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Highways & Planning
Directorate

**ARCHAEOLOGICAL DESK-TOP ASSESSMENT
(INCORPORATING GRADIOMETER SURVEY REPORT)
MANOR COURT, NETTLEHAM,
LINCOLN**

NGR: TF 00437538
Planning Ref.: M02/P/0157

Report Prepared for
Land and Development Consultants
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July 2002

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Summary

- *This archaeological assessment and non-intrusive evaluation has been prepared for Land and Development Consultants in respect of a proposed residential development on land at Manor Court, Nettleham, Lincolnshire. It has been prepared to fulfil a planning requirement of West Lindsey District Council, and it will inform a decision making process that will seek to address the needs of the developer, whilst ensuring that archaeological resources are not needlessly destroyed as a result of developing the site.*
- *The results of this report suggests that the archaeological potential of the site is **moderate**, and that the greatest potential is based on the possibility that Saxon and medieval archaeological and palaeoenvironmental deposits are located within the site environs. There is a remote chance that early prehistoric artefacts may also be encountered.*
- *It is suggested that a programme of intrusive archaeological field evaluation, such as trial excavation, may be appropriate across the south edge of the site, along with a second trench within the field itself to investigate a possible natural pool and later mill pond.*

1.0 Introduction

This desk-based archaeological assessment has been commissioned by Land and Development Consultants, acting on behalf of their client. Its purpose is to assess the overall archaeological potential of a proposed development site, without the use of intrusive fieldwork, and to assess the potential impacts that may be posed by development of land at Manor Court, Nettleham. The report will assist West Lindsey District Council with its decision-making in relation to archaeological matters, and will likewise inform the client of any archaeological constraints which may be of relevance to the application.

Research was conducted in accordance with the procedures set out in the Lincolnshire County Council publication *Lincolnshire Archaeological Handbook: A Manual of Archaeological Practice* (LCC, 1998); national guidelines produced by the Institute of Field Archaeologists were also adhered to (IFA, 1994).

The report was researched and prepared by Mark Allen of Pre-Construct Archaeology (Lincoln) (hereafter PCA) in June/July 2002.

2.0 Location and description

Nettleham is in the administrative district of West Lindsey, approximately 4.5km north-east from the centre of Lincoln, 4.2km north-north-east of Dunholme.

The site that is the subject of this report is currently an area of waste ground at the north-west end of the village (fig. 1). It is an irregular unit of approximately 21450m² (fig. 2), and the central national grid reference is TF 00450 75375. To its north is Nettleham Beck, which meanders through the village from north-east to south-west. To its south is Manor Court, with modern detached housing beyond. The western boundary comprises a fairly young hedge and fence, with hedging forming part of the east boundary. The vegetation cover is predominantly dense tall nettles (plate 1).

3.0 Geology and topography

The solid geology over which the site rests is Middle Jurassic Lincolnshire Limestone, with Rutland Mudstone and Sandstone to the south-west (BGS 1999). There are no known drift deposits.

Nettleham is situated on relatively low ground to the east of the Lincoln Edge, at approximately 27m OD.

4.0 Planning background

Outline planning consent is sought from West Lindsey District Council for the construction of a residential development (Ref. M02/P/0157). Prior to the determination of this application, the District Council, acting on the advice of the Assistant Built Environment Officer of Lincolnshire County Council, has requested

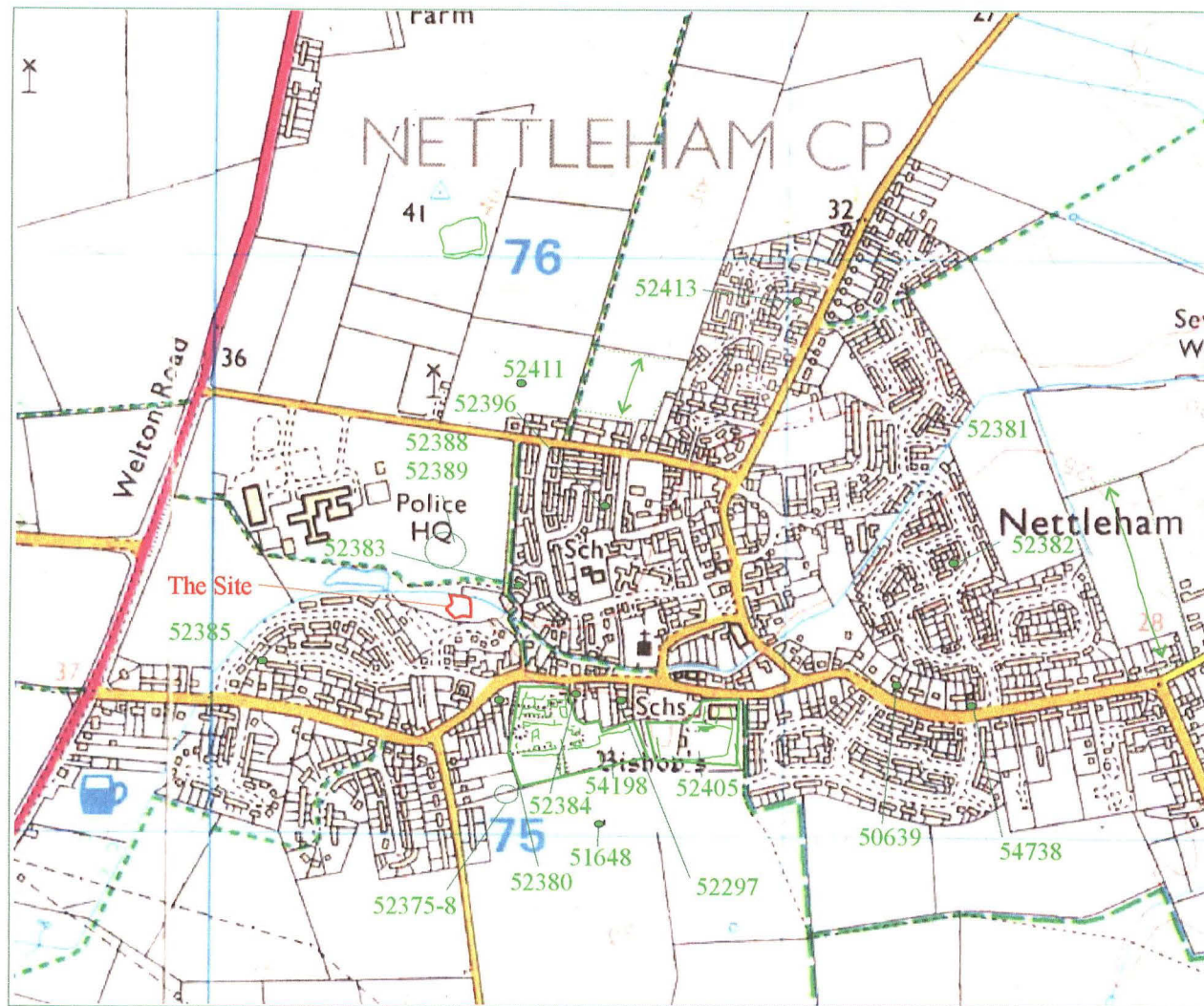


Figure 1: Site location plan at scale 1:12500. The site is outlined in red and cropmarks/SMR entries are labelled in green. (OS Copyright Licence Number: AL 515 21 A0001).

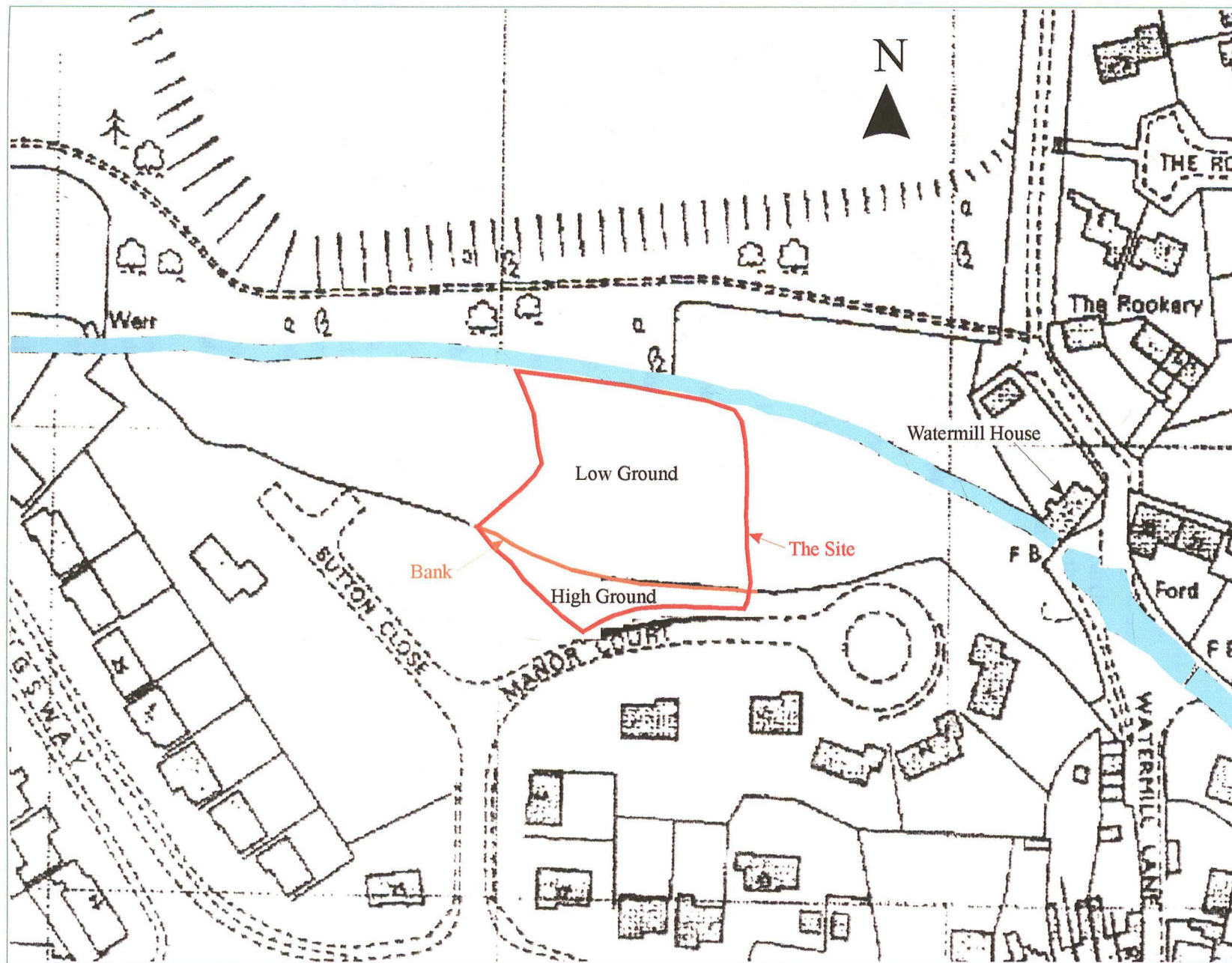


Figure 2: Site location at scale 1:1250. The site is outlined in red, Nettleham Beck is in blue and the prominent bank is shown in brown.

the undertaking of a detailed archaeological assessment and non-intrusive evaluation to determine the overall archaeological potential of the site. This approach is consistent with the advice set out in *Archaeology and Planning: Planning Policy Guidance Note 16*, 1990.

5.0 Objectives and methods

The purpose of this report is to identify and assess archaeological remains that may be sensitive to construction works associated with the proposed development and, if necessary, to suggest further methods by which the site may be evaluated in advance of works.

Data for this report was, for the most part, obtained for a 1km radius, centred on the application area. This was drawn from the following sources:

- the County Sites and Monuments Record for Lincolnshire (SMR)
- the Lincolnshire Archives Office (LAO)
- the Lincolnshire Local Studies Library (LSL)
- Aerial photographs held by the National Monuments Record, Swindon (NMR)
- Published and unpublished sources
- Information supplied by the client
- A detailed inspection of the site (undertaken by the author on 18th June 2002)

6.0 Archaeological and historical background

A number of prehistoric finds are known from the area. The earliest recorded artefact in the vicinity of the site is a Neolithic polished stone axe, found within a garden less than 100m to the north-east. Other finds of similar date include an unfinished flint arrowhead, found c.400m north-east of the site, and a late Neolithic or early Bronze Age triangular flint arrowhead, recovered approximately 300m to the WSW.

A flint scatter of Bronze Age date has been recorded c. 300m to the south of the site, including an arrowhead, a scraper and various other worked flints.

An important late Bronze Age bronze hoard was discovered within the Parish in 1860. This included four looped palstaves, a leaf-shaped spearhead, a basal-looped spearhead, a long tubular ferrule from the butt-end of a spearshaft, and two socketed axes (May 1976). The provenance of the hoard remains unclear, its recorded location apparently being within 'a cavity in clay'. The village is situated on a complex geology of Lincolnshire Limestone, Rutland Mudstone/Sandstone, and Snitterby Limestone. Wragby Till is the closest known source of clay, approximately 1.6km east of the application area (BGS 1999).

An isolated late Bronze Age palstave was found in 1909, more than 700m to the east of the site.

Two Iron Age sites have been recorded within 1km of the application area. An archaeological watching brief at 9 Sudbrooke Lane revealed a series of ditches, believed to be of Iron Age date (Network Archaeology 2002). The presence of Roman pottery and tile indicates continuity into the Romano-British period.

An extensive Iron Age multiple-ditched boundary was sample excavated approximately 700m to the west of the site, alongside Riseholme Lane (Palmer Brown 1994; Boutwood 1998). This boundary comprises three ditches with banks between (estimated by the author to have originally stood to 1.5m). The predominance of Late Iron Age pottery (2nd and 1st centuries BC) was interpreted as possible evidence for a nearby farmstead.

The village lies close to two Roman roads: Ermine Street, 2.9km to the west, and the Roman coast road, c.1.6km to the south, now the A158. There is good archaeological evidence that the locality was of some importance in the Roman period.

In 1961 a stone inscription was found in a drainage trench in the garden of 13 Willowfield Avenue, 750m to the east of the site (Whitwell 1992). The inscription reads 'DEO MARTI RIGO/NEMETI ET NVMINI/BVS AVGVSTORVM/Q.NERAT.PROXSI/MVS ARCVMDDESVO/DONAVIT', meaning 'To the God Mars Rigonemetis and the Divine Emperors, Quitus Neratius Proximus has given this arch at his own cost' (*ibid.*). Such a decorative piece would almost certainly have been set up over the entrance of a temple enclosure, suggesting the presence of a religious compound at Nettleham. The remnants of stone walls, with associated Roman pottery from the vicinity, provide further evidence for such a complex.

Surface scatters and isolated artefacts of Romano-British date are known within the village environs, including finds of greyware pottery, a bronze finger ring and penannular brooch, and 2nd century pottery, found in 1935, 150m and 350m to the SSE of the current site respectively. A Roman coin of indeterminate type or date was found 700m to the north-east.

Finds of Saxon date are relatively common within the village environs, and an important group of pagan Saxon pottery sherds was recovered during the construction of the Lincolnshire Police HQ, less than 100m to the north. In the same general area, late Saxon (9th – 11th century) loom weights were found in 1955.

An unknown quantity of Saxon beads are reported from a rear garden at Greetwell Lane, c.350m to the south of the site and, approximately 700m to the north-east, a fragment of a possible Saxon annular brooch was found in the garden of 28 Highfields.

During Saxon times, it has been suggested the Beck overflowed its banks and formed a large pool at the centre (Taylor 1999). Deposits formed by this pool created sandier soils than those found elsewhere in the village. The location of such a pool, if it

existed, is presumed to lie within the site confines, a suggestion borne out, possibly, by recent test pit results, which exposed a deep silt deposit (c.0.7m deep) beneath an alluvial topsoil. Lincs Laboratories undertook analysis of the test pit results on behalf of the client on 22nd May 2002.

The place-name derives from the Old English meaning 'the homestead, estate where nettles grow' (Cameron 1998). Prior to the widespread use of fertilisers, the presence of nettles indicated a concentration of phosphates in the soil, suggesting that the area that they grew in was formerly a site of human settlement (*ibid.*). The Domesday Survey lists a number of principal landowners in 1086: the King, Gilbert of Ghent, Durand Malet and Odo the Crossbowman. The King had 3 ploughs, 28 villagers, 12 smallholders and 1 Freeman who had 11 ploughs. Pre-Conquest, Queen Edith (the wife of Edward the Confessor) held 12 carucates of land. Gilbert of Ghent had 2 bovates of land taxable. Durand Malet had 2 ploughs and 10 villagers and 5 smallholders with 1 plough; and 3 mills, 5s; a church; meadow, 60 acres; underwood, 60 acres. Rothulfr had 14 bovates of land taxable (Morgan and Thorn 1986).

The shrunken nature of Nettleham shows a large irregular or rectangular green situated to the north-east of the church, which was possibly in existence when the parish was enclosed in 1777 (see fig. 3). Two empty crofts with no obvious sign of house plans are also depicted (approximately 400m north-east of the site).

The parish church, dedicated to All Saints, is a miss-match of styles, the earliest elements of which are of 13th century construction (Pevsner and Harris 1990). The listed building was substantially rebuilt in 1891, and lies approximately 300m ESE of the site. Within its grounds are the recorded remains of a medieval cross base and a 14th century stone coffin.

Approximately 250m to the south of the site is the Bishop's manor of Nettleham (Scheduled Ancient Monument No. 22749). The manor, which survives as a series of mounds, probably dates to the late 11th century. It replaced an earlier manor that may have been built at the beginning of the 11th century by the Earl of Mercia, Eadric Streona (Taylor 1999). After he died, the manor fell to his grand nephew, Earl Godwin, who passed it on to his daughter, Edward the Confessor's wife, Queen Edith (*ibid.*).

Immediately to the south of the Bishop's manor house, a medieval French jetton (inscribed metal counter) and green glazed pottery of 14th century date have been found.

Slightly further afield (less than 300m to the north-east of the site), a small bronze pilgrim badge of 15th century date was recovered from a garden in North Street. The badge, of St Barbara, included a tower and palm decoration, possibly with a lantern.

North of the village are the recorded remains of medieval ridge and furrow cropmarks.

Historical records show the parish ran into difficulties for certain rites and customs associated with the church. For example, John Buckingham forbade a long-established custom by which hard-boiled eggs and 'swine's flesh called bacun' were

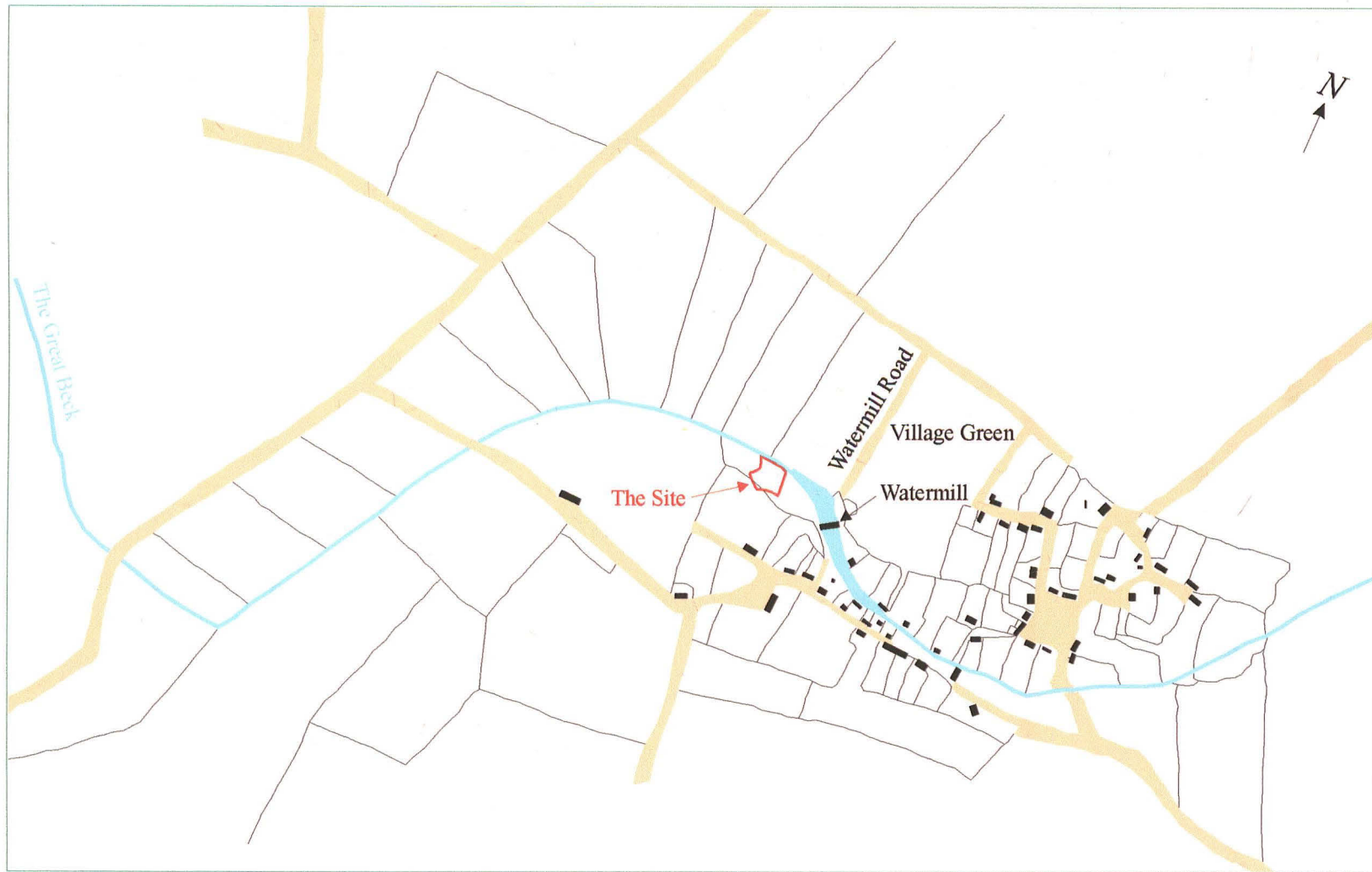


Figure 3: Enclosure plan of Nettleham from 1777 at scale eight chains to one inch. LAO Reference: 2CC62/21415

brought to the church on Easter morning for blessing and later distribution to the parish (Owen 1971). They were again in trouble later for selling cakes called 'flauns' to their people at Easter (*ibid.*).

Many of the stone-built cottages around the village green and High Street date from the 16th - 19th centuries and are listed buildings.

Approximately 500m to the south-east of the site (on the site of the village school) is the documented site of a post-medieval windmill.

7.0 Archaeological potential

The information presented below has been collated from a variety of sources. Data from published and unpublished sources has been synthesised, with information obtained from aerial photographs, and an inspection of the site itself. The sub-sections describe the information obtained from each source, and are followed by a brief summary. Finally, an assessment of archaeological potential is considered.

7.1 Cartographic information held at the Lincolnshire Archives Office (LAO)

There are a number of maps for Nettleham. The earliest is the 1777 Enclosure Map (fig. 3). This shows the village settlement concentrated mainly to the east and south-east of the site. The map indicates that the site cuts across a boundary that forms a small irregular block of pasture adjacent to 'The Great Beck' (now the Nettleham Beck), owned by Sir Francis Bernard. This boundary is of some interest, as it does not conform to the general pattern of fields and gardens adjacent to the Beck, all of which radiate outwards from the watercourse. An explanation of this shape may well be found in relation to the watermill that was in existence to the east (downstream) of the site. The watermill, which was in use until 1860 – 70 (Baker 1957), was positioned where the Beck was significantly wider than elsewhere in the village. For the watermill to have functioned effectively, this would have required a reservoir, known as the millpond (see fig. 4 for a suggested reconstruction of the mill features). This pond may have been the original Saxon pool intonated earlier (see Section 6.0). When the watermill was constructed (the date is not known), the pool may have been altered, possibly with banks added to hold the extra volume of water that would accumulate when the Beck was dammed. Such a bank may have been revetted with stone or simply lined with clay. This could explain the steep bank at the south end of the site (see Section 7.3 below).

An 1857 plan of part of the village was drawn up to show properties belonging to the Lord Bishop of Lincoln (fig. 5). This shows the watermill, with part of the millpond surviving to the north side of the site. The plan also depicts a track that extended along the high ground that bounded the suggested former millpond to the north. This track does not survive today but it can be traced running parallel with the modern field boundary that also delimits the extent of the suggested millpond (see fig. 2)

The first edition Ordnance Survey map (with revisions) of c.1880 (fig. 6) shows the field much as it was in the previous plans of 1777 and 1857 (see figs. 3 and 5 respectively). The map indicates that the track that was present in 1857 had been replaced by a field boundary that delimits the high and low ground.

A comprehensive NMR/EH aerial photographic cover search was undertaken as part of this study. This resulted in a list of sixteen oblique and eleven vertical aerial photographs being identified for the parish. After discarding those that did not cover the village itself, three vertical shots were selected, based on year and date (cropmarks are more pronounced during hot, dry summers following a damp spring). Unfortunately, when requested, the NMR did not hold two of the vertical shots and the final one covered an area to the south of the application site (NMR Ref.: OS/66128, Frame No. 412) and is of no direct relevance to this report. Two further

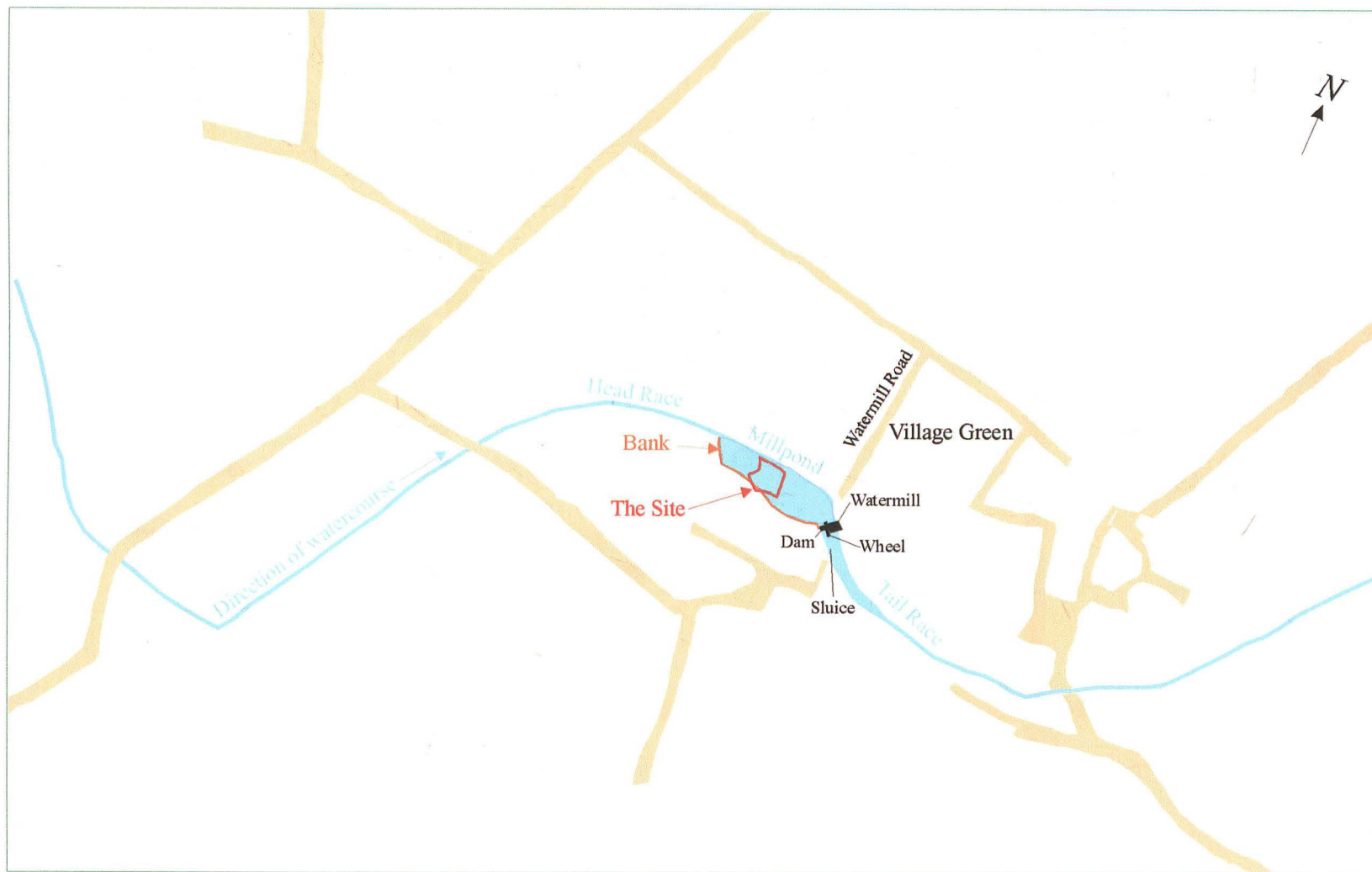


Figure 4: Suggested reconstruction of watermill and associated mill pond taken from 1777 enclosure plan.
At scale eight chains to one inch



Figure 5: Map of an estate at Nettleham. The property of the Lord Bishop of Lincoln. Dated September 14th 1857. Scale six chains to one inch.

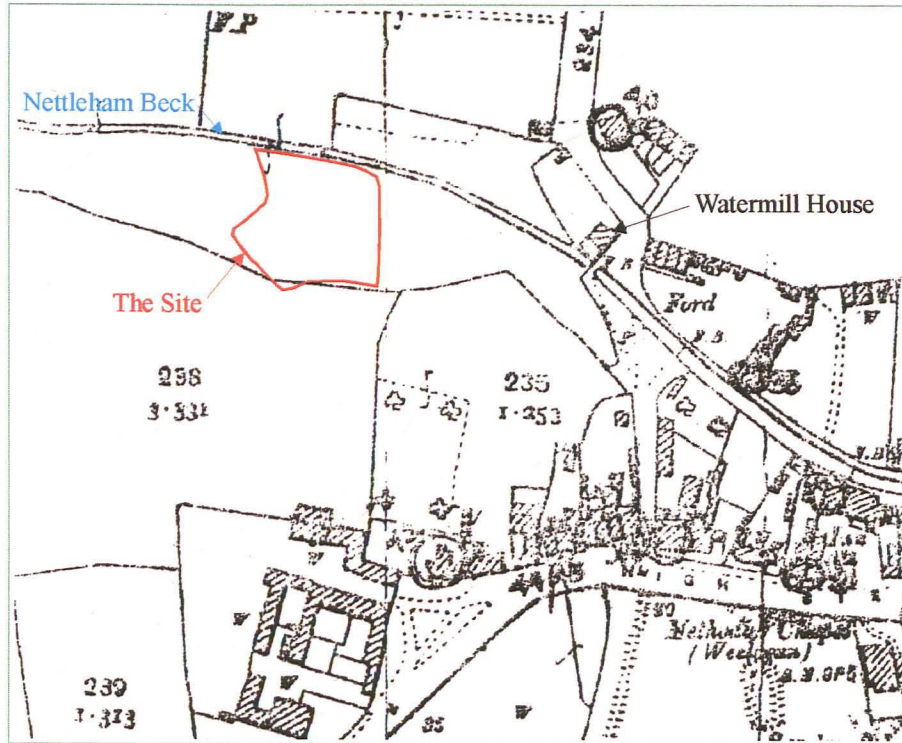


Figure 6: Extract from 1st edition OS map (c. 1880) with site outlined in red. At scale six inch to one mile.

aerial photographs, one vertical (Ref.: CPE/UK 2541) and one oblique (Ref.: SMR PRN 00104), were examined at the Lincolnshire SMR. Although both included the site, the poor quality of the images renders them of limited value, and so they are not included within this report.

7.2 The County Sites and Monuments Record

Twenty five records of direct or indirect relevance to the proposed scheme are incorporated as part of the SMR (locations indicated on fig. 1). Some of these references have been variously described:

NMR No.	Grid Reference	Description
50625	TF00777530	Medieval cross base and a 14 th century stone coffin within the churchyard of All Saints church
50639	TF01207530	Possible Roman temple site, suggested from stone wall foundations and inscribed stone. Also Constantine I coin
51648	TF00607506	Medieval French Jetton found by metal detector south of bishop's manor house
52375	TF00507510	Bronze Age arrowhead, scraper and other worked flint scatter
52376	TF00507510	Roman greyware pottery scatter, possibly with calcite-gritted sherds. Bronze finger ring and penannular brooch with milled knobs also found
52377	TF00507510	Anglo Saxon beads found at this location
52378	TF00507510	Medieval (14 th century) green-glazed pottery scatter, and possibly calcite-gritted wares
52379	TF00487520	Approximately 8 th – 11 th century (Late Saxon) loomweights found in 1955
52380	TF00527527	Roman pottery, 2 nd century AD, found in 1935
52382	TF01307550	Bronze Age bronze palstave found in 1909. Heavy stop ridge with shield-shaped recess beneath and a broad blade
52383	TF00537542	Neolithic polished stone axe found in garden of cottage
52384	TF00637525	Small figure (17 th century) in midlands yellow fabric, possibly from a chafing dish

52385	TF00107530	Late Neolithic or Early Bronze Age triangular flint arrowhead found in a field
52388	TF00407550	Mid – Late Saxon pot sherds found during earthmoving on Lincolnshire police HQ site
52389	TF00407550	Medieval pottery sherds found during earthmoving on Lincolnshire police HQ site
52392	TF00767532	Medieval to modern parish church of All Saints. Contains early English tower, south door and knaves. Stained glass dates to 14 th century
52394	TF01107570	Fragment of possible Anglo Saxon annular brooch found in garden of 28 Highfields
52395	TF01107570	A Roman coin of indeterminate date was found at this location
52396	TF00687557	A small bronze pilgrim badge (St Barbara) of 15 th century date found in garden in North Street. Decoration included tower and palm and also possibly a lantern
52397	TF00727521	Struck Neolithic flint, possibly initial workings for an arrowhead
52405	TF00907520	Shrunken medieval village of Nettleham. Area north-east of the church, possibly a village green with associated structures
52411	TF00717576	Medieval ridge and furrow cropmarks
52415	TF00747521	Site of windmill
54198	TF00637514	Bishop's manor house, dating from late 11 th century. Visible as a series of earthworks. On site of earlier Saxon manor house owned by Edith, wife of Edward the Confessor, possibly also the homestead of Eadric, Earl of Mercia
54738	TF01277525	Ditches exposed during a watching brief in 2002. Pottery suggested ditches originated in Iron Age, continuing in use in Roman period, before silting up between the 3 rd and early 5 th centuries

7.3 Site visit

The author visited the site on 18th June 2002. It comprises of a former pasture field of approximately 0.2ha, containing high nettles and foxgloves, rendering ground observations almost impossible for much of the area. This situation enforced the author to abandon the rapid walkover survey, although a few surface finds were noted around the periphery of the field, and where test-pitting had occurred. These will be considered below.

The field incorporates some topographical variation, the most notable being a prominent rise at the south end of the site. This places the modern road, Manor Court, approximately 1m higher than the ground surface of the application area. At the base of the steep bank there appears to be the remnant of a shallow ditch boundary, with the lower ground beyond, sloping very gradually down to Nettleham Beck in the north.

An area of fresh disturbance at the top of the bank allowed the author to examine its make-up in some detail (plate 2). Although mostly modern debris was exposed (some brick and iron fragments), a number of limestone fragments were uncovered, including a large dressed block of building stone of probable medieval date (plate 3). It is however unclear as to whether this stone was imported to the site as fill for the bank, or represents localised structural remains.

Two test pits were excavated to provide information regarding the local geological sequence for the proposed development. Both were excavated and backfilled prior to the site visit, although the results were kindly made available by John Dixon Developments Ltd. Both indicated that a 0.3m thick topsoil overlay 0.7m – 0.8m of soft silt. This sealed a limestone gravel and sand formation. Water seepage occurred at approximately 1m below existing ground level. Examination of the backfill of both pits yielded a fragment of animal bone from each pit. Both were stained black and were coated in silty subsoil.

7.4 Geophysical survey results (Appendix 2)

A fluxgate gradiometer survey was carried out as a first stage towards evaluating the site. This identified several discrete anomalies that are considered to be of limited archaeological significance.

A zone of magnetic variation that extends along the southern survey boundary may be associated with the steep bank noted during the site visit (see 7.3 above; fig. 2). This may reflect material within the bank make-up or modern debris on the surface.

Discrete anomalies, especially in the north-east part of the survey, may indicate the presence of ferrous or ceramic material in some quantity, probably of modern origin.

Overall, it was concluded that the majority of the magnetic variation relates to recent land use.

7.5 General considerations

In the light of information that has been variously described, it is possible to present a generalised historical context for the site of proposed development, before consideration is made of the impacts that have taken place in recent times, and which may have affected the quality and survival of any archaeological resources, if present.

For the prehistoric periods, there is no site-specific information, although sites of prehistoric date have been noted in the vicinity. Similarly, there is ample evidence demonstrating that the general area was occupied and exploited during the Romano-British period. Artefact scatters and other remains suggest that this was focused away from the proposed development area, several hundred metres to the east, and Roman remains are unlikely to be impacted by the development.

The Saxon manor of Queen Edith, which lay within the grounds of the later medieval Bishop's manor (several hundred metres to the south-east), may indicate that the Saxon settlement emerged towards the south side of the present village. A mid-late Saxon pottery scatter found immediately to the north of the application area provides good evidence that some form of early settlement took place in the vicinity of the site itself. The pond area that makes up much of the application site may have been in existence in the Saxon period (as previously discussed), and it seems plausible the settlement lay around the periphery this pool. It would therefore seem possible that artefacts and other evidence of this date exist within the alluvial silts that comprise much of the application area.

8.0 Impacts to archaeological resources

If the site does incorporate archaeological remains, then these are likely to be well preserved within the bank. Palaeoenvironmental and archaeological deposits may also survive within the soft alluvial silts that possibly formed a Saxon pool and later medieval millpond. Impacts from past developments are likely to be minimal, although one such impact will have taken place during the creation of the millpond (which may have truncated earlier remains).

Detailed development plans have not been provided for the purpose of this report, although it is understood that the development will comprise three dwellings with associated access and infrastructure.

9.0 Conclusions

It is variously concluded that the archaeological potential of this site is **moderate**. The greatest potential is based on the possibility that *in situ* Saxon and medieval archaeological and palaeoenvironmental deposits will occur within the site environs, as suggested by cartographic and SMR evidence. There is a remote chance that early prehistoric artefacts may also be encountered.

For much of its history, a significant proportion of the site may have been a pool that was created from over-spill from the Nettleham Beck. It is unlikely therefore that any

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APPENDIX 1: Colour Plates



Pl. 1: Site location shot taken from south-west corner of field, looking north-east.



Pl. 2: Disturbance of bank at south end of site, looking south.



Pl. 3: Dressed limestone building stone recovered from disturbed bank area.

APPENDIX 2

Fluxgate gradiometer survey report by David Bunn and Colin Palmer-Brown

Summary

- *As part of an integrated desk top assessment, a fluxgate gradiometer survey was undertaken on approximately 0.2 hectare of land at Nettleham, Lincolnshire*
- *This survey identified a range of magnetic anomalies across the site. Whilst some of the strongest examples are probably associated with modern activities, others have not been resolved; a factor influenced by the small area available for study*

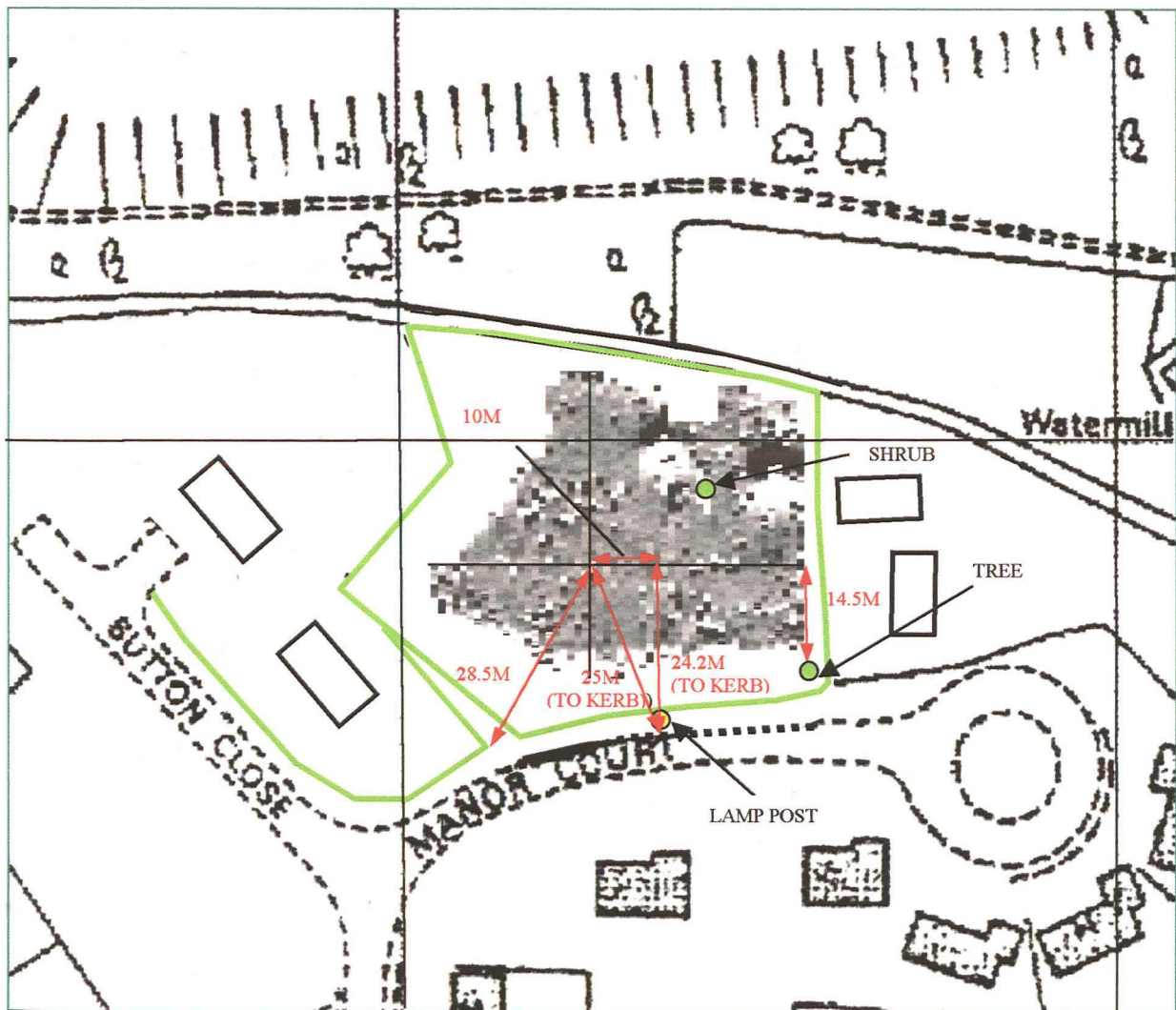


Fig.1 Location of Survey 1:1000

1.0 Introduction

Land and Development Consultants commissioned Pre-Construct Archaeology (Lincoln) to undertake a combined archaeological desk top assessment and geophysical survey of land at Nettleham. This work was carried out to fulfil part of a recommendation by Lincolnshire County Council for an archaeological assessment and evaluation. Full planning permission is sought for the construction of three dwellings (Ref. M02/P/0157).

The gradiometer survey methodology was based upon guidelines set out in the English Heritage document '*Geophysical Survey in Archaeological Field Evaluation*' (David, 1995).

The archaeological background and site description are discussed in the wider desk top study (above).

2.0 Methodology

Detailed area survey using a fluxgate gradiometer is a non-intrusive method of evaluating the archaeological potential of a site. The gradiometer detects magnetic anomalies created by areas of high or low magnetic susceptibility. These variations are caused by changes in the composition of the subsoil or the underlying geology. Archaeological features result from man-made alterations to the soil and they may also incorporate intrusive materials such as brick and stone. These features can create detectable magnetic anomalies. In addition, activities that involve heating and burning can generate magnetic anomalies, as will the presence of ferrous metal objects.

The anomalies detected by a fluxgate gradiometer survey can often be resolved into entities sharing morphological similarities with features of known archaeological provenance. This enables the formulation of an informed, but subjective, interpretation.

Magnetic variation between archaeological or naturally occurring features and natural geological strata can result from:

- their relative depth or density of fill
- the magnetic properties of materials introduced as a result of human activity (e.g. rubble, stone, brick/tile, ferrous metal etc.) in contrast to those within surrounding natural deposits
- magnetic enhancement associated with areas of burning
- the magnetic properties of localised, naturally deposited minerals, such as those occurring in the fills of palaeo-channels.

An area measuring c. 0.2 ha was surveyed.

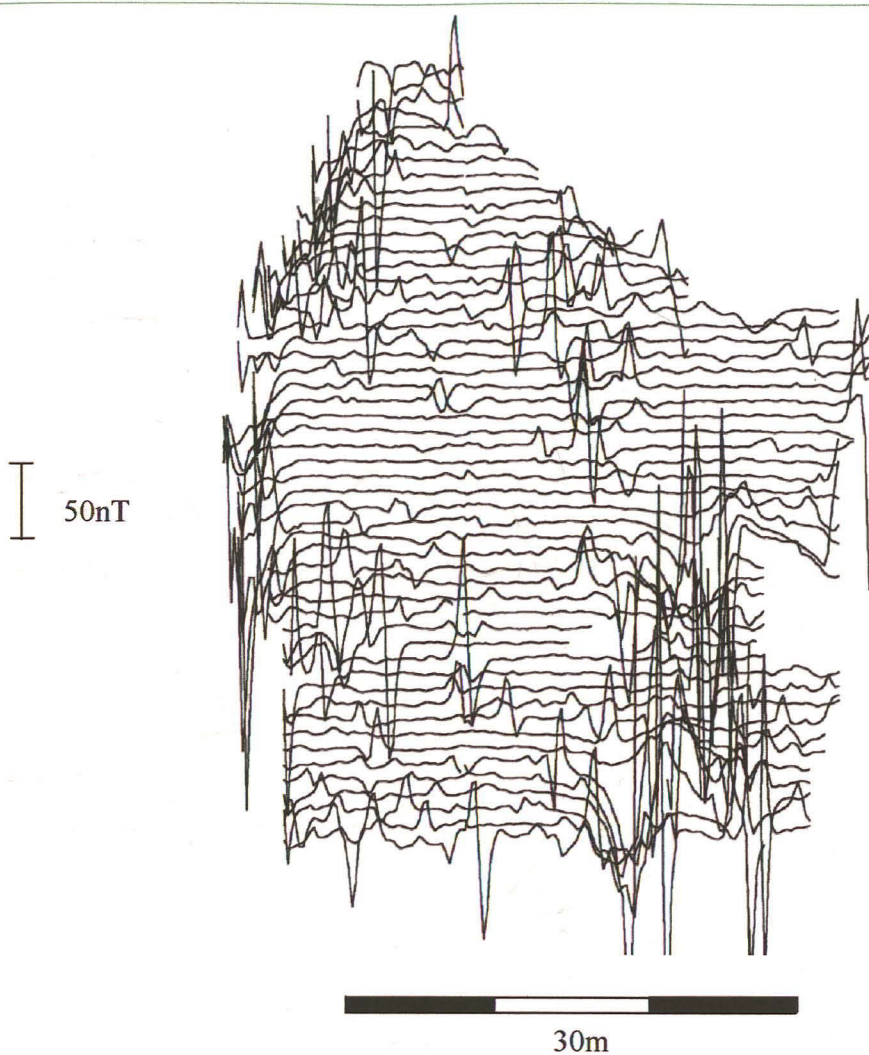
The area survey was conducted using a *Geoscan Research* fluxgate gradiometer (model FM36) with an electronic sample trigger set to take four readings per metre (a sample interval of 0.25m). The zigzag traverse method of survey was used, with 1m wide traverses across 30m x 30m grids. The sensitivity of the machine was set to detect magnetic variation in the order of 0.1 nanoTesla.

Data from the survey was processed using *Geoplot* (v. 3.0). It was desloped (a means of compensating for sensor drift during the survey) and clipped to reduce the distorting effect of extremely high or low readings caused by discrete pieces of ferrous metal.

The site was surveyed by David Bunn on 21st July 2002.

Instrument	Geoscan Research fluxgate gradiometer FM36 Sample trigger ST1
Grid size	30m x 30m
Sample interval	0.25m
Traverse interval	1.0m
Traverse method	Zigzag
Sensitivity	0.1nT
Processing software	Geoplot (v. 3.0)
Weather conditions	Warm, sunny
Area surveyed	c.0.2ha

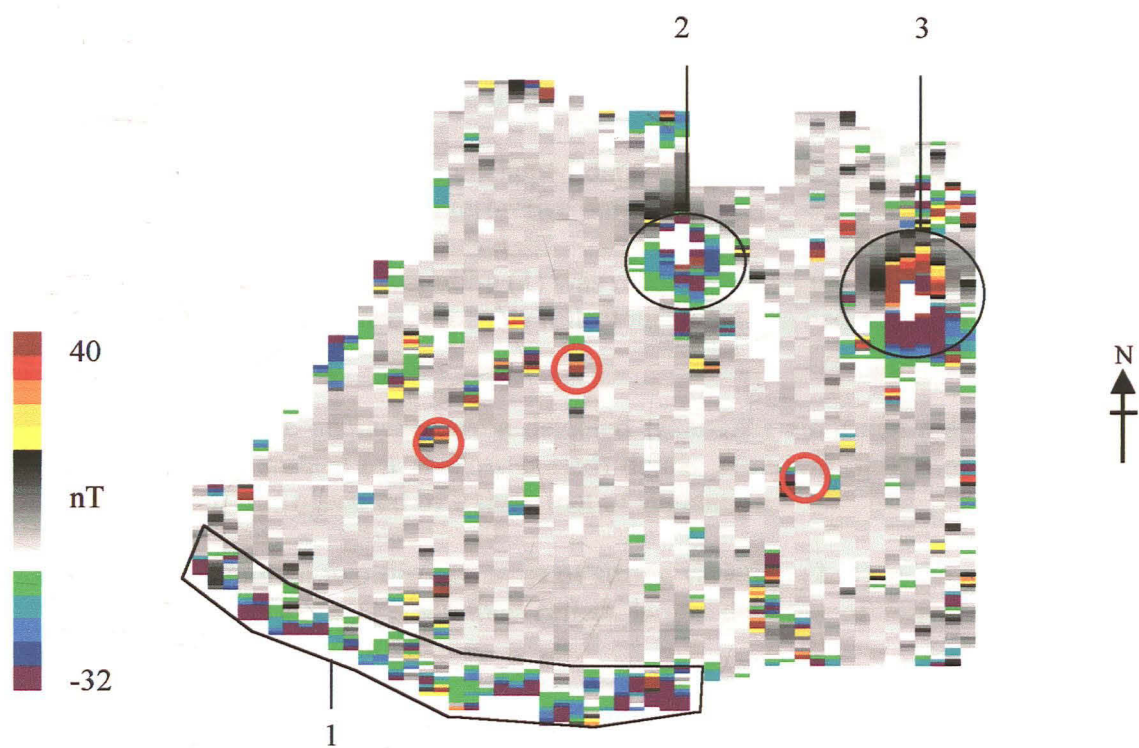
Table 1: Summary of survey parameters



**Fig.2: Trace plot of
the raw data
1:500**



**Fig.3: Greyscale image of clipped data
1:500**



**Fig.4: Image of raw data, with strongest anomalies shown in colour
1:500**

30m

3.0 Results

The results are presented graphically in figures 2-4 (1:500):

- Figure 2: Trace plot of the raw data
- Figure 3: Greyscale image of the enhanced (clipped) data
- Figure 4: Image of the unclipped data, with the strongest anomalies shown in colour (annotated for interpretive purposes)

A zone of strong magnetic variation (1) was recorded along the south-west edge of the survey area. These anomalies probably reflect metal fencing and miscellaneous debris in the boundary hedge.

Scatters of discrete anomalies were detected (examples circled in red, fig. 4). Most probably reflect surface (or shallow buried) debris. However, little was noted on the surface, which was obscured by a thick mat of vegetation.

The survey identified two distinct areas of strong variation (2, 3) in the north-east part of the site. It is possible that they reflect larger deposits of ferrous and ceramic materials, of unresolved origin.

Enhancement of the data (Fig.3) did not produce any clear evidence for the presence of underlying features of archaeological significance.

4.0 Conclusions

Most of the magnetic variation probably corresponds to recent and current use of the site. The survey may have identified potentially significant linear anomalies. However, the intensity of surrounding magnetic disturbance has severely hampered interpretation, and it is not possible to determine whether these are archaeologically significant or not.

Given the wider context of the site, which was probably a former pool/pond, it is not necessarily surprising that subtle discrete anomalies of potential archaeological significance were not identified.

5.0 Acknowledgements

Pre-Construct Geophysics would like to thank Land and Development Consultants for this commission.

6.0 References

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