

~~EX SMP~~

M3/18

**ARCHAEOLOGICAL WATCHING BRIEF
AT HURLINGHAM BUSINESS PARK,
FULBECK HEATH,
LINCOLNSHIRE
(FHH 03)**



A P S
ARCHAEOLOGICAL
PROJECT
SERVICES

EVENT L14399 SOURCES L18997 L18998
PRN - 35664 - Roman pottery
PRN - 35665 - Bronze Age Pottery
PRN - 35666 - Undated
PRN - 35667 - Medieval Building Evidence

**ARCHAEOLOGICAL WATCHING BRIEF
AT HURLINGHAM BUSINESS PARK,
FULBECK HEATH,
LINCOLNSHIRE
(FHH 03)**

**Work Undertaken For
Molsom and Partners
on behalf of
Hurlingham Estates Ltd.**

July 2003

Report Compiled by
Paul Cope-Faulkner BA (Hons) AIFA

National Grid Reference: SK 9835 5010
Planning Reference: S01/1350/34
City and County Museum Accession No: 2002.217

ARCHAEOLOGICAL PROJECT SERVICES



APS Report No. 123/03



Quality Control
Hurlingham Business Park,
Fulbeck Heath
FHH 03

Project Coordinator	Gary Taylor
Supervisors	Denise Buckley, Barry Martin, Chris Moulis, Fiona Walker
Surveying	Rachael Hall
Finds Processing	Denise Buckley
Illustration	Paul Cope-Faulkner, Rachael Hall
Photographic Reproduction	Sue Unsworth
Post-excavation Analyst	Paul Cope-Faulkner

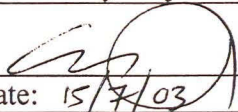
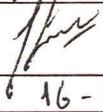
Checked by Project Manager	Approved by Senior Archaeologist
 - Gary Taylor	 Tom Lane
Date: 15/7/03	Date: 16-07-03

Table of Contents

List of Figures

List of Plates

1.	SUMMARY	1
2.	INTRODUCTION.....	1
2.1	DEFINITION OF A WATCHING BRIEF.....	1
2.2	PLANNING BACKGROUND.....	1
2.3	TOPOGRAPHY AND GEOLOGY	1
2.4	ARCHAEOLOGICAL SETTING	2
3.	AIMS	2
4.	METHODS	2
5.	RESULTS	3
6.	DISCUSSION	4
7.	CONCLUSION	5
8.	ACKNOWLEDGEMENTS	5
9.	PERSONNEL	5
10.	BIBLIOGRAPHY	6
11.	ABBREVIATIONS.....	6

Appendices

1. Specification for archaeological watching brief
2. Context descriptions
3. The Finds by *Paul Cope-Faulkner, Hilary Healey and Gary Taylor*
4. Glossary
5. The Archive

List of Figures

- Figure 1 General location plan
- Figure 2 Site location plan
- Figure 3 Plan of the development area showing principal features
- Figure 4 Area A
- Figure 5 Area B
- Figure 6 Area C
- Figure 7 Section 1
- Figure 8 Sections 2 to 4
- Figure 9 Summary of the archaeological investigations

List of Plates

- Plate 1 General view of the site
- Plate 2 Area A, Well (024) after partial excavation
- Plate 3 General view across Area B
- Plate 4 Area B, Walls (017) and (018)
- Plate 5 Area B, Wall (016)
- Plate 6 Area B, Wall (015)
- Plate 7 Area C showing Wall (013)
- Plate 8 Section 1 showing Quarry pit (007)
- Plate 9 Section 1 showing Quarry pit (011)

1. SUMMARY

An intensive archaeological watching brief was undertaken during commercial development on land at Hurlingham Business Park, Fulbeck Heath, Lincolnshire. The watching brief monitored the removal of topsoil from the site in advance of the excavation of stanchion pits for a new industrial unit.

The investigation area lies close to the site of a medieval Gilbertine grange of Sempringham priory which was established on Fulbeck Heath during the 12th century. Nothing remains above ground of the grange, although ruins were noted at the site during the 19th century. Previous investigations at the site in advance of the current development had revealed a stone building which, based on animal bone and finds of horseshoe nails, may be a stable.

Topsoil stripping of the site revealed evidence for further structures, although many are too fragmentary to define clearly and their function is unclear, although based on other known grange sites they are likely to represent barns. A stone lined well was also revealed as were two quarry pits.

Finds from the investigation included a single Bronze Age sherd, a Roman samian ware and a small quantity of medieval pottery. Animal bone, iron nails, an iron arrowhead and roof tiles were also retrieved during the investigation.

2. INTRODUCTION

2.1 Definition of a Watching Brief

An archaeological watching brief is defined as *"a formal program of observation and investigation conducted during any operation carried out for non-archaeological reasons. This will be within a specified area or site on land,*

inter-tidal zone or underwater, where there is a possibility that archaeological deposits maybe disturbed or destroyed." (IFA 1999).

2.2 Planning Background

Archaeological Project Services was commissioned by Molsom and Partners on behalf of Hurlingham Estates Ltd to undertake an intensive archaeological watching brief during groundworks associated with commercial development on land at Hurlingham Business Park, Fulbeck Heath, Lincolnshire. Approval for the development was sought through the submission of planning application S01/1350/34. Following archaeological evaluation of the site, the watching brief was carried out between the 28th April and 22nd May 2003, in accordance with a specification prepared by Archaeological Project Services (Appendix 1) and approved by the South Kesteven Community Archaeologist.

2.3 Topography and Geology

Fulbeck Heath lies in the northern part of South Kesteven District, Lincolnshire, approximately 10km northwest of Sleaford and 14km north of Grantham (Fig. 1).

The area of development is located approximately 3.5km east of Fulbeck and lies north of the A17 highway within the Hurlingham Business Park complex centred on Maiden House Farm. The site comprises a roughly rectangular block of land located on a gentle slope down to the east. The site is centred at National Grid Reference SK 9835 5010 at a height of c. 80m OD.

The site lies on the boundary of soils of the Elmton 1 Association, typically shallow brown rendzinas, and Marcham Association, typically brown rendzinas and calcareous earths (Hodge *et al.* 1984, 179; 182). These soils overlie a solid geology of

Jurassic Lincolnshire Limestone (GSGB 1972).

2.4 Archaeological Setting

The development area is located in an area of known archaeological remains dating from the Romano-British period to the present day. Within 350m east of the site is the Roman thoroughfare, Ermine Street, that once connected London to Lincoln and beyond to the Humber (Margary 1973, 228).

Fulbeck is first mentioned in the Domesday Survey of c. 1086. Referred to as 'Fulebec' the name is derived from the Old English *fūl* meaning 'foul' and the Old Norse *bekkr* meaning 'brook' (Cameron 1998, 47). At the time of the Domesday Survey the land was assessed with Leadenham and held by Count Alan of Brittany and Ralf Staller and contained 2 churches with 2 priests and a half share of a mill (Foster and Longley 1976).

Immediately north of the site lies Maiden House Farm. Ruins of older buildings were noted at the site in the early 19th century (Anon 1812, 635). It was thought that these were a *camerae* associated with the Templar Preceptory at Temple Bruer. However, the ruins comprise part of a grange established by Sempringham Priory in the 12th century and documentary sources indicate that 920 acres were granted for this purpose (Owen 1981, 50). The grange remained in the possession of the priory until the monastery was surrendered to the crown in 1536 (Page 1988, 187).

An archaeological watching brief was undertaken 100m northeast of the site and identified an undated pit and several postholes (Young 1988, 4). Prior to the current watching brief, an archaeological evaluation of the site was carried out. Geophysical survey revealed a number of linear anomalies, large pit like features and areas of high magnetic responses (GSB

2002, 2). Subsequent trial trenching then identified several undated quarry pits, an undated ditch and a medieval stone building which, on the basis of finds, was identified as a possible stable (Hall 2002, 5). Furthermore, pottery of Bronze Age and Romano-British date was also retrieved (*ibid.*).

3. AIMS

The requirements of the watching brief, as detailed in the specification (Appendix 1), were to locate and record archaeological deposits and, if present, determine their nature, function, date and origin.

4. METHODS

Prior to the excavation of stanchion pits, topsoil was stripped from the area of the new development. Topsoil was generally stripped to the surface of the underlying geology, although this did not occur in all areas. Features and deposits exposed during the stripping were cleaned by hand to determine their nature and to retrieve artefactual material. Each deposit was allocated a unique reference number (context number) with an individual written description. A list of all contexts and their descriptions appears as Appendix 2. Plans were drawn at a scale of 1:20 and sections were drawn at a scale of 1:10. Features were surveyed in to fixed reference points using an EDM. A photographic record, comprising colour slides, was compiled. Recording was undertaken according to standard Archaeological Project Services' practice.

Following excavation the records were checked and a stratigraphic matrix produced. Finds were also examined and a period date assigned where possible (Appendix 3). Phasing was assigned based on the nature of the deposits and recognisable relationships between them.

5. RESULTS

Following post-excavation analysis three phases were identified.

Phase 1	Natural deposits
Phase 2	Medieval deposits
Phase 3	Recent deposits

Archaeological contexts are listed below and described. The numbers in brackets are the context numbers assigned in the field.

Phase 1 Natural deposits

Where topsoil stripping was sufficient to expose the underlying natural, deposits of reddish brown silty sand with limestone (002), fragmented limestone (003) and yellowish brown silty sand with limestone (008) were exposed. These were identified as the upper surface of the underlying geology.

Phase 2 Medieval deposits

For ease of reference, the site has been sub-divided into areas (Areas A to C). The location of these areas is shown on Figure 3.

Area A (Fig. 4)

Located on the western side of the area was a north-south aligned wall (025). This was built of limestone blocks and mortar and was 6.05m long by 0.7m wide. At the northern end of this wall was a slight return to the west.

Situated 5m east of this wall was a circular limestone structure (024) identified as a well (Plate 2). This was c. 1.5m in diameter and was excavated to a depth of 0.7m, although continued further (Fig. 8, Sections 2 and 3). Two fills were recorded, a lower of reddish brown silty sand with limestone (027) and an upper fill of reddish brown silty sand (023). Pottery of 13th – 14th century date was retrieved from the upper fill as was a nail and clinker. An

iron arrowhead, a nail and a quantity of sheep and other bones were retrieved from the lower fill.

Located 3.5m north of the well was a second length of wall (026). This lay perpendicular to wall (025). This wall was 0.75m wide and 4.9m long, although part of the eastern end had been accidentally removed by machining. The western end was partially excavated to reveal a foundation trench for the wall (029) that was 0.13m deep (Fig. 8, Section 4). A single pot sherd of 13th – 14th century date was retrieved from the wall.

Area B (Fig. 5)

Area B is represented by a single square structure (Plate 3). A short length of the southern wall survives (015) which is constructed of limestone and is 3.2m long by 0.8m wide (Plate 6). Within the wall is a circular arrangement of limestone which may represent the position of an upright timber post.

Perpendicular to this wall, and representing the eastern wall of the structure is wall (016), measuring 3.5m long and between 0.9m and 1m wide (Plate 5). Adjoining this wall to the north was a fragmentary wall (017), possibly indicating robbing of the structure, which adjoins a more substantial wall (018) of the north-east corner of the structure. Both (017) and (018) are narrower than wall (016), between 0.6m and 0.7m wide, possibly indicating an earlier build (Plate 4).

The northwest corner of the structure is represented by walls (020) and (021) which are joined by an area of robbing (028). Wall (020) is the widest of the walls within the structure, measuring 1.4m wide.

An apparent entrance to the structure exists between walls (018) and (020) and is represented by a limestone and mortar spread (019).

Area C (Fig. 6)

Within Area C was an L-shaped length of wall (013). This was 5.7m long on its east-west axis with a turn to the south at its western end for a length of 3.54m (Plate 7). Widths of the wall lay between 0.65m and 0.7m.

Adjoining the wall on its northern side was a roughly circular spread of limestone and mortar (014) which may represent an area of wall collapse.

Other features (Fig. 2)

Located 20m east of Area C were two large features, both identified as quarry pits. The most easterly of these (007) was 4.6m wide and over 1.25m deep (Fig. 7, Section 1). Two fills were recorded, the lowest (006) comprising limestone fragments, from which 13th – 14th century pottery was retrieved, and an upper of yellowish brown sand (005).

The western quarry pit (011) was 7.7m wide and over 0.6m deep (Plate 9). Two fills were also recorded for this feature, both of yellowish brown sand (009) and (010).

Phase 3 Recent deposits

Sealing all archaeological features and deposits was a topsoil of reddish brown silty sand (001) and (004) that was generally 0.3m thick.

6. DISCUSSION

Natural deposits (Phase 1) of silty sand and limestone represent the upper weathered surface of the Jurassic Lincolnshire Limestone.

Medieval deposits (Phase 2) comprise several lengths of wall, of which a small group form a cohesive structure, a well and two quarry pits. The phasing of these features is largely by form and association

rather than the retrieval of artefactual material.

It is not certain if all of the walls represent standing structures or were used to define yard areas. Area A, for example, may represent a yard with its central well. No floors were identified in any of the areas defined by walls. However, it is possible that floors may have been removed in the past, or not revealed by the development, rather than being absent.

Along with the building identified during the evaluation, the pattern of structures appears to be largely dispersed around the site. As a grange of Sempringham priory, the main buildings would resemble a small religious house with an oratory, cloister, frater and guest house occupied solely by lay-brothers (Page 1988, 181). It is likely that this would be walled and would also contain the principal workshops of the grange whereas stables and barns for sheep and cattle would lie outside the main enclosure. Such a pattern has been identified at a Gilbertine grange at Kirkby Underwood where a tight nucleus of buildings was identified during fieldwalking (Whitwell 1967, 47) and the partially excavated Cistercian grange at Ropsley (Thompson 1955, 17). A building recorded during the evaluation was tentatively identified as a stable (Hall 2002, 6) and it is likely that the remaining structures are barns. This is somewhat supported by the paucity of refuse material which would be expected from an occupied area.

The overall function of the grange is likely to have been a *bercaria* or sheep farm as Sempringham was one of the principal producers of wool in Lincolnshire throughout the medieval period (Owen 1981, 66). However, horse and cattle bones were also retrieved (Appendix 3) which may indicate they practised a mixed pastoral economy. Smaller bones, perhaps of rabbit, were also identified and may

suggest the presence of a warren associated with the grange.

The two quarry pits identified were probably used to obtain a source of building stone for the structures recorded here and the principal grange buildings.

None of the ditches or other cut features identified by geophysical survey or during the evaluation were noted in the watching brief. This may be due to the depth of topsoil stripping not being sufficient. However, features identified during the geophysical survey and confirmed during the evaluation have been plotted on Figure 9.

The earliest dateable artefact recovered from this investigation is a single fragment of Bronze Age pottery. Samian pottery of Roman date was also recovered, although both prehistoric and the Roman pottery was unstratified. Romano-British pottery was also collected during the evaluation stage and supports the possibility of a settlement of the period in the vicinity, though not at the site itself.

The medieval pottery retrieved during this investigation was mainly produced at Potterhanworth, near Lincoln, although examples from Lincoln and Nottingham were also represented. Other medieval finds include an iron arrowhead, nails and ridge tiles, possibly derived from the roofs of the structures identified or the grange buildings themselves.

There is a dearth of post-medieval finds with only a 19th – 20th century pot sherd and recent brick recovered during the investigation. This lack of post-medieval material suggests that habitation of the site ceased at the dissolution in the 16th century and the area was used for non-occupation functions subsequently.

7. CONCLUSION

Archaeological investigations were undertaken at Fulbeck Heath as the site lay in close proximity to the site of a medieval monastic grange.

The watching brief identified several stone built walls of medieval date. A few walls formed a coherent plan forming a square structure. The pattern of walls is suggestive of barns and outbuildings and do not represent the actual site of the grange. A stone-lined well was also identified as were two quarry pits for the extraction of the underlying limestone.

Finds recovered from the investigation include Bronze Age, Roman and medieval pottery as well as animal bone, a medieval iron arrowhead, nails and roof tiles.

8. ACKNOWLEDGEMENTS

Archaeological Project Services wish to acknowledge the assistance of Mr G.S. Molsom of Molsom and Partners who commissioned the fieldwork and post-excavation analysis on behalf of Hurlingham Estates Ltd. Gary Taylor coordinated this work and along with Tom Lane edited this report. Jenny Young, the South Kesteven Community Archaeologist, kindly provided access to the parish files maintained by Heritage Lincolnshire.

9. PERSONNEL

Project Coordinator: Gary Taylor
 Site Supervisors: Denise Buckley, Barry Martin, Chris Moulis, Fiona Walker
 Surveying: Rachael Hall
 Finds processing: Denise Buckley
 Photographic reproduction: Sue Unsworth
 Illustration: Paul Cope-Faulkner, Rachael Hall
 Post-excavation analysis: Paul Cope-Faulkner

10. BIBLIOGRAPHY

Anon, 1812, 'Present State of Lincolnshire Monasteries', *Gentlemen's Magazine* Vol. LXXII

Cameron, K., 1998, *A Dictionary of Lincolnshire Place Names*, English Place-Name Society Popular Series No. 1

Foster, C.W., and Longley, T., 1976 *The Lincolnshire Domesday and the Lindsey Survey*, The Lincoln Record Society 19

GSB, 2002, *Hurlingham Business Park, Fulbeck Heath, Lincolnshire; Geophysical Survey Report 2002/28*

GSGB, 1972, *Grantham, solid and drift edition*, 1:63,360 map sheet 127

Hall, R.V., 2002, *Archaeological Evaluation on land at Hurlingham Business Park, Fulbeck Heath, Lincolnshire (FHH 02)*, Unpublished APS report 104/02

Hodge, C.A.H., Burton R.G.O., Corbett, W.M., Evans, R. and Seale, R.S., 1984, *Soils and their Use in Eastern England*, Soil Survey of England and Wales 13

IFA, 1999, *Standard and Guidance for Archaeological Watching Briefs*

Margary, I.D., 1973, *Roman Roads in Britain* (3rd edition)

Owen, D.M., 1981, *Church and Society in Medieval Lincolnshire*, History of Lincolnshire V

Page, W. (ed), 1988, *The Victoria History of the County of Lincoln* (reprint)

Thompson, M.W., 1955, 'Trial Excavations at Ropsley Grange, near Grantham, Lincolnshire', *Lincolnshire Architectural and Archaeological Society Reports and Papers* Vol. 6 Pt. 1

Young, J., 1998, *Archaeological Watching Brief at Maiden House Farm Light Industrial Estate, Fulbeck Heath, Lincolnshire (FMH 98)*, unpublished APS report 79/98

Whitwell, J.B., 1967, 'Archaeological Notes 1966', *Lincolnshire History and Archaeology* No. 2

11. ABBREVIATIONS

APS Archaeological Project Services

GSB Geophysical Surveys of Bradford

GSGB Geological Survey of Great Britain

IFA Institute of Field Archaeologists

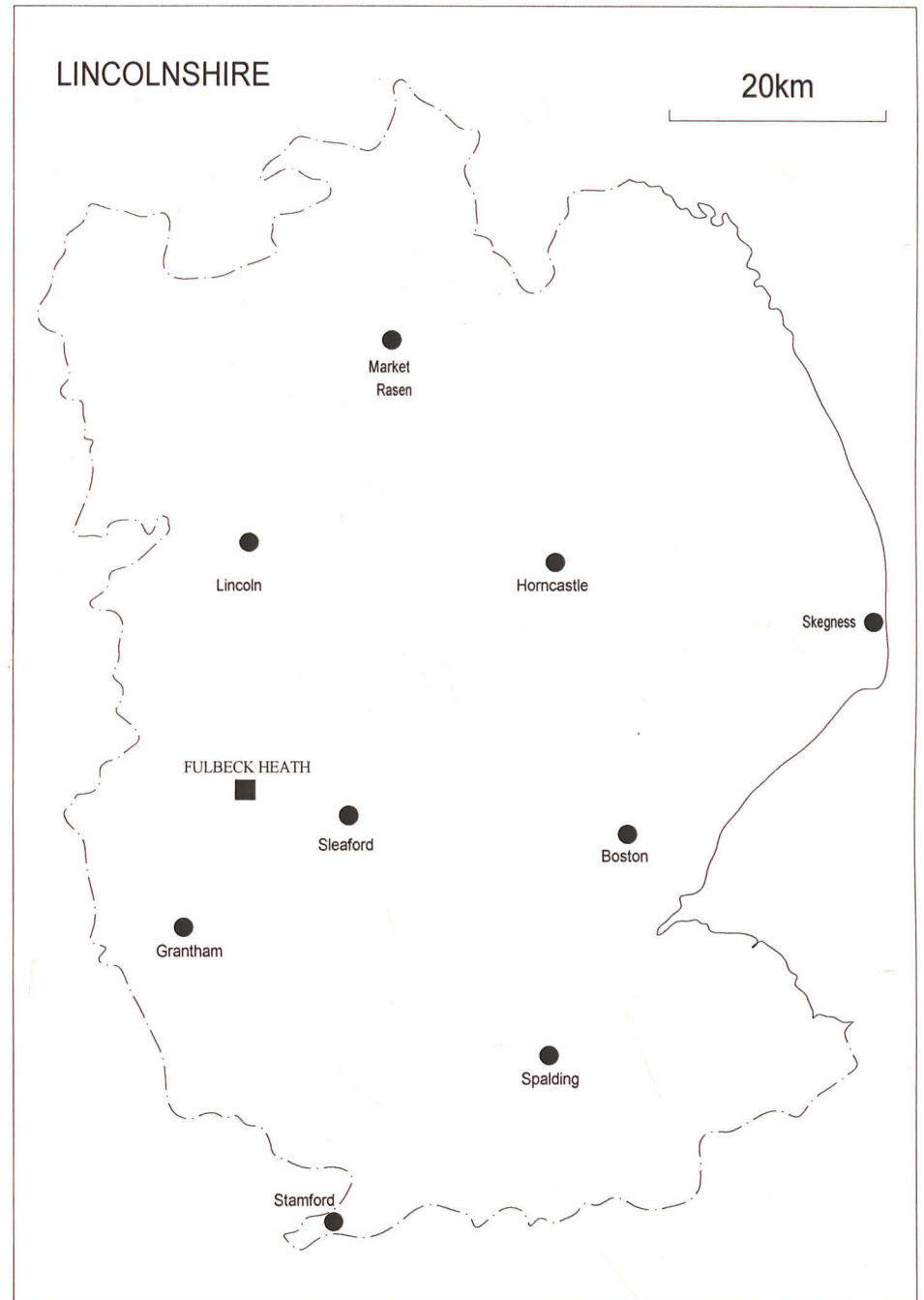
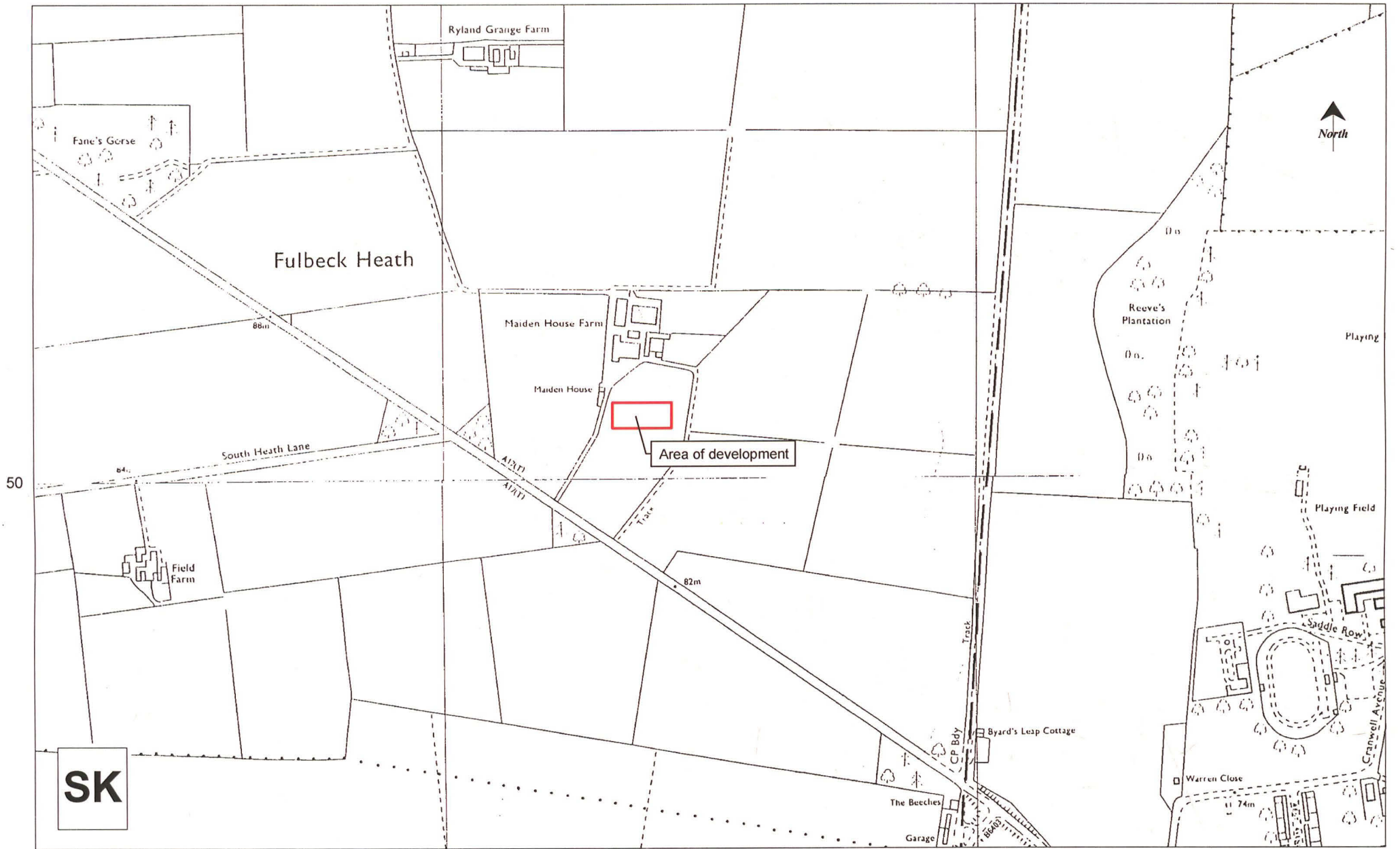


Figure 1 - General Location Plan



Reproduced from the Ordnance Survey 1:10,000 map with the permission of The Controller of Her Majesty's Stationery Office, © Crown Copyright. HTL LTD Licence No AL5041A0001

97

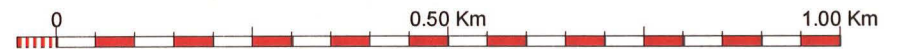


Figure 2 - Site location plan

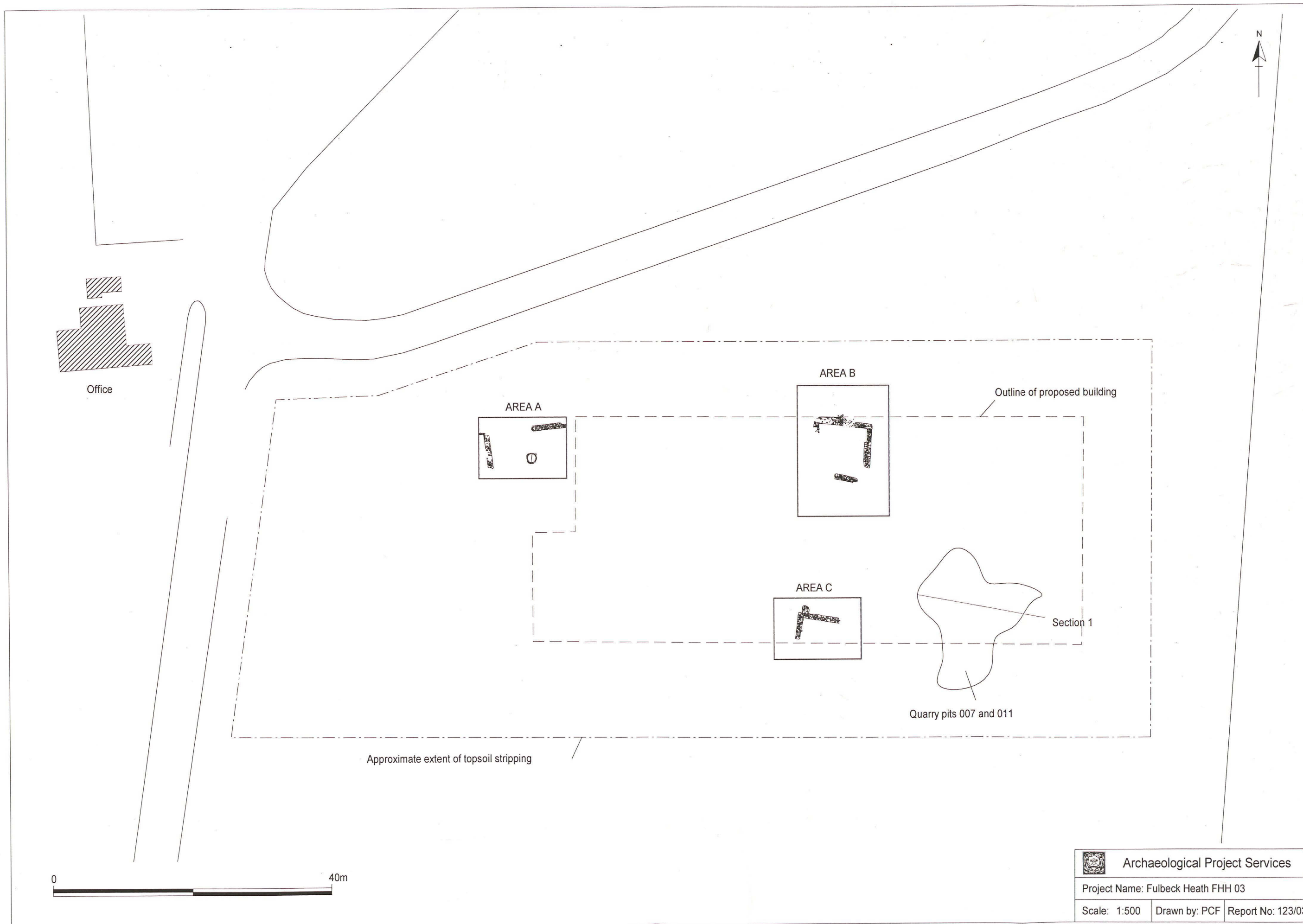


Figure 3 - Plan of the site showing Area locations, principal features and section locations

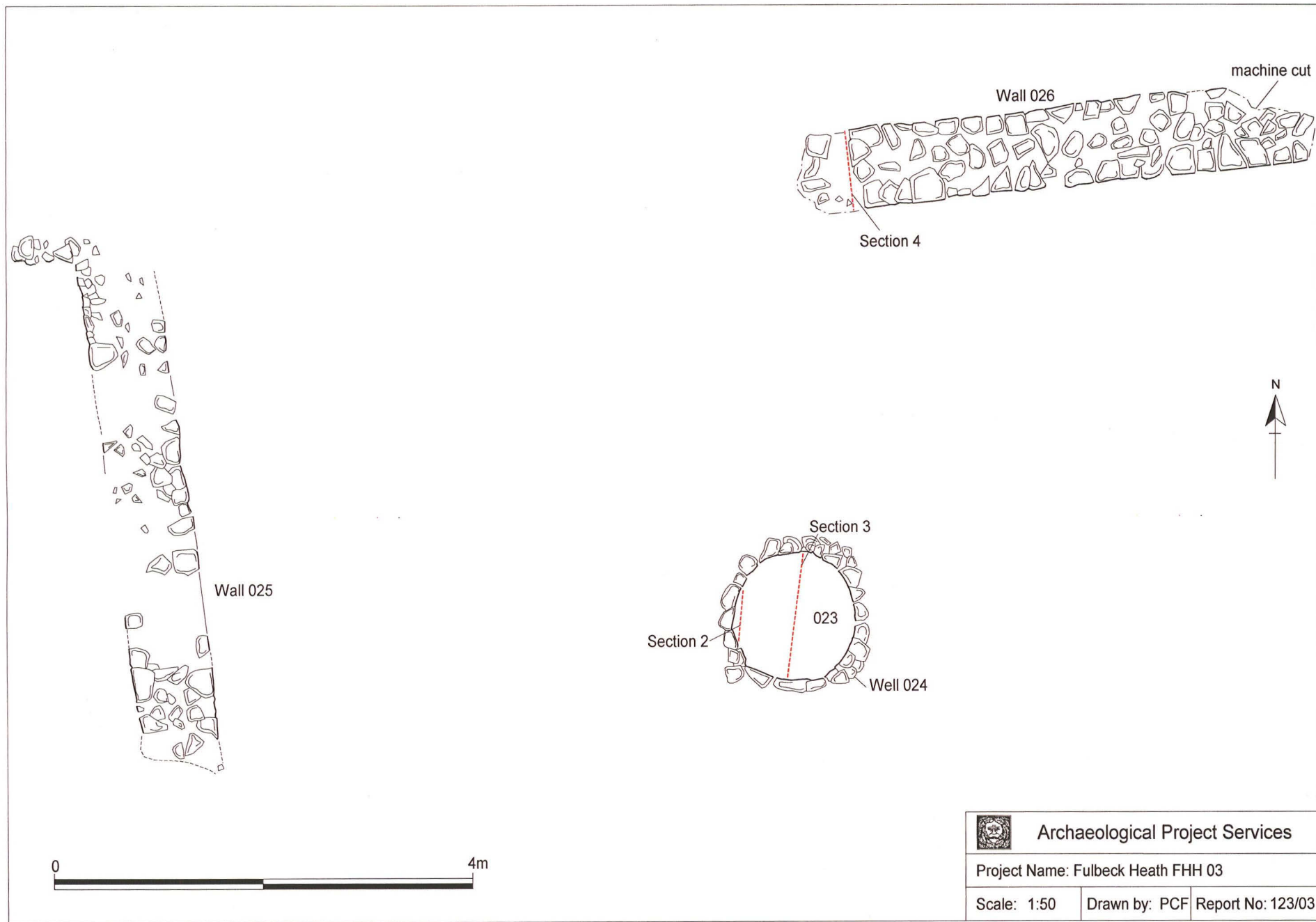


Figure 4 - Area A




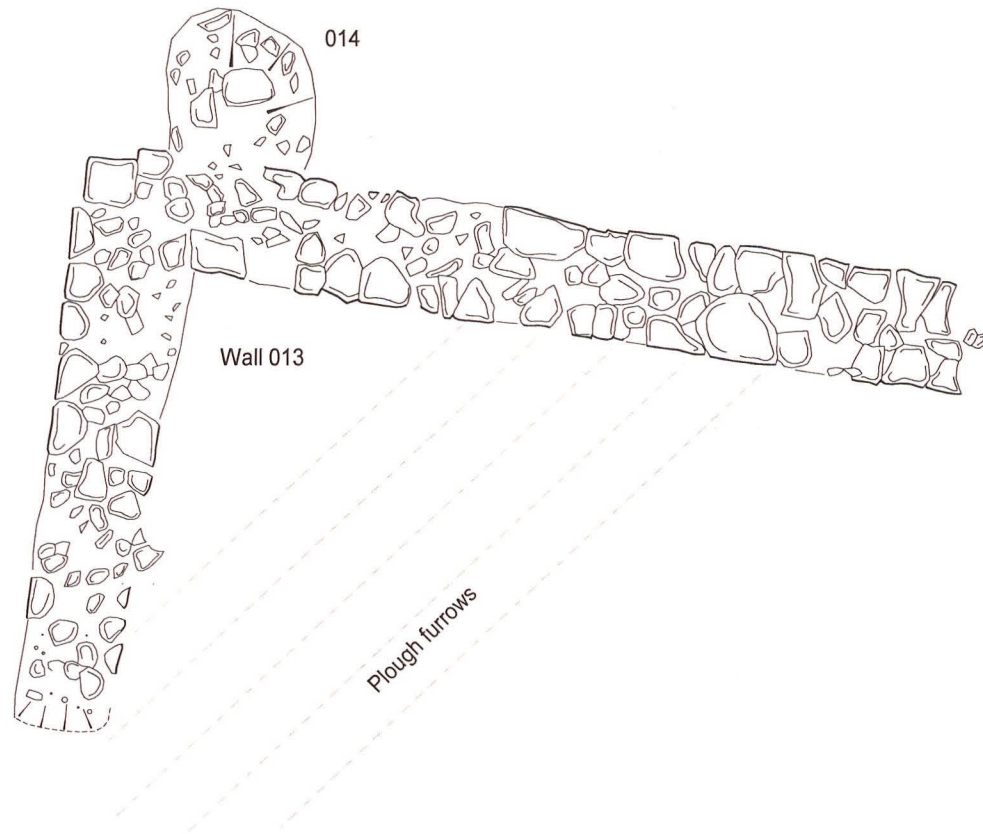
	Archaeological Project Services
Project Name: Fulbeck Heath FHH 03	
Scale: 1:50	Drawn by: PCF Report No: 123/03

Figure 5 - Area B




	Archaeological Project Services		
Project Name: Fulbeck Heath FHH 03			
Scale: 1:50	Drawn by: PCF	Report No: 123/03	

Figure 6 - Area C

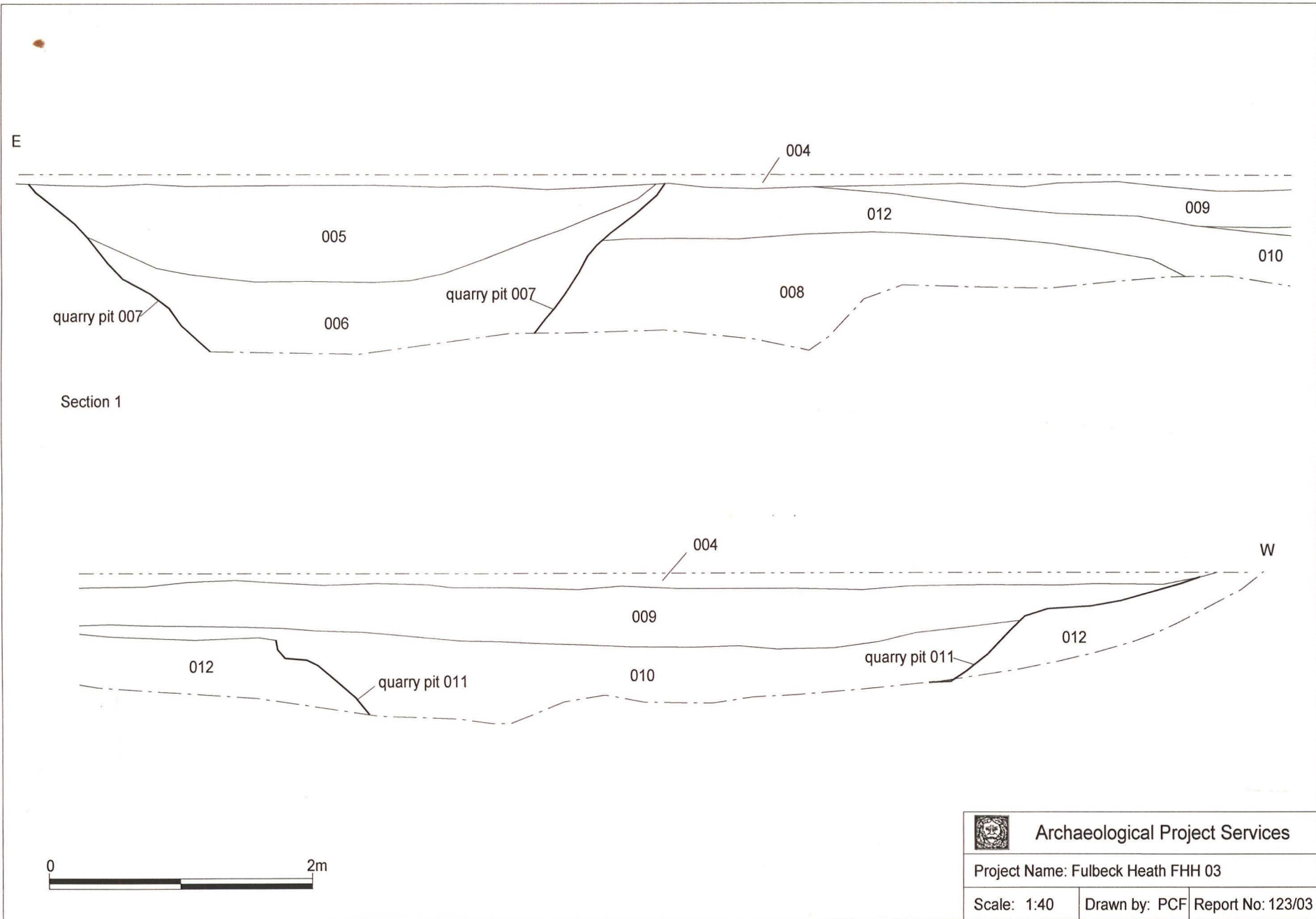
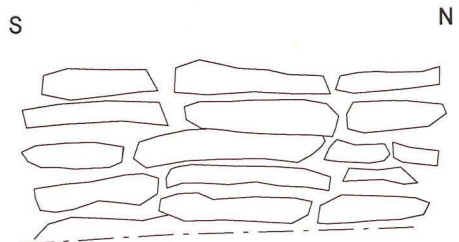
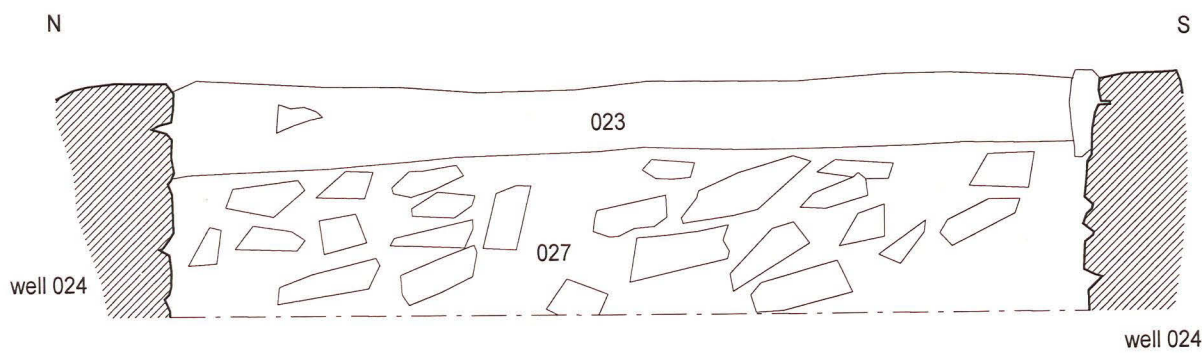


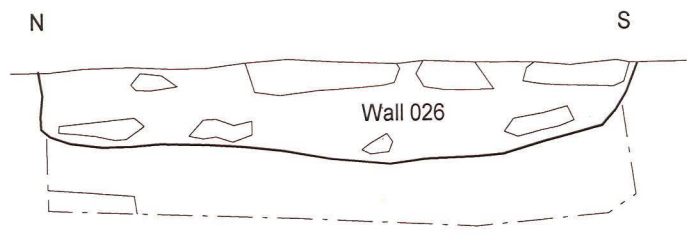
Figure 7 - Section 1



Section 2
(elevation of well 024)



Section 3



Section 4




 Archaeological Project Services		
Project Name: Fulbeck Heath FHH 03		
Scale: 1:10	Drawn by: PCF	Report No: 123/03

Figure 8 - Sections 2 to 4

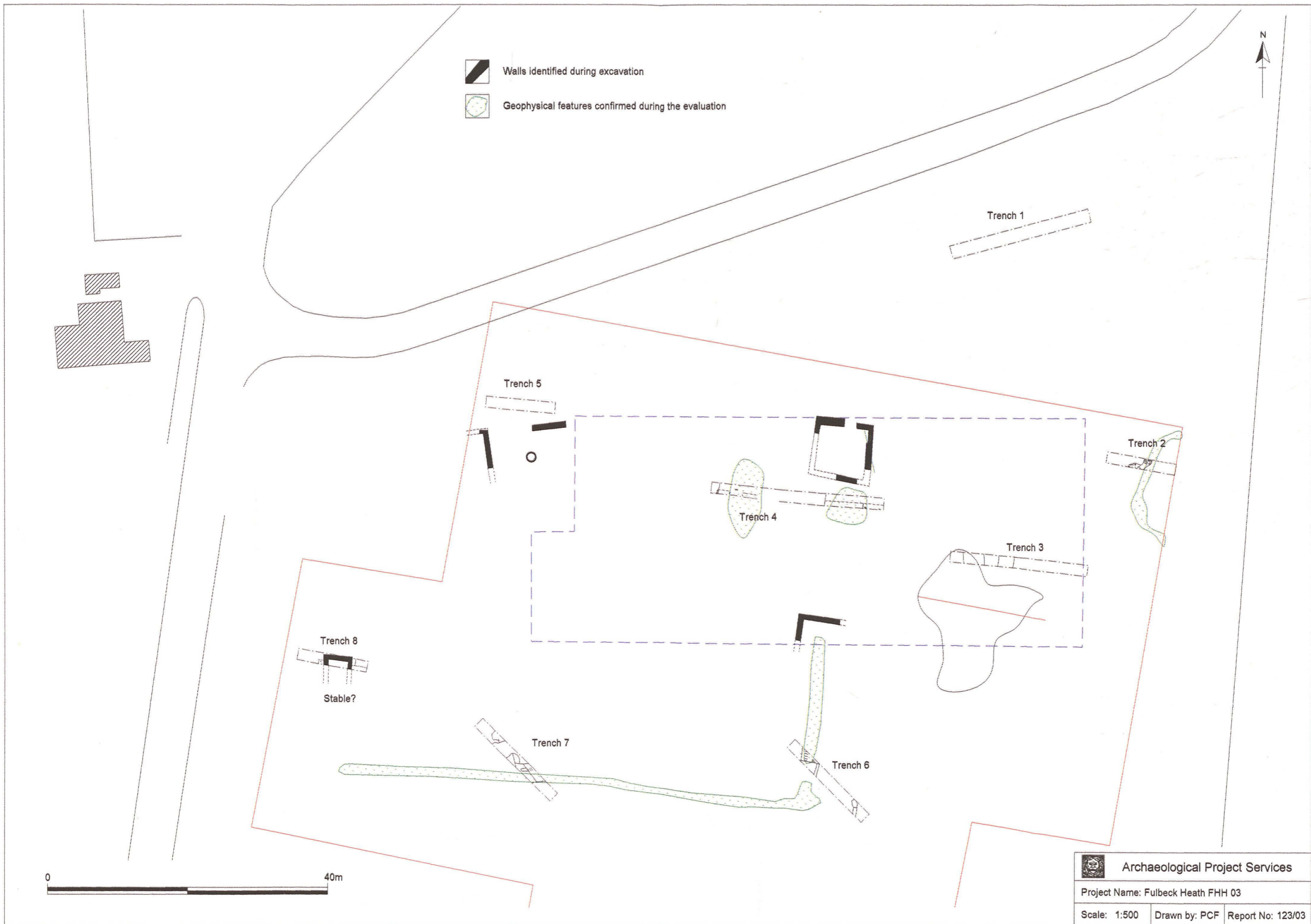


Figure 9 - Summary of the archaeological investigations



Plate 1 - General view of the site, looking west



Plate 2 - Area A, Well (024) after partial excavation, looking east



Plate 3 - General view across Area B, looking northeast



Plate 4 - Area B, Walls (017) and (018), looking south

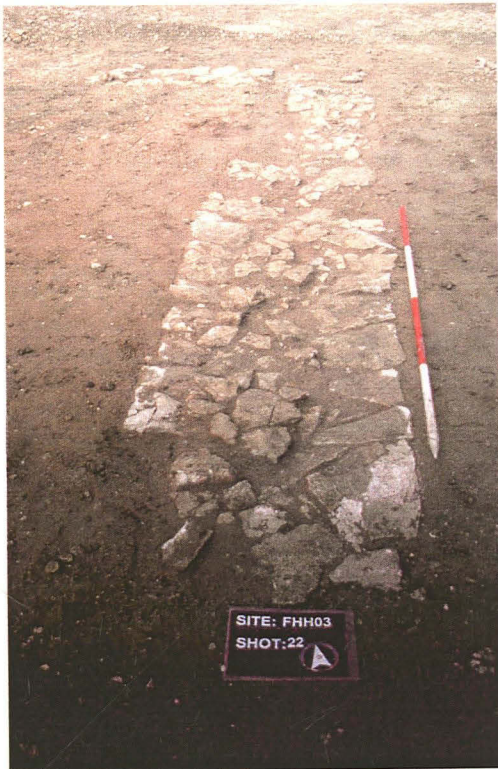


Plate 5 - Area B, Wall (016), looking north



Plate 6 - Area B, Wall (015), looking west

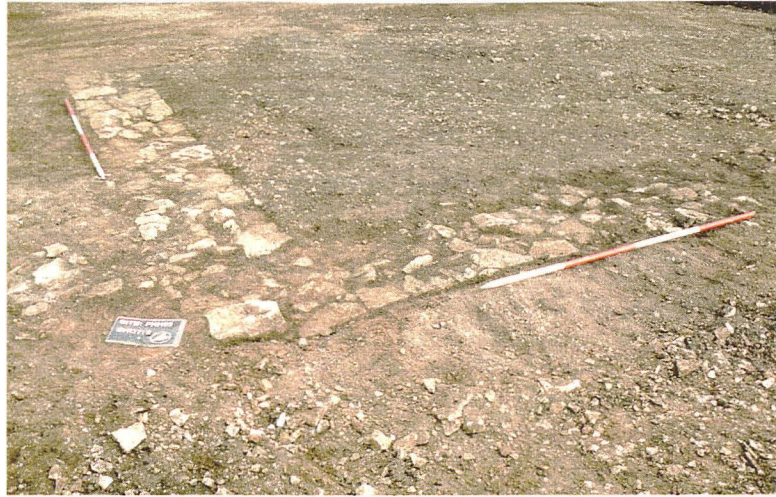


Plate 7 - Area C showing Wall (013), looking east



Plate 8 - Section 1 showing Quarry pit (007), looking southwest



Plate 9 - Section 1 showing Quarry pit (011), looking southeast

Appendix 1

LAND AT HURLINGHAM BUSINESS PARK, FULBECK HEATH, LINCOLNSHIRE - SPECIFICATION FOR ARCHAEOLOGICAL WATCHING BRIEF

1 SUMMARY

- 1.1 *This document comprises a specification for an archaeological watching brief on land at Hurlingham Business Park, Fulbeck Heath, Lincolnshire.*
- 1.2 *The area is archaeologically sensitive, previous investigations revealed a large number of anomalies and a variety of features dating from the Romano-British to the medieval period.*
- 1.3 *The watching brief will be undertaken during groundworks associated with the development. The archaeological features exposed will be recorded in writing, graphically and photographically.*
- 1.4 *On completion of the fieldwork a report will be prepared detailing the results of the investigation. The report will consist of a narrative supported by illustrations and photographs.*

2 INTRODUCTION

- 2.1 This document comprises a specification for the archaeological watching brief of land at Hurlingham Business Park, Fulbeck Heath, Lincolnshire. The site is located at National Grid Reference SK 9835 5010.
- 2.2 This document contains the following parts:
 - 2.2.1 Overview.
 - 2.2.2 Stages of work and methodologies.
 - 2.2.3 List of specialists.
 - 2.2.4 Programme of works and staffing structure of the project

3 SITE LOCATION

- 3.1 Fulbeck Heath is located 10km northwest of Sleaford in the administrative district of South Kesteven, Lincolnshire. The site is to the north of the A17 highway, immediately south of Maidenhouse Farm at Hurlingham Business Park. The site is on the east side of the access road at National Grid Reference SK 9835 5010.
- 3.2 The field accommodating the site is a roughly rectangular block of land covering an area of approximately 4.5ha. Currently the area is pasture. The proposed development site itself is located near the northern limit of the field.

4 PLANNING BACKGROUND

- 4.1 The site is the subject of a full planning application (S01/1350/34) submitted to South Kesteven District Council for the erection of a storage and showroom facility. Permission is subject to a condition requiring the implementation of an archaeological watching brief during groundworks.

5 SOILS AND TOPOGRAPHY

- 5.1 The site and surrounding area is on a gentle slope down to the east at approximately 80m OD. The site is at the boundary of soils of the Elmton 1 Association shallow brown rendzinas and Marcham Association brown rendzinas/ calcareous earths, both soils developed on Jurassic Lincolnshire Limestone (Hodge et al. 1984, 179; 242).

6 ARCHAEOLOGICAL OVERVIEW

- 6.1 Maidenhouse Farm, located immediately north of the proposed development area, is the site of a grange established by Sempringham Priory in the 12th century. The priory was dissolved in 1536, at which time its possessions, including the grange, were surrendered to the crown. Ruins that may relate to the grange were noted in the 19th century. Transcriptions of cropmarks on aerial photographs depict several sub-rectangular enclosures, which may represent buildings, gardens or ponds, immediately south of Maidenhouse Farm, in the area of proposed development.
- 6.2 Previous investigations about 100m to the northeast recorded a pit and several postholes. Due to the absence of artefacts or other occupation debris, these features were undated and thought not to represent settlement remains (Archaeological Project Services 1998).
- 6.3 Geophysical survey of the proposed development area (GSB 2002) has identified a large number of probable archaeological features, including numerous pits, rectilinear enclosures and the site of a possible building.
- 6.4 Trail trenching revealed a variety of features dating from the Romano-British to medieval period. One trench contained foundations of a medieval building thought to be associated with the Gilbertine Grange.

7 AIMS AND OBJECTIVES

- 7.1 The aims of the watching brief will be:
- 7.1.1 To record and interpret the archaeological features exposed during the excavation of the foundation trenches and other areas of ground disturbance.
- 7.2 The objectives of the watching brief will be to:
- 7.2.1 Determine the form and function of the archaeological features encountered;
- 7.2.2 Determine the spatial arrangement of the archaeological features encountered;
- 7.2.3 As far as practicable, recover dating evidence from the archaeological features, and
- 7.2.4 Establish the sequence of the archaeological remains present on the site.

8 SITE OPERATIONS

- 8.1 General considerations
- 8.1.1 All work will be undertaken following statutory Health and Safety requirements in operation at the time of the watching brief.
- 8.1.2 The work will be undertaken according to the relevant codes of practise issued by the Institute of Field Archaeologists (IFA), under the management of a Member of the institute (MIFA). Archaeological Project Services is IFA registered organisation no. 21.
- 8.1.3 Any and all artefacts found during the investigation and thought to be 'treasure', as defined by the Treasure Act 1996, will be removed from site to a secure store and promptly reported to the appropriate coroner's office.
- 8.2 Methodology
- 8.2.1 The watching brief will be undertaken during the ground-works phase of development, and includes the archaeological monitoring of all phases of soil movement.

- 8.2.2 Stripped areas and trench sections will be observed regularly to identify and record archaeological features that are exposed and to record changes in the geological conditions. The section drawings of the trenches will be recorded at a scale of 1:10. Should features be recorded in plan these will be drawn at a scale of 1:20. Written descriptions detailing the nature of the deposits, features and fills encountered will be compiled on Archaeological Project Services pro-forma record sheets.
- 8.2.3 Any finds recovered will be bagged and labelled for later analysis.
- 8.2.4 Throughout the watching brief a photographic record will be compiled. The photographic record will consist of:
- 8.2.4.1 the site during work to show specific stages, and the layout of the archaeology within the trench.
- 8.2.4.2 groups of features where their relationship is important
- 8.2.5 Should human remains be located they will be left *in situ* and only excavated if absolutely necessary. Should removal be required the appropriate Home Office licence will be obtained before the exhumation of the remains. In addition, the Local Environmental Health Department, coroner and the police will be informed, where appropriate.

9 POST-EXCAVATION

- 9.1 Stage 1
- 9.1.1 On completion of site operations, the records and schedules produced during the watching brief will be checked and ordered to ensure that they form a uniform sequence forming a level II archive. A stratigraphic matrix of the archaeological deposits and features present on the site will be prepared. All photographic material will be catalogued and labelled, the labelling referring to schedules identifying the subject/s photographed.
- 9.1.2 All finds recovered during the fieldwork will be washed, marked and packaged according to the deposit from which they were recovered. Any finds requiring specialist treatment and conservation will be sent to the Conservation Laboratory at the City and County Museum, Lincoln.
- 9.2 Stage 2
- 9.2.1 Detailed examination of the stratigraphic matrix to enable the determination of the various phases of activity on the site.
- 9.2.2 Finds will be sent to specialists for identification and dating.
- 9.3 Stage 3
- 9.3.1 On completion of stage 2, a report detailing the findings of the watching brief will be prepared.
- 9.3.2 This will consist of:
- 9.3.2.1 A non-technical summary of the results of the investigation.
- 9.3.2.2 A description of the archaeological setting of the watching brief.
- 9.3.2.3 Description of the topography of the site.
- 9.3.2.4 Description of the methodologies used during the watching brief.

- 9.3.2.5 A text describing the findings of the watching brief.
- 9.3.2.6 A consideration of the local, regional and national context of the watching brief findings.
- 9.3.2.7 Plans of the archaeological features exposed. If a sequence of archaeological deposits is encountered, separate plans for each phase will be produced.
- 9.3.2.8 Sections of the trenches and archaeological features.
- 9.3.2.9 Interpretation of the archaeological features exposed, and their chronology and setting within the surrounding landscape.
- 9.3.2.10 Specialist reports on the finds from the site.
- 9.3.2.11 Appropriate photographs of the site and specific archaeological features.

10 REPORT DEPOSITION

- 10.1 Copies of the report will be sent to the client; the South Kesteven Community Archaeologist; and to the County Council Archaeological Sites and Monuments Record.

11 ARCHIVE

- 11.1 The documentation and records generated during the watching brief will be sorted and ordered into the format acceptable to the City and County Museum, Lincoln. This will be undertaken following the requirements of the document titled *Conditions for the Acceptance of Project Archives* for long-term storage and curation.

12 PUBLICATION

- 12.1 A report of the findings of the watching brief will be presented to the editor of the journal *Lincolnshire History and Archaeology*. If appropriate, notes on the findings will be submitted to the appropriate national journals: *Britannia* for discoveries of Roman date, and *Medieval Archaeology* and the *Journal of the Medieval Settlement Research Group* for findings of medieval or later date.

13 CURATORIAL RESPONSIBILITY

- 13.1 Curatorial responsibility for the archaeological work undertaken on the site lies with the South Kesteven Community Archaeologist. They will be given written notice of the commencement of the project.

14 VARIATIONS AND CONTINGENCIES

- 14.1 Variations to the proposed scheme of works will only be made following written confirmation of acceptance from the archaeological curator.
- 14.2 In the event of the discovery of any unexpected remains of archaeological importance, or of any changed circumstances, it is the responsibility of the archaeological contractor to inform the archaeological curator (*Lincolnshire Archaeological Handbook* 1998, Sections 5.7 and 18).
- 14.3 Where important archaeological remains are discovered and deemed to merit further investigation additional resources may be required to provide an appropriate level of investigation, recording and analysis.
- 14.4 Any contingency requirement for additional fieldwork or post-excavation analysis outside the scope of the proposed scheme of works will only be activated following full consultation with the

archaeological curator and the client.

15 PROGRAMME OF WORKS AND STAFFING LEVELS

- 15.1 The watching brief will be integrated with the programme of construction and is dependent on the developers' work programme. It is therefore not possible to specify the person-hours for the archaeological site work.
- 15.2 An archaeological supervisor with experience of watching briefs will undertake the work.
- 15.3 Post-excavation analysis and report production will be undertaken by the archaeological supervisor, or a post-excavation analyst as appropriate, with assistance from a finds supervisor, illustrator and external specialists. It is expected that each fieldwork day (equal to one person-day) will require a post-excavation day (equal to one-and-a-half person-days) for completion of the analysis and report. If the fieldwork lasts longer than about four days then there will be an economy of scale with the post-excavation analysis.

16 SPECIALISTS TO BE USED DURING THE PROJECT

- 16.1 The following organisations/persons will, in principle and if necessary, be used as subcontractors to provide the relevant specialist work and reports in respect of any objects or material recovered during the investigation that require their expert knowledge and input. Engagement of any particular specialist subcontractor is also dependent on their availability and ability to meet programming requirements.

<u>Task</u>	<u>Body to be undertaking the work</u>
Conservation	Conservation Laboratory, City and County Museum, Lincoln
Pottery Analysis	Prehistoric - Trent & Peak Archaeological Trust Roman - B Precious, Independent Specialist Anglo-Saxon - J Young, Independent Specialist Medieval and later - G Taylor in consultation with H Healey, Independent Archaeologist
Non-pottery Artefacts	J Cowgill, Independent Specialist
Animal Bones	Environmental Archaeology Consultancy
Environmental Analysis	J Rackham, Independent Specialist
Human Remains Analysis	R Gowland, Independent Specialist

17 INSURANCES

- 17.1 Archaeological Project Services, as part of the Heritage Trust of Lincolnshire, maintains Employers Liability Insurance of £10,000,000, together with Public and Products Liability insurances, each with indemnity of £5,000,000. Copies of insurance documentation can be supplied on request.

18 COPYRIGHT

- 18.1 Archaeological Project Services shall retain full copyright of any commissioned reports under the Copyright, Designs and Patents Act 1988 with all rights reserved; excepting that it hereby provides an exclusive licence to the client for the use of such documents by the client in all matters directly relating to the project as described in the Project Specification.
- 18.2 Licence will also be given to the archaeological curators to use the documentary archive for educational, public and research purposes.

- 18.3 In the case of non-satisfactory settlement of account then copyright will remain fully and exclusively with Archaeological Project Services. In these circumstances, it will be an infringement under the Copyright, Designs and Patents Act 1988 for the client to pass any report, partial report, or copy of same, to any third party. Reports submitted in good faith by Archaeological Project Services to any Planning Authority or archaeological curator will be removed from said planning Authority and/or archaeological curator. The Planning Authority and/or archaeological curator will be notified by Archaeological Project Services that the use of any such information previously supplied constitutes an infringement under the Copyright, Designs and Patents Act 1988 and may result in legal action.
- 18.4 The author of any report or specialist contribution to a report shall retain intellectual copyright of their work and may make use of their work for educational or research purposes or for further publication.

19 **BIBLIOGRAPHY**

Hodge, CAH, Burton, RGO, Corbett, WM, Evans, R, and Seale, RS, 1984 Soils and their use in Eastern England, Soil Survey of England and Wales 13

Specification: Version 1, 7th April 2003

Appendix 2

CONTEXT DESCRIPTIONS

No.	Description	Interpretation
001	Friable mid to dark reddish brown silty sand, 0.3m thick	Topsoil
002	Friable mid reddish brown silty sand with limestone fragments,	Natural deposit
003	Limestone	Natural deposit
004	Friable mid to dark reddish brown silty sand, 0.3m thick	Topsoil
005	Firm mid yellowish brown sand	Fill of (007)
006	Firm limestone fragments	Fill of (007)
007	Feature, 4.6m wide by 1.25m deep, steep sides, not fully excavated	Quarry pit
008	Firm mid yellowish brown silty sand with limestone fragments, >0.8m thick	Natural deposit
009	Firm mid yellowish brown sand	Fill of (011)
010	Firm light yellowish brown sand	Fill of (011)
011	Feature, 7.7m wide by >0.6m deep, moderate sides, not fully excavated	Quarry pit
012	Firm light yellowish brown fragmented limestone, >0.4m thick	Natural deposit
013	Limestone structure, L-shaped construction, rough hewn stone, total length 9.34m by 0.65-0.7m wide	Wall
014	Limestone and mortar structure, rough hewn blocks, aligned north-south, 0.98m long by 0.9m wide	Wall collapse
015	Limestone structure, rough hewn blocks, aligned east-west, 3.2m long by 0.8m wide	Wall foundation
016	Limestone and mortar structure, rough hewn blocks, aligned north-south, 3.5m long by 0.9-1m wide	Wall
017	Limestone and mortar structure, rough hewn blocks, aligned north-south, 1.3m long by 0.6m wide	Wall
018	Limestone and mortar structure, L-shaped structure, rough hewn blocks, total length 3.8m long by 0.7m wide	Wall
019	Limestone and mortar structure, 1.66m by 1.3m extent	Possible surface
020	Limestone and structure, rough hewn blocks, aligned east-west, 1.8m long by 1.4m wide	Wall
021	Limestone and mortar structure, rough hewn blocks, aligned north-south, 1.4m long by 0.75m wide	Wall
022	Unstratified finds retrieval	
023	Firm mid reddish brown silty sand	Fill within well (024)
024	Limestone structure, Circular plan, 1.5m diameter by >0.7m deep	Well
025	Limestone and mortar structure, rough hewn blocks, aligned north-south, 6.05m long by 0.3-0.7m wide	Wall
026	Limestone and mortar structure, rough hewn blocks, aligned east-west, 4.9m long by 0.75m wide	Wall
027	Firm mid reddish brown silty sand with limestone fragments	Fill within well (024)
028	Limestone and mortar structure, 2m by 1m extent	Wall remnant
029	Linear feature, aligned east-west, 4.9m long by 0.75m wide by 0.13m deep, steep sides and uneven base	Construction cut for (026)

Appendix 3

THE FINDS

by Paul Cope-Faulkner, Hilary Healey, Tom Lane and Gary Taylor

Recording of the pottery was undertaken with reference to guidelines prepared by the Medieval Pottery Research Group (Slowikowski *et al.* 2001) and the pottery was quantified using the chronology and coding system of the Lincolnshire ceramic type series. A total of 17 fragments of pottery weighing 266g was recovered from 4 separate contexts. In addition to the pottery, a moderate quantity of other artefacts, mostly brick/tile but also metal objects, comprising 16 items weighing a total of 257g, was retrieved. Faunal remains were also recovered.

The excavated animal bone assemblage comprises 22 stratified fragments weighing 226g. The animal bone was identified by reference to published catalogues. No attempt is made to sex or age animals represented within the assemblage, although where this is readily apparent is noted in the comments column.

Provenance

The material was recovered from topsoil (001), a quarry fill (006), fills of a well (023 and 027), from within a wall (026) and as unstratified finds (022).

Most of the pottery was made in moderate proximity to Fulbeck, at Potterhanworth 20km to the northeast. The Roman pottery fragment is a French import.

Range

The range of material is detailed in the tables.

Table 1: Pottery

Context	Fabric Code	Description	No.	Wt (g)	Context Date
006	POTT?	?Potterhanworth ware, abraded	1	5	13 th -14 th century
022	POTT?	?Potterhanworth ware, 13 th -14 th century	2(link)	70	19 th -20 th century
	LSW1-3	Lincoln ware jugs, 1 abraded, 13 th -14 th century	2	8	
	NSW	Nottingham splash glazed ware, jug, 12 th -13 th century	1	60	
	LSTON	Grey stoneware bottle, 19 th -20 th century	1	35	
	PREH	Prehistoric ware, Bronze Age	1	3	
	SAMCG	Samian ware, DR18 or 18/31, abraded, 2 nd century	1	3	
023	POTT	Potterhanworth ware, sooted externally, 13 th -14 th century	1	15	13 th -14 th century
	NSW?	Nottingham splash glazed ware? jug handle, 12 th -13 th century	1	6	
026	POTT	Potterhanworth ware, 2 sooted externally	6	61	13 th -14 th century

The pottery assemblage from this watching brief is very closely similar to that recovered during previous evaluation at the site. Those previous investigation recovered a single prehistoric fragment, a small amount of worn Roman material and a larger medieval group comprising vessels made in Nottingham, Potterhanworth, Lincoln and Stamford. Excluding the Stamford ware, the current assemblage contains pottery made at these same locations. Similarly, the present collection has an abraded Roman fragment and a piece of prehistoric pottery, this latter item unworn. These compare with and supplement the previous discoveries of similar materials and suggest prehistoric activity in the area and probable Romano-British period manuring of the land.

Table 2: Other Artefacts

Context	Material	Description	No.	Wt (g)	Context Date
001	CBM	Machine-made brick, 20 th century	1	2	20 th century
	CBM	Roof tile, oxidized throughout, 15mm thick, post-medieval	1	19	
	CBM	Roof tile, reduced core, 14mm thick, medieval	2	51	
	CBM	Glazed ridge tile, reduced core, 13-15mm thick, 1 abraded, medieval	4	94	
022	CBM	Glazed ridge tile, reduced core, 10-15mm thick, 1 abraded, 1 in Bourne A fabric, medieval	2	31	Medieval
	CBM	Roof tile, reduced core, 14mm thick, very abraded, medieval	1	8	
	Clinker	Clinker	1	2	
023	Iron	Nail, rectangular section	1	13	
	Clinker	Clinker	1	21	
027	Iron	Arrowhead, probably Jessop's Type MP8, 13 th century	1	7	13 th century
	Iron	Nail, rectangular section, bent	1	9	

Note: CBM = Ceramic Building Material

One of the glazed tiles from (022), the thinner example, appears to be in a Bourne fabric. The remainder are in a fabric that is generally gravel tempered. Previous investigations at the site recovered a very similar group of tiles, dominated by those with gravel inclusions and supplemented by Bourne fabrics (Cope-Faulkner *et al.* 2002). These tiles indicate buildings on the site during the medieval period, with the glazed ridge tiles deriving from higher status structures.

An iron arrowhead was recovered from (027). This is a multi-purpose form, probably Jessop's form MP8 (Oliver Jessop, *pers comm*), mainly used in hunting though could also function in military operations. Based on previous discoveries, this arrowhead type appears to date from the mid 13th century (Jessop 1996, 197), a chronology that accords well with the general indication from the pottery and other finds of activity of predominantly 13th-14th century date at the site. The wings (barbs) of this arrow are quite short and the socket has broken off in the past. Although the recovery of an arrowhead at a medieval grange may be thought unusual, a separate similar find was made only 15km to the south at Ropsley, a grange of the Cistercian abbey of Vaudey, where a hunting arrowhead of 14th-15th century date was discovered (Thompson 1955, 22).

Table 3: The Faunal Remains

Context	Species	Bone	No.	Wt (g)	Comments
006	cattle	molar	2	65	chalky condition possibly rabbit or cat
	horse	metatarsus	5 (link)	110	
	unknown	rib	1	1	
027	sheep	molar	1	8	some small animals probably rabbit
	sheep	humerus	1	13	
	sheep	scapula	1	5	
	unknown	unidentified	11	24	

Horse, cattle and sheep bones were recovered from the fill of a quarry pit (006) and the fill of a well. Additionally, small mammal bones were also recovered and may indicate the presence of rabbit. This could indicate warrens in existence at Fulbeck Heath. However, this smaller bone is in quite chalky condition and has been extensively gnawed by rodents. The presence of the horse supports earlier discoveries of horse at the site and cattle and sheep indicate a

mixed pastoral economy was perhaps practised.

Condition

All the material is in good condition and present no long-term storage problems. Archive storage of the collection is by material class.

Documentation

There have been previous archaeological investigations at Fulbeck, including at the current site itself, that are the subjects of reports. Previous investigations at the site yielded a closely comparable assemblage to that from the current monitoring (Cope-Faulkner *et al.* 2002). Details of archaeological sites and discoveries in the area are maintained in the files of the South Kesteven Community Archaeologist and the Lincolnshire County Council Sites and Monuments Record.

Potential

The various components of the assemblage have different levels of significance and potential. The single prehistoric pottery fragment supplements previous discoveries of the same material at the site and is of moderately high local potential.

Similarly, the Roman pottery contributes to the small collection of artefacts of this date previously recovered from the site. The group as a whole is likely to represent manuring scatter and is of limited local potential but does indicate that there must be a settlement of the period nearby.

Medieval material forms the bulk of the assemblage and indicates occupation of the site at that time. Roof tiles indicate that there were buildings in the area, and the glazed ridge tiles suggest some of the structures were of moderately high status. This aspect of the assemblage emphasises the previous discoveries at the site and, in consequence, the two mutually supportive collections are of high local potential and significance.

The dearth of any material later than the 15th century is informative and suggests that the site was abandoned at that time.

Acknowledgements

Thanks are due to Oliver Jessop for commenting on the arrowhead.

References

Cope-Faulkner, P., Hall, R., Healey, H., Lane, T. and Taylor, G., 2001 'The Finds', in R. Hall, *Archaeological Evaluation on Land at Hurlingham Business Park, Fulbeck Heath, Lincolnshire (FHH02)*, unpublished Archaeological Project Services report no. 104/02

Jessop, O., 1996 A new artefact typology for the study of medieval arrowheads, *Medieval Archaeology* **XL**

Slowikowski, A., Nenk, B. and Pearce, J., 2001 *Minimum Standards for the Processing, Recording, Analysis and Publication of Post-Roman Ceramics*, Medieval Pottery Research Group Occasional Paper 2

Thompson, M. W., 1955 Trial excavations at Ropsley Grange, near Grantham, Lincolnshire, *Lincolnshire Architectural and Archaeological Society Reports and Papers*, Vol 6 Pt 1 (New Series)

Appendix 4

GLOSSARY

Camerae	A cell or grange belonging to a preceptory of the Knight's Templars or Hospitallers.
Context	An archaeological context represents a distinct archaeological event or process. For example, the action of digging a pit creates a context (the cut) as does the process of its subsequent backfill (the fill). Each context encountered during an archaeological investigation is allocated a unique number by the archaeologist and a record sheet detailing the description and interpretations of the context (the context sheet) is created and placed in the site archive. Context numbers are identified within the report text by brackets, <i>e.g.</i> (004).
Cropmark	A mark that is produced by the effect of underlying archaeological features influencing the growth of a particular crop.
Cut	A cut refers to the physical action of digging a posthole, pit, ditch, foundation trench, <i>etc.</i> Once the fills of these features are removed during an archaeological investigation the original 'cut' is therefore exposed and subsequently recorded.
Fill	Once a feature has been dug it begins to silt up (either slowly or rapidly) or it can be back-filled manually. The soil(s) which become contained by the 'cut' are referred to as its fill(s).
Geophysical Survey	Essentially non-invasive methods of examining below the ground surface by measuring deviations in the physical properties and characteristics of the earth. Techniques include magnetometry and resistivity survey.
Grange	A monastic farm complex at some distance from the abbey, generally supervised by a monk and staffed by lay brethren, created to cultivate one of the abbey's estates.
Layer	A layer is a term to describe an accumulation of soil or other material that is not contained within a cut.
Medieval	The Middle Ages, dating from approximately AD 1066-1500.
Natural	Undisturbed deposit(s) of soil or rock which have accumulated without the influence of human activity.
Post-medieval	The period following the Middle Ages, dating from approximately AD 1500-1800.
Romano-British	Pertaining to the period dating from AD 43-410 when the Romans occupied Britain.

Appendix 5

THE ARCHIVE

The archive consists of:

29	Context sheets
8	Daily record sheets
12	Sheets of scale drawings
1	Photographic record
1	Stratigraphic matrix
1	Bag of finds

All primary records and finds are currently kept at:

Archaeological Project Services
The Old School
Cameron Street
Heckington
Sleaford
Lincolnshire
NG34 9RW

The ultimate destination of the project archive is:

Lincolnshire City and County Museum
12 Friars Lane
Lincoln
LN2 1HQ

The archive will be deposited in accordance with the document titled *Conditions for the Acceptance of Project Archives*, produced by the Lincolnshire City and County Museum. The accession number is the same as for the evaluation conducted in 2002.

Lincolnshire City and County Council Museum Accession Number: 2002.217

Archaeological Project Services Site Code: FHH 03

The discussion and comments provided in this report are based on the archaeology revealed during the site investigations. Other archaeological finds and features may exist on the development site but away from the areas exposed during the course of this fieldwork. *Archaeological Project Services* cannot confirm that those areas unexposed are free from archaeology nor that any archaeology present there is of a similar character to that revealed during the current investigation.

Archaeological Project Services shall retain full copyright of any commissioned reports under the *Copyright, Designs and Patents Act 1988* with all rights reserved; excepting that it hereby provides an exclusive licence to the client for the use of such documents by the client in all matters directly relating to the project as described in the Project Specification.