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**ARCHAEOLOGICAL EVALUATION
ON LAND AT
BOSTON ROAD,
SUTTERTON,
LINCOLNSHIRE
(BRS01)**

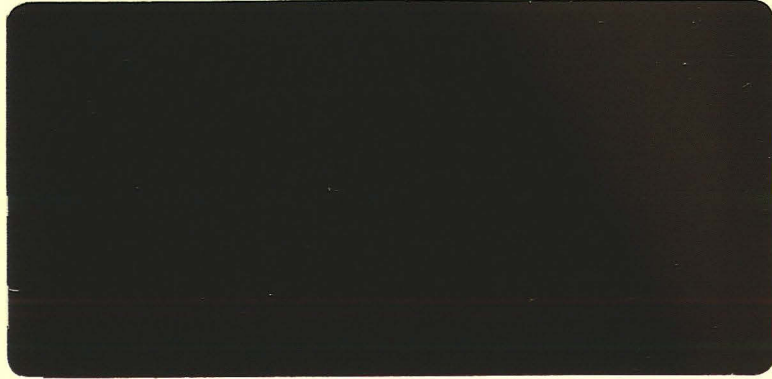


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ARCHAEOLOGICAL
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Conservation
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**ARCHAEOLOGICAL EVALUATION
ON LAND AT
BOSTON ROAD,
SUTTERTON,
LINCOLNSHIRE
(BRS01)**

Work Undertaken For
Persimmon Homes

August 2001

Report Compiled by
Rachael V. Hall BA (Hons) PIFA

National Grid Reference: TF 2870 3580
Planning Application N^o: B/00/0441
Lincolnshire County Museum Accession N^o:2001.248

ARCHAEOLOGICAL PROJECT SERVICES



A.P.S. Report No.115/01

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1. SUMMARY

Archaeological evaluation was undertaken in response to a planning application for the construction of residential housing at Boston Road, Sutterton, Lincolnshire

The site lies to the northeast of the present village of Sutterton and is currently in use as arable fields and an area of glasshouses. Although a variety of remains have been found previously around Sutterton no archeological finds or features were known from the application area and none were found during the evaluation. However anomalies of possible archaeological origin were noted on an earlier Geophysical Survey but no trace of these was found. Therefore the site has only a low potential for archaeological remains.

* see Appendix 3

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

Planning permission (Application No. B/00/0441) for development was subject to a condition requiring the implementation of a

programme of archaeological works.

Archaeological Project Services (APS) was commissioned by Persimmon Homes to undertake the archaeological evaluation of the site in accordance with the requirements of the local planning authority. The work was undertaken between 20th - 22nd of August 2001 in accordance with a specification for investigation prepared by APS and approved by the Community Archaeologist for Boston.

2.3 Topography and Geology

Sutterton village is situated in the Boston district of Lincolnshire, approximately 8km southwest of Boston (Fig. 1). The site is located to the east of Boston Road on the north side of the village. It is centred on NGR TF 2870 3580 and lies at a height of c.3m above OD.

The site lies on calcareous alluvial gley soils of the Agney Association developed on marine alluvium (Hodge *et al.* 1984, 87).

2.4 Archaeological Setting

Sutterton itself is not mentioned in the Domesday Survey of 1086. However, the same survey recorded ploughland and meadow in Dowdyke, which is in Sutterton parish (Foster and Longley 1976, 60). The extinct settlement of *Riche*, the site of which lies c.400m to the north of the proposed development area, was recorded in the Domesday Book. Count Alan had land for 10 ploughs and 12 acres of meadow at this settlement which was in the jurisdiction of Drayton (Morris 1986, 12; 74).

The place-name Sutterton is Old English in origin and refers to 'the shoemakers' village'

(Cameron 1998, 120). It is first mentioned as *Suterton* in 1177 AD. Riche may derive from the Old English *ric*, meaning 'stream, ditch'. Dowdyke may mean 'ditch of the doves', though it is more probable that the first element is the personal name *Duve* (Ekwall 1974, 386; 149).

In 1295, the jurors of Holland made a verdict that all the owners of land on the *Mistledyk* in Sutterton and Algarkirk were equally responsible with other landowners for the upkeep of the sea-dykes in the two parishes. This *Mistledyk* appears to have been on the boundary of the two parishes and may be identifiable with the Three Towns Drain, part of which flows in the immediate proximity of the present investigation site (Hallam 1965, 49-50).

Prehistoric Archaeology

No prehistoric archaeological evidence was identified within the assessment area. It is likely that any remains from this period are masked by later alluvial deposits.

Romano-British Archaeology

The Romano-British period (50 - 410 AD) is principally represented by a site which lies to the south of the village. An evaluation and watching brief undertaken at this location revealed pits and ditches containing charred grain and pottery dating mainly to the mid-3rd century AD (Herbert 1996). Subsequent excavations at the site have exposed the remains of kilns or corn driers and a possible cob-walled structure. It has been suggested that the site extended to the south and west of the excavated area and that it had lay on the edge of a brackish creek (Mark Wood *pers. comm.*).

A group of cropmarks of a droveway and

enclosures is shown to the south of Sutterton village. Although these are undated, Romano-British pottery has been found in this field and it is probable that the cropmarks are also of this date.

Earlier finds of Romano-British pottery and 'clay balls' have been made to the east of Station Road and are probably associated with this site.

Saxon Archaeology

No archaeological evidence of Saxon (410 - 1066 AD) date has been identified within the assessment area.

Medieval Archaeology

The proposed development site lies between the remains of two medieval (1066-1500 AD) settlements. The site of the deserted village of Riche lies *c.*400 to the north of the development site. The medieval origins of Sutterton are indicated by its parish church. It is dedicated to St. Mary and has late Norman style aisle doorways. The chancel is Early English and the nave and aisles are in the Decorated style. The spire was rebuilt in 1787 and again with the tower and other parts of the church in 1861-3 (Pevsner 1995, 730). A medieval coffin lid has been found to the west of the proposed development site.

Medieval pottery has been found at a number of locations to the west and south of the proposed development site. A cluster of medieval and post-medieval artefacts were also found adjacent to the cemetery, about 0.5km to the south (APS 1994b, 6).

Post-Medieval Archaeology

An Elizabethan silver coin found to the south of Sutterton village, is the principal post-medieval artefact to have been found within

the assessment area. The site of Sutterton House, which was built in the early 17th century lies c. 300m to the west of the proposed development site.

The site of a post-medieval dovecote lies in Algarkirk parish to the east of the proposed development site.

To the south of the site on Station Road is the Georgian House a two storey house dating from the early 18th century and constructed of red brick with a concrete tiled roof. Both it and its brick outbuildings are Grade II listed (DoE 1988, 35-9).

3. AIMS

The aim of the evaluation was to gather sufficient 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

Trial trenching was used to enable in situ determination of the sequence, date, nature, depth, density and environmental potential of any archaeological deposits. Six trenches measuring 2m wide by 20m long (2% of the evaluation area), were located to provide sample coverage and to target possible features identified in the geophysical survey, of the two areas to be investigated. Three trenches were located in the field north of the glasshouses (Area 2) and three in the field south of the glasshouses (Area 3).

A mechanical excavator with a toothless ditching bucket excavated the trenches under archaeological supervision. No archaeological features were encountered beneath the topsoil in any of the six trenches, so the mechanical excavator stripped successive spits to an eventual depth of 1.2m beneath present ground surface. These were carefully monitored to ensure that the natural layers were not sealing any earlier archaeological features.

The exposed surfaces of the trial trenches were then cleaned by hand and inspected for archaeological remains. Representative sections of deposits within each trench were drawn.

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 existing buildings recorded on OS maps.

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. A list of all contexts and interpretations appears as Appendix 2. Context numbers are identified in the text by square brackets. Phasing was based on the

nature of the deposits and recognisable relationships between them.

5. RESULTS

5.1 Description of the results

Phase 1: Natural deposits

Phase 2: Modern deposits

5.2 Phase 1: Natural deposits

The earliest deposits encountered during the evaluation within Area 2 were firm mid greyish brown clayey and sandy silts, (202, 203, 302, 303, 304 and 305), occurring at an average depth of 2.15m OD.

In Area 3 the earliest deposits were soft, light reddish grey, poorly laminated, fine sandy silts containing flecks of manganese, occurring at 3.25m OD.

5.3 Phase 2: Modern deposits

In Trench 1 a 0.7m thick layer of firm, greyish brown, clayey silt deposit containing fragments of brick (101) and burnt tree roots (105) was identified. This was not seen in any of the other trenches

A 0.2m thick layer of firm, mid greyish brown, sandy silt (100, 201, 301, 501 and 601) extended across the investigation areas.

A 0.3m thick layer of topsoil was present across the site. In Area 2 the topsoil consisted of a firm mid greyish brown sandy silt (104, 200 and 300, whereas in Area 3 the topsoil was a friable dark brown clayey silt (400, 500, and 600)

6. DISCUSSION

The nature of the deposits encountered during the archaeological investigations reflect largely the depositional environment under which they were laid.

The natural deposits (Phase 1) characterised by the poorly laminated sandy silts were most likely deposited in a low energy marsh environment, possibly a creek.

In Trench 1 a layer of clayey silt not seen elsewhere at the site was identified, it is uncertain as to the depositional nature of this deposit.

7. ASSESSMENT OF SIGNIFICANCE

For assessment of the significance the *Secretary of State's criteria for scheduling ancient monuments* has been used (DoE 1990, Annex 4: see appendix).

Many of the following criteria are not applicable to the area evaluated. Where this is so an indication has been made.

Period:

The exposed deposits are all naturally formed in an intertidal environment. The date of this sediment deposition is unknown.

Rarity:

Evidence of creek systems are seen throughout the Fens.

Documentation:

Several archaeological investigations have been undertaken in Sutterton. Records of archaeological sites and finds made in the Sutterton area are kept in the Lincolnshire County Sites and Monument Record as well as the files of the Boston District Community

Archaeologist.

Group Value:

n/a

Survival/Condition:

n/a

Fragility/Vulnerability:

n/a

Diversity:

n/a

Potential:

The absence of any artefactual evidence suggests that there is very low potential for settlement of the site post.

8. EFFECTIVENESS OF TECHNIQUES

The technique of using trial trenches to evaluate archaeological deposits was successful. Mechanical excavation allowed a rapid appraisal of the naturally laid deposits present across the site.

9. CONCLUSIONS

Archaeological investigations at Boston Road, Sutterton were undertaken as a previous geophysical survey of the site had revealed the possibility of archaeological remains.

However, no archaeological remains nor artefacts were encountered up to a depth of 1.2m beneath present ground level. It is likely that the site was once uninhabited marshland, and has been used as farmland land since reclamation.

10. ACKNOWLEDGEMENTS

Archaeological Project Services wish to acknowledge the assistance of Persimmon Homes who commissioned the work. The project was coordinated by Steve Malone; and this report was edited by Tom Lane. Rebecca Wilcox, the Community Archaeologist for Boston Borough Council permitted examination of the relevant parish files.

11. PERSONNEL

Project Coordinator: Steve Malone
Site Supervisors: Rachael Hall
Site Assistants: Victoria Mellor and Ben Crossley
Photographic reproduction: Sue Unsworth
CAD Illustration: Rachael Hall
Post-excavation Analyst: Rachael Hall

12. BIBLIOGRAPHY

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by N. Antram)

13. ABBREVIATIONS

APS Archaeological Project Services

IFA Institute of Field Archaeologists

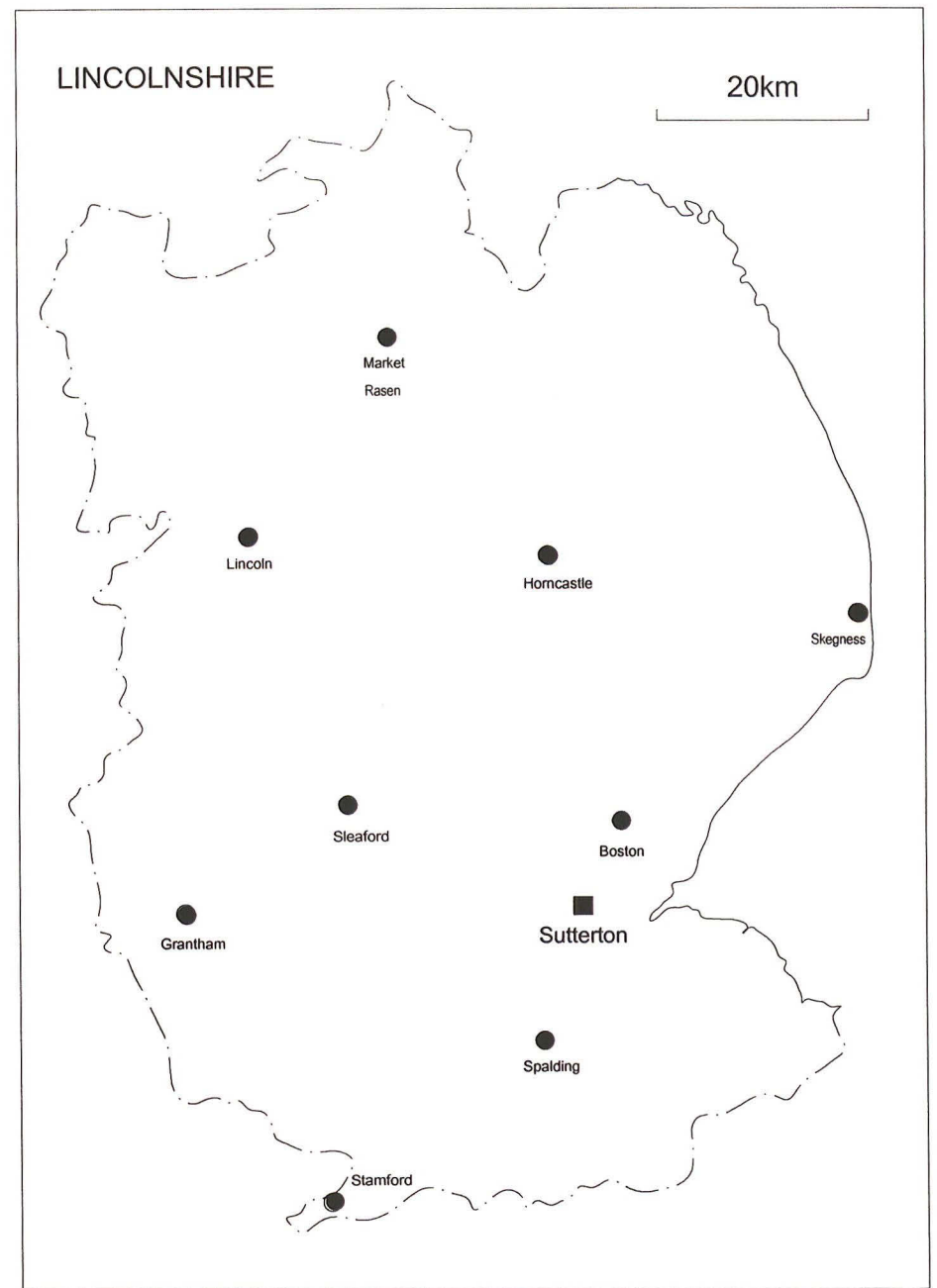
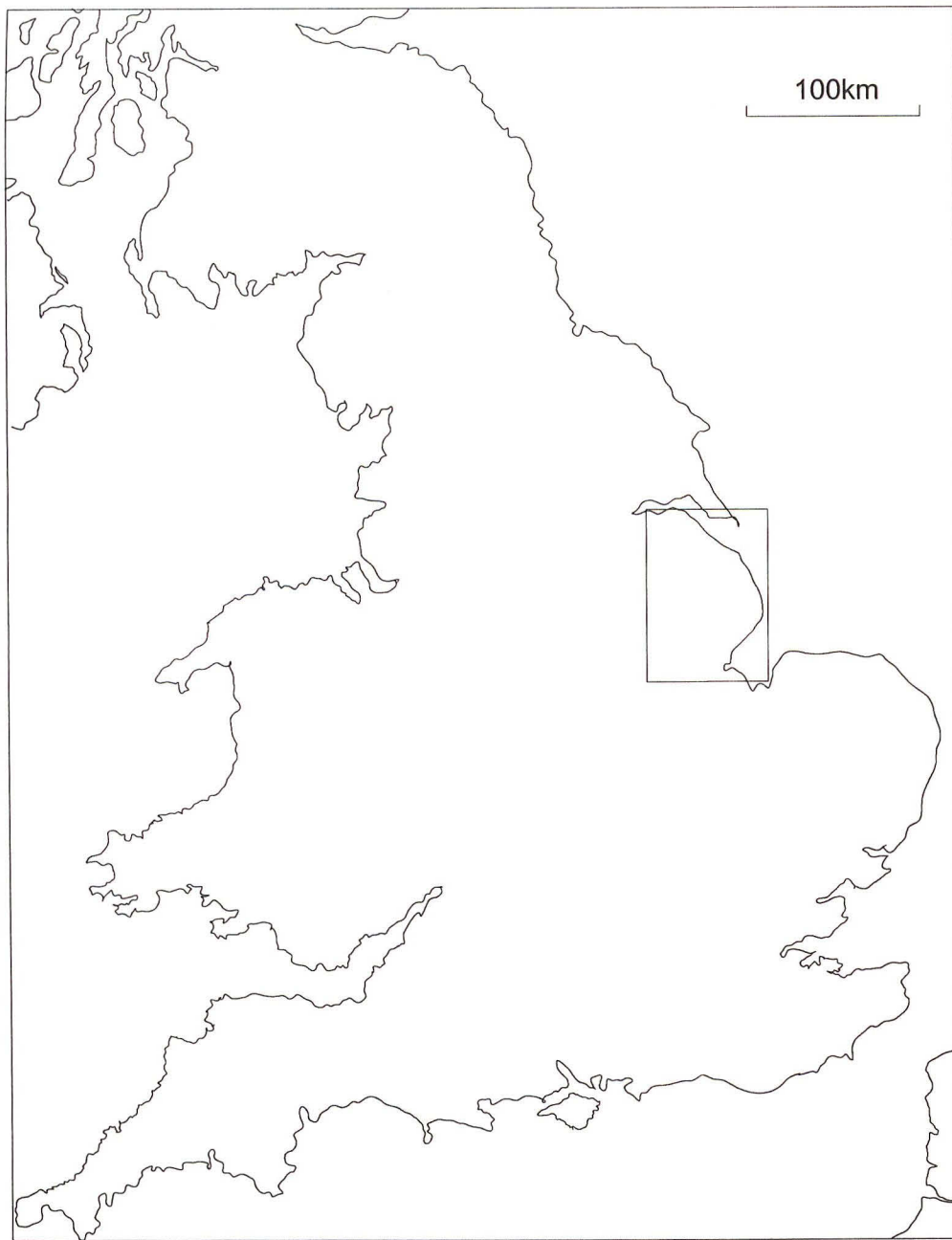


Figure 1 General Location Plan

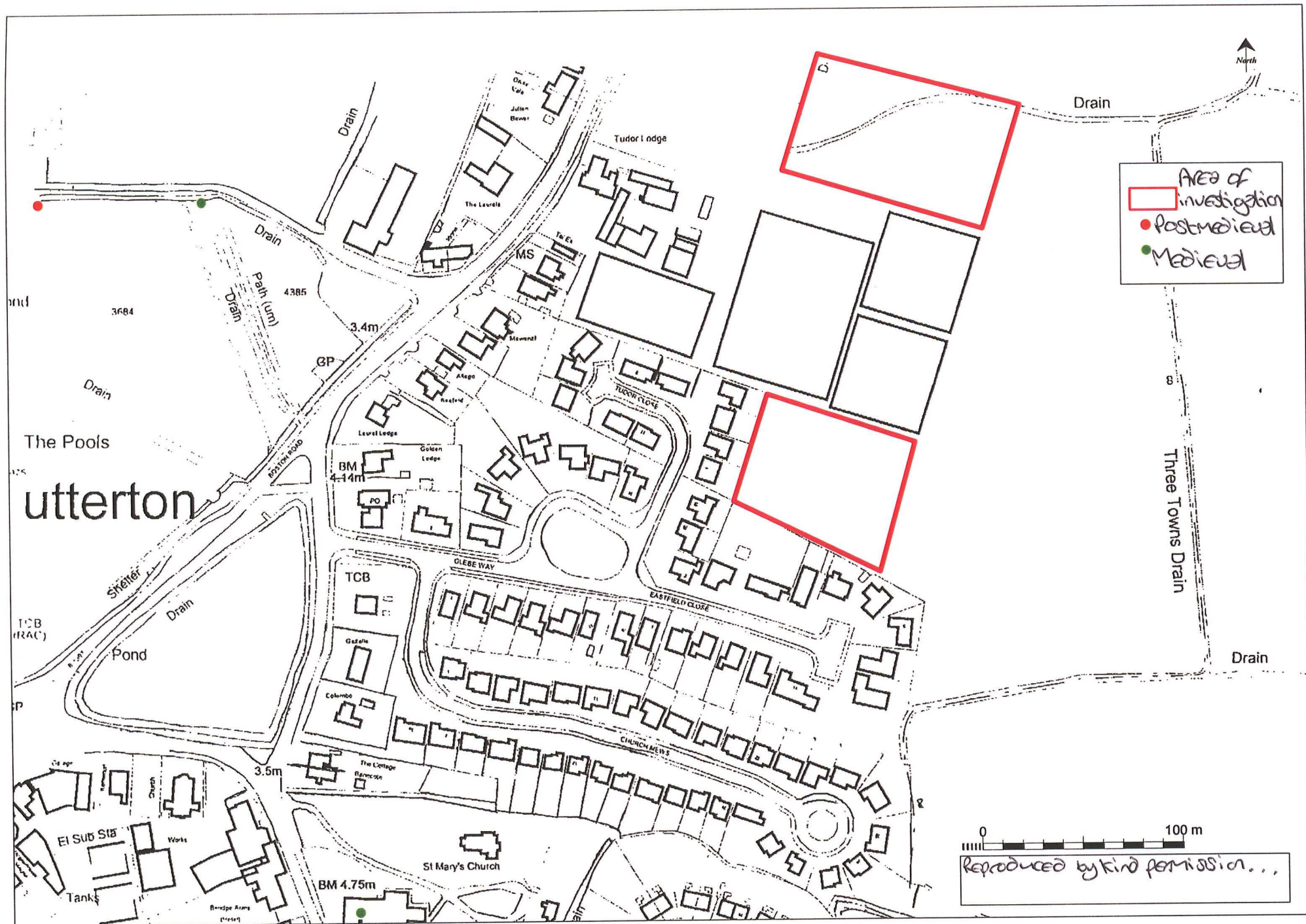


Figure 2: Site Location and Archaeological Setting

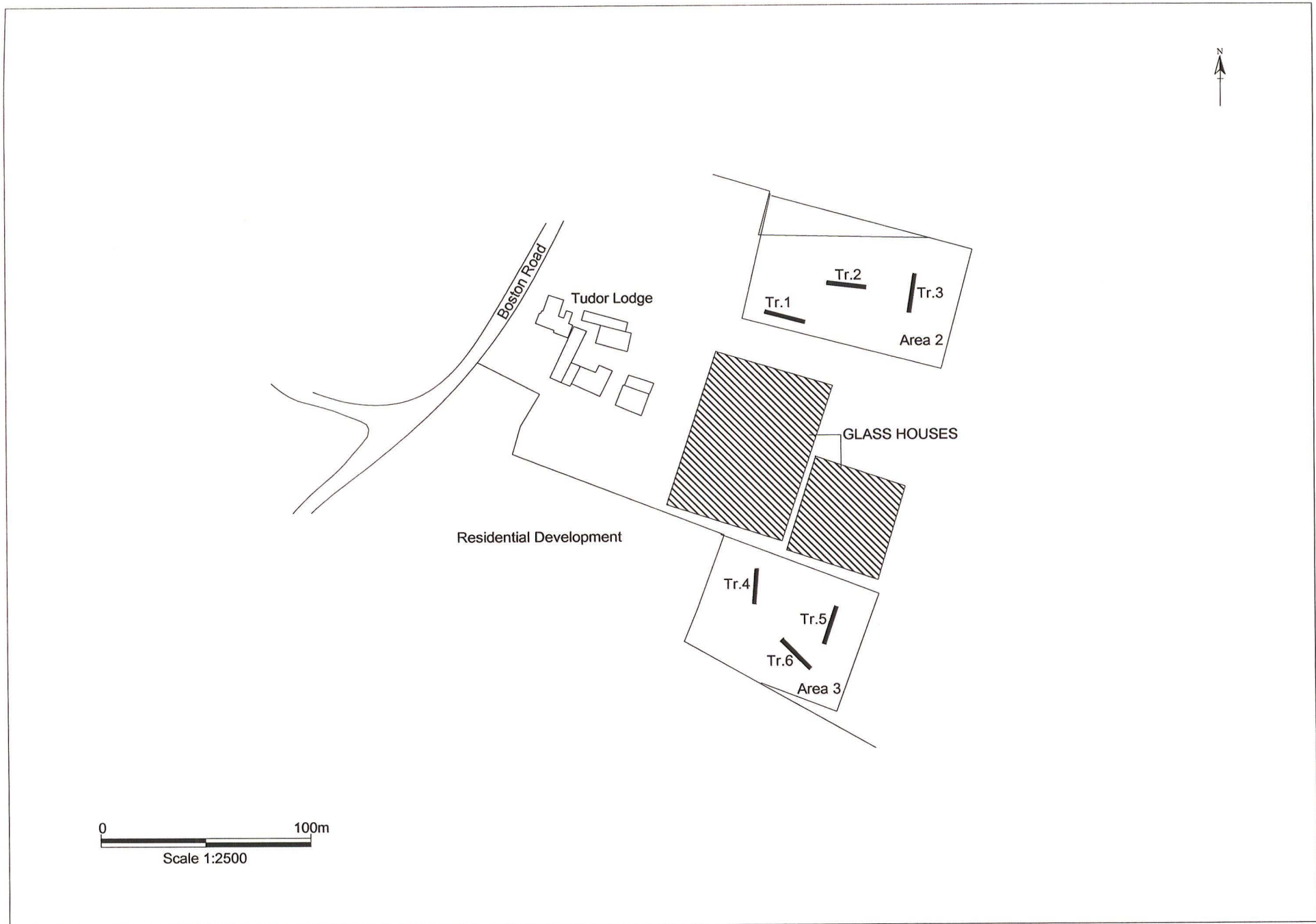


Figure 3: Trench Location

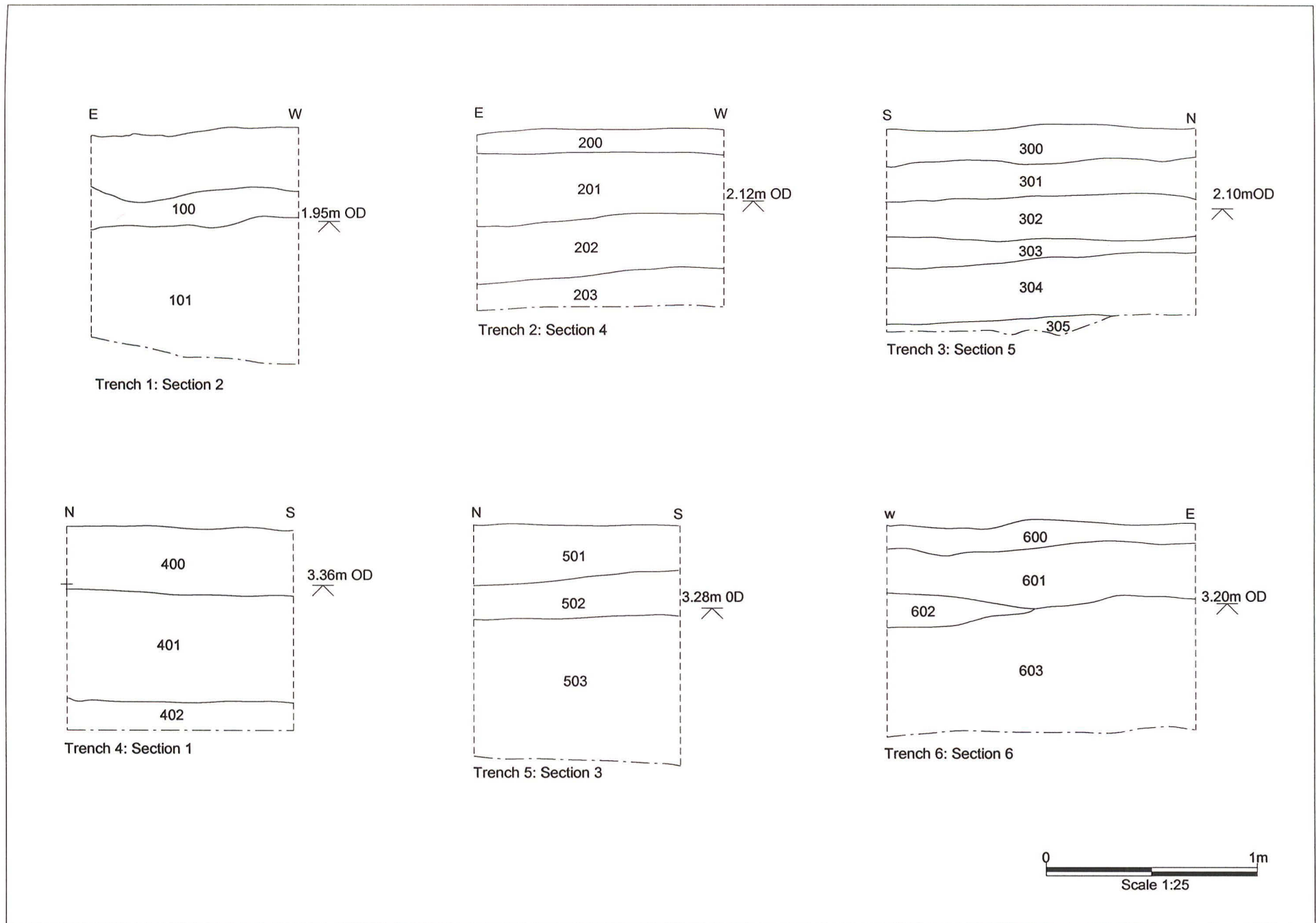


Figure 4: Sections 1-6



Plate 1 General view of site, looking south



Plate 2 Trench 1, laminated silts, looking south



Plate 3 Section 4, laminated silts, looking east

Appendix 1

Specification for an archaeological evaluation on land at Boston Road, Sutterton, Lincolnshire

1. SUMMARY

- a. *This document comprises a specification for the archaeological field evaluation of land at Boston Road, Sutterton, Lincolnshire.*
- b. *Although the development site itself contains no known archaeological remains, fieldwalking in and around Sutterton has recovered numerous Romano-British, Saxon and medieval pottery scatters and sites within this area can often be masked by later flood silts.*
- c. *An archaeological scheme of works is required as part of the planning consent for the development. Geophysical survey has been undertaken on the available areas of the site and shows possible archaeological features. Trial trenching is now required to investigate these.*
- d. *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

- a. This document comprises a specification for the archaeological field evaluation of land at Boston Road, Sutterton, Lincolnshire. The site is centred on National Grid Reference TF 2870 3580.
- b. The document contains the following parts:
 - i. Overview
 - ii. The archaeological and natural setting
 - iii. Stages of work and methodologies to be used
 - iv. List of specialists
 - v. Programme of works and staffing structure of the project

3. SITE LOCATION

- a. Sutterton is located in the Boston district of Lincolnshire, approximately 8km southeast of Boston. The site is located to the east of Boston Road on the north side of the village. It is centred on NGR 2870 3580.
- b. The site as a whole is an irregular block of land covering an area of approximately 3.4ha. Much of the site is currently occupied by glasshouses or under crop. Areas 2 and 3 were available for geophysical survey and these areas are to be investigated by trial trenching.

4. PLANNING BACKGROUND

- a. Planning permission has been granted by Boston Borough Council for residential development. An archaeological scheme of works is required as part of the planning

consent for the development. Geophysical survey has been undertaken on available areas of the site. A programme of trial trenching is now required.

5. **SOILS AND TOPOGRAPHY**

- a. The site lies in flat lands of the Lincolnshire fens at c. 3m OD. Soils at the site are Agney Association, calcareous fine and coarse silty soils developed on marine alluvium (Hodge *et al.* 1984, 87).

6. **ARCHAEOLOGICAL OVERVIEW**

- a. Although the development site itself contains no known archaeological remains, fieldwalking in and around Sutterton has recovered numerous Romano-British, Saxon and medieval pottery scatters. A Romano-British settlement site has been identified some 500m to the south. The potential for unidentified settlement remains to exist at the site is perhaps only low-moderate but sites within this area can often be masked by later flood silts.
- b. Geophysical survey (Brooks 2001) has identified a number of possible archaeological features within the site and these are to be the subject of further investigation.

7. **AIMS AND OBJECTIVES**

- a. 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.
- b. The objectives of the work will be to:
 - i. Establish the type of archaeological activity that may be present within the site.
 - ii. Determine the likely extent of archaeological activity present within the site.
 - iii. Determine the date and function of the archaeological features present on the site.
 - iv. Determine the state of preservation of the archaeological features present on the site.
 - v. Determine the spatial arrangement of the archaeological features present within the site.
 - vi. Determine the extent to which the surrounding archaeological features extend into the application area.
 - vii. 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**

- a. 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**

- a. Reasoning for this technique

- i. Trial trenching enables the *in situ* determination of the sequence, date, nature, depth, environmental potential and density of archaeological features present on the site.
- ii. The trial trenching will consist of the excavation of six (6) trenches measuring 20m x 1.6m. 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.

b. General Considerations

- i. All work will be undertaken following statutory Health and Safety requirements in operation at the time of the investigation.
- ii. 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).
- iii. 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.
- iv. 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.
- v. 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.

c. Methodology

- i. 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.
- ii. 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.
- iii. 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.

- iv. 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.
- v. 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:
 - (1) the site before the commencement of field operations.
 - (2) the site during work to show specific stages of work, and the layout of the archaeology within individual trenches.
 - (3) individual features and, where appropriate, their sections.
 - (4) groups of features where their relationship is important.
 - (5) the site on completion of field work
- vi. 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.
- vii. 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.
- viii. 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.
- ix. 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**

- a. 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**

- a. Stage 1
 - i. 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.
 - ii. 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.

- b. Stage 2
 - i. Detailed examination of the stratigraphic matrix to enable the determination of the various phases of activity on the site.
 - ii. Finds will be sent to specialists for identification and dating.

- c. Stage 3
 - i. On completion of stage 2, a report detailing the findings of the investigation will be prepared. This will consist of:

- (1) A non-technical summary of the results of the investigation.
- (2) A description of the archaeological setting of the site.
- (3) Description of the topography and geology of the investigation area.
- (4) Description of the methodologies used during the investigation and discussion of their effectiveness in the light of the results.
- (5) A text describing the findings of the investigation.
- (6) 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.
- (7) Sections of the trenches and archaeological features.
- (8) Interpretation of the archaeological features exposed and their context within the surrounding landscape.
- (9) Specialist reports on the finds from the site.
- (10) Appropriate photographs of the site and specific archaeological features or groups of features.
- (11) A consideration of the significance of the remains found, in local, regional, national and international terms, using recognised evaluation criteria.

12. **ARCHIVE**

- a. 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**

- a. Copies of the report will be sent to: the client, Persimmon Homes; the Boston Community Archaeologist; the Boston District Planning Department; and the Lincolnshire County Sites and Monuments Record.

14. **PUBLICATION**

- a. A report of the findings of the investigation will be published in Heritage Lincolnshire's annual report and 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**

- a. Curatorial responsibility for the project lies with Boston Community Archaeologist, . 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**

- a. Variations to the scheme of works will only be made following written confirmation from the archaeological curator.
- b. 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**

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

<u>Task</u>	<u>Body to be undertaking the work</u>
Conservation	Conservation Laboratory, City and County Museum, Lincoln.
Pottery Analysis	Prehistoric: 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
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

18. **PROGRAMME OF WORKS AND STAFFING LEVELS**

- a. Fieldwork is expected to be undertaken by 3 staff, a supervisor and 2 assistants, and to take five (5) days.
- b. Post-excavation analysis and report production is expected to take 12 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. Two half-days of specialist time are allotted in the project budget.
- c. Contingency
 - i. Contingencies have been specified in the budget. These include: environmental sampling/analysis of waterlogged remains; pump (may be required); Roman pottery (small amounts allowed for); Anglo-Saxon pottery (small amounts allowed for); Medieval pottery- large quantities (moderate amount allowed for); faunal remains - large quantities (moderate amounts allowed for); Conservation and/or Other unexpected remains or artefacts.
 - ii. Other than the pump, the activation of any contingency requirement will be by the archaeological curator (Boston Community Archaeologist), not Archaeological Project Services.

19. **INSURANCES**

- a. 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**

- a. 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.
- b. Licence will also be given to the archaeological curators to use the documentary archive for educational, public and research purposes.
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Brooks, I. 2001 *Boston Road, Sutterton Geophysical Survey*, unpublished EAS 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**

Appendix 2
CONTEXT SUMMARY

Trench 1:

Cxt No.	Type	Section	Description	Thck (m)	Interpretation
100	Deposit	2	Firm, brownish grey clayey silt, occ cbm flecks	0.2	
101	Deposit	2	Firm, greyish brown clayey silt	>0.7	
102			Ceramic land drain		Land drain
103			Ceramic land drain		Land drain
104	Deposit		Firm, mid greyish brown, sandy silt	.25	Topsoil
105	Deposit		Soft black burnt wood	.15	Burnt tree roots

Trench 2:

Cxt No.	Type	Section	Description	Thck (m)	Interpretation
200	Deposit	4	Firm, mid greyish brown, sandy silt	0.12	Topsoil
201	Deposit	4	Firm, mid mottled greyish brown, sandy silt	0.35	Subsoil
202	Deposit	4	Firm, mid grey- reddish brown, clayey silt	0.28	Natural
203	Deposit	4	Firm, mid greyish brown, sandy silt	0.18	Natural

Trench 3:

Cxt No.	Type	Section	Description	Thck (m)	Interpretation
300	Deposit	5	Firm, mid greyish brown, sandy silt	0.2	Topsoil
301	Deposit	5	Firm- friable, mid brownish grey, sandy silt	0.18	Subsoil
302	Deposit	5	Firm, mid brownish grey, clayey silt	0.19	Natural
303	Deposit	5	Soft, mid grey- reddish brown, silty sand	0.15	Natural
304	Deposit	5	Firm, mid brownish grey, clayey silt	0.3	Natural
305	Deposit	5	Soft, mid greyish brown, sandy silt	0.09	Natural

Trench 4:

Cxt No.	Type	Section	Description	Thck (m)	Interpretation
400	Deposit	1	Friable, dark brown, clayey silt	0.32	Topsoil
401	Deposit	1	Soft, light reddish brown, silt, occ. maganese flecks, poorly laminated	0.5	Natural
402	Deposit	1	Soft, light greyish brown, fine sandy silt, poorly laminated	>0.15	Natural

Trench 5:

Cxt No.	Type	Section	Description	Thck (m)	Interpretation
500	Deposit	3	Friable, dark brown, clayey silt	0.3	Topsoil
501	Deposit	3	Firm, mid reddish brown, silty clay	0.2	Subsoil
502	Deposit	3	Soft, light reddish grey, fine sandy silt with iron staining, mod. manganese flecks	>0.75	Natural

Trench 6:

Cxt No.	Type	Section	Description	Thck (m)	Interpretation
600	Deposit	6	Friable, dark greyish brown, clayey silt	0.15	Topsoil
601	Deposit	6	Hard, mid yellowish brown, silty clay, occ. iron staining	0.35	Subsoil
602	Deposit	6	Firm, mid yellowish brown, silty clay, occ. manganese	0.2	Natural
603	Deposit	6	Soft, light reddish grey, fine sandy silt, freq. Iron staining	>0.62	Natural

Abbreviations

cbm: ceramic burnt material

occ: occurring occasionally

Appendix 3

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Geophysical Survey*

Instrumentation

Methodology

Copyright

Boston Road, Sutterton Geophysical Survey - Introduction:

NGR

Centred on TF 2874335932 (Area 2)
and TF 2870435787 (Area 3)

Location and Topography

Three areas of Fluxgate Gradiometer survey were commissioned to the south east of Boston Road, Sutterton, Lincolnshire. The proposed areas (Figure 1) surrounded a series of glasshouses shown as Area 4 on Figure 1. Unfortunately, Area 1 was not available as the crop in this area was protected by a series of wires and meshes against rabbit damage. The remaining areas (2 and 3) were basically flat and had been ploughed, harrowed and allowed to weather. Area 3 had also been planted with a crop of brassicas which were still young and did not interfere with the survey.

Archaeological Background

A housing development is proposed for the site and the survey is part of the archaeological evaluation in advance of the development.

Aims of Survey

To evaluate, by detailed survey, the archaeological potential of the proposed development.

SUMMARY OF RESULTS

A series of diffuse, but intense magnetic anomalies were located in both of the survey areas. These tended to follow a general axis at an angle to the modern field boundary and are therefore not likely to be the result of modern activity.

Some areas of modern magnetic disturbance were also located within both of the surveys. These tended to concentrate along current or previous field boundaries.

Boston Road, Sutterton Geophysical Survey - Results:

Survey Results:

Area

Two areas were investigated either side of the glasshouses in the south eastern half of the proposed development area. In all an area of approximately 1.04 ha was surveyed in two areas of 0.57 ha (area 2) and 0.47 ha (Area 3).

Display

The results are displayed as Grey Scale Image and as X-Y Trace Plots. (Figures 2 - 5)

Results:

Detailed Survey:

Fourteen 30 x 30 m grids were investigated. These consisted of two areas, one of eight grids (Area 2) and the other of six grids (Area 3). (Figure 1)

Area 2:

The north western end of this survey was dominated by modern disturbances. The drain shown on Figure 1 on the north east boundary of the survey area no longer exists in this position in the field and has been moved further north. Other modern disturbance include an area of ferromagnetic responses in Grid 1 and disturbance associated with the field edge adjacent to the glasshouses in Grids 1, 2 and 3. These anomalies are shown in blue on Figures 6.

The potential archaeological responses are somewhat diffuse with large positive anomalies and fainter linear anomalies. These are somewhat confused by a variable background response, presumably the result of variable geology across the site. The potential archaeological responses, however tend to be between 6 and 10 nT above the general background level. There would also appear to be a general trend within the potential archaeological anomalies with a general axis running NW to SE. A number of faint linear anomalies were also recorded also following the

general axis of the areas of magnetic disturbance. The possible archaeological anomalies are shown in red on Figure 6.

Area 3:

Modern disturbance was recorded along the field boundaries of this area and are shown in blue on Figure 6.

Similar areas of diffuse, but intense magnetic responses were also recorded within this survey area, together with faint possible linear anomalies. Once again these appear to follow a general axis running NW to SE. (Figures 6)

Magnetic Susceptibility

Soil samples were taken from the area of detailed survey in order to assess the magnetic susceptibility of the soils. It was not possible to obtain a subsoil sample for comparison .

Sample	Volume susceptibility χ_v	Mass susceptibility χ_m
Area 2		
Grid 1	39	38.6
Grid 3	14	13.0
Grid 6	15	16.0
Grid 8	13	13.5
Area 3		
Grid 9	20	20.0
Grid 11	19	19.2
Grid 13	22	23.9

The susceptibilities as measured are consistently low with little difference between samples suggesting that conditions are not ideal for magnetic survey. The only exception is Grid 1 in Area 2. This is adjacent to the access to the field and the glasshouses, it is also adjacent the backfilled drain.

Boston Road, Sutterton Geophysical Survey - Conclusions:

Conclusions

It is a fundamental axiom of archaeological geophysics that the absence of features in the survey data does not mean that there is no archaeology present in the survey area only that the techniques used have not detected it.

A number of diffuse, but intense anomalies and faint linear anomalies were recorded in both of the survey areas. It is not certain as to the origins of these anomalies, however they would appear to follow a general alignment at an angle to the present field boundaries and appear to be slightly rectilinear in plan suggesting they may be archaeological in nature.

Boston Road, Sutterton - Technical Information:

Techniques of Geophysical Survey:

Magnetometry:

This relies on variations in soil magnetic susceptibility and magnetic remanance which often result from past human activities. Using a Fluxgate Gradiometer these variations can be mapped, or a rapid evaluation of archaeological potential can be made by scanning.

Resistivity:

This relies on variations in the electrical conductivity of the soil and subsoil which in general is related to soil moisture levels. As such, results can be seasonally dependant. Slower than Magnetometry this technique is best suited to locating positive features such as buried walls that give rise to high resistance anomalies.

Resistance Tomography:

Builds up a vertical profile or pseudosection through deposits by taking resistivity readings along a transect using a range of different probe spacings

Magnetic Susceptibility:

Variations in soil magnetic susceptibility occur naturally but can be greatly enhanced by human activity. Information on the enhancement of magnetic susceptibility can be used to ascertain the suitability of a site for magnetic survey and for targeting areas of potential archaeological activity when extensive sites need to be investigated. Very large areas can be rapidly evaluated and specific areas identified for detailed survey by gradiometer.

Instrumentation:

- 1. Fluxgate Gradiometer - Geoscan FM36***
- 2. Resistance Meter - Geoscan RM4/DL10***
- 3. Magnetic Susceptibility Meter - Bartington MS2***
- 4. Geopulse Imager 25 - Campus***

Methodology:

For Gradiometer and Resistivity Survey 20m x 20m or 30m x 30m grids are laid out over the survey area. Gradiometer readings are logged at either 0.5m or 1m intervals along traverses 1m apart. Resistance meter readings are logged at 1m intervals. Data is down-loaded to a laptop computer in the field for initial configuration and analysis. Final analysis is carried out back at base.

For scanning transects are laid out at 10m intervals. Any anomalies noticed are where possible traced and recorded on the location plan.

For Magnetic Susceptibility survey a large grid is laid out and readings logged at 20m intervals along traverses 20m apart, data is again configured and analysed on a laptop computer.

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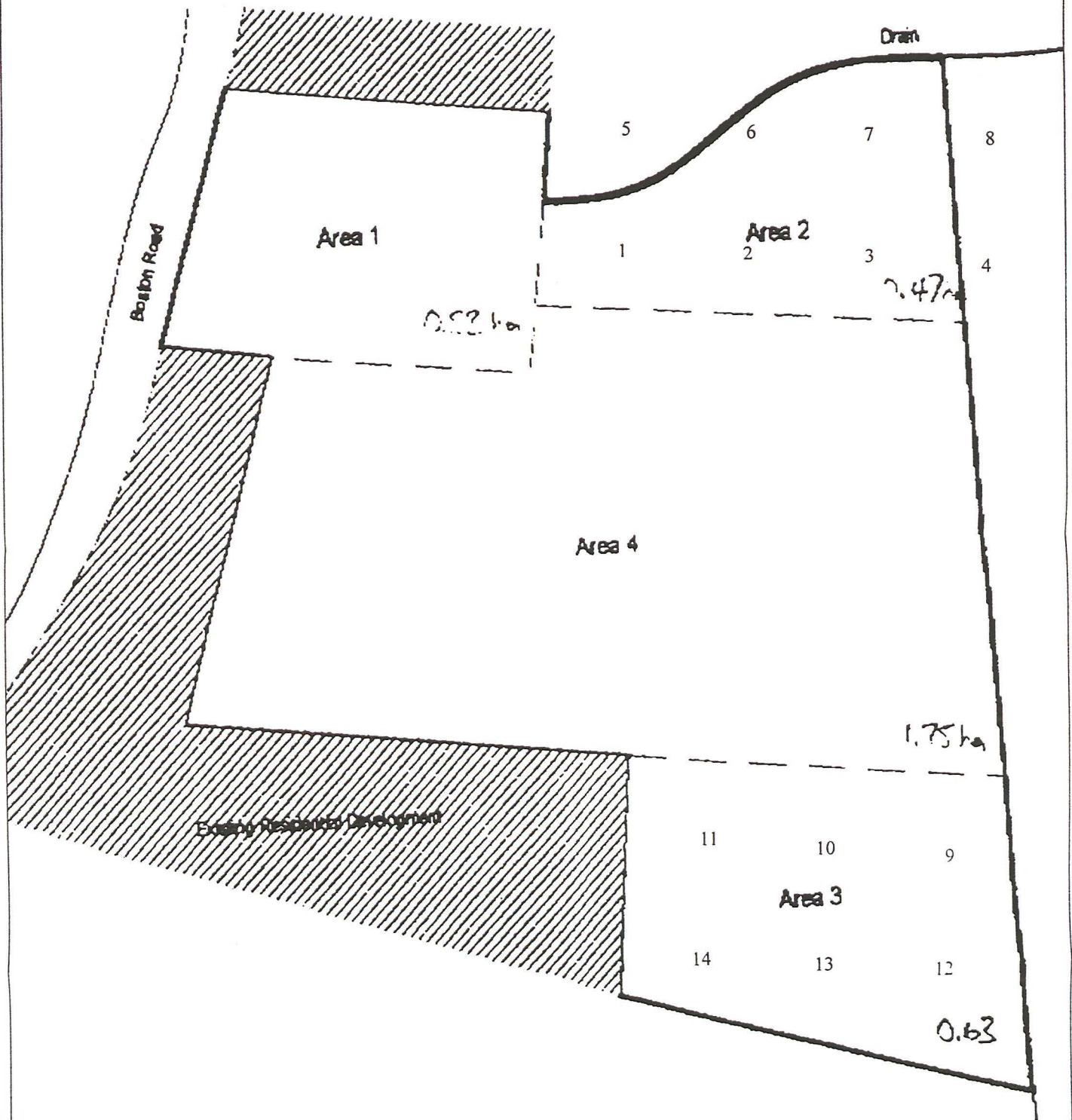
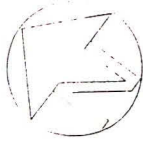
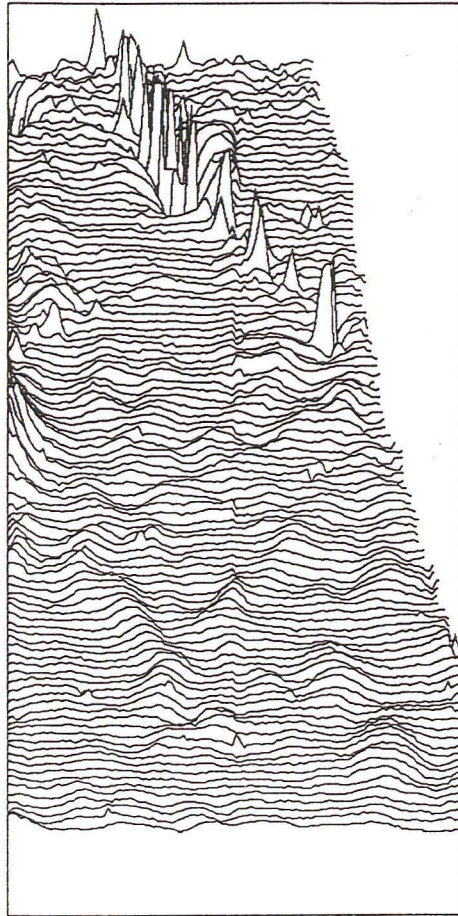


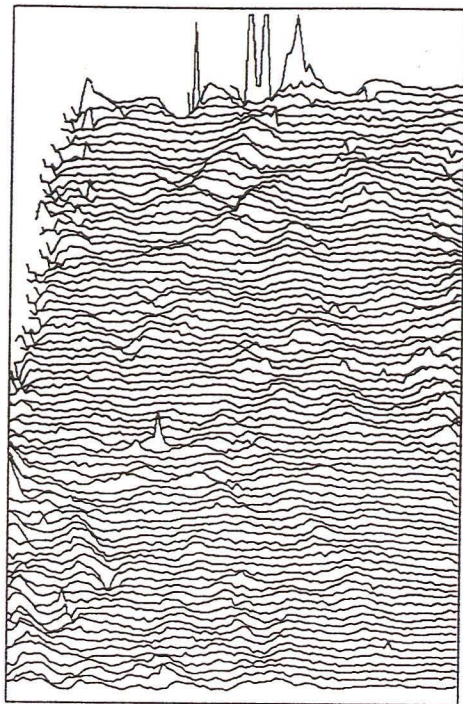
Figure 1: Boston Road, Sutterton
Location
Scale 1:1000



50 nT |



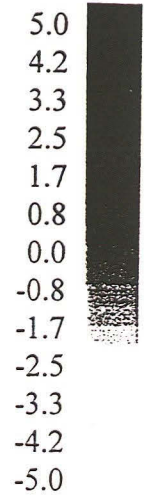
Figure 3: Boston Road, Sutterton
Area 2
X - Y Plot
Scale 1:1000



50 nT |



Figure 5: Boston Road, Sutterton
Area 3
X - Y Plot
Scale 1:1000



nT



Figure 4: Boston Road, Sutterton
Area 3
Grey Scale Plot
Scale 1:1000

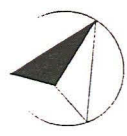
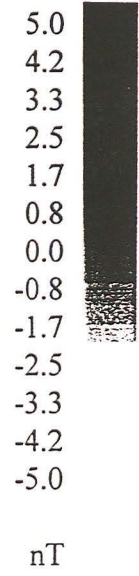


Figure 2: Boston Road, Sutterton
Area 2
Grey Scale Plot
Scale 1:1000

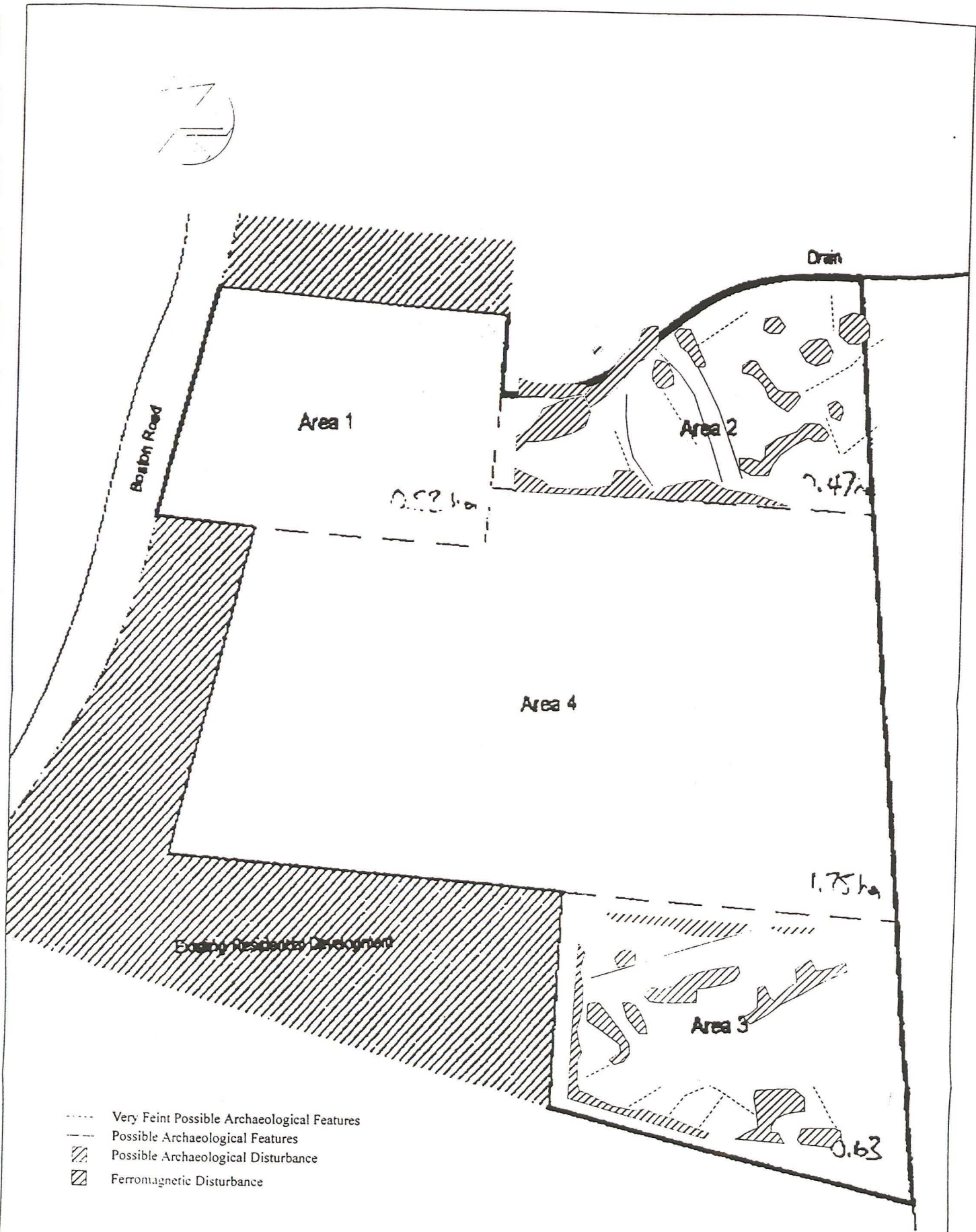


Figure 6: Boston Road, Sutterton
 Interpretation
 Scale 1:1000

Appendix 4

Secretary of State's criteria for scheduling Ancient Monuments - Extract from *Archaeology and Planning* DoE Planning Policy Guidance note 16, November 1990

The following criteria (which are not in any order of ranking), are used for assessing the national importance of an ancient monument and considering whether scheduling is appropriate. The criteria should not however be regarded as definitive; rather they are indicators which contribute to a wider judgement based on the individual circumstances of a case.

i *Period*: all types of monuments that characterise a category or period should be considered for preservation.

ii *Rarity*: there are some monument categories which in certain periods are so scarce that all surviving examples which retain some archaeological potential should be preserved. In general, however, a selection must be made which portrays the typical and commonplace as well as the rare. This process should take account of all aspects of the distribution of a particular class of monument, both in a national and regional context.

iii *Documentation*: the significance of a monument may be enhanced by the existence of records of previous investigation or, in the case of more recent monuments, by the supporting evidence of contemporary written records.

iv *Group value*: the value of a single monument (such as a field system) may be greatly enhanced by its association with related contemporary monuments (such as a settlement or cemetery) or with monuments of different periods. In some cases, it is preferable to protect the complete group of monuments, including associated and adjacent land, rather than to protect isolated monuments within the group.

v *Survival/Condition*: the survival of a monument's archaeological potential both above and below ground is a particularly important consideration and should be assessed in relation to its present condition and surviving features.

vi *Fragility/Vulnerability*: highly important archaeological evidence from some field monuments can be destroyed by a single ploughing or unsympathetic treatment; vulnerable monuments of this nature would particularly benefit from the statutory protection that scheduling confers. There are also existing standing structures of particular form or complexity whose value can again be severely reduced by neglect or careless treatment and which are similarly well suited by scheduled monument protection, even if these structures are already listed buildings.

vii *Diversity*: some monuments may be selected for scheduling because they possess a combination of high quality features, others because of a single important attribute.

viii *Potential*: on occasion, the nature of the evidence cannot be specified precisely but it may

still be possible to document reasons anticipating its existence and importance and so to demonstrate the justification for scheduling. This is usually confined to sites rather than upstanding monuments.

Appendix 5

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. The Early Saxon period lasts from AD 450-650, the Middle Saxon from 650-850 and the Late Saxon from 850-1066.
Context	An archaeological context represents a distinct archaeological event or process. For example, the action of digging a pit creates a context (the cut) as does the process of its subsequent backfill (the fill). Each context encountered during an archaeological investigation is allocated a unique number by the archaeologist and a record sheet detailing the description and interpretations of the context (the context sheet) is created and placed in the site archive. Context numbers are identified within the report text by brackets, <i>e.g.</i> (004).
Cut	A cut refers to the physical action of digging a posthole, pit, ditch, foundation trench, <i>etc.</i> Once the fills of these features are removed during an archaeological investigation the original 'cut' is therefore exposed and subsequently recorded.
Fill	Once a feature has been dug it begins to silt up (either slowly or rapidly) or it can be back-filled manually. The soil(s) which become contained by the 'cut' are referred to as its fill(s).
Layer	A layer is an accumulation of soil or other material that is not contained within a cut.
Medieval	The Middle Ages, dating from approximately AD 1066-1500.
Natural	Undisturbed deposit(s) of soil or rock which have accumulated without the influence of human activity.
Post-medieval	The period following the Middle Ages, dating from approximately AD 1500-1800.
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.

Appendix 6

THE ARCHIVE

The archive consists of:

26	Context records
2	Photographic record sheets
1	Plan Sheets
6	Section Sheets
1	Evaluation report

All primary records and finds are currently kept at:

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

Responsibility for the ultimate destination of the project archive is held by :

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 Council Museum Accession Number: 2001.248
Archaeological Project Services Site Code: BRS01

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.

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