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ARCHAEOLOGICAL EVALUATION ON LAND AT CURLEW DRIVE COWBIT LINCOLNSHIRE (CCB02)

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ARCHAEOLOGICAL EVALUATION ON LAND AT CURLEW DRIVE COWBIT LINCOLNSHIRE (CCB02)

Work Undertaken For
Allison Homes

June 2002

Report Compiled by
S.J.Malone B.Sc. AIFA

National Grid Reference: TF 2654 1770
Planning Application Number: H01/002/01

A.P.S. Report No. **114/01**

ARCHAEOLOGICAL PROJECT SERVICES

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Date: 11/6/02	Date: 11-06-02

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1. SUMMARY

Archaeological evaluation was undertaken on land at Curlew Drive, Cowbit, Lincolnshire in advance of residential development at the site.

The site lies in an area of known archaeological potential: previous investigations during development to the south have identified activity dating from the Roman to the medieval periods. A concentration of Roman pottery recovered during fieldwalking suggests further settlement of that date immediately to the north.

Geophysical survey undertaken on the site identified a number of possible archaeological features within the proposed development area.

The evaluation identified features on the geophysical survey plot as post-medieval drainage features. A less well defined area of magnetic enhancement was found to coincide with an area of deeper flood silts. Pottery recovered dates from Roman, medieval and post-medieval periods. The small quantities of Romano-British and medieval material attest to activity in the vicinity in those periods but no features were identified contemporary with this material.

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 1997).

2.2 Planning Background

Planning permission (Application No. H01/002/01) for the development was subject to a condition requiring the implementation of a scheme of archaeological works. Geophysical survey was undertaken as a first phase of evaluation. This was followed up by exploratory trial trenching.

Archaeological Project Services was commissioned by Allison Homes to undertake the archaeological evaluation of the site in accordance with the requirements of the local planning authority. The work was undertaken between the 2nd and 5th April 2002.

2.3 Topography and Geology

Cowbit is located 5km south of Spalding in South Holland district in the fens of south Lincolnshire (Fig. 1). The proposed development area, approximately 1ha in extent, lies to the southeast of the village centre, on the west side of Back Gate and north of Curlew Drive at National Grid Reference TF 2654 1770.

The site lies at c. 3m O.D. on relatively level ground. Local soils are of the Stockwith Series, silty over clayey calcareous alluvial gley soils (Robson 1990, 28).

2.4 Archaeological Setting

This area of the Fenland has been examined during two major archaeological surveys, those undertaken by Hallam as part of a study of the Roman Fenland (Hallam 1970) and more recently by Hayes and Lane (1992) as part of the Fenland

Survey. These two surveys have enabled a well defined picture of changing settlement patterns, environmental change and local topography to be built up.

Cowbit parish is located at the junction of the silty clays of Deeping Fen and the so-called Wash silts. It lies on the wide levees of a prehistoric course of the river Welland. During the late Saxon period the course of the river was canalised to pass through the gravel island of Crowland. Not only did this enable a direct riverine passage for the Barnack stone used to construct Crowland Abbey but also connected the Welland to the Nene, by means of a channel to the southeast, enabling access to the Fenland waterway network as a whole.

The western part of the parish lies in Cowbit Wash, an area of washland formed during deliberate repositioning of the river Welland in the mid 17th century. Numerous Iron Age and Roman pottery scatters were found in the Wash during the Fenland survey (Hayes and Lane *op. cit.*). Subsequently, one saltern, at Tollbar Drove, 1.8km northeast of Backgate, was excavated. The second of three phases of saltmaking at the site was dated by radiocarbon to 195-95cal BC (Lane 2001b).

Closer to the proposed development, Roman settlements and salterns are known some 0.6km to the southeast (Hayes and Lane 1992, fig. 107). Roman settlement features were recorded during development some 150m to the south (Rayner *forthcoming*). A concentration of Roman pottery was recovered within 50m of the northern boundary of the site during fieldwalking of immediately adjacent land (Lane 2001b).

Geophysical Survey of this site (EAS 2001) produced no clearly identifiable features, but a number of possible archaeological anomalies were recorded.

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

Three trenches measuring 30m x 1.6m were excavated, placed on specific anomalies identified during Geophysical Survey (Fig. 3).

Removal of overburden 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 location of the excavated trenches was surveyed with an EDM in relation to fixed points on boundaries and on existing buildings.

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. An equals sign between context numbers indicates that the contexts once formed a single layer or feature. Phasing was based on artefact dating and the nature of the deposits and recognisable relationships between them.

5. RESULTS

5.1 Description of the results

Deposits identified during the evaluation are divided into three phases: natural, undated, and post-medieval.

Phase 1: Natural deposits
Phase 2: Undated deposits
Phase 3: Post-medieval 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 deposits exposed during the evaluation were natural firm light grey / light brown silty clay (106) above mid-light brown silty sand (107) in Trench 1 (Fig 4); mottled orange-brown / pale grey-brown silty sand (202) in Trench 2 (Fig. 5); and orange brown silty sand (313) = (321) above darker orange-brown silty sand (316) in Trench 3 (Fig. 6). The dark brown sandy silt (314), dark sandy brown sandy silt (317) and dark brown / orange mottled sandy silt (319) formed minor variations within these two latter.

At the western end of Trench 1, an irregular linear band of silt [103], c. 1.75m wide and 0.45m deep, with shallow sides and a flattish base, was observed running approximately north-south across the trench (Fig. 4; Plates 1, 2). This is interpreted as a probable natural watercourse. A 0.1m thick layer of firm mid-dark grey silt (105) occurred above the natural (106) across the whole trench and within [103] and seems to represent a stabilisation horizon before further deposits were laid down. Above (105) a mid-grey-light brown sandy clay (104) fills [103]. Artefacts were only retrieved from the overlying subsoil (100).

At the northern end of Trench 2 [206], a possible linear feature, 0.2-0.25m wide, proved on investigation to be the remains of an animal burrow with an irregular profile and indications of further small burrows leading off.

5.3 Phase 2: Undated deposits

At the northern end of Trench 2, a narrow straight linear feature [204] was observed running east-west across the trench, 0.24m wide and 0.23m deep, with near vertical sides and a flat base filled with a mid greyish brown silty sand (203) (Plate 3). South of this a second similar feature [208] ran northwest-southeast, 0.2m wide and 0.45m deep with near vertical sides and a flat base filled with an orangish mid-brown sandy silt (207) (Fig. 5, Section 5). Both were cut from immediately below the modern topsoil but neither yielded any direct dating evidence.

5.4 Phase 3: Post-medieval deposits

A large ditch [210] / [213], up to 4.25m wide at least 0.8m deep, was identified running east-west across Trench 2 at the

location of one of the linear geophysical anomalies (Figs 3, 5; Plates 3, 4). There was evidence of two phases of use, the earlier cut [210] having become filled with a greyish brown silty loam (212), and greyish mid-brown silty loam (211) before the ditch was recut with a steeper profile [213]. The later cut was narrower, only some 2.9m wide and filled with mid-dark silty clay (209). Finds from (211) included 3 sherds of Roman pottery (3rd century), Bourne A/B ware (12th-14th century) and 18th century earthenware (Appendix 3). A recent mid-brown silty clay topsoil (201) overlay these deposits.

A second large east-west aligned ditch [320] 3.5-4.0m wide was present in Trench 3 (Figs 3, 6; Plate 5). This was not excavated to any depth owing to the abundance of post-medieval material in the fill and the shallowness of the water table here. A complex series of dark brown, dark greyish brown and orangish brown silts and sandy silts on the western (303-308) and eastern (312, 313, 315) edges may represent initial dumping or infilling with final filling of the feature represented by the firm, dark brown silt (310) and dark brown sandy clay (311). A subsoil (322) and recent topsoil (301) of mid-light brown silty clay overlay these deposits. Pottery of 18th-19th century date, clay pipe stems, and fragments of brick and glass were prominent among the finds, but earlier material was also present with an abraded sherd of 12th-14th century Bourne A/B ware recovered and also other sherds of 15th-17th century date (Appendix 3).

Overlying (104) and (105) within Trench 1 was a 0.15m thick mid-brown / light-grey clayey silt subsoil (100) (Fig. 4). This contained a rather mixed assemblage of pottery including Romano-British, medieval and post-medieval material. Three sherds from a Nene Valley colour coat vessel (3rd-4th century), 12 sherds of Bourne A/B ware (12th-14th century date) and 5 of Bourne D ware (15th-17th century) as well as sherds of 18th century earthenware and stoneware. Cockle, mussel and winkle shells were also recovered from this deposit. Recent mid-dark brown sandy clay topsoil (101) overlay all other deposits in the trench.

6. DISCUSSION

Despite the presence of Roman settlement evidence to the north and south of the site, no evidence for features of that date was recovered in the evaluation. Roman material was present in small quantities – three sherds from Trench 1, four sherds from Trench 2 – but all of this material was residual in later contexts. Five fragments of fired clay were found in Trenches 2 and 3. None of the pieces are characteristic of any particular function although none would be out of place in terms of fabric and colouration on the Iron Age or Roman salt-making sites common in the area. All were, however, recovered from contexts of post-medieval date.

Medieval pottery, the earliest being Bourne A/B ware of the 12th-14th centuries, was recovered from all three trenches, but once again no features or deposits can be assigned to this period. Similar material was recovered during fieldwalking of the land immediately to the north (Lane 2001b) and is assumed to derive from manuring scatters, the focus of medieval occupation being further to the north and west.

Building material was recovered from all three trenches (Appendix 3) and probably signifies post-medieval constructions in the vicinity. Several of the handmade bricks are wasters and investigations nearby also recovered a moderate amount of similarly misfired brick (Healey *et al.*, forthcoming). Cumulatively, the evidence from the two sites strongly indicate that a

brick clamp or similar was located in the general vicinity.

Two large post-medieval linear features were identified in Trenches 2 and 3. These matched the locations of two linear features seen on the geophysical survey running parallel to the extant field boundaries and interpreted as agricultural features. They are clearly field boundary ditches / dykes. The southernmost is still mapped as such on the 1959 Ordnance Survey 1:10,560; both are also visible on aerial photographs of the area.

The two undated narrow linear features towards the northern end of Trench 2 are probably also drainage features of post-medieval date. Despite the absence of a ceramic drain within these, the very straight nature of the cuts, with near vertical sides and a flat base would support that interpretation. A further drainage feature, observed only in the southeastern section of Trench 3 was lined with fine gravel but again contained no ceramic pipe.

7. CONCLUSIONS

The presence of Roman pottery across the site testifies to the proximity of settlement of that date both to the north and to the south. However, no features of that date were identified within the evaluation trenches and the quantity of pottery is small, so that this area probably falls outside of the immediate vicinity of settlement. Medieval material is likewise relatively sparse and for the most part residual. No features of earlier than post-medieval date were identified.

8. ACKNOWLEDGEMENTS

Archaeological Project Services wish to acknowledge the assistance of Allison Homes who commissioned the work and provided use of accommodation on site. The project was coordinated by Tom Lane who also edited the report.

9. PERSONNEL

Project Coordinator: Tom Lane
Site Supervisor: Steve Malone
Site Assistants: Pete Watkin, Bob Garlant, Maria West
Photographic reproduction: Sue Unsworth
CAD Illustration: Steve Malone
Post-excavation Analyst: Steve Malone

10. BIBLIOGRAPHY

EAS 2001, Curlew Drive, Cowbit, Geophysical Survey. Unpublished Client Report

Hallam, S.J., 1970 'Settlement round the Wash' in Phillips, C.W. (ed.) *The Fenland in Roman Times*. Royal Geog. Soc. Research Series 5, 22-113

Hayes, P.P. and Lane, T.W., 1992 *The Fenland Project No. 5: Lincolnshire Survey, the South-West Fens*, East Anglian Archaeology 55

Healey, H., Hall, R., Lane, T. and Taylor, G., forthcoming 'The Post-Roman Pottery and Other Finds', in T. Rayner, *Archaeological Investigations at Backgate, Cowbit, Lincolnshire* {provisional title], Archaeological Project Services report

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

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

Lane, T. 2001a, 'An Iron Age Saltern in Cowbit Wash, Lincolnshire', in Lane, T. and Morris, E.L, (eds) *A Millennium of Saltmaking: Prehistoric and Romano-British Salt Production in the Fenland,* Lincolnshire Archaeology and Heritage Reports Series 4, 13-97

Lane, T., 2001b Geophysical Survey and Fieldwalking at Land off Backgate, Cowbit, Lincolnshire (BGC 01), Unpublished APS Client Report, 45/01

Rayner, T. forthcoming *Archaeological Investigations at Backgate, Cowbit, Lincolnshire* {provisional title], Archaeological Project Services report

Robson, J.D., 1990, *Soils of the Boston and Spalding District,* Memoir of the Soil Survey of Great Britain

11. ABBREVIATIONS

APS Archaeological Project Services

IFA Institute of Field Archaeologists

SMR Sites and Monuments Record

Figure 1: General Location Plan

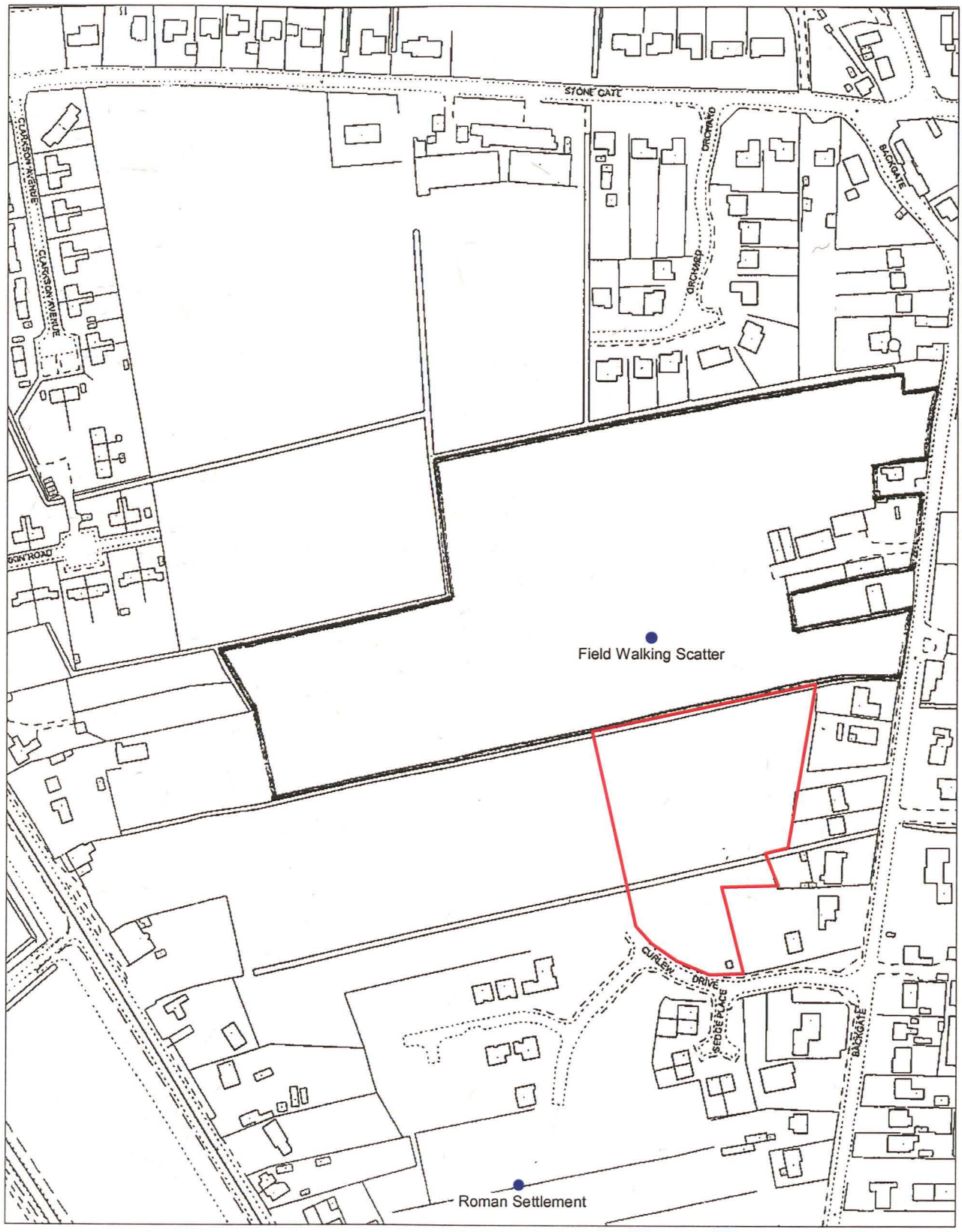


Figure 2 Location plan

Figure 3 Layout of trenches

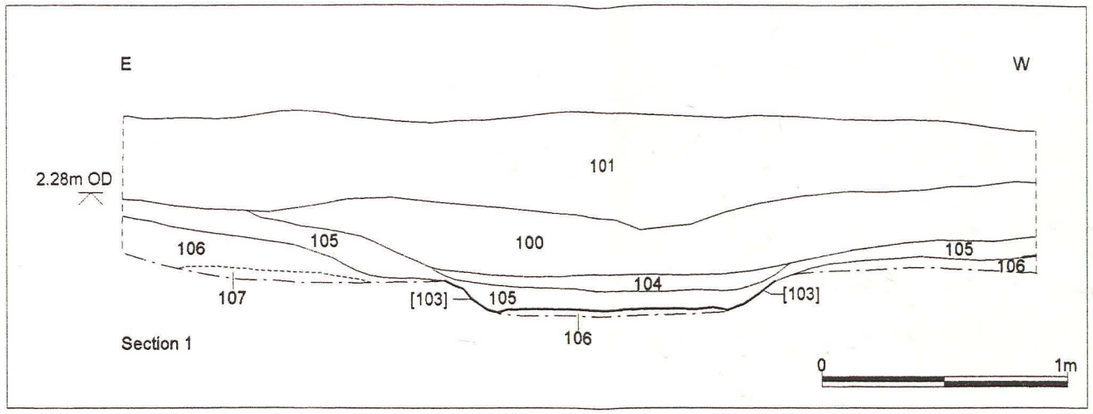
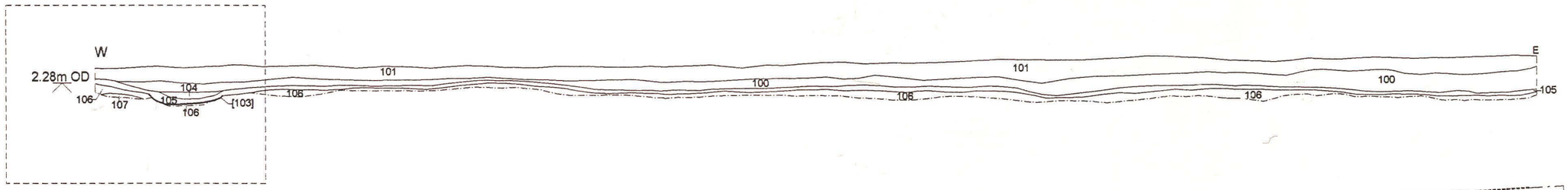


Fig 4A



Section 1 (Fig 4A)

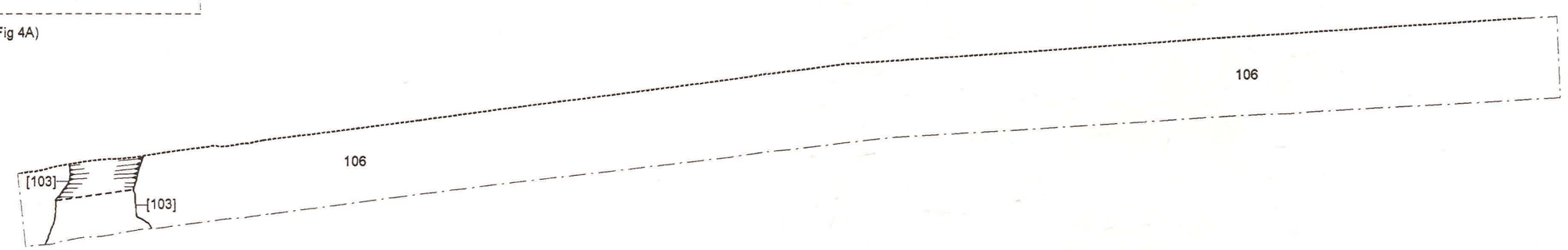


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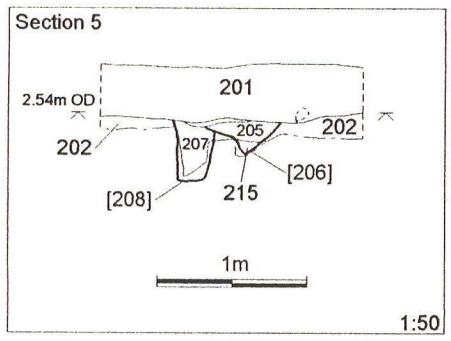
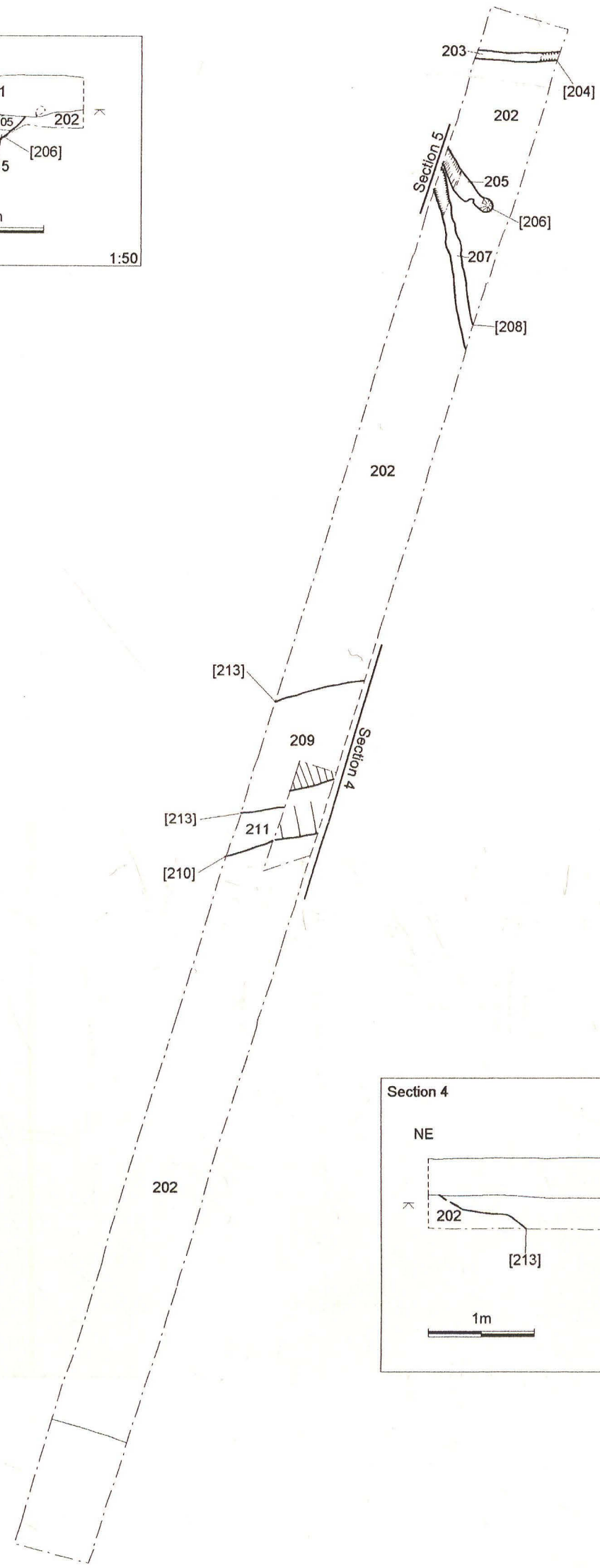
Figure 4 Trench 1: post-excavation plan and section





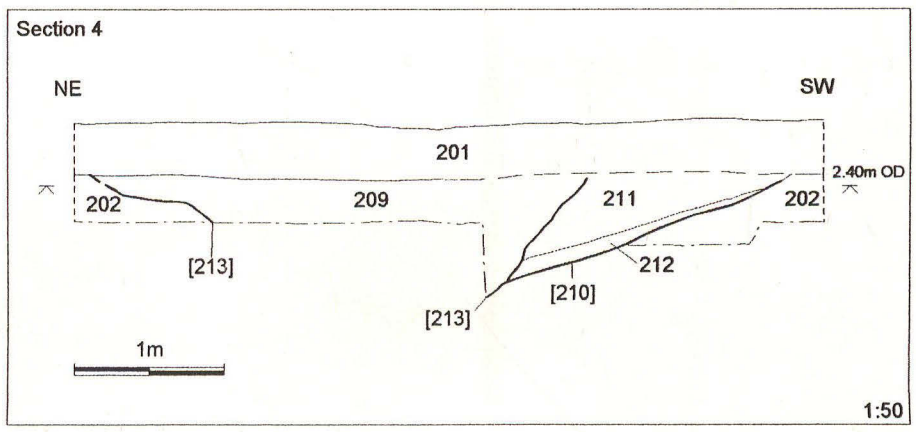


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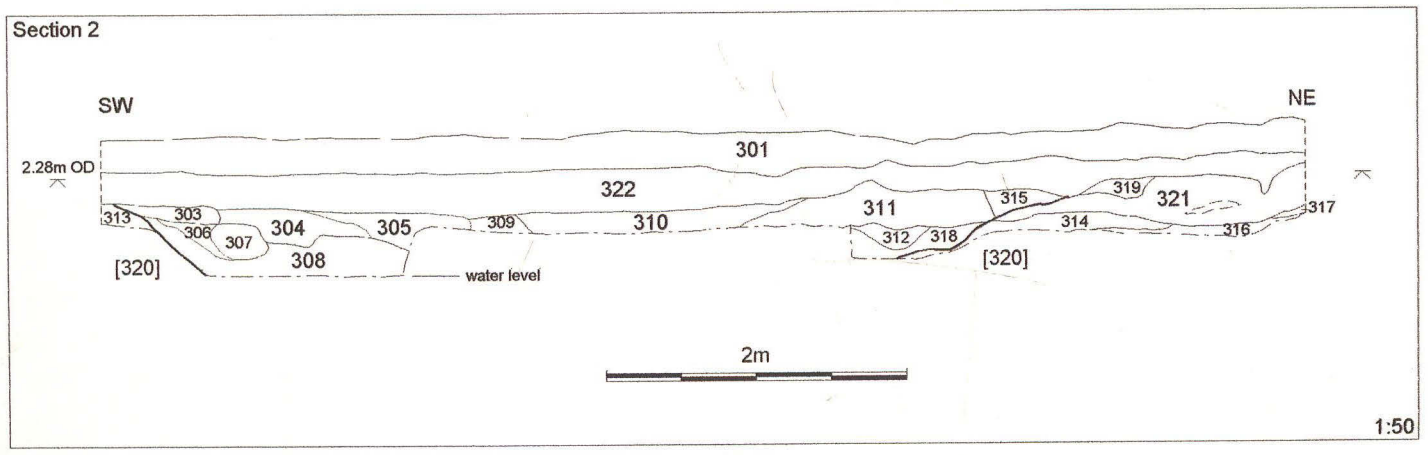
Figure 5 Trench 2: post-excavation plan and section



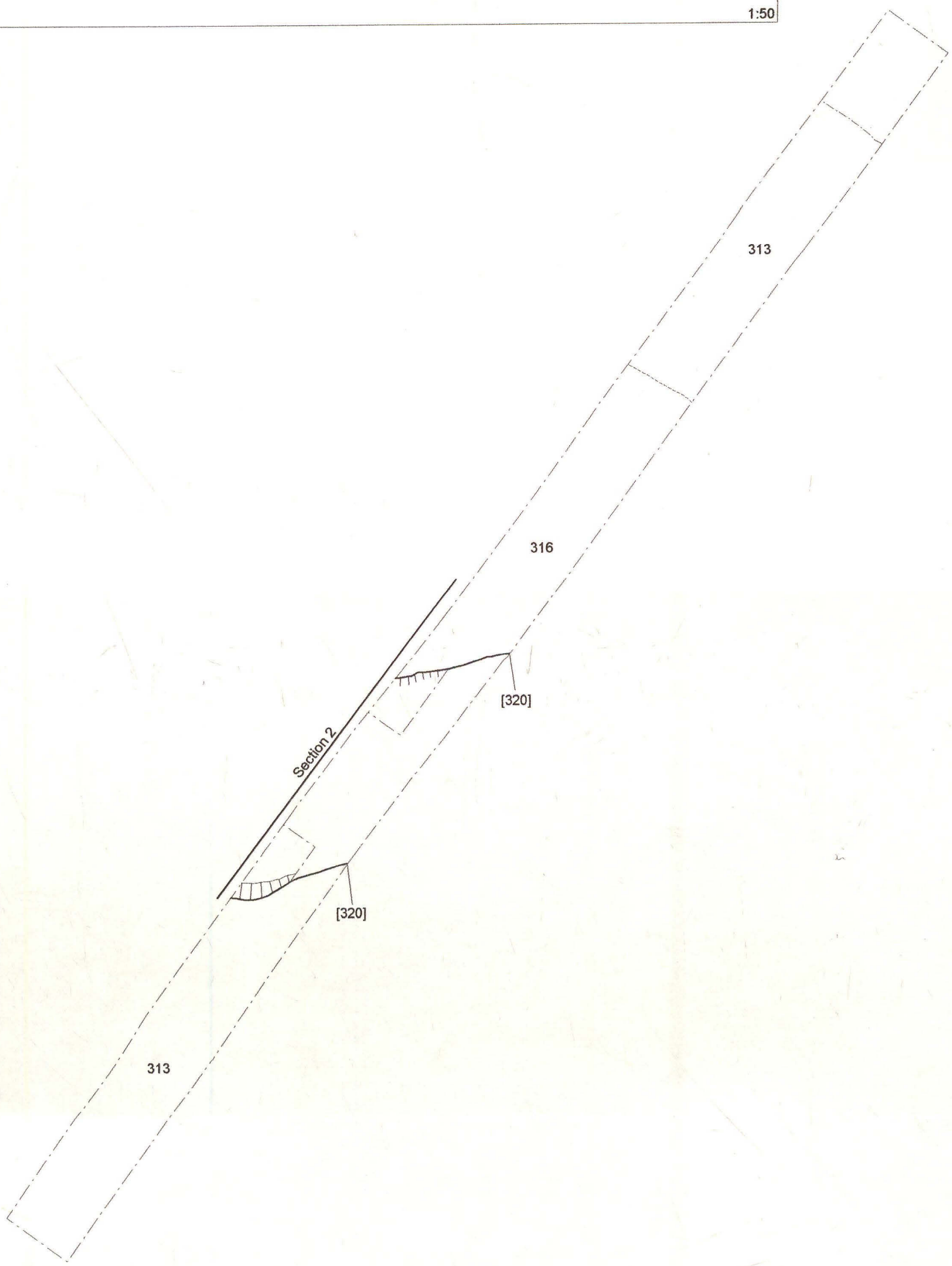


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Figure 6 Trench 3: post-excavation plan and section

Plate 1 Trench 1 looking east, [103] in foreground

Plate 2 Trench 1, excavated section of [103], looking north

Plate 3 Trench 2, looking SW, [204] in foreground, drainage ditch [210] in distance

Plate 4 Trench 2, excavated section of [210]/ [213], looking north

Plate 5 Trench 3, looking northeast, showing drainage ditch [320]

Appendix 1

Specification for Archaeological Evaluation
on land at Curlew Drive, Cowbit, Lincolnshire

1 SUMMARY

1.1 *This document comprises a specification for the archaeological field evaluation of land at Curlew Drive, Cowbit, Lincolnshire.*

1.2 *The area is archaeologically sensitive, lying close to the centre of the medieval village. Roman settlements have been located previously both to the north and south and there have been frequent finds of Roman material in the vicinity, including briquetage.*

1.3 *Planning permission has been granted for residential development of the site. The archaeological works are being undertaken as a condition of that permission.*

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 at Curlew Drive, Cowbit, Lincolnshire. The site is located at National Grid Reference TF 265 174.

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

3.1 Cowbit is located 5km south of Spalding in the South Holland district of Lincolnshire. The proposed development area, approximately 1ha in extent, lies to the southeast of the village centre, on the west side of Back Gate at National Grid Reference TF 265 174.

4 PLANNING BACKGROUND

4.1 Planning permission for the development is subject to a condition requiring the implementation of an archaeological scheme of works. This is to comprise a programme of trial trenching of the site.

5 SOILS AND TOPOGRAPHY

5.1 The site lies at c. 3m OD. on relatively level ground. Local soils are of the Stockwith Series, silty over clayey calcareous alluvial gley soils (Robson 1990, 28).

6 ARCHAEOLOGICAL OVERVIEW

6.1 Cowbit lies in an area of dense Roman and Iron Age settlement and industry. Saltmaking was common in the area. An Iron Age saltern has been excavated to the west, in Cowbit Wash. This provided a radiocarbon date of 185-95 BC for the *second* phase of activity on the site (Lane 2001a).

6.2 In the immediate vicinity Roman sites have been located recently little more than 40m north of the northern boundary of this site (Lane 2001b) and less than 100m to the southwest.

6.3 Geophysical Survey of this site in 2001 produced a number of anomalies interpreted as 'possible archaeological disturbance'.

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.

7.1.1 The objectives of the work will be to:

7.1.2 Establish the type of archaeological activity that may be present within the site.

7.1.3 Determine the likely extent of archaeological activity present within the site.

7.1.4 Determine the date and function of the archaeological features present on the site.

7.1.5 Determine the state of preservation of the archaeological features present on the site.

7.1.6 Determine the spatial arrangement of the archaeological features present within the site.

7.1.7 Determine the extent to which the surrounding archaeological features extend into the application area.

7.1.8 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 The archaeological curator has confirmed the requirement for excavation of three trenches each 30m long. The position of the trenches has been established by the curator and based on the results of the Geophysical Survey.

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 three (3) trenches, each measuring 30m x 1.6m, placed on specific anomalies identified during Geophysical Survey. Trenches may be widened and stepped-in should archaeological deposits extend below 1.2m depth. Augering may be used to determine the depth of the sequence of deposits present.

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.

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.

11 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, Allison Homes; the Archaeological Officer, Lincolnshire County Council; 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 Archaeological Officer, Lincolnshire County Council, on behalf of South Holland District Council. 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.

Task	Body to be undertaking the work
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: J.Young, independent archaeologist; H. Healey, Independent Archaeologist or G Taylor, APS
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 4 staff, a supervisor and 3 assistants, and to take five (5) days.

18.2 Post-excavation analysis and report production is expected to take 10 person-days within a notional programme of 6 days. A project officer or supervisor will undertake most of the analysis, with assistance from the finds supervisor and CAD illustrator.

18.3 Contingency

18.3.1 Contingencies have been specified in the budget. These include: environmental sampling/analysis of waterlogged remains; pump; Roman pottery; Anglo-Saxon pottery (not expected); Medieval pottery; faunal remains -large quantities (moderate amounts expected and allowed for); Conservation and/or Other unexpected remains or artefacts.

18.3.2 Other than the pump, the activation of any contingency requirement will be by the archaeological curator, 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

Lane, T. 2001a, 'An Iron Age Saltern in Cowbit Wash, Lincolnshire', in Lane, T. and Morris, E.L, (eds) *A Millennium of Saltmaking:Prehistoric and Romano-British Salt Production in the Fenland,* Lincolnshire Archaeology and Heritage Reports Series 4, 13-97

Lane, T., 2001b Geophysical Survey and Fieldwalking at Land off Backgate, Cowbit, Lincolnshire (BGC 01), Unpublished APS Client Report, 45/01

Robson, J.D., 1990, *Soils of the Boston and Spalding District,* Memoir of the Soil Survey of Great Britain (Silsoe)

Specification: Version 1, 15/3/02

Appendix 2

Context Summary

Trench 1

Context No.	Type	Description	Thck (m)	Interpretation
100	Deposit	Firm, mid-brown-light grey clayey silt, occ. stone	0.15	Subsoil
101	Deposit	Firm, mid-dark brown clayey sand, occ. stone	0.40	Topsoil
103	Cut	North-south linear, round base, 1.75m wide	0.40	Natural water channel/drain
104	Deposit	Firm, mid-grey-light brown clay and sand, occ. gravel	0.09	Fill of 103
105	Deposit	Firm, mid-dark grey silt	0.10	layer
106	Deposit	Firm, light grey-light brown clay and sand	0.10	Natural
107	Deposit	Firm, mid-light brown sand	0.05	Natural

Trench 2

Context No.	Type	Description	Thck (m)	Interpretation
200		Unstratified finds		
201	Deposit	Friable, mid-brown silty clay loam	0.30	Topsoil
202	Deposit	Friable, mottled orange brown and pale greyish brown silty sand	0.60	Natural
203	Deposit	Friable, mid-greyish brown silty clay loam	0.23	Fill of 204
204	Cut	East-west linear, steep sides, flat base, 0.24m wide	0.23	Land drain
205	Deposit	Friable, mid-greyish brown silty clay loam	0.15	Fill of 206
206	Cut	NNW-SSE linear, steep sides, round base, 0.25m x 0.20m wide	0.15	Animal Burrow
207	Deposit	Friable, orangish mid-brown clayey silt	0.35	Fill of 208
208	Cut	North-south linear, vertical sides, flat base, 0.20m wide	0.45	Modern drain
209	Deposit	Friable, mid-dark silty clay	0.73+	Fill of 213
210	Cut	East-west linear, shallow sides, 1.65m+ wide	0.68	Drainage ditch
211	Deposit	Friable, greyish mid-brown silty loam	0.54	Fill of 210
212	Deposit	Friable, greyish brown silty loam	1.0	Fill of 210
213	Cut	East-west linear, steep sides, 3.20m wide	0.73	Drainage Ditch

Trench 3

Context No.	Type	Description	Thck (m)	Interpretation
301	Deposit	Loose, light brown silt, occ. gravel	0.23	Topsoil
302		finds from within [320]		
303	Deposit	Firm, dark brown silty clay, occ. brick	0.18	Fill of [320]
304	Deposit	Firm, grey and yellow silt, occ cbm	0.26	Fill of [320]
305	Deposit	Firm, dark brown silt, occ. cbm	0.27	Fill of [320]
306	Deposit	Firm, dark brown silt	0.41	Fill of [320]
307	Deposit	Firm, dark greyish brown silt, occ. cbm	0.25	Fill of [320]
308	Deposit	Firm, darkish brown silt, occ. cbm	0.32	Fill of [320]
309	Deposit	Firm, mid-brown silt, occ. gravel	0.11	Fill of [320]
310	Deposit	Firm, dark brown silt	0.15	Fill of [320]
311	Deposit	Firm, dark brown sandy clay, occ. brick	0.27	Fill of [320]
312	Deposit	Firm, dark brownish grey sandy silt, occ. brick	0.16	Fill of [320]
313	Deposit	Soft, orangish-brown silty sand	0.20	Natural
314	Deposit	Firm, dark brown sandy silt	0.14	Natural
315	Deposit	Firm, mottled brown and orange sandy silt	0.20	Fill of [320]
316	Deposit	Firm, dark orangish brown sandy silt	0.10	Natural
317	Deposit	Firm, dark brown sandy silt	0.25	Natural
318	Deposit	Firm, mid-brown sandy silt	0.35	Fill of [320]
319	Deposit	Firm, dark brown sandy silt	0.15	layer
320	Cut	Northeast- southwest linear, steep sides, 5.40m wide	-	Drainage ditch
321	Deposit	Soft, orangish-brown silty sand	0.30+	Natural
322	Deposit	Firm, mid-brown silty clay, occ. stone	0.25	Subsoil

Abbrieviations

Thck. Thickness
occ. occasional
cbm ceramic burnt material

Appendix 3

THE FINDS

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

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 46 fragments of pottery weighing 535g was recovered from 4 separate contexts. In addition to the pottery, a small quantity of other artefacts, brick/tile, clay pipe, iron, glass and stone, comprising 20 items weighing a total of 2.926kg was retrieved as well as fired clay (5 pieces weighing 50g). A quantity of faunal remains was also recovered.

Provenance
The material was recovered from subsoil (100), ditch fills (209, 211 and 302), fill of burrow (205), and as unstratified finds (200).

Roman pottery derives from Nene Valley kilns and local sources. Most of the medieval pottery was made in moderate proximity to Cowbit, at Bourne 20km to the west. Some of the earthenwares are probably also Lincolnshire products, though there are several pieces made in Staffordshire and one foreign import from Germany.

Range
The range of material is detailed in the tables.

Table 1: Pottery

Context	Fabric Code	Description	No.	Wt (g)	Context Date
100	BOU	Bourne D ware, separate vessels, 15th-17th century	5	49	18th century
	BL	Red painted earthenware, black glazed, separate vessels, 18th century	2	14	
	GRE	Glazed red earthenware, abraded, 18th century	1	7	
	STSL	Staffordshire slipware, abraded, 18th century	1	6	
	GS	Salt-glazed grey stoneware, 18th century	1	5	
	BOUA	Bourne A/B ware, 4 abraded, 2 sooted externally; 2 link; 1 with applied thumbed strip, incls pancheon and cooking pot, pancheon slightly distorted, 12th-14th century	12	178	
	SLST	South Lincs. Shelly ware, pancheon, 11th-13th century	1	44	
200	BOU	Bourne D ware, 15th-17th century	1	11	15th-17th century
	BOUA	Bourne A ware, 12th-14th century	1	7	
	TAS	Toynton All Saints ware, pancheon, 13th-15th century	1	18	
211	BOUA	Bourne A/B ware, 12th- 14th century	2	11	18th century
	BL	Red painted earthenware, black glazed, 18th century	1	12	
302	BOUA	Bourne A/B ware, abraded, 12th-14th century	1	6	19th century

Context	Fabric Code	Description	No.	Wt (g)	Context Date
	BOU	Bourne D ware, 1 abraded, 15th-17th century	1	16	
	MY	Midlands Yellow ware bowl, abraded, 17th century	1	24	
	MP	Midlands Purple-type ware, 16th- 17th century	3	86	
	FREC	Frechen stoneware, 15th- 17th century	1	5	
	Bl	Red painted earthenware, black glazed, 18th century	4	13	
	BL?	Red painted earthenware, abraded (no surviving glaze), 17th- 18th century	4	19	
	CRMWARE	Creamware, late, early 19th century	1	3	
	EMOD	White glazed tableware. 19th century	1	1	

Table 2: Roman Pottery

Context	Fabric	Form	Vessno	Alter	Comments	Join	Shs	Wt
100	NVCC	CLSD	1	VABR	BSS J;THICKER; CC LOST;WT FAB		3	7
	ZZZ				W 18C MATERIAL			
	ZDATE				3-4C/POSTRO			
200	NVGW	B36			RIM ONLY		1	9
	ZZZ				W 16-17C MATERIAL			
	ZDATE				L2-3C/POSTRO			
205	SAMCG?			VABR	BS; ALL SURFS LOST;MICACEOUS		1	1
	ZZZ				SAM ONLY			
	ZDATE				ML2C			
	LOOL				BS; LINCS OOLITIC FABRIC; FABRIC SAMP		1	5
	NVGW	JWM	1	ABR	RIMS NECK; CF NV10		2	14
	ZZZ				W 18C MATERIAL			
211	ZDATE				3C/POSTRO			

Pottery of 2nd-4th century date is the earliest ceramic recovered but is represented by only 8 sherds of 5 vessels and all is redeposited with later material. Pottery of medieval date, 11th-15th century, provides about one-third of the assemblage, though is again mostly redeposited with later material. Locally-made Bourne wares of medieval and post-medieval date contribute over half the total assemblage. Investigations on another site in close proximity retrieved a pottery assemblage of comparable composition to this, and similarly dominated by Bourne wares (Healey *et al.*, forthcoming). There is one foreign import, from Frechen in Germany.

Table 3: Other Artefacts

Context	Material	Description	No.	Wt (g)	Context Date
100	Clay pipe	Bowl fragment, thick walled, 17th century	1	1	19th–20th century
	Slate	Roofing slate, ?Welsh, post-medieval	1	1	
	CBM	Brick, handmade, 1 post-medieval	4	63	

Context	Material	Description	No.	Wt (g)	Context Date
	CBM	Tile, 15mm thick, oxidized, abraded, early post-medieval	1	42	
	CBM	Brick, machine-made vented brick, 19th-20th century	1	3	
	Stone	Limestone trough, apparently rectangular in plan	2 (link)	1149	
	Stone	Roof tile, micaceous sandstone	2	79	
200	Slate	Roofing slate, Welsh, post-medieval	1	6	19th century
	CBM	Brick, handmade, post-medieval	3 (2 link)	45	
	Iron and copper alloy	Cast copper alloy hinge, with iron bars from it, clad in copper alloy sheet with spiral pattern, 19th century	1	108g	
209	CBM	Brick, handmade, 55mm thick	1	964	Late medieval-early post-medieval
	Iron	Possible blade, 128mm long, 18mm wide	1	80	
302	Clay pipe	Stems, bore 5/64", 18th century	2	3	18th century
	Clay pipe	Stems, bore 6/64", 17th century	2	5	
	Clay pipe	Stems, bore 7/64", 17th century	1	5	
	CBM	Brick, handmade, 1 post-medieval, 3 are wasters, late medieval-post-medieval	9	276	
	Glass	Window glass, post-medieval	1	2	
	Coal	Coal	3	7	
	Stone	Roofing tile	1	63	
	Stone	Oolitic limestone, natural	1	24	

Building material is relatively common and probably signifies post-medieval constructions in the vicinity. Several of the handmade bricks are wasters and investigations nearby also recovered a moderate amount of similarly misfired brick. Cumulatively, the evidence from the two sites strongly indicate that a brick clamp or similar was located in the general proximity.

Table 4: Fired Clay

Context	No.	Max dimensions	Wt (g)	Comments
211	1	22 x 18 x 7mm	6	Contains part of one smoothed external surface which is reddish brown in colour. Internal is light purple. Sandy/silty clay fabric with one fragment of shell inclusion.
	1	45 x 35 x 21mm	22	Largely amorphous piece with possible external surface which exhibits yellowish coating on the red/light brown coloured fabric of the remainder of the piece. Fabric is chiefly silty but contains small linear vesicules where vegetation filler may have been burned out.
	1	22 x 11 x 6mm	2	Amorphous fragment with reddish silty fabric
	1	29 x 20 x 12mm	8	Amorphous hard-fired fragment varying in colour from mid brown to purple to grey.
302	1	39 x 31 x 9mm	12	Amorphous shaped piece with reddish/light brown sandy silty fabric with traces of vegetation

Discussion

None of the pieces are characteristic of any particular function although none would be out of place in terms of fabric and colouration on the Iron Age or Roman salt making sites common in the area.

Table 5: The Faunal Remains

Context	Species	Description	No.	Wt (g)	Comments
100	Cattle sized	unidentified	3	12	Very chalky
	Cockle	Shells	3	4	
	Mussel	Shells	4	4	
	Winkle	Shell	1	4	
200	Cattle sized	Calcaneus	1	8	
	Cattle sized	?femur	1	18	
	unknown	unidentified	1	4	juvenile
205	Cattle sized	mandible	2	28	fragments
211	Sheep sized	unidentified	1	2	
	Garden snail	Shells	2	5	Complete
	Banded snail	Shells	5	9	Mostly complete
302	Cattle sized	unidentified	7	25	Fragments
	Cockle	Shell	2	2	Fragments
	Ramshorn snail	Shell	1	1	Fairly complete

The animal bone is dominated by cattle with some sheep present. However, much of this material is very fragmentary and not always identifiable.

All of the marine mollusc shells, of cockle, mussel and winkle, are food residues. The other species are natural to the site. A largish group from deposit (211) consists of garden snails, *Helix aspersa*, and banded snails, *Helix nemoralis*. Both are terrestrial species, though occur widely and are not useful indicators of past environmental conditions. The garden snail, in particular, is often associated with human occupation (McMillan 1973, 124-5). A ramshorn snail shell was also recovered, from deposit (302). This species, *Planorbis planorbis*, inhabits hard freshwater, often in ponds and ditches and frequently in small habitats (*ibid.*, 110). This indicates that deposit (302) was probably laid down in freshwater.

Condition

All the material is in good condition, apart from the animal bone from Context (100), 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 Cowbit, including in immediate proximity to the present site. Examination of one of these nearby sites yielded an assemblage of medieval and post-medieval pottery comparable with that from the current evalaution. Additionally, waster or misfired handmade bricks were found on the nearby site, as here (Healey *et al.*, forthcoming). There has also been reported study of the archaeological and historical evidence for the parish. Details of archaeological sites and discoveries in the area are maintained in the Lincolnshire County Council Sites and Monuments Record.

Potential

The Roman material from the site is consistent with the known areas of settlement in the immediate vicinity, but is small in quantity and of little potential in itself. The collection of medieval and early post-medieval pottery fragments is of moderate local potential and significance and is likely to reflect habitation of both periods at the site or in the immediate vicinity. Moreover, the close comparison between the compositions of this assemblage and that from an adjacent site is mutually enhancing and emphasises the indications of medieval and later settlement in the vicinity. Additionally, the discovery of brick wasters at both this and the adjacent site is of high local potential and signifies brick making in the area.

References

Healey, H., Hall, R., Lane, T. and Taylor, G., forthcoming 'The Post-Roman Pottery and Other Finds', in T. Raynor, *Archaeological Investigations at Backgate, Cowbit, Lincolnshire* {provisional title], Archaeological Project Services report

McMillan, N. F., 1973 *British Shells*

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**

Appendix 4

GLOSSARY

Bronze Age	A period characterised by the introduction of bronze into the country for tools, between 2250 and 800 BC.
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, *e.g.*(004).
Dumped deposits	These are deposits, often laid down intentionally, that raise a land surface. They may be the result of casual waste disposal or may be deliberate attempts to raise the ground surface.
Iron Age	A period characterised by the introduction of Iron into the country for tools, between 800 BC and AD 50.
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.
Neolithic	The 'New Stone Age' period, part of the prehistoric era, dating from approximately 4500-2250 BC.
Post-medieval	The period following the Middle Ages, dating from approximately AD 1500-1800.
Prehistoric	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.
Romano-British	Pertaining to the period dating from AD 43-410 when the Romans occupied Britain.
Saltern	Salt producing site typified by ash, derived from fuel needed to evaporate sea water, and briquetage.
Saxon	Pertaining to the period dating from AD 410-1066 when England was largely settled by tribes from northern Germany.

Appendix 5

THE ARCHIVE

The archive consists of:

43	Context records
14	Scale drawings
2	Photographic record sheets
1	Plan record sheet
1	Section record sheet
3	Context record sheets
5	level sheets
1	Stratigraphic matrix

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 entitled *Conditions for the Acceptance of project Archives*, produced by the Lincolnshire City and County Museum.

City and County Museum Accession Number: 2002.152

Archaeological Project Services Site Code: CCB 02

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.