Land East of Church Street and South of Bicker Road, Donington, Lincolnshire

An Archaeological Investigation



Len Middleton and Tom Bourne

CAMBRIDGE ARCHAEOLOGICAL UNIT

UNIVERSITY OF CAMBRIDGE

CAMBRIDGE ARCHAEOLOGICAL UNIT

Land East of Church Street and South of Bicker Road, Donington, Lincolnshire.

An Archaeological Investigation

Len Middleton and Tom Bourne

Illustrations by Ellie Winter

With contributions by:
Pottery ***Craig Cessford****, Animal Bone* ***Vida Rajkovaca****, Paeleoenvironment* ***Gemma Warham***

NGR	TF 2092 3601
Planning reference	H04-0208-20
Accession number	LCNCC:2021.89
Site Code	CBDS21
CAU report number	1507
OASIS number	cambridg3-431045

Edited by: **Ricky Patten** (Project Manager)

Approved for issue by: **Ricky Patten** (Project Manager)

February 2022

© Cambridge Archaeological Unit
Department of Archaeology
University of Cambridge
34 A&B Storey's Way, Cambridge, CB3 0DT

CONTENTS

Summary	1
Introduction	2
Location, Topography and Geology	2
Archaeological Background	2
Project Aims and Methodology	3
Recording System	4
Archive	4
Results	5
Metal Detecting Survey	5
Bucket Sampling	5
Trenches	5
Trench 1	6
Trench 2	7
Trench 3	7
Trench 4	7
Watching Brief	5
Specialist Reports	9
Pottery Report	9
Faunal Remains	9
Fired Clay Report	10
Palaeoenvironmental Assessment Report	10
Discussion	16
Acknowledgements	17
References	18
Appendix 1: Figures	20
Appendix 2: *Trench and Feature Tables*	28
Appendix 3: OASIS	32

LIST OF FIGURES

Figure 1: Site Location 20
Figure 2: Site Plan 21
Figure 3: Photographs from Trench 1 22
Figure 4: Sections of features in Trench 1 23
Figure 5: Photographs from Trenches 2 and 3 24
Figure 6: Sections of features in Trenches 2 and 3 25
Figure 7: Photographs from Trench 4 26
Figure 8: Sections of features in Trench 4 27

Summary

The Cambridge Archaeological Unit (CAU) was commissioned by Burmor Construction to undertake a trenched evaluation and subsequent monitoring on the development of a new Co-Op at land East of Church Street and South of Bicker Road, Donington, Lincolnshire (TF 2092 3601). An evaluation was carried out between the 5th and 7th July 2021, and identified a series of ditches and pits of 10th to 15th century date. This was complimented by an additional programme of archaeological monitoring comprising the excavation of an additional trench and the monitoring and recording of below ground elements of the construction works between the 7thand 8th October 2021. This additional work revealed a dense area of ditching and pits dating to the 10th to 15th century.

Introduction

The Cambridge Archaeological Unit (CAU) were commissioned by Burmor Construction to undertake a programme of archaeological investigation that comprised a trenched archaeological evaluation and monitoring programme on Land East of Church Street and South of Bicker Road, Donington, Lincolnshire, ahead of, and alongside, the development of two retail units, a car park, landscaping and associated works, including the demolition of previously existing buildings (Planning Reference: H04-0208-20). The evaluation took place between 5th and 7th July 2021, following on from a Desk Based Assessment (DBA) carried out by Archaeological Project Services (APS 2020). The evaluation was followed by archaeological monitoring of the construction works between the 7th and 8th October 2021. A CAU written scheme for investigation (Patten 2021) was issued in response to a brief by the Lincolnshire County Council Historic Places Team (Marsham 2021), who also approved and monitored the works. The Museum confirmed Site Code is CBDS21 and the Museum Accession Number is LCNCC :2021.89.

Location, Topography and Geology

The Development Area (DA) is located on land East of Church Street and South of Bicker Road, Donington, Lincolnshire (Figure 1). It is situated on the northern part of Donington, close to the nearby church of St. Marys and the Holy Rood, and is within 50m of the northern limit of the existing settlement.

The DA centres on (TF 2092 3601) and extends over approximately 0.34 hectares, which at the time of the evaluation was a vacant commercial premises (a vehicle sales company) and associated parking areas comprising gravel, concrete/tarmac, and grass areas. The topography of the site is relatively flat at c. 4.m OD. The underlying geology is a bedrock comprising of Oxford Clay Formation that is overlain with Tidal Flat deposits of clay and silt (British Geological Survey website; accessed February 2022). The natural geology the features were cut into in the evaluation trenches were Tidal Flat silts.

Archaeological Background

Prior to the evaluation there had been no previous archaeological investigations within the DA. There is a grade I Listed building within 1km of the site, the Church of St. Mary and the Holy Rood (ML22493; List no. 1064449), and a Grade II* Listed building Church House (MLI94316; List no. 106448), with three Grade II Listed buildings between 100-200m of the DA.

Prehistoric

No confirmed prehistoric finds or features have been identified within the DA, and indeed, there is very little evidence for any activity in the wider area up to the end of the Bronze Age, with the exception of a small number of Middle Bronze Age flints recovered to the west of the village. Up until the Bronze Age the area was subject to a series of marine inundations that left several metres of alluvium deposits.

Roman

Donington lies to the Eastern End of the Roman thoroughfare known as the Salter's Way that connected it to Saltersford near Grantham (Margary 1973). Despite this, little evidence for Roman activity has been recorded within the vicinity of the DA.

To the northwest a substantial amount of Roman pottery was discovered but never investigated, while to the southwest a silver antoninianus coin of Emperor Gallienus (AD 253-268) was found.

Early Medieval

It is likely that Donington village had been founded by the latter part of the Early Medieval period due to its inclusion in the Domesday Book, although no finds of this period have been recovered from within 500m of the DA.

Medieval

The village is first recorded in the Domesday Book as *Donnicture* or *Duninctune* (homestead of the Dunn(a)) (Cameron 1998). The land was owned by the Abbott of Peterborough and contained c. 22 saltpans and 54 acres of meadow.

The church of St. Mary and the Holy Rood, built in 1228, is located 60m southwest of the DA with the edge of the churchyard 15m away. It is thought the medieval village of Donington extended into the southern part of the DA, however, this is purely speculative.

West of the church several sherds of medieval pottery and a silver penny of Edward I (1272-1307) were recorded. Some 13th to 14th century pits were excavated during an archaeological evaluation undertaken along Church Street (Peachey 2010). The pits were sealed by layers of alluvium that were in turn cut by late medieval and post-medieval features.

Post-Medieval and Modern

18th century maps show no activity within the DA, although these maps lack any detail. The 1973 Ordnance Survey map is the first to show buildings present within the boundaries of the DA.

Project Aims and Methodology

The work was carried out in accordance of the Written Brief prepared by Linconshire County Council Historic Place Team (2021), CIfA's *Code of Conduct* (2014) and *Standards and Guidance for Archaeological Field Evaluation* (CIfA 2014), and the Lincolnshire County Council *Archaeological Handbook* (Jennings 2019).

The trenched evaluation aimed to '*identify, assess and record'*, any archaeological features, remains and deposits within the DA. To achieve this, three trenches were machined totalling 80m (Figure 2). The trenches were cut using a 16-ton tracked excavator with a 2m wide toothless ditching bucket. Topsoil and underlying deposits were removed under the direct supervision of an experienced archaeologist and the removed overburden was placed in separate stacks on either side of the trenches.

The archaeological monitoring and recording programme was conducted during the digging of foundations for the new supermarket building under the direct supervision of an experienced archaeologist. Archaeological remains were planned, excavated, and recorded, and the surfaces scanned for artefacts. As the development had begun prior to further mitigation a single trench 30m long was cut within the footprint of the new car park.

After machining, each trench was planned digitally using GPS, and all spoil heaps and identified features were scanned with a metal-detector. Excavation of all features was carried out using hand-tools, with one-metre slots excavated in linear features at suitable intervals, pits and post-holes were at least half-sectioned and natural/ambiguous features tested. All work was carried out in strict accordance with statutory Health and Safety legislation and within the recommendations of FAME (Allen & Holt 2010) and in accordance with a site-specific risk assessment and the CAU Health and Safety policy.

Recording System

Recording of archaeological features and deposits followed a CAU designed system that was developed for extensive rural projects. Context numbers are indicated in the text in square brackets (e.g. [100]) and feature numbers are denoted by the prefix F. (e.g. F.1), these are assigned to stratigraphic events such as ditches, pits and postholes. All sections were drawn at either 1:10 or 1:20 scale; bulk environmental samples were taken where appropriate; and a digital photographic archive was assembled.

Archive

This investigation, both the trenched evaluation and monitoring programme produced varying quantities of archival material as outlined in Tables 1 and 2. All documentary records and accompanying artefacts have been assembled into a catalogued archive in line with Appendix 6 of MoRPHE (Lee, 2015). At the time of writing, archive is being stored at the CAU offices, upon completion of the project they will be transferred to The Collection, Lincoln.

Archive Item	*Total Number*
Archaeological Features	15
Archaeological Slots	15
Environmental Samples	4
Graphic Sheets	2
Archive Files	1

Table 1: Archive

Artefact Type	*Number*	*Weight (g)*
Pottery	20	570
Animal bone	79	850
Burnt Clay	2	26
Total	**67**	**812**

Table 2: Main Artefact Totals

Results

The Development Area was evaluated by three trenches totalling 80m in length (at 2.0m wide) in the first instance, which equated to approximately 5% of the 0.34 hectares site. The evaluation indicated limited disturbance to the archaeological levels by the construction of modern drainage on site, but, overall, the potential for archaeological survival was moderate. The additional trench demonstrated that the creation of the new car park did not impact on the underlying deposits and that within the area of the car park archaeological deposits should still survive. All of the archaeological features encountered were medieval in date, from the 10th to 15th centuries. The following sections outline the results from various components of the evaluation, additional works and monitoring including the results from bucket sampling, metal detecting and the trenches themselves.

Metal Detecting Survey

A metal detecting survey was carried out on the surface of the features and subsoil heaps, however, the topsoil was not metal detected as this had been disturbed by the construction of the gravel and concrete parking within the DA. From a visual inspection of the topsoil there was a substantial amount of later 20th century refuse, none of which was retained. There was no material recovered from the metal detector survey of the subsoil or archaeological features.

Bucket Sampling

A programme of bucket sampling was undertaken at either end of the trenches whereby 90 litres of topsoil and the same of subsoil were hand sorted to look for material culture. The topsoil from all the trenches had a significant amount of late 20th century material present, probably related to the construction of the current commercial buildings and associated parking on site; this material was not retained. In comparison, the subsoil contained no material culture.

Trenches

The following sections give an overview of the results from the individual trenches, and the archaeological features identified within them. A tabulated overview of the results is also presented in Appendix 1. The machining of the evaluation trenches demonstrated a fairly consistent area of made ground comprising of gravel on top of

a crushed and compacted layer of hardcore/concrete covering most of the area investigated, with the eastern end of Trench 1 an exception. This made ground was fairly consistent in depth with around 0.1m of gravel over 0.25m of crushed hardcore/concrete. Modern intrusions were present and these were of sufficient depth to truncate the archaeological level (see Figure 2). In Trench 3 two large concrete drains were present towards the centre and western end, whilst an electrical cable was discovered at the eastern end. The electrical cable was CAT scanned and gave off no signal, but in the interests of safety a baulk was left either side of it and above it. A large concrete slab of unknown purpose was discovered in Trench 2. Below the made ground, both topsoil and subsoil was present; albeit the top half of the topsoil was heavily disturbed during the construction of the commercial buildings currently on site. The depth of both topsoil and subsoil was consistent across all three evaluation trenches with the topsoil and subsoil each averaging around 0.30m in depth. The additional trench (4) demonstrated that the new car park area comprised 0.5m of gravel and tarmac directly on top of the underlying topsoil and subsoil deposits, which were of similar depths to those recorded within the primary evaluation.

The results from the trenches indicate the area was clearly settled in the Medieval period with a series of ditches aligned north-south or east-west, forming possible rectilinear enclosures or plots. The pottery evidence suggests the area may have already been in use in the 10th century, although this evidence is limited (just one sherd), and continued to be in use up until the 15th century. There is no evidence of activity on the DA from the 15th century up until the construction of the current commercial buildings and associated parking on the area in the latter half of the 20th century. This fits a wider pattern in Donington, with a shift of settlement focus towards the south after the medieval period.

Trench 1 (Figures 3 and 4)

Trench 1 was 20m in length and oriented northeast to southwest, and was 0.94m deep. Four features were identified; three ditches (**F.2**, **F.5** and **F.9**) and a post-hole (**F.1**) cut into the underlying Tidal Flat silts.

> **F.1 [1.02]** A circular post-hole measuring 0.39m in diameter with a depth of 0.20m. It had steep straight sides with a concave base and was filled with light brownish-grey, sandy silt (1.01). No material culture was recovered from this feature.
>
> **F.2 [2.02]** The terminus of an east-west orientated ditch of at least 2.5m in length, terminating at its eastern end within the trench. It was 0.1m in depth with a width of 0.52m and had moderate straight sides with a concave base. It was filled with a light greyish-brown sandy-silt with no inclusion (2.01). No material culture was recovered from this feature.
>
> **F.5 [5.03]** A north-south orientated medieval ditch. It was 2.20m wide and 0.57m deep with moderate concave sides and a concave base. The fills were a light grey/grey-brown sandy-silt with no inclusions. 1 sherd of Grimston-ware pottery dating from the 13th to 15th century was recovered, along with a small amount of animal bone.
>
> **F.9 [9.03]** The terminus of a northwest-southeast orientated ditch, terminating at its northwest end within the trench. It was 1.90m wide and 0.52m deep with moderate straight sides and a flat base. It was filled with a light brownish-grey/greyish-brown sandy silt with no inclusions. A

small amount of animal bone was recovered., including a horn core from a cow with chop marks at the base (see Table 4).

Trench 2 (Figures 5 and 6)

Trench 2 was 30m in length and orientated north-south. It was machined to a maximum depth of 0.95m revealing one ditch (**F.4**) cut into a geology of Tidal Flat silts. It was truncated by one modern feature, a large concrete slab, whose purpose was unknown.

F.4 [4.02] An east-west orientated medieval ditch. It was 0.62m wide and 0.05m deep with shallow sides and a concave base and was filled with a yellow-grey sandy-silt that had no inclusions. A small quantity of animal bone was recovered.

Trench 3 (Figures 5 and 6)

Trench 3 was 30m in length and orientated east-west. It was machined to a maximum depth of 0.95m revealing three ditches (**F.3**, **F.6** and **F.8**) and one pit (**F.7**) cut into a geology of Tidal Flat silts. It was truncated by three modern features, two drains at its western end and an electric cable to its eastern end.

F. 3 [3.04] A north-south orientated medieval ditch. It had a width of at least 1.31m (its eastern side was truncated by a modern drain that prevented excavation of its full width) and was 0.75m deep. Its sides were moderately sloped and straight and its base was flat. Its fills were largely mid-brown sandy-silts with no stone inclusions. One fill [3.03] had moderately dense concentrations of mussel shells. Small amounts of animal bone were recovered as well as 6 sherds of pottery dating from the 10th to the 15th centuries.

F.6 [6.02] A north-south orientated medieval ditch. It measured 0.93m wide and 0.21m deep with moderately sloped straight sides and a concave base. It was infilled with a grey-brown sandy silt with no inclusions. A single sherd of shelly ware pottery was recovered, of possible 13th/14th century date.

F.7 [7.02] A sub-circular pit that cuts F.8. It measured 0.77m wide and 0.26m deep, with moderately sloped, curved sides and a concave base. Its fill [7.01] was a mid-brown, sandy-silt, with some inclusions of highly fragmented mussel shells. No other material culture was recovered.

F.8 [8.02] An east-west orientated ditch that is cut by **F.7**. It was at least 0.34m wide and 0.15m deep. It had moderate curved sides and a flat base with a grey-brown sandy-silt fill. No material culture was recovered from this feature.

Trench 4 (Figure 7 and 8)

Trench 4 was 30m in length and orientated northwest-southeast. It was machined to a maximum depth of 1.34m revealing five ditches (F.10,F.11,F.12,F.14 and F.16) and two pits (F.13 and F.15). cut into a geology of Tidal Flat silts.

F.10 [10.02] A north-south orientated ditch that cut ditch F.11. It was 0.72m wide and 0.21m deep. It had moderate curved sides and a flat base with a grey-brown sandy-silt fill. Finds comprised two oyster shells, two pieces of burnt clay and a single piece of animal bone.

F.11 [11.03] A north-south orientated ditch that was cut by ditch F.10.It was at least 0.45m wide by 0.4m deep and was steep sided with a concave base. This feature contained two fills both of which were mid greyish brown sandy silts with no inclusions. A single piece of burnt clay was recovered.

F.12 [12.3] A northeast-southwest orientated medieval ditch. It had a width of 0.9m and was 0.52m deep with steep sides and a concave base and contained two fills which comprised mid brown sandy silts with rare small stone inclusions. No material culture was recovered from this feature.

F.13 [13.2] A sub-circular pit that extended beyond the edge of the trench on the northern side. This pit measured 1.1m in length by a minimum of 0.31m in width and had moderately slopped sides and a flat base containing a single fill comprising a mid grey sandy silt. No material culture was recovered from this feature.

F.14 [14.2] A north-south oriented ditch which was cut by pit F.15. This ditch was a minimum of 0.31m wide by 0.22m deep and had moderately slopped sides. This feature comprised a single fill of mid brown sandy silt with no inclusions. Three fragments of animal were recovered from this feature.

F.15 [15.2] A sub-circular pit which cut ditch F.14. This pit was 1.45m wide by 1.4m long and 0.39m deep with vertical sides and a flat base. There were four fills the majority of which comprised mid brown sandy silts however the upper fill was a darker silt with patches of burnt clay and charcoal inclusions. Finds from this pit include three sherds of pottery including a large fragment of green glazed Grimston(?) Ware jug and fragments of animal bone.

F.16 [16.2] A north-south orientated ditch. The ditch was 0.36m in width by 0.13m deep, with moderately slopped sides and concave base and comprised a single pale brown sandy silt fill. Three sherds of pottery were recovered from this ditch.

Watching Brief

The watching brief was carried out within the east of the development area and involved monitoring the cutting of the foundation trenches for the new retail unit. Whilst the depth at which the foundations were cut remained consistent the impact upon the underlying deposits varied, with more than half of the foundations not impacting upon the underlying geology. In the areas where the geology was exposed no archaeological remains were encountered, corresponding with the results of the evaluation in this area.

Specialist reports

As previously set out in tables 1 and 2, the only artefactual material recovered was 79 fragments of animal bone (850g), 20 sherds of pottery (570g), and two pieces of burnt clay (26g). Environmental samples were also taken from some of the features and, four samples were processed and analysed. The results from these analyses are presented below.

Pottery Report

Craig Cessford

A total of 20 sherds of pottery, weighing 576g, were recovered from five features in three trenches. All of the pottery dates to between the 10th and 15th century AD (Table 3). Although there are few sherds, the assemblage is generally large and unabraided, indicative of settlement material rather than a rural scatter. More detailed analysis of the assemblage should be undertaken if further work were to be undertaken on the site.

Trench	*Feature*	*Context*	*Quantity*	*Weight (g)*	*Type*	*Date*
3	3	3.02	4	132	Stamford Ware	10th – 12th
3	3	3.02	1	4	Medieval coarseware	13t – 15th
3	3	3.02	1	22	Possible Stamford Ware or later glazed ware	10th – 15th
3	5	5.01	4	62	Grey fabric with a green glaze; possible Grimstone ware	13th – 15th
3	6	6.01	1	20	Shelly fabric	13th 14th
4	15	15.1	3	277	Grey fabric with a green glaze; possible Grimstone ware	13th – 15th
4	16	16.1	3	53		

Table 3: Pottery quantities and dates

Faunal Remains

Vida Rajkovača

Recovered from four trenches, this small assemblage amounted to a raw count of 79 fragments and a total weight of 850g. Overall, some 35 assessable specimens were recorded, eleven of which were identified as cow (NISP=4), sheep/ goat (NISP=3), horse (NISP=2), chicken (NISP=1), and goose (NISP=1). Further 24 elements were cattle-sized and sheep-sized ribs and limb bone fragments, impossible to assign to species. Material is heavily fragmented and it is showing signs of gnawing. Of note was the cow horn core from F.9 with clear cut and chop marks at the base, created to detach the horn. Ribs and vertebrae from F.15 were butchered, with nine having cut/chop marks, typical of soup/stew waste.

Taxon	NISP						
	F.03	F.04	F.05	F.09	F.10	F.14	F.15
Cow	2	.	.	2	.	.	.
Sheep/ goat	.	1	.	.	.	.	2
Horse	.	.	.	1	.	1	.
Chicken	.	.	.	.	.	.	1
Goose	.	.	.	.	.	.	1
Sub-total to species	**2**	**1**	**.**	**3**	**.**	**1**	**4**
Cattle-sized	1	.	.	.	1	2	2
Sheep-sized	1	.	3	.	.	.	8
Bird n.f.i.	.	.	.	.	.	.	6
Total	**4**	**1**	**3**	**3**	**1**	**3**	**20**

Table 4: Fauna counts

Fired Clay Report

A total of two fragments, weighing 26g, were recovered from F.10 in Trench 4. The fragments are of a reddish brown, well fired fabric, with occasional clay inclusions. Each fragment is between 3 and 5cm in size with a dark brown/black core. The pieces are undiagnostic.

Palaeoenvironmental Assessment Report

Gemma Warham
(Sheffield Archaeobotanical Consultancy, University of Sheffield, Department of Archaeology, Minalloy House, 10-16 Regent Street, Sheffield, S10 2TN.)

A series of bulk samples were taken by Cambridge Archaeological Unit (CAU) during an archaeological evaluation on land east of Church Street and south of Bicker Road (A52), Donington, Lincolnshire (NGR: TF 2092 3601). Four samples were processed by the CAU for the recovery of charred plant macrofossils and wood charcoal and submitted to Sheffield Archaeobotanical Consultancy for assessment. The archaeological trail trench investigation revealed evidence for Medieval period activity in form of a possible series of enclosures or field boundaries, with finds of mussel shell, faunal remains and pottery recovered from the excavated features (CAU 2021). The site lies approximately 300m away from the medieval church that is situated on the edge of the modern settlement of Donington, and the underlying geology of the site is Lincolnshire Fenland Silt Geology (CAU 2021). The bulk sieve samples ranged in volume between 8 and 10 litres and were taken from four features associated the with Medieval activity, including three ditches and a pit (Table 5).

The objectives of the assessment were:

- To determine the concentration, diversity, state of preservation and suitability for use in scientific dating, of any palaeoenvironmental material present in the samples.

- To evaluate the potential of any palaeoenvironmental material present in the samples to provide evidence for crop plants and/or wild plant foods.
- To evaluate the potential of any palaeoenvironmental material present in the samples to provide evidence for the local environment.

The samples were processed by CAU using a water separation machine. Floating material was collected in a 300µm mesh and the remaining heavy residue retained in a 1mm mesh. A total of 36 litres of sediment was processed in this way. The flots and heavy residues were air-dried and the >4mm fractions of the heavy residues were sorted for ecofacts remains and artefacts, and the <4mm fractions checked for charcoal and charred plant macrofossils.

The samples were assessed in accordance with Historic England guidelines for environmental archaeology assessments (Campbell *et al*. 2011). A preliminary assessment of the samples was made by scanning using a stereo-binocular microscope (x10 - x65) and recording the abundance of the main classes of material present. All material found in the samples was quantified using a scale of abundance (- = < 10 items, + = 10-29 items, ++ = 30-49 items, +++ = 50-99 items, ++++ = 100-499 items, +++++ = > 500 items).

Preliminary identifications of plant material were carried out by comparison with material in the reference collections at the Department of Archaeology, University of Sheffield and various reference works (e.g. Cappers *et al*. 2006). Cereal identifications and nomenclature follow Zohary *et al*. (2012). Other plant nomenclature follows Stace (2019). The composition of the samples is recorded in Table 5. The seed, in the broadest sense, of the plant is always referred to in Table 5, unless stated otherwise. The abbreviation *cf*. means 'compares with' and denotes that a specimen most closely resembles that taxon more than any other. Information relating to the ecology of various plant taxa was sourced from Stace (2019) and Preston *et al.* (2002).

The flots are small and range is volume between 2ml and 10ml (excluding root material), with only one flot exceeding 5ml. The majority of the flots contain recent root material, with the volume of roots ranging in volume between 2.5 and 10 ml, indicating that the deposits have been subject to some degree of bioturbation. Further evidence for bioturbation is indicated in samples 2, 3 and 4 by the presence of *Cecilioides acicula* (Müller), a blind burrowing snail that is suspected to be a recent introduction to Britain (Davies 2008, 117). Sample 2 in particular, from the fill (7.01) of pit [7], yielded a high concentration of *Cecilioides acicula* shells. In addition, occasional small nematode capsules, occasional remains of both intact and disarticulated insects (Arthropoda), and small numbers of untransformed seeds, including birch (*Betula* sp.), elder (*Sambucus nigra* L.) and sow-thistle (*Sonchus* sp.) were recorded in the flots (Table 5). Given the presence of recent roots and *Cecilioides acicula* in the flots, the untransformed plant seeds, nematode capsules and insect remains from are likely to be derived from intrusive material. Aquatic indicators, including possible ram's horn snail shells (cf. *Planorbis* sp.), duckweed (*Lemna* sp.), small vertebrate bones provisionally identified as amphibious remains, and possible fish scales are present in the ditch fills (Table 5). However, given the evidence for soil disturbance and the

overall small size of the assemblages, it cannot be ruled out that the small vertebrate, aquatic plant and possible fish remains are also intrusive.

Preservation of plant macrofossils and wood is by charring. Preservation of charred plant macrofossils is variable; many of the cereal grains and wild/weed species recovered from the samples are abraded and distorted in appearance, which will impede further identification, although it was possible to identify hulled and potentially 'twisted' grains of barley (*Hordeum*). The wood charcoal tends to consist of low concentrations of comminuted charcoal that rarely exceeds 2mm^3, much of which is also silted in appearance, which limits the potential of selecting material suitable for identification. For the most part, the wood charcoal assemblages are derived from the sample retents (>2mm fraction).

Low concentrations of cereal remains are present in all of the feature fills, in the form of cereal grains (Table 5). No cereal chaff is present in samples. Provisional identifications of the cereal grains include wheat (*Triticum* spp.) and barley (*Hordeum* sp.) and where preservation permitted, free-threshing wheat was recorded, and the slight twisted appearance of several hulled barley grains indicates possible six-row hulled barley (*Hordeum* cf. *vulgare* L.). The overall abraded and distorted appearance of the cereal grain will prevent further identification. Occasional wild/weed plant seeds are present in fill (3.03) of ditch [3] and fill 7.01) of pit [7], with provisional identifications indicating the presence of stinking chamomile (*Anthemis* cf. *cotula* L.), cabbage/mustard (*Brassica/Sinapis*) and sedges (Cyperaceae).

Sample No.	Trench	Context / Feature No.	Context type	Prelim date	Sample vol (L)	Flot vol (ml) Incl. roots/ excl. roots	Grain/ chaff	Wild or weed plant material	>2mm charcoal from flot	>2mm charcoal from residues	Molluscs	Notes
1	3	(3.03)/ [3]	Ditch fill	10th-13th Century	10	10/10	-/0	-	0	-	+++	**CPR:** *Hordeum* sp. (including hulled grain), *Anthemis* cf. *cotula*. **WC:** Silted, comminuted charcoal <2mm^3. **Molluscs:** predominantly cf. *Planorbis* sp. **UC:** *Lemna* sp., *Betula* sp., *Sonchus* sp. (+). **Arthropoda:** disarticulated remains (-).
2	3	(7.01)/ [7]	Pit fill	10th-13th Century	8	6/5	++/0	-	0	0	++++	**CPR:** *Hordeum* sp. (including hulled and possible twisted grains), *Brassica/Sinapis* sp(p)., Cyperaceae, *Anthemis* cf. *cotula*. **Molluscs:** predominantly *Cecilioides acicula*. **Arthropoda:** disarticulated remains (-).
3	3	(6.02)/ [6]	Ditch fill	10th-13th Century	8	2.5/2	-/0	0	0	-	++	**CPR:** *Hordeum* sp. (including hulled grain). **WC:** Silted, comminuted charcoal <2mm^3, some DP noted. **Molluscs:** includes *Cecilioides acicula,* all <2mm. **UC:** *Betula* sp., *Sambucus nigra*, indet. sp. (+). **Arthropoda:** intact insect (-), small nematode capsules (+). **Other**: small (amphibious?) bones (-); possible fish scales (-).
4	1	(5.01)/ [5]	Ditch fill	10th-13th Century	10	10/5	-/0	0	-	0	+	**CPR:** *Triticum* sp(p). (including free-threshing grain), *Triticum/Hordeum* sp. **WC:** Silted, comminuted charcoal <2mm^3. **Molluscs:** includes *Cecilioides acicula,* all <2mm. **UC:** *Sonchus* sp. (-). **Arthropoda:** intact insect (-), small nematode capsules (+). **Other**: small (amphibious?) bones and indet. burnt bone frags (-); possible fish scales (-).

key - = < 10 items, + = 10-29 items, ++ = 30-49 items, +++ = 50-99 items, ++++ = 100 - 499 items, +++++ = > 500 items. CPR = charred plant remains, WC = wood charcoal, WPR? = possible waterlogged plant remains, DP = diffuse porous charcoal, RP = ring porous charcoal, uc = uncharred.

Table 5: Archaeobotanical sample assessment

The wood charcoal assemblages consist of small quantities of comminuted charcoal, with one or two diffuse porous fragments noted. The scarcity of fragments >2mm^3 and the poor state of preservation of the remains means that there is insufficient material from ditch fill deposits (3.03), (6.02) and (5.01) to provide a representative sample of the wood charcoal assemblage (i.e. the minimum required one hundred >2mm^3 charcoal fragments).

The charred plant macrofossil assemblages from pit (F.7) and ditch features (F.3), (F.5) and (F.6), provide some evidence for the types of crops consumed at the site during the Saxo-Norman period, but limited scope for further economic reconstruction due to the relatively small quantities of charred crop remains. The cereal crops recovered from the fills of ditches (F.3) and (F.6) and pit (F.7) from Trench 3 appear to be exclusively barley, including hulled six-row barley, whilst free-threshing wheat and wheat/barley were recovered from the fill of ditch (F.5) in Trench 1. Free-threshing wheat and hulled six-row barley are consistent with the range of cereals cultivated and consumed during the Saxo-Norman period in the midland counties of England (Carruthers and Hunter-Dowse 2019). The greater frequency of barley compared to wheat recovered from the features is also in keeping with the dominant crop types associated with the Lincolnshire Silt Fens; it thought the predominance of barley reflects an economic strategy associated with the cultivation of saline soils (Carruthers and Hunter-Dowse 2019). The wild/weed plant species associated with the charred cereal assemblages from the fill [3.03] of ditch (F.3) and fill [7.01] of pit (F.7) may be derived from crop processing residues, but are in such small quantities that further interpretation is very limited. Stinking chamomile is commonly associated with heavier soils under cultivation and disturbed/waste ground (Stace 2019) and the presence of sedges may indicate the cultivation of damp soils. It cannot, however, be ruled out that the relatively small quantity of charred cereal residues from these features may be residual in character, which will limit further interpretation. Due to the small quantities of wood charcoal recovered from ditches (F.3), (F.5) and (F.6), these assemblages have no potential to provide evidence for the availability and exploitation of local woodland and/or scrub during the Saxo-Norman period.

The presence of aquatic indicators from the fills of ditches (F.3), (F.5) and (F.6), in the form of the mollusc assemblage dominated by possible ram's horn from ditch (F.3), as well as the presence of uncharred seeds of duckweed and the small vertebrate remains, provides some scope for palaeoenvironmental reconstruction. If contemporary with the features, and not derived from reworked material, these palaeoenvironmental remains suggest the presence of standing/slow moving water in the ditch features.

The charred plant macrofossil assemblage from pit feature (F.7) and ditches (F.3), (F.5) and (F.6) is of regional research significance as evidence for crop types in the Saxo-Norman period (Carruthers and Hunter-Dowse 2019). The presence/absence data of stinking chamomile is also of regional significance as a potential indicator of the cultivation of heavier soils during the Medieval period (Carruthers and Hunter-Dowse 2019).

Recommendations for further work:

The small size and poor state of preservation of the charred plant macrofossil assemblages means that further identification would not provide significant additional evidence for palaeoeconomic reconstruction. Further analysis, therefore, of the plant macrofossils from samples 1, 2, 3 and 4 is not recommended. However, presence absence data may be used to compare with other local sites in terms of the regional importance of hulled six-row barley and free-threshing wheats, and the potential cultivation of heavier soils on the Lincolnshire Silt Fens during the Saxo-Norman period.

There is no potential for further work in terms of the wood charcoal assemblages due to insufficient quantities of charcoal fragments >2mm^3.

There is potential for the mollusc assemblage from fill [3.03] of ditch (F.3) to provide evidence for palaeoenvironmental reconstruction, perhaps in comparison with the small assemblages from fills [5.01] and [6.02] of ditches (F.5) and (F.6) respectively and the mollusc assemblages recovered from the sample retents. Further analysis of the mollusc assemblage retained in the flot from fill [7.01] of pit (F.3) is not recommended, however, due to the dominance of the burrowing snail *Cecilioides acicula*.

Due to the paucity of charred plant macrofossils and the absence of short life round wood charcoal, in combination with the evidence for bioturbation, there is no charred material suitable for scientific dating from any of the sampled features.

I should like to thank Ellen Simmons for the provisional identification of the *Planorbis* sp. snail shells and comments on their ecological significance.

Discussion

To date, very little archaeological investigation has been carried out in and around Donington, except for a small evaluation on Church Street that revealed pits dating to the 13th-14th centuries. The only evidence of any pre-medieval activity was a few Middle Bronze Age Flints, a 3rd century Roman coin, and 3rd to 4th century Roman pottery scatter. The evidence within the DA is even more scarce with no pre-medieval evidence present; the pottery suggests activity may have started in the 10th century, at the earliest.

The evidence from the evaluation and additional trenching indicates medieval settlement, with a mixture of shallow and deep ditches that were orientated north-south and east-west suggesting rectilinear plots, with a notable increase in the scale of activity towards the south, with the larger ditches F.3 and F.6 being boundary ditches. The pottery is indicative of settlement material, rather than a rural scatter, with very few abraded sherds in the assemblage suggesting nearby settlement dating from the 10th to the 15th century. Although there was a paucity of material it does suggest that the known limits of Medieval Donington extended not only further north than previously thought but had origins in the Early-Medieval period.

The environmental data is typical of this area of Medieval Lincolnshire with barley dominating wheat, there is also the suggestion that the ditches had either slow moving or standing water within them. The animal bone shows the presence of cow, sheep, and horse in the DA but it is found in too low a volume to suggest anything other than low scale domestic activity. The large quantity of mussel shell within F.3 is a further indication of possible domestic waste.

From the 15th century the area is likely to have been fields, with the settlement of Donington shifting slightly to the south. The absence of ridge and furrow could indicate that the area was not used for agriculture.

Despite the limited nature of these investigations the results have highlighted settlement activity within the DA from the 10th to the 15th centuries. The depth of soil encountered across the development area are such that impacts upon the archaeology present are likely to have been minimal. Any future development of the site would allow us to understand more fully its form and function, and it would be a useful link in understanding the formation and development of Donington from its Early-Medieval origins until the present day.

Acknowledgements

Client: The work was commissioned by Burmor Construction

The excavation was monitored on behalf of Lincolnshire County Council Historic Places Team by Ian Marsham, Historic Environment Officer.

CAU Site Team

Project Manager: Ricky Patten
Project Supervisor: Len Middleton and Tom Bourne
Site Survey: Jon Moller
Excavation Team: Haaroon Ahmed; Allan Kirk

References

Allen, J.L. and Holt, A. 2010. *Health and Safety in Field Archaeology.* FAME

APS. 2020. Heritage Impact Assessment: Land at Church Street, Donington, Lincolnshire. Unpublished report no. HS/116.

BGS, 2020 Geology of Britain Viewer, available at http://mapapps.bgs.ac.uk/geologyofbritain/home.html

Cameron, K, 1998 A Dictionary of Lincolnshire Place-Names, English Place-Name Society Popular Series Vol. 1

Campbell, G. Moffett, L. and Straker, V., (2011). *Environmental Archaeology. A Guide to the Theory and Practice of Methods, from Sampling and Recovery to Post-excavation.* 2nd ed. Portsmouth: English Heritage.

Cappers, R.T.J. Bekker, R.M. and Jans, J.E.A., (2006). *Digital Seed Atlas of the Netherlands*. Eelde: Barkhuis Publishing.

Cambridge Archaeological Unit, (2021). *Archaeological Evaluation on land east of Church Street and south of Bicker Road (A52), Donington, Lincolnshire (CBDS21): Assessment Report.* Unpublished Cambridge Archaeological Unit report.

Carruthers, W. J., and Hunter-Dowse, K. L., (2019). *A review of Macroscopic Plant Remains from the Midland Counties*. Environmental Studies Report. Research Department Report Series no. **77/2019**. Portsmouth: Historic England.

CIfA 2014, revised 2019. Code of Conduct.

CIfA 2014, updated 2020. Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials (2014).

CIfA 2014, updated 2020. Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives.

CIFA 2014, updated 2020. Standards and Guidance for Archaeological Field Evaluation.

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

Jennings, L. 2019. Archaeology Handbook Revised 2019. Lincolnshire County Council

Lee, E. 2015. *Management of Research Projects in the Historic Environment the MoRPHE Project Managers' Guide.* Historic England

Margary, ID, 1973, Roman Roads in Britain

Marsham, I. 2021. Archaeological Brief for Evaluation by Trial Trenching: Land East of Church Street and South of Bicker Road, Donington.

Patten, R. 2021. Written Scheme of Investigation for Archaeological Evaluation at Land East of Church Street and South of Bicker Road, Donington, Lincolnshire. Cambridge: CAU

Peachey, M, 2010 Archaeological Evaluation on Land at 4-12 Church Street, Donington, Lincolnshire. Archaeological Project Services Report 64/10

Preston, C.D. Pearman, D.A. and Dines T.D., (2002). New Atlas of the British and Irish Flora: An Atlas of *the Vascular Plants of Britain, Ireland, the Isle of Man and the Channel Islands*. Oxford: Oxford University Press.

Stace, C., (2019). *New Flora of the British Isles.* 3rd ed. Suffolk: C&M Floristics.

Zohary, D. Hopf, M. and Weiss, E., (2012). *Domestication of Plants in the Old World.* 4th ed. Oxford: Oxford University Press.

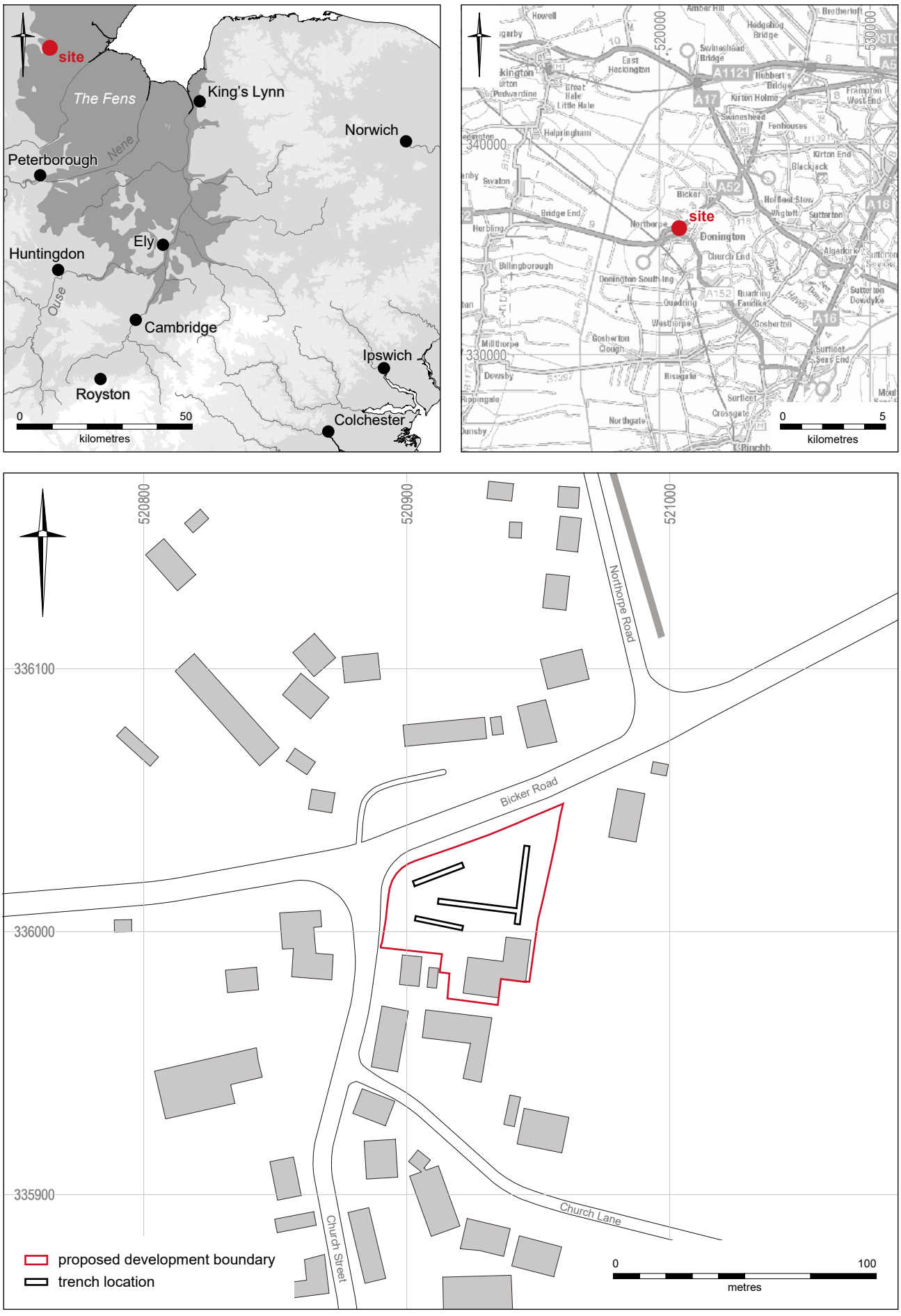


Figure 1. Site location

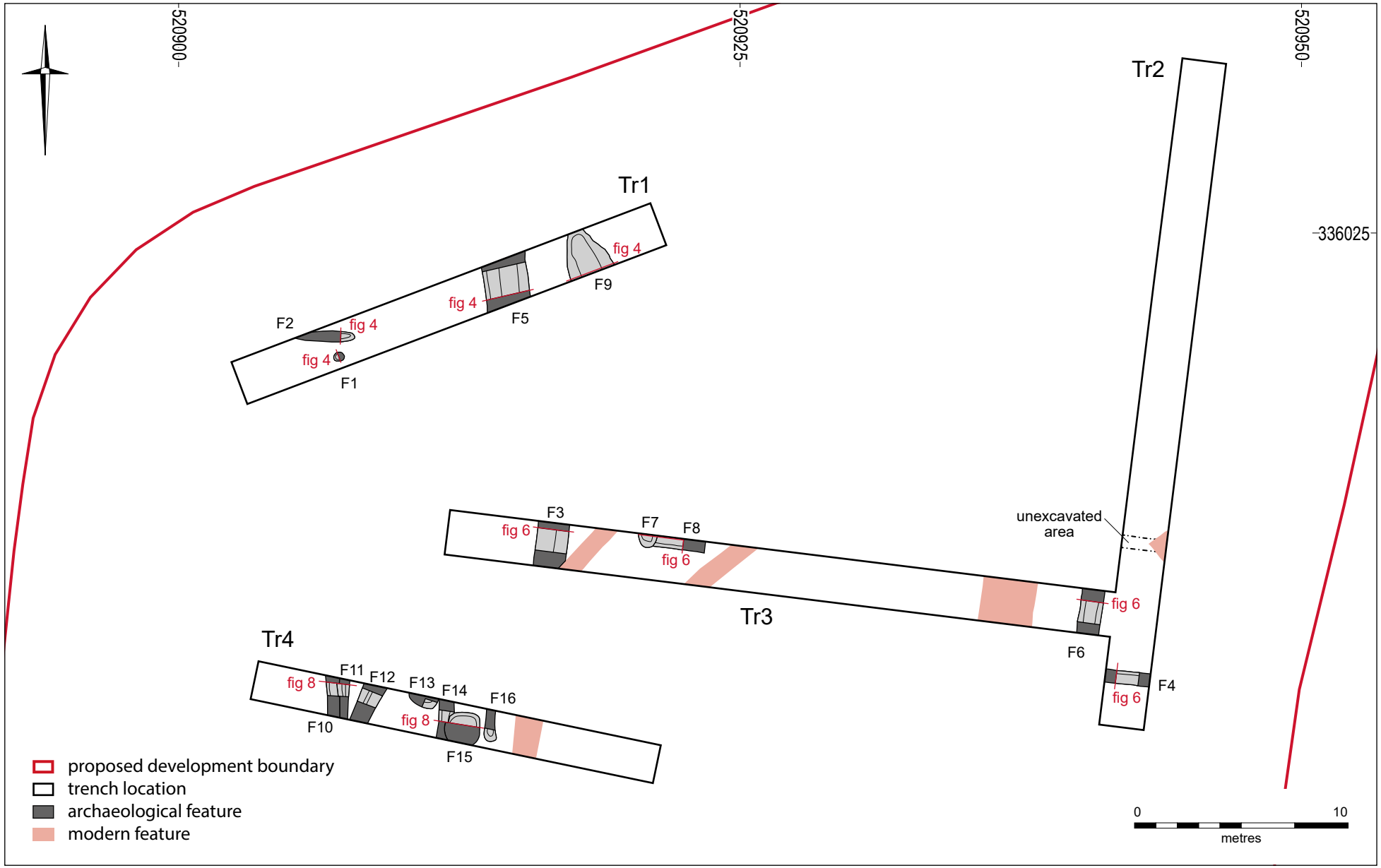


Figure 2. Site plan



Trench 1 from east



Feature 1 from south-west



Feature 5 from north



Feature 9 from north-west

Figure 3. Photographs from Trench 1

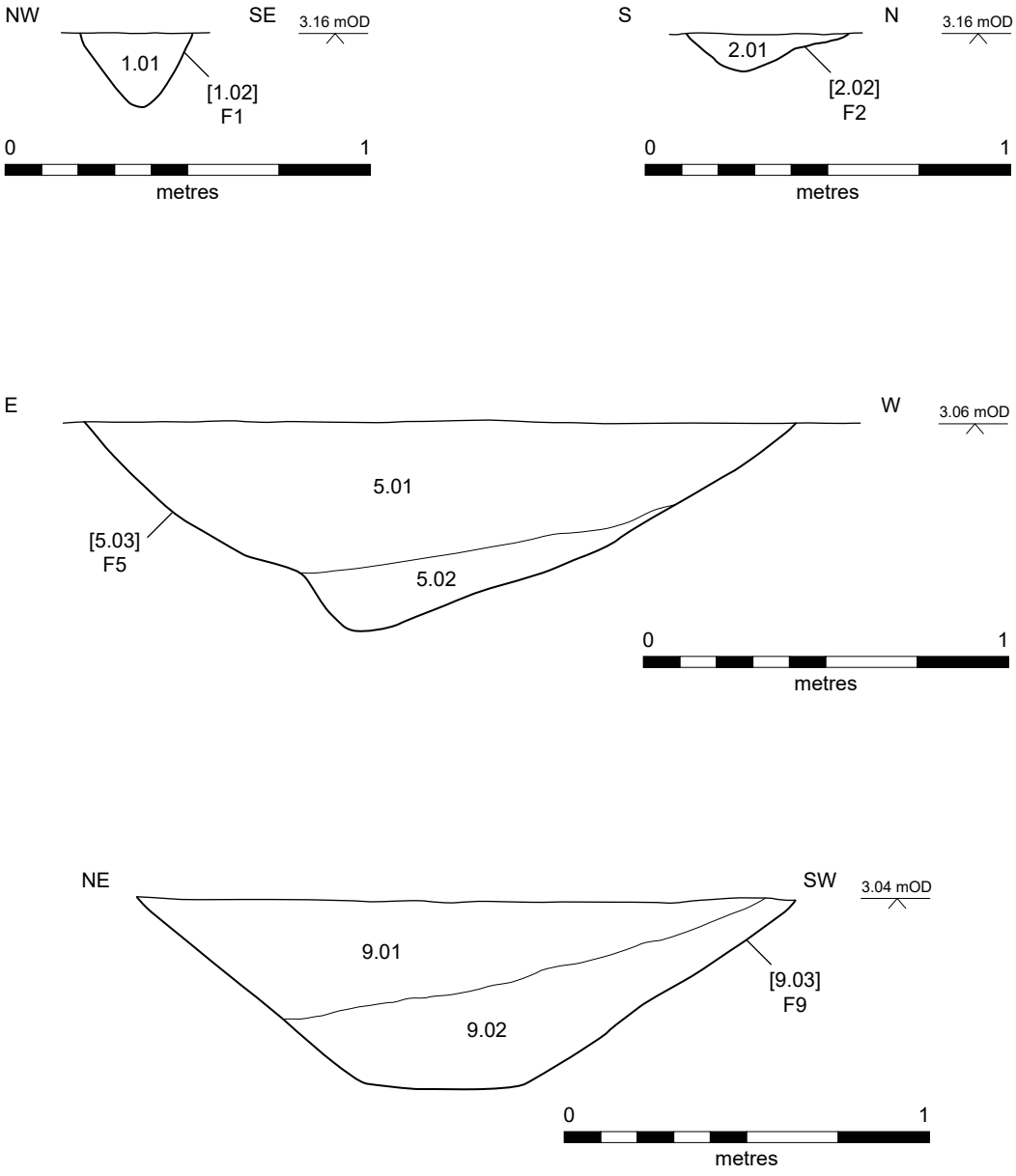


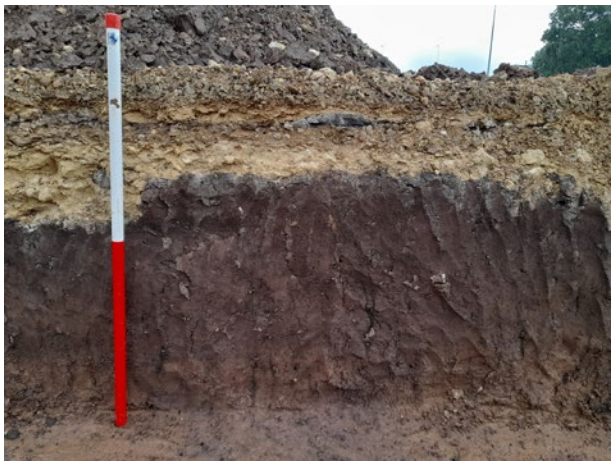
Figure 4. Sections of features in Trench 1



Trench 2 from north



Trench 3 from west



Trench section showing made ground over Trenches 2 and 3



Feature 3 in Trench 3 from south



Features 7 and 8 in Trench 3 from south

Figure 5. Photographs from Trenches 2 and 3

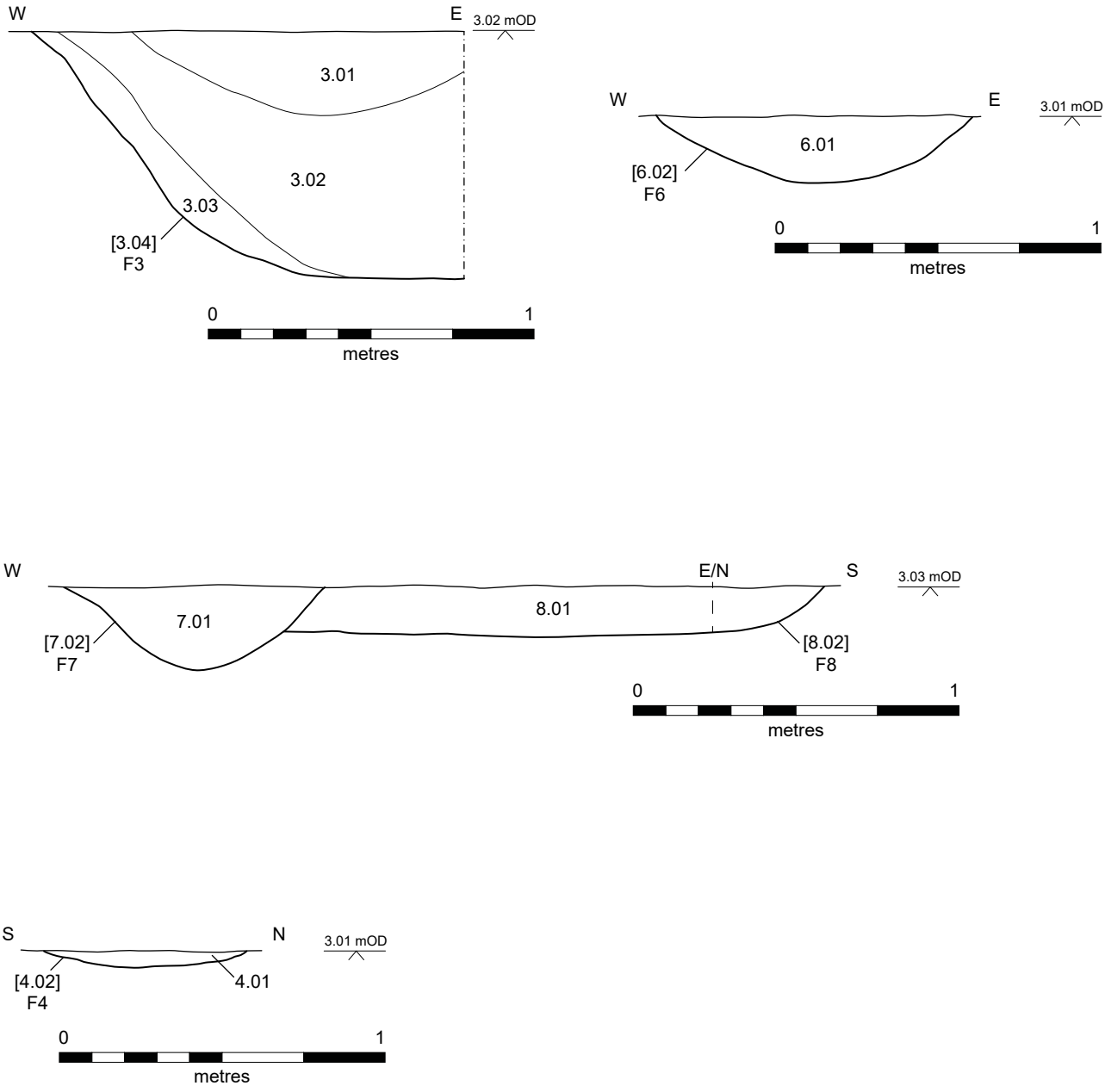


Figure 6. Sections of features in Trenches 2 and 3



Trench 2 from west – as tarmac had been lain prior to the cutting of the trench it was not possible to spoil outside of the trench



Feature 12 in Trench 4 from south



Intercutting Features 10 and 11 in Trench 4 from south

Figure 7. Photographs from Trench 4

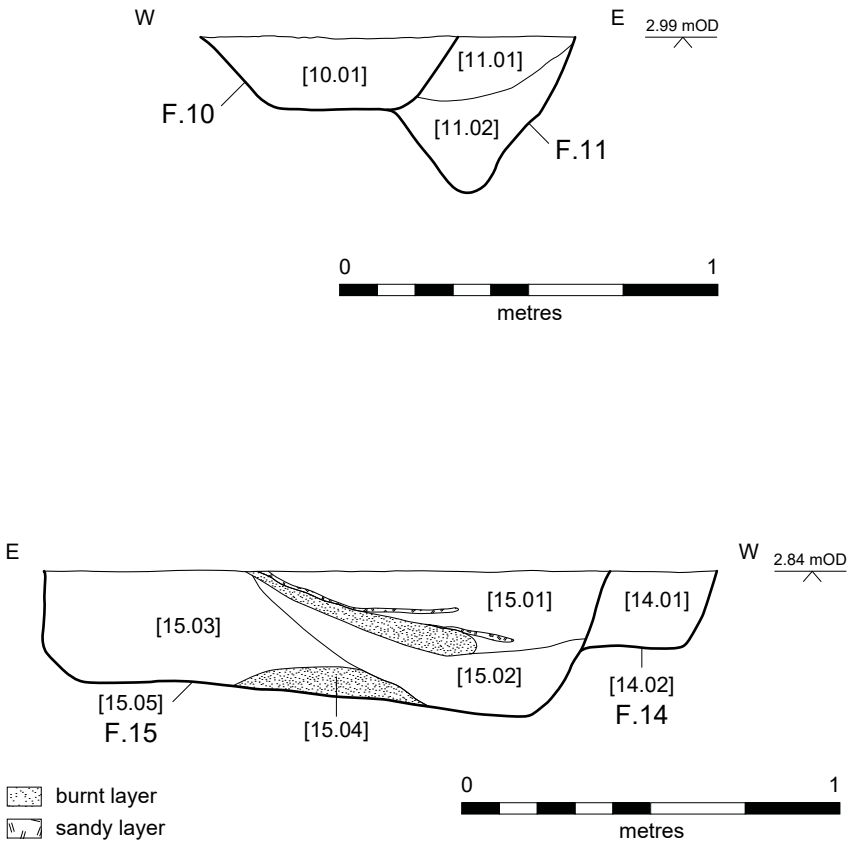


Figure 8. Sections of features in Trench 4

Appendix 2: *Trench and Feature Tables*

Nb: The feature Primary Fill Type and Profile codes are listed at the end of this Appendix.

Trench 1											
Trench 1 contained one post-hole (Feature 1) and three ditches (Features 2, 5 and 9).							**Trench Orientation**				NE-SW
							Height (m) OD at Base of Trench				3.04
							Trench Width (m)				2.0
							Trench Length (m)				20.0
							Average Topsoil Depth (m)				0.35
							Average Subsoil Depth (m)				0.35
							Average Made Ground Depth (m)				0.21
							Overall Depth (m)				0.91
Feature No.	**Feature Type**	**Slot No.**	**Shape/ Orientation**	**No. of Contexts**	**Length (m)**	**Width (m)**	**Depth (m)**	**Primary Fill Type**	**Profile**	**Artefacts**	**Archaeological Period**
1	Post-hole	1	Circular	2	1.0	0.39	0.2	1.3.3	3.2	n/a	Medieval
2	Ditch	2	E-W	2	1.0	0.52	0.1	3.2.3	2.2	n/a	Medieval
5	Ditch	5	N-S	3	1.0	2.20	0.57	1.2.3	2.2	PT, BN	Medieval
9	Ditch	9	NW-SE	3	1.0	1.90	0.52	1.3.3	2.1	BN	Medieval

Trench 2											
Trench 2 contained on ditch (Feature 4) and the corner of a modern concrete slab.							**Trench Orientation**				N-S
							Height (m) OD at Base of Trench				3.01
							Trench Width (m)				2.0
							Trench Length (m)				30.0
							Average Topsoil Depth (m)				0.27
							Average Subsoil Depth (m)				0.27
							Average Made Ground Depth (m)				0.35
							Overall Depth (m)				0.95
Feature No.	**Feature Type**	**Slot No.**	**Shape/ Orientation**	**No. of Contexts**	**Length (m)**	**Width (m)**	**Depth (m)**	**Primary Fill Type**	**Profile**	**Artefacts**	**Archaeological Period**
4	Ditch	4	E-W	2	1.0	0.62	0.05	3.3.3	1.2	n/a	Medieval

Trench 3											
Trench 3 contained one pit (Feature 7) and three ditches (Features 3, 6 and 8). It was truncated by 2 large modern concrete drains and an electric cable.							**Trench Orientation**				E-W
							Height (m) OD at Base of Trench				3.01
							Trench Width (m)				2.0
							Trench Length (m)				30.0
							Average Topsoil Depth (m)				0.3
							Average Subsoil Depth (m)				0.3
							Average Made Ground Depth (m)				0.35
							Overall Depth (m)				0.95
Feature No.	**Feature Type**	**Slot No.**	**Shape/ Orientation**	**No. of Contexts**	**Length (m)**	**Width (m)**	**Depth (m)**	**Primary Fill Type**	**Profile**	**Artefacts**	**Archaeological Period**
3	Ditch	3	N-S	4	1.0	>1.31	0.75	3.2.3	2.1	BN, PT	Medieval
6	Ditch	6	N-S	2	1,0	0.93	0.21	3.2.3	2.2	PT	Medieval
7	Pit	7	Sub-Circular	2	>0.4	0.77	0.26	3.2.3	2.3	n/a	Medieval
8	Ditch	8	E-W	2	>2.0	>0.34	0.15	3.2.3	2.1	n/a	Medieval

Trench 4											
Trench 4 contained Five ditches (Features 10, 11, 12, 14 and 16) and two pits (Features 13 and 15).							**Trench Orientation**				NW-SW
							Height (m) OD at Base of Trench				3.01
							Trench Width (m)				2
							Trench Length (m)				30
							Average Topsoil Depth (m)				0.46
							Average Subsoil Depth (m)				0.3
							Average Made Ground Depth (m)				0.5
							Overall Depth (m)				1.34
Feature No.	**Feature Type**	**Slot No.**	**Shape/ Orientation**	**No. of Contexts**	**Length (m)**	**Width (m)**	**Depth (m)**	**Primary Fill Type**	**Profile**	**Artefacts**	**Archaeological Period**
10	Ditch	10	N-S	2	1.0	0.72	0.21	3.2.3	2.1		Medieval
11	Ditch	11	N-S	3	1.0	0.45	0.4	3.2.3	3.3		Medieval
12	Ditch	12	NE-SW	3	1.0	0.9	0.52	3.2.3	3.2		Medieval
13	Pit	13	Sub-Circular	2	1.2	>0.4	0.31	3.3.3	2.1		Medieval
14	Ditch	14	N-S	2	1.0	>0.31	0.22	2.2.3	3.1		Medieval
15	Pit	15	Sub-Circular	5		1.45	0.39	3.2.3	4.1	PT/BN	Medieval
16	Ditch	16	N-S	2	1.0	0.36	0.13	2.2.3	2.2	PT	Medieval

Primary Fill types:

Shade	No.	Colour	No.	Composition	No.
Pale	1	Orange	1	Sand	1
Pale/Mid	2	Brown	2	Silty Sand	2
Mid	3	Grey	3	Sandy Silt	3
Mid/Dark	4	Black	4	Silt	4
Dark	5			Clay Silt	5
Very Dark	6			Silty Clay	6
				Sandy Clay	7
				Clay	8

Slot Profile types:

Sides	No.	Base	No.
Shallow	1	Flat	1
Moderate	2	Rounded/Concave	2
Steep	3	V-shaped/pointed	3
Vertical	4	Irregular	4

OASIS DATA COLLECTION FORM: England

Printable version

OASIS ID: cambridg3-431045

Project details

Project name	Land East of Church Street and South of Bicker Road, Donington
Short description of the project	The Cambridge Archaeological Unit (CAU) was commissioned by Burmor Construction to undertake a trenched evaluation on land East of Church Street and South of Bicker Road, Donington, Lincolnshire (TF 2092 3601) to assess the archaeological potential of the site prior to a proposed development. The evaluation was carried out between the 5th and 7th July 2021, and identified a series of ditches and pits of 10th to 15th century date.
Project dates	Start: 05-07-2021 End: 07-07-2021
Previous/future work	No / Not known
Any associated project reference codes	LCNCC : 2021.89 - Museum accession ID
Any associated project reference codes	CBDS21 - Sitecode
Any associated project reference codes	H04-0208-20 - Planning Application No.
Type of project	Field evaluation
Site status	None
Current Land use	Industry and Commerce 2 - Offices
Monument type	DITCHES Medieval
Monument type	PITS Medieval
Significant Finds	POTTERY Medieval
Significant Finds	ANIMAL BONE Medieval
Methods & techniques	"Sample Trenches"
Development type	Rural commercial
Prompt	Planning condition
Position in the planning process	After outline determination (eg. As a reserved matter)

Project location

Country	England
Site location	LINCOLNSHIRE SOUTH HOLLAND DONINGTON Land East of Church Street and South of Bicker Road
Postcode	PE11 4XP

Study area	0.34 Hectares
Site coordinates	TF 2092 3601 52.907565722399 -0.201775255724 52 54 27 N 000 12 06 W Point
Height OD / Depth	Min: 4m Max: 4m

Project creators

Name of Organisation	Cambridge Archaeological Unit
Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body
Project design originator	Ricky Patten
Project director/manager	Ricky Patten
Project supervisor	Len Middleton
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Burmor Construction

Project archives

Physical Archive recipient	The Collection: Art and Archaeology in Lincolnshire
Physical Contents	"Animal Bones","Ceramics","Environmental"
Digital Archive recipient	The Collection: Art and Archaeology in Lincolnshire
Digital Contents	"Survey"
Digital Media available	"Database","Images raster / digital photography","Spreadsheets","Survey","Text"
Paper Archive recipient	The Collection: Art and Archaeology in Lincolnshire
Paper Contents	"none"
Paper Media available	"Context sheet","Drawing","Section"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Land East of Church Street and South of Bicker Road, Donington, Lincolnshire. An Archaeological Evaluation Assessment
Author(s)/Editor(s)	Lee Middleton
Other bibliographic details	Report Number 1432
Date	2021
Issuer or publisher	Cambridge Archaeological Unit
Place of issue or publication	Cambridge
Description	PDF file

Entered by	Ricky Patten (rp257@cam.ac.uk)
Entered on	21 September 2021

OASIS:

Please e-mail Historic England for OASIS help and advice
© ADS 1996-2012 Created by Jo Gilham and Jen Mitcham, email Last modified Wednesday 9 May 2012
Cite only: http://www.oasis.ac.uk/form/print.cfm for this page

Cookies Privacy Policy