UNIVERSITY OF LEICESTER
Archaeological Services

# An Archaeological Evaluation at Loughborough University Science & Enterprise Park, Loughborough, Leicestershire

**NGR: SK 50431 18351**

Nathan Flavell

ULAS Report No. 2018-138

# An Archaeological Evaluation at Loughborough University Science & Enterprise Park, Loughborough, Leicestershire

## (SK 50431 18351)

**Nathan Flavell**

**For: Pick Everard**

**Planning Ref:**

| Filename/Version | Amended/Checked by | Date |
|---|---|---|
| 2018-138 Draft | Vicki Score | 13/08/2018 |
| 2018-138 | Vicki Score | 15/08/2018 |

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**ULAS Report Number 2018-138**



**Accession Number X.A80.2018**

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# An Archaeological Evaluation at Loughborough University Science & Enterprise Park, Loughborough, Leicestershire (SK 50431 18351)

*Nathan Flavell*

**Summary**

*Archaeological trial trenching was carried out at Loughborough University Science & Enterprise Park, Loughborough, Leicestershire (SK 50431 18351) by University of Leicester Archaeological Services (ULAS) on 25 July- 2 August 2018. The work was undertaken on behalf of Pick Everard in advance of the continued development of the Science and Enterprise Park. A series of undated gullies and post-medieval boundary ditches were uncovered. The site archive will be held by Leicestershire County Council Museum Services under the accession number X.A80.2018.*

## Introduction

This document constitutes the report for an archaeological evaluation at the Loughborough University Science & Enterprise Park, Loughborough, Leicestershire (SK 50431 18351). The work was undertaken on behalf of Pick Everard by University of Leicester Archaeological Services (ULAS) between the 25th July and the 2nd August 2018.

The site is located to the west of and adjacent to the main Loughborough University Campus south of the A512 east of Junction 23 of the M12 motorway (Fig. 1). A programme of archaeological work comprising trial trenching was undertaken to determine the impact of the proposed scheme on any buried archaeology and produce a mitigation strategy for the site. The work followed the procedures laid out in the approved Written Scheme of Investigation (WSI) (Brown 2017).

## Geology and Topography

The site consists of grassed fields (Fig.2) and is approximately 4.5 ha with a high point of approx. 65m in the north-west corner falling to the south-east. The site is bounded to the south by the Burleigh Brook. The British Geological Survey website indicates that the underlying geology is likely to be Gunthorpe Member mudstone.

 


Figure 1: Location of the proposed site



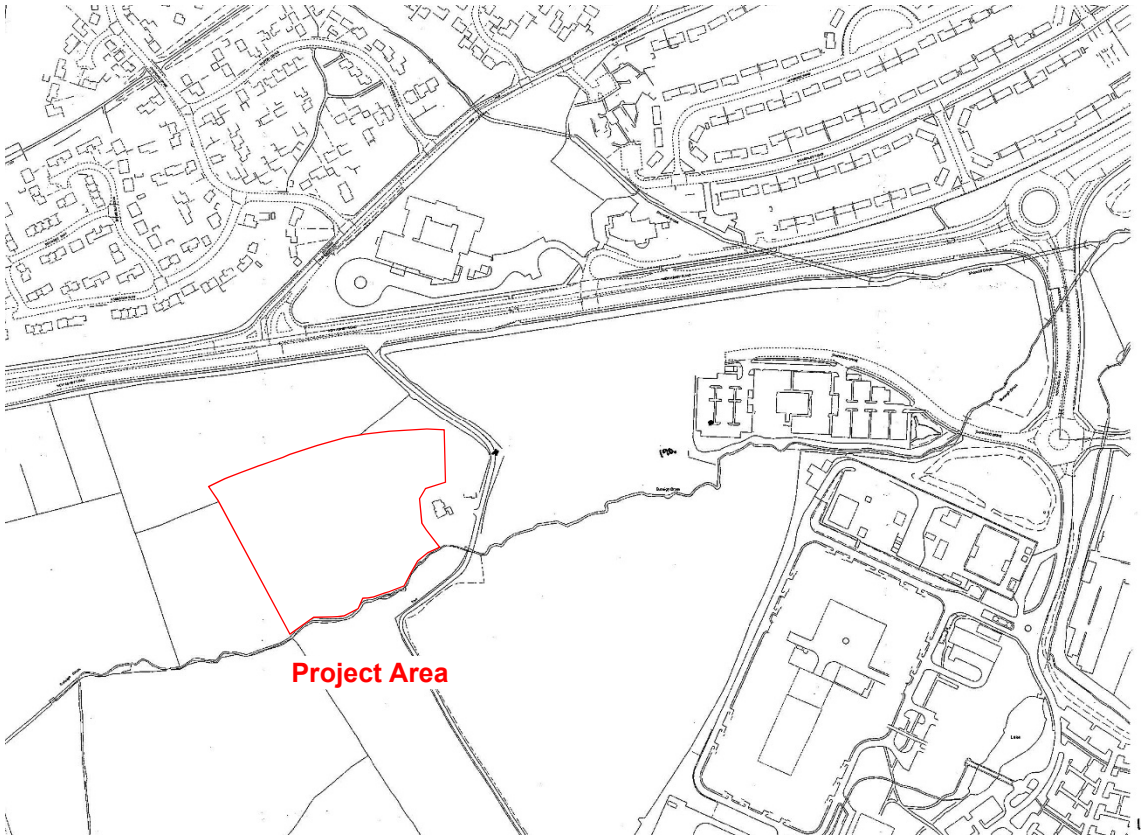


Figure 2: Detail of Site Location

## Historical and Archaeological Background

A desk based assessment has been undertaken for the area (Bocock 2006). The Historic Environment Record (HER) for the area shows that there are no known archaeological sites in the assessment area itself. However, there are a few archaeological sites in the vicinity of the assessment area and these are summarised below.

Various medieval archaeological sites and one Roman site have been recorded within the proposed development area. Part of a moat surrounding Holywell Hall is located within the development area (**MLE636**). There is also a two storey brick house with 16th century doorway and arch (**MLE637**). There is documentary evidence for a church or chapel within the development area (**MLE638**). In addition, a medieval barn with cruck construction is located within the area (**MLE639**). There is a documentary reference to a Vercarium, or possibly Bercarium, in 1240 which may have been a hermitage or sheepcote (**MLE640**). Earl's Dyke is partially located within the development area, and was constructed in the early 12th century to delineate the hunting areas of three feuding lords (**MLE9791**). Holywell Farmhouse dating to the 15th/16th century (**MLE13425**) with an associated medieval outbuilding (**MLE13426**). A mid-18th century landscaped park, which was a replacement and extension of a medieval park, is located 45m to the north of the proposed development area (**MLE578**).

Two coins of Marcus Aurelius and a selection of Roman pottery were found within the development area (**MLE645**). An archaeological evaluation was undertaken at Holywell Hall in 1990, in advance of the construction of a research station for British Gas. This included the survey of surviving earthworks, test pits and trial excavations. The earthworks showed a series of 'house' platforms and associated ridge and furrow field systems adjacent to a moated site which was not affected by the development. Trial trenches suggested that these were of medieval date and represented gardens enclosed by ditches. One medieval wall footing was located. A few early Saxon sherds suggested activity from this period.

The HER lists one prehistoric archaeological site in the vicinity of the proposed development area. An Iron Age or Roman beehive quern was found 285m to the north of the proposed development (**MLE6556**).

Potentially two Roman sites have been recorded in the vicinity of the development area Large quantities of Roman coins, pottery, a spoon and a possible Roman lead weight indicate an occupation site c.400m to the south of the development (**MLE641**). At the same location an undated ditch was recorded (**MLE642**).

There are three post-medieval structures included in the HER in the vicinity of the proposed development area. The line of the Charnwood Forest Line Canal passes along the southern boundary of the development area (**MLE9782**). The Lodge at Garendon Park is located 45m to the north of the development area (**MLE13418**). Burleigh Farmhouse is located 45m to the southeast of the development (**MLE13448**).

Loughborough is referred to in the Domesday Book as land owned by Earl Hugh. There were "8 villagers with 15 Freemen and 16 smallholders owning 12 ½ ploughs, two mills at 10 shillings; meadow 45 acres; woodland 7 furlongs long and 3 furlongs wide. Five thane held them freely". The name Loughborough appears to mean "fortified house of a man called Luhhede.

 

The earliest documentary reference to Holywell Haw dates to 1330. Holy Well Haw means 'an enclosure around the holy well' and suggests that some form of worship, pilgrimage, and/or a building, once existed at the site. The Holy Well Haw has a unique legend associated with it, in the form of a poem which tells of the safe rescue of a lady by a hermit at the holy well.

Loughborough University originated from the Loughborough Technical Institute, set up by Leicestershire County Council in 1909 to provide local facilities for further education. During the First World War the Technical Institute became an 'Instructional Factory' for the Ministry of Munitions. It was renamed as Loughborough College in 1920 and expanded. It widened its reputation beyond engineering to athletics, handicrafts and teacher training. In 1951-2 the College was divided into four separate institutions reflecting its main areas of interest. The College of Technology 1957 was designated a College of Advanced Technology in 1957. In 1966 it was granted university status and received a royal charter as Loughborough University of Technology. In 1977 the original structure was partly restored when the University and the College of Education were amalgamated.

A geophysical survey was undertaken in 2008 (Startascan 2008). This identified a few small anomalies that could be archaeological cut features. Previous trial trenching to the east revealed no indications of archaeological activity, with the exception of medieval plough furrows.

An evaluation undertaken in 2013 in the adjacent field to the east uncovered medieval plough furrows (Kipling 2013).

## Archaeological Objectives

The main objectives of the archaeological work were:

- To identify the presence/absence of any archaeological deposits.
- To establish the character, extent and date range and significance of any surviving archaeological deposits.
- To establish the ecofactual and environmental potential of any archaeological deposits and features encountered.
- To provide sufficient information on the archaeological potential of the site to assess the impact of the proposed development on cultural heritage and to help formulate a mitigation strategy
- To record any archaeological deposits and produce an archive and report of any results.

## Methodology

The trenches were located to cover the area of a new building and carpark (Fig. 3). Due to site constraints, a number of trenches were moved to avoid power lines and areas of trees and scrub resulting in 15, 30m long trenches being excavated (Fig. 4). The trenches were excavated with a toothless bucketed machine down to natural substratum revealed archaeological features.

All trenches and spoil heaps were visually inspected for features and finds. Where present archaeological features were hand cleaned, planned, photographed and sample excavated as detailed in the approved Written Scheme of Investigation (WSI). All work followed the

Chartered Institute for Archaeologists' (CIfA) *Code of Conduct* (2014) and adhered to their *Standard and Guidance for Archaeological field evaluations* (2014).


Figure 3: Plan of proposed site. Plan provided by client

 

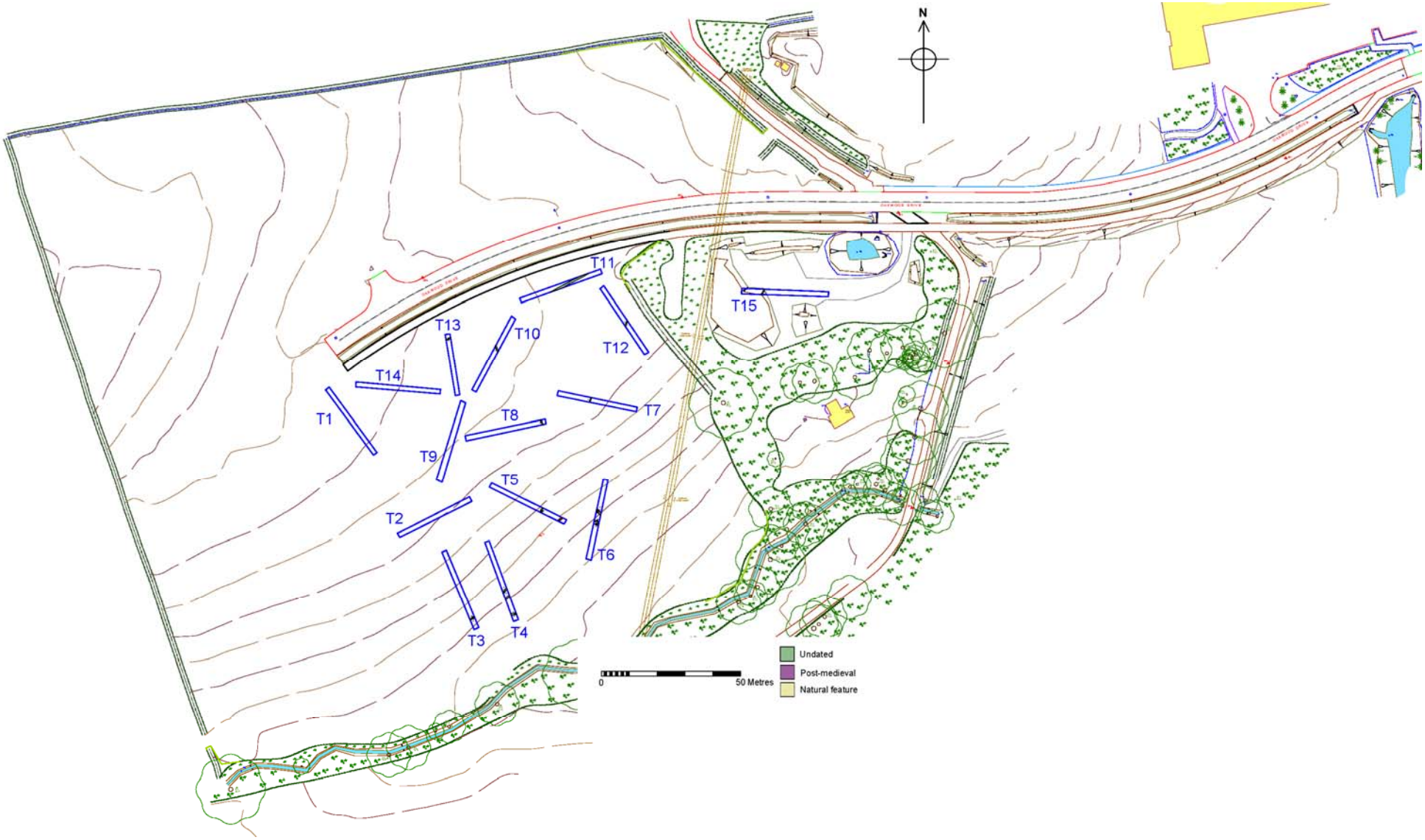


Figure 4: Overall site plan

 

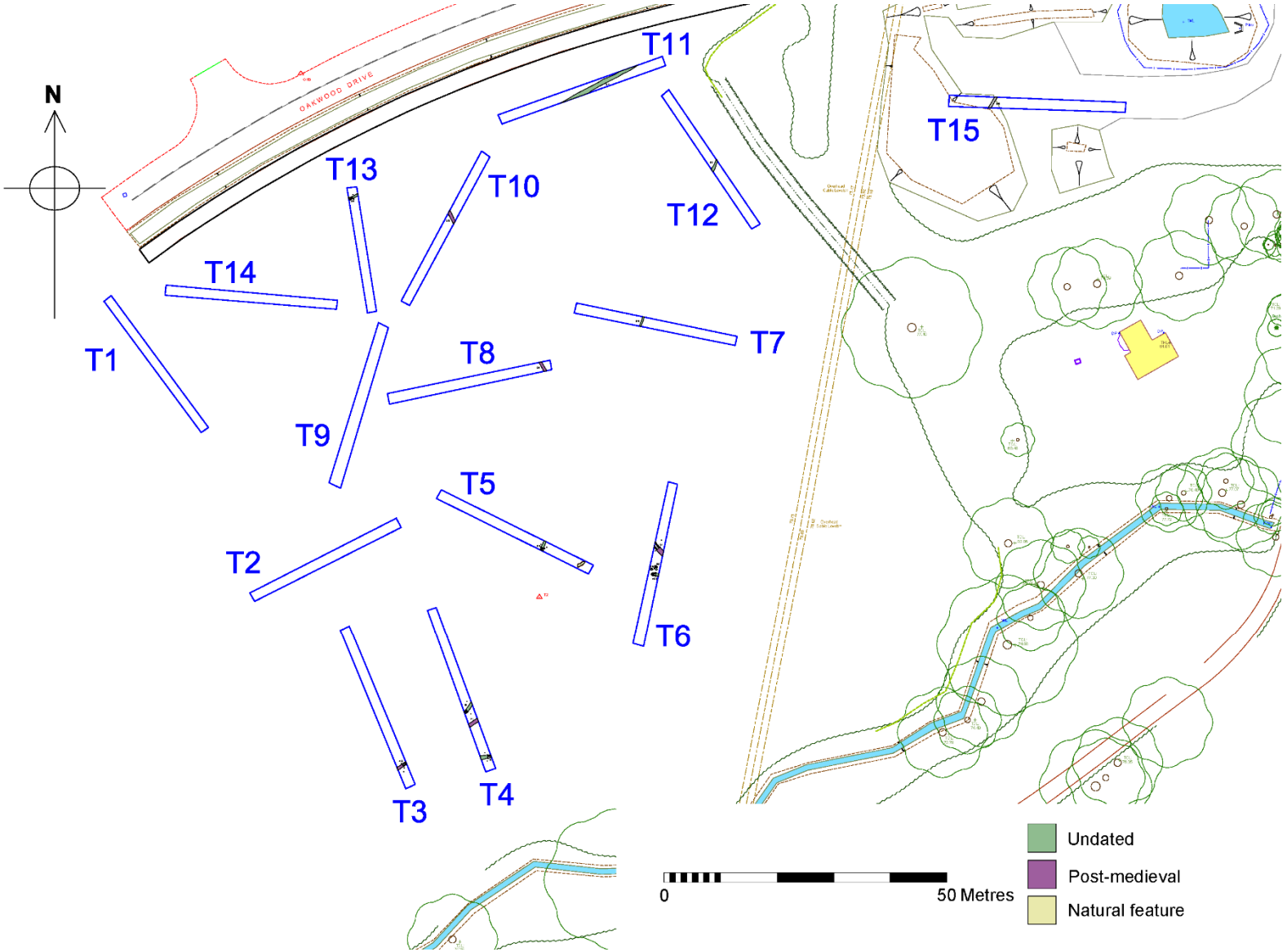


Figure 5: Detail of trench plan showing features

 

## Results

Natural substrata was a pink-red clay with some sand patches which changed to orange-grey sand to the south between 0.18-0.54m below ground level. It was between 1.05-1.35m in trench 15 because of the overburden. A colluvial layer was located in the south of the field in trenches 3, 4 and 6. This consisted of mid yellow-grey sandy silt with some manganese inclusions, c0.25m thick. Topsoil was dark brown clay loam, 018-0.37m thick. A small number of land drains were encountered.

### Trench 1

Trench 1 measured 29.3m x 1.8m, and was aligned northwest-southeast. The natural substratum was encountered between 0.25m and 0.37m. The natural was overlain by topsoil, 0.25m-0.37m thick. No archaeological deposits were identified.

| Trench No. | Length (m) | Width (m) | Area (sq. m) | Min. depth (m) | Max. depth (m) | Archaeology? |
|---|---|---|---|---|---|---|
| 1 | 29.3 | 1.8 | 52.74 | 0.25 | 0.37 | No |

| Interval (m) from northwest end | 0 | 5 | 10 | 15 | 20 | 25 | 29.30 | | |
|---|---|---|---|---|---|---|---|---|---|
| Topsoil depth | 0.28 | 0.37 | 0.33 | 0.26 | 0.25 | 0.24 | 0.3 | | |
| Top of natural substratum | 0.28 | 0.37 | 0.33 | 0.26 | 0.25 | 0.24 | 0.3 | | |
| Base of trench | 0.37 | 0.43 | 0.33 | 0.26 | 0.25 | 0.26 | 0.3 | | |

### Trench 2

Trench 2 measured 29.7m x 1.8m aligned northeast-southwest. The natural substratum was encountered at a depth of 0.2m and 0.26m. The natural was overlain by topsoil, 0.2m-0.26m thick. No archaeological deposits were identified.

| Trench No. | Length (m) | Width (m) | Area (sq. m) | Min. depth (m) | Max. depth (m) | Archaeology? |
|---|---|---|---|---|---|---|
| 2 | 29.7 | 1.8 | 53.46 | 0.2 | 0.26 | No |

| Interval (m) from southwest end | 0 | 5 | 10 | 15 | 20 | 25 | 29.7 | | |
|---|---|---|---|---|---|---|---|---|---|
| Topsoil depth | 0.25 | 0.22 | 0.23 | 0.2 | 0.23 | 0.25 | 0.26 | | |
| Top of natural substratum | 0.25 | 0.22 | 0.23 | 0.2 | 0.23 | 0.25 | 0.26 | | |
| Base of trench | 0.25 | 0.22 | 0.23 | 0.2 | 0.23 | 0.25 | 0.26 | | |

### Trench 3

Trench 3 measured 30.6m x 1.8m aligned north-west to south-east (Figs. 6 & 7). The natural substratum was encountered at a depth of 0.18m and 0.53m. This was overlain by a colluvial deposit (1), mid yellow-grey sandy silt 0.15-0.25m thick. Cut into this was a small ditch [2], aligned northeast-southwest with a steep straight sided profile, 0.71m wide, 0.44m deep (Figs. 8 & 9). It was filled by (3), mid grey-brown clay-silt with occasional small stone inclusions. This was overlain by topsoil, 0.21m-0.25m thick.

 

| Trench No. | Length (m) | Width (m) | Area (sq. m) | Min. depth (m) | Max. depth (m) | Archaeology? |
|---|---|---|---|---|---|---|
| 3 | 30.6 | 1.8 | 55.8 | 0.18 | 0.53 | Yes |

| Interval (m) from northwest end | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 30.6 | |
|---|---|---|---|---|---|---|---|---|---|
| Topsoil depth | 0.25 | 0.25 | 0.18 | 0.19 | 0.2 | 0.23 | 0.15 | 0.1 | |
| Colluvium depth | - | - | - | - | 0.15 | 0.2 | 0.25 | 0.2 | |
| Top of natural substratum | 0.25 | 0.25 | 0.18 | 0.19 | 0.35 | 0.53 | 0.4 | 0.3 | |
| Base of trench | 0.31 | 0.25 | 0.18 | 0.23 | 0.35 | 0.53 | 0.4 | 0.3 | |

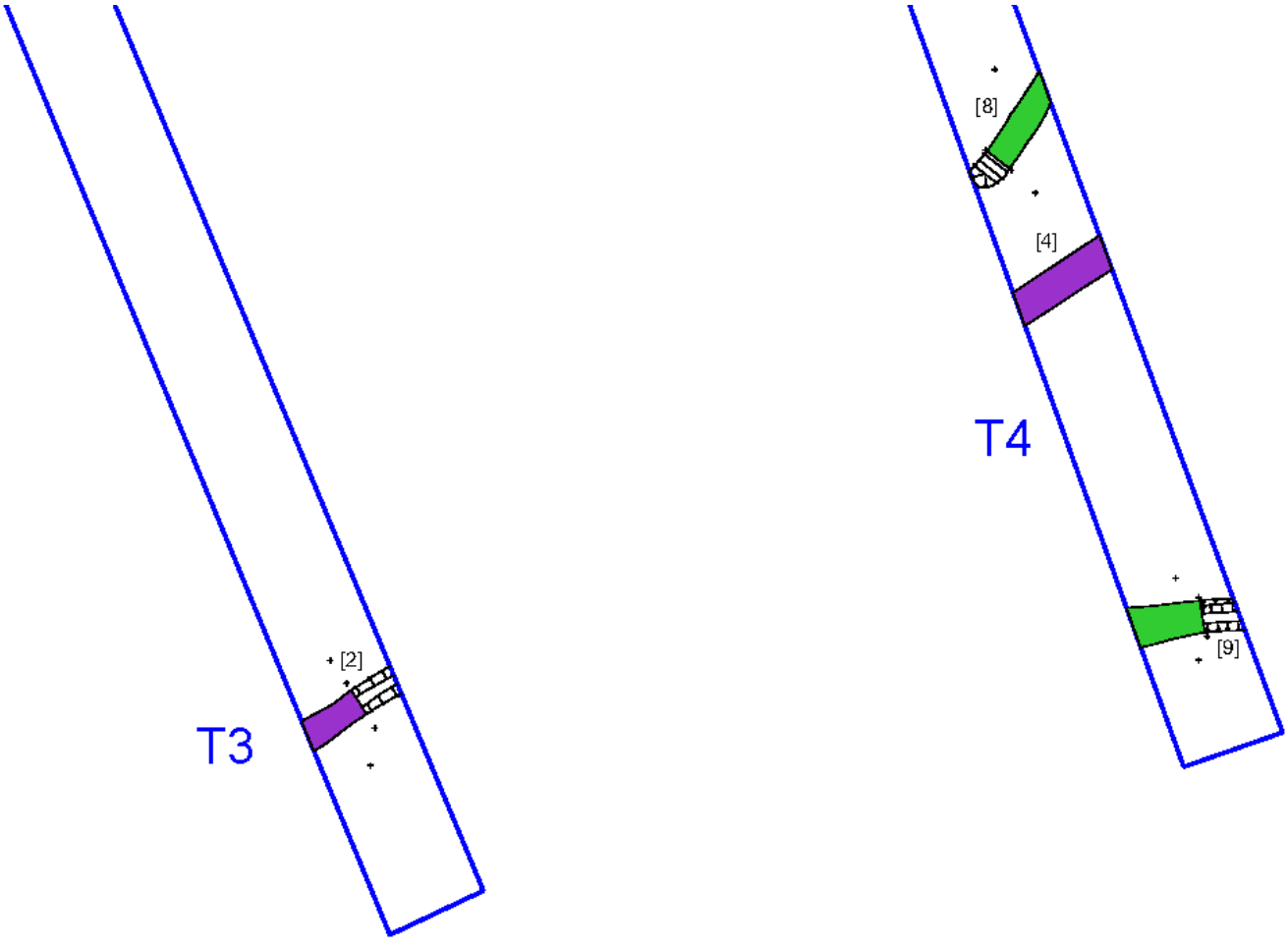


Figure 6: Trenches 3 & 4 plans

 

Figure 7: Trench 3 looking north


Figure 8: Ditch [2] looking northeast

 

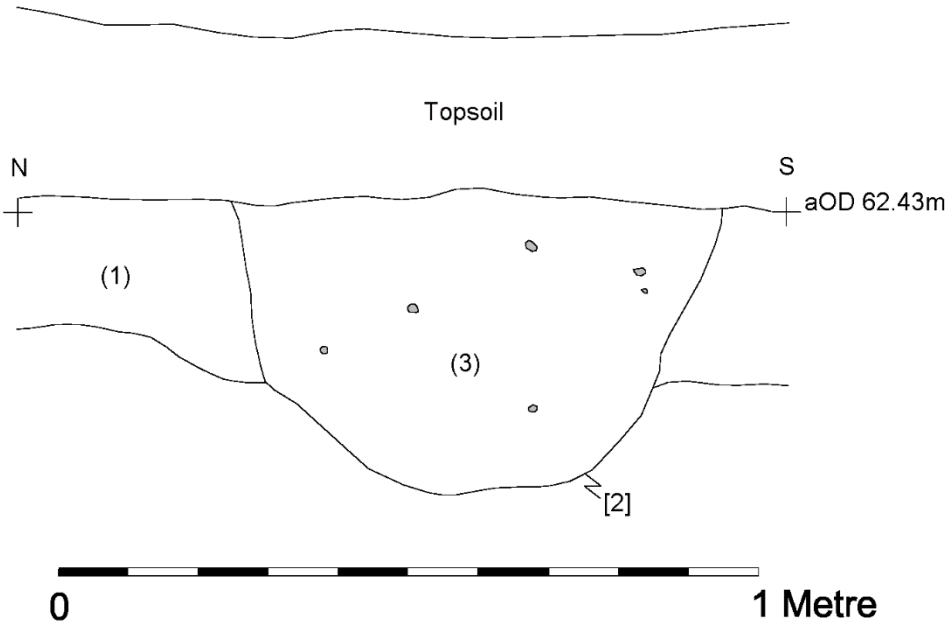


Figure 9: Ditch [2] section

## Trench 4

Trench 4 measured 30.3m x 1.8m, and was aligned northwest-southeast (Figs. 6 & 10). The natural substratum was encountered at a depth of 0.26m and 0.38m. Cut into this were two shallow gullies, [8] and [9]. Gully [8] was aligned northeast-southwest (terminus) with a shallow concave profile, 0.41m wide, 0.09m deep (Figs. 11 & 12). It was filled by (7), light brown-grey clay silt. Gully [9], was aligned east-west with a u-shaped profile, 0.84m wide, 0.35m deep (Figs. 13 & 14). It was filled by (10), mid grey-brown clay silt with occasional stone inclusions. These were sealed by a colluvial deposit (6), mid yellow-grey sandy silt c.0.05m thick. Cut into this was ditch [4], aligned northeast-southwest, 0.4m wide. It was filled by (5), light brown-grey clay silt. This contained 5 sherds of modern pottery and glass.

| Trench No. | Length (m) | Width (m) | Area (sq. m) | Min. depth (m) | Max. depth (m) | Archaeology? |
|---|---|---|---|---|---|---|
| 4 | 30.3 | 1.8 | 54.54 | 0.26 | 0.5 | Yes |

| Interval (m) from northwest end | 0 | 5 | 10 | 15 | 20 | 25 | 30.30 | | |
|---|---|---|---|---|---|---|---|---|---|
| Topsoil depth | 0.26 | 0.3 | 0.33 | 0.27 | 0.25 | 0.25 | 0.31 | | |
| Colluvium depth | - | - | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | | |
| Top of natural substratum | 0.26 | 0.3 | 0.38 | 0.32 | 0.3 | 0.3 | 0.36 | | |
| Base of trench | 0.26 | 0.3 | 0.38 | 0.32 | 0.48 | 0.3 | 0.36 | | |

Figure 10: Trench 4 looking northwest


Figure 11: Gully [8] looking northeast

 

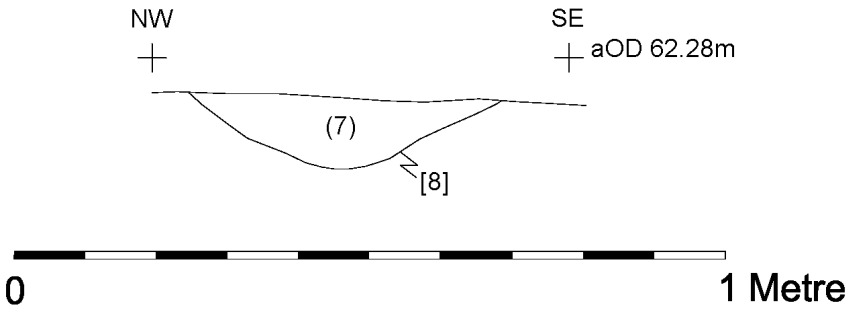


Figure 12: Gully [8] section


Figure 13: Gully [9] looking east

 

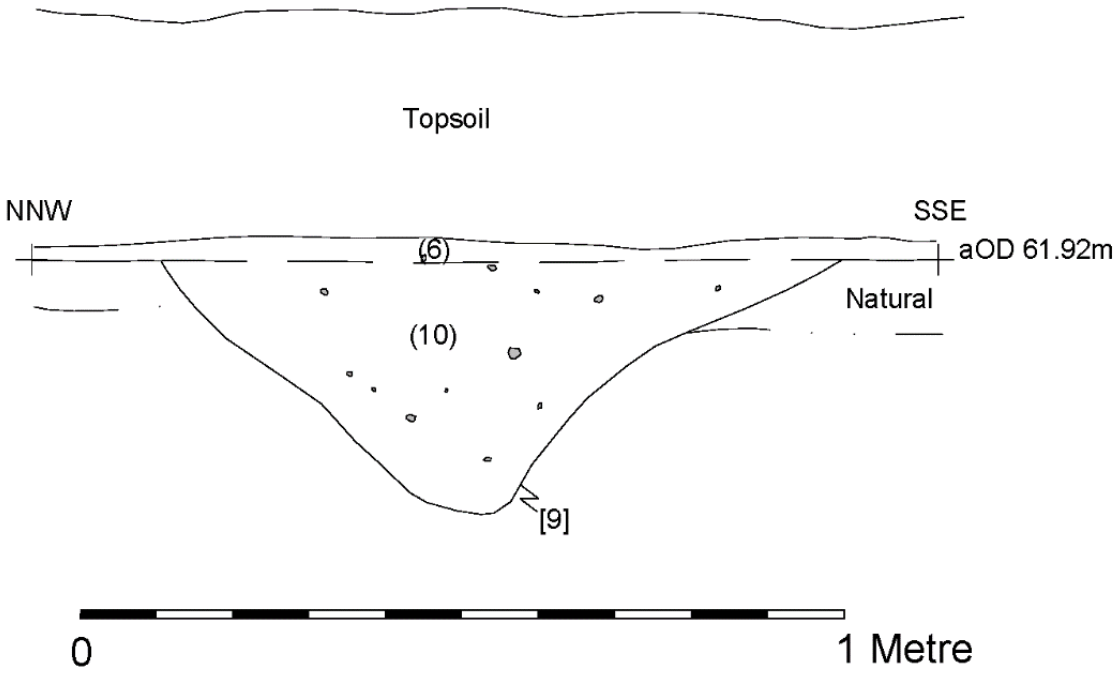


Figure 14: Gully [9] section

## Trench 5

Trench 5 measured 30.3m x 1.8m, and was aligned northwest-southeast (Figs. 15 & 16). The natural substratum was encountered at a depth of 0.18m and 0.34m. The natural clay was overlain by subsoil, 0.02m-0.1m thick. Cut into this was gully [11] (Figs. 17 & 18), aligned north-south with a shallow concave profile, 0.4-0.6m wide, 0.12m deep. It was filled with (12), light brown-grey silty clay with small pebble inclusions. A small irregular feature at the east end turned out to be geological in origin.

| Trench No. | Length (m) | Width (m) | Area (sq. m) | Min. depth (m) | Max. depth (m) | Archaeology? |
|---|---|---|---|---|---|---|
| 5 | 30.3 | 1.8 | 54.54 | 0.18 | 0.34 | Yes |

| Interval (m) from northwest end | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 30.3 | |
|---|---|---|---|---|---|---|---|---|---|
| Topsoil depth | 0.24 | 0.28 | 0.2 | 0.18 | 0.25 | 0.27 | 0.34 | 0.28 | |
| Top of natural substratum | 0.24 | 0.28 | 0.2 | 0.18 | 0.25 | 0.27 | 0.34 | 0.28 | |
| Base of trench | 0.24 | 0.28 | 0.2 | 0.18 | 0.25 | 0.27 | 0.34 | 0.28 | |

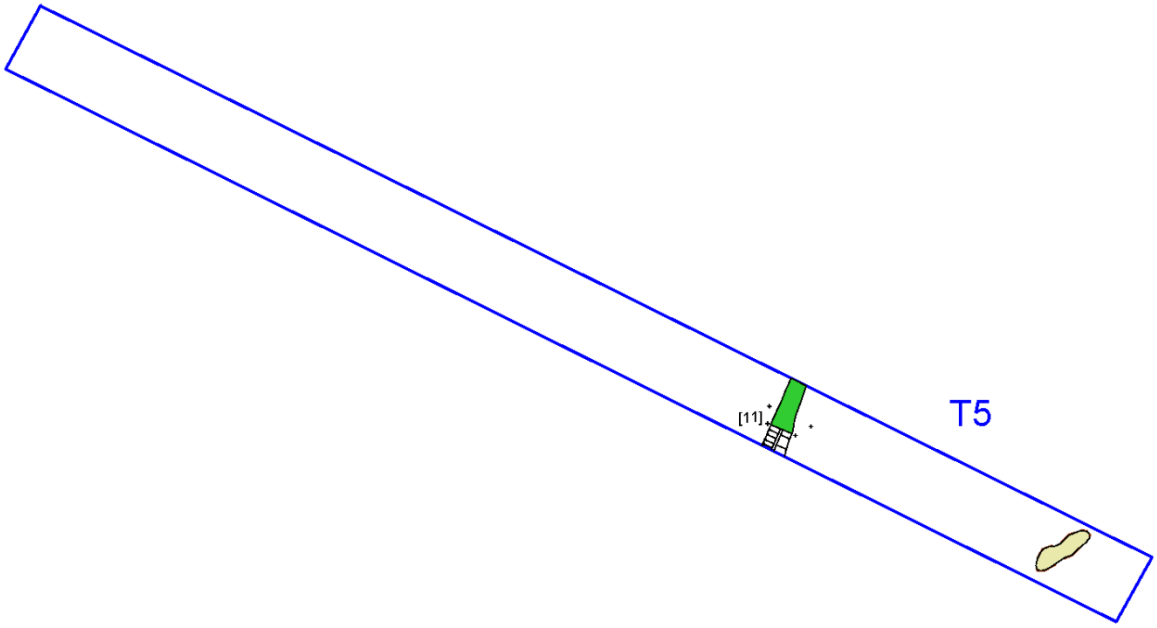


Figure 15: Trench 5 plan


Figure 16: Trench 5 looking southeast

 


Figure 17: Gully [11] looking southwest

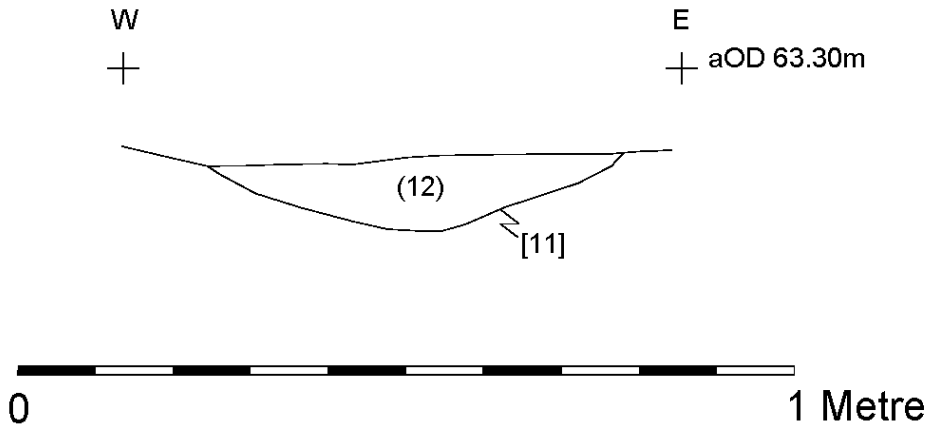


Figure 18: Gully [11] section

**Trench 6**

Trench 6 measured 30m x 1.8m, and was aligned north-northeast-south-southwest (Figs. 19 & 20). The natural substratum was encountered between 0.27m and 0.5m. Cut into this in the same small area was gully [22] aligned east-west with a u-shaped profile, 0.4m wide, 0.49m deep (Figs. 21 & 22). It was filled by (23), mixed yellow-brown silty clay with occasional small stones. Close by were two small circular features. Feature [20] was oval in plan with straight steep sides, 0.99x0.48m, 0.21m deep (Figs 23 & 24). It was filled by (21), dark yellow-grey silty clay with frequent charcoal inclusions. Posthole [18] was circular in plan with straight steep sides, 0.4m diameter, 0.16m deep (Figs. 25 & 26). It was filled by (19), dark yellow-grey silty clay with occasional charcoal flecking. These were overlain by a colluvial deposit (35), mid yellow-grey sandy silt 0.04-0.15m thick. Cut into this was ditch [15], aligned north-south with moderately steep sides, 0.81m wide, and 0.34m deep (Figs. 27-30). The primary silting

 

fill, (17), mid-dark red-brown clay-silt with sand inclusions, 0.09m thick which contained modern brick fragments and the main fill (16) contained modern pottery.

| Trench No. | Length (m) | Width (m) | Area (sq. m) | Min. depth (m) | Max. depth (m) | Archaeology? |
|---|---|---|---|---|---|---|
| 6 | 30 | 1.8 | 54 | 0.27 | 0.5 | Yes |

| Interval (m) from north-northeast end | 0 | 5 | 10 | 15 | 20 | 25 | 30 | | |
|---|---|---|---|---|---|---|---|---|---|
| Topsoil depth | 0.27 | 0.3 | 0.29 | 0.33 | 0.3 | 0.35 | 0.3 | | |
| Colluvium depth | - | - | 0.04 | 0.12 | 0.11 | 0.15 | 0.1 | | |
| Top of natural substratum | 0.27 | 0.3 | 0.33 | 0.45 | 0.41 | 0.5 | 0.4 | | |
| Base of trench | 0.27 | 0.3 | 0.33 | 0.45 | 0.41 | 0.5 | 0.4 | | |

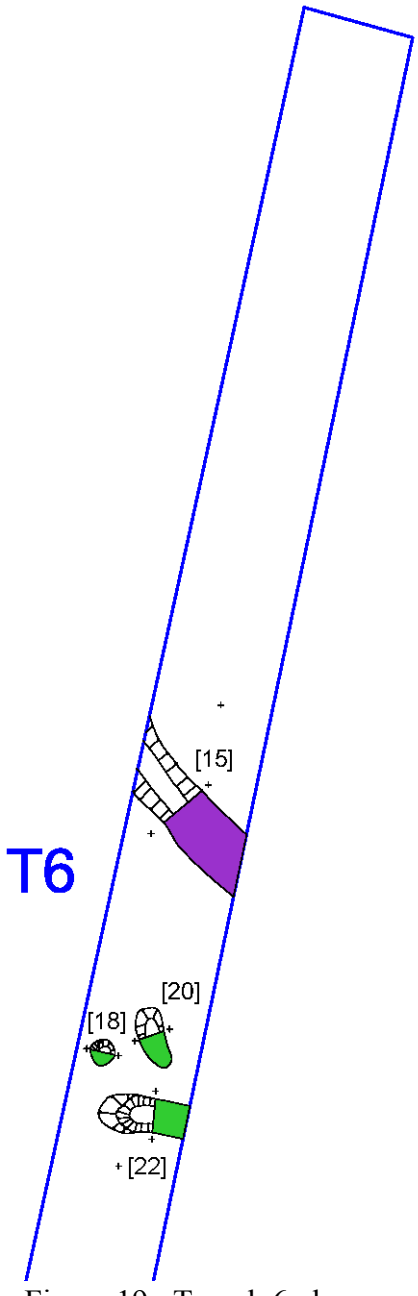


Figure 19: Trench 6 plan

 


Figure 20: Trench 6 looking north-northeast

 


Figure 21: Ditch [22] looking southeast

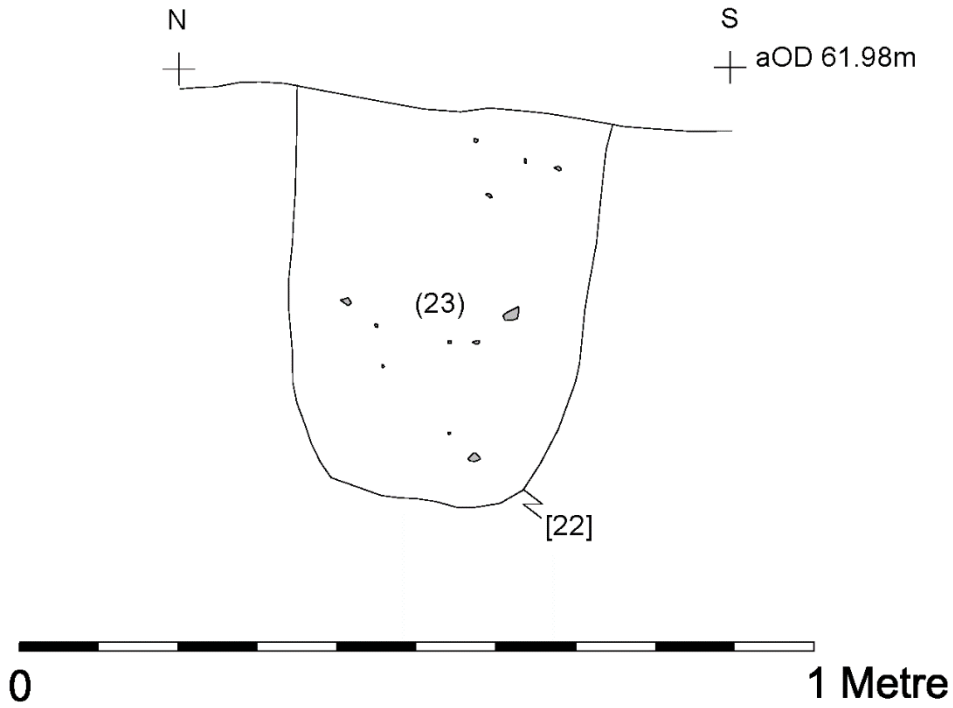


Figure 22: Ditch [22] section

 


Figure 23: Pit [20] looking south

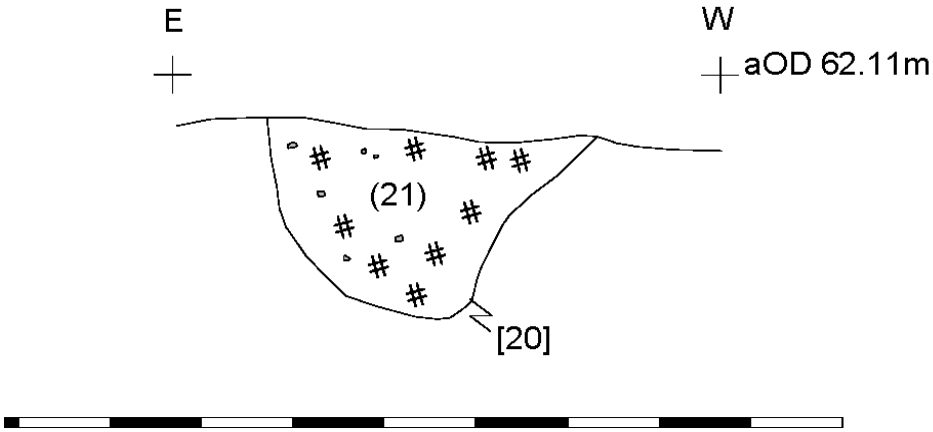


Figure 24: Pit [20] section

 


Figure 25: Posthole [18] looking southwest

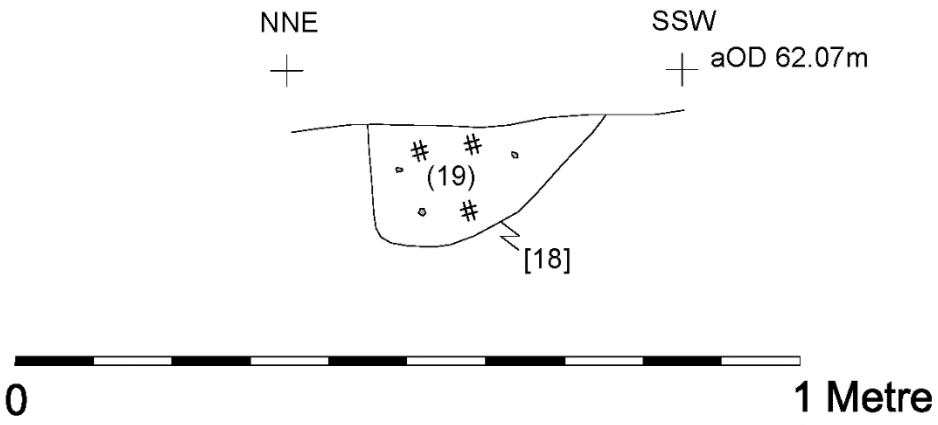


Figure 26: Posthole [18] section

 


Figure 27: Ditch [15] looking northwest

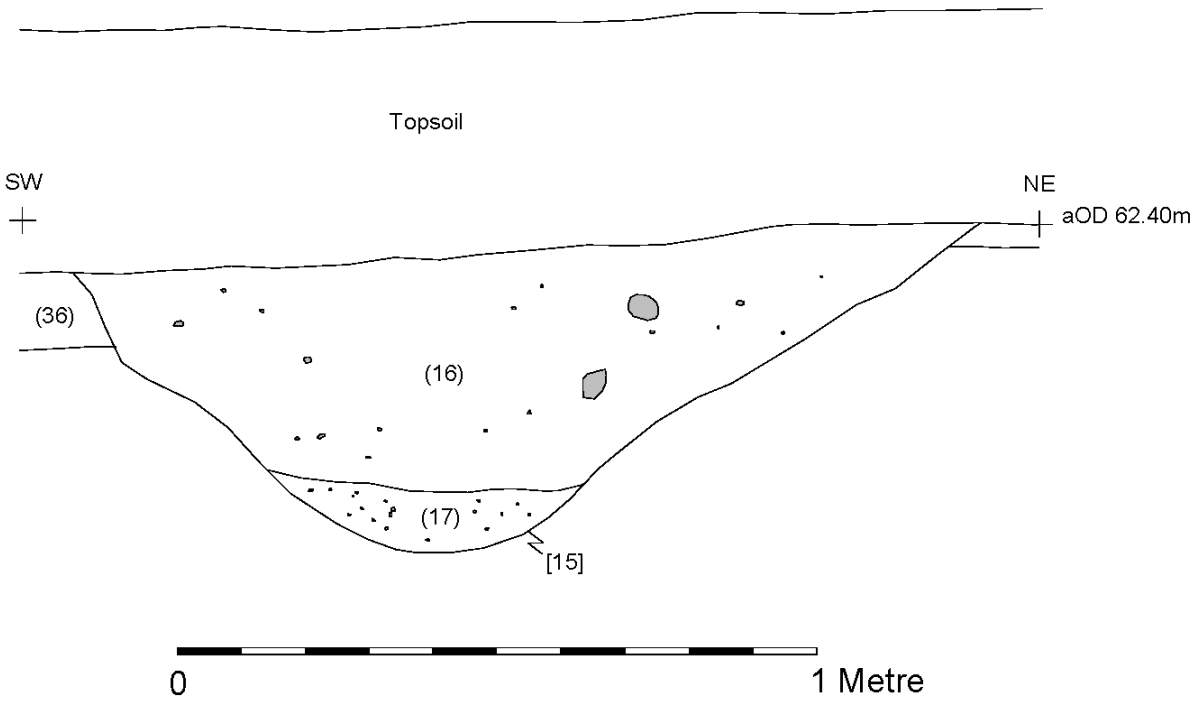


Figure 28: Ditch [15] section

 


Figure 29: Ditch [15] looking south

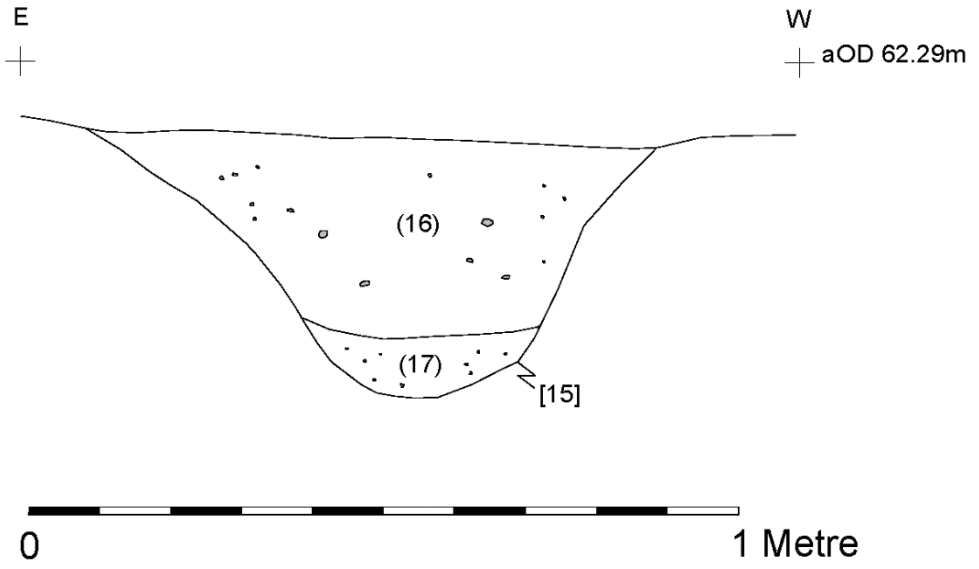


Figure 30: Ditch [15] section

 

## Trench 7

Trench 7 measured 29.5m x 1.8m, and was aligned east-west (Fig. 31). The natural substratum was encountered between 0.23m and 0.4m. Cut into this was gully [26], aligned north-south, 0.3m wide, probably the same gully identified in Trenches 12, 5 and. It was filled by (27), light orange-brown silty clay.

| Trench No. | Length (m) | Width (m) | Area (sq. m) | Min. depth (m) | Max. depth (m) | Archaeology? |
|---|---|---|---|---|---|---|
| 7 | 29.5 | 1.8 | 53.1 | 0.23 | 0.4 | Yes |

| Interval (m) from east end | 0 | 5 | 10 | 15 | 20 | 25 | 29.5 | | |
|---|---|---|---|---|---|---|---|---|---|
| Topsoil depth | 0.28 | 0.25 | 0.28 | 0.28 | 0.4 | 0.24 | 0.23 | | |
| Top of natural substratum | 0.28 | 0.25 | 0.28 | 0.28 | 0.4 | 0.24 | 0.23 | | |
| Base of trench | 0.28 | 0.25 | 0.28 | 0.28 | 0.4 | 0.24 | 0.23 | | |


Figure 31: Trench 7 looking southeast

## Trench 8

Trench 8 measured 29.5m x 1.8m, and was aligned northeast-southwest (Fig. 32). The natural substratum was encountered between 0.2m and 0.31m. Cut into the natural was gully [28], aligned northwest-southeast, 0.5m wide, probably the same gully as identified in Trenches 6 and 10. It was filled by (29), light brown-grey clay silt.

| Trench No. | Length (m) | Width (m) | Area (sq. m) | Min. depth (m) | Max. depth (m) | Archaeology? |
|---|---|---|---|---|---|---|
| 8 | 29.5 | 1.8 | 53.1 | 0.2 | 0.32 | Yes |

| Interval (m) from northeast end | 0 | 5 | 10 | 15 | 20 | 25 | 29.5 | | |
|---|---|---|---|---|---|---|---|---|---|
| Topsoil depth | 0.32 | 0.31 | 0.2 | 0.31 | 0.28 | 0.25 | 0.2 | | |
| Top of natural substratum | 0.32 | 0.31 | 0.2 | 0.31 | 0.28 | 0.25 | 0.2 | | |
| Base of trench | 0.32 | 0.31 | 0.2 | 0.31 | 0.28 | 0.25 | 0.2 | | |


Figure 32: Trench 9 looking southwest

 

## Trench 9

Trench 9 measured 30m x 1.8m, and was aligned north-south. The natural substratum was encountered between 0.22m and 0.3m. The natural was overlain by topsoil, 0.22m-0.3m thick. No archaeological features were identified.

| Trench No. | Length (m) | Width (m) | Area (sq. m) | Min. depth (m) | Max. depth (m) | Archaeology? |
|---|---|---|---|---|---|---|
| 9 | 30 | 1.8 | 54 | 0.24 | 0.3 | No |

| Interval (m) from north end | 0 | 5 | 10 | 15 | 20 | 25 | 30 | | |
|---|---|---|---|---|---|---|---|---|---|
| Topsoil depth | 0.22 | 0.26 | 0.26 | 0.3 | 0.26 | 0.25 | 0.24 | | |
| Top of natural substratum | 0.22 | 0.26 | 0.26 | 0.3 | 0.26 | 0.25 | 0.24 | | |
| Base of trench | 0.26 | 0.3 | 0.3 | 0.3 | 0.26 | 0.25 | 0.24 | | |

## Trench 10

Trench 10 measured 30.7m x 1.8m, and was aligned northeast-southwest (Fig. 33). The natural substratum was encountered between 0.2m and 0.36m. Cut into this was gully [30], aligned north-south, 0.5m wide. It was filled by (31) light brown-grey clay silt, probably the same ditch seen in Trenches 8 and 6.

| Trench No. | Length (m) | Width (m) | Area (sq. m) | Min. depth (m) | Max. depth (m) | Archaeology? |
|---|---|---|---|---|---|---|
| 10 | 30.7 | 1.8 | 55.26 | 0.2 | 0.36 | Yes |

| Interval (m) from southwest end | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 30.7 | |
|---|---|---|---|---|---|---|---|---|---|
| Topsoil depth | 0.2 | 0.26 | 0.27 | 0.34 | 0.3 | 0.36 | 0.36 | 0.35 | |
| Top of natural substratum | 0.2 | 0.26 | 0.27 | 0.34 | 0.3 | 0.36 | 0.36 | 0.35 | |
| Base of trench | 0.2 | 0.26 | 0.27 | 0.34 | 0.3 | 0.36 | 0.36 | 0.35 | |

 


Figure 33: Trench 10 looking southwest

 

## Trench 11

Trench 11 measured 31m x 1.8m, and was aligned northeast-southwest (Fig. 34). The natural substratum was encountered at a depth of 0.25m and 0.39m. Cut into this was a gully, [34] aligned north-south 0.6m wide. It was filled with (35), light brown-grey clay silt.

| Trench No. | Length (m) | Width (m) | Area (sq. m) | Min. depth (m) | Max. depth (m) | Archaeology? |
|---|---|---|---|---|---|---|
| 11 | 31 | 1.8 | 55.8 | 0.25 | 0.39 | Yes |

| Interval (m) from northeast end | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 31 | |
|---|---|---|---|---|---|---|---|---|---|
| Topsoil depth | 0.25 | 0.3 | 0.36 | 0.39 | 0.29 | 0.3 | 0.35 | 0.3 | |
| Top of natural substratum | 0.25 | 0.3 | 0.36 | 0.39 | 0.29 | 0.3 | 0.35 | 0.3 | |
| Base of trench | 0.25 | 0.3 | 0.36 | 0.39 | 0.29 | 0.3 | 0.35 | 0.3 | |


Figure 34: Trench 11 looking southwest

## Trench 12

Trench 12 measured 29m x 1.8m, and was aligned northwest-southeast (Fig. 35). The natural substratum was encountered between 0.27m and 0.38m. Cut into this was gully [32], aligned north-south, 0.4m wide, filed by (33), light orange-brown clay silt, overlain by topsoil, 0.27m-0.38m thick.

| Trench No. | Length (m) | Width (m) | Area (sq. m) | Min. depth (m) | Max. depth (m) | Archaeology? |
|---|---|---|---|---|---|---|
| 12 | 29 | 1.8 | 52.2 | 0.27 | 0.42 | Yes |

| Interval (m) from northwest end | 0 | 5 | 10 | 15 | 20 | 25 | 29 | | |
|---|---|---|---|---|---|---|---|---|---|
| Topsoil depth | 0.3 | 0.3 | 0.32 | 0.27 | 0.27 | 0.38 | 0.28 | | |
| Top of natural substratum | 0.3 | 0.3 | 0.32 | 0.27 | 0.27 | 0.38 | 0.28 | | |
| Base of trench | 0.3 | 0.3 | 0.32 | 0.31 | 0.27 | 0.42 | 0.28 | | |

Figure 35: Trench 12 looking southeast

## Trench 13

Trench 1 measured 22.8m x 1.8m, and was aligned north-south (Figs. 36 & 37). The natural substratum was encountered between 0.24m and 0.36m. Cut into this was gully [24], aligned east-west with a moderate concave profile, 0.42m wide (Figs. 38 & 39). It was filled by (25) mid grey-brown silty clay containing charcoal and slag.

| Trench No. | Length (m) | Width (m) | Area (sq. m) | Min. depth (m) | Max. depth (m) | Archaeology? |
|---|---|---|---|---|---|---|
| 13 | 22.8 | 1.8 | 41.04 | 0.24 | 0.42 | Yes |

| Interval (m) from south end | 0 | 5 | 10 | 15 | 20 | 22.8 | | | |
|---|---|---|---|---|---|---|---|---|---|
| Topsoil depth | 0.25 | 0.24 | 0.3 | 0.36 | 0.34 | 0.28 | | | |

 

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Top of natural substratum** | 0.25 | 0.24 | 0.3 | 0.36 | 0.34 | 0.28 | | | |
| **Base of trench** | 0.25 | 0.24 | 0.3 | 0.36 | 0.42 | 0.28 | | | |

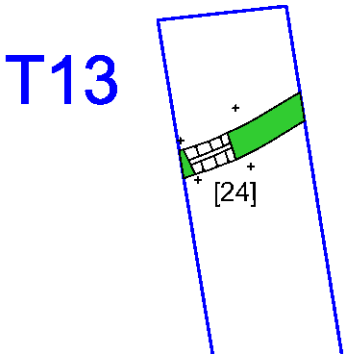


Figure 36: Trench 13 plan


Figure 37: Trench 13 looking south

 


Figure 38: Gully [24] looking east

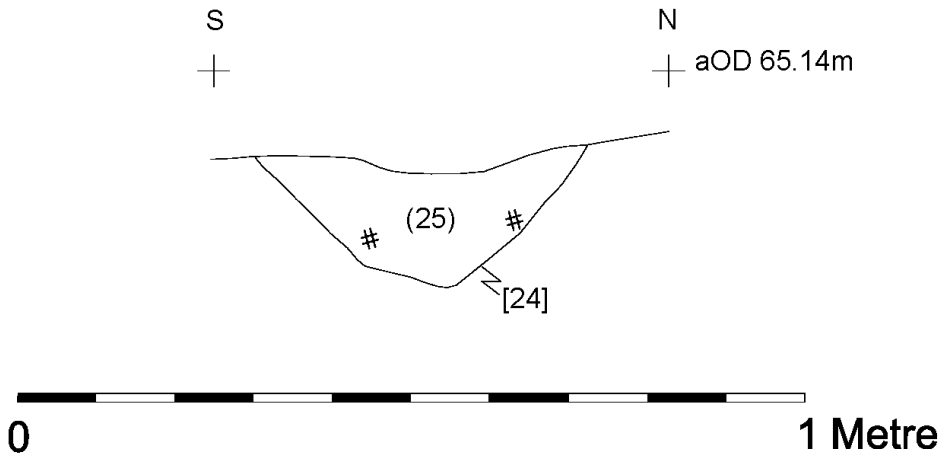


Figure 39: Gully [24] section

 

## Trench 14

Trench 14 measured 31.31m x 1.8m, and was aligned east-west. The natural substratum was encountered between 0.2m and 0.3m. The natural was overlain by topsoil, 0.2m-0.3m thick. No archaeological features were identified.

| Trench No. | Length (m) | Width (m) | Area (sq. m) | Min. depth (m) | Max. depth (m) | Archaeology? |
|---|---|---|---|---|---|---|
| 14 | 31.31 | 1.8 | 56.358 | 0.2 | 0.3 | No |

| Interval (m) from west end | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 31.31 | |
|---|---|---|---|---|---|---|---|---|---|
| Topsoil depth | 0.21 | 0.2 | 0.2 | 0.24 | 0.25 | 0.27 | 0.3 | 0.25 | |
| Top of natural substratum | 0.21 | 0.2 | 0.2 | 0.24 | 0.25 | 0.27 | 0.3 | 0.25 | |
| Base of trench | 0.21 | 0.2 | 0.2 | 0.24 | 0.28 | 0.27 | 0.3 | 0.25 | |

## Trench 15

Trench 15 measured 31.6m x 1.8m, and was aligned east-west. The natural substratum was encountered between 1.05m and 1.35m. There appeared to be a small ditch cut into this aligned northeast-southwest. Further recording of this feature could not take place due to trench depth. A deposit of dark brown-grey silty clay with charcoal flecking was noted above the natural at the east end of the trench 0.15m thick. In the rest of the trench the natural was overlain by mixed red-brown silty clay with some brick inclusions 0.3-0.81m thick. This was most likely a redeposited natural form a nearby balancing pond. This was overlain by a levelling layer, dark brown silty clay with CBM inclusions, 0.22-0.58m. The final layer was a mix of tarmac and redeposited topsoil, 0.12-0.18m thick

| Trench No. | Length (m) | Width (m) | Area (sq. m) | Min. depth (m) | Max. depth (m) | Archaeology? |
|---|---|---|---|---|---|---|
| 15 | 31.6 | 1.8 | 56.88 | 1.05 | 1.35 | Yes? |

| Interval (m) from west end | 0 | 5 | 10 | 15 | 20 | 25 | 30 | 31.6 | |
|---|---|---|---|---|---|---|---|---|---|
| Topsoil depth | 0.15 | 0.18 | 0.14 | 0.15 | 0.12 | 0.12 | 0.12 | 0.12 | |
| Levelling layer | 0.33 | 0.22 | 0.31 | 0.45 | 0.52 | 0.58 | 0.4 | 0.4 | |
| Redeposited natural | 0.57 | 0.73 | 0.81 | 0.55 | 0.44 | 0.3 | 0.68 | 0.68 | |
| Lower deposit | - | - | - | - | - | - | 0.15 | 0.15 | |
| Top of natural substratum | 1.05 | 1.13 | 1.26 | - | - | - | 1.35 | 1.35 | |
| Base of trench | 1.05 | 1.13 | 1.26 | 1.15 | 1.08 | 1 | 1.35 | 1.35 | |

 

## The Finds – *Debbie Sawday/Jennifer McNulty*

The finds are listed below by context.

### Methodology

The pottery was examined under an x20 binocular microscope and catalogued with reference the ULAS fabric series (Davies and Sawday 1999). The results are shown below table 1.

### Conclusion

All the datable material was modern.

Table 1: The Finds by context, fabric, number and weight (grams).

| Context | Fabric/ware | No | Gr | Max Vessel No | Comments |
|---|---|---|---|---|---|
| POT | | | | | |
| 5 | EA10 - Fine White Earthenware | 5 | 12 | | Modern |
| 16 | EA2 - Earthenware 2 | 1 | 204 | | Modern |
| MISC | | | | | |
| 5 | Glass | 5 | 6 | | Modern |
| 17 | EA - Earthenware | 1 | 162 | | Modern brick |
| 23 | Charcoal | 1 | 11 | | |
| 25 | Industrial Residue | 1 | | | |
| 25 | Charcoal | 1 | | | |

## The Environmental Remains - *Adam Santer*

### Introduction

During an archaeological evaluation at Loughborough University Science & Enterprise Park, Leicestershire a sample was taken for the analysis of charred plant remains. The sample was from the fill (21) of the undated potential pit [20]. The analysis of the environmental remains are presented here, together with a discussion of what this can potentially tell us about past diet, crop husbandry strategies and environment at the site.

### Methodology

The samples consisted of a mostly mid-brown clayey silt and were processed in a York tank using a 0.5mm mesh with flotation into a 0.3mm sieve. The flotation fractions (flots) were sorted for plant remains and other artefacts under an x10-40 stereo microscope. The residues were air dried and the fractions over 4mm were sorted in their entirety whilst the fraction under 4mm was only scanned for remains.

 

**Results**

The sample contained a moderate amount of charcoal measuring over 4mm in diameter (and therefore it is potentially suitable for species identification and radiocarbon analysis). No other charred plant remains were found.

**Conclusion and statement of potential**

Due to the small sample size and lack of plant remains found in the sample it was not possible to learn anything about diet, crop husbandry strategies or environment at the site. However, if further work is to be carried out then a suitable sampling strategy should be implemented.

**Discussion**

The excavation revealed a series of undated gullies and post-medieval ditches/modern forming field boundaries and drainage.

A modern ditch running approximately east – west was uncovered in Trenches 3 and 4 (Fig. 40), containing modern pottery. This ditch truncated the colluvial layer in the southern part of the field which also contained modern finds. A second section of ditch aligned approximately north west-southeast was uncovered in trenches 6, 8 and 10. Again modern pot was recovered from fill (16) of ditch [15] which also truncated the colluvium.

Two gullies pre-dating the colluvium were identified. One aligned northeast-southwest across the field was seen in trenches 4, 5, 7 and 12. There was no dating evidence from this feature, but as it was sealed by colluvium in Trench 4, this suggests it is older than the colluvium. The gully in trenches 13 and 11 also appear to be the same linear feature. Again it was undated, but may appear on the geophysical survey (Fig. 40) and could represent an old field boundary or drainage. The pits/posthole and butt end of the gully in Trench 6 is the only suggestion of activity other than field boundaries or drainage, however as they are undated and the environmental sample contained no evidence for any charred plant remains it is difficult to say anything definitive about their nature.

With the exception of the gully in Trenches 11 and 13 many of the anomalies suggesting cut features on the geophysical survey did not translate to features within the trenches. However, two are two larger anomalies between trenches 6 and 8, which are on the projected alignment of a modern ditch and may represent modern material within it.

The first edition OS map of 1884 does not show any obvious boundaries for the identified ditches and gullies. This suggests that given their alignment that they are pre-19th century boundaries, although the pottery suggest they were backfilled in the 18th - 19th century.

 

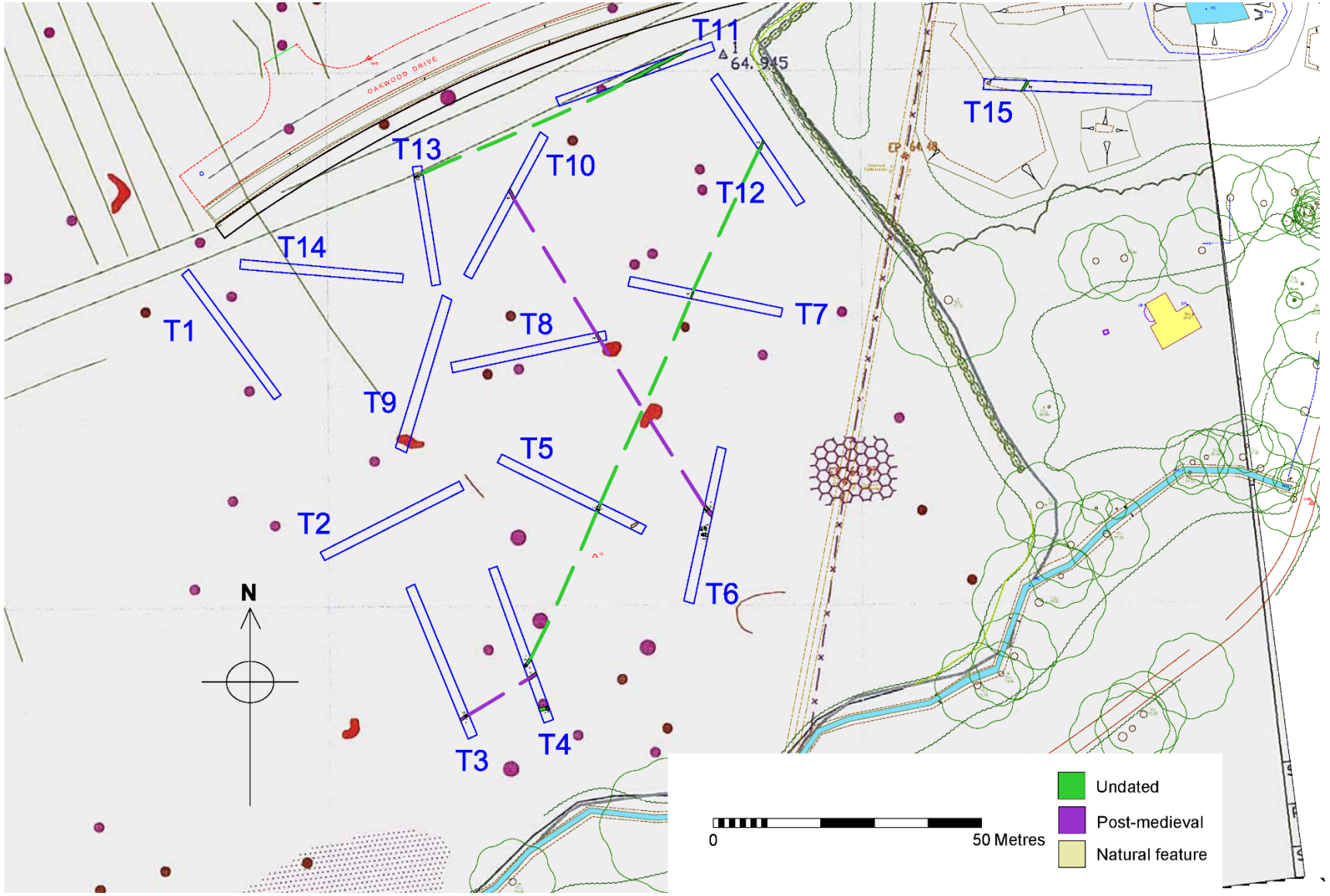


Figure 40: Site plan with features and projected lines of features

 

## Further work and recommendations

The features appear to represent two phases of field boundaries/drainage systems, one clearly modern, the other undated but probably related to post-medieval agricultural activity.

The small pits and butt-ended gully in Trench 6 while undated do suggest something slightly more than drainage features and further work would help to clarify their nature. This could be dealt with as a watching brief during the construction of the building to define their extents and perhaps their date.

## Bibliography

B.G.S. website, http://mapapps.bgs.ac.uk/geologyofbritain/home.html

Blinkhorn, P., 1996. 'Northamptonshire County Ceramic Type-Series' – available on line.

Bocock, S. 2006, *An Archaeological Desk-Based Assessment for a Proposed Development at Holywell Hall, Loughborough University, Loughborough, Leicestershire* ULAS Report **2006-104**

Brown, L. 2017, *Written Scheme of Investigation for Evaluation, Loughborough Science & Enterprise Park* ULAS WSI **18-275**

Brown, D., 2008, *Standard and guidance for the preparation of Archaeological Archives (Institute for Archaeologists)*

Buckley, 1999, *Roman and Medieval Occupation in Causeway Lane, Leicester*, Leicester Archaeology Monograph 5, 165-213.

Davies, S., and Sawday, D., 1999 'The Post Roman Pottery and Tile' in A. Connor and R. Buckley, 1999, *Roman and Medieval Occupation in Causeway Lane, Leicester*, Leicester Archaeology Monograph 5, 165-213.

Kipling, R. 2013 *An Archaeological Evaluation at the Science & Enterprise Park, Ashby Road, Loughborough, Leicestershire* ULAS Report **2013-208**

MPRG, 1998. *A Guide to the Classification of Medieval Ceramic Forms*. Medieval Pottery Research Group Occasional Paper 1, London.

MPRG et al, 2016 *A Standard for Pottery Studies in Archaeology* Medieval Pottery Research Group Occasional Paper, London.

## Archive

The site archive for this phase consists of: 15 A4 trial trench sheets, 1 A4 context index sheet, 34 A5 context sheets, 1 A4 drawing index, 1 A4 drawing record sheet, 1 A4 sample index, 1 A4 photo index sheet, 84 digital photographs and 2 A2 permatrace sheets. It will be held by Leicestershire County Council Museum Services under the accession number X.A80.2018.

## Publication

Since 2004 ULAS has reported the results of all archaeological work through the *Online Access to the Index of Archaeological Investigations* (OASIS) database held by the Archaeological Data Service at the University of York. A summary of the work will also be submitted for publication in a suitable regional archaeological journal in due course.

 

| | | | | |
|---|---|---|---|---|
| **PROJECT DETAILS** | **Oasis No** | Universi1- 326750 | | |
| | **Project Name** | Loughborough University Science & Enterprise Park | | |
| | **Start/end dates of field work** | 25-07-18 – 01-08-18 | | |
| | **Previous/Future Work** | Geophysical survey **J2427**, ULAS DBA **2006-104**, ULAS Evaluation Report **2013-208** | | |
| | **Project Type** | Evaluation | | |
| | **Site Status** | | | |
| | **Current Land Use** | Scrub fields | | |
| | **Monument Type/Period** | Post-medieval | | |
| | **Significant Finds/Period** | Pottery, glass | | |
| | **Development Type** | Academic | | |
| | **Reason for Investigation** | NPPF | | |
| | **Position in the Planning Process** | Planning condition | | |
| | **Planning Ref.** | 18/00124/CONDIT | | |
| **PROJECT LOCATION** | **Site Address/Postcode** | Loughborough University, Epinal Way, Loughborough LE11 3TU | | |
| | **Study Area** | 4.5 ha | | |
| | **Site Coordinates** | SK 50431 18351 | | |
| | **Height OD** | 65m | | |
| **PROJECT CREATORS** | **Organisation** | ULAS | | |
| | **Project Brief Originator** | Local Planning Authority (CCC) | | |
| | **Project Design Originator** | ULAS | | |
| | **Project Manager** | Vicki Score | | |
| | **Project Director/Supervisor** | Nathan Flavell | | |
| | **Sponsor/Funding Body** | Pick Everard | | |
| **PROJECT ARCHIVE** | | **Physical** | **Digital** | **Paper** |
| | **Recipient** | Leics MusService | Leics MusService | Leics MusService |
| | **ID (Acc. No.)** | X.A80.2018 | X.A80.2018 | X.A80.2018 |
| | **Contents** | Pottery, glass | Photos | Context index, context sheets, photo records, sample record, contact sheet, permatrace |
| **PROJECT** | **Type** | Grey Literature (unpublished) | | |

| | | |
|---|---|---|
| **BIBLIOGRAPHY** | **Title** | Archaeological Evaluation at Loughborough University Science & Enterprise Park, Loughborough, Leicestershire |
| | **Author** | Flavell, N. |
| | **Other bibliographic details** | ULAS Report No 2018-138 |
| | **Date** | 2018 |
| | **Publisher/Place** | University of Leicester Archaeological Services / University of Leicester |
| | **Description** | Developer Report A4 pdf |

**Acknowledgements**

Thanks are extended to the client for their co-operation and assistance on site. Fieldwork was undertaken by Nathan Flavell, with James Earley and Tome Fox; the report was written by Nathan Flavell and the project was managed for ULAS by Vicki Score.

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