

Report 3110a



nps archaeology

**Archaeological Trial Trench Evaluation at  
John Innes NRP Development (Centrum),  
Colney, Norfolk (Trenches 1-5)**

HER 129669



**Prepared for**  
Faithful + Gould  
Wellbrook Court  
Girton Road  
Cambridge  
CB3 0NA

Rachel Cruse BA, MA, AIfA, Affiliate IHBC

December 2012



[www.nps.co.uk](http://www.nps.co.uk)

<b>PROJECT CHECKLIST</b>		
Project Manager	David Whitmore	
Draft Completed	Rachel Cruse	19/10/2012
Graphics Completed	David Dobson	15/11/2012
Edit Completed	Jayne Bown	27/11/2012
Signed Off	David Whitmore	06/12/2012
<i>Issue 1</i>		

## **NPS Archaeology**

Scandic House  
85 Mountergate  
Norwich  
NR1 1PY

T 01603 756150

F 01603 756190

E [jayne.bown@nps.co.uk](mailto:jayne.bown@nps.co.uk)

[www.nau.org.uk](http://www.nau.org.uk)

BAU 3110a / 01-04-13-2-1048

© NPS Archaeology

## Contents

---

<i>Summary</i> .....	1
1.0 Introduction .....	1
2.0 Geology and Topography .....	3
3.0 Archaeological and Historical Background.....	3
3.1 Sites within the development area.....	3
3.2 Sites within a 1km study area zone (centred on, but excluding the development site).....	4
4.0 Methodology .....	10
5.0 Results.....	11
6.0 The Finds.....	26
6.1 Pottery .....	26
6.2 Ceramic Building Material.....	26
6.3 Flint.....	26
6.4 Animal Bone .....	26
6.5 General Finds Conclusions .....	26
7.0 Conclusions .....	27
<i>Acknowledgements</i> .....	28
<i>Bibliography and Sources</i> .....	28
Appendix 1a: Context Summary .....	29
Appendix 1b: OASIS Feature Summary .....	29
Appendix 2a: Finds by Context .....	30
Appendix 2b: OASIS Finds Summary .....	30

## **Figures**

Figure 1	Site location
Figure 2	Location of trenches
Figure 3	Trench 1, plan and sections
Figure 4	Trench 2, plan and sections
Figure 5	Trench 3, plan and sections
Figure 6	Trench 4, plan and section
Figure 7	Trench 5, plan and section

## **Plates**

Plate 1	Trench 1
Plate 2	Trench 1, south-facing section of ditch [3]
Plate 3	Trench 1, north-facing section of ditch [3]
Plate 4	Trench 2
Plate 5	Trench 2, south-east and south-west section of ?quarry pit [13]
Plate 6	Trench 2, south-east facing section of ?quarry pit [19]
Plate 7	Trench 3
Plate 8	Trench 3, east-facing section of pit [6]
Plate 9	Trench 3, north-facing section of pit [9]
Plate 10	Trench 4
Plate 11	Trench 4, north-facing section of ?natural hollow [15]
Plate 12	Trench 5
Plate 13	Trench 5, south-facing section of ditch

## **Tables**

Table 1	Trench 1
Table 2	Trench 2
Table 3	Trench 3
Table 4	Trench 4
Table 5	Trench 5

Location:	Norwich Research Park North, Colney Lane, Norwich
District:	South Norfolk
Grid Ref.:	TG 18030770
Planning Ref.:	2012/1145/F
HER No.:	ENF 129669
OASIS Ref.:	138068
Client:	Faithful + Gould
Dates of Fieldwork:	8-10 August 2012

---

## **Summary**

*An archaeological evaluation was conducted for Faithful and Gould ahead of the construction of a car park for the proposed Centrum building, part of the development of the Norwich Research Park, Colney, Norwich.*

*Five trenches (Trenches 1-5) each measuring 30m by 2.0m were excavated and recovered evidence of a possible boundary ditch, a further ditch and a possible ditch terminus, several pits and a number of natural features, probably tree throws. Trench 1, on the south side of the area, was positioned to target potential remains of a Bronze Age barrow. While the results from this trench are inconclusive, revealing a possible ditch terminus, it did suggest any archaeological remains here were probably unaffected by quarrying activity thought to have taken place in the vicinity.*

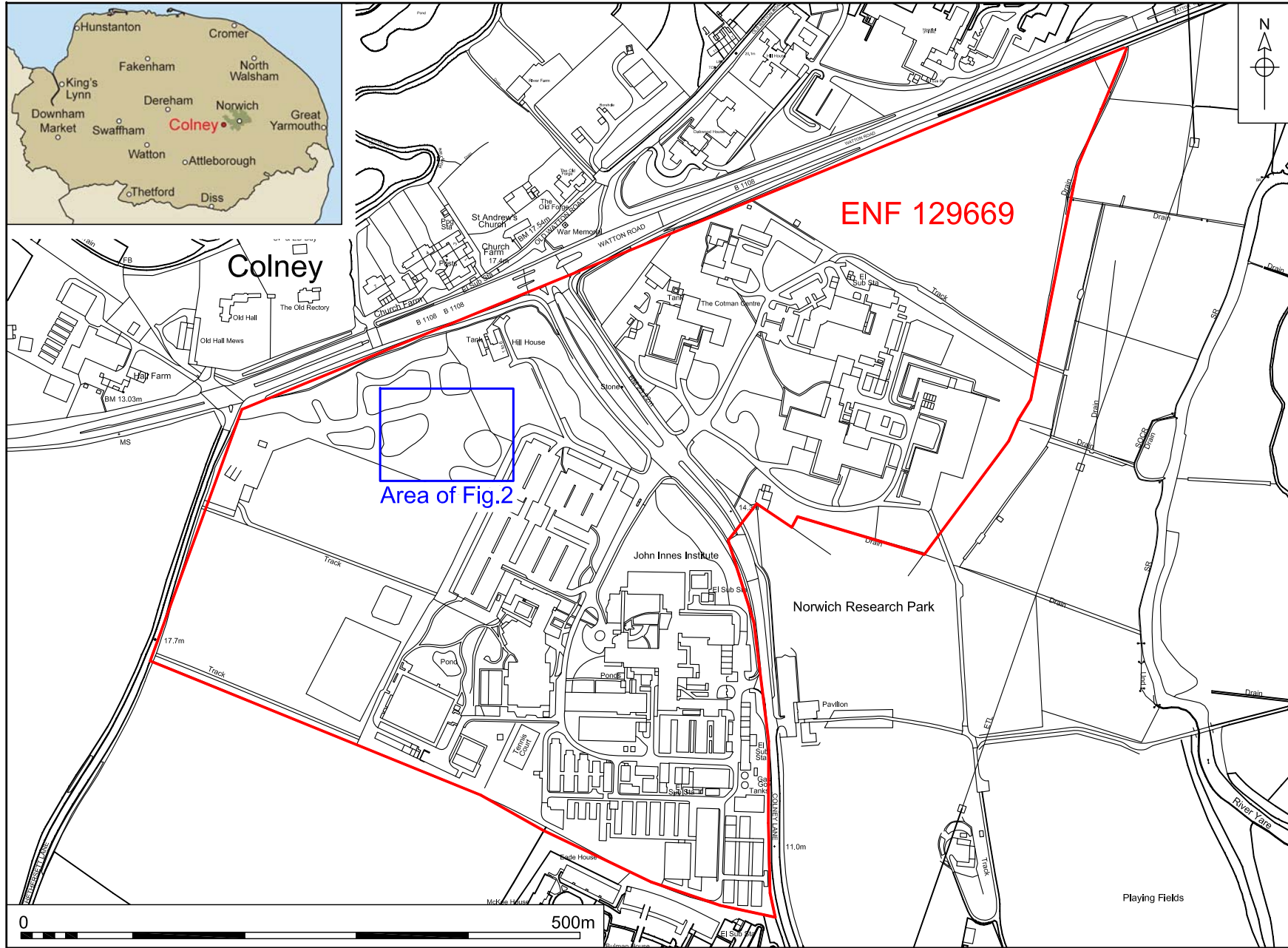
## **1.0 INTRODUCTION**

This report presents the findings of the first phase of evaluation works at the Norwich Research Park (NRP), Colney in Norfolk (Fig. 1). The results of the second phase of trial trench evaluation (Trenches 6-33) are presented in NPS Archaeology report 3110b (Adams 2012).

This work was undertaken at part of the NRP Development in Colney, Norfolk (Fig. 1) to fulfil planning requirements set by South Norfolk Council (2012/1145/F) and a Brief issued by Norfolk Historic Environment Service (CNF 44383). The work was conducted in accordance with a Project Design and Method Statement prepared by NPS Archaeology (Ref.NAU/BAU3110/DW). This work was commissioned by Faithful + Gould and funded by BBSRC.

This programme of work was designed to assist in defining the character and extent of any archaeological remains within the proposed redevelopment area, following the guidelines set out in *National Planning Policy Framework* (Department for Communities and Local Government 2012). The results will enable decisions to be made by the Local Planning Authority about the treatment of any archaeological remains found.

The site archive is currently held by NPS Archaeology and on completion of the project will be deposited with Norfolk Museums and Archaeology Service (NMAS), following the relevant policies on archiving standards.



© Crown copyright and database rights 2011 Ordnance Survey 100019340

Figure 1. Site location. Scale 1:5000

## **2.0 GEOLOGY AND TOPOGRAPHY**

The River Yare loops around the north and west sides of the research park and the evaluated site slopes gently to the west and east, dropping towards the west steeply at the south-west limit of the site.

The deep underlying bedrock geology is Lewes Nodular Chalk Formation, Seaford Chalk Formation, Newhaven Chalk Formation and Culver Chalk Formation. Sedimentary Bedrock formed approximately 71 to 94 million years ago in the Cretaceous Period. Local environment previously dominated by warm chalk seas ([http://maps.bgs.ac.uk/geologyviewer\\_google/googleviewer.html](http://maps.bgs.ac.uk/geologyviewer_google/googleviewer.html)). The superficial geology comprises of sand and gravel. These deposits formed up to two million years ago in the Quaternary Period. Local environment previously dominated by ice age conditions ([http://maps.bgs.ac.uk/geologyviewer\\_google/googleviewer.html](http://maps.bgs.ac.uk/geologyviewer_google/googleviewer.html)).

The ground would appear to drain freely.

The trench with the highest elevation is Trench 4 at 22.75 OD and the lowest is Trench 1 at 21.25 OD. The trenches were located in clearings in a small wooded area on higher ground overlooking a small valley and open fields to the south and west.

## **3.0 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND**

Data held in the Norfolk Historic Environment Record (NHER) for the area of the proposed development has been recently consulted for a Desk-based Assessment (Sillwood 2012). As part of this assessment a search was made of all NHER records that fell within a 1km radius of the development site, which entailed 157 records in total. The results of this search are presented in detail in the Desk Based Assessment, and a summary of these results are presented below based on Sillwood's work. They are divided into two sections, the first relating to sites occurring within the boundary of the development area and the second presenting sites within the 1km search area.

### **3.1 Sites within the development area**

A total of eight sites are located within the development area and are described below.

#### **Prehistoric Evidence**

Excavations at the John Innes Centre (NHER 9332, Adams 2000, Nokkert 2000, Green 2001, Whitmore 2004) have recovered important evidence of Neolithic date, including evidence of a midden-type deposit and over 28,000 pieces of flint debitage. This deposit was located in a natural hollow filled with a 'brown forest soil', formed under mixed pine and oak woodland. The Neolithic midden or 'occupation' layer was cut by a rectangular post-hole structure with internal subdivisions and a possible floor surface.

A Neolithic chipped flint tool (NHER 9331) was found on a field within an area subsequently excavated as site NHER 9332. The site of a probable Bronze Age barrow (NHER 9335) is located on the crest of a slope north of NHER 9332. The barrow is one of two possible barrow sites excavated in 1799 which contained a

burial urn with cremated human bone and pottery fragments. The NHER states that 'reports suggest' Early Saxon spearheads, knives and pottery were found nearby.

### **Roman Evidence**

One fragment of Roman or medieval pottery (NHER 9397) was recovered from the surface of a ploughed field. Two fragments of Roman pottery (NHER 9337) have been found within the site's boundary.

### **Medieval, Post-medieval and Undated Evidence**

Three cropmark sites identified from aerial photographs are located within the development area. To the east of Colney Lane the earthworks of a possible medieval-to-post-medieval enclosure are recorded (NHER 54424), along with linear field boundaries, although most of these cropmarks appear to lie outside the development area. Two undated enclosures (NHERs 54425 and 54426) are also recorded in the area.

## **3.2 Sites within a 1km study area zone (centred on, but excluding the development site)**

### **Prehistoric Evidence**

A total of sixty prehistoric NHER entries including those already mentioned are recorded within the study area. Many of these sites relate to find spots. The earliest find recovered is a Palaeolithic flint handaxe (NHER 9398) recovered from a field near the river located c. 260m north of the Research Park.

Mesolithic finds have been recovered from the area. A flint blade (NHER 35739), two large scatters of Mesolithic flints (NHER 11639 and 11641) including blades and flakes are recorded and a Mesolithic flaked flint axe (NHER 9334) has been found. Mesolithic flint was recovered during archaeological excavation at the Norfolk and Norwich Hospital (NHER 31871), and during archaeological works at the John Innes Centre (NHER 9332).

Records of Neolithic activity include the previously mentioned John Innes Centre (NHER 9332). The Norfolk and Norwich Hospital site (NHER 31871, Penn 2000) provided evidence of Late Neolithic to Bronze Age activity in the form of ditches and pits. Late Neolithic ditches and post-holes were recorded to the north of the study area at Bishy Barnabee Way, Bowthorpe (NHER 35757). Near this a multi-period site dating from the Palaeolithic to the Bronze Age (NHER 9304) was recorded. An Early Neolithic roundhouse-like structure was found, along with Late Neolithic to Early Bronze Age pits and worked flints. In addition a number of sites have produced Neolithic flints (NHERs 9321, 9328, 11638, 12192, 13409, 13411, 19827, 20666, 24157, 25508, 28273, 28326, 24017 and 34565).

Bronze Age activity is represented by surface finds. A Late Bronze Age spearhead found in a garden (NHER 9322), a Bronze Age barbed and tanged flint arrowhead (NHER 9321) recovered from the University grounds and an Early Bronze Age dagger (NHER 9309) all come from the study area.

Evidence of Iron Age activity in the study area is almost limited to a single site – Little Melton water treatment works (NHER 50209) where Iron Age enclosures, pit clusters and cremations were found during excavations. Pits and ditches of Iron



Age date were also excavated at the Norfolk and Norwich Hospital site (NHER 31871).

Cropmarks of possible prehistoric date include several ring ditches which probably represent remains of Bronze Age barrows (funerary monuments). South-west of the development site are cropmarks of five possible ring ditches (NHER 36402). The cropmarks are fairly ephemeral and the nature of the geology in the surrounding fields might explain some, or all, of these features. The largest and clearest ring ditch may have an entrance or causeway to its north-east.

A possible ring ditch cropmark (NHER 36401) is recorded to the south of the John Innes Centre. It may be a modern feature. A ring ditch with field system and linear ditches (NHER 9316) are recorded to the north of the development site. Evaluation of these cropmarks demonstrated the presence of old river channels with Neolithic flint, prehistoric pits and ditches and evidence of lead working. Also in the northern part of the study area is a ring ditch (NHER 54449) only visible on aerial photographs from a single flight, hence its interpretation may be flawed. It should be noted this cropmark is slightly different in appearance to nearby features of clearly modern origin. A fragmentary ring ditch cropmark (NHER 54408) to the south-east of the site has an internal bank feature visible as a grass mark. The slightly erratic nature of this feature and its position close to a field margin might suggest an agricultural rather than archaeological origin. Thus it would appear several ring ditches within the study area may be of spurious interpretation, several possibly resulting from agricultural or geological effects rather than archaeological activity.

Geophysical survey of an area to the south of the site (NHER 55994) recorded a ring ditch, possibly the remains of a Bronze Age barrow.

Overall this part of the Yare Valley has a number of significant prehistoric sites, in particular barrows often located near the 5m contour overlooking the river. Evidence of Neolithic activity is especially notable. Though much of this evidence is finds-related it does include a Neolithic building.

### **Roman Evidence**

A total of twenty-seven NHER entries relating to the Roman period were recorded within the study area, of which twenty-three related to surface finds.

Excavated evidence of the Roman period is limited. Roman features were recorded on the John Innes Institute (NHER 9332), and to the north of the area on Three Score Road in Bowthorpe (NHER 9304) where a rectilinear field system appeared to post-date prehistoric features there (Percival 2002). A continuation of this field system was apparently recorded to the east at Three Score in Bowthorpe (NHER 40711). The only other excavated evidence is a pit (NHER 9323) seen during utilities trenching that may indicate settlement or activity in this area. Other sites in the area provide evidence from finds spots of pottery (NHERs 9337, 9397, 12454, 28277, 29058, 35739 and 55753) and several more to metal-detected finds (NHERs 9310, 9324, 9338, 15459, 15475, 19139, 20666, 21949, 24229, 24833, 25166, 29088, 29395, 39733, 41099 and 44080).

A substantial proportion of the artefactual and agricultural evidence (field systems) lies close to the River Yare, with some to the north within the loop of the river and some to the south on the rivers western bank.

## Anglo-Saxon Evidence

In all twenty-four records of Anglo-Saxon activity came from the study area; three being records of excavated remains with the remainder relating to artefacts.

Already mentioned, two excavations in close proximity uncovered Early Saxon settlement. At Bishy Barnabee Way (NHER 35757) three, possibly four, sunken-featured buildings (SFBs) were recorded along with post-hole structures (Trimble 2004). At Three Score in Bowthorpe (NHER 40711) three sunken-featured buildings were recorded. Also present were pits of similar date and a short ditch segment thought associated with the settlement. These two small settlements only 500m apart are likely to represent a small farming community, although poor soil quality might mean the economy was based more on pastoral pursuits (Green 2009). To this can be cautiously added a possible site (NHER 34566), south of Bishy Barnabee Way, consisting of a single sherd of ambiguous Iron Age or Early Saxon pottery recovered from a ditch.

Further Saxon evidence from the study area is provided by Early, Middle and Late Saxon finds and the probable Late Saxon church of St Andrew (NHER 9339). Given the earlier Saxon evidence it would appear a village was already developing prior to the foundation of the masonry church.

## Medieval Evidence

A total of thirty-nine NHER entries in the study area related to the medieval period. Seven records were from excavated evidence or cropmarks, the remainder being of finds. One possible medieval site (NHER 54424) is represented by cropmarks of a large rectangular enclosure and field boundary ditches that continue into the southern part of the development area. Close to the development area medieval walls and pits were recorded during construction of the B1108 bypass (NHER 9341). Just north of the development area more cropmarks (NHER 54423) included a large rectangular enclosure and field boundaries. North of the development area medieval pits were recorded by an evaluation at Dodderman Way (NHER 34566).

In the east of the study area is a deserted medieval village (NHER 9392) now within the park of Earlham Hall. The village was depopulated in 1657 but mentioned in the 11th-century Domesday Book and 14th-century *Nomina Villarum*. Earthworks and a hollow way within Earlham Park and Earlham Hall are now believed to relate to the post-medieval park rather than medieval settlement.

At the western limit of the study area a single medieval pit was excavated at Little Melton water treatment works (NHER 50209).

To the very north of the study areas site (NHER 54446) is thought to be the deserted medieval settlement of Bowthorpe. Linear banks and ditches are visible as cropmarks and earthworks within the area defined as Bowthorpe Deserted Medieval Village and the ruins of St Michael's Church (NHER 5352, outside the study area).

Other medieval evidence comes from surface or metal-detected finds likely to be casual losses. The parish church of St Mary's Earlham, (NHER 9326), has Norman origins with medieval additions.

## **Post-medieval Evidence**

A total of forty-one records were noted within the study area for the post-medieval period, several for excavated evidence and monuments, but more (twenty-four) represented finds spots.

Several cropmarks sites are present within the area, including some mentioned in the medieval section. These include earthwork enclosures and field boundaries found partly within the development area and to the north (NHERs 54424 and 54423). Some cropmarks are thought to relate to Bowthorpe deserted medieval settlement (NHER 54446). Close to Colney Woodland Burial Park, and within Colney Park itself lie more cropmarks (NHER 54435), curvilinear in nature and either relating to post-medieval woodland boundaries or of possible geological origin. Also in Colney Park lie earthworks of possible ridge and furrow agriculture (NHER 54436).

Two large parks, Earlham Park (NHER 33727) and Colney Park (NHER 30499), lie within the study area. Earlham Park is mentioned in 1733 and extended to its present area by 1800. The majority of the park consists of 19th-century tree belts, woodland walks and gardens. Colney Park was established before 1794; the conifer woods were introduced after 1834 and more exotic planting, pleasure grounds and estate buildings added between 1834 and 1906.

Brick and flint wall foundations were recorded near the development site during construction of the B1108 bypass (NHER 9344), with pottery of 16th- to 17th-century date recovered. Nearby is an 18th-century milestone (NHER 56301). Another milestone lies to the east on the main road, and is again 18th century in date (NHER 56300).

To the south of the study area lies Newfound Farm (NHER 9404) apparently named after a nearby source of pottery clay.

South-west of site NHER 9404 is a disused clay pit (NHER 9407), and near to this a scatter of post-medieval kiln debris and pottery wasters (NHER 9406) was found in a field and on the edge of a pit. Geophysical survey has indicated the locations of three possible kilns.

Two small post-medieval (or modern) pits (NHER 40135) were found during an excavation near to the above-mentioned sites. To the north of Watton Road observations along a pipe trench (NHER 29915) recorded a post-medieval pit and finds.

Nearby is the site of a tollgate and tollhouse (NHER 9385). To the north of the study area a 17th-century kiln (NHER 9387) was probably used to provide ceramics for Earlham Hall.

## **Second World War Evidence**

Six sites of Second World War date are recorded within the study area, all on its eastern side.

A spigot mortar gun emplacement (NHER 32484), the only such example recorded in Norwich, lies within Earlham Park to the east of the development site. Also within Earlham Park is a barrage balloon site (NHER 54414) identified from aerial photographs. Another barrage balloon site and anti-landing trenches (NHER 54415) are recorded to the north of NHER 54414.

In the south-east of the study area are two possible searchlight batteries. The first (NHER 54409) might be a replacement for a possible anti-aircraft or searchlight battery situated 240m to the south-east (NHER 54410). Site NHER 54410 has circular banks and a circular ditch feature. Both sites had been removed by the end of the war.

### **Historical Evidence**

At the time of the *Domesday Survey* (Brown 1984) Colney was under the ownership of three different lords - Roger Bigot, Godric the Steward and William of Ecouis having been forfeited by Earl Ralf. These manors remained divided for centuries becoming known as Westhall, Easthall and Melton's.

### **Listed Buildings**

A total of ten listed buildings are recorded within the study area, on the opposite (northern) side of the B1108 to the proposed development site.

St Andrew's church (NHER 9339) has a Late Saxon round tower and later nave and is one of the closest listed buildings to the development site.

Nearby the Old Rectory (NHER 9420) is a 17th-century style building. To the west of this is Old Hall (NHER 11623), an L-shaped, mid 17th-century building. To the west of this is Hall Farm (NHER 50558) which includes buildings of 19th/20th-century date.

More distant buildings include Colney Hall (NHER 9415) built between 1767 and 1781 and Earlham Hall (NHER 9412) which dates to the late 16th-century. An 18th-century dovecote (NHER 9414) lies within Earlham Park.

In Earlham, to the north-east of the development site, is St Mary's church (NHER 9326) which is of Norman origin. Buildings north of the churchyard (NHER 9413) have a 16th-century timber-framed core, but the Church Farm range dates to the 17th century and the Earlham Lodge wing dates to the later 17th century.

Some of the University of East Anglia campus buildings constructed from 1964-68 are also listed (NHER 40079).

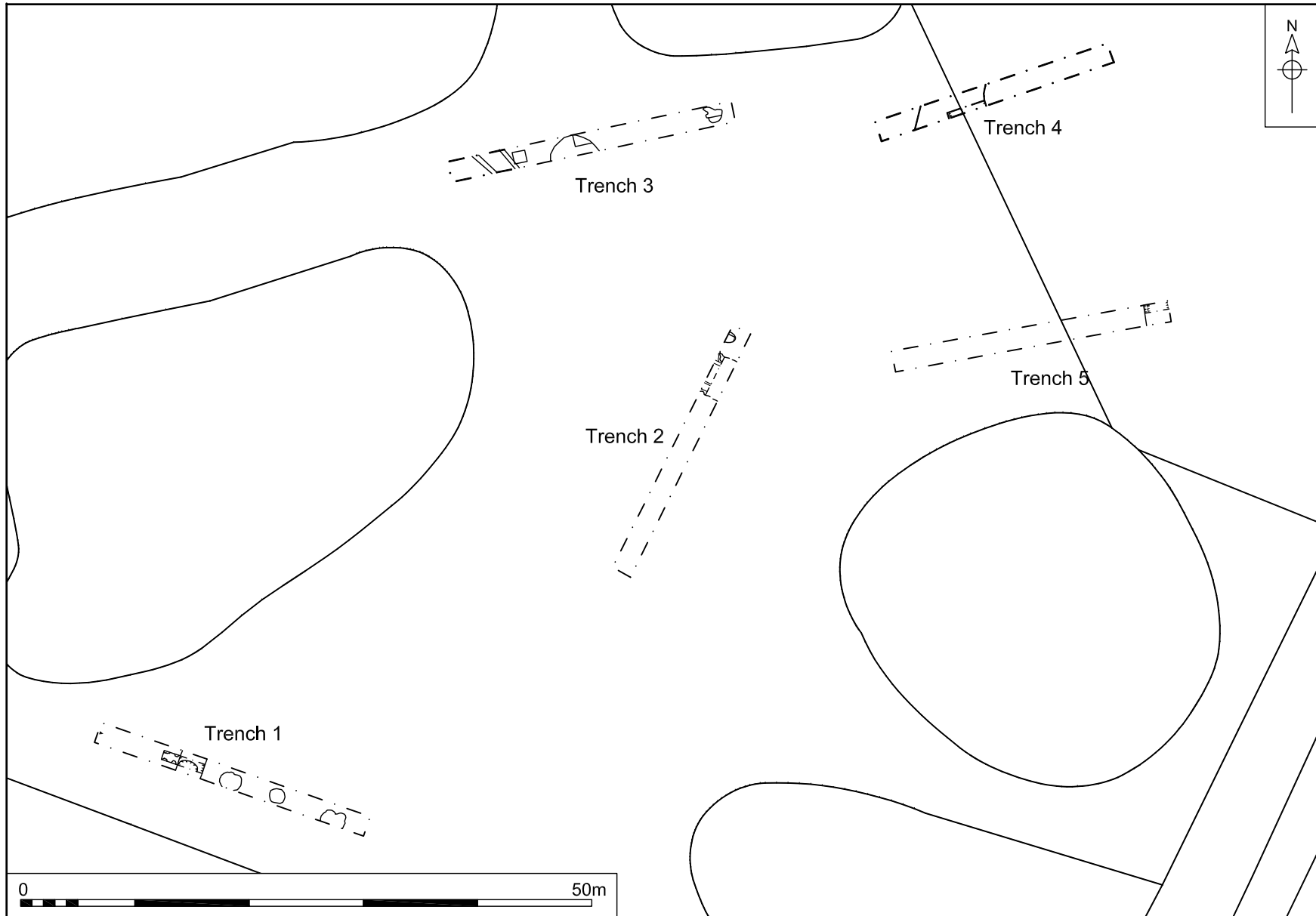
### **Cartographic Evidence**

The earliest available map of Colney is Faden's map of Norfolk in 1797 (Barringer 2004) shows. The infrastructure layout surrounding the site appears much as it stands today with the Watton turnpike road (on its original alignment, not the bypass route) and Colney Lane and Hethersett Lane both depicted.

Bryant's map of Norfolk in 1826 shows little change in the area. Old Hall, the Church and Colney Hall are depicted, and the roads are as they were in 1797. Newfound Farm is shown on both Faden's and Bryant's maps.

The tithe map of c.1840 shows the original route of the Watton Road (through the village) which has subsequently been bypassed and straightened. The site overlies six fields.

The Ordnance Survey map of the 1880s shows a building known as Hill House at the corner of Watton Road and Colney Lane. Just north of these buildings is an area which may represent quarry pitting.



© Crown copyright and database rights 2011 Ordnance Survey 100019340

Figure 2. Location of trenches. Scale 1:500

By 1928 the Ordnance Survey map shows barns on the western edge of the site with the words 'Sheepwash' near to them. The possible quarry to the north of the barns appears more likely to be a pond at this stage. Another possible small quarry pit lies in the centre of the area. Little changes in the area until the 1970s when the 'Biological Research Institute' and 'Food Research Institute' appear on the site.

#### **4.0 METHODOLOGY**

The objective of this evaluation was to determine as far as reasonably possible the presence or absence, location, nature, extent, date, quality, condition and significance of any surviving archaeological deposits within the development area.

Norfolk Historic Environment Service required a total of 33 trenches (Trenches 1-33) ranging in size from 15-30m by 2m be excavated across the accessible parts of the Norwich Research Park that were within the proposed areas of redevelopment. This report presents the results of Trenches 1-5 (Fig. 2). The results obtained from Trenches 6-33 are presented in Report 3110b (Adams 2012).

Machine excavation was carried out with a hydraulic 360° excavator equipped with a toothless ditching bucket and operated under constant archaeological supervision.

Spoil, exposed surfaces and features were scanned with a metal-detector. All metal-detected and hand-collected finds other than those which were obviously modern, were retained for inspection.


Due to the unsuitable nature of the deposits revealed no environmental samples were taken.

All archaeological features and deposits were recorded using NPS Archaeology pro forma. Trench locations, plans and sections were recorded at appropriate scales. Monochrome and digital photographs were taken of all relevant features and deposits where appropriate.

The trenches were located using a Leica GPS900 RTK and used to create Temporary Bench Marks at the ends of each trench.

Access to the sites was generally good and the site conditions were good, with the work taking place in fine weather.

## 5.0 RESULTS

Trench 1							
 <p>Plate 1. Trench 1</p>			<b>Figs 2 and 3; Plates 1, 2 and 3</b>				
			<b>Location</b>				
			Orientation		North-east to south-west		
			North-east end		617960.253, 307749.996		
			South-west end		617982.799, 307740.232		
			<b>Dimensions</b>				
			Length		25.00m		
Width		1.80m					
Depth		0.40m					
<b>Levels</b>							
North-east top		21.34m OD					
South-west top		21.05mOD					
Context	Type	Description and Interpretation	Thickness	Depth BGL			
1	Deposit	Topsoil, dark brown silt sand	0.30m	0.00-0.30m			
2	Deposit	Subsoil, mid orange brown silt sand.	0.10m	0.30-0.40m			
3=17	Cut	Possible terminus of north-south aligned U-shaped ditch [3=17] with 45° sloping sides and a flattish base (Fig. 3, Sections 1 and 2; Plates 2 and 3). This may form a terminus of the ditch. Alternatively it could be a pit.	0.06m	0.40-1.00m			
4=18	Deposit	Single homogeneous fill of [3=17]. Friable, light brown, sandy silt with occasional medium-sized stones and flint, shallower on the northern edge of the feature. The majority of inclusions sat near the base on the western edge and are similar in size, shape and composition to those found in layer [5] and perhaps represent part of layer 5 that has slipped into the feature.	0.06m	0.40-1.00m			
5	Deposit	Light grey-brown, sandy silt with abundant (over 70%) predominantly flint pebbles that ranged in size from small to large. This layer was present on the western side of feature [3=17] and continued to the western limit of the trench (roughly 7.5m away).	0.20m	0.40-0.60m			
Discussion							
<p>Ditch [3=17] is manifest as a north-south linear feature which may possibly form part of a ditch, and perhaps its terminus. It may even be feasible that the ditch originally formed part of a barrow – a ring ditch being the surviving elements.</p> <p>To the west of this ditch was deposit [5], a layer of mixed gravels and flints, small to large in size in a light grey brown sandy silt matrix. Deposit [5] overlay brighter pea shingle and sand natural.</p>							

## Trench 1

Blackened patches were apparent in the natural where sand and stones had become accreted together to form very solid semi-circular masses. Some of these patches were located immediately to the west of ditch [3=17] (see Fig. 3). T

Trench 1 contains three tree throws in its eastern half (see feature [9] in Trench 3 for general description).



Plate 2. Trench 1, south-facing section of ditch [3]



Plate 3. Trench 1, north-facing section of ditch [3]



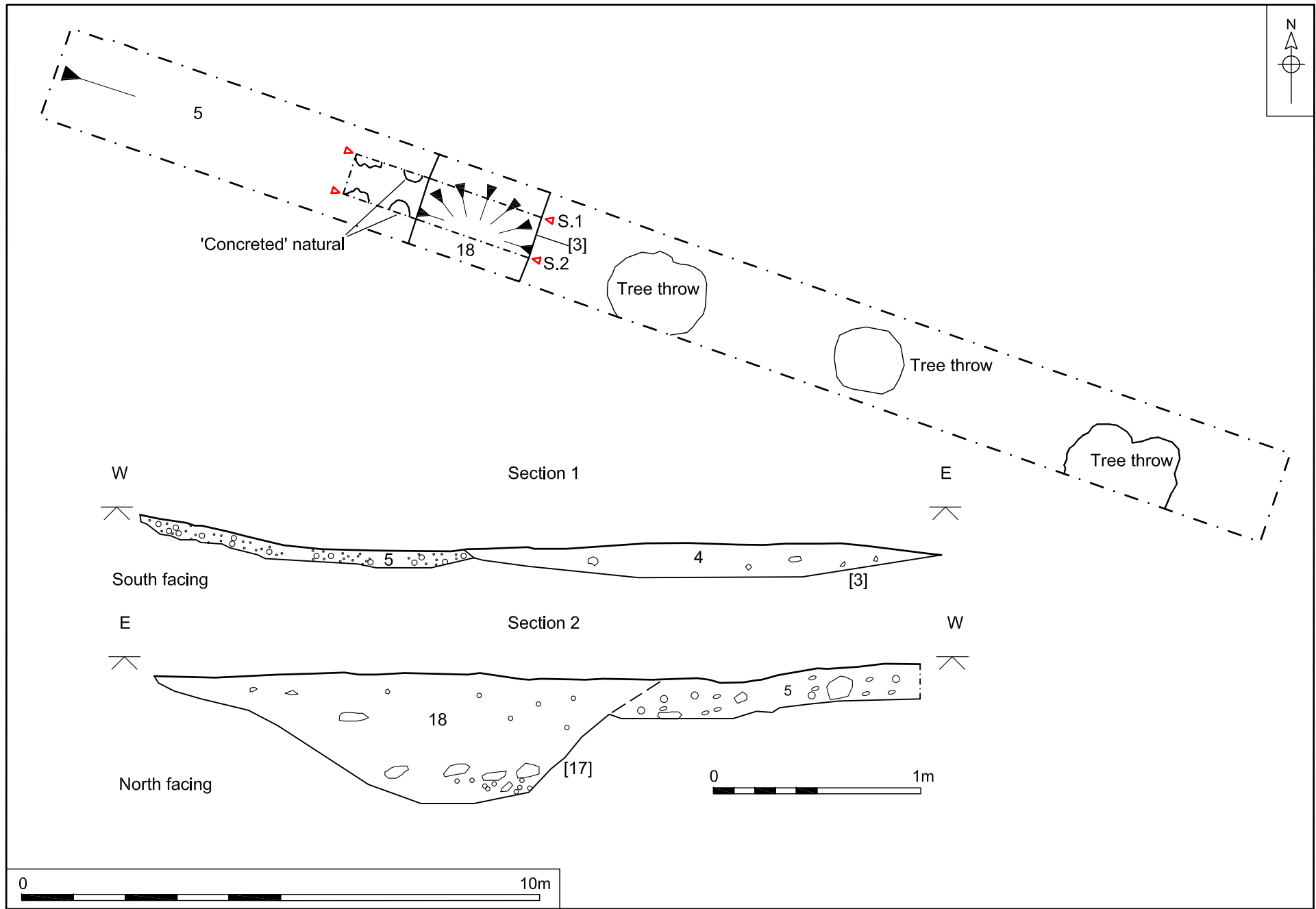


Figure 3. Trench 1, plan and sections. Scale 1:100 and 1:25

## Trench 2



Plate 4. Trench 2

**Figs 2 and 4; Plates 4 and 5**

### Location

Orientation	North-North-east to south-South-west
North-east end	618016.803, 307784.174
South-west end	618006.158, 307762.887

### Dimensions

Length	25.00m
Width	1.80m
Depth	0.45m

### Levels

North-east top	22.13m OD
South-west top	21.54mOD

Context	Type	Description and Interpretation	Thickness	Depth BGL
1	Deposit	Topsoil, dark brown silt sand	0.14-0.25m	0.00-0.25m
2	Deposit	Subsoil, mid orange brown silt sand.	0.15-0.25m	0.14-0.50m
13	Cut	Sub-circular possible quarry pit with steep (almost vertically sloping) sides (Fig 4 section 3). The base was not reached as the feature was too deep to excavate safely (1m in a friable sandy deposit).	0.66m+	0.50-1.11+m
14	Deposit	Fill of pit [13] comprising a moderate-softly compacted mid-dark brown sandy silt with common flint pebble inclusions. The fill contained ceramic building material that suggested it was fairly modern.	0.66m+	0.50-1.11+m
19	Cut	North-west to south-east aligned linear feature (possible ditch) with irregular sides. The full depth was not investigated as the feature was too deep hence the profile is unknown. The exposed sides slope steeply (Fig. 4; Plate 5).	0.50m	0.50-1.00m
20	Deposit	Fill of [19]. Softish dark orangey brown, sandy silt with sparse amounts of flint pebbles 0.05m across. This fill was sealed by layer [21]. It had a diffuse colour horizon, but slightly different texture. Contains many fewer stones than the surrounding deposits.	0.46m	0.50-0.96m
21	Deposit	Moderate-soft mid-dark grey brown, sandy silt with very common sub-rounded and sub-angular flints. It contains a large number of stones and may be an old soil layer.	0.04-0.14m	0.50-0.64m

## Trench 2

### Discussion

Lots of root disturbance along the trench. There are two possible extraction pits towards the north-east end of the trench.



Trench 2, south-east and south-west section of ?quarry pit [13]



Plate 6. Trench 2, south-east facing section of ?quarry pit [19]

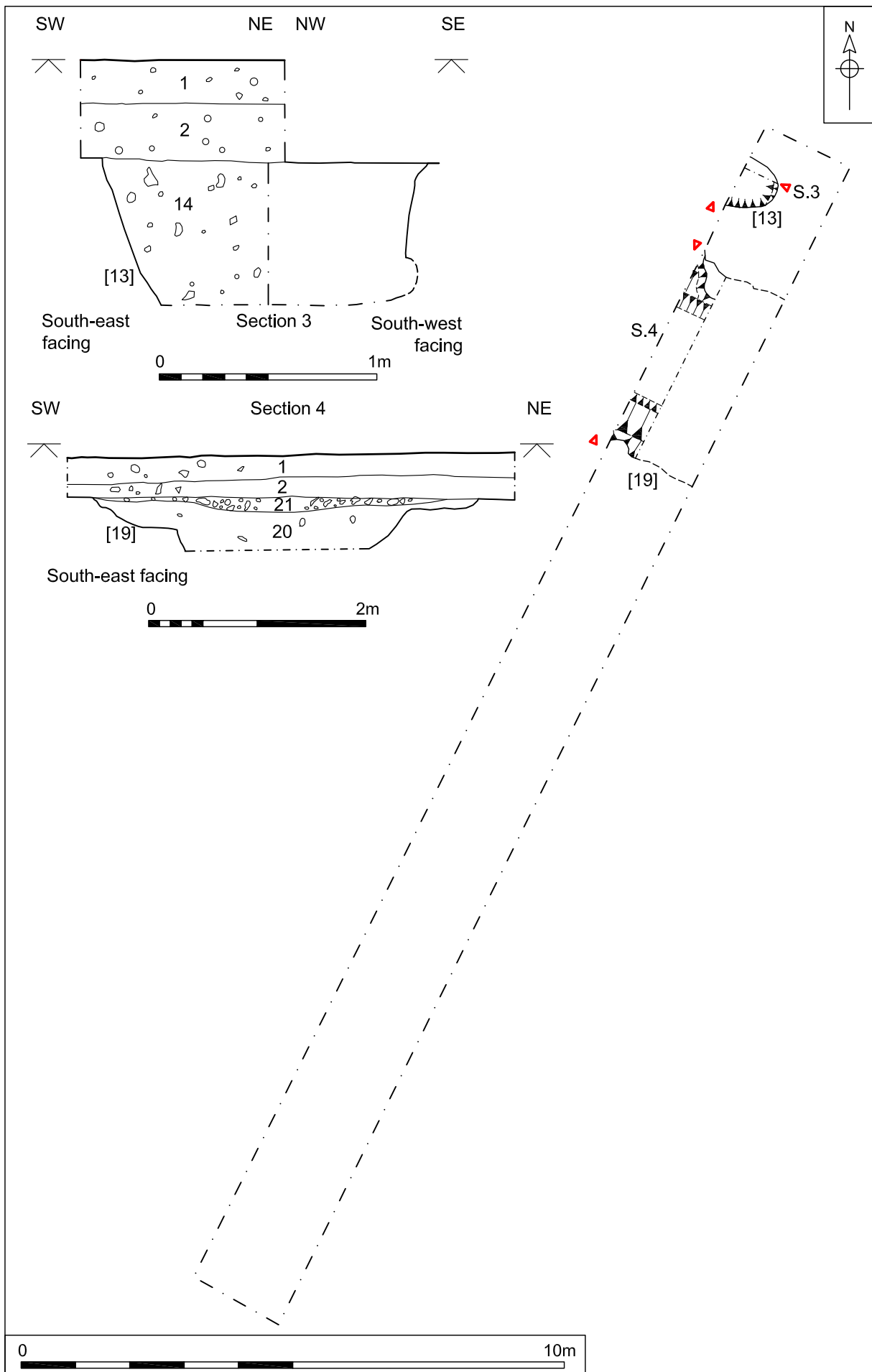


Figure 4. Trench 2, plan and sections. Scale 1:100, 1:50 and 1:25

### Trench 3



Plate 7. Trench 3

**Figs 2 and 5; Plates 7-9**

#### Location

Orientation East to West

West End 617991.143, 307799.495

East end 618014.665, 307804.518

#### Dimensions

Length 25.00m

Width 1.80m

Depth 0.20 to 0.40m

#### Levels

West top 21.60m OD

East top 28.58mOD

Context	Type	Description and Interpretation	Thickness	Depth BGL
1	Deposit	Topsoil, dark brown silt sand	0.20m	0.00-0.20m
2	Deposit	Subsoil, mid orange brown silt sand.	0.20m	0.40m
6	Cut	Semi circular possible quarry pit [6] with a V-shaped profile, steep sides with gently sloping sides for the most part (sharp dip at the base) (Fig. 6; Plates 8).	0.50m	0.40-0.90m
7	Deposit	Mid grey brown, sandy silt, frequent very small and small stones occasional medium stones. Friable compaction with homogenous consistency.	0.50m	0.40-0.90m
8	Cut	Sub-circular, irregular feature [8], possibly a tree throw. It has a generally rounded, uneven profile (Fig. 5 section 6; Plate 9).	0.40m	0.40-0.80m
9	Deposit	Fill of tree throw [8] comprising a homogeneous mid grey-brown, sandy silt with frequent amounts of small- and medium-sized stones and flints and occasional large ones.	0.40m	0.40-0.80m

#### Discussion

Trench 3 contains a possible quarry pit and tree throw.

There is also evidence of an earlier test pit and two land drains (Fig. 5).

This is one of two trenches to have subsoil at its deeper western end (which appears to have been lain down within a hollow).

## Trench 3



Plate 8. Trench 3, east-facing section of pit [6]



Plate 9. Trench 3, north-facing section of pit [9]

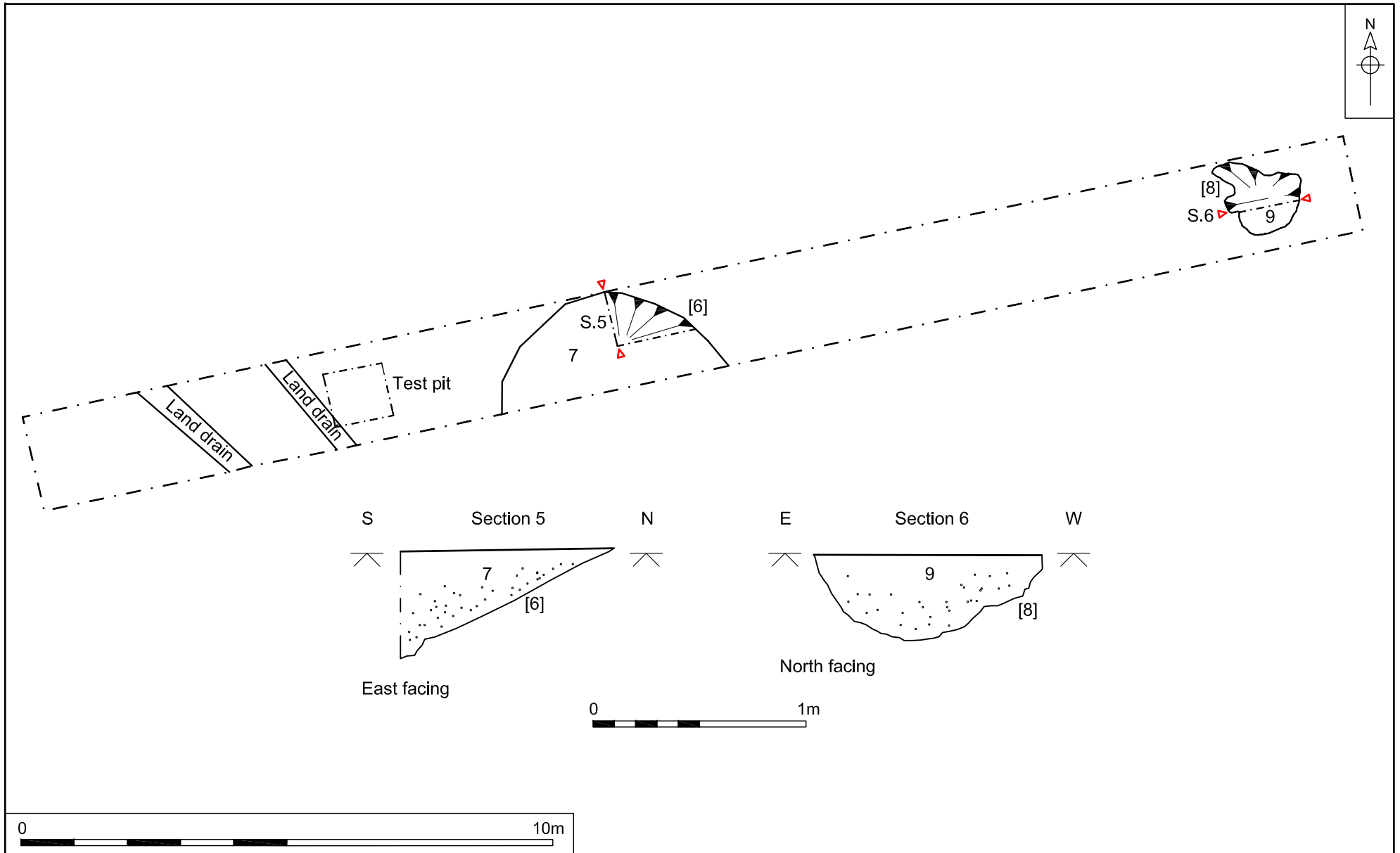


Figure 5. Trench 3, plan and sections. Scale 1:100 and 1:25

## Trench 4



Plate 10. Trench 4

**Figs 2 and 6; Plates 10 and 11**

### Location

Orientation	East, West
East	618048.477, 307807.975
West	618027.464, 307802.803

### Dimensions

Length	25.00m
Width	1.80m
Depth	0.20 to 0.40

### Levels

East	23.08m OD
West	22.66m OD

Context	Type	Description and Interpretation	Thickness	Depth BGL
1	Deposit	Topsoil, dark brown silt sand	0.30m	0.00-0.30m
2	Deposit	Subsoil, mid orange brown silt sand.	0.10m	0.30-0.40m
15	Cut	North-south orientated large linear feature [15] with shallowly sloping irregular sides and an irregular base that exhibit both rooting and burrowing into a very sandy mid-yellow deposit. This feature appears to be part of a natural hollow that has gradually become infilled. When it became apparent that it was a natural feature, the exploratory section through it was not continued right across it (Fig 6 section 7; Plate 11).	0.34m	0.40-0.74m
16	Deposit	Fill of natural hollow [15] consisting of a friable, homogeneous mid orange brown, sandy silt with occasional, evenly distributed small-large flints. Flints were more numerous along the edge of the feature. Two struck flints and one burnt one were discovered close to the base of the feature.	0.34m	0.40-0.74m

### Discussion

Trench 4 contained a single archaeological feature – natural hollow [15].



## Trench 4



Plate 11. Trench 4, north-facing section of ?natural hollow [15]

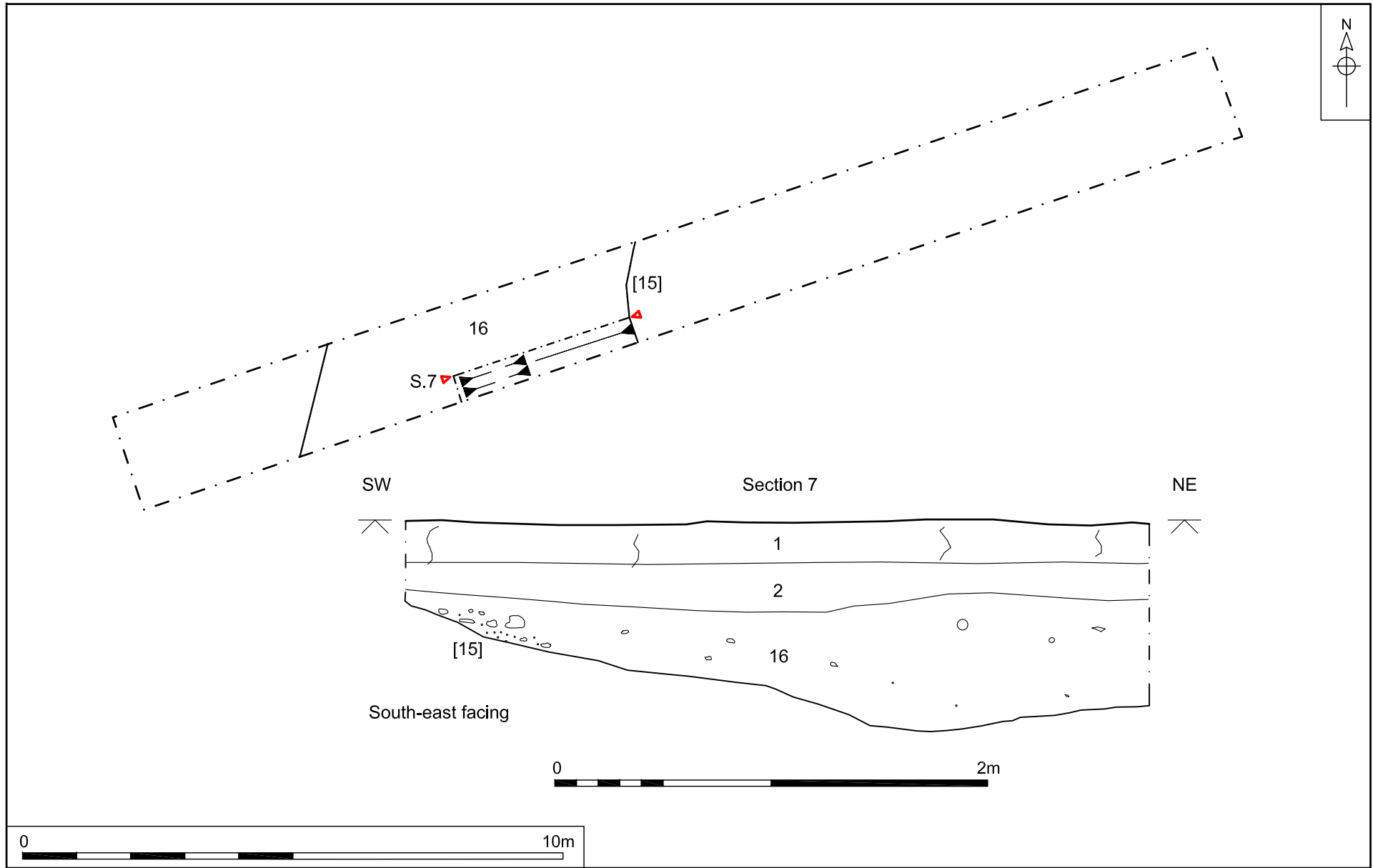



Figure 6. Trench 4, plan and section. Scale 1:100 and 1:25

Trench 5				
 <p>Plate 12. Trench 5</p>			<b>Figs 2 and 7; Plates 12 and 13</b>	
			<b>Location</b>	
			Orientation	East West
			North East	618053.318, 307786.127
			South West	618029.195, 307781.739
			<b>Dimensions</b>	
			Length	25.00m
			Width	1.80m
			Depth	0.35m
			<b>Levels</b>	
East	22.47m OD			
West	22.09mOD			
Context	Type	Description and Interpretation	Thickness	Depth BGL
1	Deposit	Topsoil, dark brown silt sand	0.25m	0.00-0.25m
2	Deposit	Subsoil, mid orange brown silt sand.	0.10m	0.25-0.35m
10	Cut	North-south aligned V-shaped linear feature [10] with sides that sloped at 45° and a narrow flat bases. It could be a boundary or drainage ditch and has possibly been re-cut (Fig 7 section 8; Plate 13)	0.80m	0.35-1.15m
11	Deposit	The major fill of ditch [10] comprising friable, homogeneous, mid grey brown, sandy silt with frequent amounts of small-medium stones and flints. Inclusions were spread evenly throughout the deposit. One prehistoric flint flake and a small amount of animal bone were recovered from fill [11].	0.80m	0.35-1.15m
12	Deposit	Part fill of ditch [10] present along the sides of the feature at depth. It consists of friable mid orange-brown sandy silt with small-medium sized stones and flints. This fill probably represents an earlier fill or erosion from the sides of the feature.	0.13m	0.80-1.15m

## Trench 5

### Discussion

Trench 5 contains a ditch that had possibly been re-cut and a number of tree throws (which were not recorded or excavated).

Ditch [10] is located at the eastern limit of the trench.



Plate 13. Trench 5, south-facing section of ditch

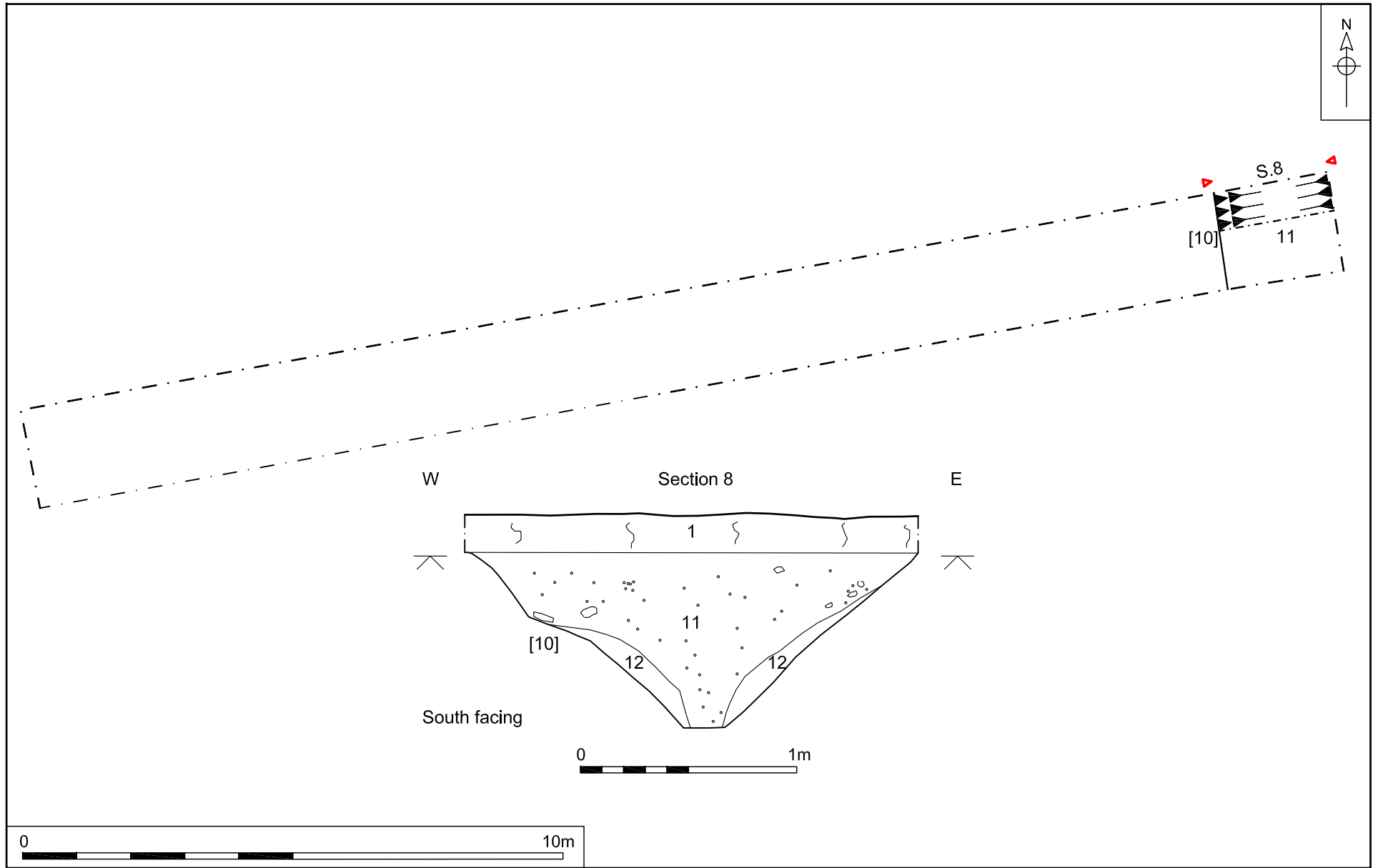


Figure 7. Trench 5, plan and section. Scale 1:100 and 1:25

## **6.0 THE FINDS**

by Rebecca Sillwood

The archaeological material collected during the evaluation was processed and recorded by count and weight, and an Excel spreadsheet was produced outlining broad dating. Each material type has been considered separately and is presented below organised by material. A list of the finds ordered by context can be found in Appendix 2a.

### **6.1 Pottery**

Three fragments of post-medieval pottery were recovered from two contexts, with a fragment of rim in blue and white glazed china from pit fill [7] (pit [6] in Trench 3), and two pieces of glazed red earthenware from pit fill [14] (pit [13] in Trench 2).

The blue and white china fragment is part of an upright rim, and is likely to be part of a cup. The two earthenware fragments are glazed in brown, one of them only on one surface, and are probably from utilitarian pottery of 16th- to 18th-century date.

### **6.2 Ceramic Building Material**

Five fragments of ceramic building material (CBM) were recovered from two contexts.

Two pieces are probably medieval in date - both fragments of roof tile - and came from pit fill [14] (pit [13] in Trench 2). These pieces are much abraded and were found alongside post-medieval pottery hence are likely to be residual in the context in which they were found.

Three post-medieval pieces were recovered from pit fill [7] (pit [6] in Trench 3) and comprise a curved fragment of pan tile, and two abraded pieces with no surviving surfaces (which are probably remnants of bricks).

### **6.3 Flint**

Four pieces of worked flint were recovered from three contexts; fills [11] and [16] (from ditch [10] and ?natural hollow [15] respectively) and pit fill [20] (pit [19]). Ditch fill [16] also produced a single piece of burnt flint, which has since been discarded.

The worked flint is in the form of secondary and tertiary flakes, in off-white and blue-grey raw material.

### **6.4 Animal Bone**

Ditch fill [11] (ditch [10]) produced eight fragments of animal bone. The pieces are extremely fragmentary and fragile, and do not provide any further information. These pieces have been discarded.

### **6.5 General Finds Conclusions**

This evaluation revealed evidence of activity of prehistoric and post-medieval date in the area. Trench 2 produced both prehistoric and post-medieval evidence, Trench 3 also revealed probable post-medieval activity. The limited amount of

finds recovered make it difficult to state with any certainty the precise date or purpose of the features that they were found in, but they do give an indication of activity in the area at certain times in the past.

## **7.0 CONCLUSIONS**

The evaluation recorded a variety of features at low density across the site. Based on the small number of datable artefacts recovered by fieldwork, some prehistoric activity is suggested by the finds of worked flints. Pits of post-medieval date were more precisely dated from the artefactual evidence recovered from their fills. One interpretation of these pits is that they might represent small scale gravel or sand quarrying.

Ditches were recorded in Trenches 1 and 5. The example in Trench 5 might have served as a field boundary. Considered more significant is the possible ditch terminus revealed in Trench 1 at the south of the site, this trench having been targeted to examine the possible location of a Bronze Age barrow. The presence of this barrow had been suggested by antiquarian reports (Sillwood 2012, 8). While the findings of the ditch in this trench might indicate the barrow's possible survival here, they do not provide conclusive evidence. However they do suggest that quarrying, highlighted in the antiquarian reports as the reason a barrow was originally identified, might not have extended as far as Trench 1, increasing the potential for any remains of the putative barrow, or indeed any other barrow or monument, to survive in this place.

## **Acknowledgements**

The author would like to thank Faithful and Gould for commissioning and funding the project and the staff of the John Innes Centre.

Fieldwork was undertaken by Rob Brown, David Whitmore and the author.

Rob Brown and the author undertook digitising the plans and sections.

The finds were processed, recorded and reported on by Rebecca Sillwood.

This report was illustrated and produced by David Dobson and edited by Jayne Bown.

## **Bibliography and Sources**

- Adams, D. 2012 *Archaeological Trial Trench Evaluation, at Norwich Research Park, Colney, Norfolk* NPS Archaeology Report 3110b
- Adams, D. 2000 *Report on an Archaeological Evaluation at the John Innes Centre Colney Lane, Colney, Norwich.* Norfolk Archaeological Unit. Report 483
- Department for Communities and Local Government 2012 *National Planning Policy Framework*
- Green, F. 2001 *Report on an Archaeological Watching Brief at the John Innes Centre Colney Lane, Colney, Norwich.* Norfolk Archaeological Unit. Report 553
- Nokkert, M. 2000 *Report on an Archaeological Watching Brief at the John Innes Centre Colney Lane, Colney, Norwich.* Norfolk Archaeological Unit. Report No 489
- Penn, K. 2000 *Report on an Archaeological Evaluation at the John Innes Centre Colney Lane, Colney, Norwich.* Norfolk Archaeological Unit. Report No 479
- Whitmore, D. 2012 Norwich Research Park North, Archaeological evaluation, Project Design
- Whitmore, M. 2004 'Excavations at a Neolithic Site at the John Innes Centre, Colney, 2000' in *Norfolk Archaeology XVIV (3)*, Witley Press, Hunstanton
- Sillwood, R. 2012 Archaeological Desk-Based Assessment of Norwich Research Park North Site, Colney Lane, Colney, Norfolk.

[http://maps.bgs.ac.uk/geologyviewer\\_google/googleviewer.html](http://maps.bgs.ac.uk/geologyviewer_google/googleviewer.html) Accessed 03/09/2012



## Appendix 1a: Context Summary

Context	Category	Cut Type	Fill Of	Description	Period	Trench
1	Deposit			Topsoil	Modern	1-5
2	Deposit			Subsoil	Uncertain	1-5
3	Cut	Ditch		Ditch=[17]	?Prehistoric	1
4	Deposit		3	Ditch fill =[18]	?Prehistoric	1
5	Deposit			Layer	Uncertain	1
6	Cut	Pit		?Quarry pit	?Post-medieval	3
7	Deposit		6	?Quarry pit fill	?Post-medieval	3
8	Cut	Tree throw		Tree throw	Uncertain	3
9	Deposit		8	Tree throw fill	Uncertain	3
10	Cut	Ditch		Ditch	Uncertain	5
11	Deposit		10	Ditch fill	Uncertain	5
12	Deposit		10	Ditch fill	Uncertain	5
13	Cut	Pit		?Quarry pit	?Post-medieval	2
14	Deposit		13	?Quarry pit fill	?Post-medieval	2
15	Cut	Natural hollow		Natural hollow	Uncertain	4
16	Deposit		15	Natural hollow fill	Uncertain	4
17	Cut	Ditch terminus	17	Ditch terminus=[3]	?Prehistoric	1
18	Deposit			Ditch fill=[4]	?Prehistoric	1
19	Cut	Pit		?Quarry pit	?Post-medieval	2
20	Deposit		19	?Quarry pit fill	?Post-medieval	2
21	Deposit		19	?Quarry pit fill	?Post-medieval	2

## Appendix 1b: OASIS Feature Summary

Period	Category	Total
?Prehistoric	Ditch	1
?Post-medieval	Pit	3
Uncertain	Ditch	1
	Hollow	1

## Appendix 2a: Finds by Context

Context	Material	Qty	Wt	Period	Notes
7	Ceramic Building Material	3	48g	Post-medieval	
7	Pottery	1	2g	Post-medieval	
11	Animal Bone	8	3g	Unknown	DISCARDED
11	Flint – Struck	1	23g	Prehistoric	
14	Ceramic Building Material	2	20g	Medieval	
14	Pottery	2	11g	Post-medieval	
16	Flint – Burnt	1	41g	Unknown	DISCARDED
16	Flint – Struck	2	24g	Prehistoric	
20	Flint – Struck	1	5g	Prehistoric	

## Appendix 2b: OASIS Finds Summary

Period	Material	Total
Prehistoric	Flint – Struck	4
Medieval	Ceramic Building Material	2
Post-medieval	Ceramic Building Material	3
	Pottery	3
Uncertain	Animal Bone	8
	Flint – burnt	1