ARCHAEOLOGICAL EVALUATION ON LAND AT HEALTHLINC HOUSE, CLIFF ROAD, WELTON LINCOLNSHIRE (WCR03)



A P S

ARCHAEOLOGICAL

PROJECT

SERVICES

Conservation Services

2 1 FEB 2003

Highways & Planning Directorate



CANT LI3942 SOURCES LI8562 LI8663 S4809 LI83956 MIDDLED S4810 LI83957 UNDOLED S4811 LI83958 MEDIFMED S483 LI83387 LDLE SDXON.

ARCHAEOLOGICAL EVALUATION ON LAND AT HEALTHLINC HOUSE, CLIFF ROAD, WELTON LINCOLNSHIRE (WCR03)

Work Undertaken For Mike Alford (Welton) Ltd Construction

February 2003

Report Compiled by James Albone MA AIFA

Planning Application Reference: M02/P/0936 National Grid Reference: TF00847974

A.P.S. Report No. 026/03

ARCHAEOLOGICAL PROJECT SERVICES



Quality Control

Project Coordinator	Dale Trimble
Supervisor	James Albone
Site Assistants	Aaron Clements and Chris Moulis
Finds Processing	Denise Buckley
Illustration	James Albone and Vicky Mellor
Photographic Reproduction	Sue Unsworth
Post-excavation Analyst	James Albone

Checked by	Project	Manage	r	Approv	ed by S	Senior Archaeolog	ist
C		1-1-			_	June .	
1	1	,	Dale Trimble		1		Tom Lane
Date: / 7/	02	63		Date:	0	17-02-03	

CONTENTS

List of Figures

List of Plates

1.	SUMMARY	1
2.	INTRODUCTION	1
2.	1 DEFINITION OF AN EVALUATION	1
2.	2 PLANNING BACKGROUND	1
2.	3 TOPOGRAPHY AND GEOLOGY	1
2.	4 ARCHAEOLOGICAL SETTING	2
3.	AIMS	3
4.	METHODS	3
4.	1 TRIAL TRENCHING	3
4.	POST-EXCAVATION	3
5.	RESULTS	3
5.	1 DESCRIPTION OF THE RESULTS	3
5.		
5.	3 PHASE 2: UNDATED DEPOSITS	4
5.	4 PHASE 3: MEDIEVAL DEPOSITS	4
5.	4 PHASE 3: MEDIEVAL DEPOSITS	4
5.	5 PHASE 4: POST-MEDIEVAL DEPOSITS	5
6.	DISCUSSION	5
7.	ASSESSMENT OF SIGNIFICANCE	6
8.	EFFECTIVENESS OF TECHNIQUES	6
9.	CONCLUSIONS	7
10.	ACKNOWLEDGEMENTS	7
11.	BIBLIOGRAPHY	7
12.	ABBREVIATIONS	7

Appendices

- Specification for an Archaeological Evaluation by Archaeological Project Services
- 2 Context Summary
- 3 Post-Roman Pottery and Tile catalogue by Jane Young
- The Non-Pottery Finds and Faunal Remains by James Albone, Paul Cope-Faulkner, Rachael Hall and Gary Taylor

- Charred Plant Macrofossils and Other Remains by Val Fryer 5
- 6 7
- Glossary
 The Archive

List of Figures

- Figure 1 General location map
- Figure 2 Site location map
- Figure 3 Site plan showing trench location and previous archaeological investigations
- Figure 4 Trench plan
- Figure 5 Sections 1 8

List of Plates

- Plate 1 General view of the site looking northwest towards Healthline House.
- Plate 2 Post-excavation view of the trench looking north.
- Plate 3 South end of the trench showing wall foundation 014, limestone spread 016 and posthole 009.
- Plate 4 Section 2 showing pit 007
- Plate 5 Section 8 showing ditches 018 and 020

1. SUMMARY

An archaeological evaluation was undertaken in advance of a proposed development at Heathlinc House, off Cliff Road, Welton, Lincolnshire. A single trial trench was excavated across the footprint of the proposed building. Late Saxon and medieval settlement remains had been identified during an evaluation immediately to the south of the site in 1998 and an early Anglo-Saxon cemetery is recorded a short distance to the north.

A pit and gully of late Saxon date (late 9th – 11th century) were identified, confirming domestic occupation of this period at, or near, the site. A small quantity of middle Saxon (8th to mid 9th century) Maxey ware pottery was also recovered, suggesting earlier activity in the immediate vicinity. No evidence of middle Saxon date had previously been identified at the site.

Medieval to post-medieval remains comprised a north-south aligned stone wall foundation with an associated gully and the possible foundation of a stone surface. No pottery of this period was recovered, suggesting that the building may have had a non-domestic, possibly agricultural, function.

The results of the present investigation correspond well with those from the adjacent 1998 evaluation and support the suggestion that the site formed part of the medieval manor of Westhall and its late Saxon predecessor.

Archaeological remains were encountered at a depth of 0.55m below the present ground surface. Sampling undertaken for palaeoenvironmental analysis indicated a poor to moderate level of preservation, with charred cereal grains among the plant material identified.

2. INTRODUCTION

2.1 Definition of an Evaluation

An archaeological evaluation is defined as, 'a limited programme of non-intrusive and/or intrusive fieldwork which determines the

presence or absence of archaeological features, structures, deposits, artefacts or ecofacts within a specified area or site. If such archaeological remains are present Field Evaluation defines their character and extent, quality and preservation, and it enables an assessment of their worth in a local, regional, national or international context as appropriate' (IFA 1999).

2.2 Planning Background

Outline planning permission (Application No. M02/P/0936) for the development was subject to a condition requiring the implementation of a scheme of archaeological works within specified areas of the site. The first phase of work consisted of a desk-based assessment (Albone 2002), which had confirmed the archaeological potential of the proposed development site.

Archaeological Project Services was commissioned by Mike Alford (Welton) Ltd Construction to undertake the archaeological evaluation of the site in accordance with the requirements of the local planning authority. The work was undertaken between the 21st and 23rd of January 2003.

2.3 Topography and Geology

Welton is located in the West Lindsey district of Lincolnshire, 8.5km northwest of Lincoln. The proposed development site is situated on the western side of the village in the southeast corner of the grounds of Healthline House off Cliff Road. It comprises a roughly rectangular plot the eastern side of which fronts onto Norbeck Lane. The centre of the site is located at national grid reference TF 0084 7974 and lies at c.26m OD.

The site lies at the junction of three soil types. To the north are fine loamy over clayey soils of the Beccles 1 Association, with fine loamy soils of the Aswarby Association located to the east. To the south and west of the site are brashy calcareous fine loamy soils of the Elmton 1 Association (SSEW 1983a; SSEW 1983b; Hodge *et al.* 1984, 99, 117, 179). These deposits overlie middle Jurassic limestone bedrock.

2.4 Archaeological Setting

Detailed discussion of the archaeological and historical background to the evaluation site was included in the desk-based assessment report (Albone 2002).

The earliest archaeological evidence recorded in the immediate vicinity of the evaluation site is of Romano-British date (43 – 410 AD). Pottery of 4th century date and tiles, including one stamped with an inscription, have been recovered from the site of a Roman building 380m to the southwest of the site and a small quantity of Roman pottery has also been found 200m to the southwest.

An early history of the village records that when a Roman camp was levelled in Chapel Close in about 1860, "many Roman urns were found and unfortunately broken pieces..."(Hunt c.1925, 3). Chapel Close is located on the opposite side of Norbeck Lane to the evaluation site. Although the suggestion that a Roman camp had existed there is perhaps fanciful, the pottery, if correctly identified as Roman, indicates some activity at that location. Hunt (c.1925, 3) also records that a Roman quernstone had been found in the vicarage garden. In Hunt's time, the finds were kept at the church, but unfortunately their present whereabouts are unknown. Coins of 3rd and 4th century date have been found at a number of locations within the village.

Significant remains of Anglo-Saxon date (410 - 1066 AD) have previously been recorded adjacent to the evaluation site. During the construction of Healthline House in 1971 an Anglo-Saxon inhumation cemetery discovered adjacent to Cliff Road. Eleven graves were recorded accompanied by annular brooches, beads pottery vessels, shield bosses and a spearhead. This range of artefacts dated the burials to the 6th century. The graves were very shallow with the deepest extending only 0.3m in to the natural subsoil. In the majority of cases the skull extended into the lower part of the overlying 'topsoil' layer. Further burials are believed to have been exposed during the laying of a gas pipe along Cliff Road (Notes in SMR file).

An archaeological evaluation undertaken south immediately of the proposed development site in 1998 revealed structural remains of late Saxon date (Fig. 3). These included foundation trenches and cobbled surfaces of 10th to 11th century date. A postbuilt structure was identified in another evaluation trench, 40m further to the west (Albone 1998). It was considered likely that the remains discovered during the evaluation were part of a late Saxon precursor to the prebendal manor of West Hall, supporting a suggestion by Everson et al. (1991, 28) that this manor fossilised a pre-Conquest pattern. A small quantity of late Saxon pottery and a loomweight fragment were also recovered during the excavation of the cemetery site in the north of the field.

The settlement of Welton is first recorded in 1072 in a writ issued by King William granting the manor to the newly founded cathedral at Lincoln (Foster 1931, 2). The place-name 'Welletona' is Old English in origin and refers to the 'farmstead or village with a spring' (Cameron 1998, 136).

In the Domesday Survey of 1086 the manor was still the property of Lincoln Cathedral and held by the six canons. The holding included ploughlands, 150 acres of meadow, 40 acres of underwood and five mills (Morgan and Thorn 1986, 7.8). Welton was divided into six prebendal manors with the prebends, or benefices, of these providing the living for the canons of the Cathedral. The six prebendal manors were West Hall, Gore Hall, Beck Hall, Rive Hall, Pans Hall and Brink Hall (Everson et al. Fig.19). The proposed development site was located in the West Hall manor, which was combined with Gore Hall at an unknown date before the 19th century.

The 1998 evaluation carried out to the south of the evaluation area identified a stone wall associated with 13th to 14th century roof tiles and an iron pivot from a door or window shutter. Medieval remains were also identified during the construction of Healthline House. The site appeared to have originally been divided into four separate crofts by ditches. Pottery of 13th to 14th century date was

recovered and the site of a possible house was noted in the southwestern corner of the northwestern croft (Notes in SMR file). Late medieval to early post-medieval tiles fragments, dating to the 15th to 16th centuries, were also recovered at that time. A small quantity of pottery of 13th to 14th century date has also been found during a recent watching brief on an extension to Healthlinc House (Cope-Faulkner 2002).

The parish was enclosed by an Act of Parliament of 1772 (Leach 1984, 17). However, many small enclosures had already been made in and around the village, including the area of the proposed development site.

Healthlinc House, formerly known as Saxon House, was constructed immediately to the north of the proposed development site in 1971. Prior to this the site had formed part of a pasture field.

3. AIMS

The aim of the evaluation was to gather information to establish the presence or absence, extent, condition, character, quality and date of any archaeological deposits in order to enable the archaeological curator to formulate a policy for the management of archaeological resources present on the site

4. METHODS

4.1 Trial Trenching

A single trench measuring 12m x 1.8m was excavated across the footprint of the proposed building.

Removal of topsoil deposits was undertaken by mechanical excavator using a toothless ditching bucket. The exposed surfaces of the trenches were then cleaned by hand and inspected for archaeological remains. Where present, features were excavated by hand in order to retrieve dateable artefacts and other remains. Each deposit exposed during the evaluation was allocated a unique reference number (context number) with an individual written description. A photographic record was compiled. Sections were drawn at a scale of 1:10 and plans at a scale of 1:20. Recording of deposits encountered was undertaken according to standard Archaeological Project Services practice. The trench was located in relation to the present site boundary.

Deposits with some potential for palaeoenvironmental remains were identified during the evaluation. Samples were taken from these deposits and submitted for specialist analysis (Appendix 5). Artefacts recovered during the investigation were identified by appropriate specialists (Appendices 4 and 5).

4.2 Post-excavation

Following excavation, all records were checked and ordered to ensure that they constituted a complete Level II archive and a stratigraphic matrix of all identified deposits was produced. Artefacts recovered from excavated deposits were examined and a period date assigned where possible. A list of all contexts and interpretations appears as Appendix 2. Context numbers are identified in the text by brackets. Phasing was based on artefact dating, the nature of the deposits and the recognisable relationships between them.

5. RESULTS

5.1 Description of the results

Deposits revealed during the evaluation were classified into five phases:

Phase 1: Natural deposits

Phase 2: Undated deposits

Phase 3: Late Saxon deposits

Phase 4: Medieval to post-medieval deposits

Phase 5: Modern deposits

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

5.2 Phase 1: Natural deposits

The earliest deposit exposed during the evaluation comprised natural limestone brash and light brownish yellow sandy silt (021) (Fig. 4).

5.3 Phase 2: Undated deposits

In the western part of the trench was a small pit or gully terminus (011) (Fig. 4). This feature had a steep-sided profile with a flat base (Fig. 5, Sects. 3 and 4) and contained medium greyish brown sandy silt (010). Palaeoenvironmental analysis of a soil sample from this deposit revealed the presence of wheat, barley, oats and field bean (Appendix 5). No artefacts were recovered from this deposit although it is stratigraphically earlier than the late Saxon pit (007) and may be of mid Saxon date.

Posthole (009) was situated in the southeastern part of the trench (Fig. 4). This feature had a diameter of 0.25m and survived to a depth of 0.10m (Fig. 5, Sect. 5). Its fill comprised medium yellowish grey brown clayey sandy silt (008). No artefacts were recovered from this deposit and it was not possible to relate it to the adjacent features with any certainty.

5.4 Phase 3: Late Saxon deposits

Pit (007) was located in the northwestern part of the trench and cut the undated pit or gully (011) at its southern end (Fig. 4). Its fill comprised medium to dark brownish grey clayey sandy silt (006) from which a single sherd of late 9th to late 10th century Lincoln kiln-type pottery was recovered (Appendix 3). Charred grains of wheat, barley and oats were identified in a palaeoenvironmental sample of this deposit (Appendix 5). A sherd of earlier 8th to mid 9th century Maxey ware pottery recovered from this fill may have been derived from the undated pit or gully (011) and provides a possible date for that feature.

A narrow gully (005) identified in the eastern part of the trench (Fig. 4) was aligned north – south and had a steep-sided profile with an

uneven base (Fig. 5, Sect. 1). It contained medium greyish brown sandy silt (004). A small fragment of animal bone was recovered from this deposit and palaeoenvironmental analysis identified cereal grains including wheat and oats (Appendices 4 and 5). A single small sherd of 11th century Stamford ware pottery was recovered from this deposit (Appendix 3). Late 9th to late 10th century pottery was also recovered from the medium to dark greyish brown clayey sandy silt subsoil layer (003) immediately above this feature.

5.5 Phase 4: Medieval to post-medieval deposits

A rubble wall foundation (012) located at the southern end of the trench was 0.8m wide and visible for a distance of 1.6m (Fig. 4). It was contained within a steep sided, flat-bottomed cut (013) and had been truncated at its northern end by a later ditch (020). The foundation consisted of irregular limestone fragments within medium to dark brown clayey sandy silt (012). A fragment of a coarse sandstone rotary quern had been reused within the rubble make up of the wall foundation.

Joining the western side of the wall was a gully (015) with a shallow concave profile (Fig. 5, Sect. 7) filled by medium to dark brown clayey sandy silt (014). Although this feature appeared to be contemporary with the wall foundation, it did not contain any rubble, suggesting a different function. It is possible that this feature formed the foundation trench for a wooden internal wall within the structure formed by (012). A single fragment of late medieval to post-medieval tile was recovered from the upper surface of the fill of (015) (Appendix 3), providing the only dateable material directly associated with the building.

Immediately to the east of wall (012) was an area of flat limestone fragments (016) laid directly onto the natural deposits. The full extent of this material was not clear but it appeared to respect the position of the wall foundation to its west (Fig. 4).

Cutting the northern end of wall (012) was an east to west aligned ditch (020) (Fig. 4). The full profile of this feature was not exposed due

to groundwater flooding. Its fill comprised dark to medium brown slightly sandy clayey silt with orangey mottling (019) containing fragments of small limestone, derived from wall (012). A single fragment of medieval to post-medieval tile was the only dateable artefact recovered (Appendix 3). Analysis of a soil sample from this deposit revealed cereal grains, possibly including rye, and a hazel nutshell fragment (Appendix 5).

Cutting ditch (020), and also on an east – west alignment was ditch (018). This feature had a steep-sided profile with an irregular base (Fig. 5, Sect. 8). Its dark brownish grey slightly sandy clayey silt fill (017) contained fragments of medieval to post-medieval tile as well as pottery of middle to late Saxon and 19th century date.

5.6 Phase 5: Post-medieval and modern deposits

Sealing ditch (018) and the subsoil layer (003) was a thick deposit of dark brown clayey sandy silt (002). This represented the former garden soil associated with the vegetable plot. In the northern part of the trench, which was cut into the lawned area, dark brown clayey sandy silt topsoil was present (001).

6. DISCUSSION

The earliest archaeological remains revealed during the evaluation comprise two sherds of 8th to mid 9th century Maxey ware pottery. Although both sherds were recovered from later contexts they provide the first indication of activity of this date in the vicinity of the site. An undated pit (011) was stratigraphically earlier than the late 9th to late 10th century and may belong to this phase of activity. However, no pottery of this date was found during the earlier evaluation immediately to the south of the site (Young 1998).

A late Saxon gully and pit were identified in the northern part of the trench and dated to the late 9th to late 10th century and the 11th century respectively. Features of this date had also been identified in the area immediately to the south of the site (Albone 1998). The majority

of features recorded in that area were on a north to south alignment, similar to gully (005) in the present evaluation trench. The combined results of both evaluations suggest settlement activity at or near the site during this period, resulting in a relatively high level of artefact deposition. Analysis of palaeoenvironmental remains identified significant quantities of cereal remains in the late Saxon deposits indicating processing activity at the site during this period.

The structural remains identified at the southern end of the trench were broadly dated to the medieval to post-medieval period on the basis of tile fragments recovered in the vicinity. Wall (012) did not continue beyond ditches (018) and (020) and must have turned within the area where it had been truncated by these features. Consequently it is not possible to determine the form of the building or structure to which the wall belonged. However, the presence of a possible internal division, represented by the gully (015), suggests that it lay predominantly to the west and south of the excavated area. Although undated it is likely that the spread of limestone to the east of the wall was of a contemporary date. A stone wall associated with 13th to 15th century tile was recorded in the earlier evaluation 30m to the southwest (ibid.).

The absence of medieval or early postmedieval pottery is surprising if the building represented by wall (012) belongs to this period. However, this is also reflected in the results of the previous evaluation where only a small quantity of 13th to 14th century pottery was recovered from close to the stone building remains (ibid.). The combined evidence of the two evaluations indicates that whatever activity was taking place on the site during the medieval and early post-medieval periods it did not result in significant artefact loss or disposal. It is possible that the buildings may have had an agricultural rather than domestic function, probably as part of Westhall manor. However, the principal focus of domestic activity appears to have been located elsewhere during this period.

No evidence of Romano-British or early Anglo-Saxon activity was recorded during the evaluation. This reflects the results of the earlier work immediately to the south and means that it is not possible to shed any further light on the discoveries recorded by Hunt (1925, 3) in Chapel Close. However, this does add further confirmation that the early Anglo-Saxon cemetery identified along Cliff Road does not extend into this area of the site.

The archaeological remains identified at the site lay at a depth of 0.55m below the present ground level. This can be contrasted with the 1998 evaluation to the south where the upper surface of the archaeological deposit lay at 0.30m below ground level (Albone 1998). However, the ground surface in the paddock to the south of the site, where the earlier evaluation took place, was correspondingly lower than the grounds of Healthline House. The upper surface of archaeological deposits in both areas lay at c.25.4m OD. Analysis of soil samples suggested a good potential for the survival of palaeoenvironmental remains with the potential to answer questions about agricultural and industrial activity at the site (Appendix 5).

7. ASSESSMENT OF SIGNIFICANCE

For assessment of significance the Secretary of State's criteria for scheduling ancient monuments has been used (DoE 1990, Annex; Appendix 5).

Period

Middle to late Saxon, medieval, post-medieval and undated features and deposits were identified during the evaluation.

Rarity

The range of features recorded during the evaluation is typical of those associated with a manorial site of these periods. However, evidence of activity spanning the middle Saxon to post-medieval periods at a single site is not commonly recorded during such investigations.

Documentation

Records of previous archaeological work in the immediate vicinity of the evaluation site are held in the Lincolnshire Sites and Monuments Record. Although no detailed documentary evidence of medieval date appears to exist for West Hall manor, its location can be mapped from field-names recorded on post-medieval cartographic sources.

Group value

The archaeological evidence obtained from the investigation site forms an important part of the overall archaeological pattern from Welton. This is enhanced because the site seems to be part of one of the six prebendal manors in the settlement and contains evidence spanning the middle Saxon to post-medieval periods.

Survival/Condition

Archaeological remains revealed during the investigation appeared to have survived well being sealed by 0.55m of later deposits.

Fragility/Vulnerability

Although relatively deeply buried the archaeological remains at the site may be affected by the proposed development. Consequently, the archaeological remains present are potentially vulnerable.

Diversity

Evidence of middle Saxon to post-medieval activity is present at the site representing a relatively high period diversity. Functional diversity is represented by domestic and agricultural activity and is therefore low to moderate.

Potential

There is a high potential for further archaeological deposits to survive elsewhere within the development site. There is good potential for the survival of charred environmental remains within the deposits at the site.

8. EFFECTIVENESS OF TECHNIQUES

The techniques employed during the archaeological evaluation were effective. Removal of overburden deposits by

mechanical excavator allowed a rapid appraisal indicating that archaeological remains were present the site.

Manual excavation of the remains established that archaeological deposits were well preserved with different phases of activity represented, dating from the Saxon to post-medieval periods.

9. CONCLUSIONS

An archaeological trial trench was excavated at Healthlinc House as the site lay within an area of known late Saxon and medieval settlement activity.

Archaeological remains were identified at a depth of 0.55m below the present ground surface. Archaeological features indicating late Saxon settlement activity at or near the site were identified. Medieval to post-medieval evidence was restricted to structural remains. Although the nature of these could not be established, they did not appear to relate to significant domestic activity and may have been agricultural in function. In addition pottery of middle Saxon date was also recovered providing the first evidence for activity of this period at the site.

10. ACKNOWLEDGEMENTS

Archaeological Project Services wish to acknowledge the assistance of Mike Alford who commissioned the fieldwork and this report.

11. BIBLIOGRAPHY

Albone, J. 1998 Archaeological Field Evaluation at Norbeck Lane, Welton, Lincolnshire. Unpubl. PCA Report.

Albone, J. 2002 Desk-Based Assessment of Proposed Development at Healthline House, Welton, Lincolnshire (WCR02). Unpubl. APS Report 217/02 Cameron, K., 1998 A Dictionary of Lincolnshire Place-Names.

Cope-Faulkner, P., 2002 Archaeological Watching Brief of Development at Healthlinc House, Cliff Road, Welton, Lincolnshire. APS Report 053/02

Everson, P.L., Taylor, C.C. and Dunn, C.J., 1991 Change and Continuity: Rural Settlement in North-West Lincolnshire.

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

Hunt, A., c.1925 Welton-by-Lincoln

IFA, 1999, Standard and Guidance for Archaeological Field Evaluations.

Leach, T.R., 1984 A Welton Miscellany

Morgan, P. and Thorn, C., 1986 Domesday Book: Lincolnshire

SSEW, 1983a Soils of Eastern England, Sheet

SSEW, 1983b Legend for the 1:250,000 Soil Map of England and Wales

Young, J., 1998 Norbeck Lane, Welton, Post-Roman pottery archive. In J. Albone 1998 Archaeological Field Evaluation at Norbeck Lane, Welton, Lincolnshire. Unpubl. PCA Report.

12. ABBREVIATIONS

APS Archaeological Project Services

BGS British Geological Survey

IFA Institute of Field Archaeologists

PCA Pre-Construct Archaeology

SMR Sites and Monuments Record

SSEW Soils Survey of England and Wales

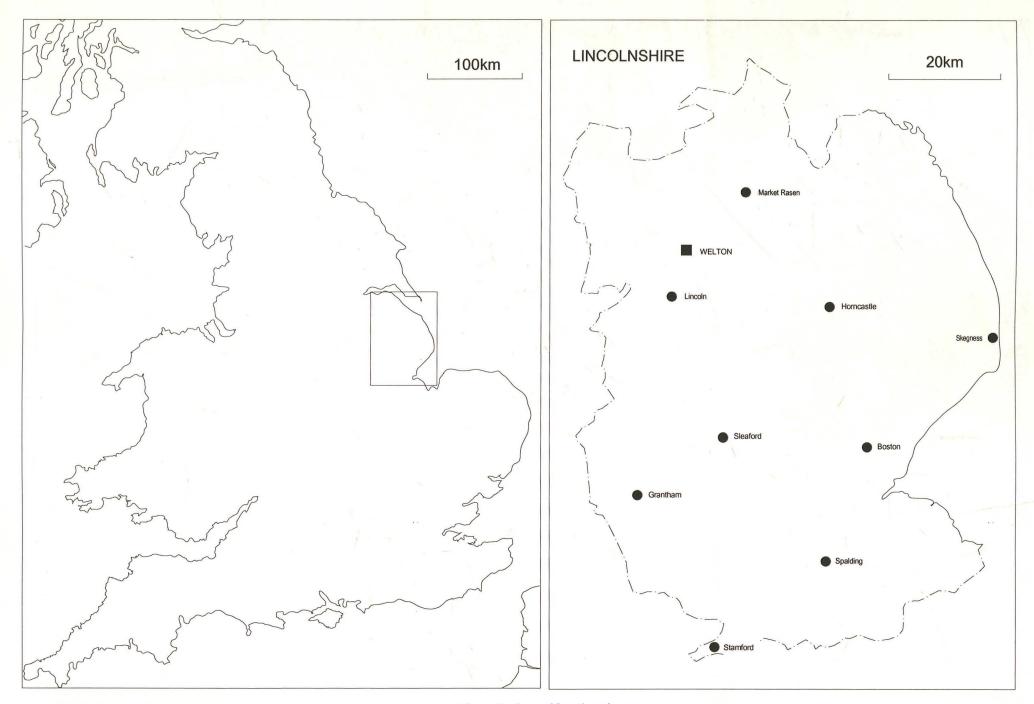


Figure 1 - General location plan

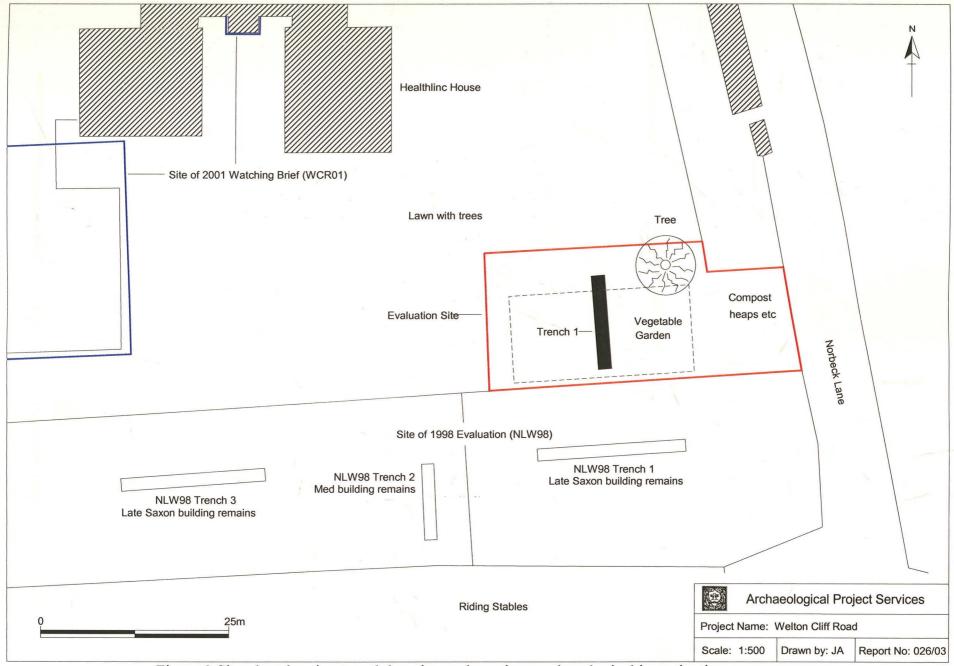
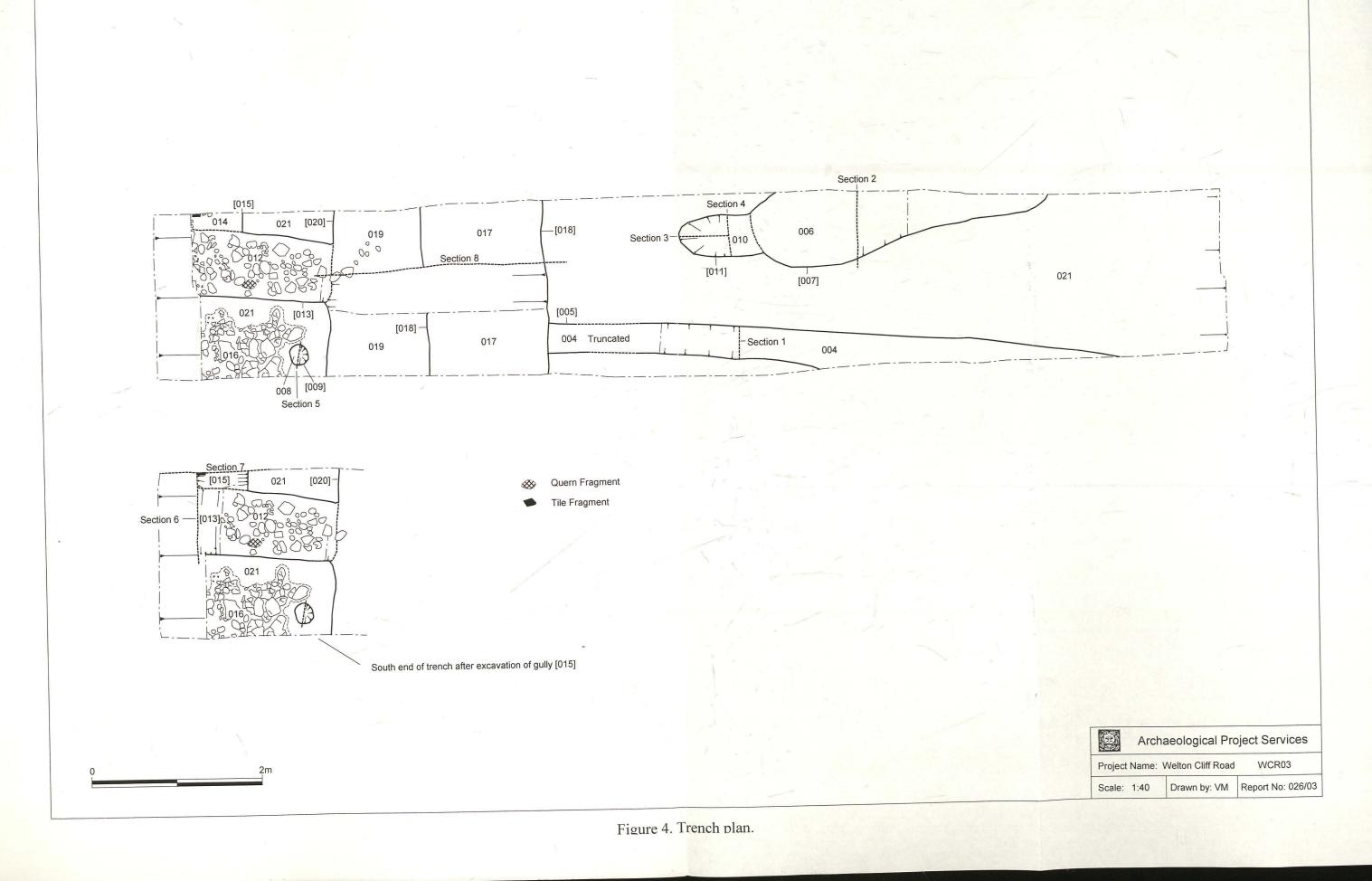


Figure 3 Site plan showing trench location and previous archaeological investigations.



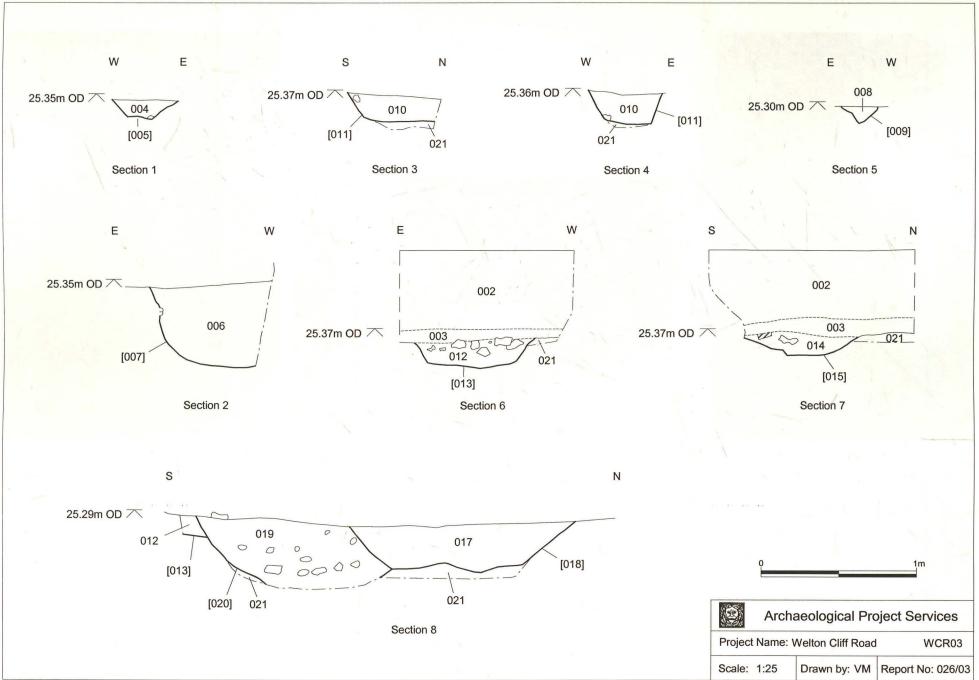


Figure 5. Sections 1 - 8



Plate 1 General view of the site looking northwest towards Healthline House.



Plate 2 Post-excavation view of the trench looking north.



Plate 3 South end of the trench showing wall foundation 014, limestone spread 016 and posthole 009.



Plate 4 Section 2 showing pit 007.



Plate 5 Section 8 showing ditches 018 and 020.

LAND AT
HEALTHLINC HOUSE
CLIFF ROAD, WELTON
LINCOLNSHIRE

SPECIFICATION FOR ARCHAEOLOGICAL EVALUATION

PREPARED FOR MIKE ALFORD (WELTON) LTD

BY
ARCHAEOLOGICAL PROJECT SERVICES
Institute of Field Archaeologists'
Registered Archaeological Organisation No. 21

JANUARY 2003

1. SUMMARY

- 1.1. This document comprises a specification for the archaeological field evaluation of land at Healthlinc House, Cliff Road, Welton, Lincolnshire
- 1.2. The proposed development is located within an area of considerable archaeological interest. During construction of Healthlinc House in 1971 an Anglo-Saxon cemetery was discovered, although burials are not known to extend into the area of proposed development. However, a recent archaeological evaluation immediately to the south did reveal structural remains of late Saxon date.
- 1.3. As part of outline planning permission granted for the development by West Lindsey District council a programme of archaeological investigation comprising a single trench across the footprint of the proposed building is required.
- 1.4. On completion of the fieldwork a report will be prepared detailing the findings of the investigation. The report will consist of a text describing the nature of the archaeological deposits located and will be supported by illustrations and photographs.

2. INTRODUCTION

- 2.1. This document comprises a specification for the archaeological field evaluation of land located immediately southeast of Healthline House on Cliff Road, Welton, Lincolnshire, centred on National Grid Reference TF 0087974.
 - 2.1.1. The document contains the following parts:
 - 2.1.2. Overview
 - 2.1.3. The archaeological and natural setting
 - 2.1.4. Stages of work and methodologies to be used
 - 2.1.5. List of specialists
 - 2.1.6. Programme of works and staffing structure of the project

3. SITE LOCATION AND CURRENT LAND USE

3.1.1. Welton is located in the West Lindsey district of Lincolnshire, approximately 8.5km northwest of Lincoln. The proposed development site is situated on the western side of the village in the southeast corner of the grounds of Healthline House off Cliff Road and comprises a roughly rectangular plot, the eastern side of which fronts onto Norbeck Lane. The site is centred on NGR TF 00847974 and lies at c. 26m OD.

4. PLANNING BACKGROUND

4.1. Outline planning permission (Application No. M02/P/0936) has been granted by West Lindsey District Council for the development of an accommodation block on the site comprising a single bungalow approximately 15m x 15m in size. At the request of the Lincolnshire County Council Archaeology Section an Archaeological Desk-Based Assessment of the proposed development indicated a strong possibility that development on the site could disturb buried archaeological remains. An intrusive archaeological evaluation comprising a single trench positioned within the footprint of the proposed building is now required to further assess the archaeological potential of the site.

5. SOILS, TOPOGRAPHY AND CURRENT LAND USE

- 5.1. The site lies at the junction of three soils types. To the north are fine loamy over clayey soils of the Beccles 1 Association, with fine loamy soils of the Aswarby Association located to the east. To the south and west of the site are brashy calcareous fine loamy soils of the Elmton 1 Association (SSEW 1983a; SSEW 1983b; Hodge *et al.* 1984, 99, 117, 179). These deposits overlie middle Jurassic limestone bedrock.
- 5.2. Currently much of the proposed area of investigation is in use as a vegetable patch.

6. ARCHAEOLOGICAL OVERVIEW

- 6.1. The settlement of Welton is first recorded in 1072 in a writ issued by King William granting the manor to the newly founded cathedral at Lincoln (Foster 1931, 2) The place-name 'Welletone' is Old English in origin and refers to the 'farmstead or village with a spring'.
- 6.2. Evidence for prehistoric activity within the assessment area is sparse and currently comprises a single Neolithic stone axe recovered to the north of the village and cropmarks to the north and west of the village which possibly represent prehistoric ditched enclosures.
- 6.3. Romano-British deposits and finds identified in the area are relatively rich. Pottery of 4th century date and tiles, including one stamped with an inscription, have been recovered from the site of a Roman building 380m to the southwest of the proposed development. A small quantity of Roman pottery has also been found 200m to the southwest.
- 6.4. An early history of the village records that when a Roman camp was levelled in Chapel Close in about 1860, "many Roman urns were found and unfortunately broken to pieces..." (Hunt c. 1925). Chapel close is located on the opposite side of Norbeck Lane to the proposed development site. The interpretation of the site as a "camp" is not likely to be accurate but if the pottery was correctly identified, some activity at this location is indicated (Albone, 2002).
- 6.5. During the construction of Healthlinc House in 1971 an Anglo-Saxon inhumation cemetery was discovered. Eleven graves were recorded accompanied by annular brooches, beads, pottery vessels, shield bosses and a spearhead, indicating a date of around the 6th century. The graves were very shallow with the deepest extending only 0.3 into the natural subsoil.
- 6.6. An archaeological evaluation undertaken immediately south of, and adjacent to, the proposed development revealed structural remains of late Saxon date. These included foundation trenches and cobbled surfaces of 10th to 11th century date. A post-built structure was also identified (Albone 1998). It was considered likely that the remains identified during the evaluation were part of a late Saxon precursor to the prebendal manor of West Hall, supporting a suggestion by Everson *et al* (1991, 28) that the later manor fossilized an earlier pattern.
- 6.7. The proposed development site lies within the area of the shrunken medieval settlement of Welton. The evaluation undertaken immediately to the south identified a stone wall associated with 13th to 14th century roof tiles. An iron pivot from a door or window shutter was also found. Medieval remains were also identified during the construction of Healthlinc House. The site appeared to have originally been divided into four separate crofts by ditches. Pottery of 13th to 14th century date was recovered and the site of a possible house was noted in the southwest corner of the the northwestern croft (Notes in SMR file)
- 6.8. Approximately 200m to the south earthwork remains of fishponds survive and include three rectangular ponds and two east to west aligned channels (Everson et al 1991, 210). These earthworks are protected as a Scheduled Ancient Monument (SAM 31636). St. Mary's church is located 300m to the east and contain fabric of 13th and 14th century date (Pevsner and Harris, 1989,786).

7. AIMS AND OBJECTIVES

- 7.1. The aim of the work will be to gather sufficient information for the archaeological curator to be able to formulate a policy for the management of the archaeological resources present on the site.
- 7.2. The objectives of the work will be to:
 - 7.2.1. Establish the type of archaeological activity that may be present within the site.
 - 7.2.2. Determine the likely extent of archaeological activity present within the site.
 - 7.2.3. Determine the date and function of the archaeological features present on the site.
 - 7.2.4. Determine the state of preservation of the archaeological features present on the site.
 - 7.2.5. Determine the spatial arrangement of the archaeological features present within the site.
 - 7.2.6. Determine the extent to which the surrounding archaeological features extend into the application area.

7.2.7. Establish the way in which the archaeological features identified fit into the pattern of occupation and land-use in the surrounding landscape.

8. LIAISON WITH THE ARCHAEOLOGICAL CURATOR

8.1. Prior to the commencement of the trial trenching the arrangement of the interventions (excavations) will be agreed with the archaeological curator to ensure that the proposed scheme of works fulfils their requirements.

9. TRIAL TRENCHING

9.1. Reasoning for this technique

- 9.1.1. Trial trenching enables the in situ determination of the sequence, date, nature, depth, environmental potential and density of archaeological features present on the site.
- 9.1.2. The trial trenching will consist of the excavation of a single north to south aligned trench across the footprint of the proposed building. The trench will be at least 1.6m wide and 12m long, although the exact length will depend on boundary constraints and the working area available to the machine.

9.2. General Considerations

- 9.2.1. All work will be undertaken following statutory Health and Safety requirements in operation at the time of the investigation.
- 9.2.2. The work will be undertaken according to the relevant codes of practice issued by the Institute of Field Archaeologists (IFA). Archaeological Project Services is an IFA Registered Archaeological Organisation (No. 21).
- 9.2.3. 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.
- 9.2.4. Excavation of the archaeological features exposed will only be undertaken as far as is required to determine their date, sequence, density and nature. Not all archaeological features exposed will necessarily be excavated. However, the investigation will, as far as is reasonably practicable, determine the level of the natural deposits to ensure that the depth of the archaeological sequence present on the site is established.
- 9.2.5. Open trenches will be marked by hazard tape attached to road irons or similar poles. Subject to the consent of the archaeological curator, and following the appropriate recording, the trenches, particularly those of excessive depth, will be backfilled as soon as possible to minimise any health and safety risks.

9.3. Methodology

- 9.3.1. Removal of the topsoil and any other overburden will be undertaken by mechanical excavator using a toothless ditching bucket. To ensure that the correct amount of material is removed and that no archaeological deposits are damaged, this work will be supervised by Archaeological Project Services. On completion of the removal of the overburden, the nature of the underlying deposits will be assessed by hand excavation before any further mechanical excavation that may be required. Thereafter, the trenches will be cleaned by hand to enable the identification and analysis of the archaeological features exposed.
- 9.3.2. Investigation of the features will be undertaken only as far as required to determine their date, form and function. The work will consist of half- or quarter-sectioning of features as required and, where appropriate, the removal of layers. Should features be located which may be worthy of preservation in situ, excavation will be limited to the absolute minimum, (ie the minimum disturbance) necessary to interpret the form, function and date of the features.
- 9.3.3. The archaeological features encountered will be recorded on Archaeological Project Services pro-forma context record sheets. The system used is the single context method by which individual archaeological units of stratigraphy are assigned a unique record number and are individually described and drawn.
- 9.3.4. Plans of features will be drawn at a scale of 1:20 and sections at a scale of 1:10. Should individual features merit it, they will be drawn at a larger scale.

SPECIFICATION FOR ARCHAEOLOGICAL EVALUATION AT HEALTHLINC HOUSE, WELTON, LINCS.

- 9.3.5. Throughout the duration of the trial trenching a photographic record consisting of black and white prints (reproduced as contact sheets) and colour slides will be compiled. The photographic record will consist of:
- 9.3.6. the site before the commencement of field operations.
- 9.3.7. the site during work to show specific stages of work, and the layout of the archaeology within individual trenches.
- 9.3.8. individual features and, where appropriate, their sections.
- 9.3.9. groups of features where their relationship is important.
- 9.3.10.the site on completion of field work
- 9.4. Should human remains be encountered, they will be left in situ with excavation being limited to the identification and recording of such remains. If removal of the remains is necessary the appropriate Home Office licences will be obtained and the local environmental health department informed. If relevant, the coroner and the police will be notified.
- 9.5. Finds collected during the fieldwork will be bagged and labelled according to the individual deposit from which they were recovered ready for later washing and analysis.
- 9.6. The spoil generated during the investigation will be mounded along the edges of the trial trenches with the top soil being kept separate from the other material excavated for subsequent backfilling.
- 9.7. The precise location of the trenches within the site and the location of site recording grid will be established by an EDM survey.

10. ENVIRONMENTAL ASSESSMENT

10.1. If appropriate, during the investigation specialist advice will be obtained from an environmental archaeologist. The specialist will visit the site and will prepare a report detailing the nature of the environmental material present on the site and its potential for additional analysis should further stages of archaeological work be required. The results of the specialist's assessment will be incorporated into the final report.

11. POST-EXCAVATION AND REPORT

11.1. Stage 1

- 11.1.1.On completion of site operations, the records and schedules produced during the trial trenching will be checked and ordered to ensure that they form a uniform sequence constituting 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: the colour slides will be labelled and mounted on appropriate hangers and the black and white contact prints will be labelled, in both cases the labelling will refer to schedules identifying the subject/s photographed.
- 11.1.2.All finds recovered during the trial trenching will be washed, marked, bagged and labelled according to the individual 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.

11.2. Stage 2

- 11.2.1.Detailed examination of the stratigraphic matrix to enable the determination of the various phases of activity on the site.
- 11.2.2. Finds will be sent to specialists for identification and dating.

11.3. Stage 3

11.3.1.On completion of stage 2, a report detailing the findings of the investigation will be prepared. This will consist of:

A non-technical summary of the results of the investigation.

A description of the archaeological setting of the site.

Description of the topography and geology of the investigation area.

Description of the methodologies used during the investigation and discussion of their effectiveness in the light of the results

A text describing the findings of the investigation.

Plans of the trenches showing the archaeological features exposed. If a sequence of archaeological deposits is encountered, separate plans for each phase will be produced.

Sections of the trenches and archaeological features.

Interpretation of the archaeological features exposed and their context within the surrounding landscape.

Specialist reports on the finds from the site.

Appropriate photographs of the site and specific archaeological features or groups of features.

A consideration of the significance of the remains found, in local, regional, national and international terms, using recognised evaluation criteria.

12. ARCHIVE

12.1. The documentation, finds, photographs and other records and materials generated during the investigation will be sorted and ordered into the format acceptable to the City and County Museum, Lincoln. This sorting will be undertaken according to the document titled *Conditions for the Acceptance of Project Archives* for long term storage and curation.

13. REPORT DEPOSITION

13.1. Copies of the investigation report will be sent to: the client, Mike Alford Ltd.; the Lincolnshire County Council Archaeology Section; South Holland District Council Planning Department; and the Lincolnshire County Sites and Monuments Record.

14. PUBLICATION

14.1. An article of appropriate content will be submitted for inclusion in the journal Lincolnshire History and Archaeology. Notes or articles describing the results of the investigation will also be submitted for publication in the appropriate national journals: Medieval Archaeology and Journal of the Medieval Settlement Research Group for medieval and later remains, and Britannia for discoveries of Roman date.

15. CURATORIAL MONITORING

15.1. Curatorial responsibility for the project lies with the Archaeological Officer of the Lincolnshire County Council Archaeological Section. As much written notice as possible, ideally at least seven days, will be given to the archaeological curator prior to the commencement of the project to enable them to make appropriate monitoring arrangements.

16. VARIATIONS TO THE PROPOSED SCHEME OF WORKS

- 16.1. Variations to the scheme of works will only be made following written confirmation from the archaeological curator.
- 16.2. Should the archaeological curator require any additional investigation beyond the scope of the brief for works, or this specification, then the cost and duration of those supplementary examinations will be negotiated between the client and the contractor.

17. SPECIALISTS TO BE USED DURING THE PROJECT

17.1. 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>Body to be undertaking the work</u>

Conservation Conservation Laboratory, City and County Museum, Lincoln.

Pottery Analysis Prehistoric: Dr D Knight, Trent and Peak Archaeological Trust

Roman: B Precious, independent specialist

Anglo-Saxon: J Young, independent specialist

Medieval and later: G Taylor, APS in consultation with H Healey, independent archaeologist; or

Other Artefacts J Cowgill, independent specialist; or G Taylor, APS

Human Remains Analysis R Gowland, independent specialist

Animal Remains Analysis Environmental Archaeology Consultancy; or P Cope-Faulkner, APS

Environmental Analysis Environmental Archaeology Consultancy

Radiocarbon dating Beta Analytic Inc., Florida, USA

Dendrochronology dating University of Sheffield Dendrochronology Laboratory

18. PROGRAMME OF WORKS AND STAFFING LEVELS

18.1. Fieldwork is expected to be undertaken by 2 staff, a supervisor and an assistant, and to take five (3) days.

18.2. Post-excavation analysis and report production is expected to take 8 person-days within a notional programme of 10 days. A project officer or supervisor will undertake most of the analysis, with assistance from the finds supervisor and CAD illustrator. Several days of specialist time are allotted in the project budget. Should it be necessary to process environmental samples, human remains, or large quantities of pottery, production of the report may require an extra ten days, depending on the availability of specialists.

18.3. Contingency

- 18.3.1.Other contingencies have been specified in the budget. In These include: environmental sampling/analysis of waterlogged remains; Roman pottery (none expected); Anglo-Saxon pottery-large quantities (some expected); Medieval pottery- large quantities (moderate amount expected and allowed for); faunal remains -large quantities (moderate amounts expected and allowed for); Conservation and/or Other unexpected remains or artefacts. A contingency for the recording of human remains is also allowed for in the budget should these be discovered.
- 18.3.2. The activation of any contingency requirement will be by the archaeological curator (Lincolnshire County Council Archaeological Officer), not Archaeological Project Services.

19. INSURANCES

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

20. COPYRIGHT

20.1. 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.

- 20.2. Licence will also be given to the archaeological curators to use the documentary archive for educational, public and research purposes.
- 20.3. 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.
- 20.4. 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.

21. BIBLIOGRAPHY

Albone, J., 1998 Archaeological Field Evaluation Report: Land off Norbeck Lane, Welton, Lincolnshire. PCA Report

Albone, J., 2002 Archaeological Dewsk-Based Assessment of Proposed Development at Healthlinc House, Cliff Road, Welton, Lincolnshire (WCR01)

Foster, C.W., 1931 The Registrum Antiquissitium of the Cathedral Church of Lincoln Pt. 1. Lincoln Records Society

Everson, P.L., Taylor, C.C. Dunn, C.J, 1991 Change and Continuity: Rural Settlement in North-West Lincolnshire

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

Hunt, A., c. 1925 Welton-by-Lincoln

Pevsner, N., and Harris, J., 1989 The Buildings of England: Lincolnshire (2nd edition)

SSEW, 1983a Soils of Eastern England, Sheet 4

SSEW, 1983b, Legend for the 1:250,000 Soil Map of England and Wales

Specification: Version 1, 14/03/03

Context Summary

Context	Description	Interpretation
001	Dark brown clayey sandy silt. Up to 0.34m thick.	Topsoil.
002	Dark brown clayey sandy silt. Up to 0.40m thick.	Garden soil.
003	Medium to dark greyish brown clayey sandy silt. Up to 0.25m thick.	Subsoil.
004	Medium greyish brown sandy silt. Up to 0.38m wide x >6.5m long x 0.10m thick.	Fill of 005.
005	Linear cut. Moderately sloping sides with flat base. Up to 0.38m wide x >6.5m long x 0.10m deep.	Cut of gutter/channe or truncated ditch.
006	Medium to dark brownish grey clayey sandy silt. >0.80m x >3.36m x 0.56m thick.	Fill of 007.
007	Possibly linear cut. >0.80m x >3.36m x 0.56m deep.	Cut of elongated pit.
008	Medium slightly yellowish grey-brown clayey sandy silt. Diameter 0.25m x 0.10m thick.	Fill of 009.
009	Sub-circular cut. Diameter 0.25m x 0.10m deep.	Cut of posthole.
010	Medium greyish brown sandy silt. 0.50m x 0.60m x 0.22m thick.	Fill of 011.
011	Elongated sub-oval cut. 0.50m x 0.60m x 0.22m deep.	Cut of pit or truncated linear feature.
012	Limestone rubble (fragments up to 0.18m x 0.18m) in medium to dark greyish brown clayey sandy silt.	Wall foundation. Fill of 013.
013	Linear cut. 0.70m wide x >1.70m long x 0.19m deep. N – S aligned.	Cut of foundation trench.
014	Medium to dark greyish brown clayey sandy silt. $0.75m x > 0.22m x 0.14m$ thick.	Fill of 015
015	Linear cut. $0.75 \text{m x} > 0.22 \text{m x } 0.14 \text{m deep.}$	Cut of possible foundation trench / beam slot.
016	Spread of flat limestone slabs. Truncated extent >1.30m x 0.85m.	Possible foundation for a floor or yard surface.
017	Dark brownish grey slightly sandy clayey silt. 1.40m x >1.80m x 0.30m thick.	Fill of 018.
018	Linear cut. 1.40m x >1.80m x 0.30m deep.	Cut of ditch.
019	Dark to medium brown slightly sandy clayey silt with orangey mottling. 1.25m x >1.80m x 0.45m thick.	Fill of 020.
020	Linear cut. 1.25m x >1.80m x 0.45m deep.	Cut of ditch.
021	Light brownish yellow limestone brash and sandy silt.	Natural deposit.

Pottery Archive

Context	Cname	Sub Fabric	Full Name	Form Type	Sherds	Vessels	Weight	Part	Description	Date
			1				(g)		<u> </u>	
001	LSH		Lincoln shelly ware	jar?	1	1	4	BS	Soot	Late 9 th – late 10 th
001	TORKT	7 1	Torksey-type ware	?	1	1	7	BS	Soot	10 th – mid 11th
001	TPW		Transfer printed ware	hollow	1	1	1	BS		19 th
003	LKT		Lincoln kiln-type shelly	jar	2	1	3	BS		Late 9 th – late 10 th
			ware					1	4	
004	ST	A	Stamford ware	?	1	1	1	BS	Soot	11 th
006	LSH		Lincoln shelly ware	small jar	1	1	3	BS	Overfired/burnt	Late 9 th – late 10 th
006	ELFS		Early fine-shelled ware	large jar	1	1	14	neck	?ID or Maxey Fabric U.4	8 th – mid 9 th
017	ELFS		Early fine-shelled ware	large jar	1	1	21	BS	?ID or Maxey Fabric U.4	8 th – mid 9 th
017	CREA		Creamware	cup?	2	1	6	BS		Late 18 th

Tile Archive

Context	Cname	Full Name	Frags	Weight (g)	Description	Date
001	PNR	Peg, nib or ridge tile	2	73		Medieval to post-medieval
014	NIB	Nibbed tile	1	258	Central folded nib; left corner; semi-vitrified	Late medieval to post-medieval
017	PNR	Peg, nib or ridge tile	1	53	Reused as a disc; 50mm diam	Medieval to post-medieval
017	PNR	Peg, nib or ridge tile	1	84	Finger impression	Medieval to post-medieval
017	PNR	Peg, nib or ridge tile	1	121	Corner	Medieval to post-medieval
017	PNR	Peg, nib or ridge tile	6	291		Medieval to post-medieval
019	PEG	Peg tile	1	66	Circular hole	Medieval to post-medieval

THE NON-POTTERY FINDS AND FAUNAL REMAINS

by James Albone, Paul Cope-Faulkner, Rachael Hall and Gary Taylor

In addition to the finds reported here, medieval ceramics (pottery and tile) were also retrieved and are reported separately.

Provenance

The material was recovered from features of a late Saxon medieval and post-medieval date, and the overlying topsoil layer.

Range

The range of material is detailed in the tables.

Table 1: Artefacts

Context	Material	Description	No.	Wt (g)	Context Date
001	Glass	Shoulder fragment of green bottle	1	6	10 th
001	Slag	Iron smithing slag	1	36	19 th century
	Iron	Nail. 55mm long		7	
012	Stone	Quern fragment of coarse sandstone. ?Upper stone. Diam. <i>c</i> .30cm	1	1375	?Medieval
	Ironstone	Natural fragment	1	4	1

Table 2: The Faunal Remains

Context	Species	Bone	No.	Wt (g)	Comments
003	Cattle sized	pelvis	1	2	
004	Sheep sized	Unidentified	1	4	Rodent gnawing
006	Cattle sized	Rib	1	24	- K.
000	Sheep sized	unidentified	2	10	
010	Snail	-	1	1	Terrestrial species
014	Cattle sized	humerus	1	18	
017	Cattle sized	Vertebra	1	19	
017	Cattle sized	unidentified	1	22	

The bone is in generally poor condition making absolute identification difficult.

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 several previous archaeological investigations at Fillingham that are the subjects of reports. Details of archaeological sites and discoveries in the area are maintained in the Lincolnshire County Council Sites and Monuments Record.

Potential

The collection of faunal remains is of limited local potential and significance. In association with dating evidence provided by the ceramics (reported separately), the faunal remains provide indications of the economy and foodstuffs of occupants of the site in the past. In particular, the faunal assemblage indicates that past inhabitants of the site were predominantly reliant on cattle and sheep. The iron slag may indicate smithing activity in the vicinity of the site.

CHARRED PLANT MACROFOSSILS AND OTHER REMAINS By Val Fyrer

Introduction

Evaluation excavations at Cliff Road, Welton were undertaken by Archaeological Project Services in January 2003. Features of probable Late Saxon to medieval date were recovered including pits, ditches and gullies.

Samples for the extraction of the plant macrofossil assemblages were taken from across the excavated area and four were submitted for assessment.

Methods

The samples were processed by manual water flotation/washover, collecting the flots in 500 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x 16, and the plant macrofossils and other remains noted are listed on Table 1. Nomenclature within the table follows Stace (1997). All plant remains were preserved by charring. Modern contaminants including fibrous roots, seeds/fruits and arthropods were present throughout.

The non-floating residues were collected in a 1mm mesh sieve and will be sorted when dry for the retrieval of artefacts/ecofacts.

Results of assessment Plant macrofossils

Cereal grains/chaff and seeds of common weed species were present at a low to moderate density in all four samples. Preservation was poor to moderate; a high density of the grains and some weed seeds were severely puffed and distorted, probably due to very high temperatures during combustion. Many of the chaff elements were very fragmented.

Cereals and other food plants

Oat (Avena sp.), barley (Hordeum sp.) and wheat (Triticum sp.) grains were recorded, with no one cereal type being predominant. A possible rye (Secale cereale) grain was noted in sample 4. Identifiable chaff elements were rare, but a single barley rachis node was recorded from sample 2, and bread wheat (T. aestivum/compactum) type nodes were present in samples 2 and 3. A large angular field bean (Vicia faba) cotyledon was found in sample 1.

Wild flora

Rare specimens of segetal weed seeds were present in all four samples. Taxa noted included stinking mayweed (*Anthemis cotula*), cornflower (*Centaurea* sp.), medick/clover/trefoil (*Medicago/Trifolium/Lotus* sp.), indeterminate grasses (Poaceae), dock (*Rumex* sp.), sheep's sorrel (*R. acetosella*) and vetch/vetchling (*Vicia/Lathyrus* sp.). Wetland plant macrofossils were rare, but single spike-rush (*Eleocharis* sp.) nutlets were noted in samples 2 and 3. A small piece of hazel (*Corylus avellana*) nutshell was the sole tree/shrub macrofossil recovered.

Other plant macrofossils

Charcoal fragments and pieces of charred root, rhizome or stem were common or abundant throughout. Fragments of heather (Ericaceae) stem were noted in samples 2 and 3. Other plant macrofossils included indeterminate culm nodes, seeds and tuber fragments.

Molluscs

Although specific sieving for molluscan remains was not undertaken, shells (including one burnt specimen) were present in all four samples. Some retained surface structuring and pigmentation and are almost certainly modern in origin, but others appeared more weathered, and may be contemporary with the features from which they were recovered. All four of Evans (1972) ecological groups (namely woodland/shade loving species, open country species, catholic species and marsh/freshwater slum species) are represented, with open country species being predominant. Shells of freshwater obligate taxa were also noted in samples 1 and 4.

Other materials

The fragments of black porous 'cokey' material and black tarry material are almost certainly derived from the combustion of organic materials (including cereals grains) at very high temperatures. The small fragments of coal are almost certainly modern in origin and may be derived from recent agricultural practises including steam ploughing. Other materials were rare but included ferrous globules and small mammal or amphibian bones.

Discussion

Although the density of material recovered differs between samples, the overall composition of the assemblages is very similar, and it appears most likely that they are all derived from a common source. The assemblages are generally cereal rich, with a far lower density of chaff elements and weed seeds. However, it is apparent from the severely puffed condition of the grains that this material has been burnt at a very high temperature, possibly on more than one occasion. This would create a false ratio of cereals to chaff and weed seeds, as only the more robust elements would survive the conflagration. The bulk of the material would, therefore appear to be derived from burnt cereal processing debris. The presence of spike-rush nutlets and stinking mayweed seeds within the assemblages may indicate that the cereals were being produced on marginal damp grassland and/or heavy clay soils.

Conclusions and recommendations for further work

In summary, the assemblages all appear to be derived from burnt cereal processing debris, which has either been deliberately or accidentally incorporated into various features on the site. Samples 3 and 4 may also include small quantities of detritus from other sources including fuel waste (heather stem fragments and straw) and industrial residues (ferrous globules). At present it is unclear whether the freshwater molluscs were resident within features on the site, or imported with materials such as thatch or riverine clays/muds.

The material within these assemblages would appear to be related to agricultural activities, which were probably being conducted at the nearby West Hall Manor. If similar well dated contexts are encountered during further excavation work, additional samples should be taken to:

- 1. Confirm the presence and range of agricultural debris
- 2. Further examine the possible presence of other fuel wastes and industrial residues.

A suitable sampling strategy should be discussed with the relevant specialists at the earliest possible date.

References

Evans, J., 1972 Land Snails in Archaeology. London.

Stace, C., 1997 New Flora of the British Isles. Second edition. Cambridge University Press

Key to Table

x = 1 - 10 specimens xx = 10 - 100 specimens xxx = 100 + specimens xxx = 100 + specimens xxx = 100 + specimens

Sample No. Context No.	010	006	3 004	019
Cereals and other food plants				
Avena sp. (grains)	×	х	x	xcf
(awn)		×		
Cereal indet. (grains)	XX	XX	×	Х
(rachis internode frag.)	X	7.5	-	
Hordeum sp. (grains)	X	х		
(rachis node)	<u> </u>	X		
Hordeum/Secale cereale (rachis nodes)	-			
	_	Х		
Secale cereale L. (grain)				xcf
Triticum sp. (grains)	X	X		
(rachis internode frag.)			X	
(rachis node frag.)	X			
T. aestivum/compactum type (rachis node)		X	Х	
Vicia faba L.	xcoty			
Herbs		410	Paris Land	
Anthemis cotula L.	X	х		X
Centaurea sp.	×			
Chenopodiaceae indet.	- ^	х	х	
Medicago/Trifolium/Lotus sp.	V	^	_^	-
	X			
Small Poaceae indet.	X			
Large Poaceae indet.	X	Х	Х	X
Rumex sp.			Х	
R. acetosella L.			Х	
Rumex/Carex sp.		Х		
Vicia/Lathyrus sp.	×		Х	
Wetland plants				
Eleocharis sp.		X	х	and the second second (in
Trees/shrubs		^	^	
Corylus avellana L.				Х
Other plant macrofossils				
Charcoal <2mm	XXX	XXX	XXX	XX
Charcoal >2mm	X	X		
Charred root/rhizome/stem	×	XX	х	Х
Ericaceae indet. (stem)		х	Х	
Indet.culm nodes			x	
Indet.seeds	X		X	
Indet.tuber	^		X	
Molluscs			^	
Terrestrial taxa - Woodland/shade species				
		WHEN THE ST		
Carychium sp.				Х
Punctum pygmaeum	X			
				V
Oxychilus sp.				Х
Oxychilus sp. Vitrea sp.		x		X
Oxychilus sp. Vitrea sp. Zonitidae indet.	x	X X	x	X
Vitrea sp. Zonitidae indet.	X		X	
Vitrea sp. Zonitidae indet. Open country species			X	
Vitrea sp. Zonitidae indet. Open country species Cepaea sp.	x		X	x
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp.	X	X		
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp.			x	x
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata	x	X		x
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica	X X	x	x	x
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica V. pulchella	x	X		x
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica V. pulchella	X X	x	x	x
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica	X X	x	x	x
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica V. pulchella Catholic species Coclicopa sp.	X X X	x xx xx	X	x
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica V. pulchella Catholic species Coclicopa sp. Trichia hispida group	X X X X	xx xx xcf	x	X X X
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica V. pulchella Catholic species Coclicopa sp. Trichia hispida group Marsh/freshwater slum species	X X X X	xx xx xcf	X	x x x x
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica V. pulchella Catholic species Coclicopa sp. Trichia hispida group Marsh/freshwater slum species Lymnaea sp.	x x x x x x x x x x x x x x x x x x x	xx xx xcf xx x	X	X X X
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica V. pulchella Catholic species Coclicopa sp. Trichia hispida group Marsh/freshwater slum species Lymnaea sp. Vertigo sp.	X X X X	xx xx xcf	X	x x x x
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica V. pulchella Catholic species Coclicopa sp. Trichia hispida group Marsh/freshwater slum species Lymnaea sp. Vertigo sp. V. antivertigo	x x x x x x x x x x x x x x x x x x x	xx xx xcf xx x	X	x x x x
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica V. pulchella Catholic species Coclicopa sp. Trichia hispida group Marsh/freshwater slum species Lymnaea sp. Vertigo sp. V. antivertigo Freshwater obligate taxa	x x x x x x x x x x	xx xx xcf xx x	X	x x x x
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica V. pulchella Catholic species Coclicopa sp. Trichia hispida group Marsh/freshwater slum species Lymnaea sp. Vertigo sp. V. antivertigo Freshwater obligate taxa Anisus leucostoma	x x x x x x x x x x x x x x x x x x x	xx xx xcf xx x	X	x x x x x
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica V. pulchella Catholic species Coclicopa sp. Trichia hispida group Marsh/freshwater slum species Lymnaea sp. Vertigo sp. V. antivertigo Freshwater obligate taxa	x x x x x x x x x x	xx xx xcf xx x	X	x x x x x
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica V. pulchella Catholic species Coclicopa sp. Trichia hispida group Marsh/freshwater slum species Lymnaea sp. Vertigo sp. V. antivertigo Freshwater obligate taxa Anisus leucostoma Bathyomphalus contortus	x x x x x x x x x x	xx xx xcf xx x	X	X X X X X
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica V. pulchella Catholic species Coclicopa sp. Trichia hispida group Marsh/freshwater slum species Lymnaea sp. Vertigo sp. V. antivertigo Freshwater obligate taxa Anisus leucostoma Bathyomphalus contortus Bithynia sp.	x x x x x x x x x	xx xx xcf xx x	X	X X X X X
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica V. pulchella Catholic species Coclicopa sp. Trichia hispida group Marsh/freshwater slum species Lymnaea sp. Vertigo sp. V. antivertigo Freshwater obligate taxa Anisus leucostoma Bathyomphalus contortus Bithynia sp. Lymnaea peregra	x x x x x x x x x x x x x x x x x x x	xx xx xcf xx x	X	X X X X X
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica V. pulchella Catholic species Coclicopa sp. Trichia hispida group Marsh/freshwater slum species Lymnaea sp. Vertigo sp. V. antivertigo Freshwater obligate taxa Anisus leucostoma Bathyomphalus contortus Bithynia sp. Lymnaea peregra Other materials	x x x x x x x x x x x x x x x x x	xx xx xcf x x x	X X X	x x x x x x
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica V. pulchella Catholic species Coclicopa sp. Trichia hispida group Marsh/freshwater slum species Lymnaea sp. V. antivertigo Freshwater obligate taxa Anisus leucostoma Bathyomphalus contortus Bithynia sp. Lymnaea peregra Other materials Black porous 'cokey' material	x x x x x x x x x x x x x x x x x	xx xx xcf xx x	X X X	x x x x x x x x x x
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica V. pulchella Catholic species Coclicopa sp. Trichia hispida group Marsh/freshwater slum species Lymnaea sp. Vertigo sp. V. antivertigo Freshwater obligate taxa Anisus leucostoma Bathyomphalus contortus Bithynia sp. Lymnaea peregra Other materials Black porous 'cokey' material Black tarry material	x x x x x x x x x x x x x x x x x	xx xx xcf x x x	X X X	x
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica V. pulchella Catholic species Coclicopa sp. Trichia hispida group Marsh/freshwater slum species Lymnaea sp. Vertigo sp. V. antivertigo Freshwater obligate taxa Anisus leucostoma Bathyomphalus contortus Bithynia sp. Lymnaea peregra Other materials Black porous 'cokey' material Black tarry material Bone	x x x x x x x x x x x x x x x x x	xx xx xcf x x x	X X X X X	x x x x x x x x x x
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica V. pulchella Catholic species Coclicopa sp. Trichia hispida group Marsh/freshwater slum species Lymnaea sp. Vertigo sp. V. antivertigo Freshwater obligate taxa Anisus leucostoma Bathyomphalus contortus Bithynia sp. Lymnaea peregra Other materials Black porous 'cokey' material Black tarry material	x x x x x x x x x x x x x x x x x	xx xx xcf x x x	X X X	x
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica V. pulchella Catholic species Coclicopa sp. Trichia hispida group Marsh/freshwater slum species Lymnaea sp. Vertigo sp. V. antivertigo Freshwater obligate taxa Anisus leucostoma Bathyomphalus contortus Bithynia sp. Lymnaea peregra Other materials Black porous 'cokey' material Black tarry material Bone Ferrous globules	x x x x x x x x x x x x x x x x x	x xx xcf x x x	X X X X X	x
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica V. pulchella Catholic species Coclicopa sp. Trichia hispida group Marsh/freshwater slum species Lymnaea sp. Vertigo sp. V. antivertigo Freshwater obligate taxa Anisus leucostoma Bathyomphalus contortus Bithynia sp. Lymnaea peregra Other materials Black tarry material Black tarry material Bone Ferrous globules Marine mollusc shell frags.	x x x x x x x x x x x x x x x x x	x xx xcf x x x	X X X X X X X	x
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica V. pulchella Catholic species Coclicopa sp. Trichia hispida group Marsh/freshwater slum species Lymnaea sp. Vertigo sp. V. antivertigo Freshwater obligate taxa Anisus leucostoma Bathyomphalus contortus Bithynia sp. Lymnaea peregra Other materials Black porous 'cokey' material Black tarry material Bone Ferrous globules Marine mollusc shell frags. Small coal fragments	x x x x x x x x x x x x x x x x x x x	x xx xcf x x x	X X X X X	x
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica V. pulchella Catholic species Coclicopa sp. Trichia hispida group Marsh/freshwater slum species Lymnaea sp. Vertigo sp. V. antivertigo Freshwater obligate taxa Anisus leucostoma Bathyomphalus contortus Bithynia sp. Lymnaea peregra Other materials Black porous 'cokey' material Black tarry material Bone Ferrous globules Marine mollusc shell frags. Small coal fragments Small mammal/amphibian bones	x x x x x x x x x x x x x x x x x x x	x xx xcf x x x	X X X X X X X X	x
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica V. pulchella Catholic species Coclicopa sp. Trichia hispida group Marsh/freshwater slum species Lymnaea sp. Vertigo sp. V. antivertigo Freshwater obligate taxa Anisus leucostoma Bathyomphalus contortus Bithynia sp. Lymnaea peregra Other materials Black tarry material Black tarry material Bone Ferrous globules Marine mollusc shell frags. Small coal fragments Small mammal/amphibian bones Vitrified material	x x x x x x x x x x x x x x x x x x x	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	X X X X X X X X X	x
Vitrea sp. Zonitidae indet. Open country species Cepaea sp. Helix sp. Vallonia sp. V. costata V. excentrica V. pulchella Catholic species Coclicopa sp. Trichia hispida group Marsh/freshwater slum species Lymnaea sp. Vertigo sp. V. antivertigo Freshwater obligate taxa Anisus leucostoma Bathyomphalus contortus Bithynia sp. Lymnaea peregra Other materials Black porous 'cokey' material Black tarry material Bone Ferrous globules Marine mollusc shell frags. Small coal fragments Small mammal/amphibian bones	x x x x x x x x x x x x x x x x x x x	x xx xcf x x x	X X X X X X X X	x

Table 1. Charred plant macrofossils and other remains from Cliff Road, Welton, Lincolnshire.

GLOSSARY

Anglo-Saxon Pertaining to the period when Britain was occupied by peoples from northern Germany, Denmark and adjacent areas. The period dates from approximately AD 450-1066.

Context

Cut

Fill

Layer

Medieval

Natural

Posthole

Post-medieval

Romano-British

Prehistoric

Domesday Survey

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 interpretation of the context (the context sheet) is created and placed in the site archive. Context numbers are identified within the report text by brackets, e.g. [004].

A cut refers to the physical action of digging a posthole, pit, ditch, foundation trench, etc. Once the fills of these features are removed during an archaeological investigation the original 'cut' is therefore exposed and subsequently recorded.

A survey of property ownership in England compiled on the instruction of William I for taxation purposes in 1086 AD.

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) that become contained by the 'cut' are referred to as its fill(s).

A layer is a term used to describe an accumulation of soil or other material that is not contained within a cut.

The Middle Ages, dating from approximately AD 1066-1500.

Undisturbed deposit(s) of soil or rock which have accumulated without the influence of human activity

The hole cut to take a timber post, usually in an upright position. The hole may have been dug larger than the post and contain soil or stones to support the post.

Alternatively, the posthole may have been formed through the process of driving the post into the ground.

The period following the Middle Ages, dating from approximately AD 1500-1800.

The period of human history prior to the introduction of writing. In Britain the prehistoric period lasts from the first evidence of human occupation about 500,000 BC, until the Roman invasion in the middle of the 1st century AD.

Pertaining to the period dating from AD 43-410 when the Romans occupied Britain.

THE ARCHIVE

The archive consists of:

21 Context records

6 Sheet of scale drawings

1 Plan record sheet

1 Section record sheet

1 Photographic record sheet

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.

Lincolnshire City and County Museum Accession Number:

2003.38

Archaeological Project Services Site Code:

WCR03

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.