



Northamptonshire Archaeology

Trial trench evaluation at Brackley Sawmills Brackley, Northamptonshire



Northamptonshire Archaeology
2 Bolton House
Wootton Hall Park
Northampton NN4 8BE
t. 01604 700493 f. 01604 702822
e. sparry@northamptonshire.gov.uk
w. www.northantsarchaeology.co.uk



**Northamptonshire
County Council**

Yvonne Wolframm-Murray

Report 11/123

June 2011



STAFF

Project manager	Tony Walsh BA
Text	Yvonne Wolframmm-Murray BSc PhD
Fieldwork	Yvonne Wolframmm-Murray Rob Smith Robin Foard Robyn Pelling BA
Flint	Yvonne Wolframmm-Murray
Prehistoric pottery and slag	Andy Chapman BSc MIfA FSA
Animal bone and charred plant remains	Karen Deighton MSc
Illustrations	Yvonne Wolframmm-Murray Amir Bassir BSc

QUALITY CONTROL

	Print Name	Signature	Date
Checked by	Pat Chapman		
Verified by	Tony Walsh		
Approved by	Andy Chapman		

OASIS REPORT FORM

PROJECT DETAILS		
Project name	Trial trench evaluation at Brackley Sawmills, Brackley, Northamptonshire	
Short description	An archaeological field evaluation was undertaken by Northamptonshire Archaeology, commissioned by Nexus Heritage on behalf of Bloor Homes, on 6.9ha of land at Brackley Sawmills, Brackley, Northamptonshire. This first phase of trial trenching comprised the excavation of twenty-three trenches. Archaeological features of possible Iron Age date were found in five trenches in the north-west part of the evaluation area. The features included postholes, the terminal of a ditch and remnant buried soils, which produced small quantities of Iron Age pottery.	
Project type	Trial trench evaluation	
Site status	None	
Previous work	Desk Based Assessment, Cotswold Archaeology	
Current Land use	Derelict buildings and hard standing, gardens and access roads	
Future work	Unknown	
Monument type/ period	Prehistoric/ modern	
Significant finds	Iron Age features and buried soils	
PROJECT LOCATION		
County	Northamptonshire	
Site address	Brackley Sawmills, Brackley, Northamptonshire	
Study area (sq.m or ha)	c 6.9ha	
OS Easting & Northing	SP 590 384	
Height OD	135 aOD	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology	
Project brief originator	Northamptonshire County Council Officer	
Project Design originator		
Director/Supervisor	Yvonne Wolfram-Murray	
Project Manager	Tony Walsh	
Sponsor or funding body	Bloor Homes	
PROJECT DATE		
Start date	April 2011	
End date	May 2011	
ARCHIVES	Location	Content (eg pottery, animal bone etc)
Physical	Northamptonshire Archaeology	Pottery, animal bone, flint, plant macrofossils
Paper	Northamptonshire Archaeology	Record sheets, drawings
Digital	Northamptonshire Archaeology	Digital mapping, photos
BIBLIOGRAPHY		
Title	Trail trench evaluation at Brackley Sawmills, Brackley, Northamptonshire	
Serial title & volume	11/123	
Author(s)	Yvonne Wolfram-Murray	
Page numbers	36	
Date	3 rd June 2011	

Contents

- 1 INTRODUCTION
 - 2 TOPOGRAPHY AND GEOLOGY
 - 3 HISTORICAL BACKGROUND
 - 4 OBJECTIVES
 - 5 METHODOLOGY
 - 6 THE EXCAVATED EVIDENCE
 - 6.1 Introduction
 - 6.2 Iron Age features (postholes, ditch and buried soils)
 - 6.3 Railway cutting
 - 6.4 Modern disturbed ground
 - 6.5 Landscape areas (survival of topsoil and subsoil)
 - 7 THE FINDS
 - 7.1 Flint by Yvonne Wolframm-Murray
 - 7.2 The Iron Age pottery by Andy Chapman
 - 7.3 Slag by Andy Chapman
 - 8 THE FAUNAL REMAINS AND ENVIRONMENTAL SAMPLE ASSESSMENT
 - 8.1 The animal bone by Karen Deighton
 - 8.2 An assessment of the environmental samples by Karen Deighton
 - 9 DISCUSSION
 - Bibliography
- APPENDIX 1: CONTEXT INVENTORY**

Figures

Front cover	General view of site, looking west onto the railway cutting
Fig 1	Site location
Fig 2	Trench layout
Fig 3	General view of site, looking north
Fig 4	Areas of archaeological features and disturbances
Fig 5	Trench 7, five postholes, looking north-east
Fig 6	Plans for Trenches 2 and 7
Fig 7	Sections 4 to 8
Fig 8	Sections 3 and 9
Fig 9	The northern extent of the buried soils in Trench 3, looking west
Fig 10	Trench 12, looking west
Fig 11	Trench 18, looking south-west
Back cover	Excavating Trench

Tables

Table 1	Quantification of worked flint
Table 2	Quantification of Iron Age pottery
Table 3	The taxa present
Table 4	Bone from sieved samples
Table 5	Ecofacts by sample and context

TRAIL TRENCH EVALUATION AT BRACKLEY SAWMILLS

BRACKLEY, NORTHAMPTONSHIRE

Abstract

An archaeological field evaluation was undertaken by Northamptonshire Archaeology, commissioned by Nexus Heritage on behalf of Bloor Homes, on 6.9ha of land at Brackley Sawmills, Brackley, Northamptonshire. This first phase of trial trenching comprised the excavation of twenty-three trenches. Archaeological features of possible Iron Age date were found in five trenches in the north-west part of the evaluation area. The features included postholes, the terminal of a ditch and remnant buried soils, which produced small quantities of Iron Age pottery.

1 INTRODUCTION

Northamptonshire Archaeology (NA) was commissioned by Nexus Heritage, on behalf of Bloor Homes, to carry out a trial trench evaluation between 19th and 26th April and on the 23rd May on 6.9ha of proposed development area at Brackley Sawmills, Brackley, Northamptonshire (NGR SP 590 384, Fig 1). The aim of the fieldwork was to determine whether significant archaeological remains survive and their state of preservation.

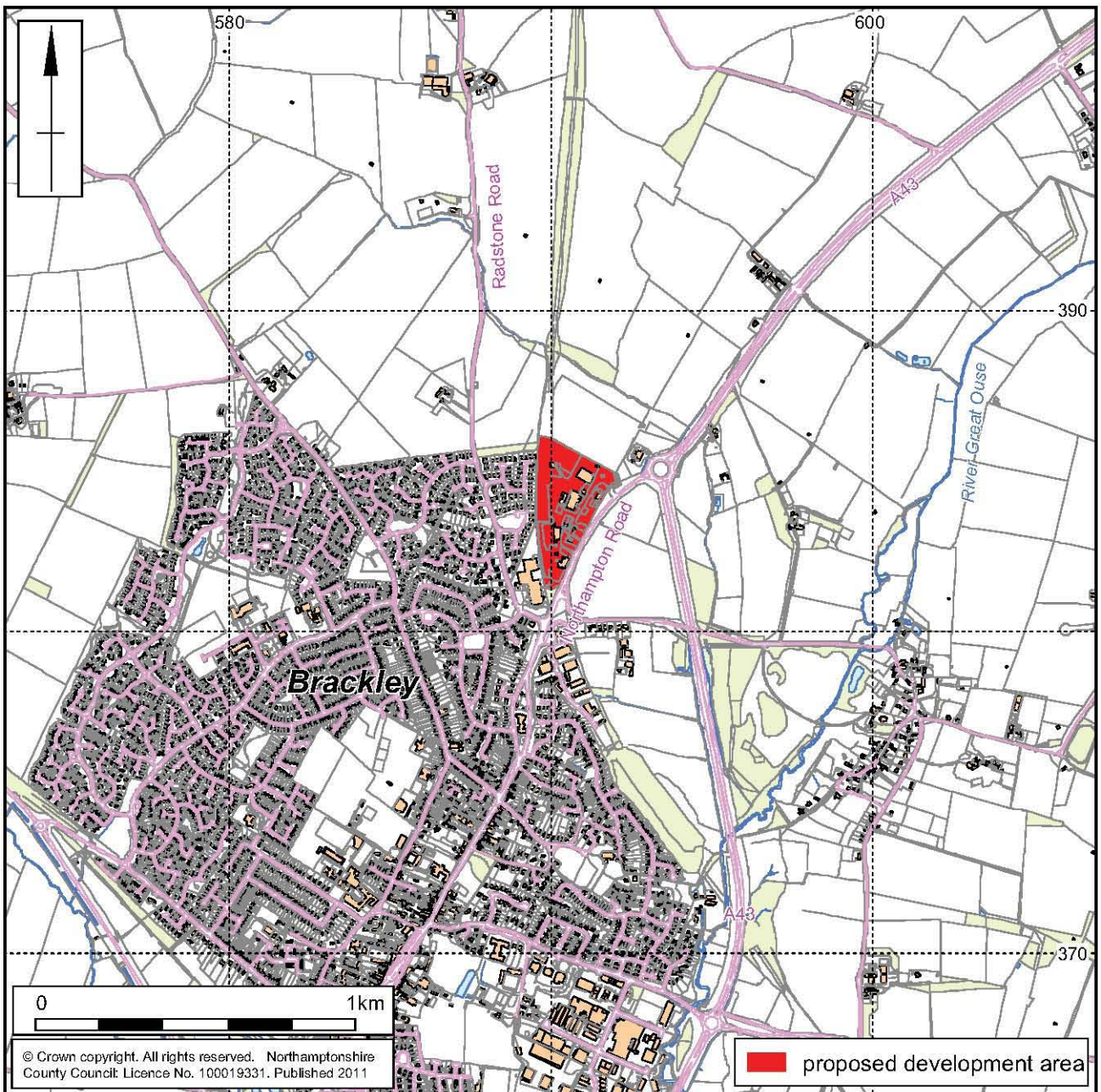
The work was carried out in accordance with a brief issued by the County Archaeological Advisor, Northamptonshire County Council (NCC 2011) and an approved Project Design prepared by Northamptonshire Archaeology (NA 2011).

2 TOPOGRAPHY AND GEOLOGY

The proposed development site lies on the northern edge of Brackley, within the grounds of the former Brackley sawmill complex. The site is bounded to the east by the Northampton Road, to the north by fields and to the south by lands belonging to the former sawmills. The west is bounded by residential development and a dismantled railway. The central area of the site is currently occupied by commercial premises with car parking and disused buildings, with extensive areas of concrete, tarmac and hardcore (Figs 2 and 3).

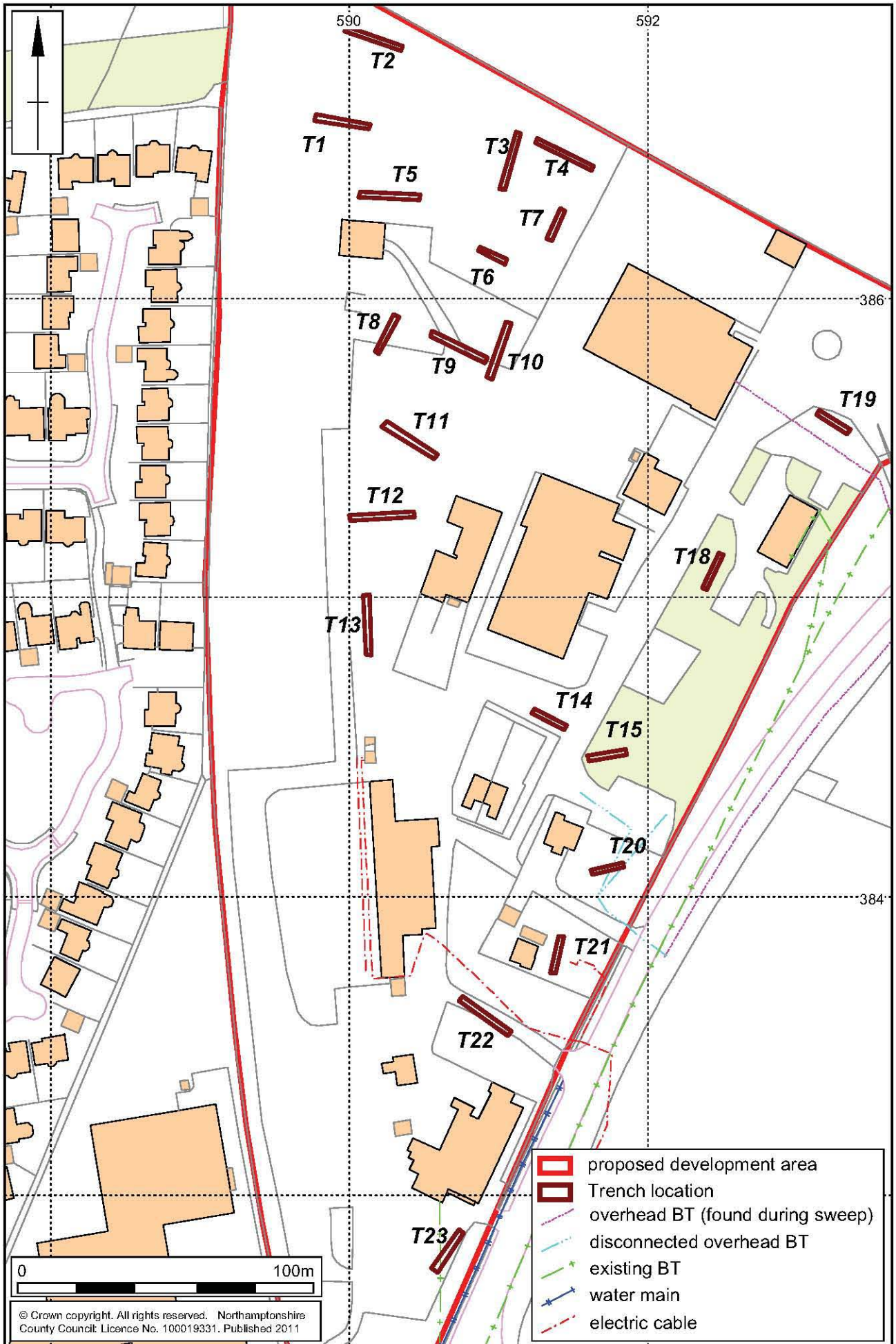
Topographically the site is located within the catchment of the Great Ouse River at c 135 aOD, with the land varying across the site due to natural and modern activity and falling gently down to the east.

The underlying geology is mapped as part of the White Limestone Formation of the Middle Jurassic Great Oolite Group (BSG 2002).



Scale 1:20,000

Site location Fig 1



Scale 1:1,750 (A4)

Trench layout Fig 2



General view of site, looking north Fig 3

3 HISTORICAL BACKGROUND

A desk based assessment (DBA) had been carried out by Cotswold Archaeology for Pegasus Environmental the following limited historical background has been taken from that report (CA 2010). The assessment focussed upon a minimum 500m buffer around the current proposed development area. It concluded that no previous work had been undertaken within the site confines, but some work had been undertaken immediately north-east of the current application site in 1990 and 2003. The DBA identified the presence of undated features comprising two pits and an ash spread within the development area, thought to be the continuation of the Iron Age activity identified during excavations in 1990 to the north-east.

The earliest known remains comprise a fragment of a Bronze Age flanged axe or palstave located to the north of the site. During the excavations Iron Age remains consisting of pits and a possible ditch were uncovered, also undated human burials were found at the location.

The 1990 and 2003 work involved rescue excavation in advance of the construction of a petrol station located adjacent to the junction of the Northampton Road and the A43 bypass and subsequent watching brief. Following from the chance discovery of two burials by a metal detectorist, the 1990 work identified Iron Age remains including pits and a pit/ditch and a group of eight undated human burials, with the Iron Age pottery recovered from the graves interpreted as probably residual finds. The subsequent 2003 work involved a watching brief, but no further remains were found (Fell 2003). Other Iron Age activity is attested by the presence of Iron Age

metal objects, including brooches found during construction works for the Brackley Bypass. Roman activity was also recorded, to the north-east was a Roman burial, coins and a brooch, to the west Roman pottery was identified, and to the south-east further Roman brooch and coins were found (CA 2010).

Brackley was probably founded during the 7th century AD and a planned town was established as a second settlement along the new Norman Road from Northampton to Oxford. During the medieval period, the settlement thrived from the wool trade and was granted a Borough Charter in 1260, when it had grown to be the one of the wealthiest towns in Northamptonshire. The site lies within a medieval open field landscape associated with the Old Town, with the system extending northwards from the Old Town as far as the stream situated to the north of the site. Medieval sites relating to the settlement at Brackley are present to the south of the development, including the two hospitals of St Leonard and St James and St John.

The post-medieval period is denoted by the opening of the Great Central Railway through the Old Town in 1899, which was closed in 1966.

4 OBJECTIVES

The aim of the archaeological evaluation is stated in the brief (NCC 2011, 2.1):

- The location, extent, nature and date of any archaeological features or deposits that may be present.
- The integrity and state of preservation of any archaeological features or deposits that may be present.

Other aims of the evaluation included:

- To establish the nature and extent of existing disturbance and intrusion to sub-surface deposits and, where the data allows, assess the degree of archaeological survival of buried deposits of archaeological significance.
- Insofar as possible within methodological constraints, to explain any temporal, spatial or functional relationships between the structures/remains identified, and any relationships between these and the archaeological and historic elements of the wider landscape.
- To enable the client to establish a schedule for archaeological risks.

5 METHODOLOGY

A total of 21 trenches each 1.8m wide, were excavated by a JCB with a toothless bucket. Two trenches (T17 and T16) could not be excavated and twelve trenches (except T9, T11 and T13) had to be moved or could not be fully excavated due to environmental constraints. Modifications to trench lengths and location were undertaken in full consultation with and agreement of the County Archaeological Officer. Actual trench locations and length are depicted in Fig 2. The topsoil, subsoil

and modern overburden were removed under archaeological supervision and the surface of significant archaeological remains was exposed, or, where these were absent, the natural substrate.

Archaeological features and layer of potential significance were sampled by hand excavation to determine their date and character. All discrete features were half sectioned and excavation slots were 1m wide. Archaeological deposits and artefact encountered during the course of excavation were fully recorded, following standard Northamptonshire procedures (NA 2006). All archaeological deposits were given individual context numbers and were described on pro-forma context sheets. Trenches with archaeological features were planned at a scale of 1:50, the trench sections and profiles through features were drawn at a scale of 1:10. Levels were related to the Ordnance Datum.

Photographs were taken as 35mm monochrome negatives in the traditional manner with digital photographs supplementing the record for reporting purposes. The photographic record was compiled into a site archive with appropriate cross-referencing. All records were compiled during fieldwork into a comprehensive and fully cross-referenced site archive.

6 THE EXCAVATED EVIDENCE

6.1 Introduction

Archaeology was found in five trenches (T2, T3, T5 - T7) comprising five postholes a ditch terminal and buried topsoil and subsoil dating to the Iron Age, creating an area of archaeological survival. Three areas of modern disturbances were also identified with no survival of archaeological features in the remaining 18 trenches (T1, T8 – T23). The disturbances were due to the railway cutting, the construction of the buildings and their associated concrete and hard standing areas, and the landscaping adjacent of Northampton Road (Fig 4).

6.2 Iron Age features (postholes, ditch and buried soils)

Archaeological features were present in Trenches 2 and 7, and buried topsoil and subsoil were preserved in Trenches 3, 5, 6 and 7. The natural comprised light yellow-brown sandy clay, which become mid orange-brown clay, sand and gravel of decaying limestone fragments in Trench 3. This was overlain by 0.10m to 0.37m of mid orange-brown silty clay buried subsoil.

In Trench 7 were five large postholes [708], [709], [711], [713] and [715] (Fig 6), which were overlain by up to 0.20m dark grey-brown silty clay buried topsoil (704) and cutting the buried subsoil (705) (Figs 5 and 6, Fig 7 section 4 to 8). The profiles of the postholes were U-shaped and measured 0.34m to 0.47m in diameter and were 0.15m to 0.49m deep. The fill of the postholes ranged from a dark grey-brown to orange-brown silty clay with moderate small to medium sized limestone fragments. Posthole [715] contained some burnt stone fragments and the stone in posthole [709] may have been for packing. All but one posthole yielded Iron Age pottery sherds.



Scale 1:1250 (A3)

Areas of archaeological features and disturbances Fig 4



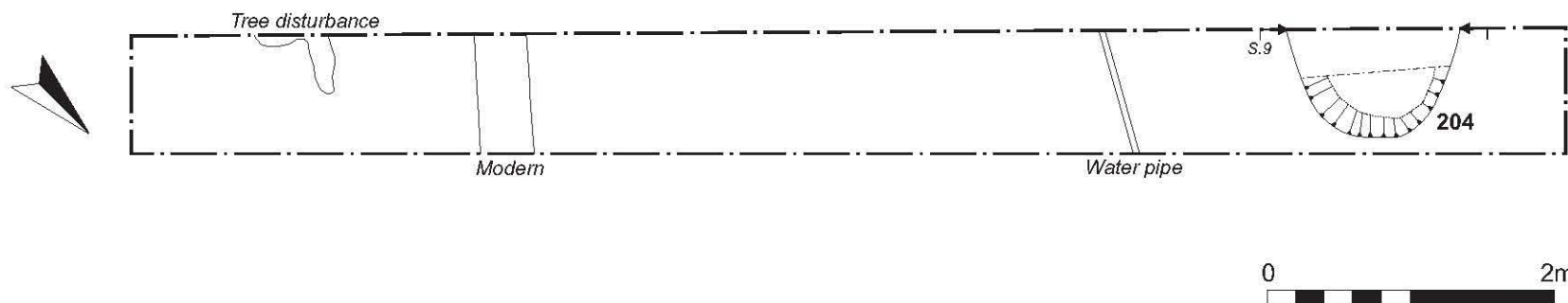
Trench 7, five postholes, looking north-east Fig 5

The buried topsoil was also present in two other trenches; up to 0.37m thick in Trench 5 (Fig 8 Section 3) and up to 0.13m thick in Trench 3, but was absent in Trench 6. The buried soils all revealed Iron Age pottery, except the buried subsoil in Trench 6 which also contained two sherds of Romano-British pottery.

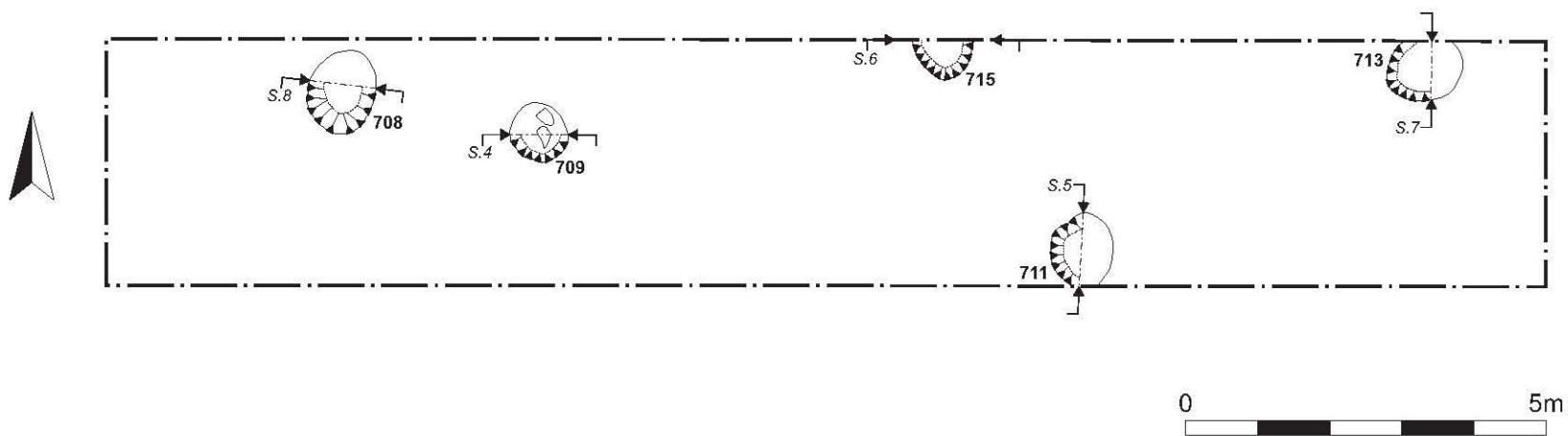
The buried subsoil in Trench 6 (603), 0.32m thick, was overlain by mid grey-brown clay, 0.20m thick with brick and asphalt fragments (602). Trenches 3, 5 and 7 contained a layer similar to (602), which appears to be produced where the remnant of buried topsoil was disturbed and had become mixed with later modern material. The disturbed layer varied between 0.15m thick in Trench 3 and 0.27m thick in Trench 7. It was overlain by a layer of modern rubble and rubbish, 0.27m to 0.59m thick; including brick fragments and metal strips.

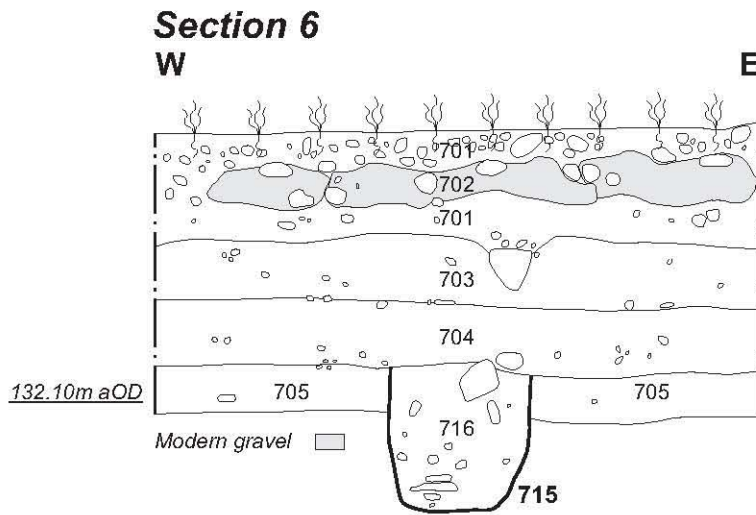
The northern extent of the buried subsoil and topsoil was visible in trench 3 (Fig 9). The southern extent of the two buried soils must lie between Trench 6 (where only buried subsoil was present) and trench 10 (which had no buried soils). The full eastern and western extent could not be established, but the buried soils are present in Trenches 5 to the west and 7 to the east.

Trench 2

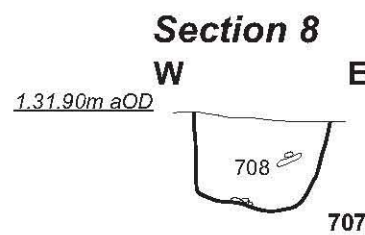
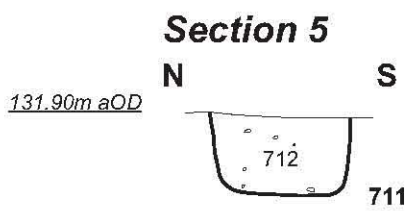
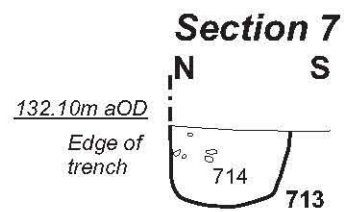
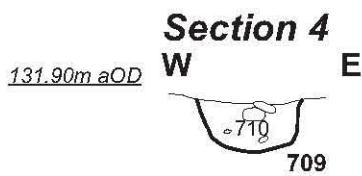


Trench 7

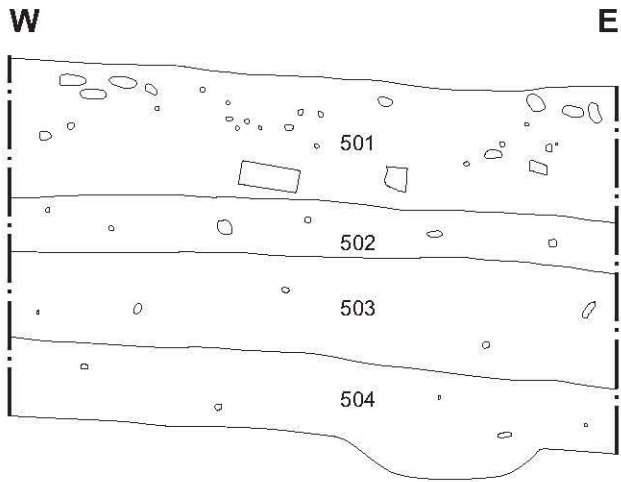




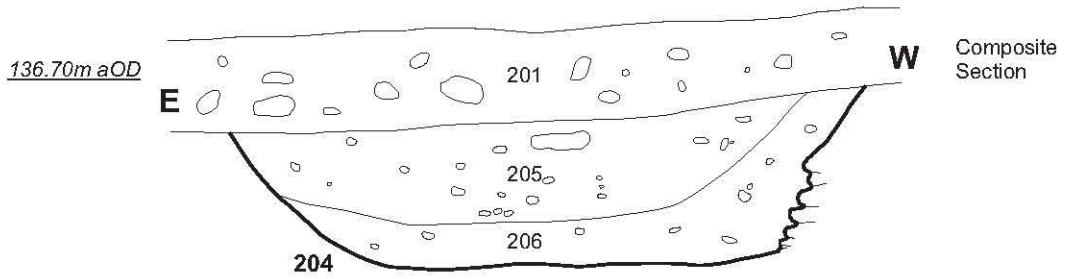
Section 6



Section 3



Section 9



Section 9





The northern extent of the buried soils in Trench 3, looking west Fig 9

At the western end of Trench 2 was the terminal of a ditch [204]. The ditch measured 2.20m wide and 0.49m deep, with an asymmetrical profile and a flat base (Figs 6 and 8, section 9). The primary fill (206) was mid orange-brown silty clay with frequent small to medium sub-angular limestone inclusions. The secondary fill (205) was dark grey-brown silty clay, which contained Iron Age pottery and animal bone.

The fill of the ditch terminal was overlain by mid grey-brown subsoil (202) 0.19m thick. Above this was topsoil (201), dark grey brown sandy loam, 0.32m deep, which was highly disturbed by tree roots.

6.3 Railway cutting

Along the western edge of the site is the disused railway cutting, which has been infilled and is notable through a build-up bank of material. This consisted of dark brown-grey sandy clay containing modern rubbish. Geotechnical assessment determined that this cutting could be over 10m deep (Bell and Greg 2011). Trench 1 was positioned to locate the position of the infilled cutting, and confirmed that the cutting is in line with the 1950s map (Fig 4).

6.4 Modern disturbed ground

The north-western trenches 8 to 14 and southern trenches, 21 to 23, had a truncated natural comprising light yellow-brown sandy clay becoming increasingly mid orange-brown clay, sand and gravel of decaying limestone fragments towards the south of

the site. This was overlain by a layer 0.05m to 0.54m thick comprising disturbed natural mixed with the overlaying levelling/make-up layer and bits of brick and other building material. The surface of the site comprised between 0.09m and 0.36m of light grey and orange-brown sandy limestone gravels, which had been compacted. Some trenches also had thin layers of crushed asphalt as well crushed brick fragments (Fig 10). Tarmac had to be broken through in Trenches 11 and 9, but had to be left in place at the north-eastern end of Trench 8 due to modern rubbish and concrete. In the northern end of Trench 23 remnants of up to 0.19m mid orange-brown subsoil were noted, the natural in the remainder of the trench was disturbed.



Trench 12, looking west Fig 10

6.5 Landscape areas (survival of topsoil and subsoil)

The landscaped area, along Northampton Road, was investigated by Trenches 15 and 18 to 20.

Trenches 15 and 18 were located in an area with tree growth. In both trenches the natural comprised light orange-brown sandy clay and weathered limestone. This was overlain by 0.19m to 0.37m mid orange-brown sandy clay subsoil and between 0.10m and 0.29m of dark grey-brown sandy loam topsoil. Due to the trees, root activity had disturbed the subsoil and topsoil extensively (Fig 11). No archaeological remains were uncovered.

Trench 20, located in the garden of the north-eastern house, revealed undisturbed light yellow-brown clay sand natural (2003) overlain by up to 0.20m thick subsoil (2002) and up to 0.09m thick topsoil (2001).



Trench 18, looking south-west Fig 11

Further north, near the site entrance, Trench 19 had a truncated natural of dark brown-blue clay (1903), which was overlain by a make-up layer comprising mid orange-brown sandy gravel, light cream limestone gravel and dark grey-brown clay (1902). This was overlain by the existing make-up layer comprising of mid orange-brown sandy gravel (1901).

7 THE FINDS

7.1 Flint by Yvonne Wolframm-Murray

In total six pieces of worked flint were recovered as residual finds in Iron Age features and buried soils. The flakes comprised a small cylindrical flake core with a single platform and five flakes of which three were broken, listed below in Table 1.

Table 1: Quantification of worked flint

Description	Whole	Fragment	Burnt	Total	Comments
Flake	2	2	1	5	All are patinated, thermal fracturing present on burnt flake, slight post-depositional edge damage
Tool	-	-	1	1	cylindrical flake core with a single platform, broadly Neolithic in date
Total	2	2	2	6	-

The condition of the assemblage was good. The flints showed post-depositional edge damage in the form of occasional edge nicks. Patination was present on all flakes ranging from a mottled white to a complete white colour. Accidental burning of the flint was evident on the core and one of the flakes in the form of thermal fracturing and patination.

The raw material is a vitreous flint of mid grey colour. Cortex is present on the dorsal surface on the core and one of the flakes and was light and dark brown in colour with a generally smooth, rolled and weathered surface. The raw material was likely to have been derived from local gravel deposits.

The worked flints are not directly dateable but their technological characteristics suggest a broadly Neolithic date.

7.2 The Iron Age pottery by Andy Chapman

There is small assemblage of hand-built pottery, 116 sherds, weighing 439g, dating to the middle/late Iron Age (Table 2).

The material was recovered in Trenches 2, 3, 5, 6 and 7, but only derives from cut features in Trench 2, a ditch terminal, and from three postholes/pits in Trench 7. The remainder of the material was recovered from buried soils. It comprises small sherds and crumbs, with an average sherd weight (excluding the crumbs) of only 3.8g.

Fabric

The Iron Age sherds are all in fabrics containing crushed shell. The majority of the sherds are from thick-walled vessels, 9-11m thick, containing dense coarse shell, but there are a few thinner sherds containing sparser more finely crushed shell. This is typically of middle/late Iron Age assemblages in Northamptonshire. The sherds typically have dark grey cores and a majority also have dark grey to dark brown

surfaces, although there are a few sherds with oxidised red-brown to orange surfaces.

Table 2: Quantification of Iron Age pottery

Context/ feature	type	sherds	Weight (g)	Comments
205/204	ditch	14	55	Shelly body sherds
305	Buried subsoil	28 + crumbs	115	Very shelly body sherds 1 with finger impression
503	Buried topsoil	8 + crumbs	25	Shelly body sherds
504	Buried subsoil	7	5	Shelly body sherds
603	Buried subsoil	5	20	3 shelly; 2 oxidised/grog RB
704	Buried topsoil	47 + crumbs	155	Shelly body sherds
716/715	Posthole/pit	10	40	Shelly body sherds 1 upright rounded rim
708/708	Posthole/pit	3	3	Shelly body sherds
710/709	Posthole/pit	1	1	Shelly body sherds
714/713	Posthole/pit	5	20	Shelly body sherds
Totals		116	439	

There are also small irregular crumbs of pale orange fired clay, to a total weight of 15g, from the subsoil in Trench 3 (305), the topsoil in Trench 5 (503) and the subsoil in Trench 7 (704).

From the subsoil in Trench 6, there are two plain body sherds in a soft, abraded orange, oxidised fabric, with a grey core, containing grog, which are of Romano-British date.

Forms

The material comprises small abraded body sherds, giving little indication of form. However, the thicker-walled sherds are likely to come from larger storage jars while the thinner-walled shreds indicate the presence of some small jars or bowls. A single body sherd has a deep finger-impressed hollow and there is a simple upright rounded rim from a jar.

Chronology

The character of the material is consistent with a broad middle/late Iron Age date. The only more specific indicator is the predominance of darker coloured sherds from large storage jars, which tends to be characteristic of later assemblages, perhaps 2nd and 1st centuries BC. There are also two stray sherds of Romano-British pottery from the same vessel, from the subsoil in Trench 6.

7.3 **Slag** by Andy Chapman

There are very small pieces of slag, 13 pieces with a total weight of 18g, from the topsoil in Trench 5 (503) and from three postholes in Trench 7 [708], [709] and [713]. This may be indicative of some ironworking taking place in the vicinity of Trench 7, but the quantities are very small, when ironworking, both smelting and smithing, produce considerable quantities of debris.

8 **THE FAUNAL REMAINS AND ENVIRONMENTAL SAMPLE ASSESSMENT**

8.1 **The animal bone** by Karen Deighton

Introduction

A total of 108 grams of animal bone was collected by hand from seven contexts during the course of excavation. This material was assessed to determine the level of preservation, the taxa present and to inform on the potential for further work.

Method

Identifiable bones were noted. Ageable and measurable bones (after Von Den Driesch 1976) were also noted. Ageable elements included cheek tooth rows where tooth eruption and wear can be assessed (Bull and Payne 1982 for pig), bones where the state of epiphyseal fusion is apparent (Silver 1969) and neonatal /juvenile bones (Amorosi 1989). Hand collected bones had previously been washed. Material from sieved samples was included (sieve sizes 1mm, 2mm and 3.4mm).

Preservation

Preservation was moderate with fairly heavy fragmentation and heavy surface abrasion. No evidence of butchery was noted and only three instances of canid gnawing were observed, however both strands of evidence could have been obscured by the surface abrasion.

Table 3: The taxa present

Fill/cut	Feature	Date	Cattle	Sheep/goat	Pig	Total
205	Ditch terminal		1	1	-	2
Tr 3	-	-	-	1	-	1
706	-	-	-	-	1	1
714	Posthole	-	1	-	-	1
Tr 7	-	-	1	4	-	5
Total	-	-	3	6	1	10

Indeterminate bone fragments only were recovered from context 712 and trench 5.

Table 4: Bone from sieved samples

Sample	Context	Weight(grams)	Cattle	Sheep/goat	Pig	Vole	Mouse	Small mammal
1	714	4	-	1	-	-	-	-
2	716	2	-	1	-	-	-	-
3	503	16	-	1	-	-	-	1
4	504	3	-	-	1	-	-	-
5	708	84	1	1	-	-	-	-
6	710	4	-	1	-	-	-	-
7	712	3	-	-	-	2	1	7
8	205	15	-	-	-	1	-	-

The remaining bone from samples was indeterminate

Ageing and metrical data

Ageing data was restricted to two neonatal sheep/goat bones from samples 1 (context 710) and 6 (context 714) and a pig cheek tooth row from sample 6. No metrical data was available due to the poor preservation encountered

Conclusion

In conclusion the bone adds little to the understanding of the site other than to say cattle, sheep and pigs were possibly utilised there. However, the presence of identifiable bone does indicate that should further work take place the collection and analysis of more animal bone could help to characterise the economy of the site.

8.2 An assessment of the environmental samples by Karen Deighton

Introduction

A total of eight samples were collected during the course of trial excavation. These were analysed to determine the presence, nature and preservation of ecofacts and to inform on any future sampling strategies.

Method

The samples were processed using a siraf tank fitted with a 250micron mesh and flot sieve. The resulting flots and residues were dried. The flots were sorted with the aid of a microscope (10 x magnifications). Residues were dry sieved (3.4mm, 1mm) and the 3.4mm retent sorted by eye. The 1mm retent was scanned using a microscope.

Charred seeds and grains were identified with the aid of the author's small reference collection and Jacomet (2006). Molluscs were identified with the aid of (Cameron and Kerney 1994).

Results

Preservation

Preservation of plant remains was solely by charring. Fragmentation was fairly high as was surface abrasion.

Taxa present

Table 5: Ecofacts by sample and context

Fill/cut	714	716	503	504	708	710	712	205
Sample	1	2	3	4	5	6	7	8
Feature type	posthole	posthole	Buried sub-soil	Buried topsoil	posthole	posthole	posthole	Ditch terminal
Volume(litres)	20	10	40	40	10	20	20	40
Charcoal	100	100	50	Sterile	1,000	50	100	100
Spelt(grains)	-	-	-	-	11	-	-	-
Spelt(chaff)	-	-	-	-	2	-	-	-
wheat	-	-	-	-	-	-	-	2
Hulled barley	-	-	-	-	14	3	-	-
Barley indet	-	-	1	-	-	-	-	-
Wheat/barley	-	-	-	-	-	9	-	-
Cereal	2	3	-	-	170	17	-	9
Fat Hen	-	-	-	-	-	2	-	-
Total	2	13	1	-	197	31	-	11
<i>H.aspersa</i>	-	-	-	-	2	-	-	-
<i>D.rotundatus</i>	1	1	-	-	18	21	4	-
<i>C.bidentata</i>	1	1	-	-	4	3	-	-
<i>V.excentrica</i>	2	-	-	-	22	8	13	3
<i>V.costata</i>	-	-	-	-	2	7	-	3
<i>Oxychilus</i> sp	-	-	-	-	15	12	1	-
<i>Carychium</i> sp	-	-	-	-	10	26	5	-
<i>V.pygmaea</i>	-	-	-	-	1	-	-	-
<i>C.lubrica</i>	-	-	-	-	4	-	1	-
Indet	8	2	1	-	51	52	16	24
Total	12	41	1	-	119	139	39	30

Discussion

The small number of charred seeds and grains per sample and the mixed of ecofacts suggests their genesis to be background i.e. material washed into features from activity taking place elsewhere. The exception would appear to be Sample 5 where the large amount of charcoal could be the result of deliberate burning with the presence of charred cereal grain suggesting that straw was used for kindling. The presence of this material in a posthole suggests waste disposal after the posthole falls into disuse.

The snail taxa present suggest open dry conditions with some moist sheltered pockets.

Conclusion

Analysis has shown a moderate range of ecofacts to be present and suggests future sampling for charred plant remains maybe profitable should further work take place.

9 DISCUSSION

Three areas with varying degree of potential for the survival of archaeological remains were identified by the evaluation (Fig 4).

Northern area: Medium to high potential

In the northern part of the development, an area of archaeological survival was identified around Trenches 2, 3, 5, 6 and 7. Five postholes were found in Trench 7, the terminal of a ditch in Trench 2, and buried subsoil and topsoil in Trenches 3, 5, 6, and 7. The majority of the features contained Iron Age pottery. The presence of archaeological features in this area adds to the existing knowledge of heritage assets recorded in the vicinity; and may, when considered with the dated Iron Age pits and pit/ditch excavated in 1990, and supports a possible Iron Age, or earlier date for the nearby burials.

It was possible to establish the northern and southern extent of the buried soils, but the eastern extent have not been established. The western limit of the buried soil is defined by the eastern edge of the railway cutting, which has destroyed a broad 30-45m wide swath along the western side of the development, removing all archaeological deposits. The potential for survival of archaeological features is greater to the east; however, this also may have been negatively impacted by modern levelling for the construction of industrial units, which are currently in use.

The two sherds of Romano-British pottery which were recovered from the subsoil in Trench 6 do not significantly add to the previous evidence for Roman activity in the vicinity. They are not indicative of settlement and probably derive from general manuring upon cultivated fields.

East area: Medium to low potential.

No archaeological remains were uncovered in the area of trees and soft landscaping around the houses and adjacent to the Northampton Road, Trenches 15, 18 and 20. There was extensive disturbance caused by trees and modern services and the truncation of original surface is possible reflecting the visible fall of the ground towards the Northampton Road. However, due to the survival of subsoil and topsoil the potential for the preservation of archaeological deposits in the area is possible.

Central and South: Low potential.

No archaeological deposits were found in the central and southern area of the site, Trenches 8 to 14 and Trenches 21 to 23. This is an area of hardstanding, re-enforced concrete, access roads and buildings and therefore probably has undergone levelling and build-up of the ground. Also the entire western side has been truncated for the railway cutting. Due to the truncated nature of the natural the preservation of archaeological deposits is likely to be low.

BIBLIOGRAPHY

- Amorosi, T 1989 Neo-natal and Juvenile mammals, British Archaeological Reports, **333** Oxford
- Bell, A, and Greg, S, 2011, *Phase II investigation for Brackley Saw Mill*
- Brothwell D, And Higgs E, (eds) 1969 *Science in Archaeology*, London: Thames and Hudson
- Bull, G, and Payne, S, 1982 Tooth eruption and epiphyseal fusion in pigs and wild boar in B. Wilson *et al* 1982
- CA 2010, *Land at Brackley Sawmills, Brackley, Northamptonshire: Cultural Heritage Assessment*, Cotswold Archaeology
- Jacomet, S, 2006 *Identification of cereal remains from archaeological sites*. Basel: IPAS
- Kerney, M.P. and Cameron, R A D, 1994 *Land Snails of Britain and North-west Europe*, London; Harpercollins
- NA 2011 *An archaeological trial trench evaluation at Brackley Sawmill, Northamptonshire, Project Design*, Northamptonshire Archaeology
- NA 2006 *Archaeological fieldwork manual*, Northamptonshire Archaeology
- NCC 2011b *Brief for the archaeological field evaluation of land at Brackley Sawmills, Northampton Road, Brackley, Northamptonshire*, Planning Northamptonshire County Council
- Silver, I, 1969 The ageing of domestic mammals, in D. Brothwell and E. Higgs 1969, 283-302
- Von den Driesch, A, 1976 *Guide to the measurement of Animal bones from Archaeological sites*, Harvard: University Press
- Wilson, B, Grigson, C, and Payne, S, 1982 *Ageing and sexing animal bones from archaeological sites*, British Archaeological Reports, British Series, **109**, Oxford

APPENDIX 1: CONTEXT INVENTORY

Trench No	Length, width & alignment	General comments	Surface height	Depth & height of natural
1	m x 1.8m E-W	Trench moved	137.25m aOD	0.57m, 136.68m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
101	Layer	Sandy gravel with large to small limestone fragments, brick, tile, asphalt fragments	0.57m thick	-
102	Natural	Mid orange-brown, small to large sub-angular limestone with clay sand	-	-
103	Cut of railway	East end of trench	7.60m exposed	-
104	Fill of [103]	Mixed rubbish of railway sleeper fragments, plastic, brick, dark grey-brown sandy clay, wire, re-distributed natural etc.	Not excavated	-

Trench No	Length, width & alignment	General comments	Surface height	Depth & height of natural
2	20m x 1.8m NW-SE	Trench moved, disturbance through tree roots	137.10m aOD	0.51m, 136.59m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
201	Topsoil	Dark grey-brown sandy loam, gravel of small to large limestone fragments, tarmac and brick fragments	0.32m thick	-
202	Subsoil	Very disturbed through roots, limestone gravel	0.19m thick	-
203	Natural	Light orange-brown clay sand with limestone gravel	-	-
204	Cut of but-end	Sub-circular, NE-SW orientated, near vertical sides and flat base		-
205	Fill of [204]	Hard, dark grey-brown silty clay with frequent small to medium sized sub-angular limestone inclusions		Pottery and animal bone Sample 8
206	Fill of [204]	Hard, mid orange-brown silty with frequent small to medium sized sub-angular limestone inclusions		Flint

Trench No	Length, width & alignment	General comments	Surface height	Depth & height of natural
3	20m x 1.8m NE-SW	Trench had to be moved	134.21m aOD	0.46m, 133.57m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
301	Layer	Mid orange gravel layer	0.31m thick	-
302	Layer	Mixed layer of grey-brown clay and natural	0.15m thick	-
303	Natural	Light brown-white weathered limestone with sandy clay and mid orange-brown patches to SW end	-	-
304	Buried Topsoil	Dark grey-brown silty clay, moderate small to medium, rounded to sub-angular limestone inclusions	0.13m thick	-
305	Buried Subsoil	Mid orange-brown silty clay with moderate small inclusion of limestone	0.10m thick	-

Trench No	Length, width & alignment	General comments	Surface height	Depth & height of natural
4	20m x 1.8m NW-SE	Trench moved	133.73m aOD	0.38m, 133.35m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
401	Layer	Mid orange gravel layer	0.20m thick	-
402	Layer	Mid grey gravel layer of small to medium sub-angular stones	0.18m	-
403	Natural	Light brown-white weathered limestone	-	-

Trench No	Length, width & alignment	General comments	Surface height	Depth & height of natural
5	20m x 1.8m W-E	-	135.85m aOD	1.41m, 134.44m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
501	Layer	Make-up layer; light and mid grey-brown sandy gravel with clay, brick, building material fragments, plastic	0.59m thick	-
502	Interface layer	Mid orange-brown, frequent small limestone fragments, modern rubbish	0.19m thick	-
503	Buried topsoil	Dark orange-brown silty clay, moderate small limestone inclusions	0.37m thick	Pot and Bone Sample 4
504	Buried subsoil	Mid orange-brown silty clay with occasional limestone and flint inclusions	0.26m thick	Pot and bone Sample 3
505	Natural	Light sandy clay with weathered limestone	-	-

Trench No	Length, width & alignment	General comments	Surface height	Depth & height of natural
6	10m x 1.8m NE-SW	Trench moved	133.64m aOD	0.82m, 132.82 m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
601	Layer	Modern rubble and rubbish (brick, concrete, metal, etc.) mid brown-grey gravelly sand with frequent stones	0.30m thick	-
602	Layer	Mid grey-brown clay, frequent small to medium white limestone fragments, occasional brick and asphalt fragments	0.20m thick	-
603	Buried Subsoil	Mid orange-brown silty clay with moderate small inclusion of limestone	0.32m thick	Pottery and animal bone
604	Natural	Light orange-brown clay, sand and gravels with varying amount of small to medium limestone fragments	-	-

Trench No	Length, width & alignment	General comments	Surface height	Depth & height of natural
7	10m x 1.8m NE-SW	Trench moved	132.92m aOD	1.26m, 131.66m aOD
Context	Context type	Description	Dimensions	Artefacts/Samples
701	Layer	Mid orange gravel layer	0.27m thick	-
702	Layer	Light grey gravel of small to large sub-angular and angular stones; some asphalt content	0.27m thick	-
703	Layer	Mid grey-brown clay, frequent small to medium white limestone fragments, brick and asphalt	0.27m thick	-
704	Buried Topsoil	Dark grey-brown silty clay, moderate small to medium, rounded to sub-angular limestone inclusions	0.20m thick	Pottery and animal bone
705	Buried Subsoil	Mid orange-brown silty clay with moderate small inclusion of limestone	0.25m thick	-
706	Natural	Light white weathered limestone and sand with mid orange-brown clay and gravel towards NE end	-	-
707	Cut of pit	Near vertical sides with a concave base		-
708	Fill of [708]	Dark grey-brown silty clay, frequent small to medium sub-angular limestone		Sample 5
709	Cut of pit	80° sides with a slightly concave base		-
710	Fill of [709]	Dark grey-brown silty clay, moderate small to medium sub-angular limestone		Sample 6
711	Cut of pit	80° sides with a flat base		-
712	Fill of [711]	Mid orange-brown silty clay, moderate small to medium sub-angular limestone		Sample 7
713	Cut of pit	U-shaped profile		-
714	Fill of [713]	Dark grey-brown, frequent small to medium sub-angular limestone		Sample 1
715	Cut of pit	U-shaped profile		-
716	Fill of [715]	Dark grey-brown silty clay, frequent small to large rounded limestone, flint and burnt stone		Sample 2

Trench No	Length, width & alignment	General comments	Surface height	Depth & height of natural
8	20m x 1.8m NE-SW	Modern rubbish and trapped water, not fully excavated due to tarmac surface	135.21m aOD	0.74m, 134.47m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
801	Layer	Mixed make-up layer, mid grey-brown sandy clay, frequent sub-angular limestone inclusions and brick fragments	0.20m	-
802	Layer	Light to mid yellow and orange-brown mixed clay, sand and gravel, occasional brick and metal fragments	0.54m	-
803	Cut	Cut of rubbish pit	-	-
804	Fill of [803]	Modern rubbish; mixed dark brown-grey sandy, clay and greavel, concrete, bricks, plasterboard, metal work, etc.	0.54m; Full depth not excavated	-
805	Natural	Light brown sandy clay with weathered limestone and mid orange-brown clay patches	-	-

Trench No	Length, width & alignment	General comments	Surface height	Depth & height of natural
9	20m x 1.8m NW-SE	-	134.90m aOD	0.75m, 134.15m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
901	Layer	Tarmac/gravel mix; light grey sandy gravel with small to medium sub-angular limestone, brick fragments	0.29m	-
902	Layer	Light to mid yellow and orange-brown mixed clay, sand and gravel, occasional brick and metal fragments	0.46m	-
903	Natural	Light clay sand; weathered limestone and mid orange-brown clay patches	-	-

Trench No	Length, width & alignment	General comments	Surface height	Depth & height of natural
10	20 m x 1.8m NE-SW	Trench had to be moved away from fence and ditch/bank	133.85m aOD	0.52m, 133.52m aOD
Context	Context type	Description	Dimensions	Artefacts/Samples
1001	Layer	Light grey asphalt and light yellow-brown sandy gravel limestone	0.33m	-
1002	Layer	Light to mid yellow and orange-brown mixed clay, sand and gravel, occasional brick and metal fragments	0.19m	-
1003	Natural	Light clay sand; weathered limestone, more clay to the north end of trench	-	-

Trench No	Length, width & alignment	General comments	Surface height	Depth & height of natural
11	20m x 1.8m NW-SE	-	136.13m aOD	0.58m, 135.55m aOD
Context	Context type	Description	Dimensions	Artefacts/Samples
1101	Layer	Dark grey tarmac, bricks and concrete with small to medium sub-angular and angular stones	0.27m	-
1102	Layer	Light to mid yellow and orange-brown mixed clay, sand and gravel, occasional brick and metal fragments	0.31m	-
1103	Natural	Light yellow-brown weathered limestone; sand and clay with small to medium sub-angular to angular limestone	-	-

Trench No	Length, width & alignment	General comments	Surface height	Depth & height of natural
12	20m x 1.8m W-E	Trench had to be moved due to a rubbish pile with asbestos	136.85m aOD	0.58m, 136.27m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
1201	Layer	Dark grey/red asphalt/brick; light brown sandy limestone gravel with brick and concrete fragments	0.36m	-
1202	Layer	Light to mid yellow and orange-brown mixed clay, sand and gravel, occasional brick and metal fragments	0.22m	-
1203	Natural	Light yellow-brown weathered limestone; sand and clay with small to medium sub-angular to angular limestone	-	-

Trench No	Length, width & alignment	General comments	Surface height	Depth & height of natural
13	20m x 1.8m N-S	-	136.73m aOD	0.98m, 135.75m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
1301	Compacted layer; Compound surface	Light grey sandy gravel of small to medium sub-angular limestone; light orange-brown sandy gravel, membrane and brick fragments, etc.	0.28m	-
1302	Layer	Light to mid yellow and orange-brown mixed clay, sand and gravel, occasional brick and metal fragments	0.27m	-
1303	Natural	Mid orange-brown clay sand gravel of small to large sub-angular limestone	-	-
1304	Deposit	Dark grey-brown sandy gravel with	0.43	-
1305	Structure	Concrete bricks with steel re-enforcement, two walls exposed overlay by (1301)	-	-

Trench No	Length, width & alignment	General comments	Surface height	Depth & height of natural
14	20m x 1.8m NW-SE	SE end could not be excavated due to concrete, discontinued service exposed	134.97m aOD	0.79m, 134.18m aOD
Context	Context type	Description	Dimensions	Artefacts/Samples
1401	Compacted layer; Compound surface	Hardcore, light grey limestone gravel, brick and general rubbish	0.40m thick	-
1402	Layer	Light to mid yellow and orange-brown mixed clay, sand and gravel, occasional brick and metal fragments	0.39m thick	-
1403	Natural	Light yellow-brown weathered limestone gravel and clay	-	-

Trench No	Length, width & alignment	General comments	Surface height	Depth & height of natural
15	20m x 1.8m SW-NE	Trench had to be moved due to vegetation; Water pipe exposed	134.18m aOD	0.54m, 133.64m aOD
Context	Context type	Description	Dimensions	Artefacts/Samples
1501	Topsoil	Dark grey-brown sandy loam, frequent small to medium limestone sub-angular inclusions, some rubbish (brick, metal work, etc.)	0.29m thick	-
1502	Subsoil	Mid orange-brown sandy clay, frequent to medium sub-angular limestone inclusions, occasional small brick fragment	0.25m	-
1503	Natural	Mid orange-brown sandy clay with frequent small to large sub-angular and angular limestone inclusions	-	-

Trench No	Length, width & alignment	General comments	Surface height	Depth & height of natural
18	20m x 1.8m NE-SW	Large tree stump, extensive root disturbance	131.26m aOD	0.63m, 130.63m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
1801	Topsoil	Dark grey-brown sandy loam, frequent small to medium limestone sub-angular inclusions, some rubbish (brick, metal work, etc.)	0.26m	-
1802	Subsoil	Mid orange-brown sandy clay, frequent to medium sub-angular limestone inclusions, occasional small brick fragment	0.37m	-
1803	Natural	Light yellow-brown sandy clay with frequent small sub-angular weathered limestone inclusions	-	-

Trench No	Length, width & alignment	General comments	Surface height	Depth & height of natural
19	20m x 1.8m NW-SE	Trench had to be moved due to services and trees, modern service trench exposed	129.84m aOD	0.74m, 129.10m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
1901	Layer	Mid orange-brown sandy gravel, mid sized sub-angular Limestone	0.39m thick	-
1902	Layer	Mid orange-brown sandy gravel with mid to small sub-angular stone, more clay content than (19001) in SE; in NW end dark grey-brown clay with frequent layers of light limestone and asphalt	0.35m thick	-
1903	Natural	Dark brown-blue clay with occasional small limestone inclusions	-	-

Trench No	Length, width & alignment	General comments	Surface height	Depth & height of natural
20	10m x 1.8m SW-NE	In a garden, some disturbance through tree roots	133.36m aOD	0.29m, 133.07m aOD
Context	Context type	Description	Dimensions	Artefacts/Samples
2001	Topsoil	Dark brown-grey silty clay	0.09m thick	-
2002	Subsoil	Mid brown-grey clay	0.20m thick	-
2003	Natural	Light yellow-brown clay sand with occasional limestone fragments	-	-

Trench No	Length, width & alignment	General comments	Surface height	Depth & height of natural
21	10m x 1.8m NW-SE	-	132.89m aOD	0.45m, 132.44m aOD
Context	Context type	Description	Dimensions	Artefacts/Samples
2101	Layer	Gravel drive/make-up layer; very mixed comprising pea-gravel, large angular limestone and sandstone and mid brown gravelly clay, brick and concrete fragments	0.45m thick	-
2101	Topsoil	Dark brown-grey with frequent small to medium limestone inclusions; strong root disturbance	0.30m thick	-
2103	Natural	Light yellow-brown sandy clay with frequent small to medium sub-angular limestone fragments, some darker more clay patches	-	-

Trench No	Length, width & alignment	General comments	Surface height	Depth & height of natural
22	20m x 1.8m NW-SE	-	134.09m aOD	0.68m, 133.41 m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
2201	Layer	Compound surface/levelling – mixed in places; dark red-brown, grey-brown and mid-brown limestone and sandstone gravel overlain by small mid grey gravel chippings	0.68m thick	-
2202	Natural	Mid orange-brown sandy clay with small to large limestone fragments with light yellow-brown sandy gravelly patches	-	-

Trench No	Length, width & alignment	General comments	Surface height	Depth & height of natural
23	20m x 1.8m NW-SE	-	133.76m aOD	0.80m, 132.96m aOD
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
2301	Layer	Compound surface; Felt overlain by medium sub-angular limestone rubble and small angular mid grey chipping	0.36m thick	-
2302	Layer	South 2/3 of trench; mid grey-brown sandy and clay subsoil with frequent stone inclusions, disturbed with concrete and brick fragments	0.44m thick	-
2303	Subsoil	North end of trench undisturbed; mid orange-brown gravelly clay with small to medium sub-angular limestone	0.19m thick	-
2304	Fill of [2305]	Mid grey-brown gravelly clay with small to medium sub-angular limestone fragments, root disturbance	0.30m wide 0.08m deep	17th century clay pipe fragments
2305	Cut of land drain	Concave base 80° sides	-	-
2306	Natural	Light orange-brown clay sand with frequent small to large sub-angular limestone fragments	-	-