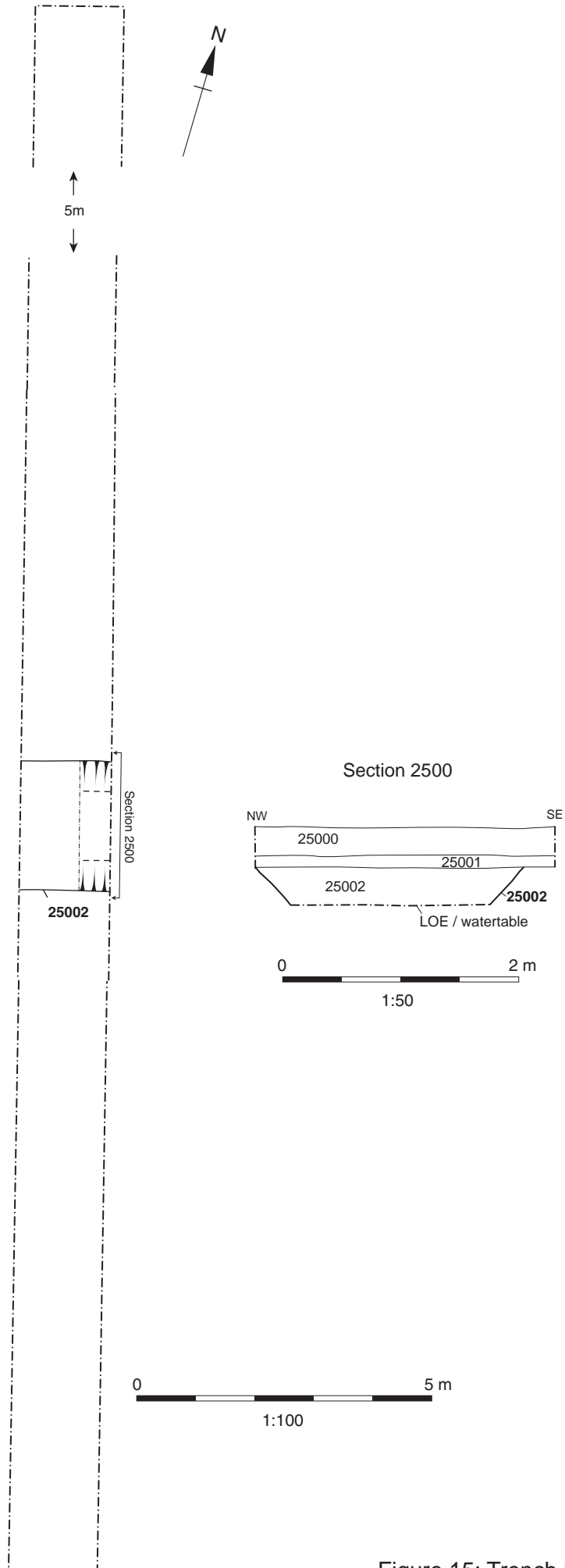


Figure 15: Trench 25, plan and section

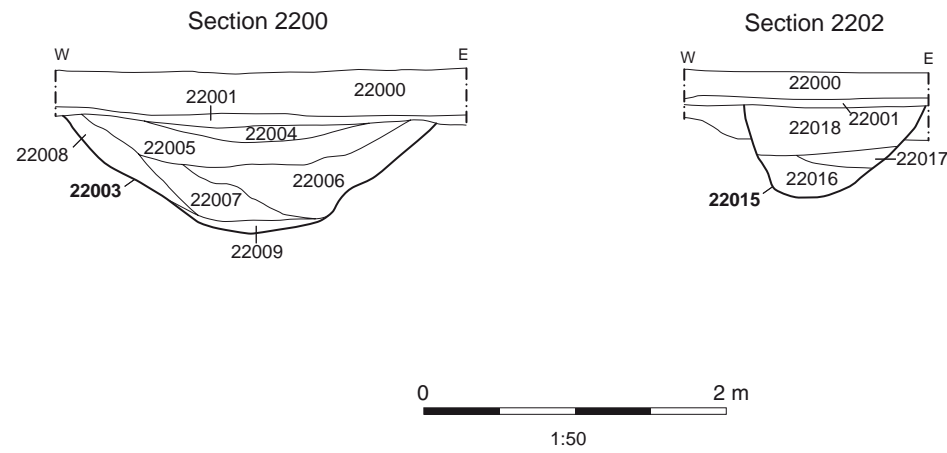
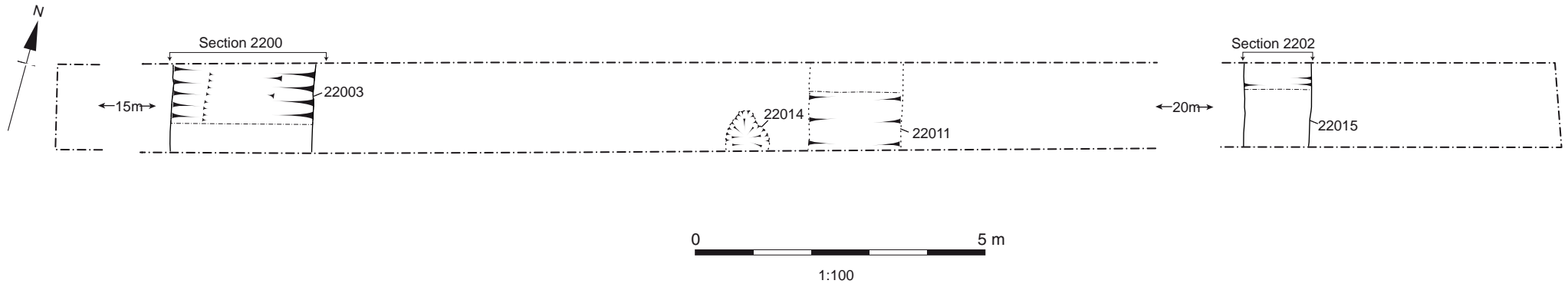


Figure 16: Trench 22, plan and sections

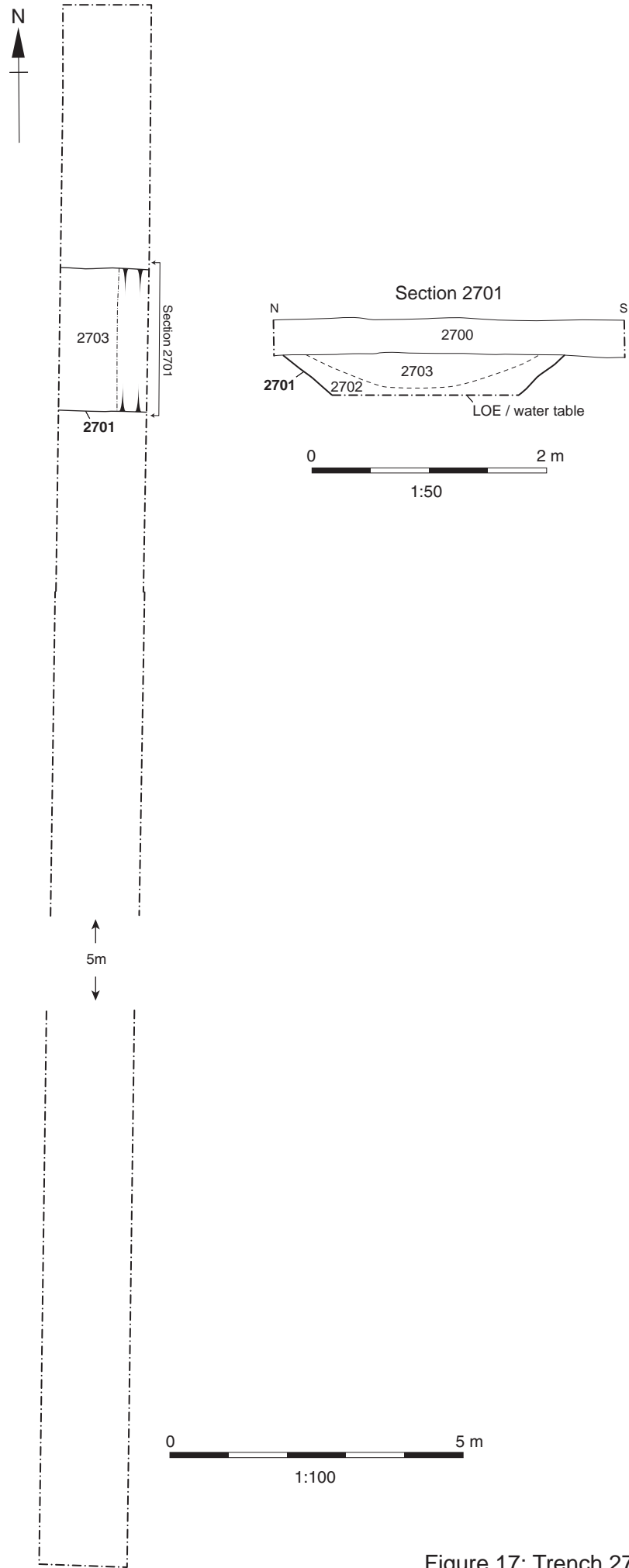


Figure 17: Trench 27, plan and section

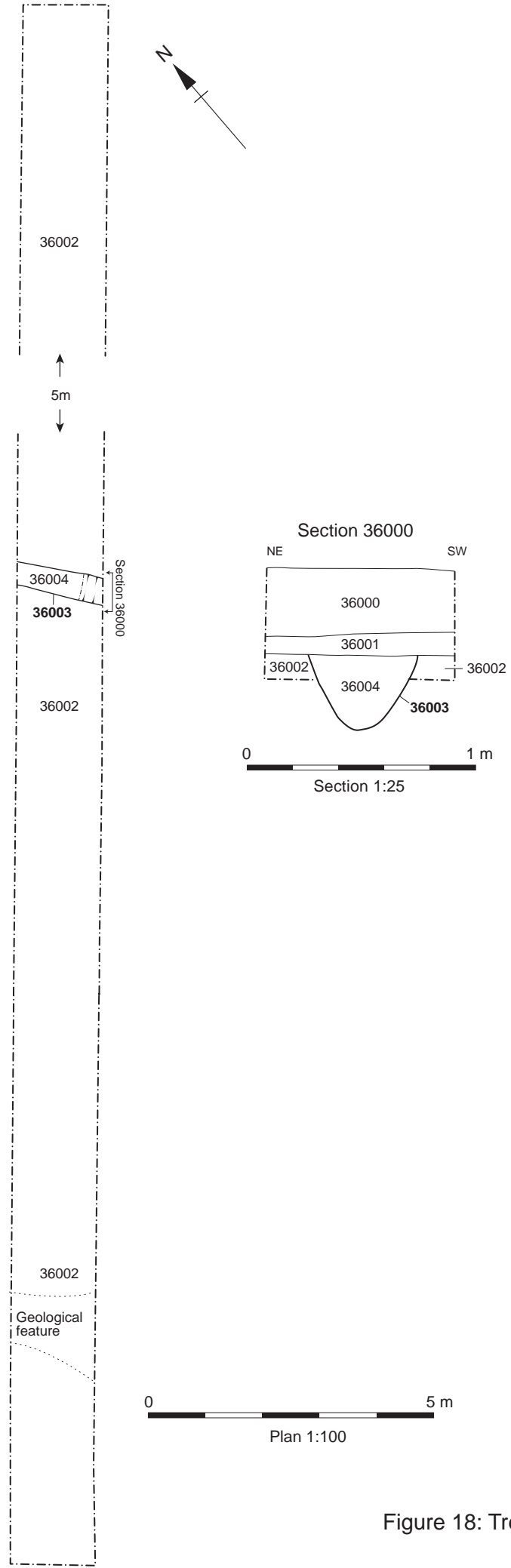


Figure 18: Trench 36, plan and section

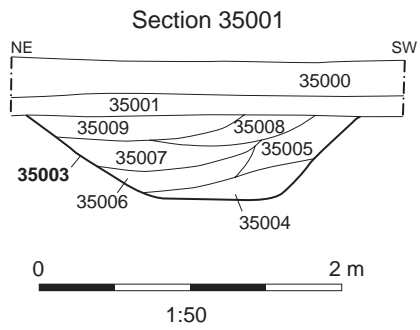
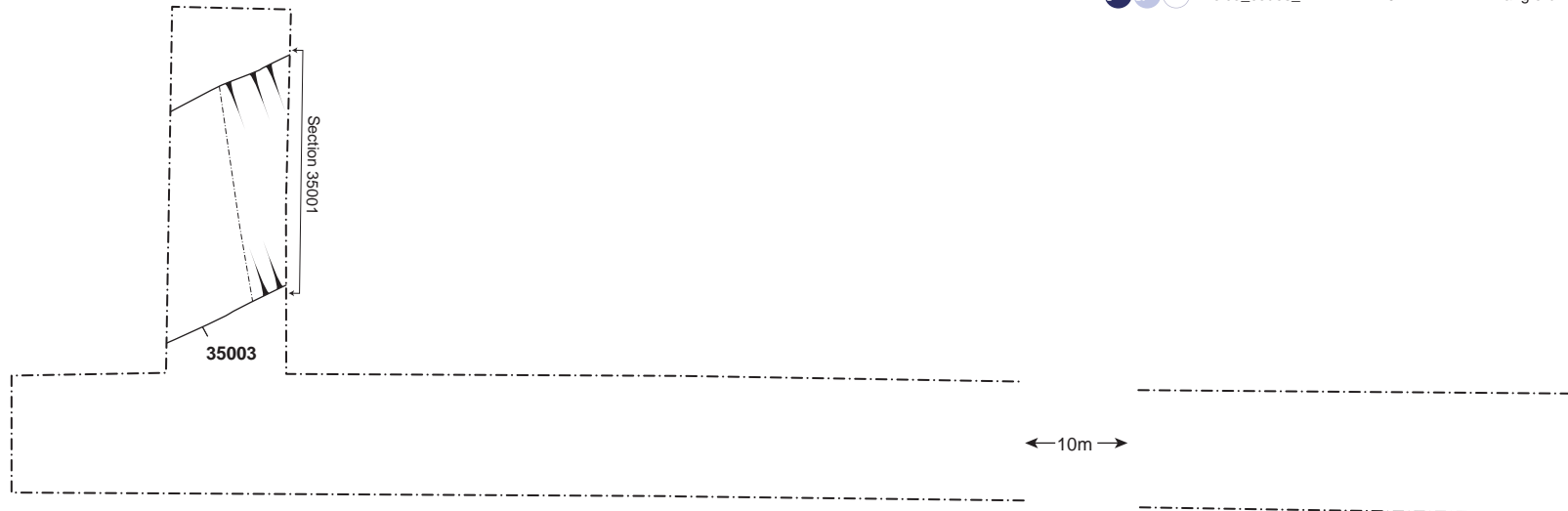
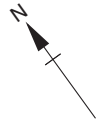


Figure 19: Trench 35, plan and section

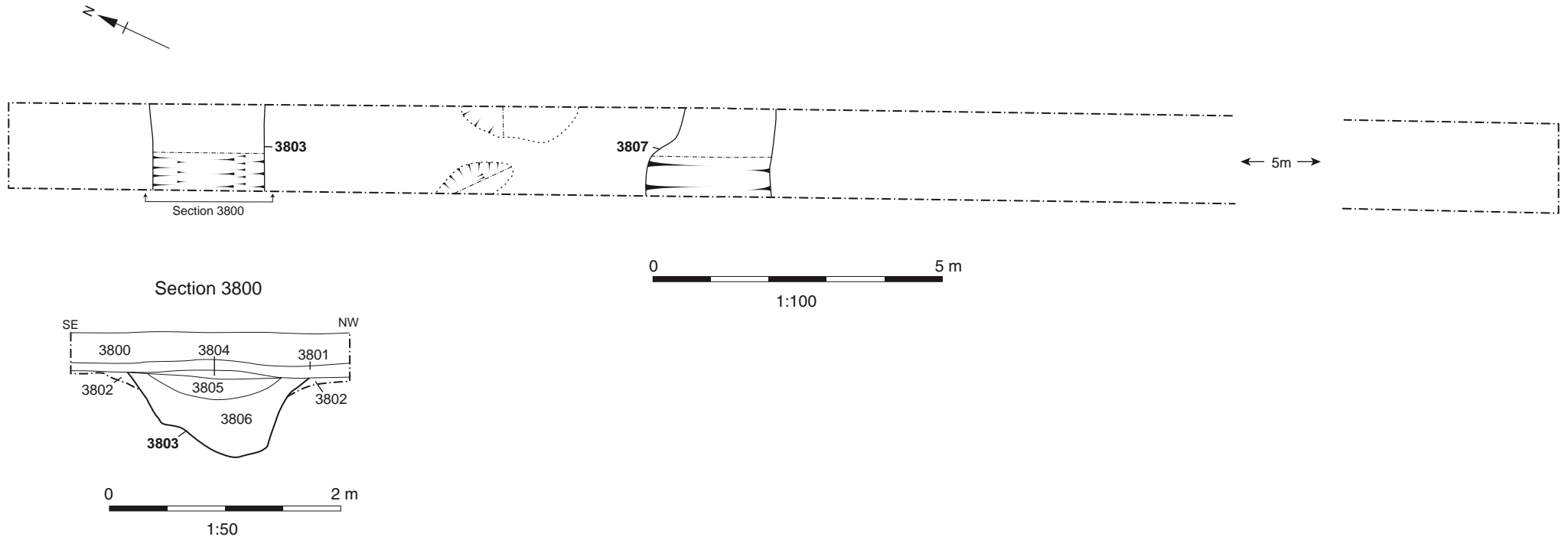


Figure 20: Trench 38, plan and section

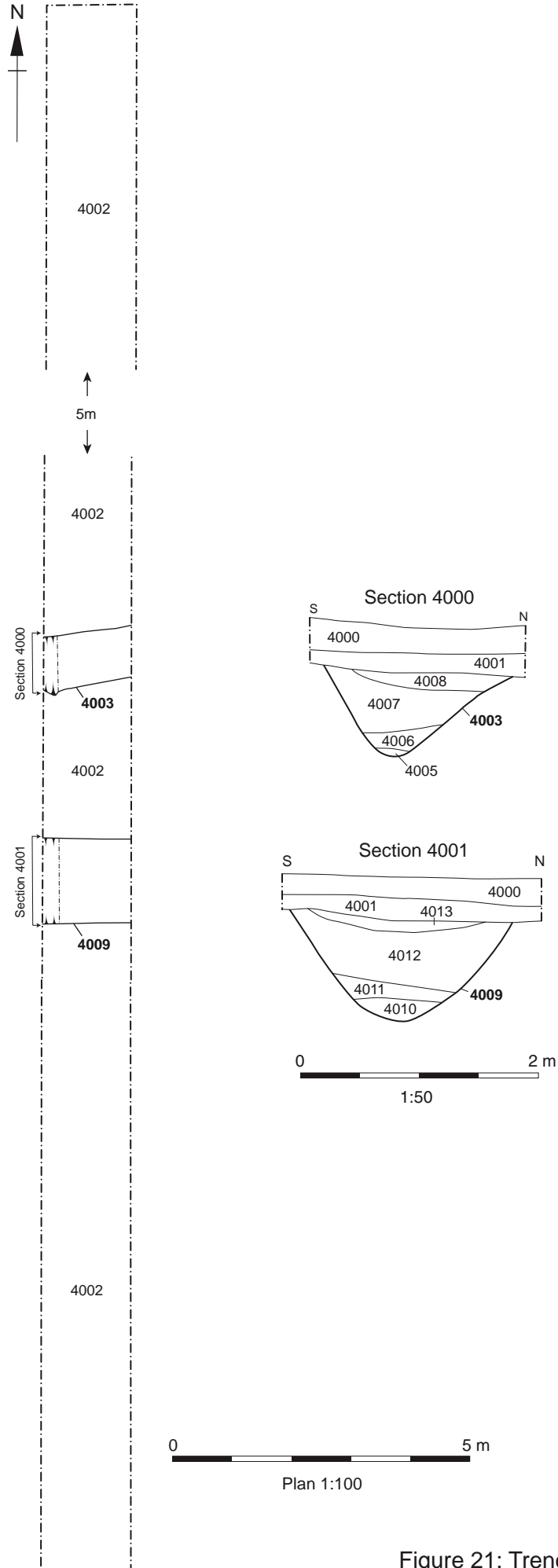


Figure 21: Trench 40, plan and sections

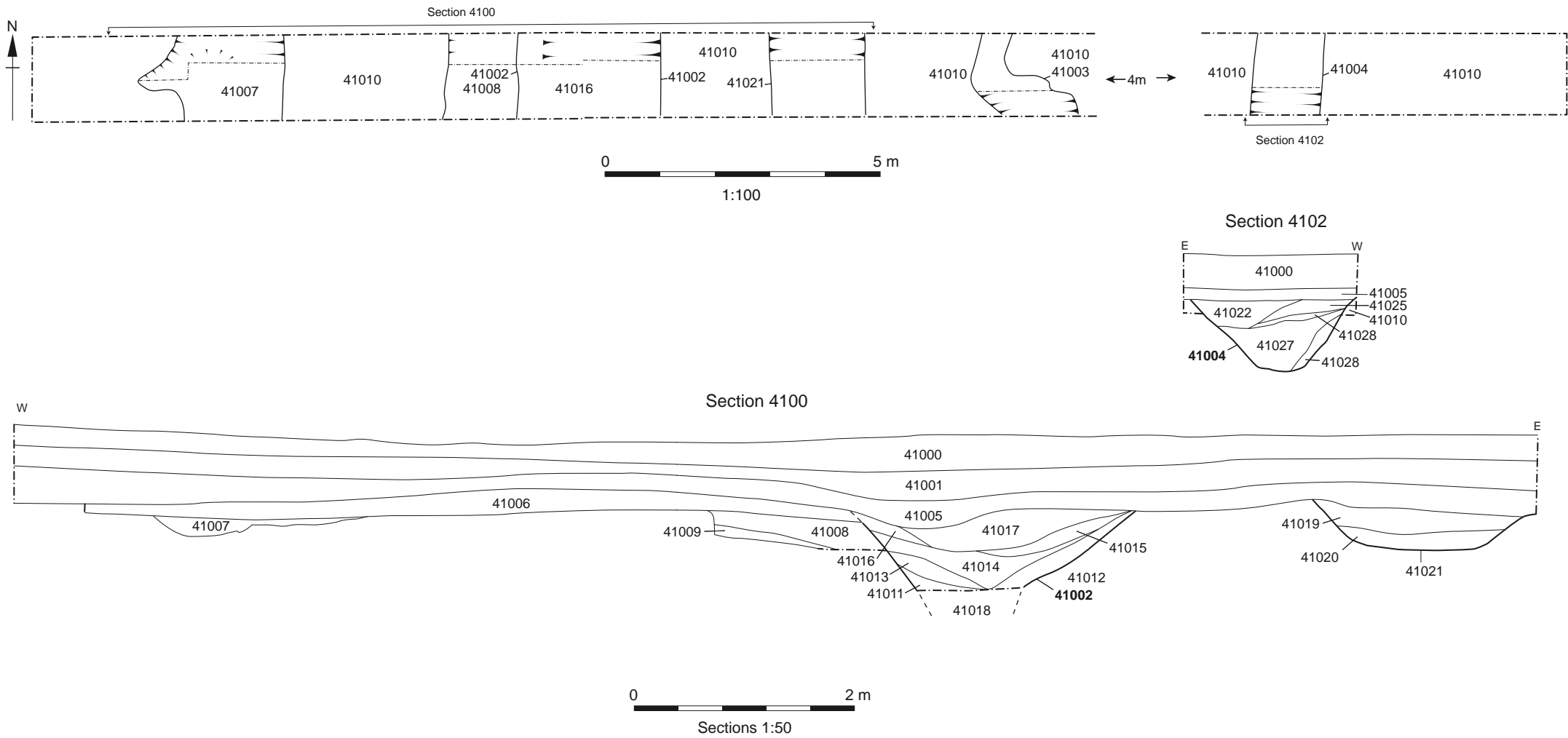


Figure 22: Trench 41, plan and sections



Plate 1: Trench 2,
surface 2015



Plate 2: Trench 2,
ditch 2019 with
surface 2015 to the
left and alluvial clay
2001 above



Plate 3: Trench 41,
ditch 41002 showing
alluvial sequence
above the ditch



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