



**Archaeological geophysical survey and
trial trench evaluation on land at
Benefield Road, Oundle, Northamptonshire
April 2014**

Report No. 14/112

Authors: John Walford, Chris Pennell and Tim Upson-Smith

Illustrator: Amir Bassir



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Quality control and sign off:

Issue No.	Date approved:	Checked by:	Verified by:	Approved by:	Reason for Issue:
1	22.05.14	Pat Chapman	Adam Yates	Andy Chapman	Draft for client review
2	28.05.14	Pat Chapman	Adam Yates	Andy Chapman	Draft for NCC approval
3	20.06.14	Pat Chapman	Adam Yates	Andy Chapman	Final version

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OASIS REPORT FORM

PROJECT DETAILS		OASIS No: molanort1-179507
Project title	Archaeological geophysical survey and trial trench evaluation on land Benefield Road, Oundle, Northamptonshire April 2014	
Short description	MOLA undertook geophysical survey and trial trench evaluation on land at Benefield Road, Oundle. No archaeological deposits or features were present in the five excavated trenches. A small amount of post-medieval pottery, derived from manuring, was recovered from the interface between subsoil and the natural geological horizon in Trench 4.	
Project type	Evaluation	
Previous work		
Future work	Unknown	
Current land use	Pasture	
Monument type and period		
PROJECT LOCATION		
County	Northamptonshire	
Site address	Benefield Road, Oundle	
NGR	TL 0342, 8821	
Area	0.66 ha	
Height	25 – 30m aOD	
PROJECT CREATORS		
Organisation	MOLA Northampton	
Project brief originator	Liz Mordue, Northamptonshire County Council	
Project design originator	MOLA Northampton	
Director/Supervisor	Tim Upson-Smith/John Walford	
Project Manager	Mark Holmes	
Sponsor or funding body	Anne and Peter Miller	
PROJECT DATE		
Start date	March 2014	
End date	April 2014	
BIBLIOGRAPHY		
Title	Archaeological geophysical survey and trial trench evaluation on land Benefield Road, Oundle, Northamptonshire April 2014	
Serial title & volume	MOLA Report 14/112	
Author(s)	John Walford, Chris Pennell and Tim Upson-Smith	
Page numbers	16	
Date	May 2014	

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Archaeological geophysical survey and trial trench evaluation of land at Benefield Road, Oundle, Northamptonshire April 2014

Abstract

MOLA undertook geophysical survey and trial trench evaluation on land at Benefield Road, Oundle. No archaeological deposits or features were present in the five excavated trenches. A small amount of post-medieval pottery, derived from manuring, was recovered from the interface between subsoil and the natural geological horizon in Trench 4.

1 INTRODUCTION by Tim Upson-Smith

MOLA were commissioned by Mr Peter and Mrs Anne Miller to undertake archaeological geophysical survey and trial trenching on a potential development site at Benefield Road, Oundle, Northamptonshire (NGR TL 034 882, Fig 1). The archaeological works comprised magnetometer survey across 0.66ha of land followed by the excavation of five trial trenches measuring 20m x 1.6m.

The works were conducted in fulfilment of a brief issued by Liz Mordue, the Assistant County Archaeological Advisor to Northamptonshire County Council (NCC 2014). Detailed method statements for each phase of work were prepared by MOLA (MOLA 2014a, 2014b), taking into account the Institute for Archaeologists' *Standards and guidance for archaeological field evaluation* (IfA 2008) and the procedural document *Management of Research Projects in the Historic Environment (MoRPHE)* (EH 2009).

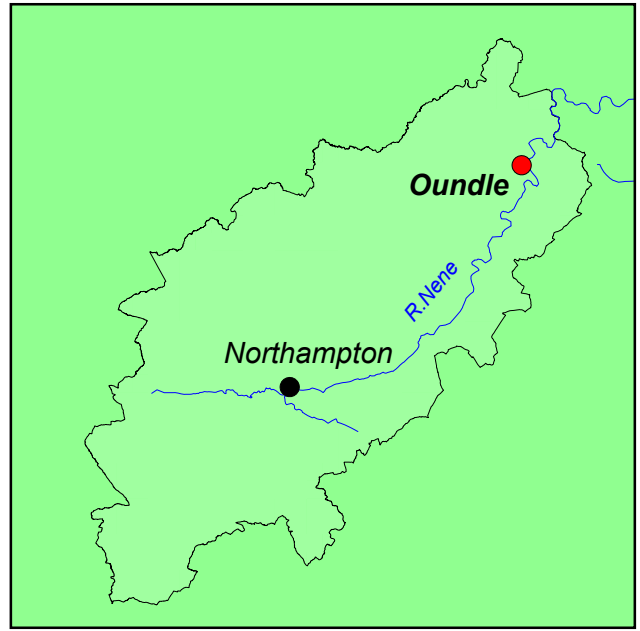
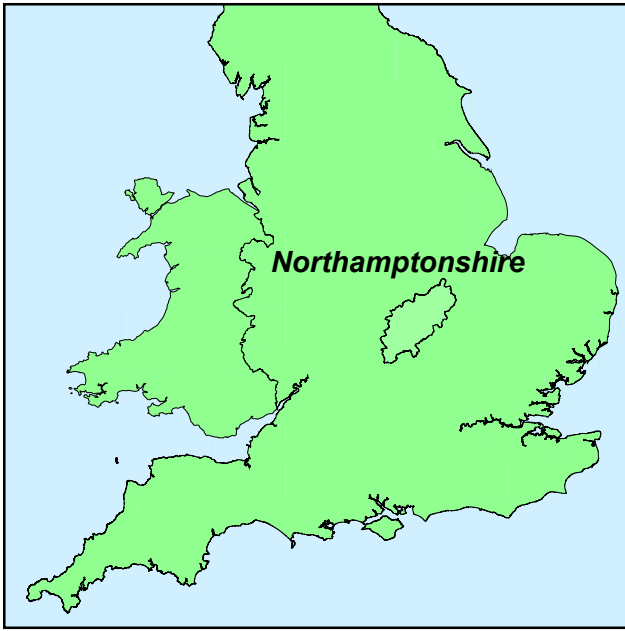
2 BACKGROUND by Tim Upson-Smith

2.1 Location, topography and geology

The site is currently one pasture field 0.66ha in area, with allotments on the eastern edge of the land. The site has a natural slope, sloping to the south towards the stream which runs east to west. The bedrock geology is recorded as Blisworth limestone (great oolite group) with alluvial deposits overlying the natural bedrock. (<http://mapapps2.bgs.ac.uk/geoindex/home.html>)

2.2 Archaeological and historical background

The archaeological and historical background for Oundle and its environs is well documented in the Extensive Urban Survey for Oundle (Foard and Ballinger 2002). Remains from all periods are recorded in the County Historic Environment Record for the area surrounding the proposed development site.



Scale 1:15,000

Site location Fig 1

Prehistoric

Approximately 1km to the south-west and also to the east of the development area are extensive patterns of enclosures and boundaries, likely to be prehistoric in date, which were recorded as cropmarks in aerial photographs. There are records for potential Bronze Age settlement (NHER9428) 650m to the west of the proposed development area.

Romano-British

A Roman town at Ashton, 1.5km to the north-east, was partially excavated in advance of the construction of the A605 Oundle bypass. A Roman farmstead was excavated c 500m to the north at Glaphorn Road by Northamptonshire Archaeology in 1999 (Maull and Masters 2005).

Anglo-Saxon

Although the town of Oundle itself appears to have late Saxon origins there are suggestions that post-Roman occupation of the area started in the 5th to 6th centuries AD. Excavations 100m to the south of the site at Stoke Doyle Road in 1979, recorded early/middle Saxon activity (Johnston 1993-4) comprising a grubenhaus and a hearth (Jackson in Johnston 1993-4). This indicates early/middle Saxon occupation outside of the later planned Late Saxon town which developed through its links with an important monastic and administrative centre. St Wilfrid is recorded by the Venerable Bede as having died at a monastery in the 'province' of Oundle in AD 709 suggesting that the town may have been an administrative capital or centre within the kingdom of Mercia (Johnston 1993-4). Part of an Anglo-Saxon cemetery was excavated at Glaphorn Road (Maull and Masters 2005), and a Saxon brooch was recovered from the allotments at the eastern side of the development area.

In the late Saxon period, the town, monastery and lands were given to Peterborough Abbey. The abbey was also granted the right to hold a market in the town, originally located immediately to the south of St Peter's Church (NHER2416/1; Foard and Ballinger 2002).

Medieval

King Henry III gave permission to hold an annual fair 'on the morrow of the Ascension and for fourteen days following' in the 13th century (Page 1930). The town was expanded at this time when tenement rows were laid out in the eastern part of the town and the existing western closes were subdivided (Foard and Ballinger 2002). Oundle also had at least three manors- Burystead (NHER2416/6), Rectory and Wakerleys (NHER2416/36) - with associated tenement plots within the town and farmland. The proposed development area is recorded in Northamptonshire's Historic Environment Record (NHER) as being situated within the farm land attached to Rectory Manor (NHER2416/45).

Post-medieval

The modern town plan and buildings appears to largely relate to the 16th-century expansion of the town. Oundle had small scale leather working industries but, through the medieval and post-medieval periods drew its wealth from its position as a commercial and economic centre for the surrounding area. The site itself was on the fringes of the post-medieval development and an 1867 map indicates that there were agricultural buildings in the north-eastern corner of the plot, fronting onto the street. The proposed development area is referred to as 'Lot 2', 'Far Townsend Close' comprising pasture land. The site and western side of Oundle was still largely free of structures into

the 20th century although by the time of the publication of the 1950s Ordnance Survey there were residential buildings fronting onto Benefield Road.

3 AIMS AND OBJECTIVES

The principal aim of the archaeological evaluation was to quantify the quality and extent of the archaeological resource through trial trenching.

Trial trench evaluation is designed to gather sufficient information to generate a reliable predictive model of the location, extent, character, date, state of preservation and depth of important archaeological remains within the application area (NCC 2014). The aims are defined as follows:

- to establish the date, nature and extent of activity or occupation on the development site;
- to recover artefacts to assist in the development of type series within the region;
- to recover palaeo-environmental remains to determine local environmental conditions (NCC 2014).

Specific research objectives are drawn from national and regional research frameworks documents (English Heritage 1991a, Knight, Vyner and Allen 2012) as necessary.

4 GEOPHYSICAL SURVEY by John Walford

4.1 Methodology

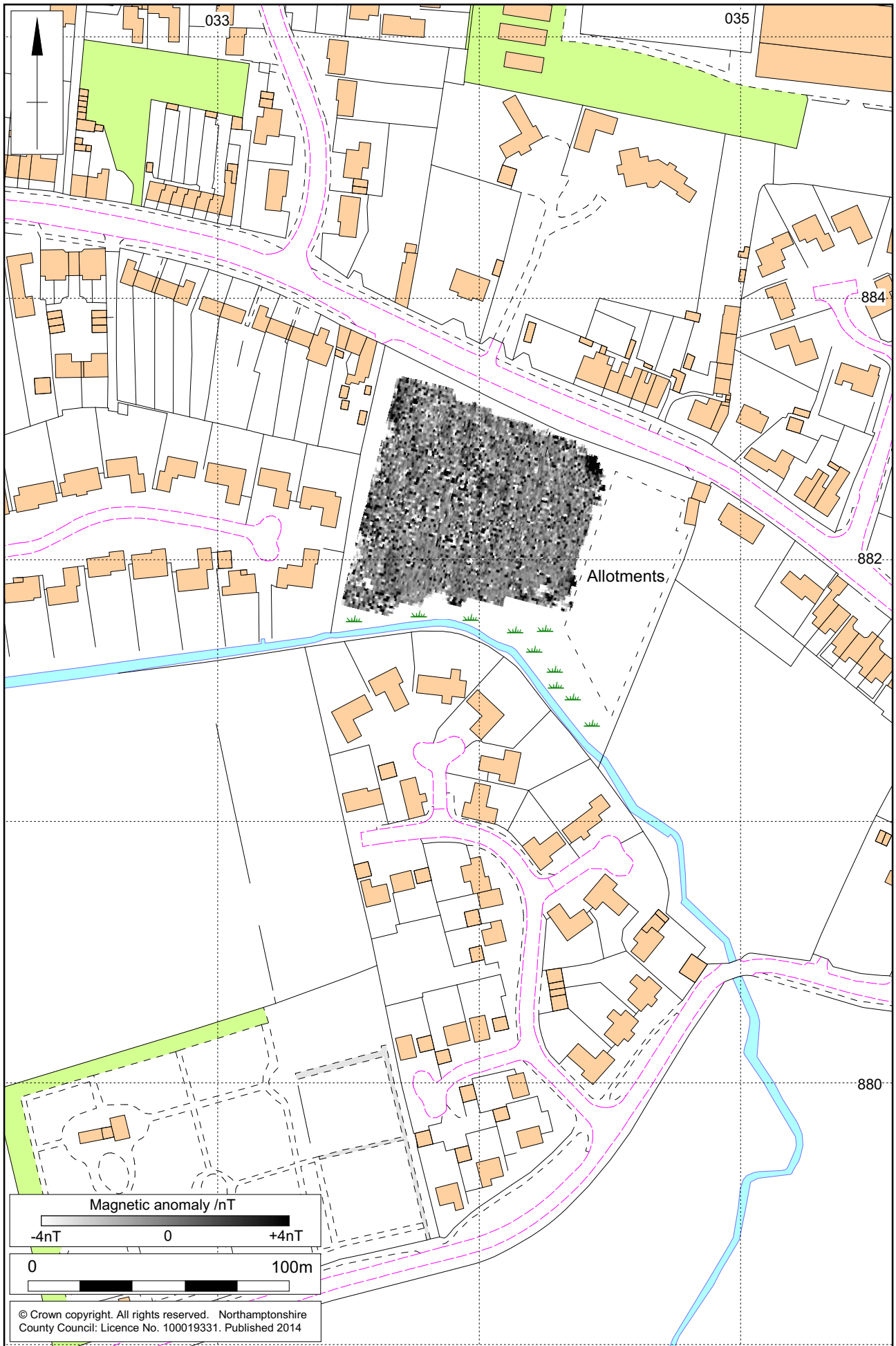
The survey was conducted with Bartington Grad 601-2, twin sensor array, vertical component fluxgate gradiometers (Bartington and Chapman 2003). These are standard instruments for archaeological survey and can resolve magnetic variations as slight as 0.1 nanoTesla (nT).

A network of 30m grid squares was established across the entire area to be surveyed. The grid was established with a tape measure and optical square and was tied in to the Ordnance Survey National Grid by taped measurements between the baseline and the field boundaries. GPS survey was not possible, due to a lack of signal on the day of survey. The gradiometers were carried at a brisk but steady walking pace through each grid square, collecting data along 1m spaced traverse lines. Measurements were automatically triggered every 0.25m along the traverses, giving a total of 3600 measurements per square.

All fieldwork methods complied with the guidelines issued by English Heritage and by the Institute for Archaeologists and with the agreed method statement for this project (EH 2008b; IfA 2011).

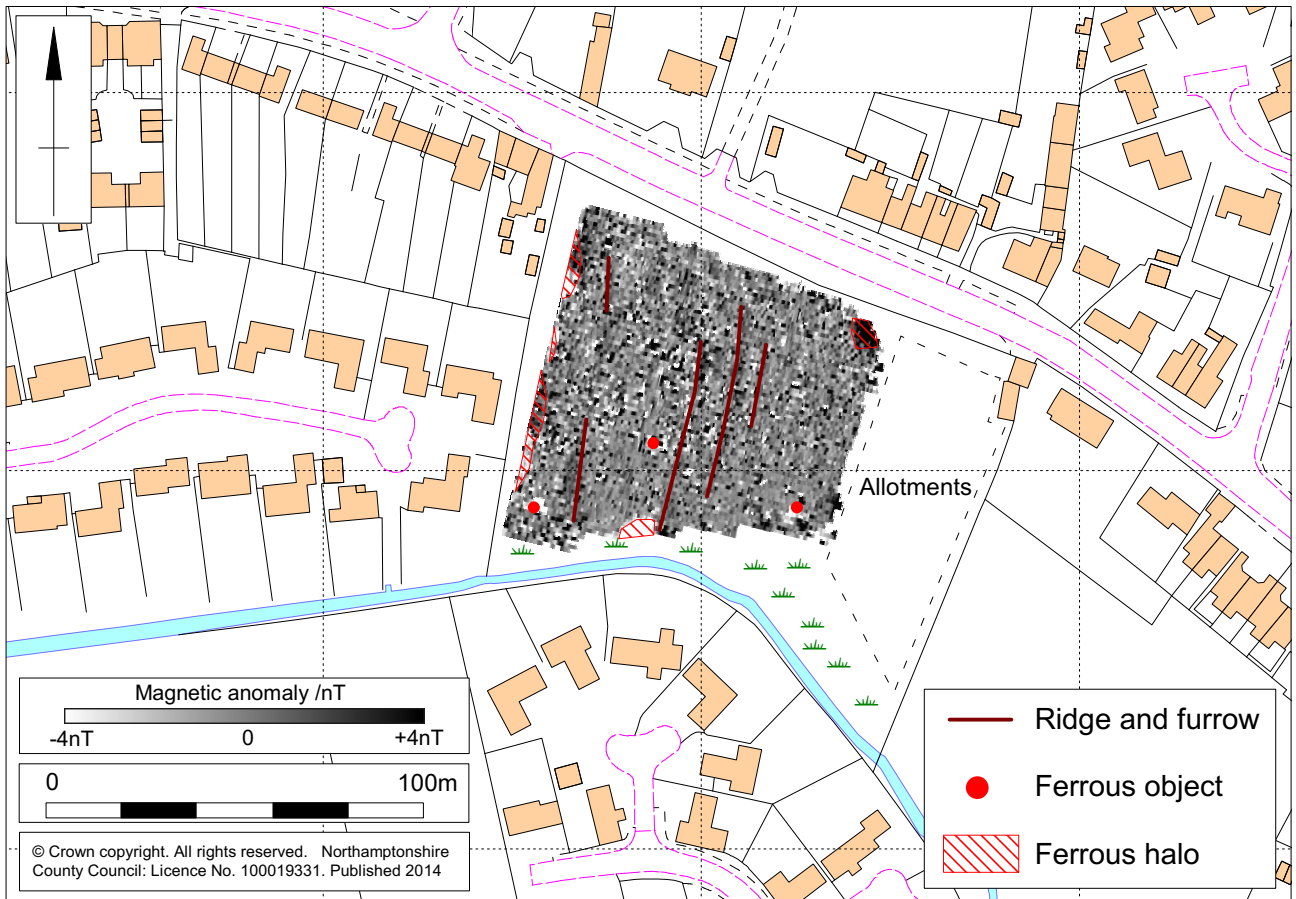
The survey data was processed using Geoplot 3.00v software. Striping, caused by slight mismatches in sensor balance, was removed using the 'Zero Mean Traverse' function and destaggering of the data was performed as necessary.

The processed data is presented in this report in the form of grey-tone plots, at a scale of +/- 4nT black/white. The plots have been scaled, rotated and resampled (georectified) for display against the Ordnance Survey base mapping (Fig 2). An interpretative overlay has been produced and is shown in Figure 3. The raw data is presented in Figure 4.



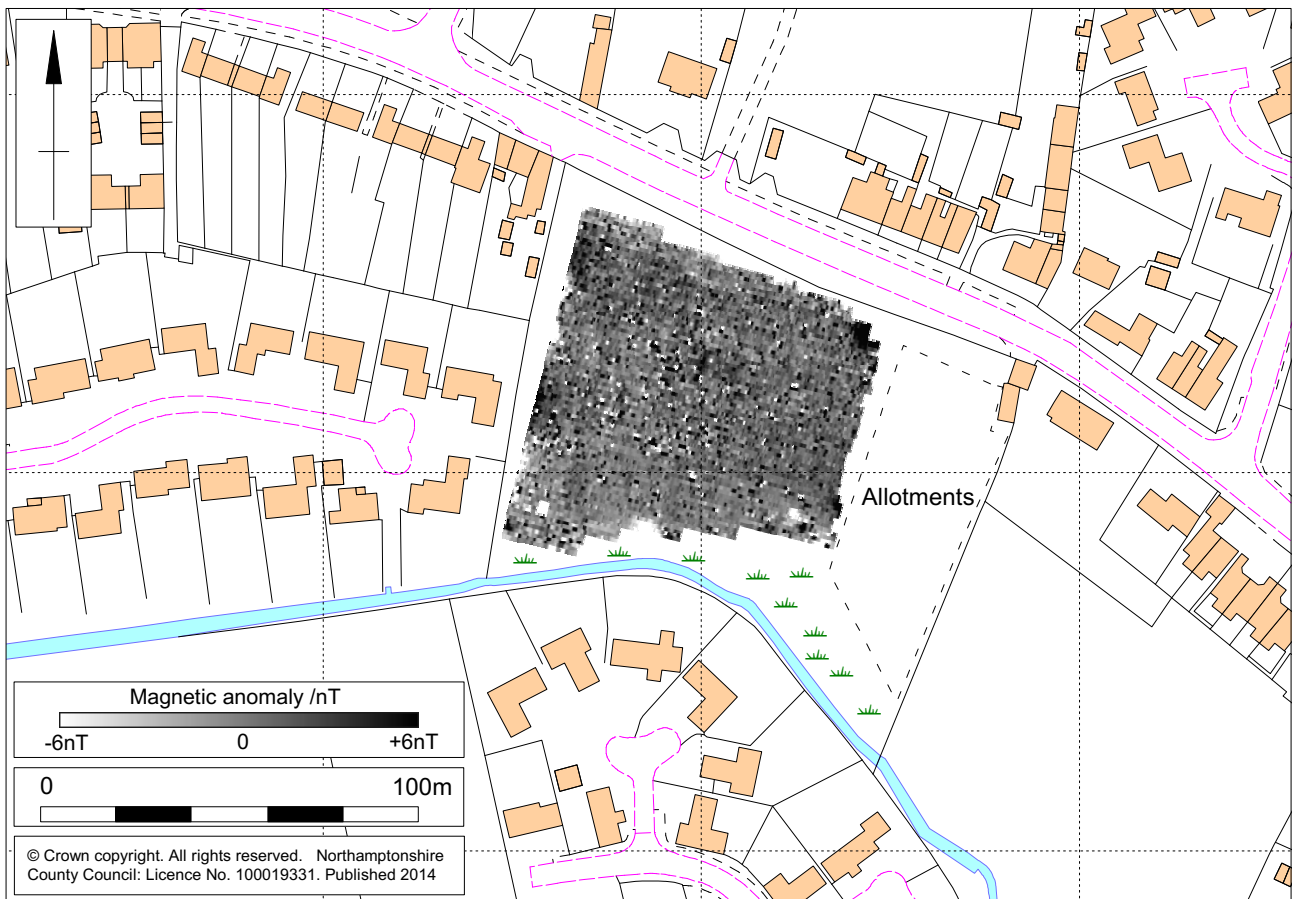
Scale 1:2000

Magnetometer survey results Fig 2



Scale 1:2000

Magnetometer survey interpretation Fig 3



Scale 1:2000

Unprocessed magnetometer survey data Fig 4

4.2 Geophysical survey results

The survey covered the north-western and central parts of the proposed development area, the remaining area being un-surveyable due to allotments and rough vegetation.

The survey identified faint linear trends aligned north to south running the length of the field suggestive of furrows of medieval or post-medieval ridge and furrow cultivation (Fig 3).

The survey identified background negative and positive “noise”, with three stronger anomalies thought to represent ferrous material within the top soil. To the north-east there was a strong positive halo, arising from a parked vehicle. The weak halos on the western edge of the survey results were likely to be interference from houses or fences or interference from the storm drain/sewer which runs north to south along the western field boundary.

5 TRIAL TRENCH EVALUATION by Chris Pennell

5.1 Methodology

The position of the trial trenches were accurately plotted using differential GPS (Leica Viva) operating to an accuracy of +/- 0.05m (Fig 5).

Machine excavation was under the direction of a suitably experienced archaeologist. Trenches were excavated by machine using a toothless ditching bucket to reveal archaeological remains or, where these are absent, undisturbed natural horizons. Machine excavation removed topsoil, subsoil, modern levelling layers and alluvium to the surface of the natural substrate. The spoil from the trenches was stacked beside the

trench at a minimum distance of 1.0m from the edge to avoid collapse. Topsoil and subsoil were stacked separately for reinstatement.

All trenches and spoil heaps were scanned with a metal detector to ensure maximum finds retrieval. Each trench was cleaned where possible, sufficiently to enhance the definition of features, unless it was certain that no archaeological remains were present.

The excavation and recording were carried out in accordance with MOLA guidelines and all records were created using MOLA pro-forma (MOLA 2014c). Photographs were taken of all trenches and all relevant deposits on 35mm monochrome print film, high resolution digital images were also taken. Work was carried out in accordance with the Institute for Archaeologists' *Standard and guidance for archaeological field evaluation* (IfA 2008).

Levels in metres above Ordnance Datum were established for all trenches using GPS and for all excavated features using a dumpy level from temporary bench marks (TBMs) established using GPS.

Artefacts were recovered from individual contexts and stored and packed according to type.

All records and materials will be compiled in a structured archive in accordance with the guidelines of Appendix 3 in the English Heritage procedural document, *Management of Archaeological Projects 2* (EH 1991b).

5.2 Results

The positions of Trenches 3 and 5 were altered from the trench design to avoid the path which borders the field. Due to the waterlogged nature of the ground Trench 3 was also shortened to 15m in length after consultation with the Northamptonshire County Council Assistant Archaeological Advisor (Fig 5). The trenches are illustrated in Figures 6 to 10 in Appendix 1.

The natural geological horizon was encountered between 0.40m and 0.75m below the modern ground surface, it comprised firm brown-grey clay with limestone brash. Trench 4 had an outcrop of natural limestone at its eastern end. Trenches 3 and 5 had mottled orange-brown and light grey stiff clay at the break of the natural slope with spring lines apparent at their southern ends. The overlying subsoil was mid orange-brown silty clay with natural limestone fragments and the topsoil was dark brown clay loam.

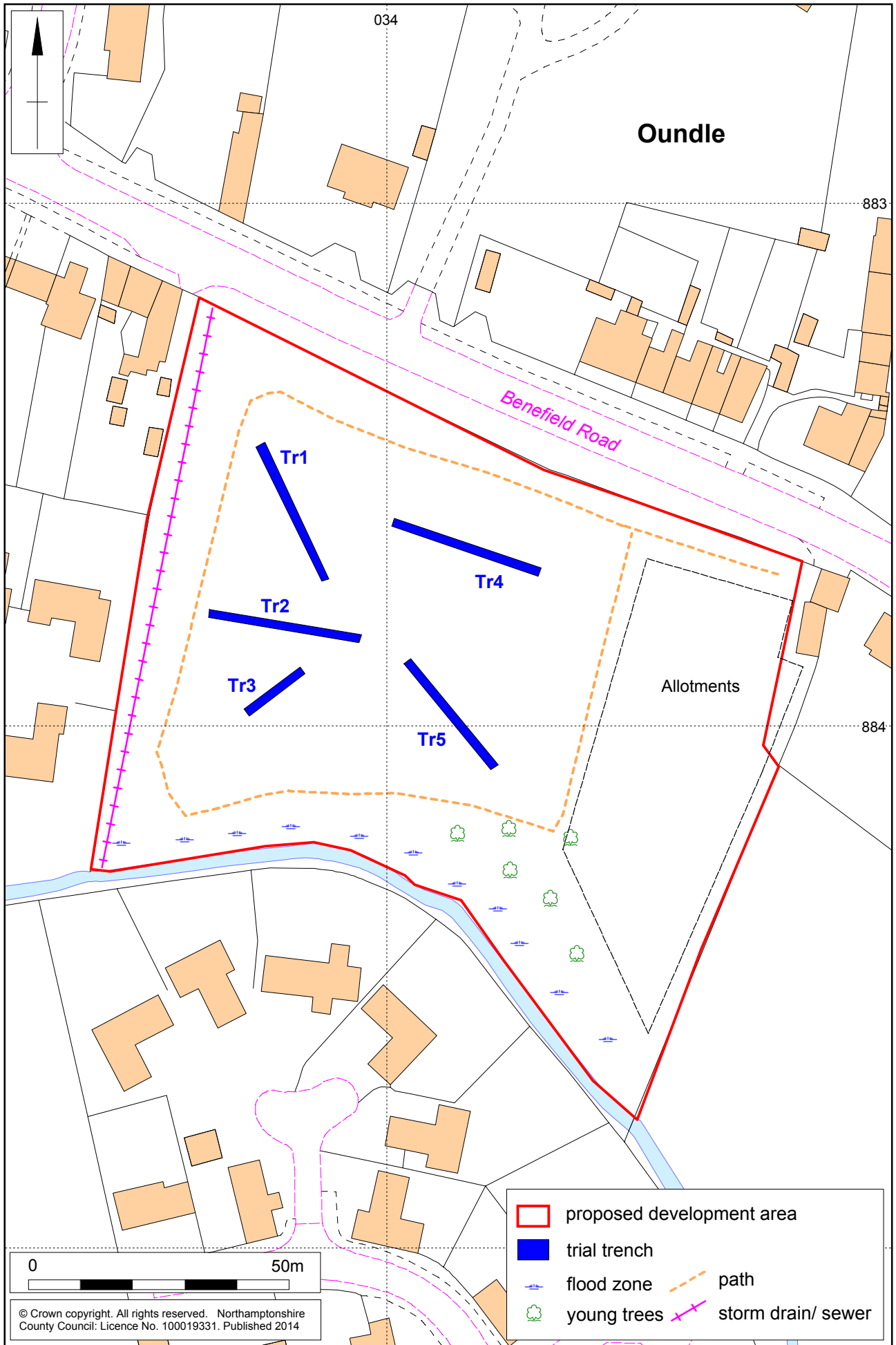
A drain was observed in each of Trenches 3 and 4 and 5, the records suggest that these were constructed of stone slabs, but had been disturbed by ploughing. The drains are likely to be 18th-century in date. No other features were observed.

Four sherds of residual medieval and post-medieval pottery were found in the interface between the subsoil and natural in Trench 4. They comprise a sherd of medieval green glazed ware with a buff fabric, two sherds of medieval shell tempered ware and a base sherd from a Midland Purple drinking vessel of probable late 16th or early 17th-century date. These are likely to derive from manuring and will not be retained.

6 DISCUSSION

No archaeological features were present in the excavated trenches. Four sherds of undiagnostic medieval and post-medieval pottery are likely to derive from post-medieval manuring. Ferrous material was observed whilst excavating the top soil, this correlates well with the findings of the geophysical survey.

No evidence for the furrows, identified in the geophysical survey (Fig 3), was recorded in the evaluation and it is possible that these features were within the overburden.



Scale 1:1000

Excavated trenches Fig 5

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June 2014

APPENDIX 1: CONTEXT INVENTORY

Trench number	Length, width and alignment	NGR	Surface height (aOD)	Depth & height of natural (aOD)
1	30m x 1.60 m NW to SE	503375 288253	31.18m	30.68m
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
101	Topsoil	Dark greyish-brown friable silty clay; occasional charcoal flecks and very rare <20mm sub angular limestone fragments	0.30m thick	-
102	Subsoil	Firm mid orange-brown silty clay with moderate <20mm sub angular limestone. Residual charcoal and limestone	0.20m thick	-
103	Natural	Firm mid grey-brown clay with moderate <60mm sub angular limestone, occasional ironstone and minor variations in shades of colour of the natural.		



Trench 1, looking north-west

Fig 6

Trench number	Length, width, and alignment	NGR	Surface height (aOD)	Depth & height of natural (aOD)
2	30m x 1.60m E to W	503366 288221	28.48m	27.93m
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
201	Topsoil	Dark greyish-brown friable silty clay; occasional charcoal flecks and very rare <20mm sub angular limestone fragments	0.30m thick	-
202	Subsoil	Firm mid grey-brown sandy clay with occasional iron panning and moderate <30mm sub angular limestone fragments	Between 0.10m and 0.25m thick	-
203	Natural	Firm mid grey-brown clay with moderate <60mm sub angular limestone, occasional ironstone and minor variations in shades of colour of the natural.		



Trench 2, looking west

Fig 7

Trench number	Length, width and alignment	NGR	Surface height (aOD)	Depth & height of natural (aOD)
3	15m x 1.60m NE to SW	503384 288210	27.86m	27.35m
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
301	Topsoil	Dark greyish-brown friable silty clay; occasional charcoal flecks and very rare <20mm sub angular limestone fragments	Between 0.36m and 0.30m thick	-
302	Subsoil	Firm mid orange-brown silty clay with <20mm sub angular limestone fragments	Between 0.15 and 0.20m thick	-
303	Natural	Firm mid grey-brown clay with moderate <30mm sub angular limestone, occasional patches of sand/degraded sandstone		
304	Variation in natural	Stiff mottled clay ranging in colour from mid orange-brown to light blue-grey		



Trench 3, looking south-west

Fig 8

Trench number	Length, width and alignment	NGR	Surface height (aOD)	Depth & height of natural (aOD)
4	30m x 1.60m E-W	503401 288239	30.14m	29.62m
<i>Context</i>	<i>Context type</i>	<i>Description</i>	<i>Dimensions</i>	<i>Artefacts/Samples</i>
401	Topsoil	Dark greyish-brown friable silty clay; occasional charcoal flecks and very rare <20mm sub angular limestone fragments	0.30m thick	-
402	Subsoil	Firm mid orange-brown silty clay with moderate <20mm sub angular limestone. Residual charcoal and limestone	0.12 thick	-
403	Natural	Firm mid grey-brown clay with moderate <60mm sub angular limestone, occasional ironstone and minor variations in shades of colour of the natural.		
404	Variation in natural	Stiff mid brown-grey clay with frequent <0.60mm cornbrash and occasional <0.30mm limestone fragments		



Trench 4, looking west

Fig 9

OUNDLE, BENEFIELD ROAD

Trench number	Length, width and alignment	NGR	Surface height (aOD)	Depth & height of natural (aOD)
5	30m x 1.60m NW- SE	503404 288213	28.29m	27.59m
Context	Context type	Description	Dimensions	Artefacts/Samples
501	Topsoil	Dark greyish-brown friable silty clay; occasional charcoal flecks and very rare <20mm sub angular limestone fragments	0.30m thick	-
502	Subsoil	Firm mid orange-brown silty clay with moderate <20mm sub angular limestone. Residual charcoal and limestone	Between 0.10m and 0.40m	-
503	Natural	Firm mid grey-brown clay with moderate <60mm sub angular limestone, occasional ironstone and minor variations in shades of colour of the natural.		
504	Variation in natural	Stiff orange-brown and light grey mottled clay with moderate <30mm sub angular limestone		
505	Variation in natural	A natural band of firm mid grey clay with moderate <40mm limestone fragments		
506	Variation in natural	Stiff mottled clay ranging in colour from mid orange-brown to light blue-grey		



Trench 5, looking north-west

Fig 10



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