

An Archaeological Evaluation at Butterfield Green, Luton, Bedfordshire

Site Code: FBUT 04

Central National Grid Reference: TL 1078 2491

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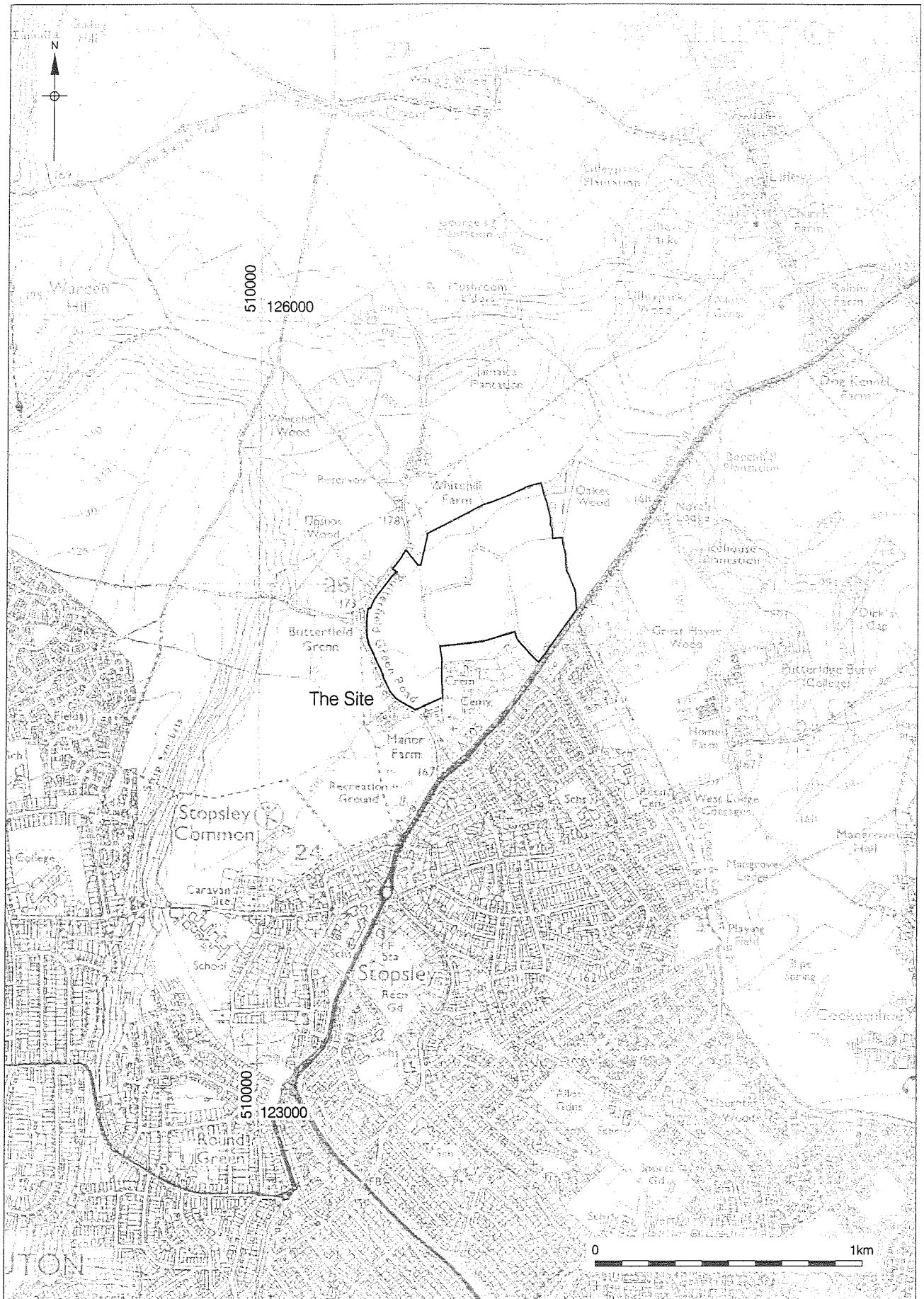
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1 ABSTRACT

- 1.1 This report details the results and working methods of an archaeological field evaluation undertaken by Pre-Construct Archaeology Ltd. at Butterfield Green, Luton, Bedfordshire. The site is a 'greenfield' development on land that has been in agricultural use.
- 1.2 The area evaluated covered the footprint of the proposed infrastructure road corridor onto the site, so represents one part of Phase 1 of the scheme. This area covered 2.4ha and it was in a cross shape, mostly within the field on the south east side the site, but extending westwards into an adjacent field (shown on the 1842 Tithe map as the Innings and the Marlings, respectively). The rest of Phase 1 is expected to be evaluated at a later date.
- 1.3 The evaluation comprised 17 trenches, totalling 600m in length.
- 1.4 Struck flint was recovered from the ploughsoil excavated from a number of the trenches. This is consistent with the known presence of a Neolithic to Bronze Age flint scatter within the field that has been previously reported from fieldwalking (Hudspith 1993).
- 1.5 The main archaeological features identified consisted of seven ditches, two pits, and a gully, widely distributed across the site.
- 1.6 The ditches shared some similarities and are interpreted as probably representing a field system. The finds recovered from it consisted exclusively of worked flint, present in a low density, which were characteristic of Mesolithic or Early Neolithic industries.
- 1.7 The lack of other types of artefacts, especially pottery, within the ditches suggests that this field system may have dated to a period with little in the way of material culture remains. Alternatively if it dates to a period from which more artefacts are typically found, such as the medieval, post-medieval, or even Roman periods, it may suggest that the site was located at a distance from any settlement or manuring practices.
- 1.8 The pits and gully may have been associated with the probable field system. The low concentration of these features means that, other than the probable field system, there was a low level of archaeologically visible activity on the site.

2 INTRODUCTION

- 2.1 An archaeological evaluation was undertaken by Pre-Construct Archaeology Limited on land at Butterfield Green, Luton, Bedfordshire (Figure 1), between 29th June and 7th July 2004. This was required in advance of the construction on an infrastructure road corridor area, which is part of the Phase 1 of the proposed development of the site.
- 2.2 The site central National Grid Reference, hereafter NGR, is TL 1078 2491. The boundaries of the whole site are: Butterfield Green Road to the west; a property along Butterfield Green Road, the Vale Cemetery and Crematorium, and Hitchin Road (the A505) to the south; and field boundaries to the east and north. The Phase 1 area is in the south east part of the site, bounded by the Vale Cemetery and Crematorium and Hitchin Road (the A505) to the south, and fields to the east, north, and west. At the time of the evaluation the Phase 1 area was disused arable land, with weeds and cereal plants.
- 2.3 The site is not within an Archaeological Priority Area as defined in Luton Borough Council's UDP, but the size of the development and significance of the known archaeology of the surrounding area meant that archaeological work was required. A condition attached to the planning permission required the implementation of a scheme of archaeological investigation prior to the development. A Brief for a Programme of Archaeological Investigation and a Brief for an Archaeological Field Evaluation were prepared by Bedfordshire County Council on behalf of Luton Borough Council (Bedfordshire County Council 2004a and Bedfordshire County Council 2004b). Also a Written Scheme of Investigation was prepared by Peter Moore, Pre Construct Archaeology Ltd., prior to the fieldwork (Moore 2004).
- 2.4 The work was commissioned by Sally Randell, CPM Environmental Planning and Design, on behalf of Easter Developments Limited. The field evaluation was undertaken under the supervision of Tim Carew and the project management of Peter Moore. The site was monitored by Martin Oake and Lesley-Ann Mather of Bedfordshire County Council, and by Sally Randell of CPM Environmental Planning and Design.
- 2.5 It is intended that the completed archive comprising written and drawn records and artefacts will be deposited at Luton Museum. Luton Museum is temporarily unable to accept new archives.
- 2.6 The site was allocated the site code FBUT 04.



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Figure 1
Site Location
1:20,000



Figure 2
Trench Location
1:5000

3 PLANNING BACKGROUND

- 3.1 The presence of cultural heritage features is a consideration in determining planning applications. Where there is a reason to believe that cultural heritage features may be affected by a development proposal then the first step is often the preparation of a desk-based assessment. This involves the collection of existing information that can assist in the assessment of the potential impact of the development. A local authority archaeologist may subsequently request that an archaeological evaluation is carried out prior to the determination of a planning application, if there is insufficient information available from desk-based research to allow an 'informed and reasonable' decision to be reached about the nature and extent of the identified potential impact. This fieldwork can include fieldwalking, geophysical survey, and limited excavation. Once this has been done an informed decision on the necessity or otherwise for further archaeological strategies may be taken. These strategies may be preservation *in situ*, excavation, or watching brief.
- 3.2 The proposed development of the site is subject to the archaeology policies of Bedfordshire County Council and Luton Borough Council.
- 3.3 The Local Plan framework mirrors advice contained in the Department of Environment document 'Planning Policy Guidance: Archaeology and Planning (PPG 16)'. This document provides guidance for planning authorities, property owners, developers and others on the preservation and investigation of archaeological remains. PPG16 describes archaeological remains as a *finite and non-renewable resource* that should not be *thoughtlessly or needlessly destroyed*. It identifies the need for early consultation in the planning process to determine the impact of construction schemes upon buried archaeological strata.
- 3.4 This study aims to satisfy the objectives of Bedfordshire County Council, which fully recognises the importance of the buried heritage for which they are the custodians. The Council's deposited draft, the Bedfordshire and Luton Structure Plan, adopted in November 2002, contains policy statements in respect of protecting the buried archaeological resource:

Bedfordshire and Luton Structure Plan

Policy 12 Managing the Historic Environment

The conservation, enhancement and management of historic buildings, historic areas, archaeological sites and historic landscape features, and their settings will be promoted by:-

- i. resisting proposals likely to have an adverse effect upon the character and appearance of:
 - historic buildings, historic areas and their settings;
 - Scheduled Ancient Monuments and other important archaeological sites and their settings;
 - historic landscape features, including historic parks and gardens, ancient woodlands and ancient boundaries, and their settings;
- ii. requiring applicants to supply sufficient information to enable the impact of proposed developments to be assessed when proposals could affect any elements of the historic environment or their settings;
- iii. requiring developers to show that where preservation is not possible, or some loss is acceptable, adequate provision has been made for the investigation and recording of archaeological sites, historic landscapes and buildings;

- iv. encouraging proposals which will preserve, manage and enhance historic buildings and areas, archaeological sites, historic landscape features and their settings;
- v. requiring proposals to demonstrate a high standard of design which responds to local character and respects the historic environment;
- vi. securing programmes of enhancement and long term management of archaeological sites and historic landscape features, and their settings, that are preserved within developments as part of planning permissions;
- vii. promoting and adopting measures to secure the conservation of historic buildings and areas;
- viii. supporting programmes and initiatives such as the Buildings at Risk Survey and Bedfordshire Architectural Heritage Trust;
- ix. encouraging the preparation and implementation of conservation and management plans;
- x. supporting and obtaining funding from local, regional and national grant aid schemes; and
- xi. encouraging the preparation of village plans and other local initiatives.

3.5 The site lies within the Borough of Luton. The corresponding policy statements within the Luton Borough Council Local Plan, 2nd Deposit Draft, February 2004 are:

Luton Borough Council Local Plan

Policy ENV6 Archaeology

On sites of known or potential archaeological interest, planning permission will only be granted for development which would not adversely affect important remains, whether scheduled or not, or their settings. The Borough Council will also require:

- A. the results of an archaeological evaluation to be submitted as part of any application; and
- B. the preservation in situ, and provision for appropriate management, of those remains and their settings considered to be of particular importance; and
- C. provision for recording and/or excavation by an accredited organisation prior to the commencement of development where in situ preservation is not justified.

3.6 There are no Scheduled Ancient Monuments within or adjacent to the development site.

4 GEOLOGY AND TOPOGRAPHY

4.1 GEOLOGY

- 4.1.1 Geological records indicate the site is underlain by chalk covered by a layer of clay with flints varying in depth between 3-6m (Robinson 2003). The clay with flints is a stiff orange brown gravely clay containing frequent sub-rounded flint inclusions.

4.2 TOPOGRAPHY

- 4.2.1 The landscape around the site is gently rolling chalk downs. To the north of the site Whitehill Farm is situated on the highest point on a ridge, around 180mOD. A topographic survey of the site has been undertaken as part of the proposal for the development. It shows that the Phase 1 area slopes gently down from north to south, between 173mOD along the hedge on its north side and 168mOD near to the Hitchin Road, a distance of 450m.

5 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

5.1 Introduction

- 5.1.1 The following summary has been compiled from information supplied by the client, and published sources. It applies to the whole of the site rather than just Phase 1 or the area evaluated.
- 5.1.2 The landscape is rich in evidence of prehistoric, Roman, and medieval use.

5.2 Prehistoric

- 5.2.1 Fieldwalking has identified a Neolithic and Bronze Age flint scatter covering part of the area evaluated (Hudspith 1993) (Luton Sites and Monuments Record, hereafter LSMR, 15847, NGR TL 111 250). This is in the northern part of the field called the Innings.
- 5.2.2 Also within the site, but not in the area evaluated, is a scatter of Mid to Late Iron Age pottery (Hudspith 1993) (LSMR 15528, NGR TL 106 250). This is towards the north west side of the site and also includes Roman pottery and tile. It may indicate the position of a small settlement occupied from the Middle Iron Age to the Roman period. The density of pot sherds and the presence of tile support this inference.
- 5.2.3 In the field immediately to the north of the site, and to the east of Whitehill Farm, fieldwalking has produced a scatter of flintwork including material of Mesolithic, as well as Neolithic and Bronze Age date.
- 5.2.4 There is another scatter of Neolithic and Bronze Age flintwork, detected by fieldwalking, about 200m to the north-west of the site (LSMR 15226, NGR TL 102 253). Medieval pottery was also present.
- 5.2.5 Large scatters of burnt flint have been found near Whitehill Farm, and may denote prehistoric occupation or other activities.
- 5.2.6 The Icknield Way and the Edeway run to the north-west of the site. Dray's Ditches are also located in this area.
- 5.2.7 Ritual and burial monuments of the earlier prehistoric period are present within the landscape around the site. A number of barrows or ring ditches are concentrated to the north west of the site, on the north and north west facing slopes facing towards the Icknield Way.
- 5.2.8 Lynchets have been recorded to the north east of the site, at Lilley, and to its south west, on the edge of Luton.

5.3 Roman

- 5.3.1 As noted in paragraph 5.2.2, a small settlement occupied from the Middle Iron Age to the Roman period may have given rise to the scatter of Mid to Late Iron Age pottery and Roman pottery and tile (Hudspith 1993) (LSMR 15528, NGR TL 106250).

5.4 Medieval

- 5.4.1 The medieval settlement pattern in this part of the Chilterns was, typically, dispersed and based on a series of greens. There are no greens within the site, but Butterfield Green (LSMR 12399, NGR TL103 249) abuts the western boundary. Occupation around the Green is likely from at least the 14th century, and any buildings on its eastern side may be within the site's western boundary. On the 1842 tithe map a field called White Hill Piece is shown in this area and may have contained a number of building plots fronting onto this side of the Green. Earthworks were visible here until

ploughing in the 1970s, which has brought medieval and later pottery to the surface. Swifts Green, a probable site of medieval occupation (LSMR 12401, NGR TL1065 2421), is about 200m to the south of the site, on the Hitchin Road.

- 5.4.2 The field on the south east side of the site is called the Innings, which means enclosed land, and may indicate relatively early enclosure, and so relatively early field boundaries. The bank and ditch along the eastern side of this field may form part of an historic parish boundary. This would be classified as an important hedgerow under the Hedgerow Regulations 1997, on cultural criteria irrespective of ecological considerations.
- 5.4.3 Manor Farm is adjacent to the south west corner of the site (LSMR 10816, NGR TL 1045 2450). It appears to have been the principal agricultural holding in the area, originating in the 12th century. By the late 15th century it was attached to Luton Manor.
- 5.4.4 As noted above, a scatter of Medieval pottery was found by fieldwalking about 200m to the north west of the site (LSMR 15226, NGR TL 102 253).

5.5 Post-Medieval

- 5.5.1 Just to the south of the site, near Manor Farm, stands a grade II listed building, The Thatched Cottage, 111 Butterfield Green Road, dating to the 17th century or earlier (LSMR 10431, NGR TL 1065 2450). A dovecote is also present further to the south (LSMR 12358, NGR TL 106 242).
- 5.5.2 During this period the site lay within the parish of Stopsley. There was no parliamentary enclosure within this parish, and hence no enclosure map. The process of enclosure was carried on by mutual consent and largely complete by 1800. A tithe map was drawn in 1842, which shows no buildings on the site, but does show a number of field boundaries that have since disappeared, and may well have derived from the medieval pattern of strip fields.
- 5.5.3 Recently ploughed out earthworks near Whitehill Farm, which extend onto the north side of the site, correspond with field boundaries on the 1842 tithe map (LSMR 5474, NGR 105 255). They are likely therefore to originate in the enclosure period. About 200m to the south of the site there are other earthworks (LSMR 3341, NGR 105 242).

6 ARCHAEOLOGICAL METHODOLOGY

- 6.1 The methodology followed that set out in the Written Scheme of Investigation (Moore 2004), with the exception that, due to the vegetation across the area, the specified fieldwalking was not undertaken as it was considered impractical.
- 6.2 A geophysical survey had been conducted on the area evaluated, using magnetometry measured with a fluxgate gradiometer instrument (Brown and Butler 2004). A number of anomalies were identified of which a few were of potential archaeological significance. However the signal for these was not strong, and the patterns that they formed in plan were not compelling.
- 6.3 Seventeen trenches were excavated during the evaluation, each between 20m and 60m long and 1.8m wide. The total length of the trenches was 600m. The positions of the trenches on the ground were determined from a plan provided by the archaeological consultant Sally Randell (CPM Environmental Planning and Design). This design was intended both to test the whole area and to investigate the possible archaeological features identified by the geophysical survey.
- 6.4 The lengths of the trenches were as follows:
Trench 1 – 30m
Trench 2 – 30m
Trench 3 – 30m
Trench 4 – 50m
Trench 5 – 30m
Trench 6 – 30m
Trench 7 – 30m
Trench 8 – 30m
Trench 9 – 30m
Trench 10 – 30m
Trench 11 – 60m
Trench 12 – 60m
Trench 13 – 20m
Trench 14 – 30m
Trench 15 – 40m
Trench 16 – 40m
Trench 17 – 30m
- This totals 600m. Trenches 1 and 2 were joined at their ends to form an L-shaped trench, but recorded separately.
- 6.5 The machine used was a 360° excavator, fitted with a 1.60m ditching (toothless) bucket. All machining was done under archaeological supervision and in spits of up to 0.10-0.20m. Where the nature of the deposits was not clear, that part of the trench was cleaned using hand tools.
- 6.6 Recording was done using the single context system, on pro-forma sheets. Trench plans were drawn at 1:50, and a representative 1 m or 2.5m section of each trench was drawn at 1:10. The locations of the trenches were surveyed using a Total Station Theodolite. The trenches and archaeological features within them were photographed.
- 6.7 Levels were derived from a survey drawing provided by Waterman Environmental. Temporary bench marks were transferred from a spot height on this drawing located next to the west corner of the building within the disused petrol station on the Hitchin Road, which has a value of 168.60mOD.
- 6.8 No unusual or unexpected health and safety risks were identified. While the fieldwork was in progress access from the Hitchin Road was fenced off.
- 6.9 In this report context numbers are shown within square brackets, e.g. '[6]'.

7 THE ARCHAEOLOGICAL SEQUENCE

7.1 Overall Sequence

- 7.1.1 Across the site, the phases identified were:
- Phase 1 – Natural
 - Phase 2 – Neolithic / Bronze Age
 - Phase 3 – Undated Archaeological Activity
 - Phase 4 – Modern

7.2 Phase 1 – Natural

- 7.2.1 The natural, [3], was clay with flints. This was variable in nature, largely consisting of a firm mid orange silty clay with frequent flints, but with patches of 'white' material and areas of darker red material. The 'white' was a very light grey silty clay, with moderate flints, and the 'darker red' was a dark brownish red silty clay with very frequent flints.
- 7.2.2 The variability of the natural meant that in a number of cases it was necessary to excavate to confirm that some of the colour variations in the ground were natural rather than archaeological in origin. The archaeological features all had fills that were browner or darker than the natural, as opposed to the whiter or redder areas that were natural. Like the natural, all the feature fills contained frequent flint pebbles.
- 7.2.3 The levels recorded from the top of the natural varied between 168.13 and 171.46 mOD, reflecting the natural topography of the area, falling very gently from north to south.

7.3 Phase 2 – Mesolithic / Early Neolithic

- 7.3.1 A quantity of struck flint was recovered from the ploughsoil excavated from a number of the trenches. This is consistent with the known presence of a flint scatter within the field that was previously recorded from fieldwalking (Hudspith 1993).
- 7.3.2 Five ditches produced a small quantity of struck flint characteristic of Mesolithic or Early Neolithic industries. Two were aligned north west – south east, two north east – south west and one east – west.

7.4 Phase 3 – Undated Archaeological Activity

- 7.4.1 These features are discussed below, trench by trench. All were found cut into the top of the natural, below the subsoil. Hence the levels of the tops of the features also varied with the natural topography of the area.

7.5 Phase 4 – Modern

- 7.5.1 Overlying the natural was subsoil [2] and ploughsoil [1]. The subsoil included elements of re-worked natural clay and ploughsoil. Together the subsoil and ploughsoil were mostly around 0.45 to 0.55m thick, but in places as thin as 0.35m and as thick as 0.70m.

7.6 Testing of Geophysical Anomalies (fig 3)

- 7.6.1 The geophysical anomalies with the highest archaeological potential were located in the northern arm of the area evaluated. There was also a larger anomaly across its centre and extending down the southern arm, which was considered more likely to have been of natural origin, possibly a palaeochannel.
- 7.6.2 The evaluation could not determine for certain the origin of the geophysical anomalies, but it has demonstrated that they were not caused by archaeological features. It

seems probable that they were the result of variations within the natural geology. In the area where the geophysics suggested that there might be archaeological features, especially the north arm of the area investigated, the natural in the trenches was found to be particularly variable. These variations appeared to trend in a north east to south west direction, which was also the case for the geophysical anomalies, especially the suggested rectilinear ditched enclosure (Brown and Butler 2004).

7.7 Trench 1 (fig 4)

- 7.7.1 Trench 1 contained a small pit, [29], which was 1.33m by 0.75m, and 0.18m deep. Its fill [28], was mid greyish brown clayey silt with some charcoal present. Both burnt and struck flint were recovered, as well as some small iron objects, possibly nails.

7.8 Trench 2 (fig 4)

- 7.8.1 Trench 2 contained a pair of ditches running north east to south west, 1.5m apart. They were similar in size and the nature of their fills, and are likely to have been associated as a single boundary marked by a double ditch. They were not substantially wider than other ditches identified during the evaluation, but they were deeper. On the south eastern side, ditch [31] was 1.00m wide and 0.60m deep, while [33] was 0.82m wide and 0.53m deep, both being steep sided with rounded bases. Both were filled by light to mid grey brown clayey silt, respectively [30] and [32]. No material culture was recovered from either of them.

7.9 Trench 3

- 7.9.1 Trench 3 contained no archaeological features.

7.10 Trench 4

- 7.10.1 Trench 4 contained no archaeological features.

7.11 Trench 5 (fig 5)

- 7.11.1 Trench 5 contained a small gully aligned north east to south west, [35], linear but not quite straight, which was 5.00m long and 0.40m wide, and only 50mm deep. It was filled with [34], a greyish brown clayey silt. Struck flint including a blade and a broken blade were recovered from this feature.

7.12 Trench 6

- 7.12.1 Trench 6 contained no archaeological features.

7.13 Trench 7 (fig 6)

- 7.13.1 A north west to south east ditch, [27], ran along most of the length of Trench 7. This was relatively straight and regular, 0.90m wide and 0.25m deep, and had moderately sloping sides and a rounded base. Struck flint was recovered from the two slots excavated in its fill, [26], which was a brown grey clayey silt.

7.14 Trench 8

- 7.14.1 Trench 8 contained no archaeological features.

7.15 Trench 9 (fig 7)

- 7.15.1 No archaeological features were present in Trench 9, but there was a tree bole, [23], filled by [22]. This interpretation is based on its crescent shape and irregular base, supported by the absence of material culture.

7.16 Trench 10 (fig 8)

7.16.1 Trench 10 contained a ditch, [25], running north west to south east, 0.85m wide and 0.32m deep. It was steep sided with a stepped profile, and with a flat to rounded base. A small quantity of struck flint was recovered from its fill, [24], a dark yellowish brown very clayey silt.

7.17 Trench 11 (fig 8)

7.17.1 The west end of an east - west ditch, [17], was present in Trench 11. This was 0.83m wide and 0.50m deep, with steep sides and a rounded base. A single piece of possibly struck flint was recovered from its fill, [16], a grey brown clay silt.

7.18 Trench 12 (fig 5)

7.18.1 Ditch [15] in Trench 12 ran north east – south west, and was 0.92m wide and 0.33m deep, with steep sides and a flat to rounded base. Struck flint, ranging from blades to flake fragments, was recovered from its fill, [14], a dark brown very clayey silt.

7.18.2 In addition there was a tree bole, [21], filled by [20]. This interpretation is based on its irregular shape in plan and irregular base with ill-defined edges, supported by the absence of material culture.

7.19 Trench 13

7.19.1 Trench 13 contained no archaeological features.

7.20 Trench 14

7.20.1 A pair of very small features were recorded in Trench 14, [11] and [13], interpreted as being the result of recent agricultural activities, either being the bases of fence postholes or being cut some other way. [11] measured 0.38m by 0.20m and 0.10m deep, and [13] was 0.30m by 0.30m and 0.10m deep. The fills, [10] and [12] respectively, contained material indistinguishable from the modern ploughsoil, and very likely derived from that source. A piece of ceramic building material in [12] is post-medieval in date (after c. 1670).

7.21 Trench 15 (fig 8)

7.21.1 Ditch [9] in Trench 15 ran north east - south west, and was 0.88m wide and 0.23m deep, with steep sides and a flat to rounded base. A small quantity of struck flint was recovered from its fill, [8], a light to mid greyish brown very clayey silt.

7.21.2 In addition there was a tree bole, [19], filled by [18]. This interpretation is based on its irregular shape in plan and irregular base, supported by the absence of material culture.

7.22 Trench 16

7.22.1 No archaeological features were present in Trench 16, but there was a tree bole, [7], filled by [6]. This interpretation is based on its shape and irregular sides and base, although it did contain a single struck flint.

7.23 Trench 17 (fig 9)

7.23.1 Trench 17 contained a possible pit, [5], which was circular, 1.50m across and 0.20m deep, with shallow sloping sides and a flat to rounded base. Its fill, [4], was a yellowish orange silty clay, and no cultural material was recovered from it. If not a pit this may have been a tree bole, although the edges were not as irregular as is often the case with tree boles.

7.24 Discussion

- 7.24.1 The main features found were the seven ditches. Four of these were oriented north east to south west (Trenches 2, 12, and 15), and two north west to south east (Trenches 7 and 10). The remaining one (Trench 11) was aligned east to west, but was also the only one that terminated within the evaluation trench. The double ditch identified in Trench 2 stands out as being of a slightly different nature from the rest.
- 7.24.2 The ditches identified during the evaluation were similar in terms of their size, shape and fills, and the absence or sparseness of material culture within them. They were widely distributed across the site, except for the two in Trench 1 that appeared to form a pair. They are interpreted as field boundaries, and their similarities suggest they were elements of a single system, which is supported by their seemingly consistent orientations, although the precision with which the orientation of a ditch in an evaluation trench can be determined is limited. The one in Trench 11 may be an exception, and the pair in Trench 2 were sub-parallel to the modern line of the Hitchin Road, so the possibility that they mark the roadside ditches of an earlier course of that road should also be considered.
- 7.24.3 The only material culture recovered from any of them was a small quantity of struck flint. This material was characteristic of Mesolithic or Early Neolithic technologies and although it was in better condition than the unstratified pieces it is possible that it is residual. However the lack of pottery or other datable material in combination with the struck flint assemblage may suggest an earlier date rather than a later one, possibly Neolithic. The orientation of the field boundaries from north-east to south-west and from north-west to south-east is more common in prehistoric field systems than orientation on the cardinal points. Even if the flints are residual it does suggest that the site was used as a focus for flintworking and possibly settlement during the Mesolithic or Early Neolithic period. The scatter of Mid to Late Iron Age pottery and Roman pottery and tile about 400m to the west (LSMR 15528) could indicate a settlement associated with the possible field system. On the other hand the 1842 tithe map (Entec 2000) shows some field divisions within the present field called the Innings. While the pattern of the ditches found in the evaluation cannot be matched to the tithe map it is quite conceivable that they are relict elements of the field system that is still extant. If they date from a period in which artefacts are usually abundant, for example medieval, post-medieval, or even Roman, there is an implication that any associated settlement was not close by, limiting the flow of this material onto the site. Too much weight should not be given to any of these reasons to prefer one date rather than another; the possible field system is essentially undated at present.
- 7.24.4 The other features of potential archaeological interest consisted of a pit in Trench 1, a possible pit in Trench 17, and a gully in Trench 5, but again there was little material culture recovered, and this did not provide dating evidence. These may be associated with the ditches of the probable field system, but equally could be independent of it. The presence of burnt flint and iron in the pit in Trench 1 suggests that it, at least, is unrelated to the possible field system. Few conclusions can be made about these features, given their lack of distinguishing characteristics, sparse finds, and low concentration and scattered distribution across the exposed sample of the evaluation area, other than that their low concentration implies low levels of archaeologically visible activity.
- 7.24.5 There were also a number of other features of low archaeological significance. Tree boles have been included within Phase 1. In addition a pair of very small features believed to be the result of modern or post-medieval agricultural activities are included in Phase 4.
- 7.24.6 The evaluation confirmed the presence of residual flints in the ploughsoil.

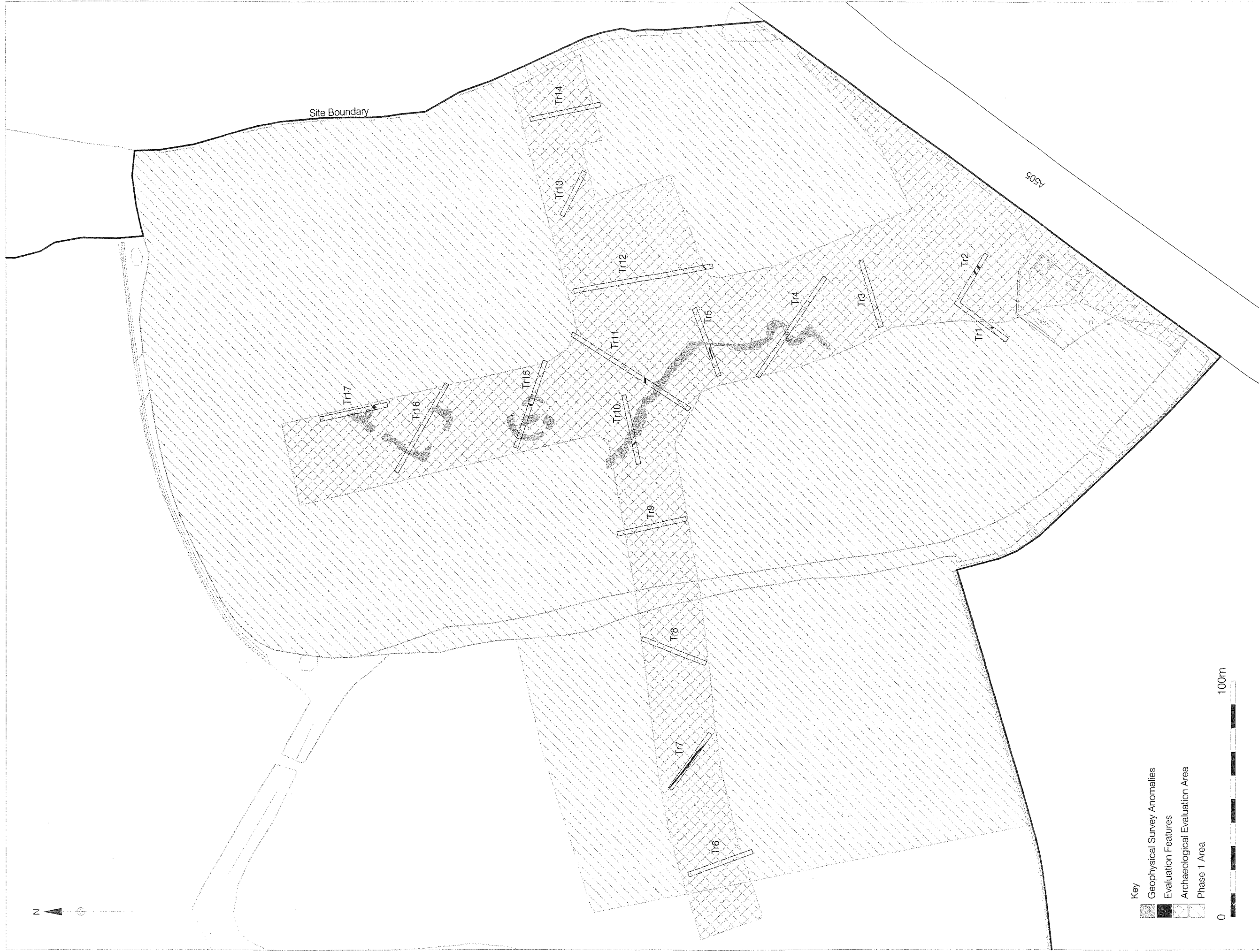


Figure 3
 Geophysical Survey Anomalies
 and Evaluation Features
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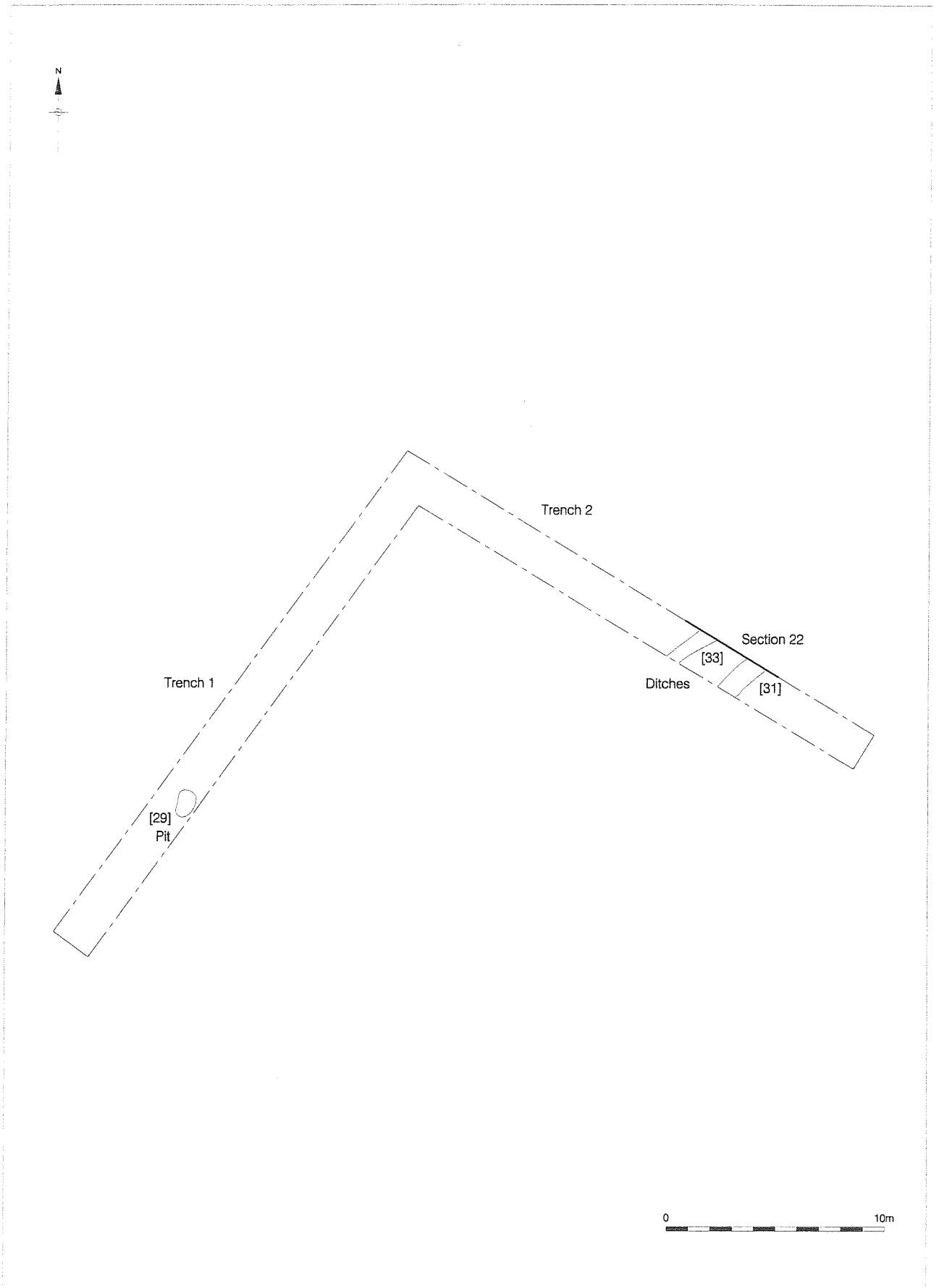


Figure 4
Trenches 1 & 2
1:250

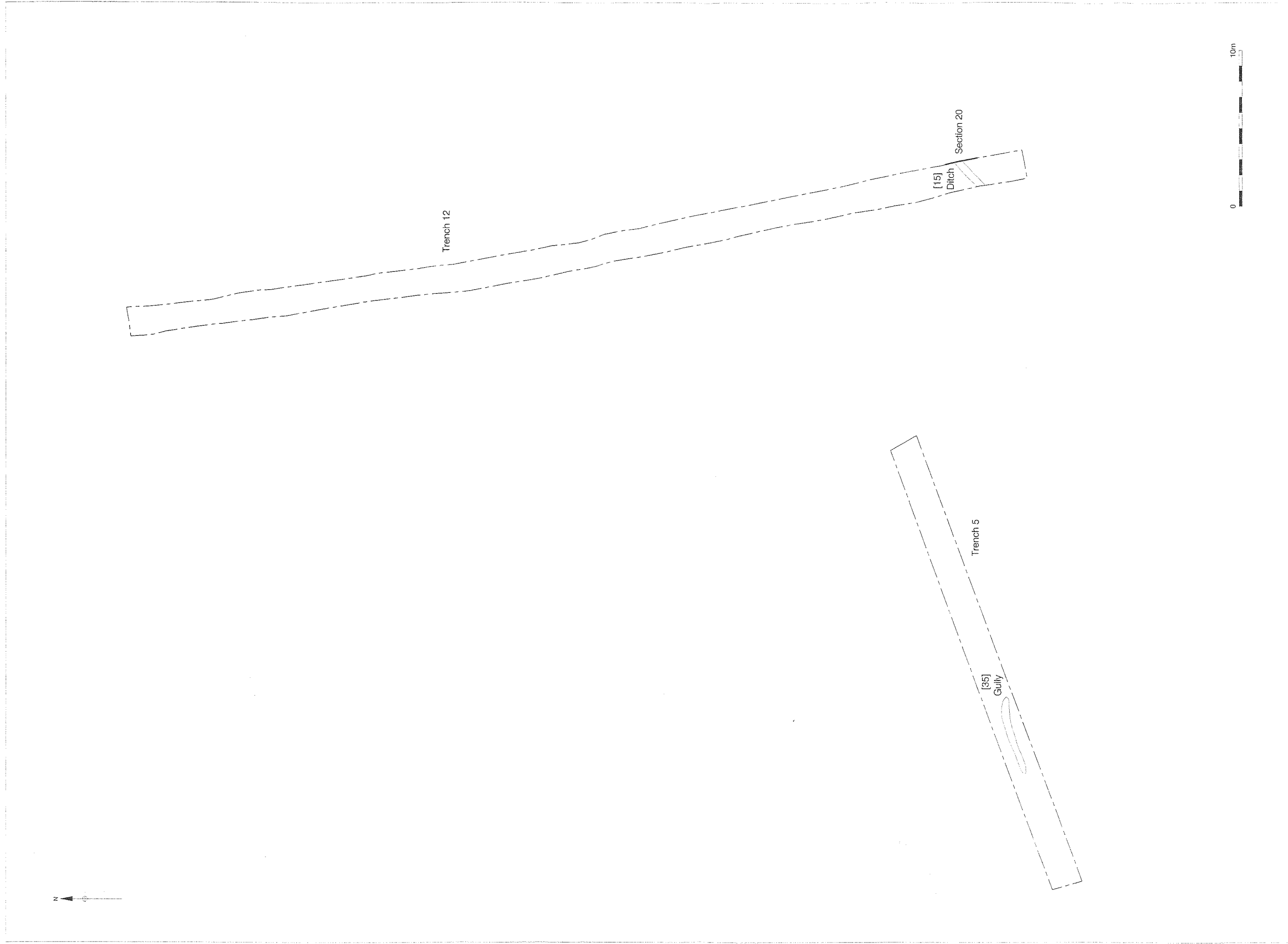


Figure 5
Trenches 5 & 12
1:250

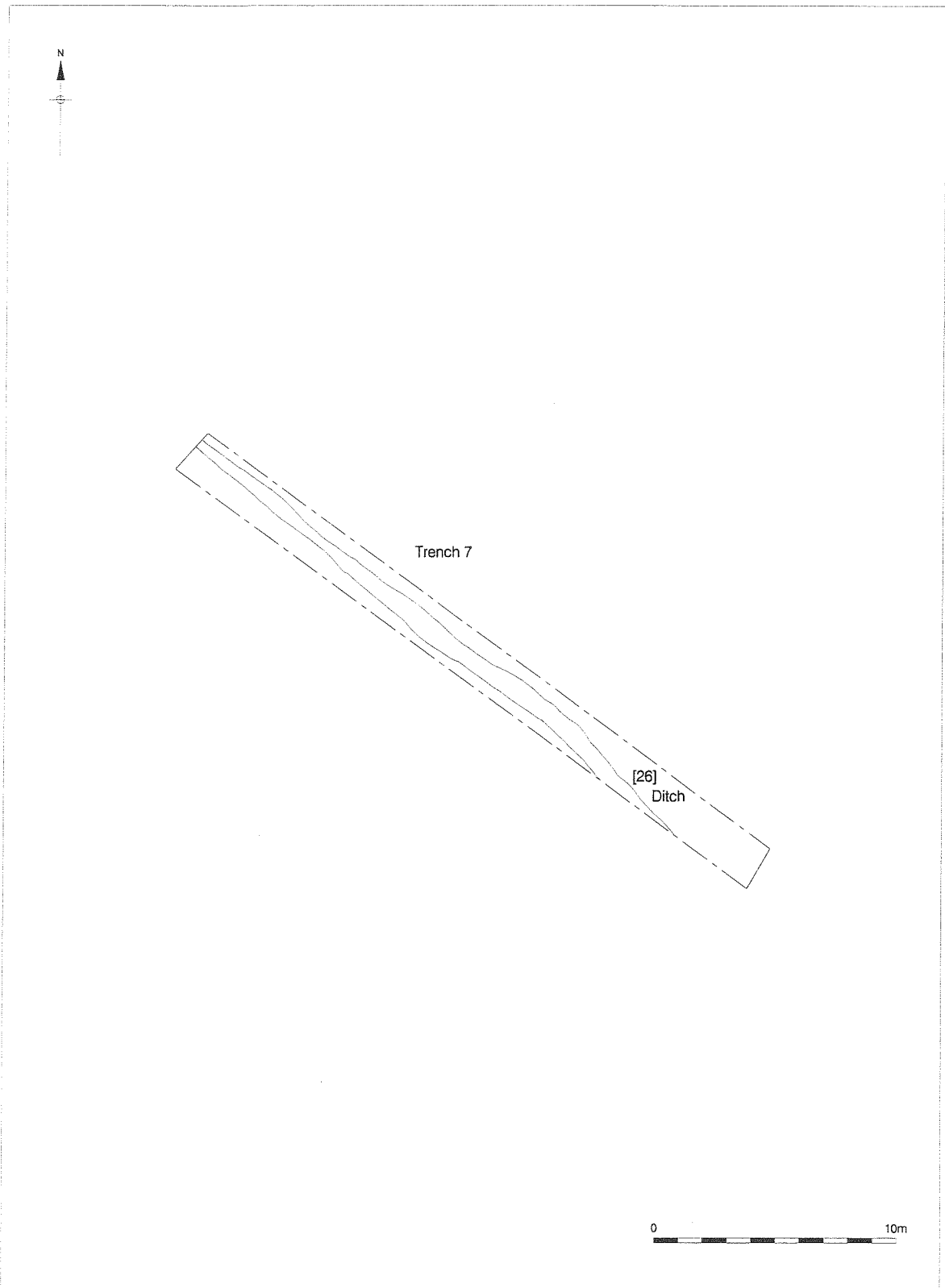


Figure 6
Trench 7
1:250

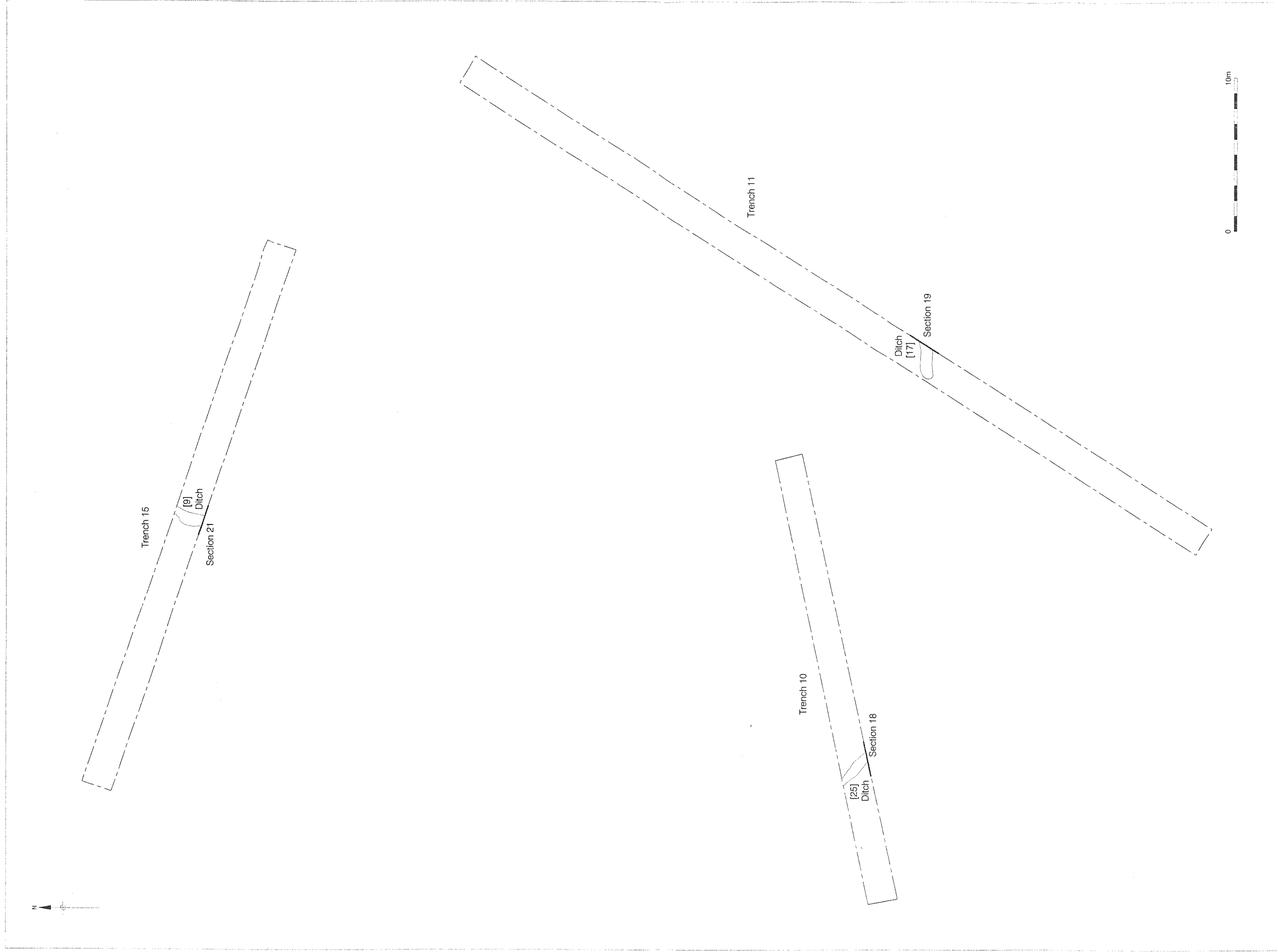


Figure 7
Trenches 10, 11 & 15
1:250

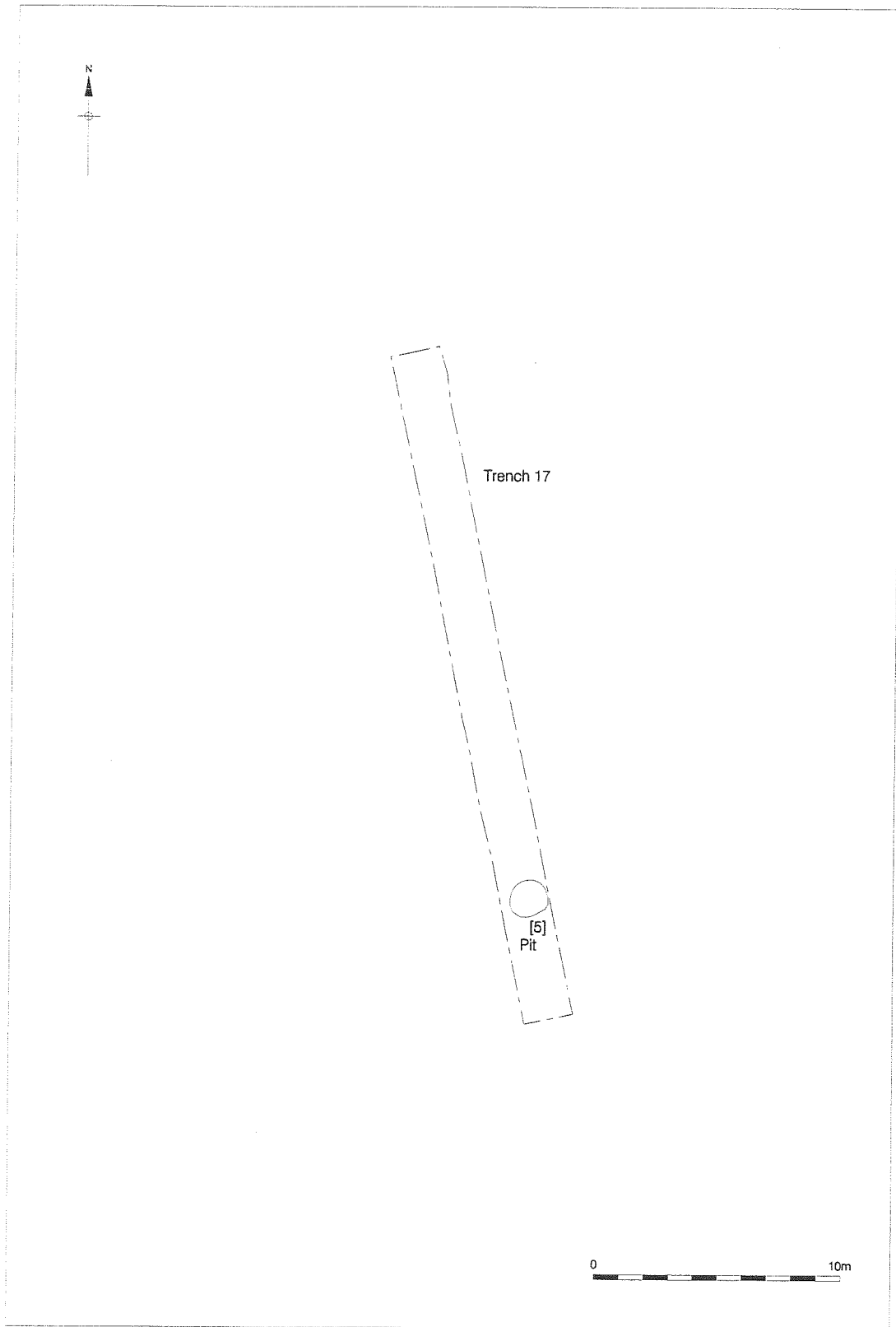


Figure 8
Trench 17
1:250

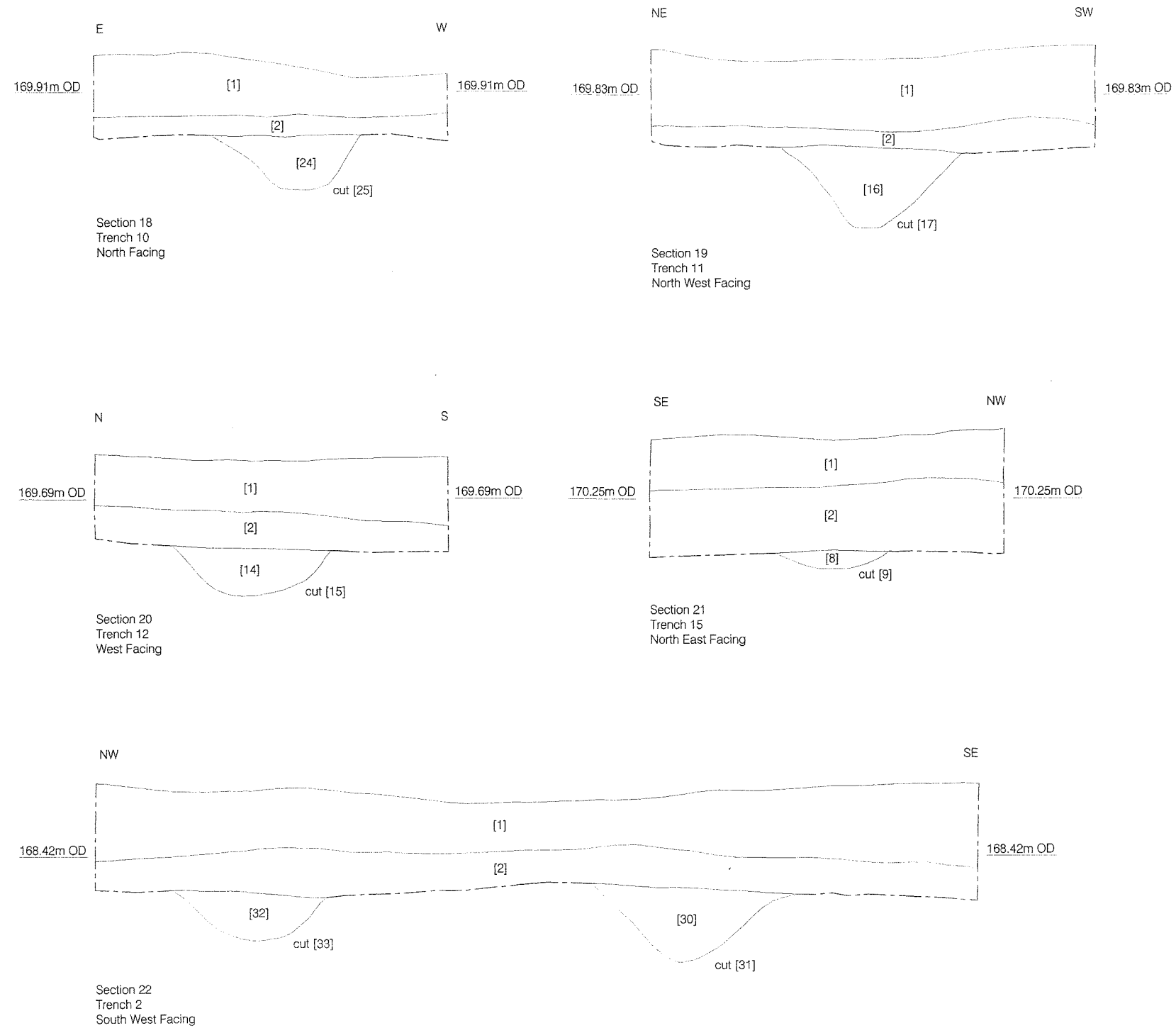


Figure 9
Sections 18 - 22
1:30

8 CONCLUSIONS

- 8.1 The natural at the site is clay with flints, above which is subsoil and ploughsoil. The area of the evaluation has a gentle slope from north to south.
- 8.2 Cut into the top of the natural are a small number of widely dispersed features. The most archaeologically significant of these are ditches that are interpreted as field boundaries. Their similarity suggests they were part of a single system. However the lack of datable material, other than struck flint which could be residual, means that the date of this possible system is unknown: it could be from the later prehistoric period onwards.
- 8.3 Only three other potentially archaeological features were present. Little can be concluded from them, other than that their low concentration implies low levels of archaeologically visible activity.
- 8.4 The known presence of flintwork in the ploughsoil was confirmed.

9 ACKNOWLEDGEMENTS

- 9.1 Pre-Construct Archaeology Ltd. wishes to thank Easter Developments Limited for funding the work, and Sally Randell, CPM Environmental Planning and Design, for commissioning it.
- 9.2 The author thanks: Tony Baxter, Victoria Osborn, Jo Taylor, and Mary Ellen Crothers, for their work on the site; Hayley Baxter for the illustrations; and Peter Boyer for editing and Peter Moore for the project management.

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APPENDIX 1 – Context Index

Context	Context Type	Feature Type	Comments	Phase	Trench	Length	Width	Depth / Thickness
1	Layer	Topsoil	-	4	1 - 17	-	-	-
2	Layer	Subsoil	-	4	1 - 17	-	-	-
3	Layer	Natural	-	1	1 - 17	-	-	-
4	Fill	Possible pit	Fill of [5]	3	17	1.50m	1.50m	0.20m
5	Cut	Possible pit	-	3	17	1.50m	1.50m	0.20m
6	Fill	Tree bole	Fill of [7]	1	16	2.20m	1.00m	0.25m
7	Cut	Tree bole	-	1	16	2.20m	1.00m	0.25m
8	Fill	Ditch	Fill of [9]	3	15	>2.00m	0.88m	0.23m
9	Cut	Ditch	-	3	15	>2.00m	0.88m	0.23m
10	Fill	Possible posthole	Fill of [11]	4	14	0.38m	0.20m	0.10m
11	Cut	Possible posthole	-	4	14	0.38m	0.20m	0.10m
12	Fill	Possible posthole	Fill of [13]	4	14	0.30m	0.30m	0.10m
13	Cut	Possible posthole	-	4	14	0.30m	0.30m	0.10m
14	Fill	Ditch	Fill of [15]	3	12	>2.00m	0.92m	0.33m
15	Cut	Ditch	-	3	12	>2.00m	0.92m	0.33m
16	Fill	Ditch	Fill of [17]	3	11	>1.80m	0.83m	0.50m
17	Cut	Ditch	-	3	11	>1.80m	0.83m	0.50m
18	Fill	Tree bole	Fill of [19]	1	15	>1.75m	1.25m	0.16m
19	Cut	Tree bole	-	1	15	>1.75m	1.25m	0.16m
20	Fill	Tree bole	Fill of [21]	1	12	2.00m	0.63m	0.20m
21	Cut	Tree bole	-	1	12	2.00m	0.63m	0.20m
22	Fill	Tree bole	Fill of [23]	1	9	2.75m	0.90m	0.13m
23	Cut	Tree bole	-	1	9	2.75m	0.90m	0.13m
24	Fill	Ditch	Fill of [25]	3	10	>2.00m	0.85m	0.32m
25	Cut	Ditch	-	3	10	>2.00m	0.85m	0.32m
26	Fill	Ditch	Fill of [27]	3	7	>25.30m	0.90m	0.25m
27	Cut	Ditch	-	3	7	>25.30m	0.90m	0.25m
28	Fill	Possible pit	Fill of [29]	3	1	1.33m	0.75m	0.18m
29	Cut	Possible pit	-	3	1	1.33m	0.75m	0.18m
30	Fill	Ditch	Fill of [31]	3	2	>1.80m	1.00m	0.60m
31	Cut	Ditch	-	3	2	>1.80m	1.00m	0.60m
32	Fill	Ditch	Fill of [33]	3	2	>1.80m	0.82m	0.53m
33	Cut	Ditch	-	3	2	>1.80m	0.82m	0.53m
34	Fill	Gully	Fill of [35]	3	5	5.00m	0.40m	0.05m
35	Cut	Gully	-	3	5	5.00m	0.40m	0.05m

APPENDIX 2 – Lithic Assessment

Barry John Bishop

Introduction

An Archaeological Field Evaluation at the above site recovered 50 struck flints and a small quantity of burnt flint fragments. This report quantifies the material by context according to a basic technological/typological scheme (see Table 1) in order to suggest a chronological framework, includes some general, preliminary impressions and interpretations of the material, and recommends any further work required. As the material was only cursorily examined and no statistically based technological, typological or metrical analyses were attempted, a more detailed examination may alter or amend any of the interpretations offered here.

Quantification

Context	Primary/preparation Flakes	Maintenance/ modification flakes	Core rejuvenation flakes	Useable flakes	Chips (< 15mm max dimension)	Flake Fragments <10mm	Flake Fragments >10mm	Chunks/core shatter	Preparation Blades	Blades	Broken Blades	Blade-like flakes	Blade/Narrow Flake Core	Edge Trimmed	Piercer	Context Total Struck	Comments	Burnt flint (g)	Burnt Flint No
[16]												1				1			
[28]					1											1			
Tr01	1					1					1	1				4	BLF Incipient recort; Br BI recort		
Tr03 [01]									1							1			
Tr04		1		1	1	1		1						1		6	ET is thick flake blunted by slightly invasive retouch to RV – scraper/core prep.?	3	1
Tr05					1	1			1	1						4	BrBI is Recort		
Tr07 [26]					1							1				2			
Tr10					1											1			
Tr11		1			1	1	1				1	1				6			
Tr12	2	2					2									6			
Tr13				1			2								1	4	Piercer is badly chipped but on narrow flake with point formed by notching accentuating distal		
Tr14												1				1			
Tr14 [10]					1											1			
Tr15	1	2	2		1	1		1				1	1			10	CRFs are 'core tablet' types; Core is a 'front and back' type prismatic blade core	2	1
Tr17	1											1				2			
TOTALS	5	6	2	2	8	1	8	2	2	1	3	7	1	1	1	50		5	2

Table 1: Quantification of the Lithic Material by Context

Condition

The condition of the struck material was variable. The unstratified pieces were generally rather chipped and abraded, as would be consistent with material that had spent some time in the abrasive conditions of the 'plough zone', however, this was not universally the case, suggesting some pieces had been disturbed from relatively secure contexts quite recently. The material from other contexts generally appeared in much better condition, although too

few pieces were present to indicate the taphonomic processes that these might have experienced.

Raw Material

The raw material utilized was also variable, most commonly used was a fine-grained translucent black, grey or light brown flint, but also present were some pieces made from a more-cherty opaque speckled or banded grey flint. Remnant cortex on all flint types consisted primarily of heavily recorticated thermal scars, with patches of hardened chalky cortex of variable thickness also present. The presence of different flint types combined with the evidence of thermal shattering suggests that the raw materials were obtained either from glacial deposits or deposits of periglacial mass weathering (Gibbard 1986).

Discussion

Small quantities of burnt flint were recovered, suggesting the use of hearths in the vicinity.

The struck material was dominated by unusable waste, including primary and core modification/maintenance flakes, chips and broken pieces. Retouched implements were limited to a piercer from Trench 13 and an edge-trimmed flake from Trench 04, although the latter was rather 'odd' as a tool and may have been an attempt to prepare the flake in order to allow it to be reused as a core. Amongst the material were a number of broken blades and blade-like flakes, which technologically would be most characteristic of Mesolithic or Early Neolithic industries, as would the piercer from Trench 13. The two core 'tablet' rejuvenation flakes were both relatively large with identical incipient recortication and possibly from same knapping event. These too would be most characteristic of Mesolithic/Early Neolithic industries, whilst, tentatively, the core from Trench 15 was most reminiscent of Mesolithic types.

The flintwork suggests the site was used as a focus for flintworking and perhaps settlement during the Mesolithic or Early Neolithic period, although little evidence for extensive tool-use was identified. The size of the assemblage would suggest that the activities conducted at the site were probably of limited duration, although as the area examined was small this could only be tested by larger-scale investigation. The lack of chronologically specific diagnostic pieces renders it impossible to further refine the date range or nature of the activities conducted at the site.

Recommendations

The assemblage is of significance in that it provides evidence for Mesolithic/Early Neolithic activity in an area where these periods are poorly understood. During the Mesolithic/Early Neolithic periods structural evidence for settlement or task-specific activity is often lacking or

confined to features such as pits and/or scattered postholes, with lithic assemblages often providing the main or only evidence of occupation. It is therefore recommended that a reference should be made to the assemblage in the local Sites and Monuments/Historic Environment Record and, in addition, a short description of it, preferably including illustrations of the core and a selection of the more technologically diagnostic flake and blades, should be included in any published account of the fieldwork.

Should further fieldwork be considered attention should focus on obtaining as large and closely contexted lithic assemblage as possible, in order to attempt to understand the nature, extent and chronology of any prehistoric lithic-based activities. Should sufficient quantities of lithic artefacts be procured from any future work, full metrical, typological and technological analysis may be warranted and, through consideration of other recovered artefact groups and environmental based evidence, this information should be incorporated into establishing as detailed and complete an understanding as possible of the prehistoric exploitation of the area.

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APPENDIX 3 – OASIS Form

OASIS DATA COLLECTION FORM

[List of Projects](#) | [New project](#) | [Change your details](#) | [HER coverage](#) | [Log out](#)

[Printable version](#)

OASIS ID: preconst1-3539

Project details

Project name	Butterfield Green, Luton, Bedfordshire
Short description of the project	In June and July 2004 an archaeological evaluation comprising 17 trenches (600m in total) was undertaken by Pre-Construct Archaeology Ltd. The work was carried out in advance of the construction on an infrastructure road corridor area. Struck flint was recovered from the ploughsoil dating to the Mesolithic or Early Neolithic periods. The excavations also revealed seven ditches which probably represent a field system. The only material recovered from these features were struck flint also dating to the Mesolithic/Early Neolithic periods. These flints would date the field system to the Early Neolithic but the possibility that they are residual should not be ruled out. Two pits were also recorded which might have been related to the field system.
Project dates	Start: 29-06-2004 End: 07-07-2004
Previous/future work	No / Yes
Any associated project reference codes	FBUT 04 - Sitecode
Type of project	Field evaluation
Site status	None
Current Land use	Cultivated Land 4 - Character Undetermined
Significant Finds	STRUCK FLINT Late Mesolithic
Significant Finds	SRUCK FLINT Early Neolithic
Methods & techniques	'Documentary Search','Environmental Sampling','Geophysical - Magnetometer','Targeted Trenches'
Development type	Road scheme (new and widening)
Prompt	Direction from Local Planning Authority - PPG16
Position in the planning process	Not known / Not recorded

Project location

Country	England
Site location	BEDFORDSHIRE LUTON LUTON Butterfield Green, Luton, Bedfordshire
Study area	2.4 Hectares
National grid reference	TL 1078 2491 Point
Height OD	Min: 168.13m Max: 171.46m

Project creators

Name of Organisation	Pre-Construct Archaeology Ltd
Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body

Project design
originator Peter Moore

Project
director/manager Peter Moore

Project supervisor Tim Carew

Sponsor or
funding body Developer

Project archives

Physical Archive
recipient Luton Museum

Physical Archive
Exists? No

Digital Archive
Exists? No

Paper Archive
recipient Luton Museum

Paper Archive
Exists? No

**Project
bibliography 1**

Publication type A forthcoming report

Entered by Paul Steele (psteele@pre-construct.com)

Entered on 9 August 2004

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