



Northamptonshire County Council

Northamptonshire Archaeology

Archaeological geophysical and fieldwalking
surveys on land at
Woodford, Kettering
Northamptonshire

November 2009



Mark Holmes and John Walford

December 2009

Report 09/178

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

STAFF

Project Manager Adam Yates BA AlfA

Text Mark Holmes MA

John Walford MSc

Fieldwork Jonathon Elston BA

Mark Holmes

James Ladocha BA

Heather Smith MA

Rob Smith

Flint Yvonne Wolframm-Murray BSc PhD

Iron Age Pottery Andy Chapman BSc MlfA

Roman Pottery Tora Hylton

Medieval Pottery Paul Blinkhorn BTech

Illustrations Mark Holmes

John Walford

QUALITY CONTROL

	Print name	Signed	Date
Checked by	Pat Chapman		
Verified by	Adam Yates		
Approved by	Andy Chapman		

OASIS REPORT FORM

PROJECT DETAILS		
Project title	Archaeological geophysical and fieldwalking surveys on land at Woodford, Kettering, Northamptonshire, November 2009	
Short description	An archaeological evaluation comprising geophysical survey and fieldwalking was carried out by Northamptonshire Archaeology in November 2009 at land at Woodford, Kettering, Northamptonshire. The work was undertaken in advance of a proposed development for CgMs Consulting. The evaluation found scatters of middle Iron Age and Romano-British pottery. The Iron Age pottery might possibly be associated with fragmentary features identified by the geophysical survey, whilst the Romano-British pottery is more likely to derive from agricultural manuring. Medieval and post-medieval pottery scatters were present and also probably derive from manuring practices. Ploughed-out ridge and furrow cultivation was identified by the geophysical survey and it is likely that from at least the medieval period onwards the land has been constantly given over to agriculture.	
Project type	Evaluation by geophysical and fieldwalking surveys	
Previous work	CgMs Consulting desk-based assessments	
Current land use	Arable	
Future work	Unknown	
Monument type and period		
Significant finds	Iron Age and Romano-British Pottery, geophysical anomalies.	
PROJECT LOCATION		
County	Northamptonshire	
Site address	Woodford, Kettering	
Easting Northing	SP 962 770	
Area (sq m/ha)	2.3 ha	
Height OD	75m above Ordnance Datum	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology	
Project brief originator		
Project Design originator	Paul Gajos, CgMs Consulting Ltd	
Director/Supervisor	Mark Holmes, Northamptonshire Archaeology	
Project Manager	Adam Yates, Northamptonshire Archaeology. Paul Gajos, CgMs Consulting Ltd	
Sponsor or funding body	CgMs Consulting	
PROJECT DATE		
Start date	23/10/2009	
End date	24/10/2009	
ARCHIVES	Location (Accession no.)	Contents
Physical		1 finds box
Paper		1 file
Digital		Survey data, Client report PDF
BIBLIOGRAPHY		
Title	Archaeological geophysical and fieldwalking surveys on land at Woodford, Kettering, Northamptonshire, November 2009	
Serial title & volume	Northamptonshire Archaeology Report 09/178	
Author(s)	Mark Holmes and John Walford	
Page numbers		
Date	November 2009	

Contents

1	INTRODUCTION	1
2	BACKGROUND	1
	2.1 Historical background	
	2.2 Topography and geology	
3	GEOPHYSICAL SURVEY	2
	3.1 Methodology	
	3.2 Results	
4	FIELDWALKING	3
	4.1 Methodology	
	4.2 Results	
5	CONCLUSION	4
	BIBLIOGRAPHY	
	APPENDIX 1 - WORKED FLINT by Yvonne Wolfram-Murray	
	APPENDIX 2 - IRON AGE POTTERY by Andy Chapman	
	APPENDIX 3 - ROMAN POTTERY by Tora Hylton	
	APPENDIX 4 - MEDIEVAL POTTERY by Paul Blinkhorn	

Tables

Table 1: Summary of fieldwalking finds (totals)

Figures

Front cover: Extract from Ordnance Survey 2" provisional surveyor's edition c 1819

Fig 1: Site location

Fig 2: Geophysical survey results 1:1250

Fig 3: Geophysical survey results interpretation 1:1250

Fig 4: Fieldwalking results: worked flint, Iron Age pottery and Romano-British pottery 1:1250

Fig 5: Fieldwalking results: all medieval and post-medieval pottery 1:1250

Fig 6: Fieldwalking results: medieval pottery 1:1250

Fig 7: Fieldwalking results: post-medieval pottery 1:1250

Fig 8: Fieldwalking results: 19th-century pottery 1:1250

Back cover: Extract from Ordnance Survey 6" first edition c 1887-8

**ARCHAEOLOGICAL GEOPHYSICAL AND FIELDWALKING SURVEYS
ON LAND AT
WOODFORD, KETTERING
NORTHAMPTONSHIRE**

November 2009

Abstract

An archaeological evaluation comprising geophysical survey and fieldwalking was carried out by Northamptonshire Archaeology in November 2009 at land at Woodford, Kettering, Northamptonshire. The work was undertaken in advance of a proposed development for CgMs Consulting. The evaluation found scatters of middle Iron Age and Romano-British pottery. The Iron Age pottery might possibly be associated with fragmentary features identified by the geophysical survey, whilst the Romano-British pottery is more likely to derive from agricultural manuring. Medieval and post-medieval pottery scatters were present and also probably derive from manuring practices. Ploughed-out ridge and furrow cultivation was identified by the geophysical survey and it is likely that from at least the medieval period onwards the land has been constantly given over to agriculture.

1 INTRODUCTION

An archaeological evaluation comprising geophysical and fieldwalking surveys was carried out by Northamptonshire Archaeology in November 2009 on land at Woodford, Kettering, Northamptonshire (Fig 1; NGR SP 962 770). The work was commissioned by CgMs Consulting acting on behalf of clients and was undertaken to inform a planning application for development of the site.

No brief or specification was issued for the works which were undertaken in accordance with the Institute for Archaeologist *Standard and Guidance for Archaeological Field Evaluation* (IfA 1994, revised 2008) and the Northamptonshire Archaeology *Fieldwork Manual* (2003). The fieldwork was conducted between 23rd and 24th November 2009.

2 BACKGROUND

2.1 Historical background

A desk-based assessment detailing the historical background to the site has been produced by CgMs Consulting (Herring 2009). The report demonstrates that although prehistoric, Roman and Saxon remains are known from the vicinity there are no known archaeological monuments or finds located within the area proposed for development. The area was part of Woodford's open field system until the later 18th century when the fields were enclosed under an Act of Parliament.

2.2 Topography and geology

The proposed development area is located at the western edge of Woodford village. It comprises a single arable field which contained an emerging cereal crop at the

time of the survey. The field is bounded to the north and east by modern housing development and to the south by sports pitches. At the west are further arable fields.

The field sits between 75m – 80m above OD and slopes gently down from the south-west to the north-east. The underlying bedrock is Kelloway Sand which is in turn overlain by Glacial Till and Chalky Boulder Clay (BGS 2009). The presence of Boulder Clay is a significant consideration for the geophysical survey, as archaeological features cut into this substrate do not always develop a clear magnetic contrast against the background (EH 2008, 15).

3 GEOPHYSICAL SURVEY

3.1 Methodology

The entire field was subject to a geophysical survey (c 2.3ha). 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).

The survey area was divided into 30m grid squares, using a tape measure and optical square. Tie-in measurements were taken to the field boundaries. The gradiometers were carried at a brisk but steady pace through each grid, collecting data along 1m spaced traverse lines. Measurements were automatically triggered every 0.25m along the traverses, giving a total of 3600 measurements per grid.

All fieldwork methods complied with the guidelines issued by English Heritage, and by the Institute for Archaeology (EH 2008; Gaffney, Gater and Ovendon 2002).

The survey data were processed using Geoplot 3.00u 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 greyscale plots (scale +4nT to -4nT black ~ white). These have been scaled, rotated and resampled (georectified) for display against the Ordnance Survey base mapping (Fig 2). Interpretative plots have been produced and are shown overlain onto the data (Fig 3).

3.2 Results (Figs 2 and 3)

Two sets of parallel and curvilinear positive anomalies occur within the data, indicating that the site contains ploughed-down ridge and furrow of likely medieval origin. One set is aligned approximately north to south and is abutted by the other, which has a south-east to north-west alignment. All these anomalies are very weak, almost at the limit of visibility, suggesting that the geological conditions of the site are not particularly favourable for magnetometer survey.

A few very slight and fragmentary anomalies hint at the presence of archaeological features towards the eastern edge of the survey area. A pair of short, weakly positive, linear anomalies appears to define a square corner and there is a slight suggestion that one of these extends further north. Another, rather stronger linear anomaly projects about 7m into the survey area from the eastern edge before coming to an abrupt end. All of these anomalies would be consistent with infilled ditches, and the 'corner' feature is reminiscent of part of an enclosure. It is quite plausible, considering the geology of the site and the weakness of the ridge and

furrow anomalies, that they represent only the most magnetically enhanced parts of a more extensive but otherwise 'invisible' site.

Two very weak linear anomalies, consisting of chains of alternating magnetic dipoles, cross the site from south-west to north-east. These are characteristic of ceramic field drains.

A scatter of intense dipolar magnetic anomalies occurs across the survey area, indicating the presence of ferrous items within the plough-soil. Many of these are quite small and probably represent recent agricultural debris; horseshoes, ploughshare tips and such like. More substantial ferrous anomalies occur as broad magnetic halos along the northern, eastern and southern edges of the survey area. These are due to adjacent fences and other modern structures.

4 FIELDWALKING

4.1 Methodology

The fieldwalking survey was undertaken by walking along parallel transects spaced 20m apart. The transects were laid out using optical square, ranging rods and tapes. The survey area was walked systematically at normal pace along the parallel transects and surface finds were collected from a corridor extending about 1m to each side of the transect line. The overall sample of the surface area was therefore approximately 10%.

The sampling policy entailed the collection of all worked flint and pottery and other significant finds. There was no tile of medieval or earlier date present and no significant concentrations of slag, tile or other building materials.

All the finds were identified and each category subsequently had their distributions plotted in 20m 'stints' within each transect and tied in to the Ordnance Survey map using MapInfo GIS system. The distribution of each category of finds was mapped at a scale of 1:1250 and analysed to identify meaningful concentrations.

Standard Northamptonshire Archaeology Fieldwalking Record Sheets were used to record the results, including ground surface visibility and weather conditions. The survey was undertaken using standard procedures in accordance with The Institute for Archaeologists *Standard and Guidance for Archaeological Field Evaluation* (IfA 1994, revised 2008) and the Northamptonshire Archaeology *Fieldwork Manual* (2003).

4.2 Summary of results

A total of 177 sherds of pottery and one worked flint were collected (Table 1). Neither tile of medieval or earlier date nor any significant concentrations of slag or building material were present.

Table 1: summary of fieldwalking finds (totals)

Worked flint	Iron Age pottery	Romano-British pottery	Medieval pottery	Post-medieval pottery	19th century pottery
1	5	6	50	98	18

Worked flint (Fig 4)

A single flint flake was recovered. It may represent part of a much wider dispersed background scatter of Neolithic to early Bronze Age date and has no intrinsic significance.

Iron Age pottery (Fig 4)

Iron Age pottery comprised five sherds, probably dating to the late Iron Age or early Roman period, collected from the extreme eastern edge of the field (see Appendix 2). These sherds, although small in number, may be significant since the friable nature of much Iron Age pottery means that it often survives less well than pottery from later periods. Because of this even small quantities of material may indicate the presence of below ground features rather than manuring practices (Parry 2006, 61). The coincidence of this pottery with the possible archaeological features identified by the geophysical survey may therefore indicate the presence of contemporary features.

Romano-British pottery (Fig 4)

The fieldwalking survey produced a scatter of six sherds of Romano-British pottery dating to the late 1st/2nd century AD (see Appendix 3). There was no discernable patterning within the scatter and it is likely to derive from agricultural manuring in the Roman period. The presence of Roman sites in the vicinity makes it unsurprising that such a distribution is present here.

Medieval pottery, (Fig 6)

Medieval pottery from the site starts in the 12th century. No Early-Middle Saxon or Late Saxon pottery was present. The pottery sequence carries on uninterrupted into the 19th century and the distribution of the entire assemblage is given in Figure 5.

In Figure 6 medieval wares are plotted, although as several ceramic types span the medieval and post-medieval periods there may well be some overlap between the two (see Appendix 4). The medieval pottery tends to avoid the lower, northern end of the field, however, there does not appear to be any great significance to this distribution which is consistent with an origin as a manuring by-product. The identification by the geophysical survey of ploughed-out ridge and furrow cultivation supports this agricultural history.

Post-medieval and later pottery (Figs 7 and 8)

The post-medieval pottery distribution is consistent across the field and again derives from agricultural manuring practices (Fig 7). Later 19th-century wares are less dominant but this may simply reflect a change in agricultural practice (Fig 8).

5 CONCLUSION

The evaluation discovered evidence of Iron Age activity at the site, although the nature of that activity is unknown. It may correspond to no more than manuring practices or it may relate to possible features identified by the geophysical survey. These fragmented features were the only possibly significant anomalies discovered by the geophysical survey.

Later pottery distributions from the Roman, medieval and post-medieval periods appear more unequivocal and are believed to represent manuring. The range of fabric types identified in the ceramic assemblage indicates that there was virtually unbroken activity at the site throughout the medieval period, and into the 17th century and beyond.

BIBLIOGRAPHY

Bartington, G, and Chapman, C, 2003 A high-stability fluxgate magnetic gradiometer for shallow geophysical survey applications, *Archaeological Prospection*, **11**, 19-34

BGS 2009 Sheets EW171 Kettering v5 and EW186 Wellingborough v5, *DigMap GB-50*, British Geological Survey

EH 2008 *Geophysical Survey in Archaeological Field Evaluation*, English Heritage

Gaffney, C, Gater, J, and Ovendon, S, 2002 *The Use of Geophysical Techniques in Archaeological Evaluations*, Institute of Field Archaeologists Technical Paper, **6**

Herring, E C, 2008 *Archaeological Desk Based Assessment, Land At Woodford Kettering, Northamptonshire*, CgMs Consulting Report, **9606/08/01**

NA 2003 *Archaeological Fieldwork Manual*, Northamptonshire Archaeology

Parry, P, 2006 *Raunds Area Survey. An Archaeological Study of the Landscape of Raunds, Northamptonshire 1985-94*, Oxbow Books

APPENDIX 1: FLINT by Yvonne Wolfram-Murray

One piece of worked flint, a flake, was recovered (transect 1 stint 9). The raw material was opaque and light to mid brownish-grey in colour. A light brown patination was present. The cortex present on the flake was a heavily white patinated surface whilst post-deposition edge damage consisted of occasional heavy nicks and crushing. The flake had a broad cortical striking platform and was soft hammer struck. The worked flint is not directly dateable but the technological characteristics suggest a Neolithic date.

APPENDIX 2: IRON AGE POTTERY by Andy Chapman

There are five sherds of possible Iron Age pottery, designated as Fabric 1002 in Table A1. A single small abraded sherd in a grey-black fabric containing finely crushed shell, from Transect 1, stint 5, may be Iron Age in date. From Transect 1, stints 5, 6 and 7 there are four sherds in a grey-black fabric containing sparse fine shell. They all have an oxidised orange-brown external surface and two have similarly oxidised inner surfaces. These sherds are from well-made vessels, probably wheel-finished, and they are either late Iron Age or early Roman in date.

APPENDIX 3: ROMAN POTTERY By Tora Hylton

Six sherds of Roman pottery, designated F1001 in Table A1, were recovered as individual finds from transects 1, 2, 4 and 5. The assemblage comprises small undiagnostic bodysherds, which display signs of extreme abrasion. Fabrics represented include locally produced greywares (x 4), oxidised ware (x 1) and sandy ware (x 1). The range suggests that this small group probably dates to the late 1st/2nd century; there are no fabrics which date to the 3rd/4th century.

APPENDIX 4: MEDIEVAL POTTERY by Paul Blinkhorn

The medieval and later pottery was quantified using the chronology and coding system of the Northamptonshire County Ceramic Type-Series (CTS), as follows:

- F209: South Lincs Oolitic Ware, c AD1100 -1300
- F320: Lyveden/Stanion 'B' Ware, AD1225 -1400
- F324: Brill Boarstall Ware, AD1200 -1500
- F328: Grimston Ware, late 12th - 15th century
- F329: Potterspury Ware, AD1275 - 1600.
- F330: Shelly Coarseware, AD1100 - 1400
- F360: Misc. Sandy Coarsewares, AD1100 -1400
- F401: Late Medieval Oxidized ware, ?AD1450 - ?1550
- F403: Midland Purple ware, AD1450 -1600
- F404: Cistercian ware, AD1470 -1700
- F407: Red Earthenwares, AD1550+
- F408: Rhenish Stonewares, AD1450+
- F409: Staffordshire Slipwares, AD1680 -1750
- F413: Staffs. Manganese Glazed wares, late 17th –18th century
- F426: Iron-glazed earthenware, late 17th - 19th century
- F438: English Stoneware, late 17th century +
- F1000: Misc. 19th century wares.

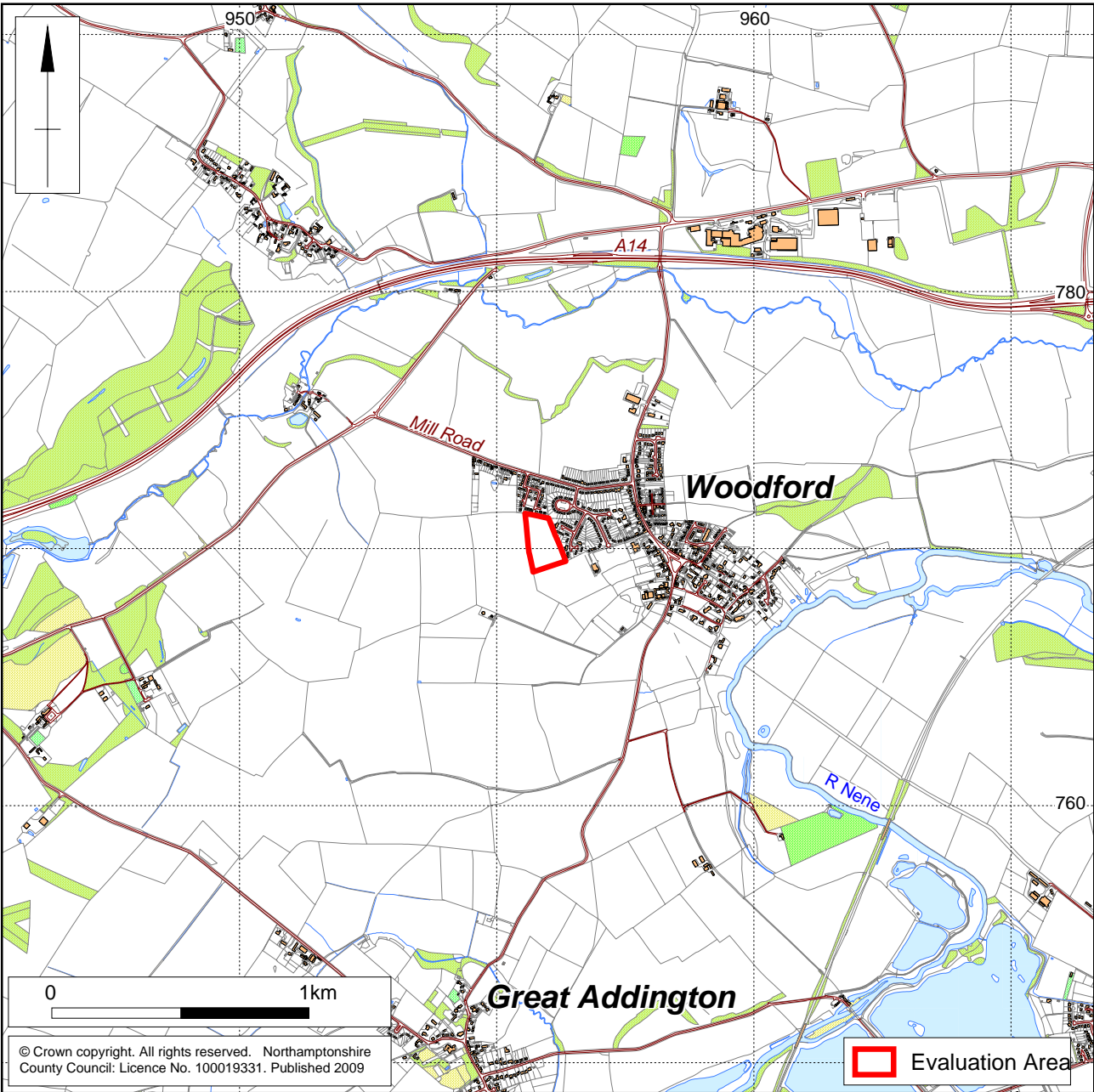
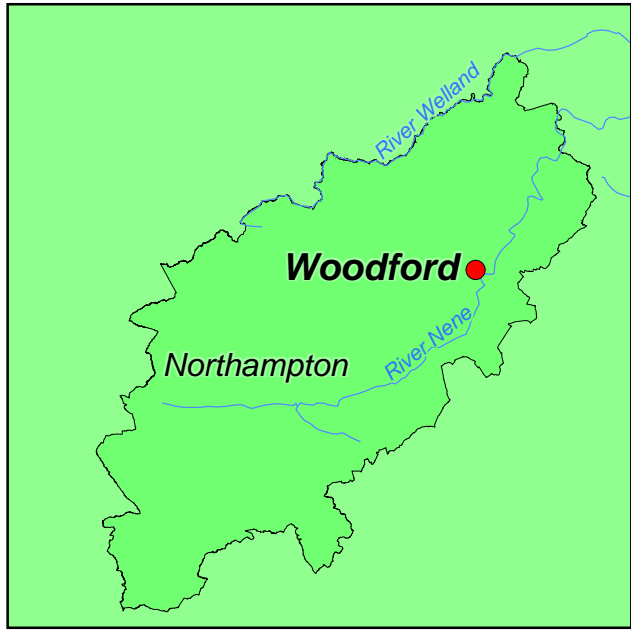
The range of fabric types indicates that there was virtually unbroken activity at the site throughout the medieval period, and into the 17th century.

Table A1: Pottery occurrence by number and weight (in grammes) of sherds per transect and stint by fabric type

TRANS	STINT	NO	WT (g)	FABRIC
1	3	1	2	1000
1	3	1	7	1001
1	5	1	20	407
1	5	2	8	1002
1	6	1	19	329
1	6	1	19	403
1	6	2	17	1002
1	7	1	13	360
1	7	1	4	1002
1	9	1	7	426
2	2	1	29	403
2	3	2	50	426
2	4	2	67	403
2	4	1	27	426
2	4	2	4	1000
2	5	3	41	407
2	5	1	2	1001
2	6	1	24	407
2	7	4	21	320
2	7	1	1	329
2	7	1	1	330
2	7	1	13	426
2	7	1	2	1000
2	7	1	13	1001
2	8	1	2	320
2	8	1	17	438
2	8	2	3	1000
2	9	2	15	320
2	9	1	1	329
2	9	1	7	330
2	9	1	2	401
2	9	3	53	403
2	9	1	6	426
2	10	1	5	209
2	10	1	3	329
2	10	1	5	401
2	10	1	20	403
2	10	1	4	404
2	11	1	3	401
3	2	3	133	426
3	3	1	7	328
3	3	1	3	330
3	3	3	53	426
3	4	1	19	426
3	6	1	12	401
3	7	2	9	426
3	8	1	1	320
3	9	1	2	320

TRANS	STINT	NO	WT (g)	FABRIC
3	9	1	3	329
3	9	2	3	330
3	9	1	1	1000
3	10	1	11	426
4	1	1	2	329
4	1	1	2	401
4	3	1	9	403
4	3	1	11	426
4	4	1	1	1000
4	5	2	6	1000
4	6	1	6	324
4	6	1	10	401
4	6	2	18	426
4	6	1	4	1001
4	7	3	6	330
4	7	1	15	401
4	7	1	2	408
4	7	1	4	413
4	7	1	46	426
4	8	1	5	330
4	8	1	7	401
4	8	1	75	403
4	8	2	10	426
4	8	3	6	1000
4	9	1	4	330
4	9	2	7	401
4	9	1	12	426
4	9	1	8	1000
4	10	2	14	320
4	10	1	7	324
4	10	1	4	330
4	10	2	11	401
4	10	1	2	426
4	10	1	8	1000
5	4	1	4	320
5	4	1	3	330
5	4	2	5	401
5	4	2	44	403
5	4	1	7	408
5	4	1	22	407
5	5	1	22	320
5	5	2	7	401
5	5	3	55	426
5	5	1	2	1001
5	6	1	4	320
5	6	2	16	330
5	6	1	2	401
5	6	1	3	426
5	8	2	4	320
5	8	2	8	330
5	8	3	12	401

TRANS	STINT	NO	WT (g)	FABRIC
5	8	1	8	404
5	8	1	2	407
5	8	1	13	426
5	8	1	3	1000
5	9	1	8	330
5	9	2	15	401
5	9	1	5	1000
5	10	1	4	330
5	10	2	23	401
5	10	1	4	401
5	10	1	1	404
5	10	1	4	426
5	10	1	5	426
5	10	1	2	433
5	11	1	2	1001
6	6	1	3	330
6	6	1	20	401
6	6	1	2	404
6	6	1	32	426
6	7	1	9	330
6	7	1	5	401
6	7	1	5	407
6	8	1	4	401
6	9	1	2	320
6	9	1	10	409
6	9	2	13	426
6	10	2	6	426
6	10	1	20	1000
6	11	1	11	330
6	11	1	13	426
7	9	2	22	401
7	10	1	21	320
7	10	1	1	401
	Total	177	1654	



1:25,000

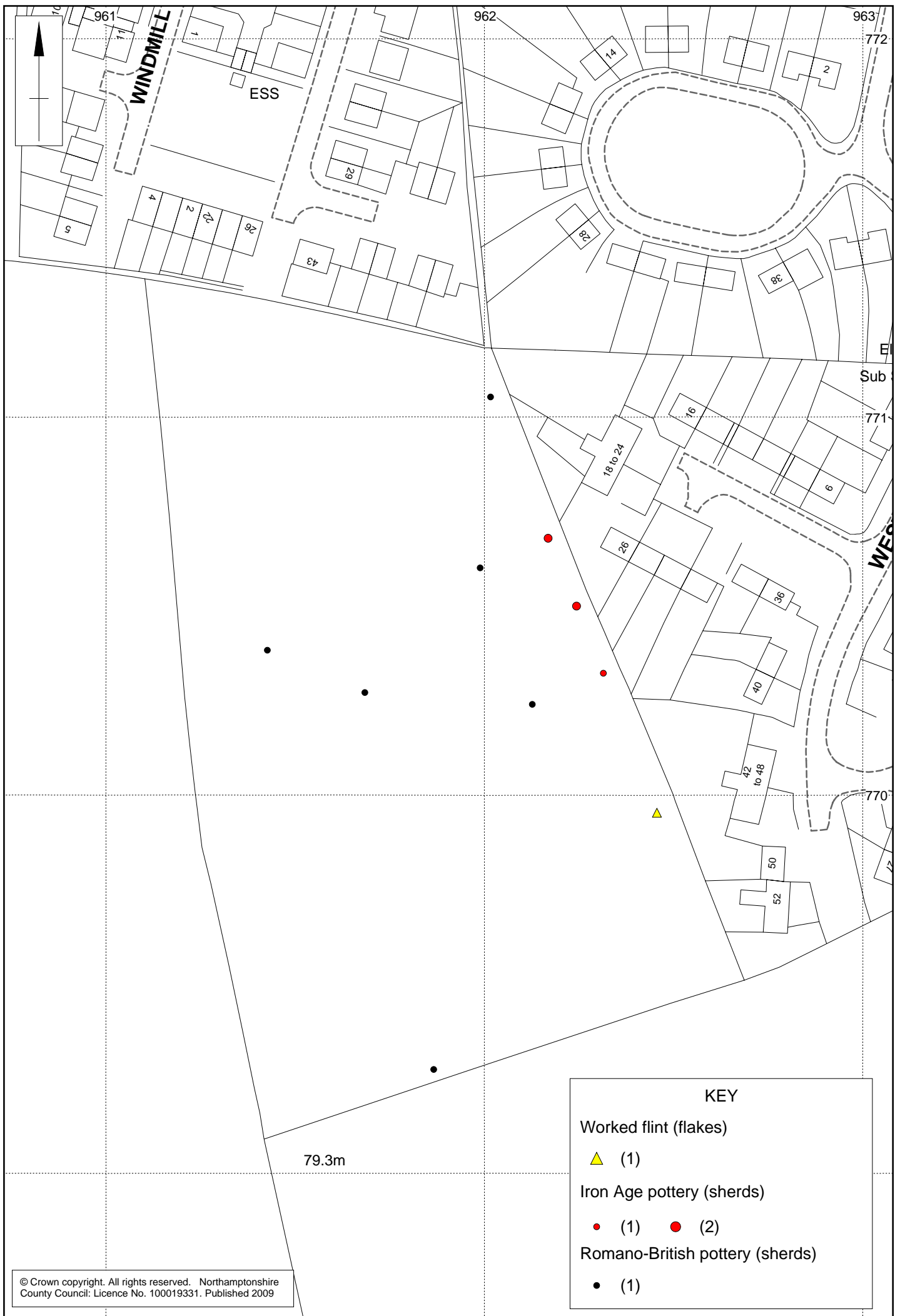
Site Location Fig 1



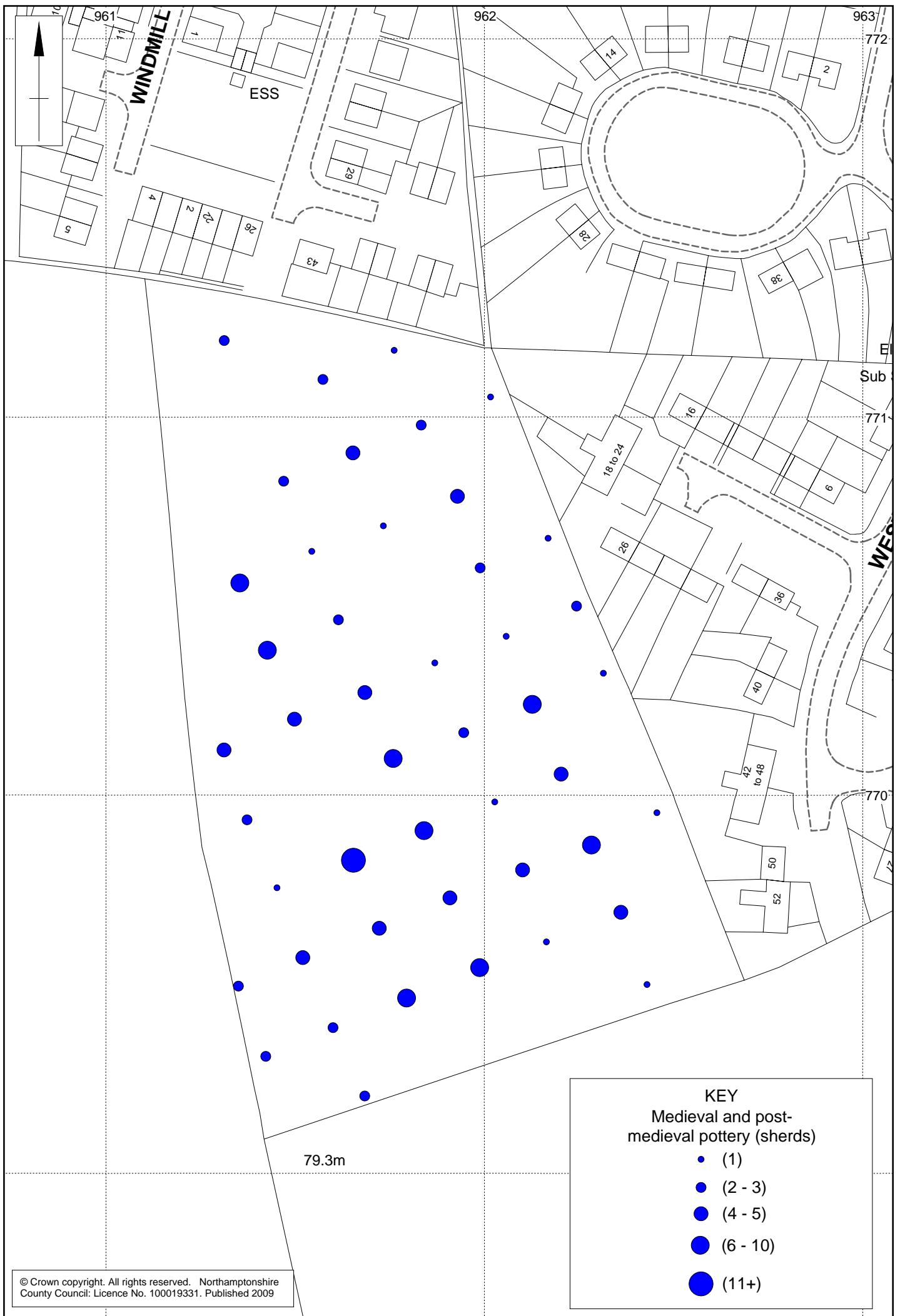


Scale 1:1250

Geophysical survey results interpretation Fig 3

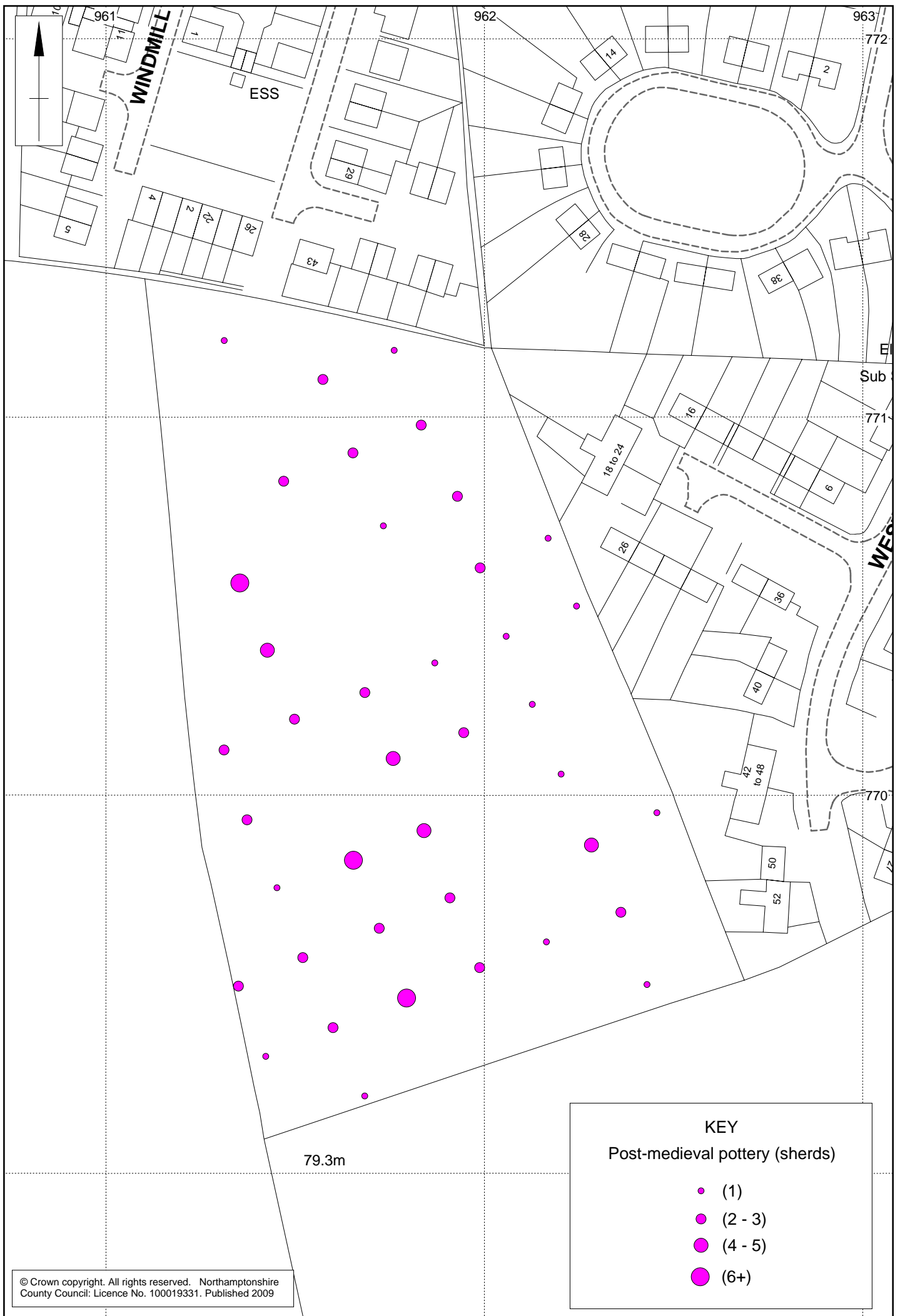


© Crown copyright. All rights reserved. Northamptonshire County Council: Licence No. 100019331. Published 2009





© Crown copyright. All rights reserved. Northamptonshire County Council: Licence No. 100019331. Published 2009

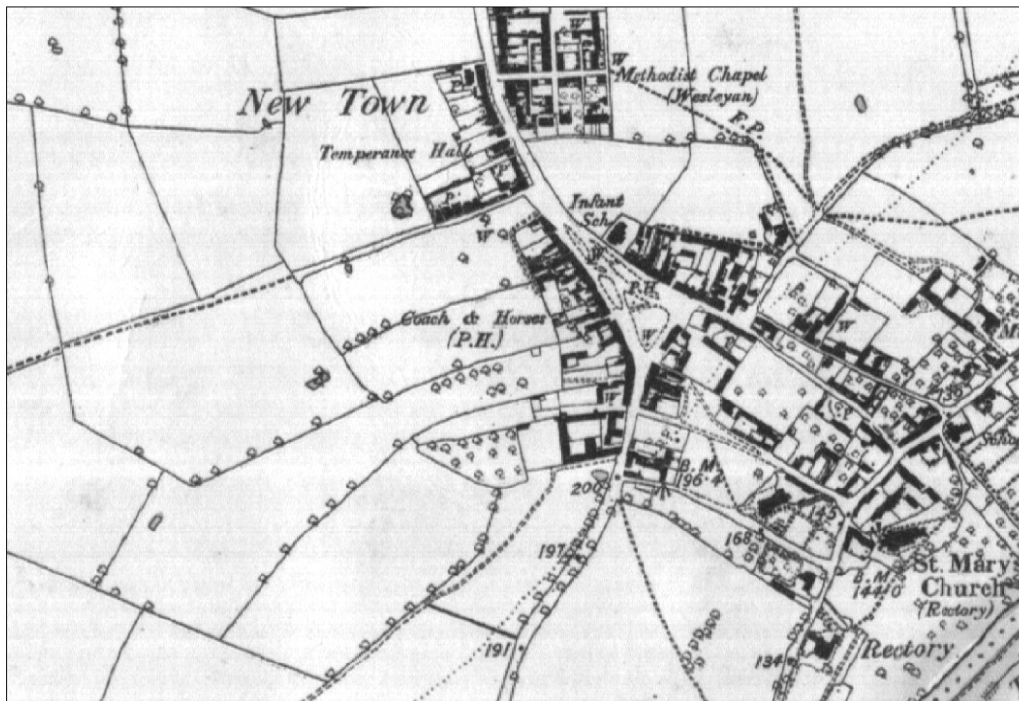






Northamptonshire County Council

Northamptonshire Archaeology



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