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London Luton Airport Expansion

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5.02 Appendix 10.5 Archaeological Trial Trench Evaluation Report Cotswold 2019

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5.02 ENVIRONMENTAL STATEMENT APPENDIX 10.5 ARCHAEOLOGICAL TRIAL TRENCH EVALUATION REPORT (COTSWOLD 2019)

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Cotswold Archaeology

Land east of Luton Airport
Luton
Bedfordshire

Archaeological Evaluation

for
AECOM Environmental Solutions Ltd

on behalf of
London Luton Airport Ltd

CA project: 661263
CA site code: LELA19
CA report No.: 661263_2

July 2019

Land east of Luton Airport
Luton
Bedfordshire

Archaeological Evaluation

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LIST OF ILLUSTRATIONS

SUMMARY

Project Name:	Land east of Luton Airport
Location:	Luton, Bedfordshire
NGR:	513139 221761
Type:	Evaluation
Date:	18th February – 8th March 2019
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An archaeological evaluation was undertaken by Cotswold Archaeology in March 2019 on land east of Luton Airport. Fifty-seven trenches were excavated across the approximately 37ha evaluation area, which comprises two arable fields, north and south respectively, situated on a series of dry valleys.

In the north field, the earliest archaeological feature revealed comprised a single pit of Neolithic date. Evidence of Late Iron Age/ Early Roman and Romano-British activity was identified in the form of a number of ditches seemingly forming an enclosure encompassing the remains of a small building and a series of rubbish pits, all situated on a largely flat area adjacent to a dry valley bisecting the field.

Outlying probable field boundary ditches were also noted to the north of the enclosure while activity did not seemingly extend to the south or east, where the gradient of the dry valley bisecting the north field becomes more pronounced and would have likely rendered the land unsuitable for anything other than pastoral uses.

The building was only partially exposed but was approximately 4m wide and had been cut into the natural substrate to form a subterranean element. A surviving, in-situ pilae stack and an area of heavily heat affected clay indicate that the building had a use associated with hot gases, possibly a hypocaust system or industrial purpose, but the exact function was not confirmed, with the structure appearing to have been deliberately demolished and heavily robbed-out. The presence of painted wall plaster, box flue, imbrex and tegula suggest that the building was of some status, although it is possible that this material was also in part derived from other buildings nearby and used to infill the subterranean element of the structure following abandonment.

Dating evidence suggest that activity began in the Late Iron Age/ Early Roman period and that the building was demolished and the enclosure ditches deliberately infilled in the 3rd to 4th century. No evidence for any later activity was identified.

These remains are likely to be associated with Romano-British activity previously identified to the north and northwest of the Site, where archaeological monitoring in Wigmore Valley Park, lo[redacted]est

boundary to the Site, revealed evidence of Roman, as well as earlier, activity, with a subsequent resistivity survey producing evidence for a substantial structure.

No features or deposits of archaeological or geoarchaeological interest were identified in the south field. A series of discrete anomalies identified by the geophysical survey and interpreted as a possible pit alignment were observed to comprise geological variations, consisting of siltier patches/ lenses within the clay with flints substrate. Other isolated possible features were investigated and all shown to be of natural origin.

1. INTRODUCTION

1.1 In March 2019 Cotswold Archaeology (CA) carried out an archaeological evaluation of land east of Luton Airport, Luton, Bedfordshire (centred at NGR: 513139 221761) at the request of AECOM Environmental Solutions Ltd (AECOM), acting on behalf of London Luton Airport Ltd.

1.2 The trial trench evaluation forms part of the second phase of investigative fieldwork at the site; phase 1 comprised archaeological geophysical survey. A further phase of trial trenching is likely to be required; a report for that work will be produced separately. The evaluation phase as a whole will inform the design of the proposed expansion of Luton Airport and help to assess the impact of the proposals on the archaeological resource, in order to enable the design of an appropriate archaeological mitigation strategy. A Brief (CBC 2018) for the evaluation was provided to AECOM by the Central Bedfordshire Council Archaeologist (Hannah Firth – CBCA), acting as archaeological advisor to the local planning authority, Luton Borough Council (LBC). A subsequent detailed scope of works was produced by AECOM (2018) in response to the Brief, which in turn formed the basis for a *Written Scheme of Investigation for An Archaeological Evaluation* (WSI; CA 2019) that was subsequently approved by the CBCA.

1.3 The evaluation was undertaken in accordance with the Brief, scope of works and WSI, the *Standards for Field Archaeology in the East of England* (Gurney 2003), and the *Standard and guidance for archaeological field evaluation* (CIfA 2014).

The site

1.4 The proposed development area is approximately 100ha in total, with the evaluation site covering approximately 37ha, and is located 2.7km to the south east of Luton town in the Borough of Luton, Central Bedfordshire, adjacent to London Luton Airport. The site comprises two arable fields, bounded to the south and west by London Luton Airport, to the north by Eaton Green Road/Darley Road, and further agricultural land to the east. The site sits on a series of dry valleys with elevations ranging from approximately 120m above Ordnance Datum (aOD) to 150m aOD, with the northern and central areas having the highest elevations

1.5 The underlying bedrock geology of the area is mapped as chalk of the undifferentiated Lewes Nodular Chalk Formation and Seaford Chalk Formation, with bands of Holywell Nodular Chalk Formation, New Pit Chalk Formation and Chalk Rock Member soils running along the site's eastern and western edges. These chalk layers formed during the Cretaceous Period (BGS 2019). No superficial deposits are recorded within the area.

1.6 In contrast, the geology recorded during the trial trenching mostly comprised clay-with-flints although some bands of chalk were observed, as well as chalk nodules within the clay substrate.

2. ARCHAEOLOGICAL BACKGROUND

2.1 The archaeological background of the wider area, including previous fieldwork, has been presented in detail as part of a Historic Environment desk-based assessment (DBA) produced by Arup (2017). The following section is summarised from this document, and in addition incorporates the results of a recent programme of geophysical survey which covered the evaluation area (SUMO 2018).

Palaeolithic

2.2 A Palaeolithic hand-axe is reported to have been found immediately north of Dane Street Cottages, to the south of the site and just south of the Luton Airport boundary.

Mesolithic

2.3 There is one site of Mesolithic date recorded within 1km of the site. Field-walking recorded a scatter of prehistoric worked flint in the fields between Cockernhoe and Wandon End [Herts HER 15052].

Neolithic and Bronze Age

2.4 A single sherd of Neolithic pot was found within the lower fill of a pit during an evaluation in 2008, as well as Neolithic-Bronze Age flints scattered over the large area examined to the south of Brickkiln Wood, Cockernhoe [Herts HER 16290]. A series of fieldwalking surveys has consistently recorded Neolithic material in the area. A small scatter of flints was found during a sample surface survey of Luton allotments, Wigmore Lane in February 1998 [Beds HER 17753] and a small scatter of burnt flints, clay and flint flakes was found to the north of Stopsley Sports Ground

[Beds HER 16076]. A scatter of worked flints, possibly all later Bronze Age, was recovered from a field west of Tea Green during fieldwalking by the Manshead Archaeological Society [Herts HER 15054].

Iron Age and Romano-British

2.5 A trapezoidal enclosure is located to the south of Chiltern Hall with other features nearby, including a circular feature intersected by two parallel linear features and other distinct linear features. A late Iron Age saddle quern was also found at this location. Part of a ditched enclosure, some pits and fragmentary ditches also apparent as cropmarks were found to the south west of Chiltern Hall [Beds HER 15090].

2.6 Fieldwalking by the Luton Archaeological Society identified Roman material south of Brickkiln Wood [Herts HER 11461], including tesserae and tile fragments. Areas of burnt material and dark organic deposits were also noted. Burnt material and freshly broken Samian as well as abraded local coarseware sherds were subsequently observed in 2002. The material is very similar to that from Winch Hill [Herts HER 7358], just over 1.5 km to the south-east.

2.7 Several large clay pits were recorded during an evaluation at Brickkiln Wood, Cockernhoe [Herts HER 16293], which are adjacent to the site of a Roman building [Herts HER 11461]. Flint surfaces in the same area were overlain by fragmentary Roman tile and tesserae; late Roman pottery was recovered from one of these surfaces. A similar feature was also found west of Brickkiln Wood. No evidence for kilns was found, however, and the purpose of the flint surfaces is unclear.

2.8 Further fieldwalking in the same area in 2008 recorded a large quantity of late 2nd-3rd century Roman tile, mainly tegula, and a sherd of samian. A resistivity survey by the Manshead Society in 2003, and 'extensive finds of tesserae in the adjacent field' suggest the presence of at least one building, possibly connected with tile manufacture. The field boundary hedge here was noted at the time to stand on a bank made of flint nodules and tegulae.

2.9 Romano-British features, probably representing a farmstead, were found during investigation in advance of the Petrofina pipeline in 1990 at Winch Hill Farm, Kings Walden [Herts HER 7358]. Exposed features included pits and a flint surface, with pottery dating to the 2nd and 3rd centuries AD. This was probably not the nucleus of

the site. Subsequent field-walking of the area revealed a spread of Roman and Medieval pottery.

2.10 A ditch containing Romano-British pottery was found during the construction of an electricity sub-station and lighting control centre at Luton Airport in 1960. The Bedfordshire HER also records several find spots of Roman material including a copper-ally pin of Romano-British date [Beds HER 18285] and a Roman coin, a sestertius of Hadrian (117-138 AD) found at Nether Crawley Farm [Beds HER 1949].

2.11 Within the development site itself, two ring ditches and a linear feature are visible on aerial photographs to the southeast of Wigmore Hall Farm. A fieldwalking survey carried out in the area of Winchhill Farm in 1993 [Beds HER 10808] revealed pottery and tile, including tegulae, imbrex, flue and hypocaust tiles, indicating the possible location of a Roman building. There were also finds of quernstones, nails, charcoal and a 4th century Roman coin. Archaeological monitoring of the excavation of an anti-traveller trench [EBD1242] in Wigmore Valley Park, located alongside the airport emergency access road at the eastern edge of the park, provided further evidence of Roman as well as earlier activity within the area. The monitoring works indicated that several archaeological features had been disturbed along the line of the trench, with Neolithic-Bronze Age flintwork, Iron Age, Romano-British and medieval pottery recovered from the trench arisings. A subsequent resistivity survey carried out in 2004 [EBD124] indicated several high resistance features in the area including evidence for a substantial structure.

Anglo-Saxon/Early Medieval

2.12 There are no known finds or features from the Early Medieval period within 1km of the site area. Early Medieval remains are not common in the area around the proposed development and it is uncertain when in the Early Medieval period the historic core of Luton was established.

Medieval

2.13 A ditch containing 11 worn Medieval sherds of pottery was found at the northwest corner of the golf course at Wandon End, Kings Walden [Herts HER 9679] in 1997. The pottery probably dates to the 11th to early/mid-12th century.

2.14 The probably site of St Anne's Tower and Chapel [Beds HER 361], dating to the [redacted] of

Kimpton Road, to the west of the airport. The Scheduled Monument of Someries Castle [SM1008452 and Beds HER 304], occupied from the 13th century, is located to the south of the runway.

2.15 The site of the Hospital of St Mary Magdalene [Beds HER 362] lay approximately 1km to the southwest of the site in an area now occupied by the buildings of Luton Airport. The hospital is thought to have been founded by Thomas Becket before 1170 and a licence to collect alms for it was obtained by the gentry in 1465 and it was dissolved around 1540. The area that the hospital occupies on the Tithe map of 1842 is named Spittlesea Wood, which in turn was said to be located within Hassex Wood, which was cut down before 1855. A hoard of silver pennies dating from the reigns of Henry VII and Henry VIII were found during the felling and are thought to have been connected with the hospital.

2.16 The site of a former rabbit warren [Beds HER 12371], probably dating from the Medieval period, lies to the south-west of the site, just to the north of the current airport runway. A large close named 'the warren' is shown on the Luton tithe map of 1842.

Post-Medieval

2.17 The major landscape feature is Luton Hoo [Beds HER 6989], a Grade II* Registered Park and Gardens, which occupies the western side of the valley of the River Lea to the east of the airport.

2.18 Wigmore Hall Farmhouse, a grade II Listed building [Beds HER 10468], is situated on the northern boundary of the proposed development (on the south side of Eaton Green Road) dating to the early 19th century. It was originally part of a larger farm complex which included Wigmore Hall and a series of farm buildings and a yard which lay on the north side of Eaton Green Road. This was demolished during the late 20th century when the area was redeveloped for housing.

2.19 The sites of two, now 'ploughed out', Post-Medieval quarry pits to the west [Beds HER 12420] and east [Beds HER 12421] of the former Wigmore Hall Farm site to the north of the proposed development are recorded in the HER. A dense concentration of post-Medieval brick and tile, and 18th-19th century pottery, across the centre of the field east of Brickkiln Wood, Tea Green, Offley suggested the site of a ploughed-out Post-Medieval building. Nothing is shown in this location on the

1881 OS map. Previous work in the field located some Post-Medieval material including a tumbler lock bolt, two Medieval sherds, a scatter of Roman sherds and some worked flints [Beds HER 15061].

2.20 The site of a brick and tile works and a lime kiln [Beds HER 6732] lies close to the proposed road between Percival Way and Eaton Green Road. The works was in operation between 1875 and 1900 and appears on the First Edition Ordnance Survey map of 1879 but is not included on the Second Edition map, presumably following its demolition.

Geophysical survey

2.21 A programme of geophysical survey was conducted in 2018 (SUMO 2018), revealing a number of linear and discrete anomalies in the northern field. It has been suggested that the anomalies may be associated with Romano-British settlement activity in the area. The poor definition and weak strength of the anomalies suggests that the tops of features have been removed by ploughing or other disturbance.

2.22 An alignment of discrete, pit-like anomalies was identified in the southern field, interpreted as being of possible archaeological interest, based largely on an entry in the LBHER (12422) which refers to a pit alignment of unknown date in this area (see Arup 2017: Fig. 2). The magnetic responses actually lie slightly further south than the area identified in the DBA (Arup 2017: Figure 2) but it is likely that they identify the same potential features.

2.23 In addition, a number of broad magnetic and ferrous responses may relate to variations within the natural substrate or relatively modern interventions and disturbance; some appear to match the alignments of historic field boundaries.

3. AIMS AND OBJECTIVES

3.1 The objectives of the evaluation were to provide information about the archaeological resource within the site, including its presence/absence, character, extent, date, integrity, state of preservation, quality and significance. In accordance with the Standard and guidance for archaeological field evaluation (CIfA 2014), the evaluation was been designed to be minimally intrusive and minimally destructive to archaeological remains. The information gathered will enable the CBCA to identify

and assess the particular significance of any heritage assets that are identified, consider the impact of the proposed development upon them, and to avoid or minimise conflict between the conservation of those heritage assets and any aspect of the development proposals. This process is in line with the National Planning Policy Framework (MHCLG 2019).

3.2 Where significant archaeological remains have been identified reference has been made in the Discussion (Section 8 below) to *Bedfordshire Archaeology: Research and Archaeology: Resource Assessment, Research Agenda and Strategy* (Oake et al 2007) and *Research and Archaeology Revisited: a revised framework for the East of England* (Medlycott 2011), and the online East of England Regional Research Framework Review period papers [redacted] particularly that for the Late Iron Age and Roman period (Evans 2018), so that the remains have been placed in their local and regional context where possible.

4. METHODOLOGY

4.1 The evaluation comprised the excavation of a total of 57 trenches in the locations shown on Figure 2. This work comprises phase one of a two-stage programme of trial trenching and the phase 2 works will be the subject of a separate WSI. The trench locations were chosen to target anomalies identified by a previous geophysical survey (SUMO 2018), as well as to test apparently blank areas in the survey and as a means of prospection for remains of a type or period that may not typically respond to geophysical survey. The trenches comprised 6 number 10m by 25m trenches; 2 number 10m by 10m trenches; 26 number 50m by 2m trenches and 23 number 25m by 2m trenches, and the rationale for the trench locations is presented in Appendix C of the WSI.

4.2 Trenches were positioned to take account of known constraints, including services and ecological and environmentally sensitive areas, and set out on OS National Grid (NGR) co-ordinates using Leica GPS and surveyed in accordance with CA Technical Manual 4 Survey Manual. All trenches were excavated by mechanical excavator equipped with a toothless grading bucket, with limits for maximum trench depths defined by the AECOM health and safety policy for the works. All machine excavation was undertaken under constant archaeological supervision to the top of [redacted]

the first significant archaeological horizon or the natural substrate, whichever was encountered first. Where archaeological deposits were encountered they were excavated by hand in accordance with CA Technical Manual 1: *Fieldwork Recording Manual*. Machine excavated slots were utilised with the approval of the CBCA in order to confirm the thicknesses of colluvial deposits encountered in both the north and south fields (see paragraphs 5.4 and 5.6, below).

4.3 Deposits were sampled, processed and assessed for their palaeoenvironmental potential in accordance with CA Technical Manual 2: *The Taking and Processing of Environmental and Other Samples from Archaeological Sites*. All artefacts recovered were processed in accordance with Technical Manual 3 *Treatment of Finds Immediately after Excavation*.

4.4 The archive and artefacts from the evaluation are currently held by CA at their offices in Milton Keynes. Subject to the agreement of the legal landowner the artefacts will be deposited with Luton Culture under accession number 2019/2, along with the site archive. A summary of information from this project, set out within Appendix D, will be entered onto the OASIS online database of archaeological projects in Britain.

5. RESULTS (FIGS 2-23)

5.1 This section provides an overview of the evaluation results; detailed summaries of the recorded contexts, finds and environmental samples (palaeoenvironmental evidence) are to be found in Appendices A, B and C respectively.

5.2 The Site comprises two arable fields, north and south field respectively, located on a series of dry valleys. The north field contained trenches 1-29, with trenches 1, 12, 23 and 26 measuring 50m long by 2m wide; trenches 2-4, 6, 8, 9, 11, 14, 15, 17-22, 25, and 27-29 measuring 25m long by 2m wide; and trenches 5, 7, 13, 16 and 24 measuring 25m long by 10m wide. The south field contained trenches 30-57, with trenches 30-39, 41-44, 47-49, 51-54 and 56 measuring 50m long by 2m wide; trenches 46, 50, 55 and 57 measuring 25m long by 2m wide; and trenches 40 and 45 measuring 10m long by 10m wide.

5.3 Topsoil across the site comprised a friable dark grey-brown silt clay (context 100, 200 etc), ranging in thickness between 0.2m in trench 4 (400) and 0.41m in trench 34 (3400). The topsoil deposit was generally noted to directly overlie the natural clay with flints substrate except in trenches 4, 7, 12, 13, 28, 33, 44 and 47, which contained shallow, remnant subsoil deposits, consisting of a sterile mid grey-brown clay silt (e.g. trench 7 - context 702), preserved in natural hollows and undulations in the surface of the substrate. This material had presumably been removed through plough truncation elsewhere, with evidence of plough scarring particularly noticeable in the northern part of the site on the higher ground (e.g. in trenches 16, 17, 22 and the north end of 23), suggesting high levels of relatively recent agricultural disturbance. The natural substrate comprised a mid-brown to reddish-orange sandy clay with frequent flint nodules, gravels and occasional chalk lumps.

5.4 In the north field, on the valley sides and in the valley base, trenches 20 and 27 contained sterile colluvial deposits, comprising a mid orange-brown clay silt (2001 and 2701 respectively), overlaying the natural substrate (Fig. 18 & 19). Machine excavation at the south end of both trenches confirmed that this material did not mask any underlying archaeological features or deposits.

5.5 No archaeological features or deposits were revealed in trenches 30-57, in the southern field. A series of discrete anomalies identified by the geophysical survey and interpreted as a possible pit alignment were observed to comprise geological variations, consisting of siltier patches/ lenses within the clay with flints substrate. Other isolated possible features were investigated in trenches 30, 32, 37, 38. 45, 49 and 56; all were shown to be of natural origin. (Figs. 21 and 23)

5.6 As with trenches in the dry valley in the north field, colluvial deposits were encountered in trenches 34, 44 and 47 in the south field, comprising a well-sorted mid orange-brown clay silt gravel, which appeared to consist of fine particulate matter than had moved downslope over time, over the underlying clay substrate. In the south field the colluvial deposit ranged in thickness between 0.2m in trench 47 to 0.89m in trench 34. Trenches 34 and 44 were stepped at their east and north ends respectively to facilitate a machine-excavated sondage in order to establish the base of the colluvium and the potential for any underlying deposits of archaeological and/ or geoarchaeological interest to be present. No such deposits were identified, with the colluvium directly sealing the Clay with flints substrate, as in the north field (Figs. [redacted]

Trench 1 (Figs 2, 3 & 5)

5.7 Trench 1 contained three archaeological features, none of which were identified by the preceding geophysical survey. In the central part of the trench north/ south orientated ditch 102 extended into the trench from the north for approximately 2.5m before terminating. Measuring 0.7m wide by 0.11m deep, it contained a single fill of mid grey-brown sandy silt (103 – Figure 5, section AA) that produced a small sherd of Romano-British pottery and a fragment of ceramic building material (CBM).

5.8 Intercutting ditches 104 and 106 broadly correspond with the line of a now-removed field boundary visible on historic and recent aerial photographs of the site (Fig. 5, section BB). Running broadly east\ west, the earlier of the two, ditch 106, measured 0.45m wide by 0.14m deep and contained a single fill of mid grey-brown sandy clay (107), truncated along its northern edge by ditch 104. This measured 0.4m wide by 0.22m deep and again contained a single fill of sandy clay (105), very similar to that in ditch 106. Context 107 in ditch 106 produced single fragments of Roman pottery and CBM but both ditches are considered to be post-medieval/ modern in date based upon aerial photographic evidence.

Trench 3 (Figs 2, 3 & 6)

5.9 Trench 3 contained a broad, east\ west orientated shallow ditch or erosion hollow, again broadly corresponding with the alignment of the modern field boundary seen in trench 1 (ditch 104/ 106). Extending across the trench and measuring 3.75m wide by 0.36m deep (Fig. 6, section CC), it contained a single fill of mid grey-brown silt clay (303), a quantity of natural flint nodules and a small fragment of CBM.

Trench 6 (Figs 2, 3 & 7)

5.10 Trench 6 contained four archaeological features, pit 609 and intercutting ditches 602, 604 and 606, which corresponded with a broad northwest to southeast aligned linear anomaly identified by the geophysical survey (Fig. 7, sections DD and EE).

5.11 The earliest of the three ditches, ditch 602 was 0.9m wide by at least 0.63m deep and contained an undated deposit of mid brown-orange silt clay (603) that had been largely removed by later ditch 604, running on the same alignment. Ditch 604, which was 0.77m wide by 0.5m deep, contained a single fill, 605, that produced an [redacted]ing

possible fragments of tegula. An environmental sample (sample 4) from this context produced low quantities of hulled wheat, emmer or spelt. Due to restrictions on the maximum depth of excavation, ditches 602 and 604 were not fully excavated. Context 605 was cut by the final iteration of this boundary alignment, ditch 606, which measured 1.4m wide by 0.48m deep and contained a basal fill of charcoal-rich mid grey-brown silt clay (607), overlain by a shallow final fill of mid orange-brown silt clay (608). Context 607 also produced Late Iron Age/ Early Roman and Roman pottery, and CBM; an environmental sample (sample 5) contained low quantities of hulled wheat grains and glume base fragments. Moderately low quantities of charcoal fragments were also recovered alongside small quantities of indeterminate burnt bone.

5.12 Located toward the northeast end of the trench, pit 609 was circular in plan and measured 0.75m wide in diameter by 0.21m deep (Fig. 7, section EE). It contained a lower fill of charcoal-rich dark grey-brown silt clay (610) that produced three sherds of prehistoric, probably Neolithic, pottery and an upper fill of mid-grey brown silt clay (611). An environmental sample (3) taken from context 610 contained low quantities of indeterminate cereal grain fragments and moderately low quantities of charcoal fragments (see section 7 below).

Trench 7 (Figs 2, 3 & 8)

5.13 Trench 7 was positioned to investigate a linear anomaly identified by the geophysical survey that appeared to form one side of a probable enclosure. Ditch 705 was identified running broadly east/ west across the trench, corresponding with the anomaly. It measured in excess of 10m long by 0.65m wide and 0.37m deep, with moderately sloping sides and a flat base, and contained two fills, a lower deposit of mid orange-brown silt clay (707) and an upper fill of mid brown-grey silt clay (706 – Fig. 8, section FF). Upper fill 707 produced two sherds of Roman pottery.

5.14 Further east, ditch 705 was clearly cut in plan by ditch/ gully 710, which was L-shaped in plan, extending out of the trench to the east and approximately 5m to the north. A possible eastern return to the north arm was also tentatively identified, suggesting that the feature may have originally been U-shaped; however this had been truncated by ploughing and remains unproven. The feature contained two fills, an undated lower deposit of mid brown-grey silt clay (711), partially overlain by a [redacted] mid grey-brown silt clay (712) with frequent crushed/ fragmentary chalk and mortar

inclusions that gave it a distinct appearance against the natural substrate and fill of ditch 705. Wall plaster and CBM including tegula were recovered from context 712.

5.15 Ditch/ gully 705 also cut square(?) pit/ ditch 708, the visible elements of which were 0.37m wide by 0.2m deep and contained a dark grey silt clay (709) that produced small amounts of Roman pottery and CBM, and fired clay (Fig. 8, section GG). Due to the presence of the eastern arm of ditch/ gully 710, pit/ ditch 708 shared an uncertain relationship with ditch 705 and may actually be the northern edge of the ditch, which was noted to increase in width to the east of excavated section FF.

Trench 8 (Figs 2, 3 & 9)

5.16 Trench 8 contained a single feature, ditch 802, which crossed the trench on a northeast/ southwest alignment and was 0.85m wide by 0.18m deep (Fig 9, section HH). It contained an undated charcoal-rich single fill of dark orange-brown silt clay that was bulk sampled (sample 1) and contained moderate quantities of charred cereal grains spelt, emmer and barley that may be reflective of dumped crop processing waste. The range of cereals would suggest an Iron Age or Roman date for this feature, which was not identified by the geophysical survey or in either trench 7 or 3, towards which it can be projected to extend.

Trench 9 (Figs 2, 3, 10a - c)

5.17 Trench 9 was positioned to investigate a large amorphous anomaly identified by the geophysical survey. Excavation revealed the remains of a structure of Romano-British date located in the central part of the trench, initially visible as a spread of demolition debris (907, 915, 916) approximately 4.4m long, extending across the width of the trench. The rubble spread was investigated by means of two box-excavated quadrants, comprising a north section excavated against the northwest edge of the spread (Fig. 10a, section II), and a south section excavated against the southeast edge of the spread (Fig. 10b, section JJ).

5.18 In the north quadrant the structure comprised a rectangular(?) area that had been cut (904) into the clay substrate to a depth of 0.7m (Fig. 10a, section II). Constructed against the northwest edge of the cut and running northeast/ southwest was wall/ wall foundation 905/ 906, which was 0.45m wide and within the box section consisted of two to three tightly packed course of flint nodules (905) ranging in size from 0.2m x 0.1m to 0.25m x 0.15m, set in a light brown coarse silty sand [redacted] bonding material (906). Within the box section the wall survived in structural form to

a height of two courses, although in section the apparent southeast facing edge of the wall was more clearly identifiable up to the base of the topsoil (900), albeit with noticeably less stone, and it is conjectured that the upper courses within the trench were either previously disturbed by an element of deliberate robbing-out of the wall, historic/ modern ploughing, which had loosened the upper courses, or dislodged during machine excavation of the trench. Evidence for the disturbance being in part the result of deliberate robbing is suggested by the recovery of two sherds of 3rd – 4th century pottery and CBM from the upper, very loose, part of the wall, suggesting that this material (906) was actually infilling a robber trench as the lower, surviving elements of the wall and associated bonding deposit were otherwise noted to be compact and tightly laid.

5.19 Extending out of the northeast edge of the trench and constructed upon the surface of the natural substrate was a seemingly in-situ stack of pilae (910). Averaging 0.25m – 0.3m wide by 0.2m - 0.23m thick, the stack was consisted of four pilae without any obvious bonding material. Around the pilae stack and overlying the natural substrate across the base of the box section was context 909, a very dark grey-brown charcoal-rich clay silt. An environmental sample (7) taken from this deposit produced low quantities of indeterminate cereal grain fragments, alongside low quantities of oat/brome grass, but moderate quantities of charcoal including fragments of both mature wood and round wood that were too poorly preserved to allow species identification.

5.20 Contexts 910 and 909 are suggestive of a function for the structure involving hot gases, such as a hypocaust system, corn dryer or industrial use, and both the pilae stack and associated charcoal-rich deposit appeared to be in-situ and undisturbed. In contrast, overlying contexts 909 and 910 was a sequence of rubble-rich deposits that seemingly represent deliberately deposited material infilling the subterranean element of the structure following deliberate demolition. The lower of these deposits, context 908, consisted of a 0.3m thick layer of mortar, flint nodules, CBM including box flue, worked clunch or chalk, likely to have been used as a building material and obtained locally, and wall plaster fragments, in a mid reddish-brown clay silt matrix, which was overlain by context 907, a second deposit of demolition rubble, including tegula, box flue and imbrex, again with a matrix of mortar-rich red-brown clay silt. Context 907 was directly overlain by the topsoil (900).

[redacted]

5.21 To the immediate northwest of wall 905 was gully 902, which ran parallel to the wall, on the same alignment. Measuring 0.42m wide by 0.2m deep, it contained a single fill, 903, of dark grey-brown clay silt that produced no dating evidence. Due to its location, 0.5m to the northwest and running parallel to wall 905, gully 902 is interpreted as an eaves-drip gully.

5.22 In the south quadrant the construction cut (911) for the structure was notably different from that to the north, with a gradually sloping southeast side, as opposed to the near vertical northwest edge. Wall/ wall foundation 912 ran southwest/ northeast along the southeast edge of the construction cut and measured 0.6m wide by 0.37m high. It consisted of flint nodules up to 0.25m in size, irregularly coursed and bonded with a white-grey mortar, contrasting with wall 905, which was more regularly coursed. Internally, seemingly running parallel to the wall, was a heavily heat affected band of natural geology (901) that had been baked to a bright orange colour and suggests the presence nearby of a high temperature heat source.

5.23 Seen in the northeast and southeast faces of the box section was deposit 913, a compact light brown-grey silt sand deposit with visible chalk flecking and chalk lumps. Only partially revealed, this deposit may relate to the demolition of the building although its compact nature and unusual shape in section (see Fig. 10b, section JJ and photo) may suggest an alternative, earlier origin. Overlying both the natural substrate and context 913, and abutting wall 912 was deposit 914, a mid grey-brown clay silt. In the northeast face of section JJ context 914 was in turn overlain by context 915, a deposit of building debris including flint nodules, tegula, imbrex, box flue and wall plaster in a dark grey-brown clay silt matrix. Context 915 was seen to abut context 913, and was sealed by context 916, a mid-red to mid grey-brown clay silt that also abutted wall 912, context 913 and partially sealed deposit 914, being in turn overlain by the topsoil.

Trench 10 (Figs 2, 3 & 11)

5.24 Trench 10 was positioned to investigate a faint north/ south linear anomaly identified by the geophysical survey and to test for the continuation of the east/ west linear anomaly identified running through trench 7 as ditch 705. The north/ south anomaly was confirmed as a substantial ditch, 1002, measuring 1.7m wide and 0.76m deep at the terminus (Fig. 11, section KK). It contained two fills, comprising a basal deposit of mid orange-grey silt clay (1003) that produced small quantities of Roman pottery and tile, including a piece of tegula and two large natural flint nodules, and

an upper fill of charcoal-rich dark grey-brown clay silt (1004) that produced a range of Roman CBM in a variety of forms including tegula, box flue, floor tile and roof tile, as well as pottery of late 3rd to mid 4th century date, suggesting that at least the upper part of the ditch had been deliberately infilled following the demolition of the building in trench 9 or other nearby structures.

5.25 At the north end of the trench ditch 1005 appeared to form a continuation of ditch 705 in trench 7, although it both deeper and wider, and therefore presumably less heavily plough truncated than ditch 705. Ditch 1005 entered the trench in the northwest corner, turning through 90 degrees to run broadly north/ south. Although only partially revealed, it measured 1.32m wide by 0.35m deep and contained a single fill of mid grey-brown clay silt (1006) that, as with ditch 1002, contained pottery of 3rd to 4th century date and a substantial quantity of Roman CBM, again suggesting that the ditch had been deliberately infilled following the demolition of the building in trench 9 or other nearby structures (Fig. 11, section LL). An environmental sample (9) identified indeterminate cereal grain fragments alongside low quantities of spelt and rye-grass/fescue seeds.

5.26 A northern continuation of ditch 1005 was not identified by the geophysical survey and it is conjectured that the ditch terminates immediately outside the trench, potentially forming an entrance into the enclosure with nearby ditch 1002.

Trench 13 (Figs 2, 3 & 12)

5.27 Trench 13 was positioned to target a northeast/ southwest linear anomaly that appeared to form part of the enclosure/ boundary line identified running through trenches 7 and 10, and a fragmentary northwest/ southeast linear alignment.

5.28 The northeast/ southwest linear anomaly was shown to correspond with a ditch alignment that had seemingly been re-established on at least three occasions (Fig. 12, section MM). The earliest of the three ditches, 1302, measured in excess of 1m wide by 0.56m deep and contained a single fill of mid grey-brown clay silt (1303) that produced Late Iron Age – Early Roman pottery. Context 1303 was cut by ditch 1304, which measured 1.25m wide by 0.4m deep and contained two fills, an undated lower deposit of light orange-grey silt clay (1305) and an upper fill of mid grey-brown silt clay (1306) that again produced pottery of Late Iron Age – Early Roman date. Ditch 1304 appeared to terminate within the trench. The final ditch in the sequence, 1307, cut across the top of both earlier ditches, extending across the

full width of the trench and measuring 0.86m wide by 0.2m deep. It contained a single fill of dark brown-grey silt clay (1308) that also contained Late Iron Age – Early Roman pottery.

5.29 No evidence for a feature corresponding with the fragmentary northwest/ southeast linear anomaly was seen.

Trench 14 (Figs 2, 3 & 13)

5.30 Trench 14 contained a single archaeological feature, ditch 1402, which ran broadly northwest/ southeast across the trench and was not identified by the geophysical survey. Measuring 1.11m wide by 0.18m deep, it contained a single fill (1403) of mid orange-brown silt clay that produced pottery and CBM of broad Romano-British date (Fig. 13, section NN).

Trench 15 (Figs 2 & 3)

5.31 Trench 15 was one of a number of trenches randomly positioned to sample apparently blank areas in the geophysical survey results. A single archaeological feature, probable ditch 1502, was encountered toward the northwest end of the trench, measuring 3m wide. The exposed fill (1503 – unexcavated) comprised a mid grey-brown clay silt. The feature was interpreted in the field as a continuation of ditch 1402 in trench 14 and possible evidence for the south side of the enclosure formed by ditches seen in trenches 7, 10, 13, 17 and 24. However, as a ditch the feature is potentially located too far to the north to form part of the putative southern enclosure boundary alignment and may be an outlying (large) pit associated with a pit cluster investigated in trench 16, immediately to the east.

Trench 16 (Figs 2, 3, 14a - c)

5.32 Trench 16 was positioned to investigate a group of discrete magnetic anomalies identified by the geophysical survey. Ditch 1602 extended approximately 8m into the trench from the northern limit of excavation before terminating. Measuring 3m wide by 0.56m deep, the terminus was investigated (Fig. 14a, section OO), revealing a sequence of four fills beginning with an undated charcoal-rich basal deposit of dark brown-grey silt clay (1603). This was partially overlain by 1604, a mid orange-brown slit clay and 1605, a mid orange-grey silt clay, both possibly representing natural silting and erosion of the ditch sides, which were in turn sealed by a final deposit of mid brown-grey silt clay, 0.39m thick, that appeared to represent [redacted] deliberate backfilling of the ditch. This contained pottery of 3rd to 4th century date

and Roman CBM, including fragments of tegula and imbrex, that are again suggestive of deliberate infilling of the ditch following demolition of the building in trench 9 and/ or any other nearby structures. A single small sherd (3 grams) of medieval pottery was also recovered from this context but is considered to be intrusive.

5.33 Ditch 1602 shared a relationship (uninvestigated) with pit 1617, which was sub-square in plan, with vertical sides, and measured at least 1.52m long by 0.63m wide and 0.66m deep (Figure 14c, section SS). It contained two fills, a basal fill of light yellow-brown silt clay (1618) that contained Roman CBM, mortar and an iron hobnail, and an upper fill of mid grey-brown silt clay (1619) that produced single pieces of Roman CBM and pottery. An environmental sample (10) from basal fill 1618 contained low quantities of hulled wheat and barley grain fragments, oat/brome grass, charcoal fragments and a silicaeous waste material typically produced by burning plant material for fuel.

5.34 Immediately to the west of ditch terminus 1602 was a small pit cluster, comprised of pits 1607, 1610 and 1612 (Fig 14b, sections PP & QQ). Pit 1607 was ovoid in plan and measured 2.08m long by 1.7m wide and 0.31m deep. It contained two fills, comprising a lower fill of mid orange-brown silt clay (1608) that produced two iron nails and a single sherd of Romano-British pottery, and an upper fill of dark grey-brown silt clay (1609) that produced an assemblage of 3rd – 4th century pottery, Roman CBM, nails and a fragment of sandstone whetstone.

5.35 With the agreement of the CBCA, pit 1620, located to the southeast of pit 1607 was not investigated. It was an irregular oval shape in plan, approximately 1.2m long by 0.8m wide and contained an upper fill of mid grey-brown clay silt (1621)

5.36 Pit 1610 had been heavily truncated by pit 1612, with only the basal part of the feature remaining. It contained a single fill of mid orange-grey silt clay (1611) that produced Romano-British pottery and CBM. Pit 1612 was broadly circular in plan, measuring approximately 2.61m in diameter by 0.27m deep, and contained a single fill of dark grey-brown clay silt (1613) that also produced an assemblage of 3rd – 4th century pottery and Roman CBM including tegula and floor tile.

5.37 Located in the west corner, large pit/ possible quarry 1614 extended into the trench from the south and west baulk and was in excess of 0.4m long by 4.7m wide and

over 1.16m deep (Figure 14c, section RR). With the agreement of the CBCA a 2.4m wide sondage was machine excavated across the visible part of the feature revealing a 0.09m thick charcoal-rich lower fill of dark brown-grey silt clay with burnt clay flecking. An environmental sample (8) from this deposit contained low levels of charred cereal grains including hulled wheat and glume fragments including spelt. Brome grass seeds were also recovered in low quantities along with high quantities of charcoal fragments. Overlying this was a 0.96m thick homogenous deposit of mid grey-brown silt clay that did not produce any dating evidence and seemingly represented intentional and rapid backfilling of the pit/ quarry.

Trench 17 (Figs 2, 3 & 15)

5.38 Trench 17 was positioned to investigate a linear geophysical anomaly running broadly north/ south through the trench that was also investigated in trench 10 and 24. The anomaly was demonstrated to coincide with ditch 1704, which appears to be a continuation of ditch 1002 in trench 10 and ditch 2402 in trench 24. Measuring 1.99m wide by 0.6m deep it contained two fills comprising a basal deposit of dark grey-brown silt clay (1705) overlain by an upper deposit of mid grey-brown clay silt (1706 – Fig. 15, section UU). Basal fill 1705 produced an assemblage of 2nd to 4th century AD pottery and Roman CBM including fragments of tegula and imbrex.

5.39 On the east side of ditch 1704, extending into the northern edge of the trench, was pit 1702, which was at least 1.35m long by 0.83m wide and 0.37m deep, and contained two fills. These comprised a lower deposit of dark grey-brown silt clay (1703) that produced pottery of broad Romano-British date and CBM including roof tile and tegula fragments, overlain by an undated mid grey-brown silt clay (1707 – Fig. 15, section TT). The relationship between ditch 1704 and pit 1702 was not investigated and remains undetermined.

Trench 23 (Figs 2, 3 & 16)

5.40 Trench 23 was positioned to investigate the western extent and projected line of a broadly east-west aligned linear anomaly identified by the geophysical survey, which was suggested to form the south side of the enclosure identified in trenches 7, 10, 13, 17 and 24.

5.41 Machine excavation revealed a thin layer of topsoil, 0.23m thick, immediately overlying the natural substrate, which was noted to be heavily plough scarred. No evidence for a feature corresponding with the geophysical anomaly was seen.

5.42 Pit 2302, located at the north end of the trench, had been heavily truncated by ploughing, surviving only to a depth of 0.11m (Figure 16, section VV). Measuring 0.62m in diameter, it contained a charcoal-rich single fill of dark grey-brown silt clay (2302) that produced Late Iron Age – Early Roman pottery. An environmental sample (2) contained hulled wheat fragments (emmer or spelt) alongside low levels of oat/brome grass seeds.

Trench 24 (Figs 2, 3 & 17)

5.43 Trench 24 was positioned to investigate the northern extent of the linear geophysical anomaly identified in trench 10 and 17, conjectured to form the east side of the main enclosure, at the point where it intersected with a possible east-west orientated anomaly conjectured to the south side of the enclosure.

5.44 North/south orientated ditch 2402 entered the trench from the north edge of excavation and terminated 10m to the south, at the projected intersection with the east-west aligned anomaly although, as in trench 23, no evidence for a feature corresponding with the east-west anomaly was seen.

5.45 Ditch 2402 was 1.46m wide by 0.36m deep and contained a single fill of mid to dark grey-brown silt clay that produced pottery of broad Romano-British date and CBM, including roof tile and tegula (Fig. 17, section WW)

6. THE FINDS

6.1 Artefactual material is recorded from 35 deposits; ditch, structure and pit fills and topsoil (Appendix B). All of the material was recovered by hand and from bulk environmental soil samples.

Pottery by Pete Banks

6.2 The pottery recovered from the evaluation is recorded in Appendix B and discussed below. Recording of the finds assemblage was direct to an Excel spreadsheet; this now forms the basis of Appendix B (Table 1). The pottery was examined by context, using a x40 hand lens and quantified according to sherd count and weight per fabric type. The fabrics are described in Appendix B (Table 2) in accordance with the Historic England guidelines (Barclay *et al*, 2016) and where appropriate the

National Roman Fabric Reference Collection (Tomber and Dore 1998), or with the Prehistoric Ceramics Research Group Guidelines (PCRG 2010). A concordance with the Bedfordshire type series (Parminter, Y. and Slowikowski, A.M. 2004), and in the case of the locally produced fabrics, with the fabric codes recorded at Tottenhoe Villa (Horne and Schneider 1992) have also been provided where possible.

6.3 The assemblage comprises 250 sherds (4116g) of pottery recorded from 27 deposits. All of the pottery was recovered from ditch, structure and pit fills and topsoils. The condition of the assemblage is moderately poor; the majority of surfaces and fractures are abraded. The mean sherd weight is average for a largely Roman assemblage (16.5g).

Prehistoric

6.4 Three body sherds (184g) of handmade Neolithic pottery are recorded from pit fill 610. One sherd is angular and may be a bowl shoulder. The sherds are made in a coarse flint-tempered fabric (FL) and are in good condition given their age suggesting that they have remained in an undisturbed deposit.

Late Iron Age and Roman

6.5 A total of 246 sherds (3929g) of Late Iron Age or Roman pottery are recorded from the site. Grog and sandy grog-tempered fabrics are the most common fabrics and share a roughly even proportion of the Late Iron Age or early Roman assemblage. Grog-tempered fabrics (UNS GR) make up around 13% of the Late Iron Age and Roman material (33 sherds, 691g), although a necked jar with a beaded rim, from ditch fill 605, is the only recognisable form made in this fabric. Sandy grog-tempered pottery (UNS QGR) accounts for around 15% by both count and weight (39 sherds, 602g). No forms are recorded in this fabric although two beaded rims are recorded from ditch fill 1308. One body sherd with a drilled repair hole is also recorded from this same deposit. Two sherds with cordons are recorded from ditch fills 1303 and 2303. A lid seated jar made in sandy fabric UNS Q is recorded from ditch fill 1308. A cordoned jar with a stabbed chevron decoration made in the same fabric (UNS Q) is recorded from ditch fill 605. A similar stabbed decoration is noted on a storage jar from the site at Folly Lane, although the fabric is slightly different and not enough of the vessel survives to say for certain that it is part of a storage jar. It is probable that this type of decoration was widely used on variety of vessels (Wilson 1984, 233, fig.97, no.2320). Sandy reduced fabric UNS RE is the most commonly recorded [redacted] Roman fabric (92 sherds, 1155g). Plain rim dishes are the most commonly recorded

from in this fabric, with flanged bowls, lid seated jars and neckless jars also present. One plain rim dish, from pit fill 1613, has been etched by the potter with an abstract mark scratched into the exterior wall of the vessel pre-firing. A base sherd, from pit fill 1608, has been mark post-firing with a 'B' shaped mark. A total of 25 sherds (143g) and 20 sherds (330g) of sandy oxidised wares (UNS OX) and shell-tempered wares (UNS SH) respectively are recorded from the site. Although several rim sherds are recorded in both fabrics, no recognisable forms or decoration are present. Four sherds (7g) of sandy buff wares (UNS BUF) are recorded from ditch fill 2403. Two sherds are decorated with a roller stamping. Four plain body sherds (21g) of sandy white ware (UNS WH) are recorded from ditch fill 607. A plain rim dish (one sherd, 23g) made in an imitation black burnished ware (IMT BB) is recorded from deposit 1613. The source of all the above fabrics is unknown, although it is most likely that production took place locally.

6.6 Regional fabrics do not appear in any great numbers, but of those that are recorded, Oxfordshire fabrics are the most frequent. Five sherds (73g) of Oxfordshire oxidised wares (OXF OX) are recorded from ditch fill 1006. On the basis of the fabric series set out in Young (2000, 200) these can be dated to the 3rd or 4th centuries AD. Three sherds (150g) of Oxfordshire white ware (**OXF WH**) mortaria are recorded from structure fill 906 and pit fill 1613. These mortaria date from the 2nd to 4th centuries AD (*ibid*. 62). Two sherds (29g) of Oxfordshire red slipped ware (**OXF RS**), including one mortarium sherd, dating from the 3rd to 4th centuries AD are recorded from structure fill 906 and ditch fill 1606 (*ibid.* 173). Two sherds (11g) of Lower Nene Valley colour coated wares (**LNV CC**), dating generally from the 2nd to 4th centuries, are recorded from ditch fills 1004 and 1705. The rim of a waisted beaker from 1004 can be dated more precisely to the late 3rd to mid-4th centuries AD (Perrin 1999, 95, fig.61, no.173). A lid seated jar (10g) made in Lower Nene Valley cream ware (LNV CW), recorded from ditch fill 1606, can be dated from the mid-late 2nd to early 3rd centuries AD (*ibid.* 110, fig.66, no.318). Two sherds (473g) of pink grog ware (**PNK GT**) dating from the 2nd to 4th centuries AD, are recorded from pit fill 1613. Two plain body sherds (45g) of Hadham oxidised ware (**HAD OX**) dating from the 3rd to 4th centuries AD are recorded from pit fills 1609 and 1613. One sherd (4g) of black burnished ware (**DOR BB1**) is also recorded from deposit 1609. Two sherds (26g) of Central Gaulish Lezoux samian (**LEZ SA**) dating from the mid-1st to 2nd centuries AD are recorded from ditch fill 1606 and pit fill 1609.

Medieval

6.7 One sherd (3g) of medieval coarse ware (MCW) dating from the 12th to 14th centuries is recorded from ditch fill 1606.

Summary

6.8 The pottery evidence suggests that the majority of the activity took place during the Late Iron Age and Roman period. There is, however, the occurrence of well-preserved Neolithic pottery, which may be significant. It may suggest some undisturbed Neolithic activity in the vicinity of a Roman site, although much could be disturbed by the later Roman activity. The Roman assemblage is domestic in nature with jars and bowls dominating those recognisable forms. The proportion of Roman fine wares is not unusually high in itself to suggest high status activity; however, the presence of other material from the site (e.g. ceramic building material and painted wall plaster) may suggests a settlement of significant status was located nearby. Grog-tempered wares account for nearly 30% of the assemblage at Luton, suggesting activity during the Late Iron Age and Early Roman period, although very few vessel forms survive. Early Roman activity is also known in the Dunstable area at the site of the former Queensway Hall, where locally produced grog-tempered wares account for over half the assemblage (Timby 2004, 148). Late Roman pottery is noted at Luton Airport in the form of Oxfordshire, Hadham and Nene Valley wares, although none are recorded in significant quantities. A late Roman villa at Tottenhoe excavated during the 1950's, to the west of Dunstable, produced pottery dating to between the 2nd and 4th centuries AD, painted wall plaster, mosaics and hypocaust systems (Matthews *et.al.* 1992, 71 and 88-91). Oxfordshire mortaria, both white and colour-coated wares, dating to between the mid 3rd and 4th centuries are recorded from Tottenhoe (*ibid.* 75, fig.10, no.40 & 36). Late Roman activity is also noted from the Roman town of *Durocobrivae*, situated on the site of modern-day Dunstable. The town was founded during the 1st century AD and was not abandoned until the 4th century AD (Matthews 1981, 60-1). A late Roman inhumation cemetery dating to the 3rd and 4th centuries AD containing 112 burials (Jones and Horne 1981, 37) was excavated in the south west of the town. The cemetery also produced late Roman wares from Oxfordshire kilns (Matthews 1981, 56, fig.41, nos.8 & 15), probably similar to those found at Luton. The presence of post-Roman material in the assemblage is probably the result of later disturbance.

Ceramic Building Material by Pete Banks

6.9 A total of 207 fragments (25515g) of ceramic building material is recorded from 25 deposits. The majority of the material is Roman in date and has been made in coarse sandy (cs), medium sandy (ms) or fine sandy (fs) fabrics with inclusions of iron ore (fe), clay pellets (cp), calcareous grits (c) and flint (f). Some of the Roman material is also made in coarse shelly fabric (csh). A total of 61 fragments of Roman brick or tile (RBT) are recorded. These can be dated to the Roman period on the basis of their fabric and thickness. A total of 24 *tegulae* and 20 *imbrices* are recorded; these forms are typically Roman and have been made in Roman-type fabrics. A total of 20 fragment of box flue tile, again Roman in date, are also recorded. A number of fragments retain coarse mortar on their surfaces (*arriccio)*, used for the rendering of decorated walls. Other fragments of ceramic building material exhibit signs of reuse; one box flue tile and one tile, in particular, from structure fill 915, have been stacked and secured using coarse lime mortar. The hole in the box flue tile has been filled with mortar to hold the two tiles together, suggesting reuse at some later date.

Fired Clay by Pete Banks

6.10 Two fragments (157g) of fired clay made in a fine sandy fabric (fs) and a fine sandy fabric with clay pellet inclusions (fscp) are recorded from pit fill 709 and ditch fill 1006.

Painted Wall Plaster by Ioannis Smyrnaios

6.11 The site produced 45 pieces of painted wall plaster weighing 4,740g. The material has been cleaned and stabilised following conservation guidelines (Watkinson and Neal, 2009) but is in poor condition due to water absorption in the depositional environment, and the render on most of the pieces survives in sensitive condition.

6.12 The largest and most important quantities of painted wall plaster derived from the foundation trench fills 908 and 915; smaller quantities derived from topsoil layer 900 and ditch fill 712. The latter fill only produced small fragments from the *intonaco* (the finer finishing layer of the wall plaster), still preserving some element of the finer mortar layer on their back surface.

6.13 Foundation trench fill 908 produced six painted fragments that suggest of two different rendering techniques. Three fragments preserve parts of the original *fresco* [redacted] in dark red-brown and light red colours forming zones, most likely associated with

the *dado* (lower part of a decorated wall). One fragment preserves elements of green *tempera*, delivered at right angle on top of the red brush strokes. The *fresco* and the gypsum i*ntonaco* have been rendered on a medium sandy lime mortar, which probably exceeded 40mm in thickness in its original form. The remaining three pieces from the same context appear coarser and perhaps associated with another wall, or perhaps another rendering technique. Their *intonaco* is thin and layered straight on top of a coarse mortar with lime and medium to large-sized grog inclusions. The surviving colours appear lighter red compared to the possible *dado* fragments from the same fill. One piece is likely to suggest that the *fresco* was once re-layered with fine render, perhaps to be covered completely or be prepared for re-decoration.

6.14 Most of the painted wall plaster debris from the foundation trench 915, including a single fragment from topsoil layer 900, associate with coarse lime and grog mortars used for wall rendering. Two large fragments, tempered with large crushed ceramic building material fragments in a lime binder, come from the *arriccio* (initial layer of coarse plaster applied on the wall). The surviving *fresco* fragments from foundation trench 915 preserve layers of red tempera in dark and light shades, including a fragment with green curvilinear brush strokes. The surviving green motif could not be identified. Finally, two large fragments from the same fill have been re-rendered on top of their *fresco* layer. One of these appears to have been layered with plain lime mortar, while the other preserves a coarse layer of a lime and fine grog aggregate.

6.15 In conclusion, the painted wall plaster from the site complies with the techniques described in Vitruvius' *De Architectura*. The material demonstrates the use of *intonaco* on coarse layers of render, and the use of such render on top of painted surfaces, either for covering the *fresco*, or for preparing the same wall for de-decoration.

Mortar by Pete Banks

6.16 A total of 14 fragments (763g) of coarse lime mortar are recorded from pit fill 1618. Five fragments exhibit signs of flat surfaces; however, the remainder are amorphous fragments with no distinguishing features.

Flint by Pete Banks

6.17 Three fragments (17g) of flint are recorded from pit fill 1613. Two primary flakes are made in a yellowish brown flint with between 5-10% cortex. One primary flake is made in a brownish grey flint with approximately 10%. It has not been possible to date these flakes.

Worked Stone by Pete Banks

6.18 Five fragments (574g) of chalk are recorded from structure fill 908. Two are amorphous fragments and appear natural; however, three fragments are possibly worked. One fragment has possible been carved into a flange shape with two flat surfaces. A whetstone (56g) made from a light green feldspathic sandstone is recorded from pit fill 1609. On the basis of mineralogy, the whetstone it most likely a Northern Gaulish import and dates to the Roman period (Thiébaux *et al*. 2016, 571).

Industrial Waste by Pete Banks

6.19 Three fragments (97g) of fuel ash slag are recorded from ditch fill 1613. No further analysis of this material has been undertaken due to the limited quantity of material recovered, which is suggestive of secondary deposition, removed from any focus of activity.

Metalwork by Pete Banks

6.20 A total of 17 fragments of iron nails (207g) are recorded from nine deposits. All are heavily corroded and it is not possible to provide any further analysis or dating for the majority. One fragment (1g), from pit fill 1618, is a small hobnail from a shoe, which is recorded from the same deposit that produced a quantity of Roman ceramic building material; therefore, it may date to the Roman period. One copper alloy coin (1g) is recorded from ditch fill 1006. The fragment is small (10mm diameter) and may be a Roman minimus coin; however, it is heavily corroded making accurate identification and dating uncertain.

7. THE BIOLOGICAL EVIDENCE

Animal Bone by Andy Clarke

7.1 Animal bone amounting to 71 fragments (3021.5g) was recovered via hand excavation and bulk soil sampling from the fills of sixteen pit and ditch features. Artefactual material dating from the Late Iron Age/early Roman transition to the

Romano-British period was also recovered from these features (See Table 1, Appendix C). The material was fragmentary but well preserved enough to make possible the identification of cattle (Bos taurus), sheep/goat (Ovis aries/Capra hircus), roe deer (Capreolus capreolus) and red deer (Cervus elaphus).

Late Iron Age/ Early Roman

7.2 Three fragments (69g) were recovered from deposits 1306 and 1308, the fills of ditches 1304 and 1307. Cattle, sheep and red deer bone were recovered but in numbers too low to provide any information other than species identification. However, each was identified from meat-poor skeletal elements and rough chop marks were present on the red deer bone. Taken together these factors may suggest an origin in the waste from the early stages of butchering a carcass.

Roman-British

7.3 A total of 65 fragments (2936.5g) were recovered from 17 deposits associated with the Roman activity identified in the northern part of the site. Cattle remains are most frequent with 18 fragments (2122g) recovered from eight deposits, most of which originated from meat-poor skeletal elements. However, occasional meat-rich bones, such as a partial scapula from pit fill 1608, were also recovered. Evidence of butchery practice was observed in the form of rough chop marks and impact damage indicating the use of a heavy cleaver that is typical of this period.

7.4 The remains of sheep/goat are more infrequent with six fragments (45g) recovered from five deposits. In keeping with the cattle remains, the sheep/goat bone consisted mainly of meat-poor skeletal elements displaying occasional rough chop marks.

7.5 A further 22 fragments (245g) were recovered that were too fragmentary to identify beyond the level of cattle or sheep size mammal. This bone consisted almost entirely of pieces of meat-rich rib and vertebrae that displayed clear and precise cut and chop marks. This bone, taken together with the cattle and sheep/goat remains, strongly suggests that the Roman assemblage has an origin in the waste from the stepped stages of butchery from carcass preparation to kitchen waste.

7.6 The presence of both Red and Roe deer was confirmed by the recovery of pieces of antler from, respectively, deposits 907 and 1003. In both cases cut marks were observed suggesting that antler was being used as a raw material.

[redacted]

Palaeoenvironmental Evidence by Emma Aitken and Sarah F. Wyles

7.7 Nine environmental samples (175 litres of soil) were taken from trench 6; ditches 604 and 606, pit 609, trench 8; ditch 802, trench 9; structure 904 (layer 909), trench 10; ditch 1005, trench 16; pits 1614 and 1617, and trench 23; ditch 2302 to evaluate the preservation of palaeoenvironmental remains across the area and with the intention of recovering environmental evidence of industrial or domestic activity on the site. It was also hoped that the environmental evidence might provide an indication of the date of the deposits. The samples were processed by standard flotation procedures (CA Technical Manual No. 2).

7.8 Preliminary identifications of plant macrofossils are noted in Table 2, Appendix C, following nomenclature of Stace (1997) for wild plants, and traditional nomenclature, as provided by Zohary *et al* (2012) for cereals. The presence of mollusc shells has also been recorded within Table 2, Nomenclature is according to Anderson (2005) and habitat preferences according to Kerney (1999) and Davies (2008).

Neolithic

7.9 Trench 6 – Pit 609. Basal fill 610 contained low quantities of indeterminate cereal grain fragments and moderately low quantities of charcoal fragments greater than 2mm in size.

Romano British

7.10 Trench 6 – Ditches 604 and 606. The single fill 605 of ditch 604 contained moderately low quantities of charred cereal grains including those of hulled wheat, emmer or spelt (*Triticum dicoccum/spelta*), and barley (*Hordeum vulgare*). Glume base fragments were also recovered and included those of emmer (*Triticum dicoccum*). No charred weed seeds were recovered from within this fill but moderate quantities of charcoal fragments greater than 2mm were recovered and included round wood/twig fragments. Terrestrial snail shells belonging to the intermediate species *Cepaea* sp. were identified in low quantities within fill 605.

7.11 Basal fill 607 of ditch 606 contained low quantities of hulled wheat grains and also glume bas fragments. No other charred plant remains were recovered from within this fill. Moderately low quantities of charcoal fragments greater than 2mm were also recovered alongside small quantities of burnt bone.

[redacted]

7.12 Trench 9 – structure 904. Fill 909 of Roman structure 904 contained low quantities of indeterminate cereal grain fragments alongside low quantities of oat/brome grass (*Avena/Bromus* sp.). Moderate quantities of charcoal fragments greater than 2mm were also recovered, containing fragments of both mature wood and round wood. Moderate quantities of terrestrial snail shells were noted, including the open country species *Vertigo* sp., *Vallonia excentrica,* and *Vallonia costata,* the intermediate species *Cochlicopa* sp., and the shade loving species *Aegopinella nitidula, Aegopinella pura* and *Discus rotundatus*.

7.13 Trench 10 – Ditch 1005. The single fill 1006 contained low quantities of indeterminate cereal grain fragments alongside low quantities of glume base fragments which included those of spelt (*Triticum spelta*). Small numbers of rye-grass/fescue (*Lolium/Festuca* sp.) seeds were also recovered from within the assemblage. Moderately low quantities of charcoal fragments greater that 2mm in size were also recorded but further wood species identification was not possible due to the poor state of preservation of the material.

7.14 Trench 16 – Pit 1617. The lower fill 1618 contained moderately low quantities of hulled wheat and barley grain fragments which showed some signs of germination. Low quantities of oat/brome grass were also recovered alongside low levels of charcoal fragments greater than 2mm. Within fill 1618 silicaeous/industrial waste material was also recovered

7.15 Trench 23 – Ditch 2302. Moderately low quantities of hulled wheat fragments, emmer or spelt were recovered from within fill 2303 alongside low levels of oat/brome grass seeds. High quantities of charcoal fragments greater than 2mm were recovered from within the fill.

Undated

7.16 Trench 8 – Ditch 802. Single fill 803 contained moderate quantities of charred cereal grains including those of spelt, emmer and barley. Some of the glume base fragments that were identified also belonged to spelt. Some of the grains showed signs of germination taking place. Moderately low quantities of charred seeds were identified as rye-grass/fescue, brome grass, and clover/medick (*Trifolium/Medicago* sp.). Charcoal fragments greater than 2mm in size were also recovered in moderately low quantities. Low quantities of terrestrial snail shells belonging to the [redacted]

open country species *Vallonia excentrica* and the shade loving species *Carychium* sp. were recorded during assessment.

7.17 Trench 16 – Pits 1614. Lower fill 1615 of pit 1614 contained low levels of charred cereal grains including those of hulled wheat. Low quantities of glume bases were present, including those identifiable as being those of spelt. Brome grass seeds were also recovered in low quantities from within the assemblage. High quantities of charcoal fragments greater than 2mm were retrieved.

Summary

7.18 The small environmental assemblages from within pit 609 and structure 904 (layer 909) are likely to be indicative of wind blow/dispersed material and do not provide any reliable indication of the date of the individual features as the amount of material recovered does not suggest deliberate deposition or proximity to any focus of related activity. Layer 909 did contain moderately low quantities of terrestrial snail shells which are indicative of an open grassland environment.

7.19 Ditch 1005 contained glume base fragments which are identified as belonging to spelt which is supportive of the Romano British phasing that this feature has been given, as spelt is the predominant wheat species during this period in this area (Greig 1991) However, due to the limited amount of material recovered this is also likely to be wind blown/dispersed from the wider area.

7.20 Cereal remains from Ditches 604 and 606, in trench 6, support a Romano British date due to the presence of glume base fragments of emmer wheat rather than spelt. These assemblages appear to be indicative of settlement activities taking place in the immediate vicinity.

7.21 The assemblage from ditch 802 contained moderate quantities of charred cereal grains which include emmer, spelt and barley. It may be reflective of dumped crop processing waste and the range of cereal would suggest an Iron Age or Roman date for this feature

7.22 However, the assemblages recovered from ditch 2302 and pits 1614 and 1617 are all likely to be representative of wind blown/dispersed material and provide no clear indication of the likely dates of these individual features. This again is due to the [redacted]

small proportion of material recovered which is unlikely to originate from deliberate deposition.

8. DISCUSSION

8.1 In the north field, the earliest archaeological feature revealed comprised a pit of Neolithic date. Little other evidence for Neolithic activity is recorded in the study area used for the Desk-based Assessment (AECOM 2018) and none to date within the Site itself. Given that only a single feature of this date was found little else can be inferred beyond a broad potential for further remains of this date to survive in the Site area.

8.2 Evidence of Late Iron Age/ Early Roman and Romano-British activity was identified in the form of a number of ditches seemingly forming an enclosure encompassing the remains of a small building and a series of rubbish pits, all situated on a largely flat area adjacent to a dry valley bisecting the field.

8.3 Outlying probable field boundary ditches were also noted to the north of the enclosure while activity did not seemingly extend to the south or east, where the gradient of the dry valley bisecting the north field becomes more pronounced and would have likely rendered the land unsuitable for anything other than pastoral uses.

8.4 Based upon the results of the geophysical survey and trial trenching, the enclosure ditch as seen in trenches 7, 10, 13, 17 and 24 ran broadly northeast - southwest from trench 13, then turning to run east –west through trench 7. The ditch then turned through 90 degrees to the north and seemingly terminated immediately outside the trench. A possible entrance was identified in trench 10, with the north/ running eastern arm of the enclosure then running through trench 10, 17 and 24. No clear evidence for a southern arm to the enclosure was identified, with an intermittent east-west aligned linear anomaly identified by the geophysical survey not having any underlying corresponding feature. Ditch 1402, in trench 14, may represent a surviving part of the southern arm, if indeed a cut boundary existed as opposed to a hedge or fence line, and was noted to run northwest to southeast, mirroring in reverse the alignment of ditch 1302, in trench 13, and suggesting that the enclosure, assuming that it formed a full circuit, may have been roughly trapezoidal in shape. Evidence for extensive and heavy plough truncation was

noted in parts of the north field, particularly in trench 23 and 24, which were situated in part on the break of slope into the dry valley, and it may be that any ditch on the crest or valley slope has subsequently been removed by ploughing.

8.5 The enclosure ditch appears to have been recut on a number of occasions, with trench 13 providing evidence for three phases of use. Of note was the recovery of Late Iron Age – Early Roman transitional period pottery from enclosure ditch fills in trench 13, and also a ditch (602) with multiple recuts (604 & 606) in trench 6 to the north of the enclosure, indicating that activity on the site began in the 1st century AD.

8.6 Similarly, and also of particular note was evidence for the deliberate infilling of the enclosure ditch in the Late Roman period, with pottery of 3rd to 4th century date recovered from upper ditch fills in trenches 7 and 10. These fills also contained building demolition debris, including wall plaster, tegula and imbrex, suggested to have derived from either the building in trench 9 or other buildings nearby to the west and southwest. Consequently, it is possible that some of the uninvestigated geophysical anomalies within the enclosure may represent additional structural remains. Although otherwise not closely dated, the upper enclosure ditch fill in trench 24 is also conjectured to have been deposited in the Late Roman period based upon the large and comparable quantities of CBM present in the fill.

8.7 The building in trench 9 was only partially exposed but was approximately 4m wide and had been cut into the natural substrate to form a subterranean element. A surviving, in-situ pilae stack and an area of heavily heat affected clay indicate that the building had a function associated with hot gases, possibly a hypocaust system or an industrial use, but the exact function was not confirmed, with the structure appearing to have subsequently been deliberately demolished and heavily robbed-out. The presence of painted wall plaster, box flue, imbrex and tegula suggest that the building was of some status, although it is possible that this material was also in part derived from other buildings nearby and used to infill the subterranean element of the structure following abandonment. The building materials that had been dumped into the subfloor area and the enclosure ditch were all noted to be fragmentary/ broken, suggesting that good quality reusable material had been systematically removed for use elsewhere and only the broken and unwanted material, such as the mortar and wall plaster, was discarded. The extensive

salvaging of building materials, apparently at the time of the demolition or soon after, suggests that active construction was going on nearby.

8.8 In regard to construction materials and techniques, given that the full dimensions and use of the building have not been determined and previous archaeological work in the vicinity suggests that other buildings may be present to the west, outside the Site area, then it can only be noted that the presence of a building complex of some status is indicated in the vicinity. The presence of quantities of box flue and pilae in the demolition debris suggest a possible hypocaust and system of heated room, although it is not proven that this applies directly to the building in trench 9, only that its use involved hot flue gases. Wall construction using flint nodules is paralleled at the Totternhoe villa complex, 15 miles to the west, as was the use of painted wall plaster, some in a similar colour palette of red/brown, red and green. As with the building in trench 9, elements of the Totternhoe villa complex had been deliberately demolished and extensively robbed-out, a process dated to the mid-4th century (Matthews, C.L, Schneider. J & Horne, B. 1992). Similarly, at Newnham, partial excavation of a high status estate centre revealed that some of the buildings had been demolished in the late 3rd century, while the bath house continued in use until the mid 4th century (Evans 2018)

8.9 The pit cluster in trench 16 was also characterised by the presence of 3rd – 4th century pottery and CBM, indicating that the pits were contemporary with the final phase of use of the site, demolition the building(s) and infilling of the enclosure ditch. Narrow ditch/ gully 710, in trench 7, was noted to cut the final fill of the enclosure ditch and on that basis appears to be one of the latest features encountered on the Site. The ditch had been truncated to its northern and eastern extent, becoming very shallow, but was noted to turn tightly through 90 degrees where it cut across the infilled enclosure ditch. Although not confirmed, it is possible that the ditch represents either an eaves drip gully or beam slot for a temporary, timber(?) structure.

8.10 Palaeoenvironmental evidence suggests crop processing was taking place either within, or in the immediate vicinity of the Site, with probable cereal processing waste recovered from ditch 802, in trench 8. The range of cereal would suggest an Iron Age or Roman date. Evidence for a grassland environment with some shady area, potentially provided by trees or scrub, is provided by brome and oat grass

seeds in a number of environmental samples, and the presence of terrestrial snail shells indicative of both an open grassland environment and shade-loving species.

8.11 Evidence of butchery practice was observed in the animal bone assemblage in the form of rough chop marks and impact damage indicating the use of a heavy cleaver that is typical of this period. Taken together, the cattle and sheep/goat remains strongly suggests that the animal bone assemblage has an origin in the waste from the stepped stages of butchery from carcass preparation to kitchen waste. Red and Roe deer were also being exploited for both meat and antler for working. Collectively the environmental evidence is suggestive of a mixed arable/ pastoral farming regime, with deer species potentially indicating the obtaining of additional resources through hunting of game.

8.12 The remains are likely to be associated with Romano-British activity previously identified to the north and northwest of the Site, where archaeological monitoring in Wigmore Valley Park, located alongside the airport emergency access road which forms the northwest boundary to the Site, revealed evidence of Roman, as well as earlier, activity, with a subsequent resistivity survey producing evidence for a substantial structure.

8.13 Overall the correlation between the results of the geophysical survey and the trial trenching were noted to be variable, with the geophysical survey tending to have identified those linear features of the greatest dimensions and with the most magnetically enhance fills, principally the main enclosure ditches in trenches 7, 10, 13 and 24. An outlying ditch was also identified in trench 6, again with multiple recuts and magnetically enhanced fills. Ditch 1402, in trench 14, and ditch 802, in trench 8, were not identified by the geophysics, however, the pit cluster in trench 16 was identified as a series of amorphous anomalies. The building in trench 9 was only identified as a large, irregular-shaped anomaly, although given the large quantities of demolition debris present this is not unexpected. No features or deposits of archaeological or geoarchaeological interest were identified in the south field. A series of discrete anomalies identified by the geophysical survey and interpreted as a possible pit alignment were observed to comprise geological variations, consisting of siltier patches/ lenses within the clay with flints substrate. Other isolated possible features were investigated and all shown to be of natural origin.

[redacted]

9. CA PROJECT TEAM

Fieldwork was undertaken by Anna Moosbauer (Project Leader), assisted by Eilidh Barr (Project Supervisor), Adrian Arenas, Alice Krausova, Mat Ferron, Susanna Ferron, Harriet Farr, Chloe Merrett. The report was written by Anna Moosbauer and Adrian Scruby. The finds and biological evidence reports were written by Ioannis Smyrnaios, Pete Banks, Emma Aitken, Sarah Wyles and Andy Clarke. The illustrations were prepared by Marta Perlinska and Jake Streatfeild-James. The archive has been compiled by Emily Evans, and prepared for deposition by Hazel O'Neill. The project was managed for CA by Adrian Scruby. The assistance of Huw Sherlock (AECOM) and Hannah Firth (Central Bedfordshire Council) is gratefully acknowledged.

10. REFERENCES

AECOM (AECOM Environmental Solutions Ltd). 2017. Luton Airport Expansion - Historic Environment Desk-Based Assessment. AECOM project no. **245580**

AECOM (AECOM Environmental Solutions Ltd). 2018a. *Invitation to Tender - Archaeological Trial Trench Evaluation: Land East of Luton Airport.* AECOM project no. **60648250**.

AECOM (AECOM Environmental Solutions Ltd). 2018b. *Scope of Works for an Archaeological Trial Trench Evaluation: Land East of Luton Airport.* AECOM project no. **60548250**.

Anderson, R. 2005 'An annotated list of the non-marine Mollusca of Britain and Ireland', *Journal of Conchology* **38**, 607-637

APABE (Advisory Panel on the Archaeology of Burials in England). 2017. *Guidance for best practice for the treatment of Human remains excavated from Christian Burial Grounds in England, 2nd Edition*.

Arup (Ove Arup and Partners Ltd). 2017. *London Luton Airport Limited: Luton Airport Expansion - Historic Environment Desk-Based Assessment.* Arup job no. **245580**.

BGS (British Geological Survey). 2019. *Geology of Britain Viewer*. [redacted]

CA (Cotswold Archaeology) 2012 *The taking and processing of environmental and other samples from archaeological sites: Technical Manual No. 2*

CBC (Central Bedfordshire Council). 2018. *Brief for a Programme of Archaeological Field Evaluation on Land to the North-east of Luton Airport, Luton, Bedfordshire*.

Davies, P. 2008 *Snails Archaeology and Landscape Change*, Oxford, Oxbow Books

Dawson, M. 2004 Archaeology in the Bedford Region Brit. Archaeol. Rep. 373

Evans, C. 2018 Regional Research Framework – Late Iron Age and Roman. [redacted]

Greig, J. 1991 'The British Isles' in van Zeist, W., Wasylikowa,K. and Behre, K-E. (eds) Progress in Old World Palaeoethnobotany, Rotterdam 229-334

Kerney, M.P. 1999 *Atlas of the Land and Freshwater Molluscs of Britain and Ireland*, Colchester, Harley

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

Marney, P.T. 1989 *Roman and Belgic Pottery: From excavations in Milton Keynes 1972-82* Buckinghamshire Archaeological Society Monograph Series No **2**, Aylesbury.

Matthews, C.L, Schneider, J. & Horne, B. 1992. *A Roman Villa at Totternhoe*. Bedfordshire Archaeology Vol. 20 pp 41 - 95

Medlycott, M. (ed.). 2011. *Research and Archaeology Revisited: a revised framework for the East of England*. East Anglian Archaeology Occasional Paper No. **24**.

MHCLG (Ministry of Housing, Communities and Local Government). 2019. *National Planning Policy Framework.*

Oake, M. Luke, M. Dawson, M. Edgeworth, M and Murphy, P. 2007. *Bedfordshire Archaeology: Research and Archaeology: Resource Assessment, Research Agenda and Strategy*. Bedfordshire Archaeology Monograph **5**.

Parminter, Y. and Slowikowski, A.M. 2004 'The ceramic assemblage' in Dawson, M. 2004, 442-89.

PCRG, 2010 Prehistoric ceramics research group guidelines Occasional Papers 1 and 2

Stace, C. 1997 *New Flora of the British Isles*, Cambridge, Cambridge University Press Books

SUMO (Sumo Services Ltd). 2018. *Geophysical Survey Report: New Century Park.* SUMO report no. **11318**.

Thiébaux, A., Feller, M., Duchêne, B. and Goemaere, E. 2016 Roman whetstone production in northern Gaul (Belguim and northern France) *Journal of Lithic Studies* **3**, 565-587.

Tomber R. and Dore J. 1998 *The National Roman Fabric Reference Collection: A Handbook* Museum of London Archaeological Service, London.

Watkinson, D. and Neal, V. 2009 *First Aid for Finds*. Rescue & UKIC Archaeology Section

Young C. 2000 *The Roman pottery industry of the Oxford region* Brit. Archaeol. Rep. **43**, Oxford.

Zohary, D., Hopf, M. and Weiss, E. 2012 *Domestication of plants in the Old World: the origin and spread of cultivated plants in West Asia, Europe, and the Nile Valley*, 4th edition, Oxford, Clarendon Press

APPENDIX A: CONTEXT DESCRIPTIONS

Trench No.	Context No.	Type	Fill of	Context Interpretation	Description	L (m)	W (m)	D (m)	Spot-date
1	100	Layer		Topsoil	Dark greyish brown, silty clay, friable, moderate stones, flint and chalk flakes, rooting			0.33	
1	101	Layer		Natural	Mid brownish and reddish orange, sandy clay, friable, frequent big flint and gravel, occasional chalk flakes			>0.01	
1	102	Cut		Cut of ditch terminus	Linear, concave gentle sloping sides, irregular base, SE-NW	>1.03	>0.34	0.11	
1	103	Fill	102	Fill of ditch	Mid greyish brown, sandy silt, compact, frequent flint stones/flakes, occasional gravel and chalk	>1.03	>0.34	0.11	
1	104	Cut		Cut of gully	Linear, straight steep sloping sides, concave base, NW-SE	>1.0	0.40	0.22	
1	105	Fill	104	Fill of gully	Mid greyish brown, sandy clay, compact, moderate flint stones/flakes, occasional gravel and chalk	>1.0	0.40	0.22	
1	106	Cut		Cut of ditch	Linear, concave moderate sloping sides, flat base, NW-SE	>1.0	0.45	0.14	
1	107	Fill	106	Fill of ditch	Mid greyish brown, sandy clay, compact, moderate flint stones/flakes, occasional gravel and chalk	>1.0	0.45	0.14	
2	200	Layer		Topsoil	Same as 100			0.21	
2	201	Layer		Natural	Same as 101			>0.21	
3	300	Layer		Topsoil	Same as 100			0.20	
3	301	Layer		Natural	Same as 101			>0.13	
3	302	Cut		Cut of ditch	Linear, steep/stepped sides, flat/irregular base, NW-SE	>1.0	>1.95	0.36	
3	303	Fill	302	Fill of ditch	Mid grey brown, silty clay, compact, frequent large flint nodules, frequent flint pieces	>1.0	>1.95	0.36	
4	400	Layer		Topsoil	Same as 100			0.21	
4	401	Layer		Natural	Same as 101			>0.39	
5	500	Layer		Topsoil	Mid greyish brown, silty clay, firm, occasional natural flint			0.27	
5	501	Layer		Natural	Mid orangey brown, silty clay, compact, frequent natural flint			>0.01	
6	600	Layer		Topsoil	Same as 100			0.22	

6	601	Layer		Natural	Same as 101			>0.14	
Trench No.	Context No.	Type	Fill of	Context Interpretation	Description	L (m)	W (m)	D (m)	Spot-date
6	602	Cut		Cut of ditch	Linear, straight steep sloping sides, concave base, NW-SE	>1.0	0.50	0.63	
6	603	Fill	602	Fill of ditch	Mid brownish orange, silty clay, compact, big flint cores (>0.30m), smaller flint flakes, occasional charcoal	>1.0	0.90	0.20	
6	604	Cut		Cut of ditch	Linear, straight steep/moderate sloping sides, rounded base, NW-SE	>1.0	0.77	0.50	
6	605	Fill	604	Fill of ditch	Dark brownish grey, silty clay, compact, small sub-rounded and –angular stone (<0.08m), occasional flint flakes, occasional charcoal	>1.0	0.77	0.50	
6	606	Cut		Cut of ditch	Linear, straight moderate sloping sides, rounded base, NW-SE	>1.0	1.40	0.48	
6	607	Fill	606	Fill of ditch	Mid greyish brown, silty clay, compact, frequent flint cores and flakes (<0.10m), occasional sub-rounded and –angular stone (<0.08m), occasional charcoal	>1.0	1.40	0.40	
6	608	Fill	606	Fill of ditch	Mid orangey brown, silty clay, compact, frequent flint cores/flakes (<0.10m)	<1.0	0.66	0.14	
6	609	Cut		Cut of pit	Circular, irregular stepped side (NW), concave moderate sloping side for rest of feature, concave base slightly sloping towards SE	0.75	0.75	0.21	
6	610	Fill	609	Fill of pit	Dark brownish grey, silty clay, compact, flint stones (<0.10m), frequent charcoal	0.65	0.60	0.09	
6	611	Fill	609	Fill of pit	Mid greyish brown, silty clay, compact, occasional flint stones (<0.10m), occasional charcoal	0.75	0.55	0.14	
7	700	Layer		Topsoil	Same as 100			0.27	
7	701	Layer		Natural	Same as 101			>0.19	
7	702	Layer		Subsoil	Mid greyish brown, clayey silt, friable, occasional small stones	11.50	3.0	0.43	
7	703	Cut		Geology		5.0	>0.32	0.37	
7	704	Fill	703	Geology		5.0	>0.32	0.37	
7	705	Cut		Cut of ditch	Linear, concave moderate sides, flat base, E-W	>1.0	0.65	0.30	
7	706	Fill	705	Fill of ditch	Mid brownish grey, silty clay, compact, frequent flint	>1.0	0.65	0.19	

7	707	Fill	705	Fill of ditch	Mid orangey brown, silty clay, compact, occasional flint	>1.0	0.50	0.11	
Trench No.	Context No.	Type	Fill of	Context Interpretation	Description	L (m)	W (m)	D (m)	Spot-date
7	708	Cut		Cut of pit	Rectangular, sharp corners, concave moderate sides, NW-SE longest axis	>1.0	0.37	0.20	
7	709	Fill	708	Fill of pit	Dark grey, silty clay, moderately compact, frequent medium flint, occasional chalk	>1.0	0.37	0.20	
7	710	Cut		Cut of linear	Linear, concave moderate sides, flat/slightly irregular base, NE-SW turning to NW-SE	>0.40	1.23	0.22	
7	711	Fill	710	Fill of linear	Mid brownish grey, silty clay, compact, frequent flint, occasional chalk	>0.40	0.76	0.22	
7	712	Fill	710	Fill of linear	Mid greyish brown, silty clay, friable, frequent chalk, small/medium flint	>0.40	0.31	0.20	
8	800	Layer		Topsoil	Same as 100			0.25	
8	801	Layer		Natural	Same as 101			0.15	
8	802	Cut		Cut of ditch	Linear, moderate sloping sides, concave base, NE-SW	>1.0	0.85	0.18	
8	803	Fill	802	Fill of ditch	Dark orangey brown, silty clay, compact, frequent sub-angular and angular stone (0.02-0.07m), frequent charcoal	>1.0	0.85	0.18	
9	900	Layer		Topsoil	Same as 100			0.22	
9	901	Layer		Natural	Same as 101			>0.12	
9	902	Cut		Cut of gully	Linear, moderate sides, concave base, NE-SW	>1.0	0.42	0.20	
9	903	Fill	902	Fill of gully	Dark greyish brown, clayey silt, moderately compact, frequent flint stones (0.03-0.10m), frequent CBM fragments, frequent mortar fragments	>1.0	0.42	0.20	
9	904	Cut		Construction cut	Linear, vertical sides, NE-SW	>1.0	0.45	>0.25	
9	905	Structure	904	Wall	Dark grey flint stone blocks with white patina on the surface, compact		0.45	>0.45	
9	906	Structure	904	Bonding	Light salmon brown, coarse silty sand, friable, moderate small stone and flint fragments			>0.45	
9	907	Fill		Internal deposit	Mid reddish brown, clayey silt, moderately compact, frequent CBM/mortar/flint and occasional plaster fragments			>0.70	

9	908	Fill		Internal deposit	Mid reddish brown, clayey silt, moderately compact, frequent CBM/mortar/flint/plaster			0.30	
Trench No.	Context No.	Type	Fill of	Context Interpretation	Description	L (m)	W (m)	D (m)	Spot-date
9	909	Fill		Internal deposit	Dark greyish brown, clayey silt, loose, moderate fragments of wall plaster, occasional flint stones, moderate charcoal			0.19	
9	910	Structure		Structure	Mid brownish red, terracotta/clay tiles		0.25	0.20	
9	911	Cut		Construction cut	Rectangular, moderate SE side, vertical NW side, flat base, NE-SW	>1.0	>1.62	0.65	
9	912	Structure		Wall	Stone (flint), <0.25m, roughly hewn, random un-coursed, wall foundation, NW-SE faces, bonding material light whitish grey mortar, compact with occasional pebbles and chalk (<0.03m)	>1.0	0.60	0.37	
9	913	Fill		Internal deposit	Light brownish grey, silty sand, compact, frequent sub-angular chalk (<0.06m), occasional angular flint and tile (<0.10m)	>1.0	>0.15	0.65	
9	914	Fill		Internal deposit	Mottled mid greyish brown, clayey silt, moderately compact, moderate chalk and flint inclusions	>1.0	1.47	0.30	
9	915	Fill		Internal deposit	Dark blackish brown, 60% CBM, 40% clayey silt, loose, occasional sub-angular chalk (<0.04m)	>1.0	1.65	0.49	
9	916	Fill		Internal deposit	Mid reddish to mid greyish brown, mottled, clayey silt, moderately compact, moderate chalk and flint (<0.10m)	>1.0	1.18	0.24	
10	1000	Layer		Topsoil	Mid greyish brown, clayey silt, loose, frequent small-medium sized stone			0.32	
10	1001	Layer		Natural	Mid brownish orange, clay, frequent small-large flint inclusions			>0.01	
10	1002	Cut		Cut of ditch terminus	Linear, convex steep sloping sides, base unexcavated, NNE-SSW	>1.0	>0.93	>0.76	
10	1003	Fill	1002	Fill of ditch	Mid orangey grey, silty clay, compact, moderate angular flint (<0.20m), occasional sandstone (<0.04m) and charcoal	>1.0	>0.69	>0.59	
10	1004	Fill	1002	Fill of ditch	Dark blackish brown, mottled with mid greyish brown, clayey silt, moderately compact, occasional angular flint (<0.20m), sub-rounded sandstone (<0.04m), flecks of charcoal	>1.0	>0.93	).36	

10	1005	Cut		Cut of ditch	Linear, steep sides, rounded base, E-W	>3.0	1.32	0.35	
10	1006	Fill	1005	Fill of ditch	Mid greyish brown, clayey silt, friable, frequent small-medium sized stones and charcoal	>3.0	1.32	0.35	
Trench No.	Context No.	Type	Fill of	Context Interpretation	Description	L (m)	W (m)	D (m)	Spot-date
11	1100	Layer		Topsoil	Same as 100			0.26	
11	1101	Layer		Natural	Same as 101			>0.06	
12	1200	Layer		Topsoil	Same as 100			0.24	
12	1201	Layer		Natural	Same as 101			>0.09	
13	1300	Layer		Topsoil	Same as 600			0.30	
13	1301	Layer		Natural	Same as 601			>0.01	
13	1302	Cut		Cut of ditch	Linear, straight steep sloping sides, concave base, NE-SW	>1.0	1.0	0.56	
13	1303	Fill	1302	Fill of ditch	Mid greyish brown, clayey silt, compact, small-medium sized stone, occasional charcoal	>1.0	1.0	0.30	
13	1304	Cut		Cut of ditch	Linear, straight moderate sloping sides, concave base, NE-SW	>1.0	1.25	0.42	
13	1305	Fill	1304	Fill of ditch	Light greyish orange, silty clay, compact, occasional small-medium sized flint stones/flakes	>1.0	>1.0	0.20	
13	1306	Fill	1304	Fill of ditch	Mid greyish brown, silty clay, compact, moderate small-medium sized flint stones/flakes	>1.0	>1.25	0.20	
13	1307	Cut		Cut of ditch	Linear, straight gently sloping sides, concave base, NE-SW	>1.0	0.86	0.20	
13	1308	Fill	1307	Fill of ditch	Dark brownish grey, silty clay, compact, frequent small-medium sized flint stones/flakes, occasional sub-angular stone and charcoal	>1.0	0.86	0.20	
14	1400	Layer		Topsoil	Same as 100			0.20	
14	1401	Layer		Natural	Same as 101			>0.01	
14	1402	Cut		Cut of ditch	Linear, concave moderate sides, flat base, NW-SE	>1.0	1.11	0.18	
14	1403	Fill	1402	Fill of ditch	Mid orangey brown, silty clay, compact, frequent angular natural flint (0.02-0.15m	>1.0	1.11	0.18	
15	1500	Layer		Topsoil	Same as 100			0.20	
15	1501	Layer		Natural	Same as 101			>0.01	

15	1502	Cut		Cut of ditch	Linear, NW-SE	>2.1	3.0		
15	1503	Fill	1502	Fill of ditch	Mid grey brown silty clay (unexcavated)	>2.1	3.0		
16	1600	Layer		Topsoil	Mid brownish grey, silty clay, moderately compact, frequent small stones			0.26	
Trench No.	Context No.	Type	Fill of	Context Interpretation	Description	L (m)	W (m)	D (m)	Spot-date
16	1601	Layer		Natural	Mid orangey brown, silty clay, compact, frequent large flint and flakes			>0.08	
16	1602	Cut		Cut of ditch terminus	Linear, convex/concave steep sides, NE-SW	>1.12	>1.16	0.56	
16	1603	Fill	1602	Fill of ditch	Dark brownish grey, silty clay, friable, frequent small shards of flint, small pieces of chalk/white stone, occasional red stones, frequent charcoal	>0.53	>0.58	0.09	
16	1604	Fill	1602	Fill of ditch	Mid orangey brown, silty clay, compact, occasional small flint shards	0.71	>0.30	0.16	
16	1605	Fill	1602	Fill of ditch	Mid orangey grey, silty clay, friable, frequent flint, small chalk, CBM	>0.30	0.68	0.10	
16	1606	Fill	1602	Fill of ditch	Mid brownish grey, silty clay, friable, occasional large flint, charcoal lens	>1.12	>1.16	0.39	
16	1607	Cut		Cut of pit	Oval, concave moderate sides, concave base	1.70	2.08	0.31	
16	1608	Fill	1607	Fill of pit	Mid orangey brown, silty clay, compact, occasional charcoal, moderate angular and sub-angular stone (0.03-0.15m)		1.83	0.17	
16	1609	Fill	1607	Fill of pit	Dark greyish brown, silty clay, compact, occasional chalk (0.10-0.15m), moderate angular/sub-angular stone (0.01-0.06m), occasional charcoal	>0.87	2.08	0.15	
16	1610	Cut		Cut of pit	Oval, steep sides, rounded base, N-S	>1.0	0.72	0.13	
16	1611	Fill	1610	Fill of pit	Mid orangey grey, silty clay, compact, occasional small stones	>1.0	0.72	0.13	
16	1612	Cut		Cut of pit	Sub-circular, gentle/moderate sides, uneven mostly concave base, NE-SW	2.61	2.57	0.27	
16	1613	Fill	1612	Fill of pit	Dark greyish brown, clayey silt, friable, frequent medium-large stone and chalk	>1.40	2.57	0.27	

16	1614	Cut		Cut of pit	Oval/circular, concave moderate sides, base unexcavated	>6.40	>4.70	>1.16	
16	1615	Fill	1614	Fill of pit	Dark brownish grey, silty clay, compact, frequent charcoal, moderate fired clay		>0.61	>0.09	
16	1616	Fill	1614	Fill of pit	Mid greyish brown, silty clay, compact, moderate sub-angular/angular stone (0.01-0.05m), occasional CBM	>2.40	>4.70	0.96	
Trench No.	Context No.	Type	Fill of	Context Interpretation	Description	L (m)	W (m)	D (m)	Spot-date
16	1617	Cut		Cut of pit	Sub-square, rounded corners, undercutting side (NE) – rest of the sides vertical, base not excavated	>0.63	>0.88	>0.66	
16	1618	Fill	1617	Fill of pit	Light yellowish brown, silty clay, compact, occasional charcoal, frequent chalk, moderate mortar/fired clay, occasional sub-angular stone (0.03-0.08m)	>0.63	>0.88	>0.66	
16	1619	Fill	1617	Fill of pit	Mid greyish brown, silty clay, compact, occasional charcoal, occasional sub-angular stone (0.01-0.05m)	>0.50	>0.75	0.39	
17	1700	Layer		Topsoil	Same as 1800			0.23	
17	1701	Layer		Natural	Same as 1801			>0.01	
17	1702	Cut		Cut of pit	Oblong, convex moderate sides, flat base, E-W	>1.35	>0.83	0.37	
17	1703	Fill	1702	Fill of pit	Dark greyish brown, silty clay, compact, frequent angular natural flint (0.02-0.10m), moderate charcoal, occasional CBM	>0.45	>0.83	0.18	
17	1704	Cut		Cut of ditch	Linear, concave moderate sides, flat base, N-S	>1.0	>1.99	0.60	
17	1705	Fill	1704	Fill of ditch	Dark greyish brown, silty clay, compact, moderate angular stone (0.01-0.20m), moderate charcoal and CBM	>1.0	>1.70	0.26	
17	1706	Fill	1704	Fill of ditch	Mid greyish brown, clayey silt, compact, moderate angular stone (0.01-0.05m), occasional CBM and charcoal	>1.0	>1.99	0.34	
17	1707	Fill	1702	Fill of pit	Mid greyish brown, silty clay, compact, frequent angular stone (0.02-0.07m), occasional charcoal and CBM	>1.35	>0.69	0.29	
18	1800	Layer		Topsoil	Dark greyish brown, silty clay, firm, natural flint inclusions			0.26	

18	1801	Layer		Natural	Mid orangey brown, silty clay, compact, frequent natural flint inclusions			>0.01	
19	1900	Layer		Topsoil	Same as 2000			0.28	
19	1901	Layer		Natural	Same as 2002			>0.01	
20	2000	Layer		Topsoil	Dark greyish brown, silty clay, moderately compact/friable, flint			0.28	
Trench No.	Context No.	Type	Fill of	Context Interpretation	Description	L (m)	W (m)	D (m)	Spot-date
20	2001	Layer		Colluvium	Mid orangey brown, silty clay, moderately compact, flint 10%			0.52	
20	2002	Layer		Natural	Mid orangey brown, silty clay, compact, large flint >10%			>0.01	
21	2100	Layer		Topsoil	Mid greyish brown, silty clay, loose, rooting, small angular stone inclusions			0.22	
21	2101	Layer		Natural	Mid brownish orange, silty clay, firm, gravel and large natural stone inclusions			>0.01	
22	2200	Layer		Topsoil	Same as 1800			0.25	
22	2201	Layer		Natural	Same as 1801			>0.01	
23	2300	Layer		Topsoil	Same as 1800			0.23	
23	2301	Layer		Natural	Same as 1801			>0.01	
23	2302	Cut		Cut of pit	Circular, moderate sides, uneven mostly concave base	0.62	0.62	0.11	
23	2303	Fill	2302	Fill of pit	Dark greyish brown, silty clay, compact, frequent charcoal and angular stones/flint	0.62	0.62	0.11	
24	2400	Layer		Topsoil	Mid brownish grey, silty clay, moderately compact, frequent medium sized stone inclusions			0.23	
24	2401	Layer		Natural	Mid brownish orange, silty clay, compact, frequent large flint with small-medium sized broken flint			>0.01	
24	2402	Cut		Cut of ditch	Linear, convex moderate sloping sides, flat base, N-S	>1.0	1.46	0.36	
24	2403	Fill	2402	Fill of ditch	Mid brownish grey, silty clay, compact, frequent broken and whole flint	>1.0	1.46	0.36	
25	2500	Layer		Topsoil	Same as 1800			0.20	
25	2501	Layer		Natural	Same as 1801, with some chalk bands			>0.08	

26	2600	Layer		Topsoil	Same as 1800			0.25	
26	2601	Layer		Natural	Same as 1801, with some chalk bands			>0.05	
27	2700	Layer		Topsoil	Same as 2000			0.24	
27	2701	Layer		Colluvium	Same as 2001			0.76	
27	2702	Layer		Natural	Same as 2002			>0.01	
28	2800	Layer		Topsoil	Mid greyish brown, silty clay, loose, small rounded stones (<5%)			0.15	
Trench No.	Context No.	Type	Fill of	Context Interpretation	Description	L (m)	W (m)	D (m)	Spot-date
28	2801	Layer		Subsoil	Mid orangey brown, silty clay, friable, small sub-angular stones			0.25	
28	2802	Layer		Natural	Mid orangey brown, silty clay, friable, natural stone inclusions			>0.14	
29	2900	Layer		Topsoil	Mid greyish brown, silty clay, loose, rooting and small stone inclusions			0.25	
29	2901	Layer		Natural	Mid orangey brown, silty clay, friable, rounded stone inclusions 10%			>0.13	
30	3000	Layer		Topsoil	Same as 3100			0.50	
30	3001	Layer		Natural	Same as 3101			>0.16	
31	3100	Layer		Topsoil	Mid greyish brown, clayey silt, friable, occasional sub-angular stone			0.24	
31	3101	Layer		Natural	Mid orangey brown, silty clay, compact, frequent small rounded and sub-rounded stone			>0.05	
32	3200	Layer		Topsoil	Mid brownish grey, silty clay, moderately compact, frequent small flint pieces			0.22	
32	3201	Layer		Natural	Mid orangey brown, silty clay, compact, frequent medium-large sized stone			>0.12	
33	3300	Layer		Topsoil	Same as 4400			0.22	
33	3301	Layer		Subsoil	Same as 4401			0.34	
33	3302	Layer		Natural	Same as 4403			>0.21	
34	3400	Layer		Topsoil	Same as 3100			0.41	
34	3401	Layer		Colluvium	Same as 4202			0.89	
34	3402	Layer		Natural	Same as 3101			>0.11	
35	3500	Layer		Topsoil	Mid greyish brown, silty clay			0.31	

35	3501	Layer		Natural	Same as 3101			>0.01	
36	3600	Layer		Topsoil	Same as 3100			0.27	
36	3601	Layer		Natural	Same as 3101			>0.05	
37	3700	Layer		Topsoil	Same as 3100			0.22	
37	3701	Layer		Natural	Same as 3101			>0.07	
38	3800	Layer		Topsoil	Same as 3100			0.32	
38	3801	Layer		Natural	Same as 3101			>0.10	
Trench No.	Context No.	Type	Fill of	Context Interpretation	Description	L (m)	W (m)	D (m)	Spot-date
38	3802	Deposit		Spread deposit	Mid greyish brown, clayey silt, friable, frequent small-medium sized flint stones/flakes, occasional small sub-angular stones	>8.0	>2.10	>0.30	
39	3900	Layer		Topsoil	Mid greyish brown, silty clay, loose, rooting and small stone inclusions <20%			0.30	
39	3901	Layer		Natural	Mid brownish orange, firm, medium-large sized flint inclusions			>0.12	
40	4000	Layer		Topsoil	Same as 3900			0.29	
40	4001	Layer		Natural	Same as 3901			>0.01	
41	4100	Layer		Topsoil	Same as 3900			0.27	
41	4101	Layer		Natural	Same as 3901			>0.05	
42	4200	Layer		Topsoil	Same as 3100			0.30	
42	4201	Layer		Natural	Same as 3101			>0.10	
43	4300	Layer		Topsoil	Mid greyish brown, silty clay, loose, rooting and small rounded stone inclusions <20%			0.33	
43	4301	Layer		Natural	Mid brownish orange, silty clay, firm, natural stone/flint inclusions			>0.07	
44	4400	Layer		Topsoil	Mid greyish brown, silty clay, loose, rooting and small rounded stone inclusions			0.27	
44	4401	Layer		Subsoil	Mid orangey brown, silty clay, friable, occasional stone			0.12	
44	4402	Layer		Colluvium	Mid orangey brown, silty sand, gravel inclusions			0.79	
44	4403	Layer		Natural	Mid orangey brown, silty clay, firm, large natural flint inclusions			>0.01	
45	4500	Layer		Topsoil	Same as 4400			0.22	

45	4501	Layer		Natural	Mid brownish orange, silty clay, compact, frequent large flint with patch of moderately compact mid greyish brown, silty clay, frequent small-medium sized stones			>0.18	
46	4600	Layer		Topsoil	Dark greyish brown, clayey silt, moderately compact, flint 10%			0.28	
46	4601	Layer		Natural	Mid orangey brown, silty clay/gravel, compact, flint>10%			>0.01	
47	4700	Layer		Topsoil	Same as 4400			0.20	
47	4701	Layer		Subsoil	Same as 4401			0.40	
Trench No.	Context No.	Type	Fill of	Context Interpretation	Description	L (m)	W (m)	D (m)	Spot-date
47	4702	Layer		Colluvium	Same as 4402			0.2	
47	4703	Layer		Natural	Same as 4403			>0.01	
48	4800	Layer		Topsoil	Same as 4600			0.28	
48	4801	Layer		Natural	Same as 4601			>0.01	
49	4900	Layer		Topsoil	Same as 5600			0.22	
49	4901	Layer		Colluvium	Mid orangey brown, silty sand, gravel inclusions			0.56	
49	4902	Layer		Natural	Same as 5601			>0.02	
50	5000	Layer		Topsoil	Same as 4400			0.19	
50	5001	Layer		Natural	Same as 4403			>0.03	
51	5100	Layer		Topsoil	Same as 4400			0.27	
51	5101	Layer		Natural	Same as 4403			>0.03	
52	5200	Layer		Topsoil	Same as 4400			0.32	
52	5201	Layer		Natural	Same as 4403			>0.11	
53	5300	Layer		Topsoil	Same as 4400			0.27	
53	5301	Layer		Natural	Mid brownish orange, silty clay, firm, natural stone/flint inclusions			>0.03	
54	5400	Layer		Topsoil	Same as 4600			0.27	
54	5401	Layer		Natural	Mid brownish orange, silty clay, compact, flint 25%			>0.01	
55	5500	Layer		Topsoil	Same as 4400			0.22	
55	5501	Layer		Natural	Same as 4403			>0.11	
56	5600	Layer		Topsoil	Mid greyish brown, clayey silt, friable, frequent rounded and sub-angular stone			0.25	

56	5601	Layer		Natural	Mid orange, silty clay, compact, frequent sub-angular stone/flint			>0.14	
57	5700	Layer		Topsoil	Same as 4100			0.20	
57	5701	Layer		Natural	Same as 4103			>0.07	

APPENDIX B: THE FINDS

Appendix B, Table 1: Finds concordance

Context	Class	RA No.	Description	Fabric Code*	Count	Weight (g)	Spot-date
103	Roman Pottery		Sandy oxidised ware	UNS OX	1	2	RB
	CBM		Tile x 1	fscp	1	18	
107	Roman Pottery		Sandy oxidised ware	UNS OX	1	3	RB
	CBM			cs	1	7	
303	CBM			fs	1	8	RB
605	LIA/Roman Pottery		Sandy grog-tempered fabric	UNS QGR	2	38	C1
	LIA/Roman Pottery		Sandy fabric	UNS Q	7	138	
	LIA/Roman Pottery		Grog-tempered fabric	UNS GR	15	251	
	Roman Pottery		Sandy reduced ware	UNS RE	14	116	
	Roman Pottery		Sandy oxidised ware	UNS OX	5	22	
	CBM			cs/msc/csc	5	141	
	Iron		Nail		1	11	
607	LIA/Roman Pottery		Sandy grog-tempered fabric	UNS QGR	3	54	RB
	LIA/Roman Pottery		Grog-tempered fabric	UNS GR	6	71	
	Roman Pottery		Sandy reduced ware	UNS RE	19	164	
	Roman Pottery		Sandy oxidised ware	UNS OX	3	14	
	Roman Pottery		Sandy white ware	UNS WH	4	21	
	CBM			fs/fsv/ms	2	13	
610	Prehistoric Pottery		Flint-tempered fabric	FL	3	184	NEO
706	Roman Pottery		Sandy reduced ware	UNS RE	1	3	RB
	LIA/Roman Pottery		Sandy grog-tempered fabric	UNS QGR	1	13	
709	Roman Pottery		Sandy reduced ware	UNS RE	1	3	RB
	Fired clay			fs	1	1	
	CBM		RBT x 1	fs/mscp	2	9	
712	CBM		Tegula x 1, RBT x 4	fs/fsf	10	359	RB
	Plaster				5	40	
900	Plaster				1	41	
903	Iron		Nail		1	10	
906	Roman Pottery		Oxfordshire white ware	**OXF WH**	1	59	C3-C4
	Roman Pottery		Oxfordshire red-slipped ware	**OXF RS**	1	27	
	CBM		Tegula x 4, Box flue tile x 2, RBT x 2	fscp/fsfe/mscp	10	633	
907	Roman Pottery		Shell-tempered ware	UNS SH	2	102	RB
	Roman Pottery		Sandy reduced ware	UNS RE	1	18	
	CBM		Tegula x 3, Imbrex x3, Box flue tile x 5, RBT x 8,	fs/fsfe/fscp/csfe/csh	19	1937	
908	CBM		Box flue tile x 3, RBT x	fs/fsfe/csh	7	658	RB

			3				
	Worked Stone		Chalk		5	574	
	Plaster				6	275	
915	Iron		Nail		1	8	RB
	CBM		Tegula x 2, Imbrex x 4, Box flue tile x 8, RBT x 10	csh/fs/fscp/fsfe/fsc	22	12639	
	Plaster				33	4384	
916	Roman Pottery		Sandy oxidised ware	UNS OX	1	17	RB
1003	Roman Pottery		Sandy reduced ware	UNS RE	2	13	RB
	CBM		Tegula x 1, RBT x 1	fscp/fs	4	255	
1004	Roman Pottery		Sandy reduced ware	UNS RE	11	154	LC3-MC4
	Roman Pottery		Shell-tempered ware	UNS SH	4	68	
	Roman Pottery		Lower Nene Valley colour coated ware	**LNV CC**	1	8	
	CBM		Tegula x 1, Box flue tile x 1, Floor tile x 1, RBT x 3	fs/fsfe/csc	9	807	
	Iron		Nail		1	9	
1006	Roman Pottery		Sandy oxidised ware	UNS OX	2	17	C3-C4
	Roman Pottery		Oxfordshire oxidised ware	OXF OX	5	73	
	Roman Pottery		Sandy reduced ware	UNS RE	4	90	
	Fired clay		Flat surface x 1	fscp	1	156	
	CBM		Tegula x 3, Imbrex x 3, Box flue tile x 1, Floor tile x 1, RBT x 7	fs/fscp/cs	35	1930	
	Copper alloy	1	Coin		1	1	
1303	LIA/Roman Pottery		Sandy grog-tempered fabric	UNS QGR	1	30	LIA ERB
1306	LIA/Roman Pottery		Grog-tempered fabric	UNS GR	12	369	LIA-ERB
	LIA/Roman Pottery		Sandy grog-tempered fabric	UNS QGR	1	6	
1308	LIA/Roman Pottery		Sandy fabric	UNS Q	1	18	LIA-ERB
	LIA/Roman Pottery		Sandy grog-tempered fabric	UNS QGR	25	393	
	CBM			ms/msf	3	39	
1403	Roman Pottery		Sandy reduced ware	UNS RE	1	2	RB
	Roman Pottery		Shell-tempered ware	UNS SH	6	43	
	CBM		RBT x 1	fs	1	57	
1606	Roman Pottery		Sandy reduced ware	UNS RE	3	21	C3-C4
	Roman Pottery		Shell-tempered ware	UNS SH	2	35	
	Roman Pottery		Lower Nene Valley cream ware	LNV CW	1	10	
	Roman Pottery		Central Gaulish samian	**LEZ SA**	1	4	
	Roman Pottery		Oxfordshire red-slipped ware	**OXF RS**	1	2	
	Medieval Pottery		Medieval coarse ware	MCW	1	3	

	CBM		Tegula x 1, Imbrex x 2	fsc/fscp/cscp	5	232	
1608	Roman Pottery		Sandy reduced ware	UNS RE	1	177	RB
	Iron		Nail x 2		3	98	
1609	Roman Pottery		Hadham oxidised ware	**HAD OX**	1	3	C3-C4
	Roman Pottery		Sandy oxidised ware	UNS OX	7	49	
	Roman Pottery		Shell-tempered ware	UNS SH	4	41	
	Roman Pottery		Black burnished ware	**DOR BB1**	1	4	
	Roman Pottery		Sandy reduced ware	UNS RE	9	139	
	Roman Pottery		Central Gaulish samian	**LEZ SA**	1	22	
	CBM		RBT x 1	fsfe	1	19	
	Iron		Nail x 5		5	37	
	Worked stone		Sandstone whetstone		1	56	
1611	Roman Pottery		Sandy reduced ware	UNS RE	2	11	RB
	CBM		RBT x 1	cscp/msc	3	439	
1613	Roman Pottery		Pink grogged ware	**PNK GT**	2	473	C3-C4
	Roman Pottery		Sandy reduced ware	UNS RE	5	56	
	Roman Pottery		Imitation black burnished ware	IMT BB	1	23	
	Roman Pottery		Hadham oxidised ware	**HAD OX**	1	42	
	Roman Pottery		Oxfordshire white ware	**OXF WH**	2	91	
	Flint		Flake x 3		3	17	
	Industrial Waste		Fuel Ash Slag		3	97	
	Iron		Nail		1	3	
	CBM		Tegula x 2, RBT x 9, floor tile x 2,	fs/fsf/fsc/fscp/ms / mscp/cs	22	2849	
1618	CBM		RBT x 1, Tegula x 1	fsf/fscpf	2	354	RB
	Mortar		Lime mortar		14	763	
	Iron		Hob nail x 1		1	1	
1619	Roman Pottery		Sandy reduced ware	UNS RE	1	5	RB
	CBM		RBT x 1	fscp/mscp	3	176	
1703	Roman Pottery		Sandy reduced ware	UNS RE	3	38	RB
	Roman Pottery		Sandy oxidised ware	UNS OX	1	3	
	CBM		RBT x 3, tegula x 1	fs/fscp/ms	9	511	
1705	Roman Pottery		Shell-tempered ware	UNS SH	2	41	C2-C4
	Roman Pottery		Sandy oxidised ware	UNS OX	1	6	
	Roman Pottery		Lower Nene Valley colour coated ware	**LNV CC**	1	3	
	Roman Pottery		Sandy reduced ware	UNS RE	12	92	
	CBM		Tegula x 3, imbrex x 1	fs/fscp	6	992	
2303	LIA/Roman Pottery		Sandy grog-tempered fabric	UNS QGR	6	68	LIA-ERB
2403	Roman		Sandy reduced ware	UNS RE	2	33	RB

	Pottery						
	Roman Pottery		Sandy oxidised ware	UNS OX	3	10	
	Roman Pottery		Sandy buff ware	UNS BUF	4	7	
	CBM		RBT x 6, tegula x 1	fs/fsfe/fscp/fsm/ ms	24	433	
	Iron		Nail x3		3	30	

* National Roman Fabric Reference Collection codes in bold

Appendix B, Table 2: Fabric Description

Period	Fabric Description	Fabric Code*	Beds Type Series**	Tottenhoe Fabric Series ***	Count	Weight (g)
Prehistoric Pottery	Abundant poorly sorted angular coarse flint ≤4mm	FL	X05		3	184
LIA/Roman Pottery	Grog-tempered fabric	UNS GR	F06		33	691
	Sandy fabric	UNS Q	F29		8	156
	Sandy grog-tempered fabric	UNS QGR	F03	1	39	602
	Sandy buff ware	UNS BUF	R10A		4	7
	Sandy oxidised ware	UNS OX	R05A	33	25	143
	Imitation Black Burnished ware	IMT BB	R07G		1	23
	Sandy reduced ware	UNS RE	R06B	3	92	1135
	Shell-tempered ware	UNS SH	R13	6 & 10	20	330
	Sandy white ware	UNS WH	R03/	12	4	21
	Black Burnished ware (Dorset)	**DOR BB1**	R07A		1	4
	Hadham oxidised ware	**HAD OX**	R22A		2	45
	Lower Nene Valley colour coated ware	**LNV CC**	R12B		2	11
	Lower Nene Valley cream ware	LNV CW			1	10
	Oxfordshire oxidised ware	OXF OX	R11		5	73
	Oxfordshire red-slipped ware	**OXF RS**	R11D		2	29
	Oxfordshire white ware	**OXF WH**	R11E		3	150
	Pink grog ware	**PNK GT**	R09A		2	473
	Central Gaulish Samian	**LEZ SA**	R01A		2	26
Medieval Pottery	Medieval coarse ware	MCW			1	3
Grand Total					250	4116

* National Roman Fabric Reference Collection codes in bold
** Bedfordshire type series codes (Parminter, Y. and Slowikowski, A.M. 2004)
*** Tottenhoe, Bedfordshire fabric codes (Horne and Schneider 1992)

APPENDIX C: THE PALAEOENVIRONMENTAL EVIDENCE

Appendix C, Table 1: Identified animal species by fragment count (NISP) and weight and context.

Cut	Fill	BOS	O/C	CAP	CER	LM	MM	Ind	BB SS	Total	Weight (g)
Late Iron Age/Early Roman											
1304	1306	1					1			2	29
1307	1308				1					1	40
Subtotal		**1**			**1**		**1**			**3**	**69**
Romano-British											
604	605		1						4	5	2.5
606	607	1							5	6	28
708	709		1							1	3
904	906					1				1	12
904	907		1		2	2	4	2		11	99
1002	1003			1			2			3	40
1002	1004					2				2	10
1005	1006	3								3	278
1402	1403	1								1	21
1602	1606	1				2				3	95
1607	1608	2	2							4	211
1607	1609	1								1	336
1610	1611						1			1	14
1612	1613	6								6	1165
1617	1619						1			1	24
1704	1705	2	1			4	3	1		11	140
2402	2403	3			2					5	458
Subtotal		**20**	**6**	**1**	**4**	**11**	**11**	**3**	**9**	**65**	**2936.5**
Undated											
911	914	1				1		1		3	16
Total		**22**	**6**	**1**	**5**	**12**	**12**	**4**	**9**	**71**	
Weight		**2496**	**45**	**33**	**172**	**171**	**90**	**13**	**1.5**	**3021.5**	

BOS = Cattle; O/C = sheep/goat; CAP = roe deer; CER = red deer; LM = cattle size mammal; MM = sheep sized mammal; Ind = indeterminate; BB SS = unidentifiable burnt bone from bulk soil samples

Appendix C, Table 2: Assessment of the palaeoenvironmental remains.

Feature	Context	Sample	Processed vol (L)	Unprocessed vol (L)	Flot size (ml)	Roots %	Grain	Chaff	Cereal Notes	Charred Other	Notes for Table	Charcoal > 4/2mm	Other
Neolithic													
Trench 6-Pit													
609	610	3	20	10	10	20	*	-	Indet. grain frag	-	-	*/**	-
Romano British													
Trench 6-Ditches													
Ditch 604	605	4	20	20	10	20	**	*	Hulled wheat + barley grain frags, glume base frags inc. emmer	-	-	**/**	Moll-t (*)
Ditch 606	607	5	20	20	5	50	*	*	Hulled wheat grain + glume base frags	-	-	*/**	burnt bone (*)
Trench 9-Hypercaust													
904	909	7	20	0	10	10	*	-	Indet grain frag	*	*Avena/Bromus*	**/**	Moll-t (**), burnt rodent droppings
Trench 10-Ditch													
1005	1006	9	20	20	10	50	*	*	Indet. grain frags + glume base frags inc. spelt	*	*Lolium/Festuca*	*/**	-
Trench 16-Pit													
1617	1618	10	20	0	5	60	**	-	Hulled wheat + barley grain frags,some germination	*	*Avena/Bromus*	*/*	silicaeous/industrial waste material
Trench 23-Pit													
2302	2303	2	20	0	25	60	**	-	Hulled wheat grain frags	*	*Avena/Bromus*	**/***	-
Undated													
Trench 8-Ditch													
802	803	1	20	20	25	20	***	**	Spelt, emmer + barley grains, glume base frags inc. spelt. Some germination	**	*Bromus, Lolium/Festuca, Trifolium/ Medicago*	*/**	Moll-t (*)
Trench 16-Pit													
1614	1615	8	15	0	50	10	*	*	Hulled wheat grain + glume base frags inc. spelt	*	*Bromus*	***/****	-

Key: * = 1–4 items; ** = 5–19 items; *** = 20–49 items; ****= 50–99 items; ***** = >100 items, Moll-t = land snails, Moll-f = freshwater/aquatic snails

APPENDIX D: OASIS REPORT FORM

PROJECT DETAILS	
Project Name	Land east of Luton Airport: Archaeological Evaluation
Short description	An archaeological evaluation was undertaken by Cotswold Archaeology in March 2019 on land east of Luton Airport. Fifty-seven trenches were excavated across the approximately 37ha evaluation area, which comprises two arable fields, north and south respectively, situated on a series of dry valleys. In the north field, the earliest archaeological feature revealed comprised a single pit of Neolithic date. Evidence of Late Iron Age/ Early Roman and Romano-British activity was identified in the form of a number of ditches seemingly forming an enclosure encompassing the remains of a small building and a series of rubbish pits, all situated on a largely flat area adjacent to a dry valley bisecting the field. Outlying probable field boundary ditches were also noted to the north of the enclosure while activity did not seemingly extend to the south or east, where the gradient of the dry valley bisecting the north field becomes more pronounced and would have likely rendered the land unsuitable for anything other than pastoral uses. The building was only partially exposed but was approximately 4m wide and had been cut into the natural substrate to form a subterranean element. A surviving, in-situ pilae stack and an area of heavily heat affected clay indicate that the building had a use associated with hot gases, possibly a hypocaust system or industrial purpose, but the exact function was not confirmed, with the structure appearing to have been deliberately demolished and heavily robbed-out. The presence of painted wall plaster, box flue, imbrex and tegula suggest that the building was of some status, although it is possible that this material was also in part derived from other buildings nearby and used to infill the subterranean element of the structure following abandonment. Dating evidence suggest that activity began in the Late Iron Age/ Early Roman period and that the building was demolished and the enclosure ditches deliberately infilled in the 3rd to 4th century. No evidence for any later activity was identified. These remains are likely to be associated with Romano-British activity previously identified to the north and northwest of the Site, where archaeological monitoring in Wigmore Valley Park, located alongside the airport emergency access road which forms the northwest boundary to the Site, revealed evidence of Roman, as well as earlier, activity, with a subsequent resistivity survey producing evidence for a substantial structure. No features or deposits of archaeological or geoarchaeological interest were identified in the south field. A series of discrete anomalies identified by the geophysical survey and interpreted as a possible pit alignment were observed to comprise geological variations, consisting of siltier patches/ lenses within the clay with flints substrate. Other isolated possible features were investigated and all shown to be of natural origin
Project dates	18th February – 8th March 2019
Project type	Evaluation
Previous work	Luton Airport Expansion - Historic Environment Desk-Based Assessment. AECOM 2017

	New Century Park – Geophysical Survey Report. SUMO Services Ltd 2018	
Future work	Unknown	
PROJECT LOCATION		
Site Location	Land east of Luton Airport, Luton Bedfordshire	
Study area (M^2/ha)	37ha	
Site co-ordinates	513139 221761	
PROJECT CREATORS		
Name of organisation	Cotswold Archaeology	
Project Brief originator	Central Bedfordshire Council	
Project Design (WSI) originator	AECOM Environmental Solutions Ltd (Project Design) Cotswold Archaeology (WSI)	
Project Manager	Adrian Scruby	
Project Supervisor	Anna Moosbauer (Project Leader) Eilidh Barr (Project Supervisor)	
MONUMENT TYPE	Ditch, pit, wall, gully,	
SIGNIFICANT FINDS	Pottery, pilae, tegula, imbrex, box flue, roof tile, wall plaster, animal bone	
PROJECT ARCHIVES	Luton Culture (Accession number 2019/2.)	
Physical		Pottery, animal bone, CBM, fired clay, wall plaster, mortar, flint, worked stone, industrial waste, Iron (nails), Cu alloy (coin)
Paper		Context sheets, permatrace, photo registers, context sheets, trench record forms soil sample register, soil sample sheets
Digital		Report, context database, digital photos, survey data, illustration files, report figures
BIBLIOGRAPHY		
CA (Cotswold Archaeology) 2019. *Land east of Luton Airport: Archaeological Evaluation.* CA typescript report 661263_1		

APPENDIX E: ARCHIVE QUANTIFICATION

Primary site archive quantification

72x B&W photos
295x digital photos
10x photographic registers
9x survey QA sheets
1x soil sample register
1x registered artefact index
10x soil sample record forms
57x trench record forms
89x context record forms (215 recorded contexts – topsoil, subsoil, colluvial deposits and natural substrate recorded on trench record sheets)
24x permatrace section drawing sheets

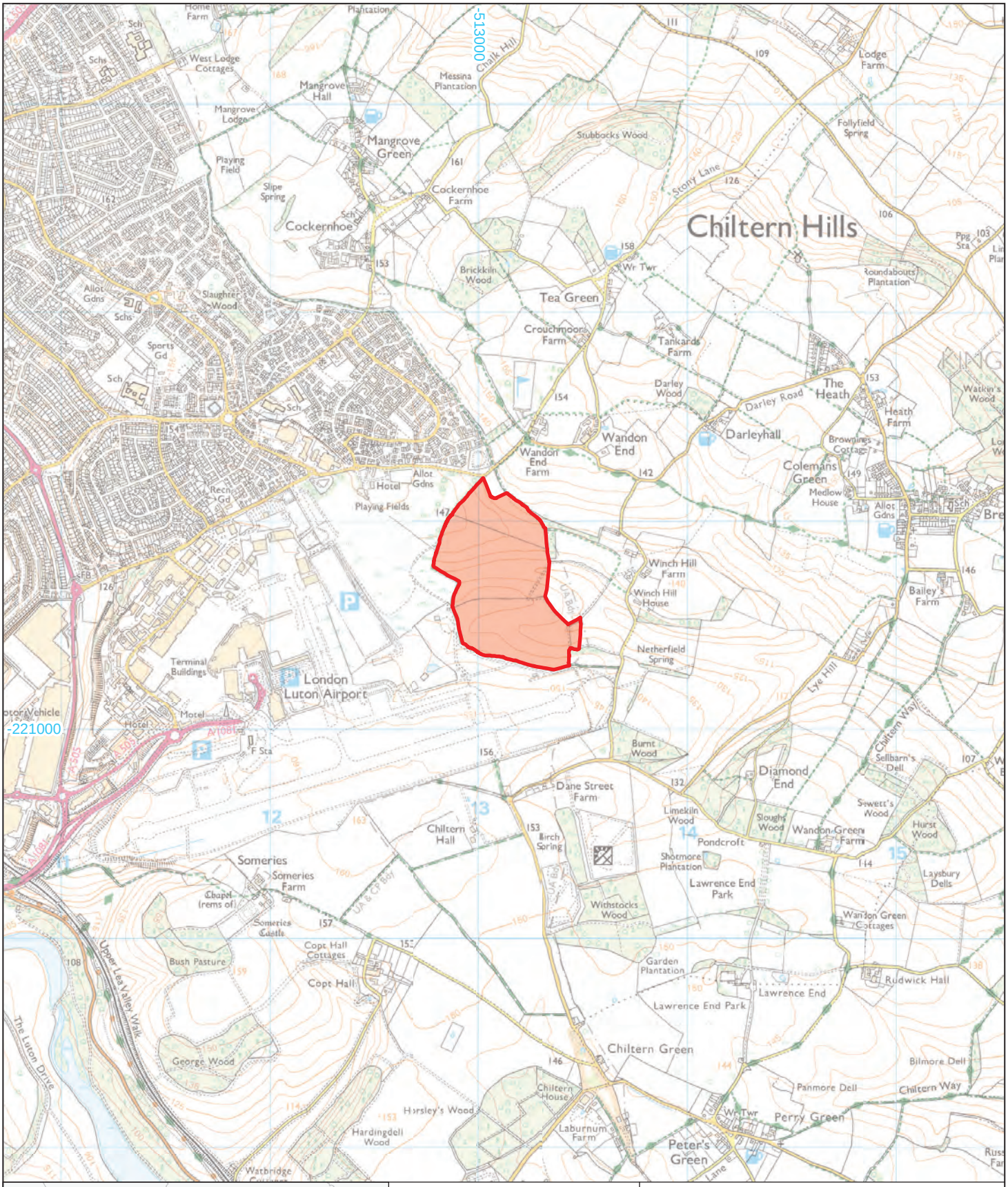
Finds quantification

10x environmental samples (29 buckets – 290 litres)

Context no	Sample no	Context Type	Enviro	
			Vol	Buckets
			290	29
803	1	Ditch	40	4
2303	2	Pit	20	2
610	3	Pit	30	3
605	4	Ditch	40	4
607	5	Ditch	40	4
908	6	Destruction debris	20	2
909	7	Hypercaust	20	2
1615	8	Pit	20	2
1006	9	Ditch	40	4
1618	10	Pit	20	2

Artefacts

Registered artefact x 1 – Cu alloy coin (1g)
Ceramic Building Material (CBM) – 207 pieces (25,515g)
Pottery – 250 pieces (4116g)
Fired Clay – 2 pieces (157g)
Plaster – 45 pieces (4740g)
Mortar – 14 pieces (763g)
Flint – 3 pieces (17g)
Animal Bone – 71 pieces (3021.5g)
Worked Stone – 5 pieces (574g)
Industrial Waste (fuel ash slag) – 3 pieces (97g)
Metal (Iron nails) - 17 pieces (207g)



N

0 1km

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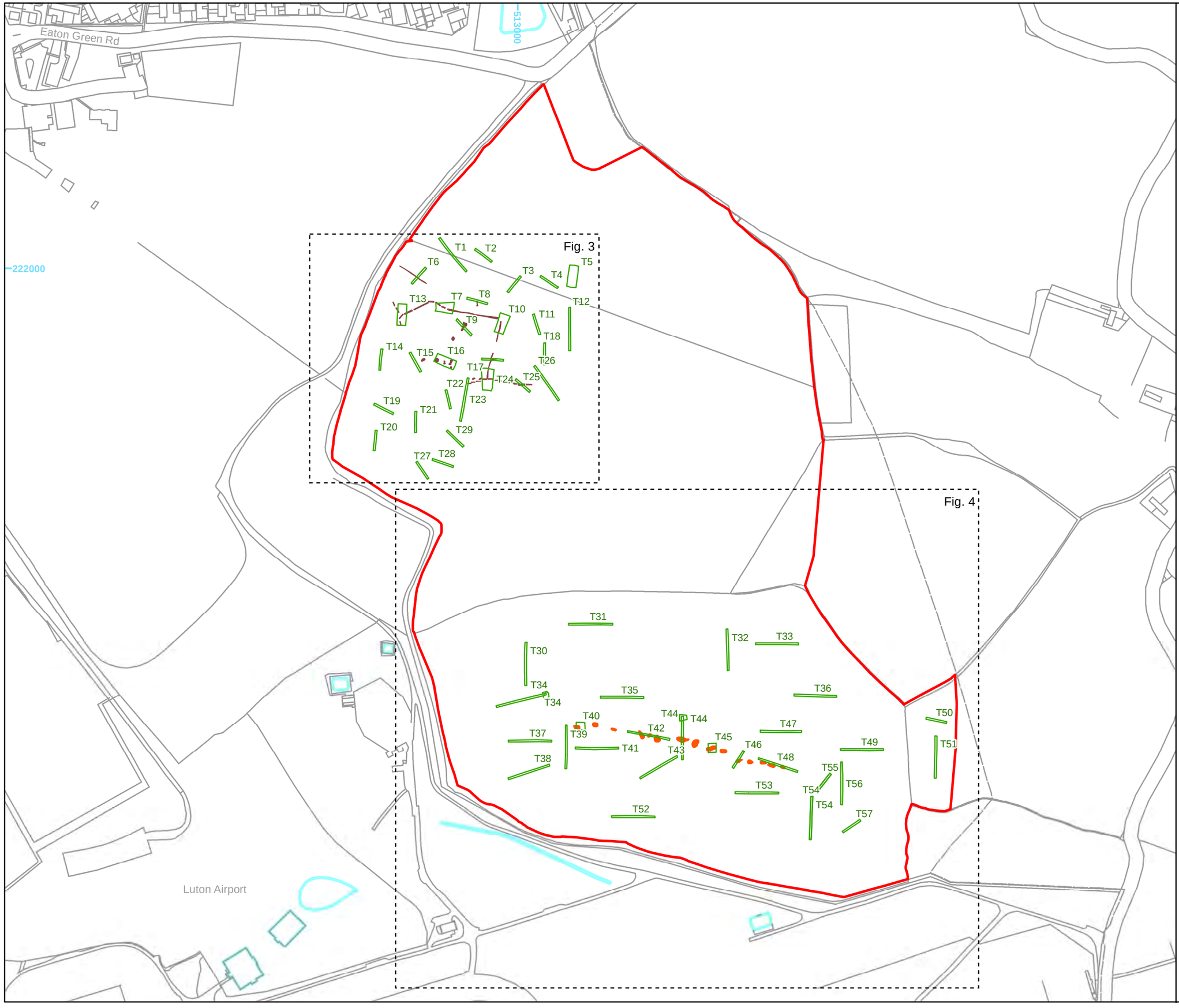
PROJECT TITLE

Land east of Luton Airport, Bedfordshire

FIGURE TITLE

Site location plan

DRAWN BY	MP	PROJECT NO.	661263	FIGURE NO.
CHECKED BY	DJB	DATE	26/03/19	1
APPROVED BY	AS	SCALE@A4	1:25,000	



N

Site boundary

Evaluation trench

Geophysical results (LLAD 2019)

Possible archaeology

Probable archaeology

0 1:4000 150m

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PROJECT TITLE

Land east of Luton Airport, Bedfordshire

FIGURE TITLE

Trench location plan with geophysical survey results

DRAWN BY	**MP**	*PROJECT NO*	**661263**	*FIGURE NO.*
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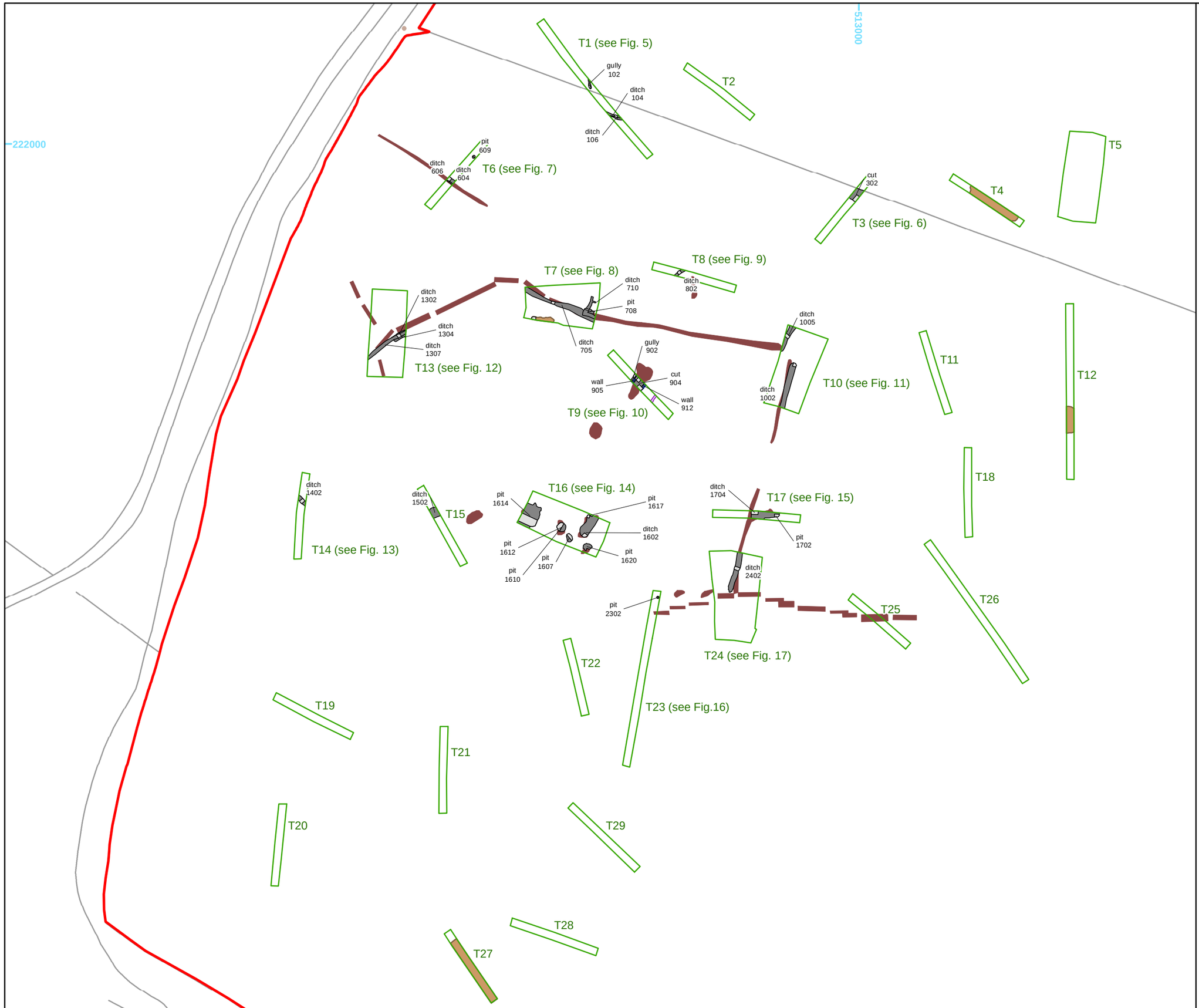
APPROVED BY	**AS**	*SCALE@A3*	**1:4,000**	



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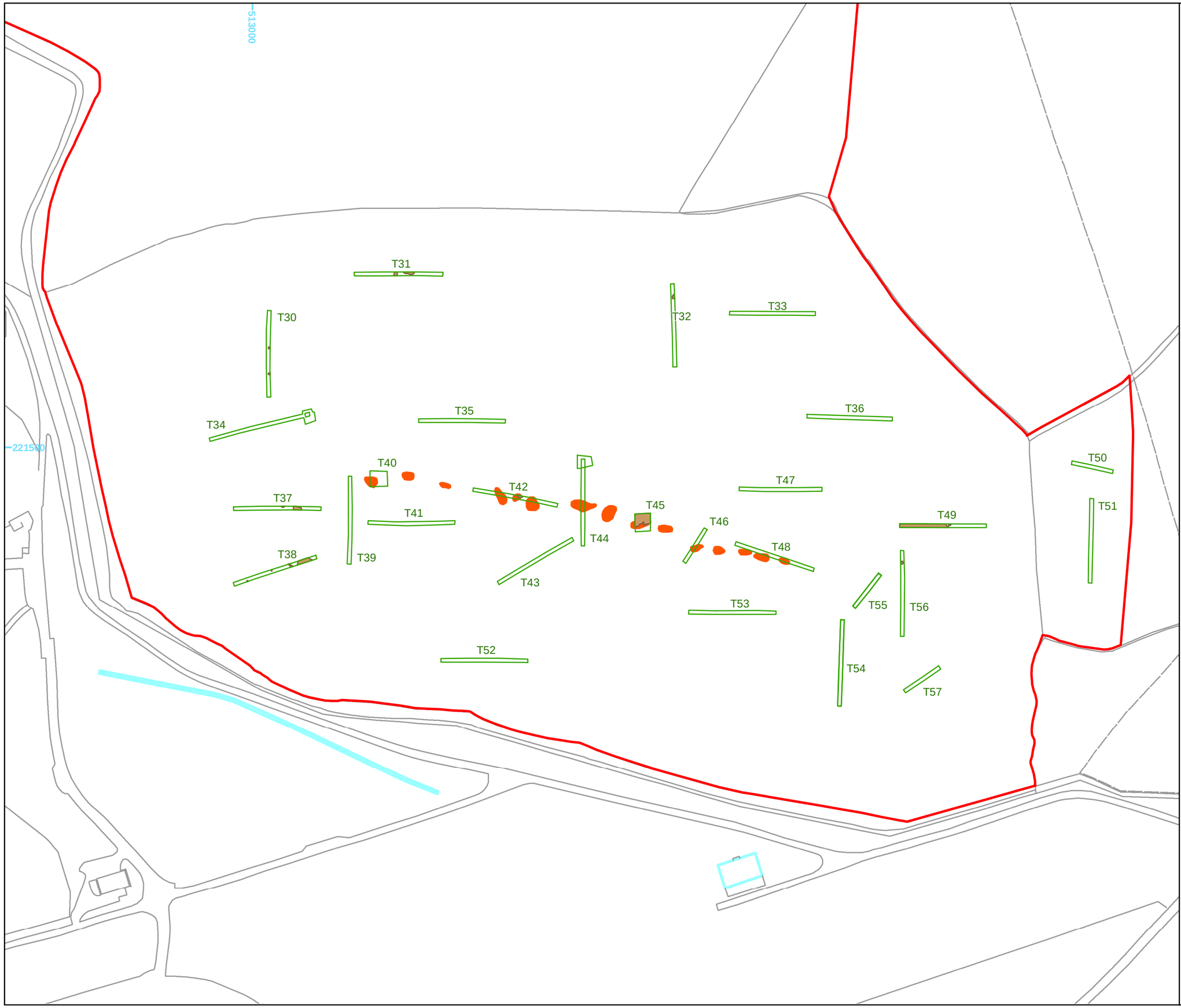
PROJECT TITLE

Land east of Luton Airport, Bedfordshire

FIGURE TITLE

North field - Trench location plan with recorded features and geophysical survey

DRAWN BY	MP	PROJECT NO	661263	FIGURE NO.
CHECKED BY	DJB	DATE	05/07/2019	3
APPROVED BY	AS	SCALE@A3	1:1,000	



N

Site boundary
Evaluation trench
Natural Feature

Geophysical results (LLAD 2019)
Possible archaeology

0 1:2000 50m

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PROJECT TITLE
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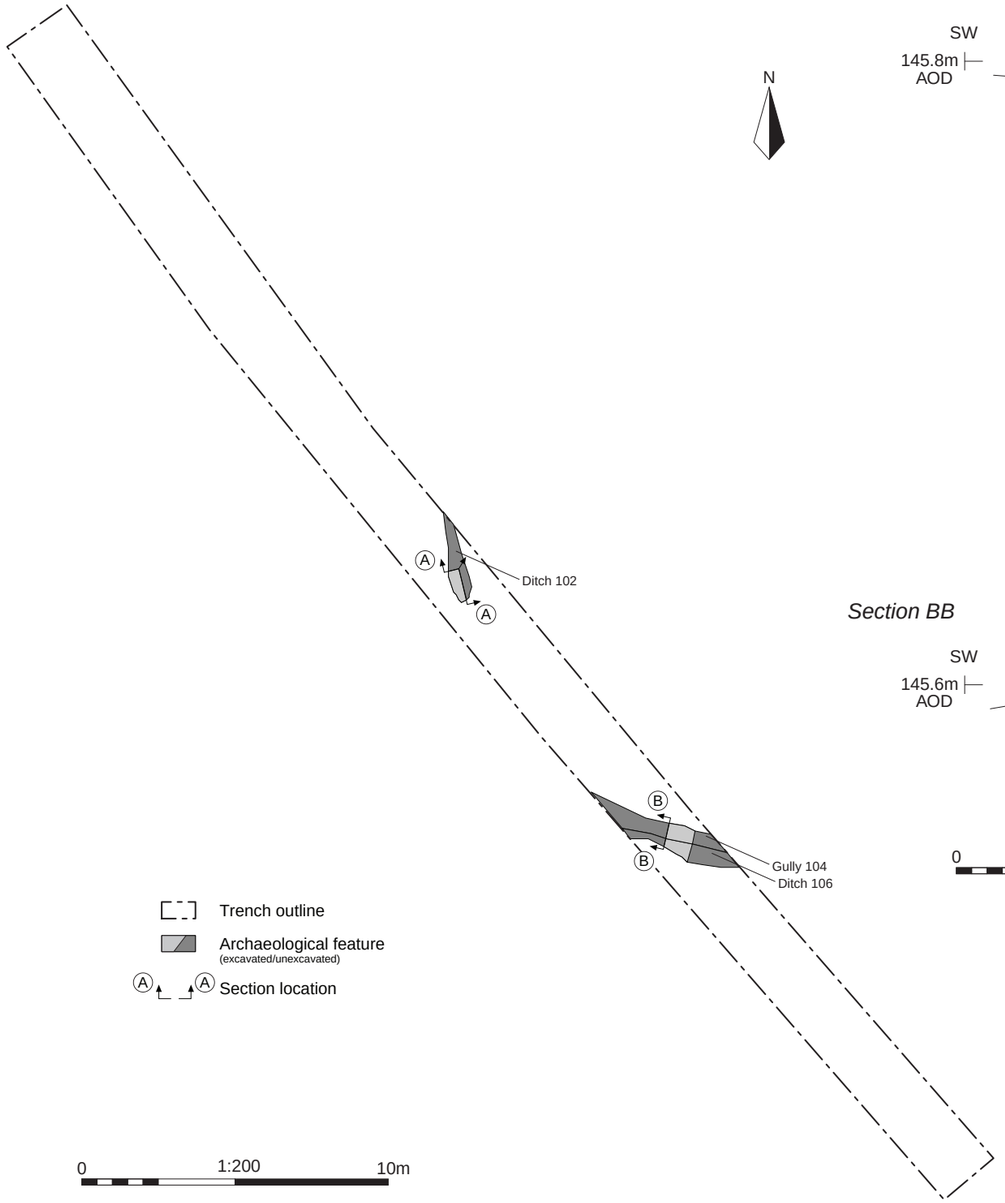
FIGURE TITLE
South field - Trench location plan with recorded features and geophysical survey

DRAWN BY	**MP**	*PROJECT NO*	**661263**	*FIGURE NO.*
CHECKED BY	**DJB**	*DATE*	**21/06/2019**	**4**
APPROVED BY	**AS**	*SCALE@A3*	**1:2,000**	

Trench 1



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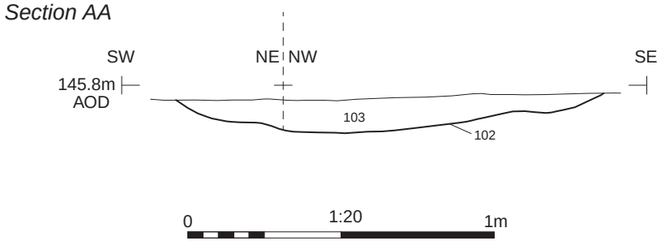

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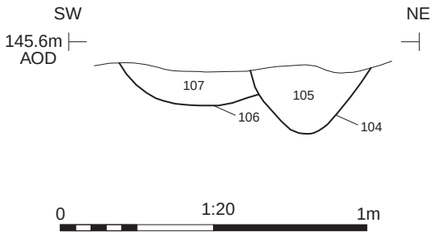

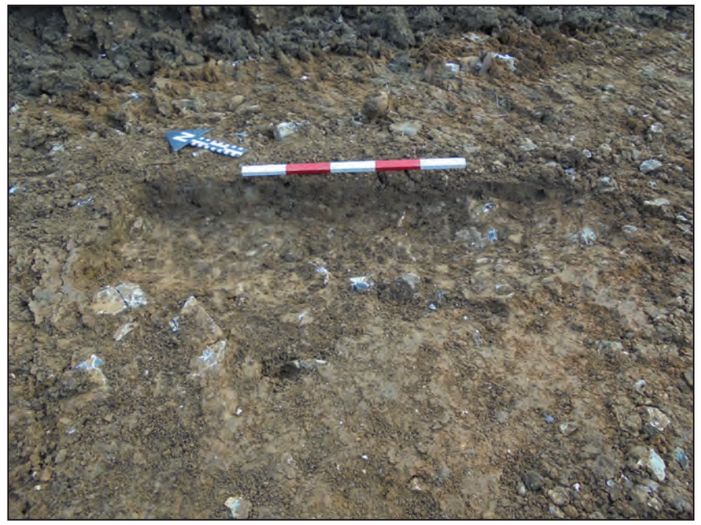

Possible ditch terminus 102, looking north-east (0.5m scale)

Gully 104 and ditch 106, looking west (0.5m scale)

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PROJECT TITLE

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FIGURE TITLE

Trench 1: plan, sections and photographs

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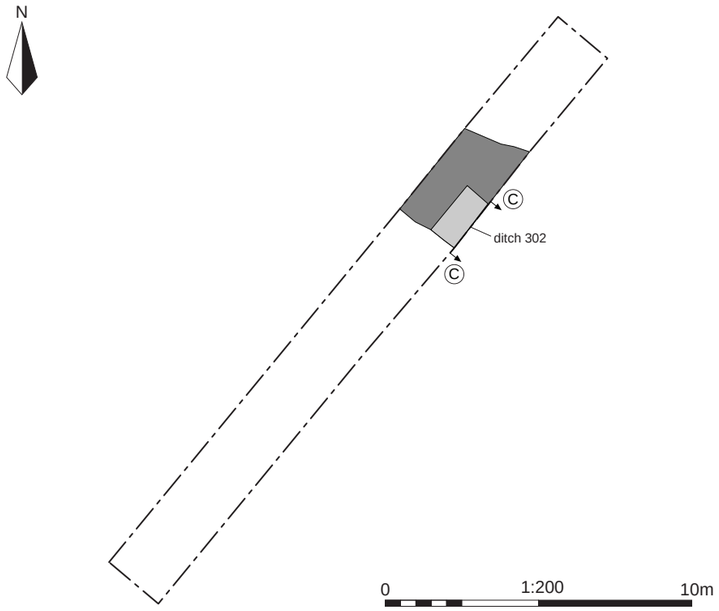
APPROVED BY	**AS**	*SCALE@A3*	**1:200, 1:20**	

Trench 3



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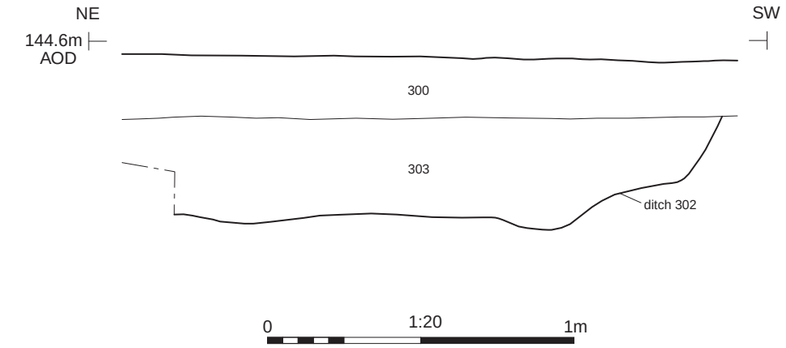

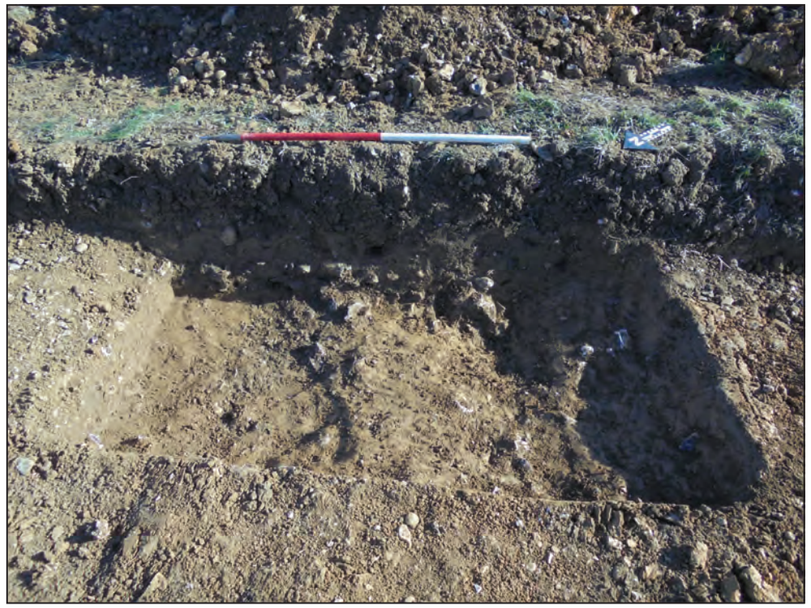

North-west facing section of ditch 302, looking south-east (1m scale)

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FIGURE TITLE

Trench 3: plan, section and photograph

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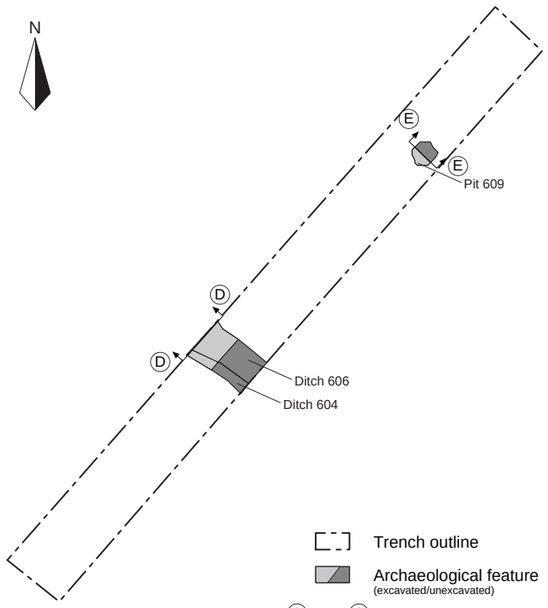
CHECKED BY	**DJB**	*DATE*	**28/03/19**	**6**
APPROVED BY	**AS**	*SCALE@A3*	**1:200, 1:20**	

Trench 6



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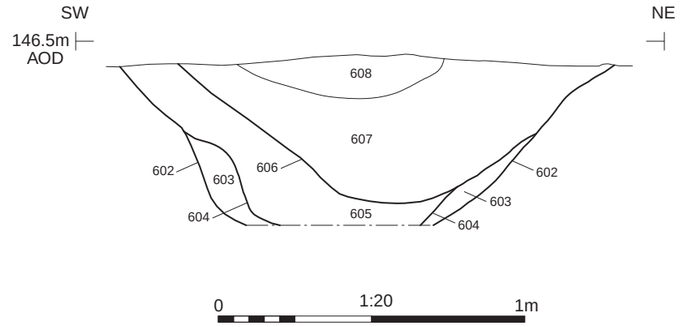

South-east facing section of ditches 602, 604 and 606, looking north (1m scale)

Section EE

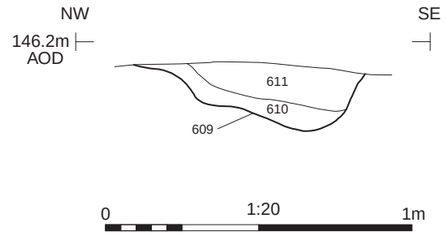

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FIGURE TITLE

Trench 6: plan, sections and photographs

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CHECKED BY	**DJB**	*DATE*	**26/03/19**	**7**
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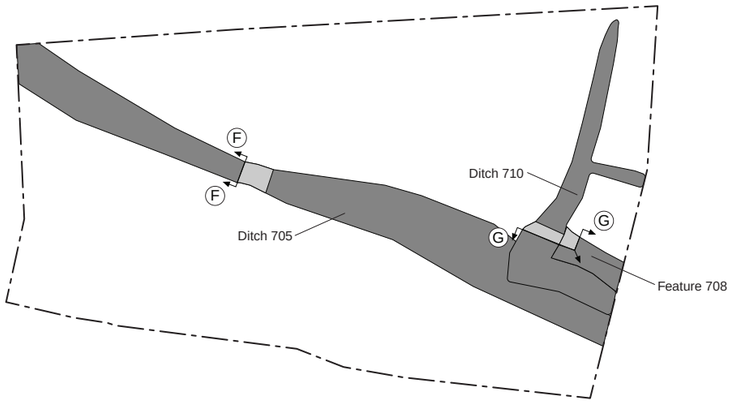
Trench 7



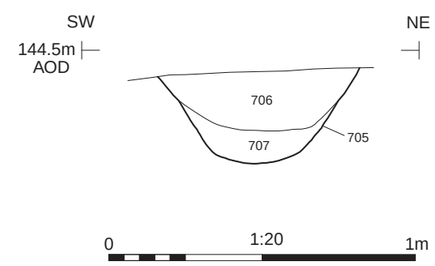
Trench outline

Archaeological feature
(excavated/unexcavated)

Section location

0 1:200 10m

Section FF



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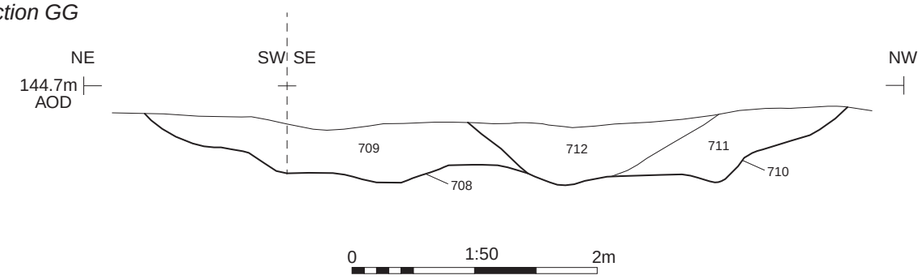

North-east facing section of ditches 708 and 710, looking west (1m scale)

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PROJECT TITLE

Land east of Luton Airport, Bedfordshire

FIGURE TITLE

Trench 7: plan, sections and photographs

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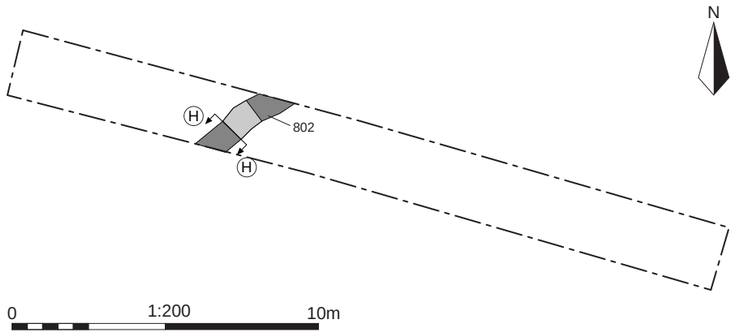
Trench 8



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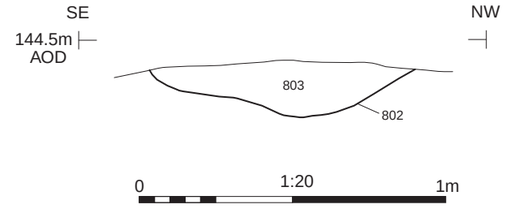

North-east facing section of ditch 802, looking south-west (0.5m scale)

Trench outline

Archaeological feature
(excavated/unexcavated)

Section location

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PROJECT TITLE

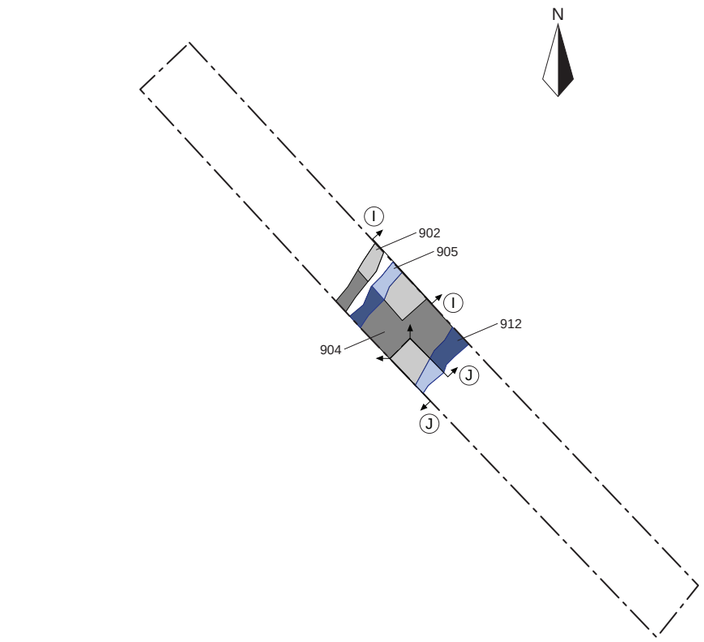
Land east of Luton Airport, Bedfordshire

FIGURE TITLE

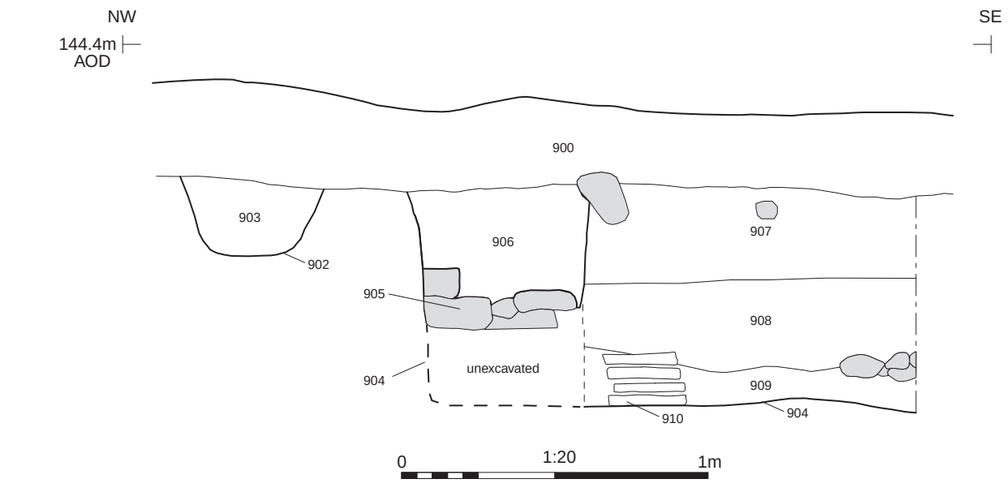
Trench 8: plan, section and photograph

DRAWN BY	**MP**	*PROJECT NO.*	**661263**	*FIGURE NO.*
CHECKED BY	**DJB**	*DATE*	**28/03/19**	**9**
APPROVED BY	**AS**	*SCALE@A3*	**1:200, 1:20**	

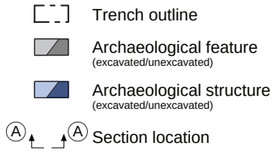
Trench 9



Section II



South-west facing section through structure, looking north-east (2m scale)



Cotswold Archaeology

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PROJECT TITLE

Land east of Luton Airport, Bedfordshire

FIGURE TITLE

Trench 9: plan, section and photograph

DRAWN BY	MP	PROJECT NO.	661263	FIGURE NO.
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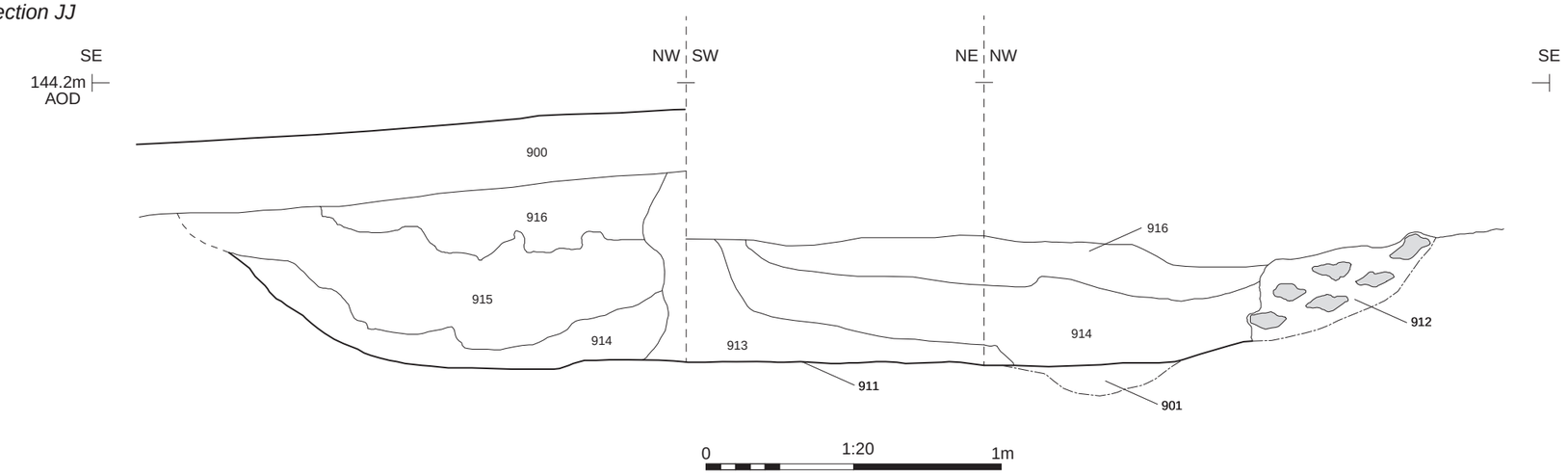
APPROVED BY	AS	SCALE@A3	1:200, 1:20	

Trench 9

Section JJ



Section through structure, looking south-west (1m scale)

Section through structure, looking north-west (1m scale)

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PROJECT TITLE

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FIGURE TITLE

Trench 9: section and photographs

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APPROVED BY	**AS**	*SCALE@A3*	**1:200, 1:20**	

Trench 9, section JJ - section through structure, looking north-east (1m scale)

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Land east of Luton Airport, Bedfordshire

FIGURE TITLE

Trench 9: photograph

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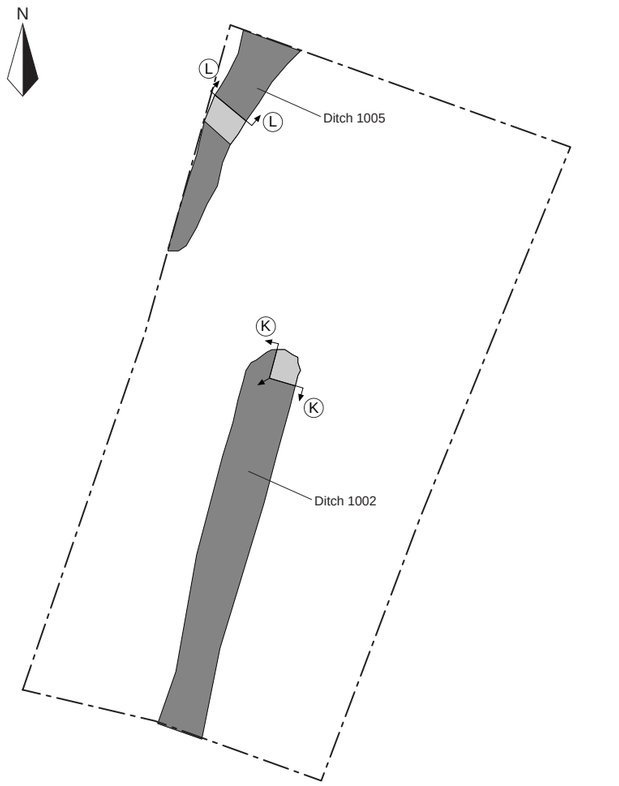
CHECKED BY	**DJB**	*DATE*	**05/07/19**	**10c**
APPROVED BY	**AS**	*SCALE@A4*	**NA**	

Trench 10



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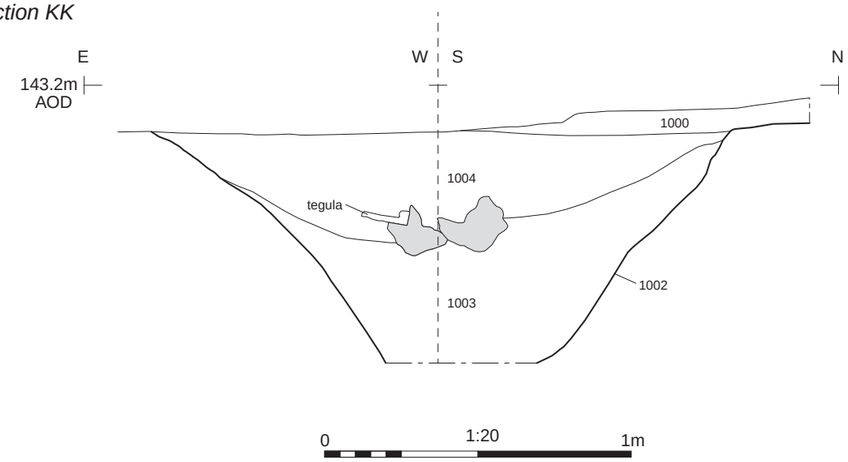

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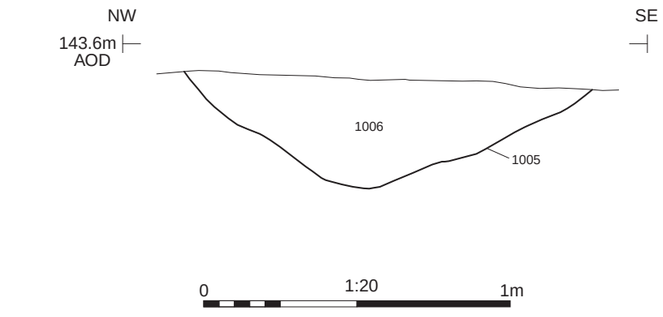

North and east facing sections of ditch terminus 1002, looking west (1m scale)

West facing section of ditch 1005, looking north-east (1m scale)

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Trench 10: plan, sections and photographs

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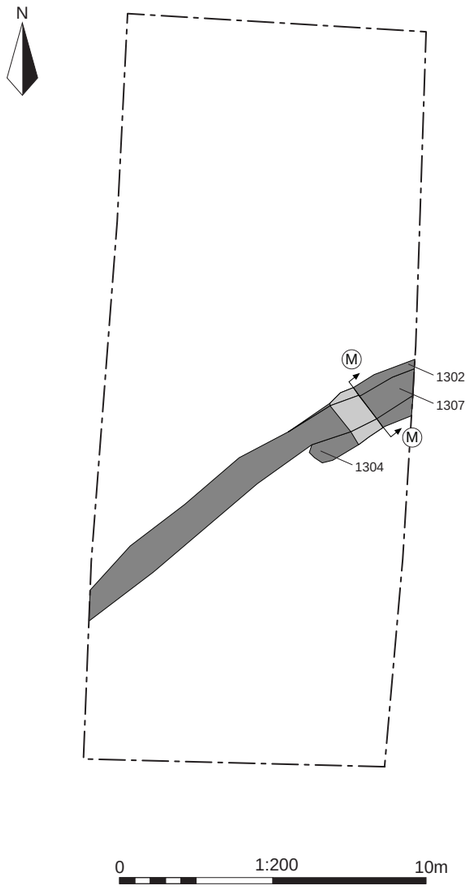
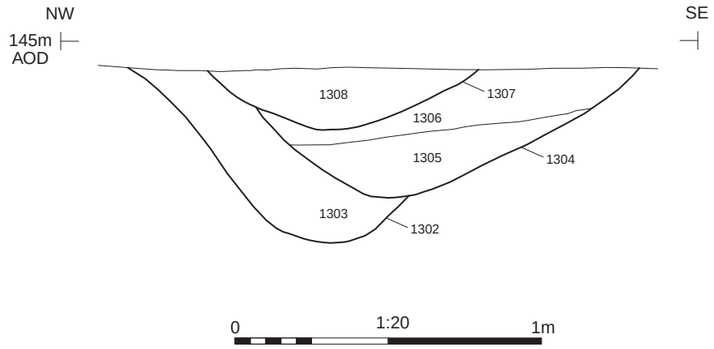
APPROVED BY	**AS**	*SCALE@A3*	**1:200, 1:20**	

Trench 13



Section MM



South-west facing section of ditches 1302, 1304 and 1307, looking north-east (1m scale)

Trench outline

Archaeological feature
(excavated/unexcavated)

Section location

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FIGURE TITLE

Trench 13: plan, section and photograph

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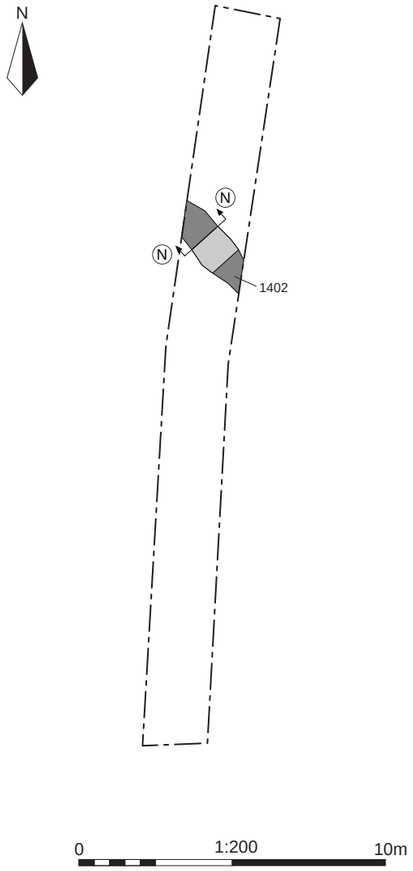
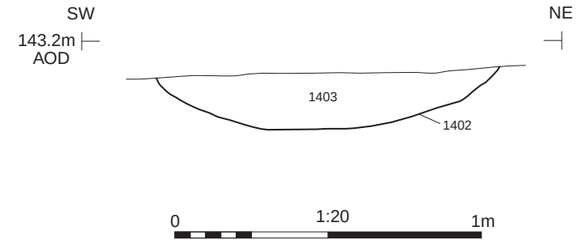
APPROVED BY	**AS**	*SCALE@A3*	**1:200, 1:20**	

Trench 14



Section NN



South-east facing section of ditch 1402, looking north-west (1m scale)

Trench outline

Archaeological feature
(excavated/unexcavated)

A A Section location

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FIGURE TITLE

Trench 14: plan, section and photograph

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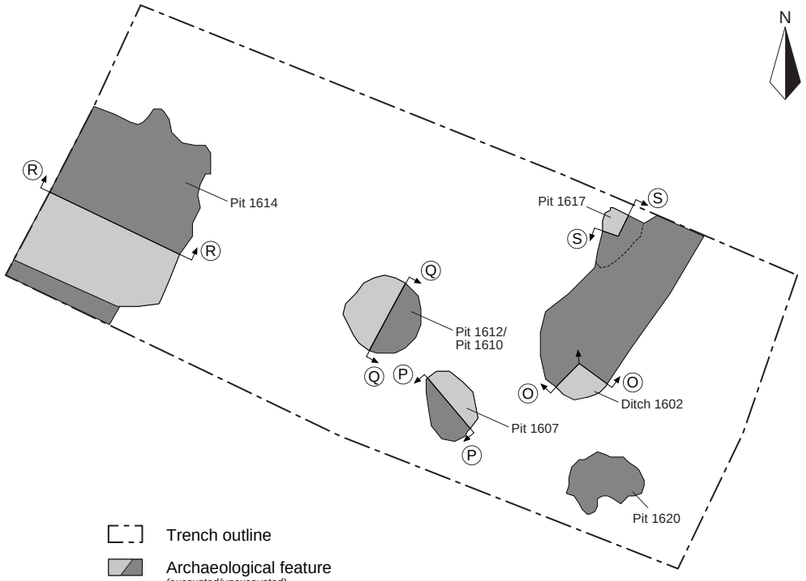
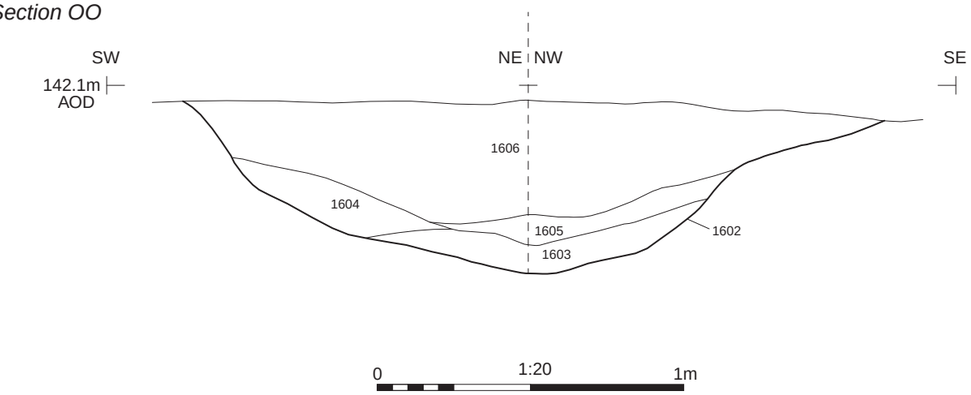
APPROVED BY	**AS**	*SCALE@A3*	**1:200, 1:20**	

Trench 16



Section OO



Section of ditch terminus 1602, looking north-west (1m scale)

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FIGURE TITLE

Trench 16: plan, section and photograph

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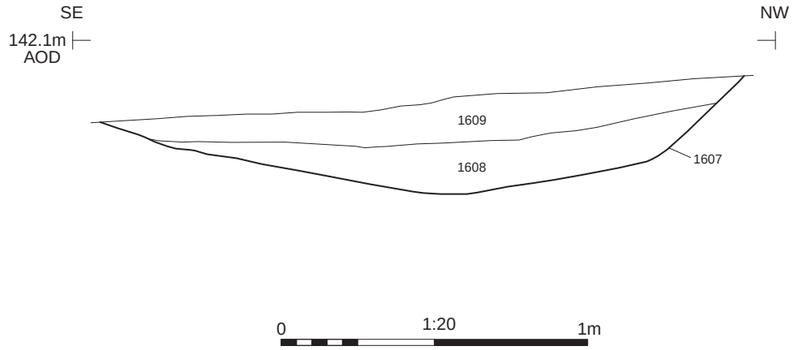
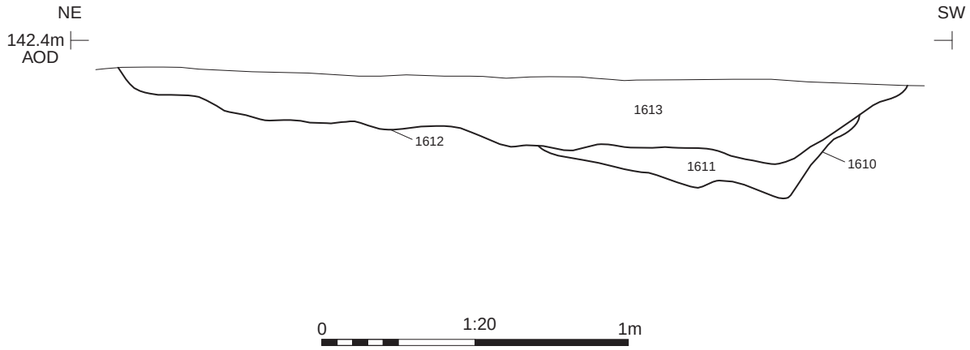
APPROVED BY	**AS**	*SCALE@A3*	**1:200, 1:20**	

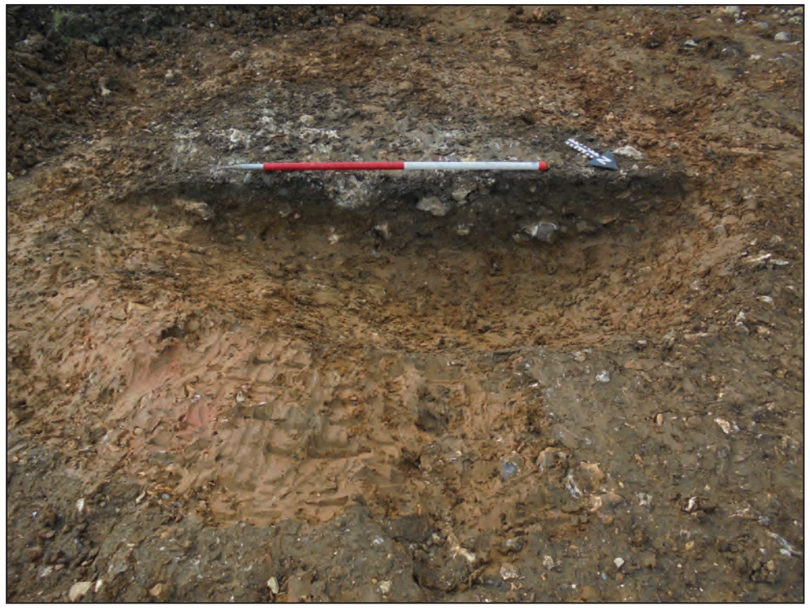
Trench 16

Section PP

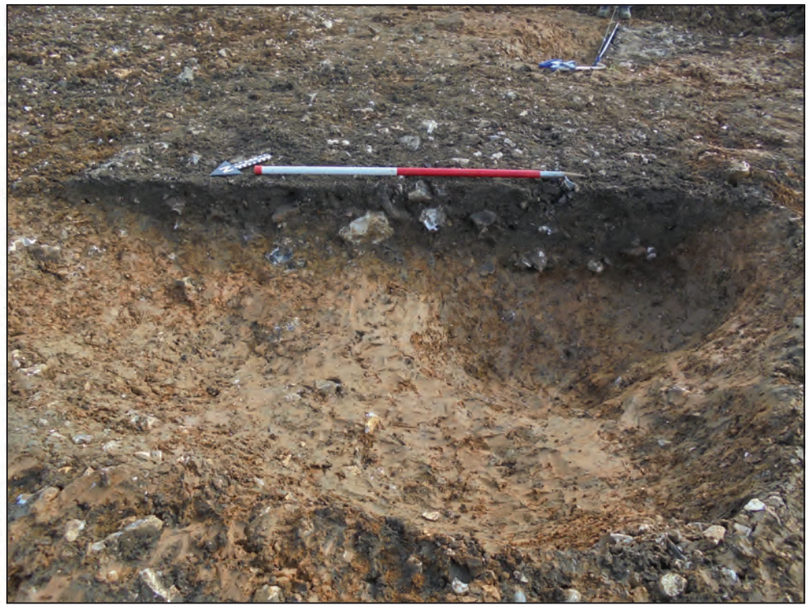


Section QQ





North-east facing section of pit 1607, looking south-west (1m scale)



North-west facing section of pit 1610 and 1612, looking south-east (1m scale)

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Trench 16: sections and photographs

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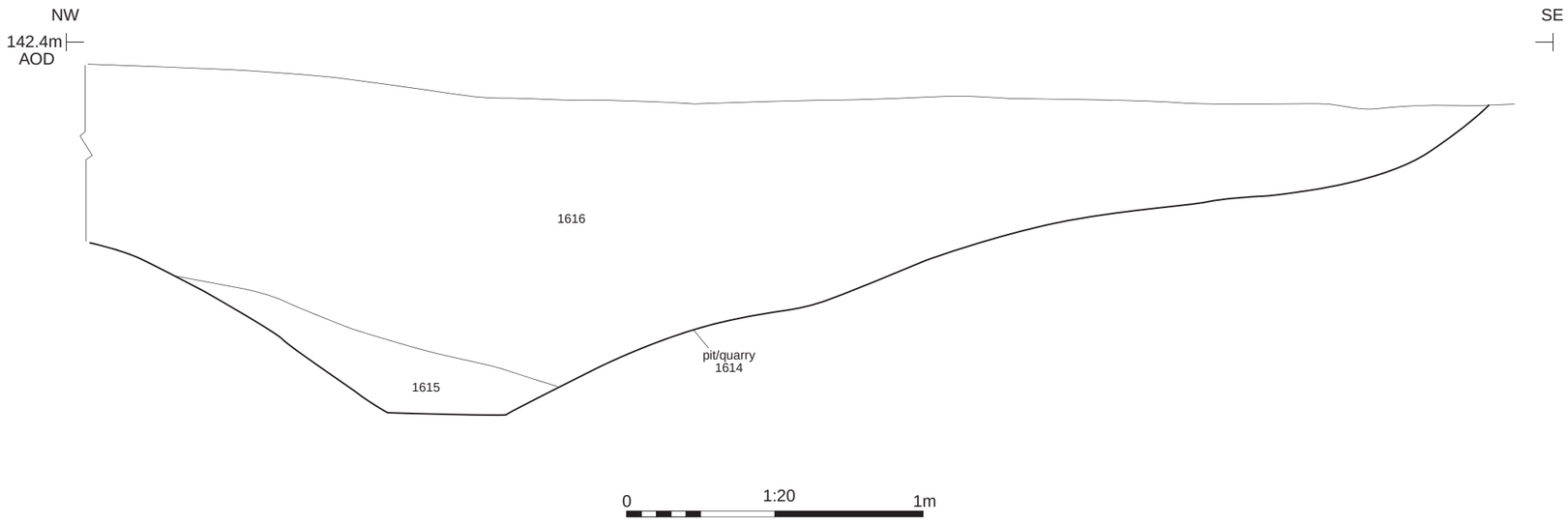
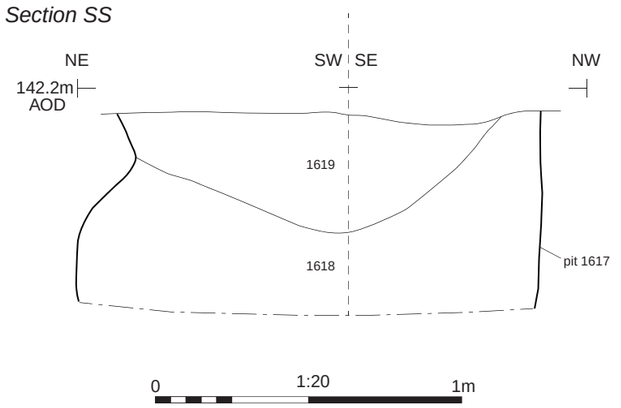
CHECKED BY	**DJB**	*DATE*	**28/03/19**	**14b**
APPROVED BY	**AS**	*SCALE@A3*	**1:200, 1:20**	

Section RR



Section SS



Pit/quarry 1614, looking north-east (1m scale)

Pit 1617, looking south-east (0.5m scale)

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Trench 16: sections and photographs

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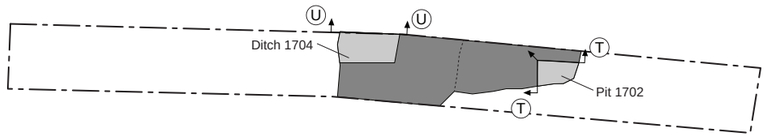
CHECKED BY	**DJB**	*DATE*	**21/06/19**	**14c**
APPROVED BY	**AS**	*SCALE@A3*	**1:200, 1:20**	

Trench 17



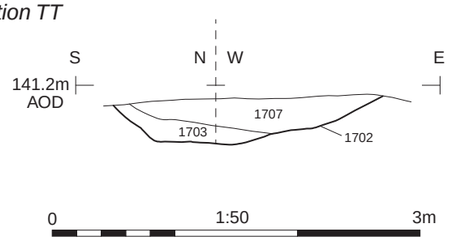
Trench outline

Archaeological feature
(excavated/unexcavated)

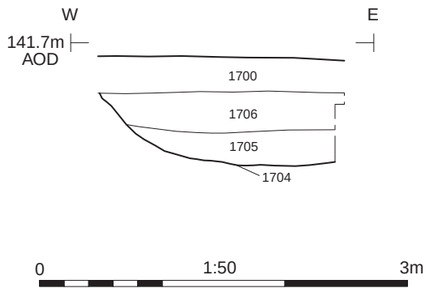
A A Section location

0 1:200 10m

Section TT



Section UU



South facing section of pit 1702, looking north (1m scale)

South facing section of ditch 1704, looking north (1m scale)

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Land east of Luton Airport, Bedfordshire

FIGURE TITLE

Trench 17: plan, sections and photographs

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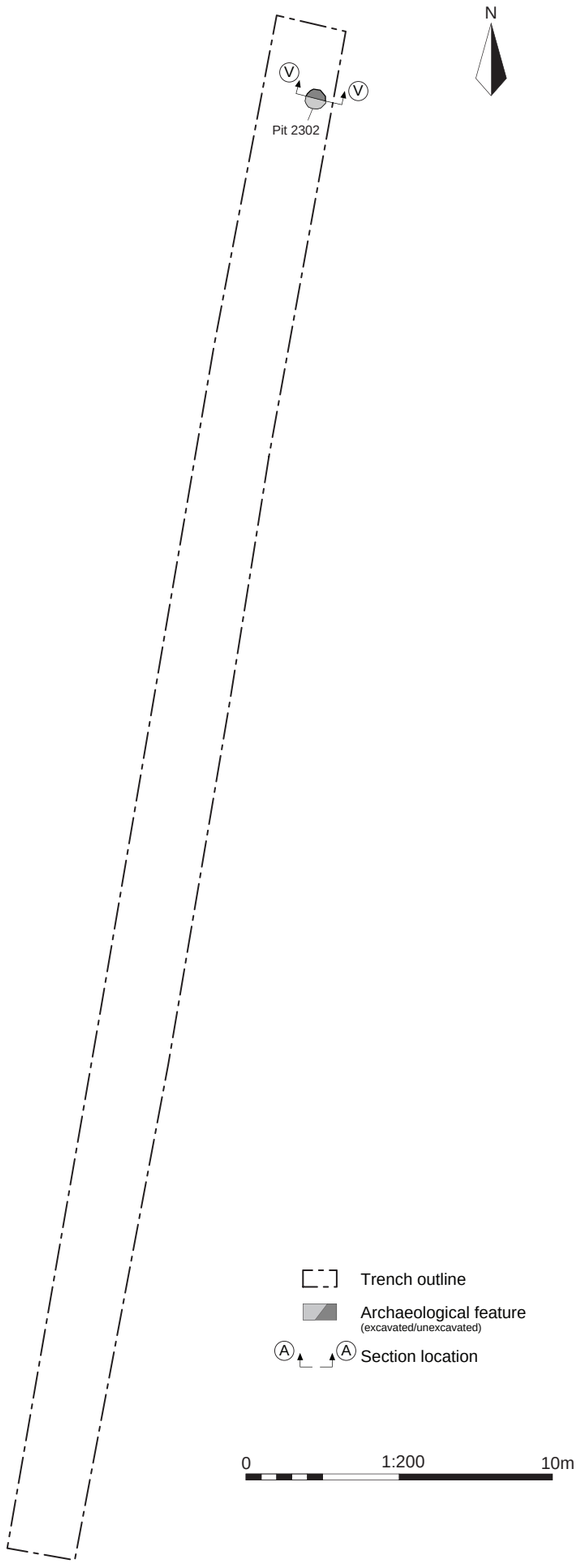
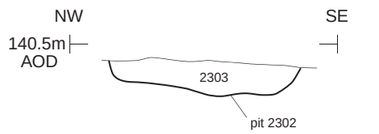
APPROVED BY	**AS**	*SCALE@A3*	**1:200, 1:50**	



Section VV



Pit 2302, looking north-east (0.4m scale)

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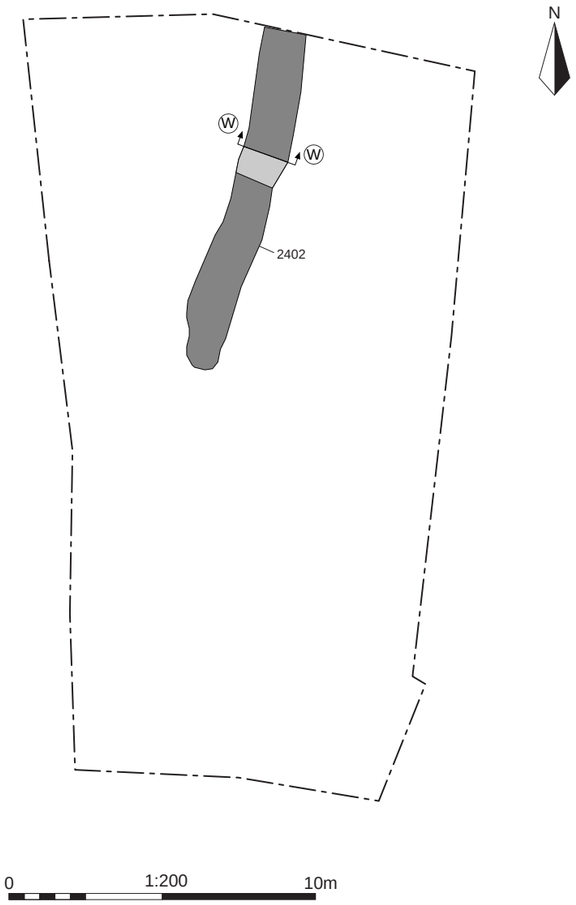
FIGURE TITLE

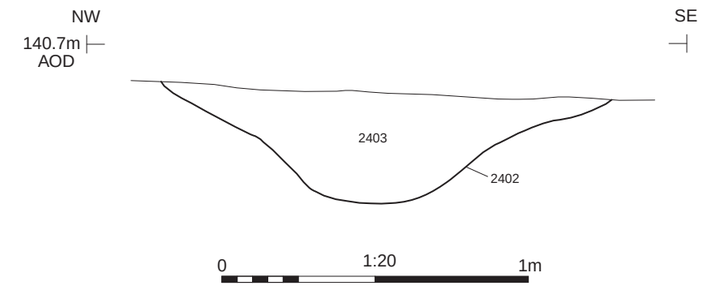
Trench 23: plan, section and photograph

DRAWN BY	**EE**	*PROJECT NO.*	**661263**	*FIGURE NO.*
CHECKED BY	**DJB**	*DATE*	**21/06/19**	**16**
APPROVED BY	**AS**	*SCALE@A3*	**1:200, 1:20**	

Trench 24



Section WW



South facing section of ditch 2402, looking north (1m scale)

Trench outline

Archaeological feature
(excavated/unexcavated)

Section location

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FIGURE TITLE

Trench 24: plan, section and photograph

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View of trench 20, looking north (1m scales)

West facing section showing colluvial deposit 2001 (1m scale)

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FIGURE TITLE

Trench 20: photographs

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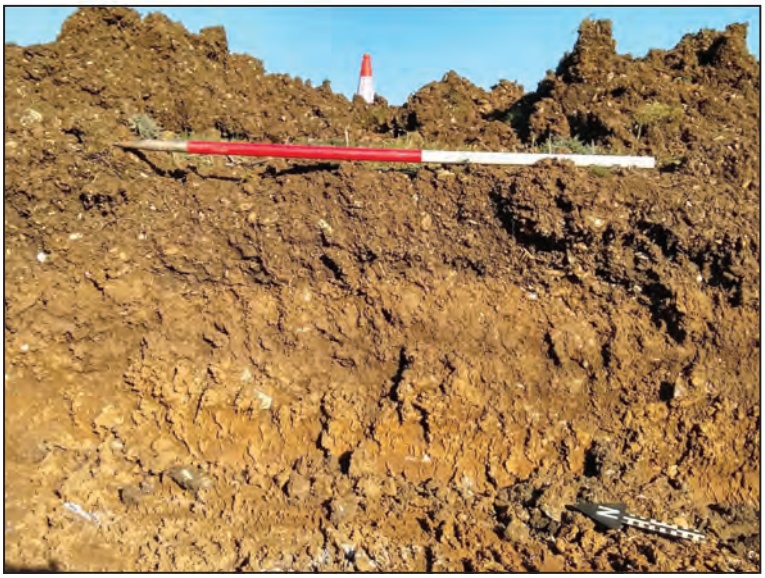
View of trench 27, looking north (1m scales)



West facing section showing colluvial deposit 2701, looking east (1m scale)

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Trench 27: photographs

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View of trench 34, looking east (1m scales)

View of colluvial deposit 3401, looking south (1m scale)

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FIGURE TITLE

Trench 34: photographs

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View of trench 42, looking east (1m scales)

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FIGURE TITLE

Trench 42: photographs

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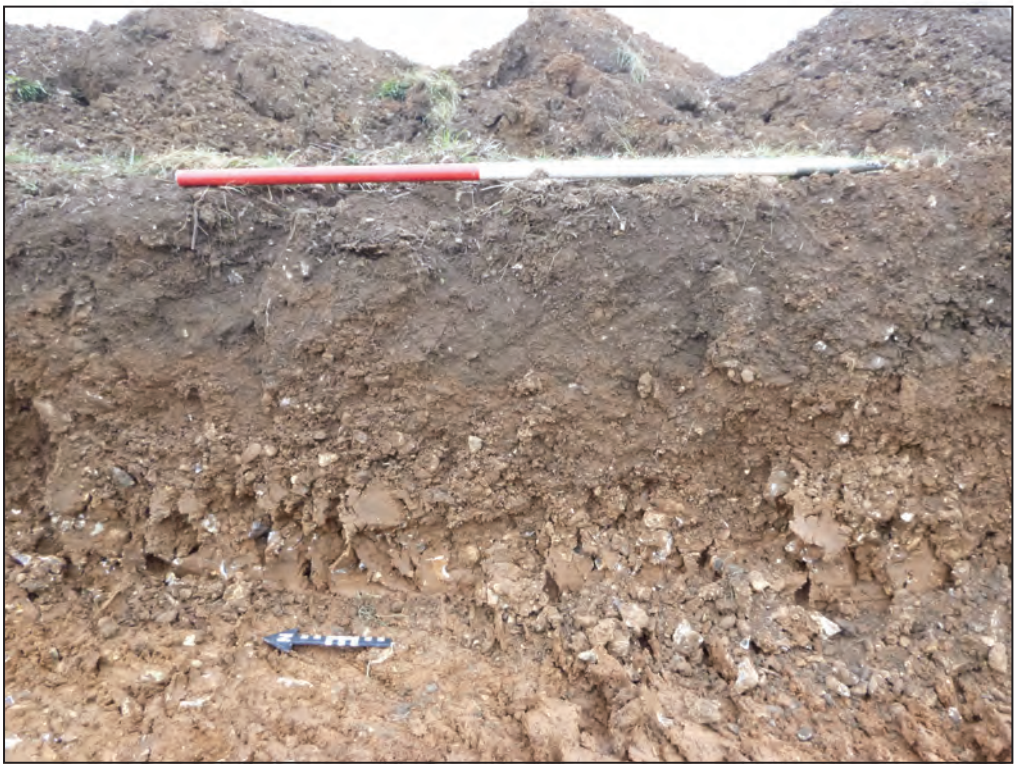
APPROVED BY	**AS**	*SCALE@A4*	**NA**	

View of trench 44, looking north (1m scales)



View of trench section showing subsoil 4401 and colluvium 4402, looking east (1m scale)

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FIGURE TITLE

Trench 44: photographs

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APPROVED BY	**AS**	*SCALE@A4*	**NA**	

View of trench 45, looking south-west (1m scales)

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FIGURE TITLE

Trench 45: photographs

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