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**ARCHAEOLOGICAL EVALUATION ON  
LAND TO THE REAR OF  
THE OLD RUGBY PITCH,  
EAST ROAD, SLEAFORD,  
LINCOLNSHIRE  
(SRP98)**



**A P S**  
ARCHAEOLOGICAL  
PROJECT  
SERVICES



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Archaeology Section  
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LAND TO THE REAR OF  
THE OLD RUGBY PITCH,  
EAST ROAD, SLEAFORD,  
LINCOLNSHIRE  
(SRP98)**

Work Undertaken For  
Beckside Builders

September 1999

Report Compiled by  
Tobin Rayner BSc (Hons)

Planning Application No: N/57/575/99  
National Grid Reference: TF 0775 4705  
City and County Museum Accession No: 59.98

A.P.S. Report No. 97/99



*Archaeological Project Services is an IFA Registered Archaeological  
Organisation (No. 21)*

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## 1. SUMMARY

*An archaeological evaluation comprising a programme of trial trenching was undertaken to determine the archaeological implications of proposed development on land to the rear of the old Rugby Club, East Road, Sleaford, Lincolnshire. A geophysical survey undertaken on the site in 1997 had detected several anomalies thought to represent archaeological features. Previous archaeological work in the vicinity has revealed the remains of a Roman road, a Roman occupation site and a Mid-Late Iron Age settlement enclosure.*

*The evaluation recorded a north-south ditch identified as an anomaly during the geophysical survey. Also identified were two previously unrecorded closely spaced parallel ditches, aligned northeast-southwest. Although no dateable evidence was recovered from any of these ditches during the evaluation, they are probably associated with the Roman or Iron Age settlement, either as part of a field boundary system or as a trackway. Several post holes and pits were also recorded, although their function was uncertain.*

*The archaeological remains were buried by up to 0.35m depth of topsoil. A metal detector survey of this soil retrieved a quantity of Roman tile and post-medieval metalwork.*

## 2. INTRODUCTION

### 2.1 Background

Between the 28<sup>th</sup> August and the 3<sup>rd</sup> September 1999, an archaeological evaluation was undertaken on land to the rear of the old Rugby Club, East Road, Sleaford, Lincolnshire. The evaluation was requested prior to the determination of

Planning Application No. N/57/575/99 in order to assess the presence and character of the archaeological resource within the proposed development area. The archaeological investigation was commissioned by Mr Avison on the behalf of Becksiders Builders. Archaeological Project Services carried out the work in accordance with a brief set by the Heritage Officer for North Kesteven District Council (Appendix 1).

Archaeological Field Evaluation is defined by the Institute of Field Archaeologists (IFA) 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, and relative quality; and it enables an assessment of their worth in a local, regional, national or international context as appropriate.' (IFA 1994, 1).

### 2.2 Topography, Geology and Soils

Sleaford is situated 27km south of Lincoln and 26km west of Boston in North Kesteven District, Lincolnshire (Fig. 1). The town stands on the River Slea and its tributaries which flow northeastward to join the River Witham.

The area of investigation is located approximately 1.5km northeast of Sleaford town centre (Fig. 2, Plate 1), as defined by the parish church of St. Denys. The site lies in an area of generally level land at a height of c.12m OD, approximately 500m to the west of the River Slea. This ground tends to be well drained and until recently utilised as a rugby pitch.

The site is centred on National Grid

Reference TF 0775 4705 and is approximately one hectare in extent. Local soils are of the Ruskington Association, typically glaciofluvial sands and gravels with a calcareous substrate containing limestone, flint and quartzite pebbles (Hodge *et al.* 1984, 304). These soils overlie a solid geology of Upper Jurassic limestones and Oxford Clays.

### 2.3 Archaeological Setting

The modern town of Sleaford has been developed over several archaeological sites dating from the prehistoric to the medieval periods. East Road is situated on the periphery of these major archaeological sites. However, a desk-top assessment previously prepared in response to a proposed development in the vicinity of East Road has shown that the area contains numerous archaeological remains (Tann 1996, 4).

Prehistoric remains have been recorded in close proximity to the area of investigation. A flint axe of Lower Palaeolithic date was retrieved adjacent to the area of development (Fig. 3; SMR60473). This is likely not to be *in situ* but residual within the natural gravels. Elsewhere, within 900m of the site, a greenstone axe and a flint thumbnail scraper have been recovered. It is likely that the latter dates to the Neolithic (3500-2000 BC) or Bronze Age (2000-600 BC) period. A recent evaluation has recorded an important Neolithic and Bronze Age site on an area of slightly raised ground c. 200m southwest of the site (Appendix 1).

There is a known Roman occupation site 500m northwest of the development site.

A previous archaeological evaluation undertaken on an area 200m to the east of the development area uncovered a Mid-Late Iron Age (c. 300-100 BC) settlement

enclosure with an associated trackway that was later overlain by a Roman road, Mareham Lane (Herbert 1998, 15).

Further archaeological evaluations in the field immediately north of the proposed development site recorded a small linear ditch and sub-rectangular double-ditched enclosure, possibly dating to the prehistoric or Romano-British period. Other features including pits, postholes and gullies were also recorded and a microlith dating to the mesolithic period was retrieved (Herbert 1997, 5).

Within the development site, aerial photography and a geophysical survey undertaken in 1997 (Appendix 8) have located several possible linear archaeological features (Fig. 3).

There is no evidence of post-Roman or medieval period remains within the area of investigation. The land is likely to have been used for agricultural purposes until recent times when it has since been used as a rugby pitch.

### 3. AIMS

The aims of the archaeological evaluation, as outlined in the brief set by the Heritage Officer for North Kesteven District Council, were: to gather information to establish the presence or absence, extent, condition, character, quality and date of any archaeological deposits. Evaluation trenches were positioned to investigate anomalies previously recorded by geophysical survey and aerial photography in order to establish their date, and to determine the extent of any further remains.



#### 4. METHODS

A total of eight trenches was excavated as requested by the North Kesteven Heritage Officer. At the officers request Trenches 10, 11, 12 and 13 were positioned over possible archaeological features recorded as part of the 1997 geophysical survey or on aerial photographic transcriptions. Trench 9 was positioned to investigate the continuation of the east-west linear, also recorded as part of the geophysical survey. The remaining trenches were positioned within the foot print of a proposed building (Fig 3). The trenches measured between 8m and 15m in length and were all 2.30m wide, comprising a 2.75% sample of the area. Topsoil was stripped from the trenches by mechanical excavator to the level of the archaeological deposits or the undisturbed natural (Fig. 3 and 4). The exposed surface of the trenches were then cleaned by hand and inspected for archaeological remains. A metal detector survey was undertaken of all trenches and spoil. Where present, features were excavated by hand in order to retrieve dateable artefacts and other remains.

*brief*  
*breaching* Each deposit exposed during the watching brief was allocated a unique reference number (context number) with an individual written description. A photographic record was compiled, and sections were drawn at a scale of 1:10 and plans at a scale of 1:20. Recording of deposits encountered during the watching brief was undertaken according to standard Archaeological Projects Services practice.

The site was visited by the project environmentalist, James Rackham, who advised that environmental sampling would not be worthwhile due to the lack of any dateable evidence.

Field survey of the excavated trenches and existing reference points was completed

using a Geodolite Total Station in conjunction with a Psion Datalogger.

#### 5. RESULTS

##### 5.1 The Stratigraphic Sequence

Finds recovered from the deposits identified during the watching brief were examined and a date assigned where possible (Appendix 5). Records of the deposits encountered during the watching brief were also examined. A list of all contexts and interpretations appears as Appendix 4. Phasing was based on the nature of the deposits and recognisable relationships between them, supplemented by artefact dating where relevant. Three phases were identified:

- Phase 1: Natural Deposits
- Phase 2: Undated Deposits
- Phase 3: Modern Deposits

Context numbers appear in brackets, and these refer to the individual deposit descriptions recorded during excavation. Context numbers commence at (082) and trench numbers start at no. 6, being a continuation of work previously carried out adjacent to the development site.

##### 5.2 Phase 1: Natural Deposits

The earliest recorded layers comprised a mid yellowish/reddish brown sand with a variable gravel content (095), (099), (101), (114), (125), (127), (140) and (142). These natural geological deposits were recorded to a maximum depth of 0.56m during the excavation of archaeological features and were present within all of the trenches.

Natural features formed by root or animal disturbance were recorded within all the trenches.

### 5.3 Phase 2: Undated Deposits

**Trench 6** (Figures 3, 4, 5 and 7 (sections 17-19), Plate 2): Two parallel ditches (083) and (085) were located in the centre of the trench approximately 3m apart. The south ditch (083) measured 1.21m wide by 0.36m deep and contained a single mid grey clayey sand fill (082) with shell inclusions. The opposing north ditch (085) was 1.45m wide by 0.23m deep and contained (084), a similar fill to (082) but without shell inclusions. To the north of ditch (085) three possible post holes (086), (088) and (090) were identified.

**Trench 7** (Figures 3 and 4): No archaeological features were located within the trench.

**Trench 8** (Figures 3, 4, 5 and 7): Two linear features (093) and (097) revealed within the trench are likely to represent the southwesterly continuation of two ditches located in Trench 6.

**Trench 9** (Figures 3, 4, 5 and 7 (sections 25-29), Plate 3, 4 and 5): Linear features (104) and (106) recorded at the south end of the trench probably represent the northeasterly continuation of ditches located in Trench 6.

To the north of ditch (106) were two irregular pits (108) and (110) both filled with mottled clayey sand fills, (107) and (109) respectively. Cutting pit (110) was an east-west aligned linear ditch (112), probably a continuation of an anomaly recorded as part of the geophysical survey.

**Trench 10** (Figures 3, 4, 6 and 8 (sections 40-42)): A 1.3m wide and 0.48m deep northwest-southeast ditch (128) recorded in this trench appears to terminate in Trench 12 as (139). A linear feature (133) 1.13m wide by 0.32m deep on a north-south alignment was located in the centre of the trench was

interpreted as a ditch. This ditch may be the linear recorded as part of the geophysical survey and is possibly the continuation of ditch (119) located in trench 13. A pit (131) at the east end of the trench was also revealed.

**Trench 11** (Figures 3 and 4): Although this trench was positioned to locate possible archaeological anomalies, no archaeological features were located.

**Trench 12** (Figures 3, 4, 6 and 8 (sections 43-44)): A northeast-southwest aligned ditch (137) revealed along the northern edge of the trench is probably the continuation of the northern ditch recorded in Trench 6. Ditch (137) truncates the northwest-southeast aligned terminus of ditch (139) which is recorded within Trench 10 as cut (128). Two modern post holes containing concrete and wood, associated with the rugby club were also identified in the trench.

**Trench 13** (Figures 3, 4, 6 and 8 (sections 33-34)): A north-south aligned ditch (119) 1.28m deep by 0.22m recorded within the trench is probably the southern continuation of ditch (133) recorded within Trench 10 and the feature recorded as part of the geophysical survey. A 0.88m wide by 0.24m deep pit (121) was revealed to the east of the trench and contained a reddened silty sand fill (120), which suggests possible burning.

### 5.4 Phase 3: Modern Deposits

A deposit of dark brown silty sand (094), (098), (100), (113), (124), (126), (135) and (141) containing roots and overlain with weeds was recorded within all of the evaluation trenches to a thickness of 0.35m and represents the modern topsoil. A metal detector survey across the surface of the topsoil retrieved an amount of post-

medieval or undated metalwork. Also retrieved from the topsoil were three fragments of Roman tile, post-medieval pottery and clay pipe stems (Appendix 5)

## 6. DISCUSSION

Archaeological evaluation on land adjacent to the Rugby Club, East Road, Sleaford, has revealed a sequence of natural geology, undated ditches, gullies, post holes and pits sealed by modern deposits. Some of the larger features have been recognised previously during the geophysical and aerial photographic surveys.

### 6.1 Phase 1: Natural Deposits

The earliest recorded deposits, found within all of the trenches, were sands and gravels. These are likely to have been deposited as part of a glaciofluvial process.

### 6.2 Phase 2: Undated Deposits

The northeast-southwest aligned parallel ditches recorded within trenches 6, 8, 9 and 12 may define a droveway or trackway for the movement of people or livestock, associated with the Roman or Mid-Late Iron Age settlements adjacent to the development site.

*See Environmental Report for clarification*  
However, the primary fill of the south ditch contained frequent freshwater snail shells. These shells were absent from the fills of the north ditch, suggesting that either the features were not contemporary, or that one side was cleaned out subsequent to the final silting of the other. The parallel orientation of the ditches does suggest either a contemporary origin or the laying out of one ditch while the other was still recognisable.

The lack of finds from these ditches may suggest they represent a possible field

boundary system associated with stock management, rather than arable farming where manuring would enhance the possibility of pottery sherds being spread on the fields. There is no evidence for settlement adjacent to the ditches. Other ditches recorded to the north of the development site at right angles to the Roman Road have been interpreted as field boundaries related to Roman land use (Tann 1996, 8).

The undated northwest-southeast aligned ditch (128), recorded in Trench 10, is probably part of a field boundary ditch. The differing alignment of, and truncation by the northeast-southwest parallel ditches (recorded in Trenches 6, 8, 9 and 12) suggest that the ditch may be part of an earlier field system.

The north-south orientated parallel features recorded during the geophysical survey, were located within trenches 10 and 13. These may also represent a field boundary associated with the Roman occupation site to the northwest, inferred in part due to the similar alignment to the Roman road, Mareham Lane.

Other pits and post holes discovered within trenches 6, 9 and 10 may possibly be contemporary with the ditches but, with no artefacts or occupation debris found associated with these remains their precise function is unclear and they are unlikely to represent a sustained habitation of the area.

### 6.3 Phase 3: Modern Deposits

A modern deposit of topsoil was recorded across the development site.

Roman tile and post-medieval artefacts, including a quantity of metal objects, were recovered from this deposit.

## 7. ASSESSMENT OF SIGNIFICANCE

For assessment of significance the *Secretary of State's criteria for scheduling ancient monuments* has been used (DoE 1990, Annex; See Appendix 3).

### Period

There were no dateable remains on which to date the site. However, the proximity of the site to known Mid-Late Iron Age and Roman settlements may infer a similar date range.

### Rarity

The lack of dating evidence from any of the features excavated at the site severely restricts any comment on the rarity of these archaeological remains. If, as suspected, these deposits are of Middle to Late Iron Age and Roman date, archaeological deposits of the type recorded during this evaluation are not particularly rare.

### Documentation

Records of archaeological sites and finds made in the Seaford area are held in the Lincolnshire Sites and Monuments Record and the files maintained by the North Kesteven Heritage Officer. A Desk-Top Assessment of the area has previously been produced (Tann 1996) and synopses of excavations to the west (Herbert 1997) and south (Elsdon 1997) have also been written. Aerial photographs of the site have been transcribed and plotted (RCHME 1996).

### Group value

The majority of the remains encountered probably served a pastoral function, such as field boundaries or trackways. Therefore, the group value is low, though this may be enhanced by possible association with the adjacent Roman road or Mid-Late Iron Age settlement. The possible different periods of the ditches may also enhance the group value.

### Survival/Condition

The features recorded appeared to have survived well and showed little evidence of disturbance other than through later agricultural activity.

### Fragility/Vulnerability

Development of the site is likely to impact into natural deposits. Consequently, all archaeological remains present are vulnerable.

### Diversity

Undated boundary ditches or trackways, pits and post holes, probably associated with pastoral use, were revealed. As a group these have low diversity.

### Potential

There is high potential that undated boundary ditches, trackways, pits and post holes, as found during the archaeological evaluation, occur elsewhere on, and in the immediate vicinity of the site. The potential of these kind of remains to yield archaeological data are limited by the lack of dating evidence. Should dating evidence be recovered, something may be learnt regarding the farming regime and economic base of the particular community.

## 8. EFFECTIVENESS OF TECHNIQUES

The technique of using trial trenches to locate and evaluate archaeological deposits was successful. Well-preserved undated archaeological deposits were identified across the area. Many of these could be equated with features identified as part of the geophysical survey. Moreover, manual excavation revealed other unknown archaeological features, including ditches, pits and post holes. However, the location of the trenches was biased towards investigation of ditches known from

geophysical and aerial photographic surveys.

The metal detector survey of the topsoil from the trenches led to the recovery of a small number of Roman and post-medieval artefacts, which would not otherwise have been found.

The earlier programme of geophysical survey was moderately effective in identifying linear sub-surface features, but did not record any pits or post holes.

The lack of finds within the excavated features has hindered the dating of the site, with only inferred dates being possible from adjacent features of known dates.

## 9. CONCLUSIONS

Archaeological evaluation on land to the rear of the old Rugby Club, East Road, Sleaford, Lincolnshire has achieved the aims set by the Heritage Officer for North Kesteven District Council. A number of undated archaeological remains were recorded.

Features recorded as part of the geophysical and aerial photographic surveys were identified and investigated. Comprising undated ditches, gullies, pits and post holes, these remains represent probable field boundary systems associated with the adjacent Mid-Late Iron Age or Roman settlements.

Two ditches running parallel northeast-southwest across the site were also recorded and may represent a droveway or trackway.

Modern ploughing of the site along with root and animal disturbance has caused some limited damage to the underlying deposits. However, archaeological remains were reasonably well preserved. Survival of well-preserved environmental remains is unlikely.

## 10. ACKNOWLEDGEMENTS

Archaeological Project Services would like to acknowledge the assistance of Mr Avison who commissioned the evaluation on behalf of Becksiders Builders. The work was coordinated by Gary Taylor and Dale Trimble, and this report was edited by Dale Trimble and Tom Lane. Metal detection of the site was by Norman Riches. Kate Orr, the Heritage Officer for North Kesteven District Council, kindly permitted examination of the relevant parish files.

## 11. PERSONNEL

Project Coordinator: Gary Taylor and Dale Trimble

Project Officer: Neil Herbert

Site Supervisor: Tobin Rayner

Site Assistants: Denise Buckley, Rachael Hall, Mundin and Fiona Walker

Finds Processing: Denise Buckley

Illustration: Tobin Rayner

Photographic Reproduction: Sue Unsworth

Post-excavation Analyst: Tobin Rayner

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### **13. ABBREVIATIONS**

APS Archaeological Project Services

IFA Institute of Field Archaeologists

TLA Trust for Lincolnshire Archaeology



Figure 1: General location map

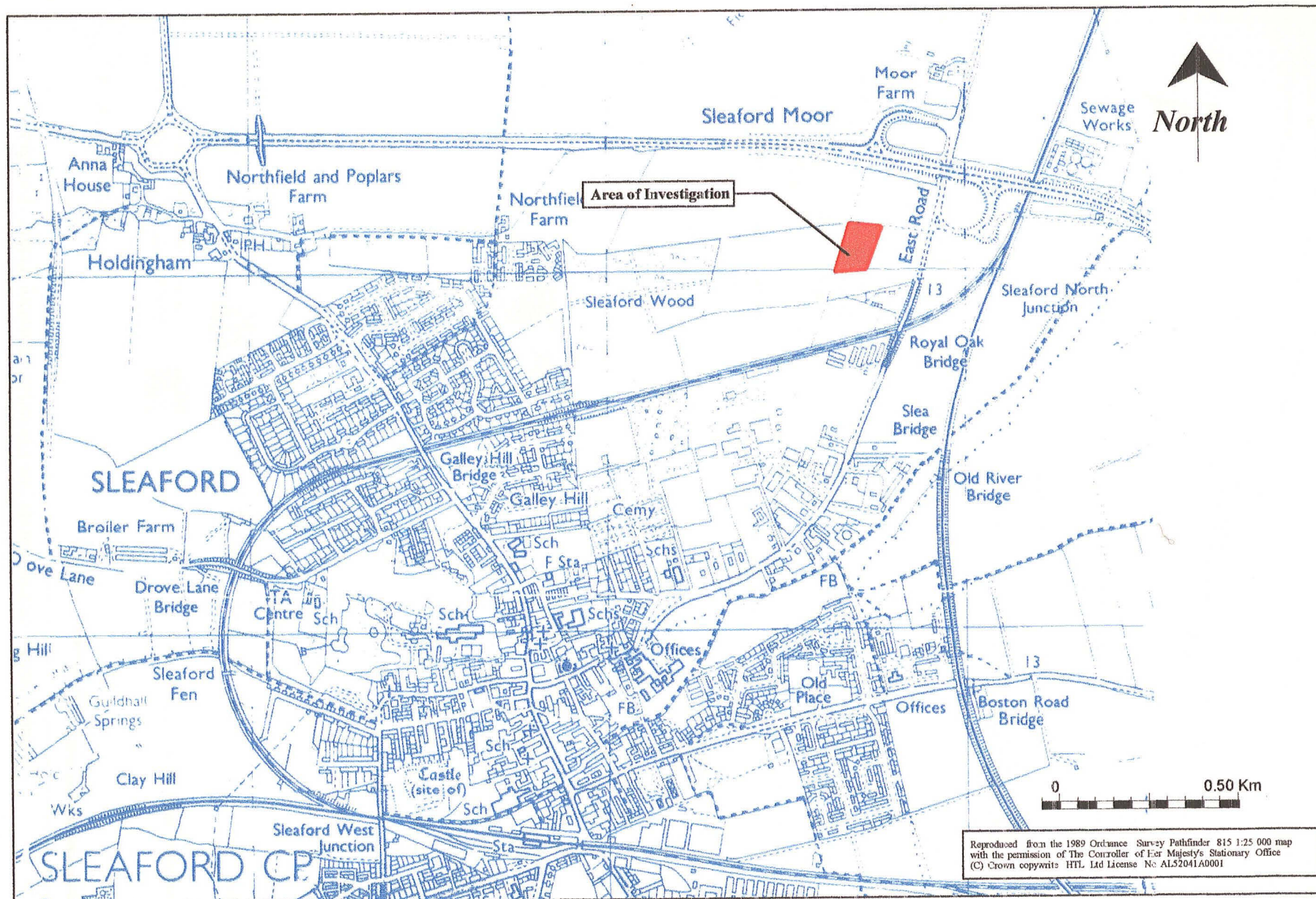


Figure 2: Map showing area of investigation



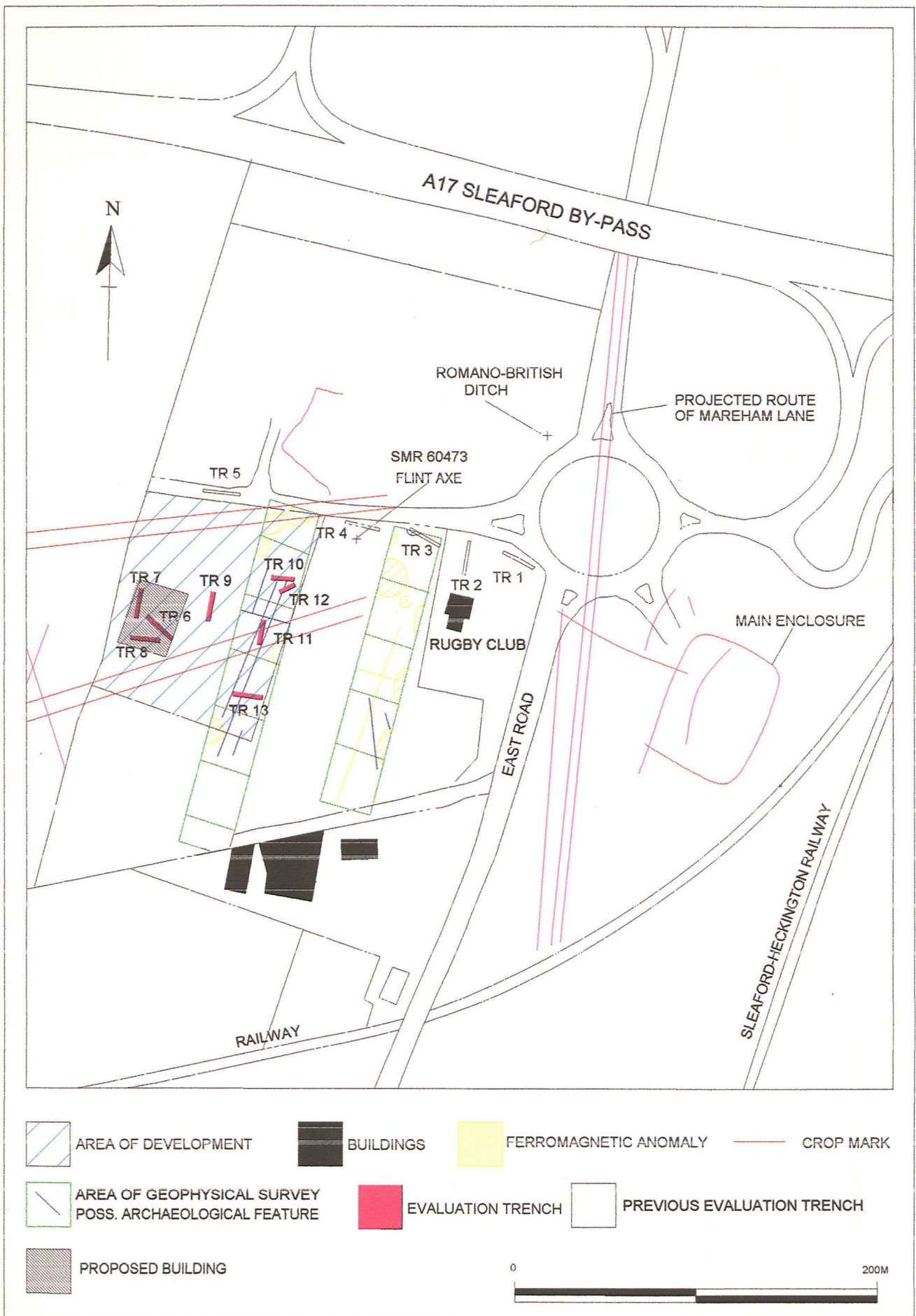


Figure 3: Trench location, cropmarks and known archaeological remains

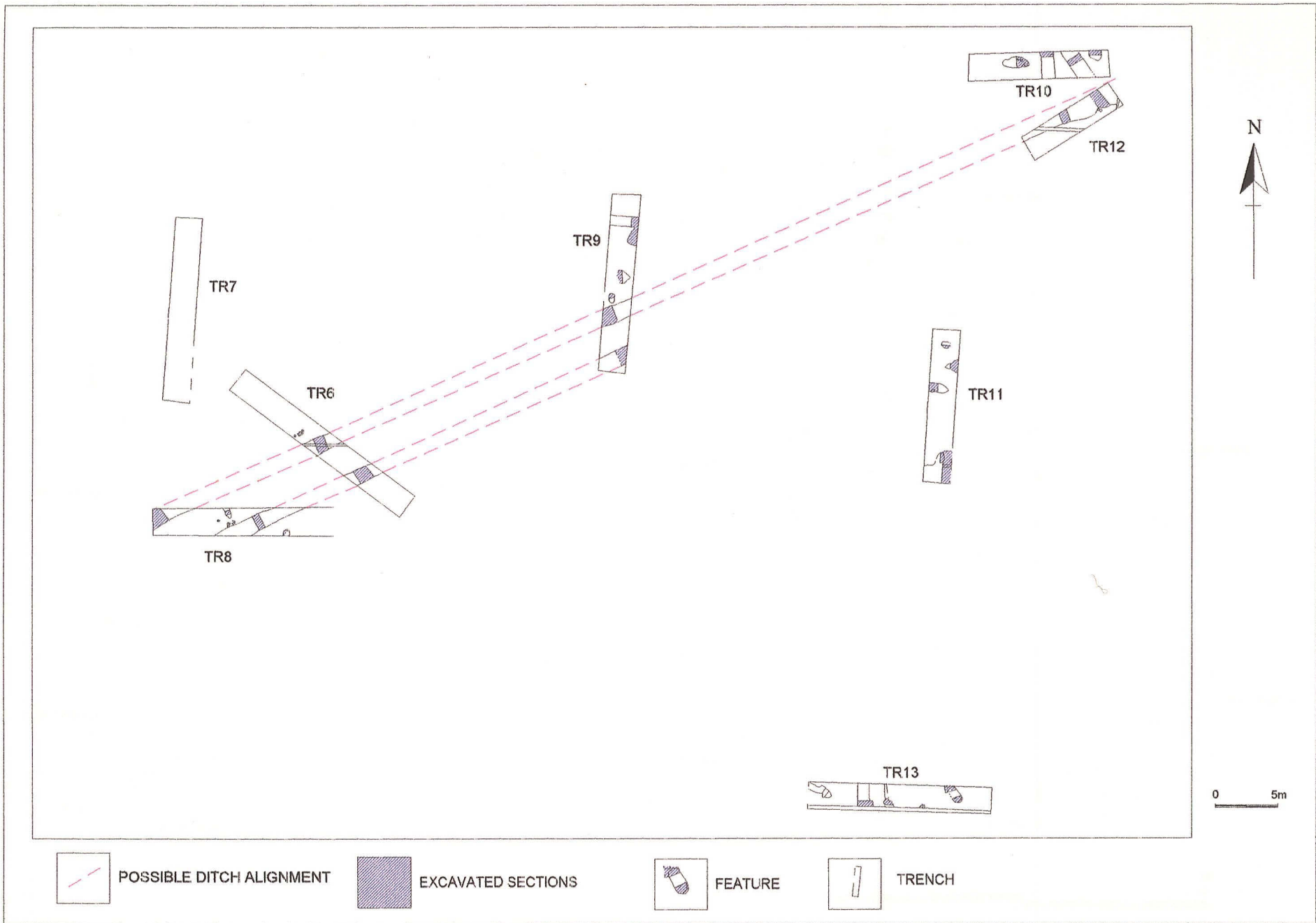


Figure 4: Trench location with possible double ditch alignment

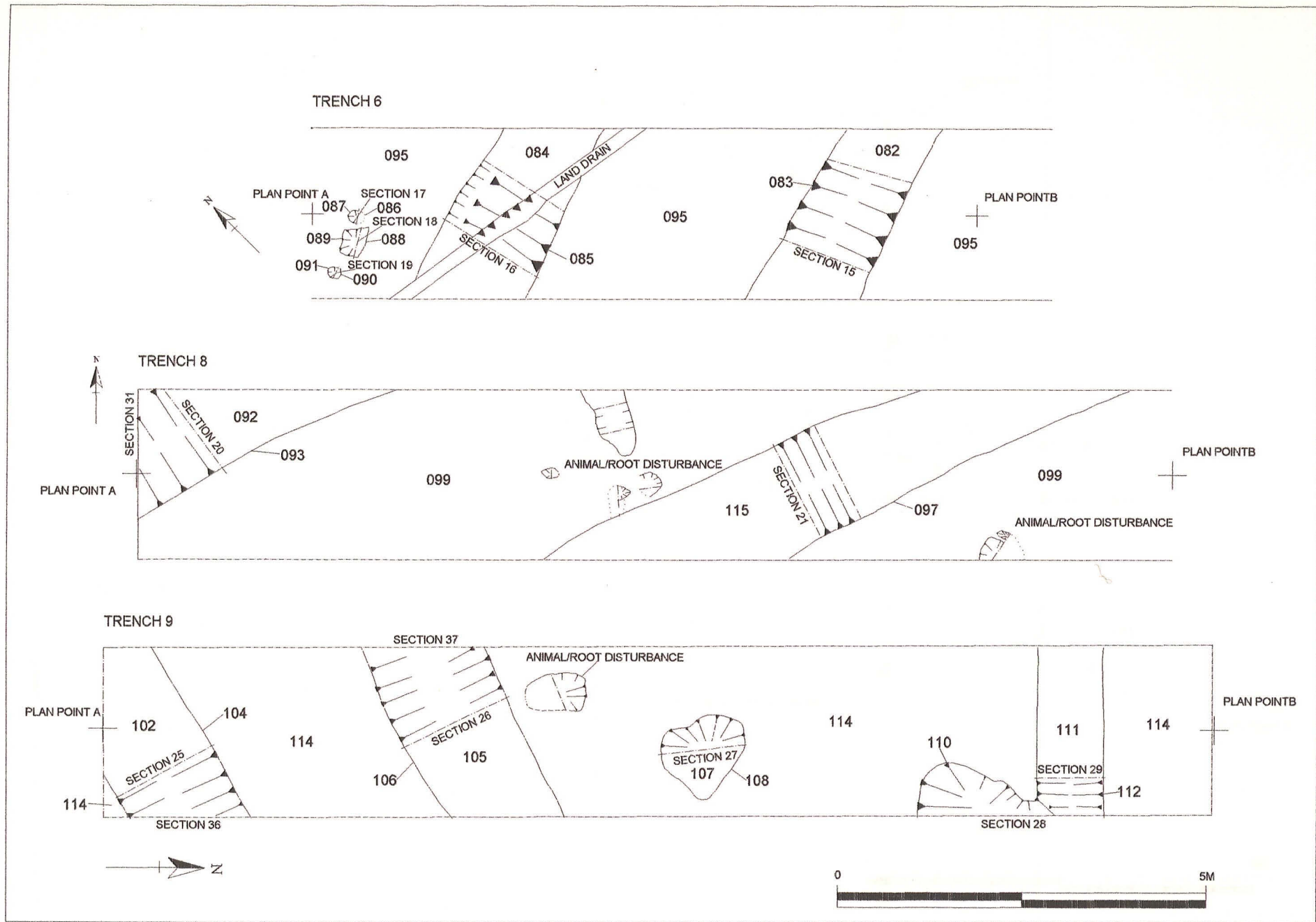


Figure 5: Trench plans 6, 8 and 9

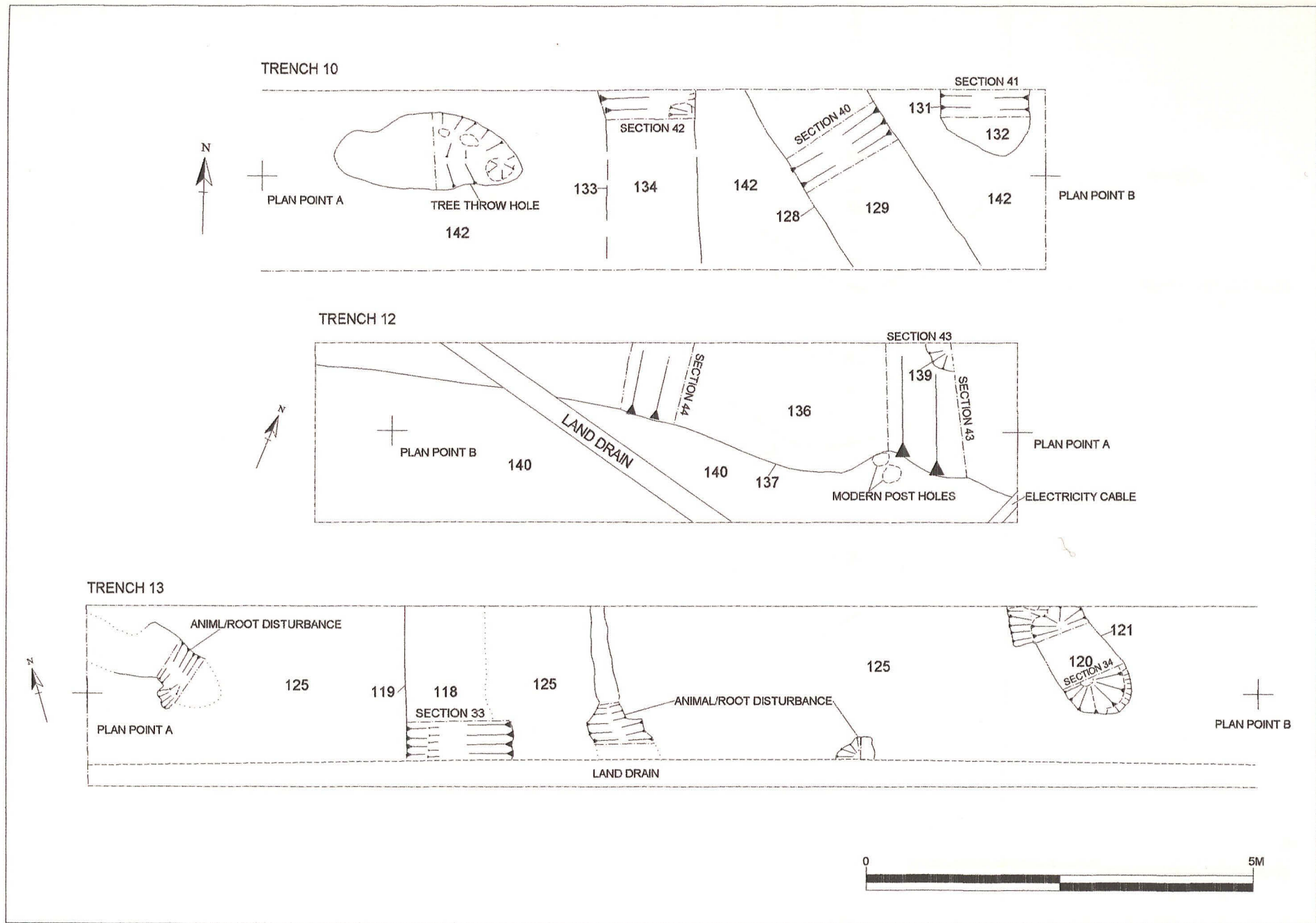


Figure 6: Trench plans 10, 12 and 13

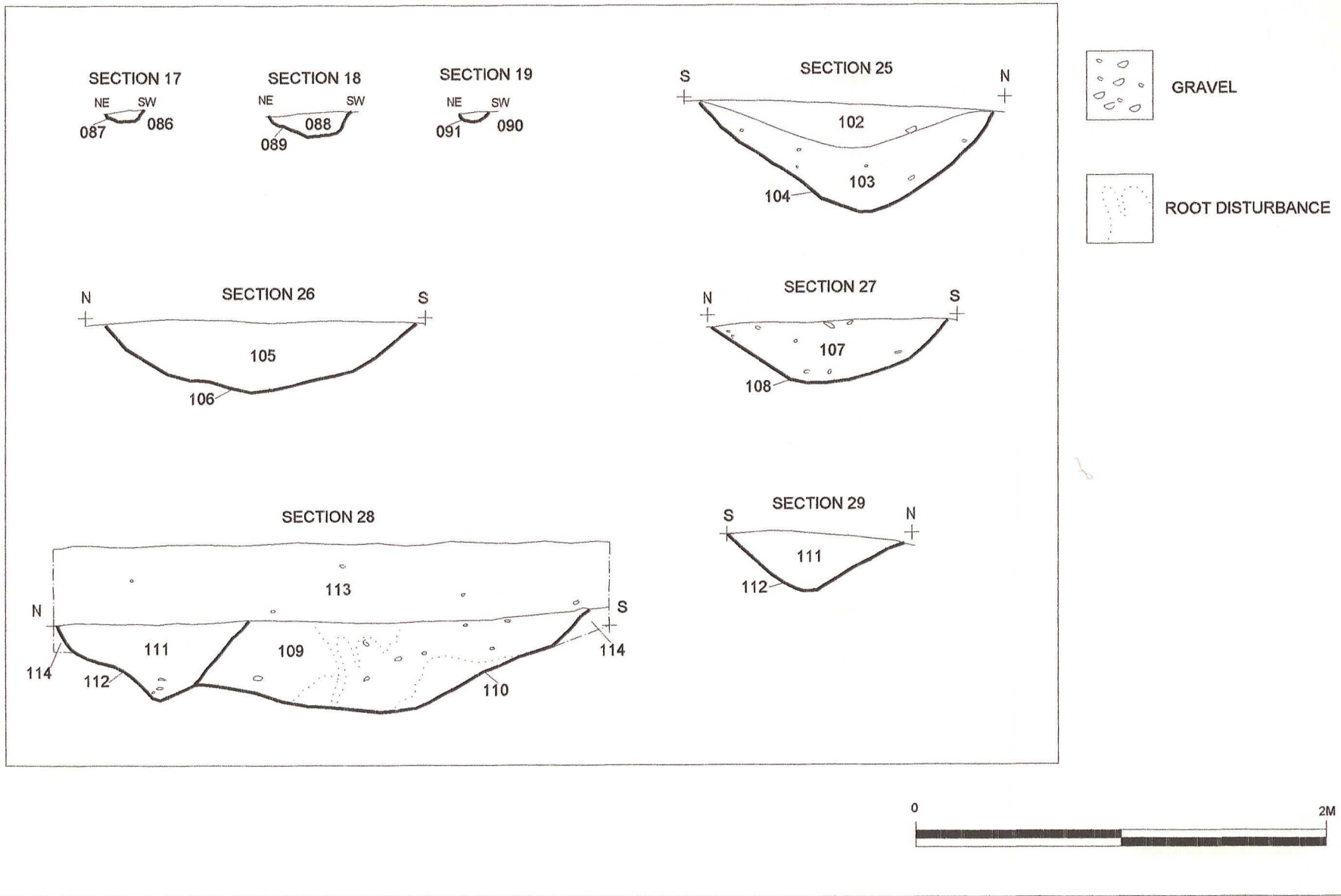


Figure 7: Sections 17 - 19, 25 - 29

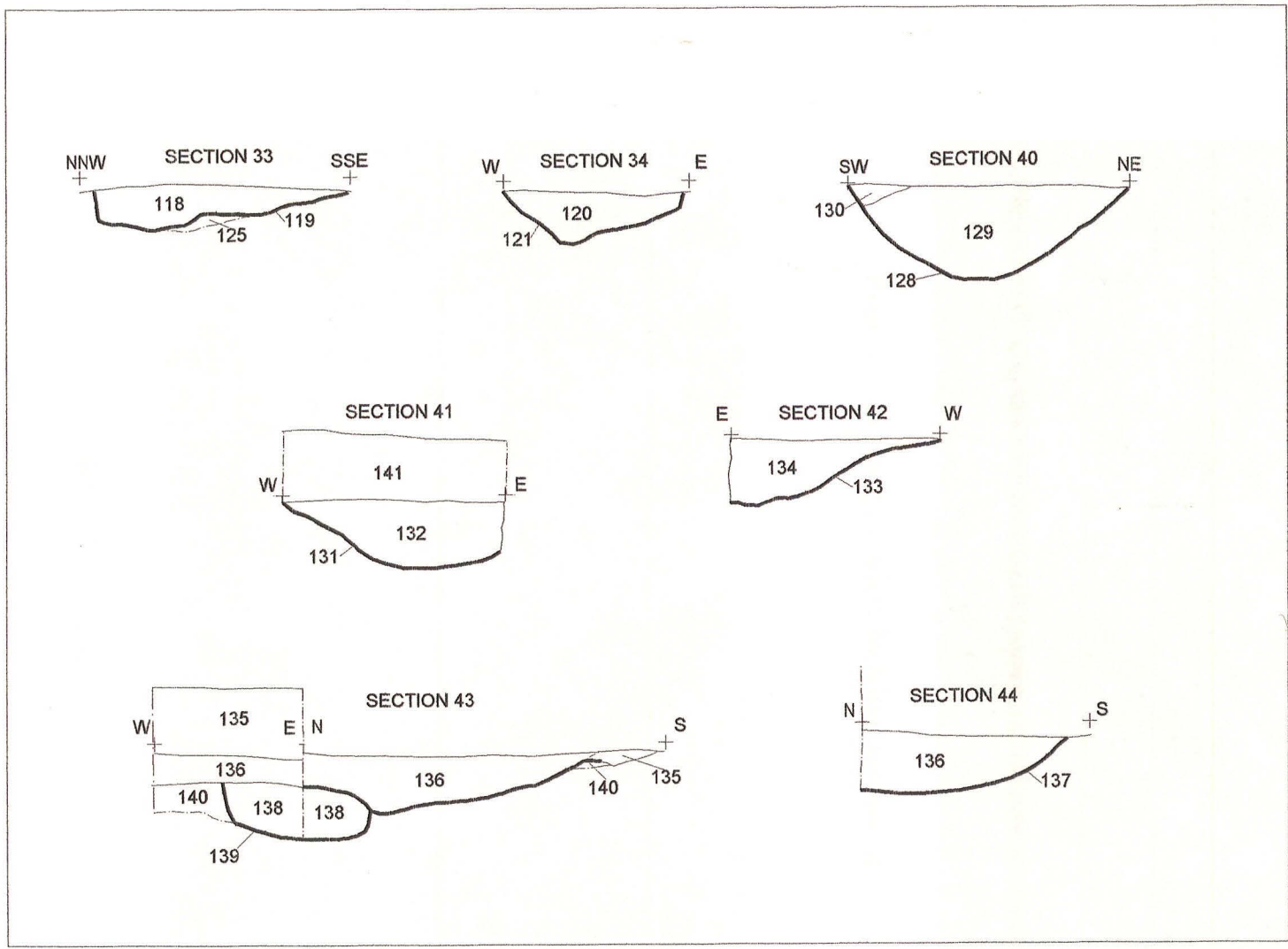


Figure 8: Sections 33 - 34, 41 -44



Plate 1 General Site View looking northwest



Plate 2 Trench 6



Plate 3 Trench 9



Plate 4 Section 25





Plate 5 Section 26

## Appendix 1

### ARCHAEOLOGICAL PROJECT BRIEF FOR TRIAL TRENCHING AS PART OF AN EVALUATION

PART OF FIELD 7500, THE REAR OF THE OLD RUGBY CLUB, EAST ROAD,  
SLEAFORD, LINCS

**Agent:** Mr Avison  
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LN5 8AS  
Tel:01522 524750

**NGR:** TF 0775 4705 (c)

#### 1. Summary

1.1 This document sets out the brief for archaeological fieldwork, recording and publication to be carried out prior to the determination of planning permission. It sets out the requirements for a programme of trial excavations to evaluate the site.

1.2 This brief should be used by archaeological contractors as the basis for the preparation of a detailed archaeological project specification. In response to this brief contractors will be expected to provide details of the proposed scheme of work, to include the anticipated working methods, timescales and staffing levels. (The Heritage Officer does not maintain a list of archaeological contractors but names of local units can be found in the Yellow Pages or from the Institute of Field Archaeologists Tel 0118 931 6446.)

1.3 All detailed specifications will be submitted by the developer for approval by the Heritage Officer for North Kesteven District Council. The client will be free to choose between those specifications which are considered to adequately satisfy this brief.

#### 2. Site Location and Description.

2.1 Sleaford is located approximately 27km south of Lincoln in the district of North Kesteven. The proposed development site is situated to the north east of the town centre, to the rear of the old rugby club on what were rugby pitches. The site is part of field no 7500. It is bounded by a new access road to the north, East Road (the A 153) to the east, and a drain and hedge to the west. The southern boundary does not appear to be marked on the ground. The site is termed 'field 1' in the desk-based assessment carried out in 1996 for this area (N/57/846/940).

2.2 The area is approximately 2 Ha. in size. It is fairly flat and covered by overgrown grass. The posts, floodlights and a line of advertising hoardings have been taken down. A stone and asphalt carpark occupies the north eastern corner.

#### 3. Planning Background

3.1 The proposed development site was included in an outline planning permission granted in 1997 to develop a 23 Ha. area west of East Road for general industrial, business and warehousing purposes.

3.2 Full planning permission is soon to be applied for to develop land to the rear of the rugby club. Before planning permission can be determined, an archaeological evaluation must be completed to assess the impact to archaeological remains. A geophysical survey has been carried out over the whole field in 1997, before the access road was built.

3.3 If important remains are revealed, further investigations or a mitigation strategy will be required.

#### **4. Archaeological Background**

4.1 Old Sleaford to the south is known to have been a major Late Iron-Age settlement and mint and later a Roman town.

4.2 There is a known Roman occupation site on the north side of Sleaford Wood.

4.3 A desk-based archaeological assessment for the East Road area was completed in July 1996. This examined aerial photographs which brought to light new evidence for probable Romano/British activity in the area including the course of the Roman road - King Street/ Mareham Lane. The road runs in a north-south direction to the east of East Road. The course of the road runs just outside the proposed development area. Aerial photographs of the field in question showed two parallel cropmarks running across the field in a roughly east-west direction. It is hoped that trial excavations will help elucidate their function

4.4 The field immediately to the north was recently evaluated by geophysical survey and trial excavations in advance of building a warehouse. A series of undated features were revealed including field boundaries and enclosures of possible prehistoric date.(N/57/942/95).

4.5 The Field by North Junction on the other side of East Road has also been evaluated. A Mid-Late Iron Age settlement enclosure excavated is some of the earliest settlement evidence of Sleaford that we have. There may be similar Iron Age enclosures in the proposed development area that are not showing up in aerial photographs The course of a Mareham Lane was also revealed.(See 4.3).

4.6 The fields to the west and south west of the site in question have recently been evaluated for British Energy. The field to the west was shown to be waterlogged and had no sign of occupation. In the field to the south of this, trial excavations revealed an important Neolithic and Bronze Age site on a area of slightly raised ground (report awaited).

4.7 The geophysical survey carried out by Engineering Archaeological Services on the Rugby Club pitches at the beginning of November 1997 showed some linear anomalies which may be archaeological features similar to those to the north and east.

These anomalies and the blank areas should be investigated by the trial excavations.

4.8 Five trial trenches were excavated in 1997 in advance of building the access road to the north of the proposed development area. A number of undated pits, ditches, gullies and possible postholes were excavated which may be of Iron-Age date. These remains were buried under 0.3m - 0.6m of topsoil. One Mesolithic flint tool was retrieved.

## 5. Requirement for Work

5.1 The purpose of the archaeological evaluation should be to gather sufficient information to establish the presence/absence, extent, depth, character, quality and date of any archaeological deposits. The trial trenches will be positioned to investigate those anomalies which appeared on the aerial photographs as crop marks, and those which appeared on the geophysical survey; as well as in blank areas, to provide dating evidence and to discover if there are any further remains.

5.2 The results of this assessment should enable a decision on whether the remains should be preserved 'in situ' i.e. through careful siting of buildings or design of foundations, or whether they should be preserved 'by record' i.e. through excavation.

5.3 The evaluation will consist of the excavation 2% sample of the approximately 2Ha. area. The positioning of the trenches should be discussed with the Heritage Officer.

5.4 Reference should be made to relevant historical sources and previous archaeological work in the area when interpreting the results.

5.5 The investigation should be carried out by a recognised archaeological body in accordance with the code of conduct of the Institute of Field Archaeologists. The specialists to be used by the archaeological body should be members of the IFA, and/or members of the appropriate finds group. If this is not the case, a CV or some other form of reference should be provided with the specification.

## 6. Methods

6.1 The contractor's specification should be prepared according to requirements of this brief and the Lincolnshire Archaeological Handbook's section 'Standard Briefs for Archaeological Projects in Lincolnshire' (August 1997) and should include the following details:

6.1.1 A projected timetable must be agreed for the various stages of work (fieldwork and production of report).

6.1.2 The staff structure and numbers must be detailed including 'person' hours for on-site work.

6.1.3 It is expected that all on-site work will be carried out in a way that complies with the relevant Health and Safety legislation and that due consideration will be given to site security.

6.1.4 A full description of the recovery and recording strategies to be used.

6.1.5 An estimate of time and resources allocated for the post-excavation work and report production in the form of 'person' hours. This should include lists of specialists and their role in the project. It is expected that Iron Age and roman finds will be encountered and therefore adequate provision should be made for specialists in these areas.

6.1.6 A contingency for unexpected costs e.g. due to more artefacts or ecofacts recovered than expected. This should only be activated after discussion with the Heritage Officer and the client.

6.2 Excavation is a potentially destructive technique and the specification should include a detailed reasoning behind the application of this technique. The following factors should be borne in mind:

6.2.1 the use of an appropriate machine with a wide toothless ditching blade and the supervision of all machine work by an archaeologist.

6.2.2 the machine should be used to remove topsoil down to the first archaeological horizon.

6.2.3 the most recent archaeological deposits are not necessarily the least important and this should be considered when determining the level to which machining will be carried out.

6.2.4 when archaeological features are revealed by machine these will be cleaned by hand.

6.2.5 a representative sample of every archaeological feature must be excavated by hand (although the depth of surviving deposits must be determined, it is not expected that every trench will be excavated to natural).

6.2.6 all excavation must be carried out with a view to avoiding features which may be worthy of preservation in situ.

6.2.7 any human remains encountered must be left in situ and only removed if absolutely necessary. The contractor must comply with all statutory consents and licences regarding the exhumation and interment of human remains. It will also be necessary to comply with all reasonable requests of interested parties as to the method of removal, reinterment or disposal of the remains or associated items. Attempts must be made at all times not to cause offence to any interested parties.

6.2.8 it is expected that an approved recording system will be used for all on-site and post-fieldwork procedures.

6.2.9 Environmental samples will be taken unless otherwise agreed with the Heritage Officer and environmental specialist.

6.2.10 Should the site merit it, consideration should be given to drawing a sample of pottery for reference purposes. The pottery specialist (s) should advise on the size of the sample to be drawn. This should be treated as a contingency.

6.2.11 Should any gold or silver finds thought to qualify as 'treasure' under the 1996 Treasure Act be retrieved, they should be stored safely and reported to the appropriated coroner's office.

## 7. **Monitoring Arrangements**

7.1 The Heritage Officer will be responsible for monitoring progress to ensure that fieldwork meets the specification. To facilitate this she should be contacted at least one week prior to the commencement of fieldwork.

7.2 Any adjustments to the brief for the evaluation should only be made after discussion with the Heritage Officer for North Kesteven District Council. If any major archaeological discovery is made it is hoped that this will be accommodated within the scheme, and preservation in situ be given due consideration.

## 8. **Reporting Requirements**

8.1 The evaluation report should be produced to the level outlined in The Management of Archaeological Projects, Appendix 3, English Heritage, 1991 and should be produced within two months of the completion of the fieldwork phase. If this is not possible then the Heritage Officer must be consulted at the earliest possible opportunity. The report should include:

8.1.1 plans of the trench layout and features therein.

8.1.2 tables summarising features and artefacts together with a full description and brief interpretation.

8.1.3 section and plan drawings with ground level Ordnance Datum, vertical and horizontal scales as appropriate.

8.1.4 plans of actual and potential deposits.

8.1.5 a consideration of the evidence within the wider landscape setting.

8.1.6 a consideration of the importance of the findings on a local, regional and national basis.

8.1.7 a critical review of the effectiveness of the methodology.

8.2 A copy of the evaluation report must be deposited with Lincolnshire Sites and Monuments Record, the Heritage Officer, The District Planning Authority and the client.

## 9. **Archive Deposition**

9.1 Arrangements must be made with the landowner(s) and/or developers and an appropriate museum for the deposition of the object and paper archive. If the receiving museum is to be the City and County Museum, Lincoln then the archive should be produced in the form outlined in that museum's document 'Conditions for the Acceptance of Project Archives', see address below.

## 10. **Publication and Dissemination**

10.1 The deposition of a copy of the report with the Lincolnshire Sites and Monuments Record and with the Heritage Officer will be deemed to put all information into the public domain, unless a special request is made for confidentiality. If material is to be held in confidence a timescale must be agreed with the Heritage Officer but is expected this will not exceed six months.

10.2 A summary of the results will be published in Lincolnshire History and Archaeology in due course.

10.3 Should the evaluation reveal finds of national or regional importance, provision should be made for publication in the appropriate regional or national journal.

## 11. **Additional Information**

11.1 This document attempts to define the best practice expected of an archaeological evaluation but cannot fully anticipate the conditions that will be encountered as work progresses. However, changes to the approved programme of evaluation work are only to be made with the prior written approval of the Heritage Officer.

11.2 Further contact addresses:

Kate Orr  
North Kesteven Heritage Officer  
Heritage Lincolnshire  
The Old School  
Cameron Street  
Lincs. NG34 9RW  
Tel:01529 461699

County Sites and Monuments Record  
Highways and Planning Directorate  
Lincolnshire County Council  
3rd Floor  
City Hall  
Lincoln LN1 1DN

Mr T. Page  
City and County Museum  
12 Friars Lane

Lincoln LN2 5AL  
01522 530401

Planning Services  
North Kesteven District Council Offices  
PO Box 3  
Kesteven St  
Sleaford  
NG34 7EF

Brief set by the North Kesteven Heritage Officer 4/6/1999  
This brief is only valid up to one year from this date.



Appendix 2

**SPECIFICATION  
FOR THE  
ARCHAEOLOGICAL EVALUATION  
AT THE OLD RUGBY PITCH,  
EAST ROAD,  
SLEAFORD**

**PREPARED FOR  
BECKSIDE BUILDINGS AND  
INSTALLATIONS LTD**

**AUGUST 1999**

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Figure 2 Site Location Plan ..... Between pages 1 and 2

## 1 SUMMARY

- 1.1 *This document comprises a specification for the archaeological evaluation of land at the old rugby pitch, East Road, Sleaford.*
- 1.2 *Numerous Iron Age and Roman sites are located in proximity to the investigation area. A Roman road lies immediately to the east and there are probably settlement and stock enclosures of prehistoric and later date just to the east and north of the rugby pitch. Previous geophysical survey of the site has revealed a number of possible buried archaeological remains on the proposed development area. Trenching along the northern boundary of the site revealed several undated but possibly Iron Age ditches and recovered a mesolithic flint tool.*
- 1.3 *A planning application has been made for development of the area. The archaeological works are being undertaken to provide information to assist the determination of the application.*
- 1.4 *The archaeological work will consist of a programme of trial trenching to examine some of the potential remains identified by the geophysical survey and test for other archaeological remains.*
- 1.5 *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 evaluation of land at the old rugby pitch, East Road, Sleaford, Lincolnshire, national grid reference TF 078 470.
- 2.2 The document contains the following parts:
  - 2.2.1 Overview
  - 2.2.2 The archaeological and natural setting
  - 2.2.3 Stages of work and methodologies to be used
  - 2.2.4 List of specialists
  - 2.2.5 Programme of works and staffing structure of the project

3 **SITE DESCRIPTION**

3.1 Sleaford is located 27km south of Lincoln in the administrative district of North Kesteven. The site is located to the northeast of Sleaford town centre, 160m south of the A17 Sleaford bypass on the west side of the A153 East Road. The land was formerly rugby pitches and covers an area of approximately 1ha.

4 **PLANNING BACKGROUND**

4.1 A planning application, number N/57/0846/94, was previously submitted to North Kesteven District Council for outline planning permission to develop the land for industrial purposes. Various archaeological investigations have been carried out in the vicinity, though not on the specific site itself. An archaeological evaluation is required before planning permission can be given.

5 **SOILS AND TOPOGRAPHY**

5.1 The site is relatively flat and lies at approximately 12m OD, and is overlain by fine loamy gleyic calcareous soils of the Aswarby Association (Hodge *et al.* 1984, 99).

6 **ARCHAEOLOGICAL OVERVIEW**

6.1 Finds of a Roman date have been retrieved from the fields surrounding the application area. Aerial photography has shown that the area surrounding the site contains evidence of remains of probable Iron Age or Roman date. In particular, a rectangular enclosure, evident as a cropmark, is located immediately to the east of the site and has been shown to be of Middle Iron Age origin (Archaeological Project Services 1998a).

6.2 A probable Roman road bypasses the site immediately to the east and the current excavations on the opposite side of East Road have revealed this probable Roman route. To the west of the site, the field north of Sleaford Wood has produced pottery and other artefacts suggesting occupation of Roman date. Additionally, recent investigations immediately north of the present investigation site revealed Roman ditches containing pottery and previously unknown double-ditched enclosures (Archaeological Project Services 1997).

6.3 Previous investigations of the old rugby pitches included geophysical survey which identified a number of predominantly linear features, aligned north-south or east-west across the area, and possible pits (Engineering Archaeological Services 1997). Archaeological Project Services were commissioned to carry out a subsequent evaluation of the entire area, though this was then reduced to the

limits of a new access road which forms the northern boundary of the site. This revealed several undated ditches and gullies and also a pit that had been identified by the geophysical survey. A mesolithic flint tool was also recovered (Archaeological Project Services 1998b).

- 6.4 Investigations to the south have revealed a Neolithic-Bronze Age site, though there is no report available for this at present.

## 7 AIMS AND OBJECTIVES

- 7.1 The aim of the work will be to gather sufficient information to enable the North Kesteven Heritage Officer to formulate an appropriate policy for the management of the archaeological resource of the site.

- 7.2 The objectives of the work will be to:

7.2.1 Establish the presence/absence of archaeological remains within the site, with particular reference to cropmark and geophysical evidence.

7.2.2 Determine the likely extent and spatial arrangement of archaeological remains present within the site.

7.2.3 Determine the condition and quality of the archaeological remains present within the site.

7.2.4 Establish the extent to which the surrounding archaeological remains extend into the application area.

7.2.5 Determine the way in which the archaeological remains identified fit into the pattern of occupation and land-use in the surrounding landscape.

7.2.6 Determine the date and function of the archaeological remains present on the site.

## 8 LIAISON WITH THE COMMUNITY ARCHAEOLOGIST

- 8.1 Prior to the commencement of the evaluation the arrangement of the trial trenches will be agreed with the North Kesteven Heritage Officer to ensure that the proposed scheme of works fulfils their requirements.

## 9 TRIAL TRENCHING

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9.1 Reasoning for this technique

9.1.1 Trial trenching enables the *in situ* determination of the sequence, date, nature, depth, environmental potential and density of archaeological features present on the site.

9.1.2 The trial trenching will consist of the excavation of a 2% sample of the entire development area of 1ha. This equate to 125m length of trenches of standard JCB bucket width of 1.6m. It is expected that the trenches will each measure 10m - 15m x 1.6m. Should archaeological deposits extend below 1.2m depth then the trench sides will be stepped in, or shored, as appropriate. Trenches will be located in accordance with the requirements of the curatorial brief. 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 evaluation.

9.2.2 The work will be undertaken according to the relevant codes of practice issued by the Institute of Field Archaeologists. *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 be excavated. However, the evaluation 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:
- 9.3.5.1 the site before the commencement of field operations.
  - 9.3.5.2 the site during work to show specific stages of work, and the layout of the archaeology within individual trenches.
  - 9.3.5.3 individual features and, where appropriate, their sections.
  - 9.3.5.4 groups of features where their relationship is important.
  - 9.3.5.5 the site on completion of field work



- 9.3.6 Should human remains be encountered, they will be left *in situ* with excavation being limited to the identification and recording of such remains. The appropriate Home Office licences will be obtained and the local environmental health department and the police informed.
- 9.3.7 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.
- 9.3.8 The spoil generated during the evaluation 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.
- 9.3.9 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 deemed necessary, during the evaluation 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 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 evaluation will be prepared. This will consist of:

11.3.1.1 A non-technical summary of the findings of the evaluation.

11.3.1.2 A description of the archaeological setting of the site with reference to previous investigations in the vicinity.

11.3.1.3 Description of the topography and geology of the evaluation area

11.3.1.4 Description of the methodologies used during the evaluation and discussion of their effectiveness in the light of the findings of the investigation.

11.3.1.5 A text describing the findings of the evaluation.

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

11.3.1.7 Sections of the trenches and archaeological features.

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

11.3.1.9 Specialist reports on the finds from the site.

11.3.1.10 Appropriate photographs of the site and specific archaeological features.

12 **ARCHIVE**

12.1 The documentation, finds, photographs and other records and materials generated

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during the evaluation 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 evaluation report will be sent to: the client, Beckside Buildings and Installations Ltd; the North Kesteven Heritage Officer; North Kesteven District Council Planning Department; and the Lincolnshire County Sites and Monuments Record.

14 **PUBLICATION**

14.1 A report of the findings of the evaluation will be published in Heritage Lincolnshire's annual report and an article of appropriate content will be submitted for inclusion in the journal of the Society for Lincolnshire History and Archaeology. Notes or articles describing the results of the investigation will also be submitted for publication in the appropriate national journals: *Medieval Archaeology* and *Journal of the Medieval Settlement Research Group* for medieval and later remains, and *Britannia* for discoveries of Roman date.

15 **CURATORIAL MONITORING**

15.1 Curatorial responsibility for the project lies with the North Kesteven Heritage Officer. As much notice as possible, ideally at least 14 days written notification, 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 of acceptance from the archaeological curator.

16.2 Should the archaeological curator require any additional investigation beyond the scope of the briefs 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 principal and if necessary, be used as subcontractors to provide the relevant specialist work and reports in respect of

LAND AT THE RUGBY PITCH, EAST ROAD, SLEAFORD: SPECIFICATION FOR ARCHAEOLOGICAL EVALUATION

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>
Geophysical Survey	Engineering Archaeological Services
Conservation	Conservation Laboratory, City and County Museum, Lincoln.
Pottery Analysis	Prehistoric: Trent and Peak Archaeological Trust Roman: B Precious, independent specialist Anglo-Saxon: J Young, independent specialist Medieval and later: H Healey, independent archaeologist, or G Taylor, APS
Other Artefacts	J Cowgill, independent specialist; or G Taylor, APS; P Mills, APS; R Hall APS
Human Remains Analysis	R Gowland, independent specialist
Animal Remains Analysis	Environmental Archaeology Consultancy, or P Cope-Faulkner, APS
Environmental Analysis	Environmental Archaeology Consultancy

17.2 Summary CVs:

R Hall BA Specialist knowledge of post-medieval glass, having produced study on such material from major excavations at Wharram Percy.

Also produced reports on such material from sites in Lincolnshire and Norfolk.

P Mills BA Specialist knowledge of ceramic building materials; author of numerous specialist reports on such material from Britain and abroad. Member of British Brick Society; Archaeological Ceramic Buildings Material Group; Finds Research Group.

G Taylor BA MA Author of numerous reports on medieval and post-medieval ceramics; industrial materials; Roman coins and pottery. Memberships held (some lapsed): Medieval Pottery Research Group; North West Medieval Pottery Research Group; West Midlands Medieval Pottery Research Group; Welsh Medieval and Post-medieval Pottery Research Group; Roman Pottery Research Group; Experimental Firing Society; Finds Research Group; West Midland Prehistoric Pottery Research Group; Preston and District Numismatics Society.

## 18 STAFFING LEVELS AND PROGRAMME

### 18.1 Evaluation (Trial Trenching)

18.1.1 The fieldwork is expected to take in the vicinity of 6-7 days for approximately 4 people, giving between 155 to 180 person hours on site. However, the level of archaeological remains is unknown and the figure is a 'best estimate' that cannot be specified further.

18.1.2 A half-day (4 person hours) has been allotted for an environmental archaeologist, though this is contingent on the quantity and quality of ancient environmental remains present on site.

18.1.3 Post-excavation analysis and report production have been allotted about 8.5 person days (64 person hours) plus specialist time of 8 person hours, though these are subject to the quantity, complexity and quality of archaeological remains encountered.

### 18.2 Contingency

18.2.1 Contingencies have been specified in the budget. These include: environmental sampling/analysis of waterlogged remains; pump (not expected as previous investigations in the vicinity have not revealed such evidence); Iron Age pottery -moderate amounts (small quantities have been allowed for); Roman pottery -moderate amounts (small quantities

expected and allowed for); Anglo-Saxon pottery (not expected); Medieval pottery -moderate quantities (not expected); faunal remains -moderate quantities (small amounts expected and allowed for); Conservation and/or Other unexpected remains or artefacts.

18.2.2 Other than the pump, the activation of any contingency requirement will be by the archaeological curator (North Kesteven Heritage Officer), not Archaeological Project Services.

## 19 **BIBLIOGRAPHY**

Archaeological Project Services, 1997 *Archaeological Evaluation on Land off East Road, Sleaford, Lincolnshire (ERS97)*

Archaeological Project Services, 1998a *Archaeological Evaluation on Land adjacent to North Junction, Sleaford, Lincolnshire (SNJ97)*

Archaeological Project Services, 1998b *Archaeological Evaluation at the Rugby Pitch, East Road, Sleaford, Lincolnshire (SRP98)*, Interim Report

Engineering Archaeological Services, 1997 *Sleaford East Road, Geophysical Survey*

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 3

#### 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 4

### Context Summary

Context	Trench	Description	Interpretation
082	6	Friable, mid grey clayey sand with occ small subangular stones	Fill of 083
083	6	Linear cut, 2.3m+, 1.21m and 0.36m deep. Gradual concave sides converging in rounded base. Aligned northeast-southwest and filled with 082	Ditch
084	6	Friable, mid grey clayey sand with occ small subangular gravel. Deposit 0.24m thick.	Fill of 085
085	6	Linear cut, 2.3m+, 1.44m and 0.24m deep. Gradual concave side on west, straight and shallow on the east. Sides gradually form a flat base. Aligned northeast-southwest and filled with 084. Possibly same as 093	Ditch
086	6	Loose, light grey sand with occ root disturbance. Deposit 0.05m thick	Fill 087
087	6	Roughly circular cut, 0.2m diameter and 0.05m deep, with gradual concave sides that converge on a flat base. Filled with 086	?Posthole
088	6	Loose, light grey sand with occ root disturbance. Deposit 0.12m thick	Fill 089
089	6	Irregular square cut, 0.4m, 0.38m and 0.12m deep. Sharp steep sides gradually turn to a flat base. Filled with 088	?Posthole
090	6	Loose, light grey sand with occ root disturbance. Deposit 0.05m thick	Fill 091
091	6	Circular cut, 0.15m diameter and 0.05m deep, with gradual concave sides and rounded base. Filled with 090	?Posthole
092	8	Friable, mid grey clayey sand with very occ small subangular stones. Deposit 0.38m thick	Fill 093
093	8	Linear cut, 2.3m+, 1.5m and 0.38m deep. Gradual concave sides converging in rounded base. Aligned northeast-southwest and filled with 092. Possibly same as 085	Ditch



094	6	Loose, dark brown silty sand with occ small subangular stones. Deposit 0.3m thick.	Topsoil
095	6	Loose, mid yellowish brown sand with freq small to medium sub-subangular limestone and flint gravel.	Natural
096	8	Friable, mid grey clayey sand with occ small sub angular stones and shells. Deposit 0.45m thick	Fill 097
097	8	Linear cut, 2.3m+, 1.34m and 0.46m deep, with sharp smooth moderate-gradual sides to a rounded base. Aligned northeast-southwest and filled with 096, 115.	Ditch
098	8	Loose, dark brown silty sand with occ small subangular stones. Deposit 0.3m thick	Topsoil
099	8	Loose, mid yellowish brown sand with freq small-med subangular limestone and flint gravel.	Natural
100	7	Loose, dark brown silty sand with occ small subangular stones. Deposit 0.35m thick	Topsoil
101	7	Loose, mid yellowish brown sand with freq small-medium subangular limestone and flint.	Natural
102	9	Friable, mid greyish brown clayey sand with occ small rounded limestone. Deposit 0.23m thick	Fill of 104
103	9	Friable, mid grey clayey sand with occ small subangular stones and occ shell. Deposit 0.55m thick	Fill of 104
104	9	Linear cut, 2.3m+, 1.43m and 0.55m deep. Sharp slightly V-shaped that gradually forms a rounded base. Aligned northeast-southwest and filled with 102, 103.	Ditch
105	9	Friable, mid grey clayey sand with very occ small subangular stones. Deposit 0.36m thick	Fill of 106
106	9	Linear cut, 2.3m+, 1.5m and 0.38m deep. Gradual edge with concave sides gradually forming a rounded base. Aligned northeast-southwest and filled with 123, 105	Ditch

107	9	Firm, mottled mid grey/ light-mid yellowish brown sand/ clayey sand with occ small subangular stones. Deposit 0.31m thick	Fill of 108
108	9	Irregular sub oval cut, 1.2m by 1.14m and 0.31m deep. Clear sharp edges with concave sides gradually forming a rounded base. Filled with 107	?Pit
109	9	Friable, mottled mid brown/mid grey/mid yellowish brown clayey sand with occ small subangular stones. Deposit 0.55m thick	Fill of 110
110	9	Possibly sub-oval cut, 1.92m by 0.74m+ and 0.55m deep. Moderately clear edge with shallow side on south and steep on west. Gradually form a rounded base. Cut by 112 and filled with 109	?Pit
111	9	Friable, dark brown clayey sand with occ small subangular stones. Deposit 0.38m thick.	Fill of 112
112	9	Linear cut, 2.3m+ by 0.92 and 0.38m deep. Sharp edges with smooth moderate (45 degrees) sides that gradually form a rounded base. Aligned east-west and filled with 111	Gully
113	9	Loose, dark brown silty sand with occ small subangular stones. Deposit 0.3m thick	Topsoil
114	9	Loose, mid yellowish brown sand with freq small-medium subangular limestone and flint fragments.	Natural
115	8	Friable, mid greyish brown clayey sand with occ small rounded limestone. Deposit 0.15m thick	Fill of 097
116	13	Firm, dark grey brown, with orange mottles, slightly silty sand with occ tiny stones. Deposit 0.22m thick	Fill of 117
117	13	Curvi-linear cut, 0.62m wide and 0.22m deep. Moderate to sharp edges with curved sides and rounded base. Aligned northwest-southeast and filled with 116	?ditch/tree root
118	13	Firm, mid yellow brown slightly silty sand with occ small stones. Deposit 0.2m thick	Fill of 119

119	13	Linear cut, 2.3m+ by 1.26m and 0.2m deep. Sharp to moderately clear edges and uneven sides one gentle and other vertical but both gradually form a rounded base. Aligned north-south and filled with 118	Ditch
120	13	Firm, dark grey brown, with freq purple and orange mottles, slightly silty sand with occ small stones and occ cobbles. Deposit 0.24m thick	Fill of 121 and 122
121	13	Linear cut, length unknown, width 0.88m and 0.24m deep. Moderately clear edges and steep to vertical sides which terminate fairly abruptly in a rounded base. Aligned north-south and filled with 120. Possibly part of or associated with 122	?Ditch/gully
122	13	Linear cut, length unknown, 0.88m wide and 0.24m deep. Steep smooth side and undulating on other to gradually form an irregular base. Aligned north-south and filled with 120. Possibly part of or associated with 121	Ditch terminus / tree throw
123	9	Friable, mid greyish brown clayey sand with occ small subangular stones. Deposit 0.1m thick	Fill of 106
124	13	Loose, dark grey brown sandy silt with occ stones. Deposit 0.3m thick	Topsoil
125	13	Loose, mid yellow brown sand with freq stones and occ gravel patches.	Natural
126	11	Friable, mid brown grey sandy silt with occ subangular limestone. Deposit 0.4m thick	Topsoil
127	11	Loose, mixed light brown grey and light brown yellow sandy silts with occ subangular limestone. Deposit 0.2m thick	Natural
128	10	Linear cut, 1.3m wide and 0.48m deep. Gradual edges smooth gentle sides with a concave base. Aligned northwest-southeast and filled with 129, 130. Possibly continue as ditch 139 in trench 12	Ditch
129	10	Loose, mid greyish brown sandy silt with occ small stones. Deposit 0.48m thick	Fill of 128
130	10	Loose, mid brown-yellow sand with freq gravel. Deposit 0.16m thick	Fill of 128

131	10	Irregular circular cut 1.1m wide and 0.34m deep. Moderately clear edges with gradual sides that become near vertical on western edge. Gradually forms an irregular base. Filled with 132	Pit
132	10	Loose, mid grey brown silty sand. Deposit 0.34m thick	Fill of 131
133	10	Irregular formation, 0.32m deep with unclear irregular sides that gradually form an uneven base. Filled with 134	Tree throw
134	10	Hard, mid yellowish brown silty sand with occ small gravel. Deposit 0.32m thick	Fill of 133
135	12	Loose, dark grey brown sandy silt with occ small stones. Deposit 0.3m thick	Topsoil
136	12	Firm, mid yellow brown slightly silty sand with occ small stones. Deposit 0.28m thick	Fill of 137
137	12	Linear cut, 1.4m wide and 0.28m deep. Moderately clear edge with even moderately steep curved sides that gently terminate in a rounded base. Aligned east-west and filled with 136. Cuts ditch 139	Ditch
138	12	Firm, blotchy light yellow brown/ light grey brown slightly silty sand. Deposit 0.26m thick.	Fill of 139
139	12	Linear cut, 0.39m width exposed, 0.35m length exposed and 0.26m deep. Moderate to sharp edges with curved almost vertical sides that terminate at a flat base. Aligned north-south, filled with 138 and cut by 137. Probably continuation of ditch 128 in trench 10	Ditch terminus
140	12	Loose, light-mid yellow brown sand with freq small stones.	Natural
141	10	Loose, dark brown silty sand with occ small gravel. Deposit 0.35m thick	Topsoil
142	10	Loose, mid yellow brown sand with freq small-medium gravel.	Natural

## Appendix 5

### The Finds

By Gary Taylor MA and Phil Mills BSc (Hons)

#### Provenance

All the material was either unstratified or recovered from the topsoil.

#### Range

The range of material is detailed in the table below. Metal detection was used in the recovery of the metallic objects.

TRENCH	CONTEXT	DESCRIPTION	DATE
6	unstratified	1 x iron rectangular-sectioned spike/nail 1 x Cu alloy 'curtain ring' 2 x linked lead sheet - ?casting splash	
8	unstratified	1 x iron flattened rod, curved 1 x iron sheet fragment 1 x Cu alloy tack	19 <sup>th</sup> - 20 <sup>th</sup> century
10	unstratified	1 x clay pipe stem 1 x Cu alloy ring - machinery part 1 x ferrous corrosion lump 1 x iron rectangular bolt 2 x iron rectangular - sectioned nails 1 x tile	19 <sup>th</sup> century 19 <sup>th</sup> - 20 <sup>th</sup> century  19 <sup>th</sup> - 20 <sup>th</sup> century  Roman
11	unstratified	1 x iron squared-sectioned nail? 1 x tile	Roman
12	unstratified	1 x iron rectangular - sectioned nail 1 x iron ?barbed wire fragment	
12	135	3 x clay pipe stems (2 linked) 1 x black glazed red painted tableware 1 x brown glazed red painted earthenware 1 x tile	18 <sup>th</sup> century 18 <sup>th</sup> century 18 <sup>th</sup> century Roman
13	unstratified	2 x iron nails 1 x lead fragment - ?casting splash	
13	116	2 x snail shells, probably <i>Helix Nemoralis</i> (banded snail)	

The Roman tiles are similar to SPS-1 (Mills, in Herbert 1999). SPS-1 is found at sites in Lincoln, Sleaford, Market Deeping and Heydour. It seems to be manufactured at the Heckington tile kiln site dated c. Late 2<sup>nd</sup> century AD.

**Condition**

All of the material is in good condition. The assemblage should be archived by material class. None of the metalwork was X-rayed.

**Potential**

The assemblage has limited potential.

**References**

Mills, P., 1999 The Ceramic Building Material , in Herbert, N.A., *Archaeological Investigations at the New Police Station, Boston Road, Sleaford, Lincolnshire*, Unpublished APS report no.30/98

## Appendix 6

### Glossary of Terms

<b>Context</b>	An archaeological context represents a distinct archaeological event or process. For example, the action of digging a pit creates a context (the cut) as does the process of its subsequent backfill (the fill). Each context encountered during an archaeological investigation is allocated a unique number by the archaeologist and a record sheet detailing the description and interpretation of the context (the context sheet) is created and placed in the site archive. Context numbers are identified within the report text by brackets, <i>e.g.</i> (004).
<b>Layer</b>	A layer is a term used to describe an accumulation of soil or other material that is not contained within a cut.
<b>Natural</b>	Undisturbed deposit(s) of soil or rock which have accumulated without the influence of human activity.
<b>Palaeolithic</b>	The 'Old Stone Age' period, part of the prehistoric era, dating from approximately 1 million years to 10,000 BC.
<b>Neolithic</b>	The 'New Stone Age' period, part of the prehistoric era, dating from approximately 4000-2000 BC.
<b>Bronze Age</b>	Part of the prehistoric era characterised by the introduction and use of bronze for tools and weapons. In Britain this period dates from approximately 2000-700 BC.
<b>Iron Age</b>	Part of the prehistoric era characterised by the introduction and use of iron for tools and weapons. In Britain this period dates from approximately 700 BC - AD 50.
<b>Romano-British</b>	Pertaining to the period from AD 43-410 when Britain formed part of the Roman Empire.
<b>Medieval</b>	The Middle Ages, dating from approximately AD 1066-1500.
<b>Post-medieval</b>	The period following the Middle Ages, dating from approximately AD 1500-1800.

Appendix 7

*Survey Commissioned  
by  
Archaeological Project Services*

*Surveyed  
by  
John Price  
Engineering Archaeological Services Ltd.*

*registered in England  
Nº 2869678*

*Sleaford East Road*

*Geophysical Survey*

*November 1997*



***Introduction:***

*Summary*

*NGR*

*Location And Topography*

***Archaeological Background***

*Aims Of Survey*

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***Technical Information:***

*Techniques Of  
Geophysical Survey*

*Instrumentation*

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*Copyright*

# Sleaford East Road Geophysical Survey - Introduction:

*NGR*

*Centred On TF 078 472*

## *Location And Topography*

*The area surveyed is the Rugby Club grounds to the south of the A17 close to its junction with the A153. The land is flat and under grass.*

## *Archaeological Background*

*The area is adjacent to a number of cropmark sites and evaluations have revealed features of late iron Age and Romano-British date.*

## *Aims Of Survey*

*It was hoped that a combination of magnetic susceptibility survey, scanning and detailed magnetometer survey would detect and locate any possible features and activity areas and thus clarify the archaeological significance of the site.*

## *SUMMARY OF RESULTS*

*A number of features were detected which might be archaeological in origin.*

# Sleaford East Road Geophysical Survey -Results:

## **Survey Results:**

### **Area**

An area approximately 200m by 200m was scanned.

Magnetic susceptibility readings were logged on a 20m grid across the whole area.

1 Ha. was surveyed in detail.

### **Results:**

Scanning detected no clear features. Some noise was detected particularly in the eastern parts of the site. Some of this is no doubt due to the incorporation of agricultural debris in the top soil e.g. horse shoes, nuts and bolts etc. The western half of the site was significantly quieter.

In the north-west corner of the site a large ferromagnetic anomaly was detected.

### **Magnetic Susceptibility**

The susceptibilities as measured are reasonable uniform, however, three readings were very high. One of these coincided with the site of the Rugby Clubs bonfire. The other two high readings were also close to the road and the pavilion and probably indicate former bonfire locations.

### **Detailed Survey**

Two strips 30m wide were surveyed, one along each pitch.

Lighting gantries, goal posts and a central barrier, all made of steel generated problems.

### **Area 1.**

Two very large ferro-magnetic features are caused by goal posts.

A prominent feature running approximately east-west and illustrated in blue on the interpretation is probably a service trench

associated with the lighting. A second feature running approximately SSW to NNW along the survey transect is also likely to be either a service trench or a drainage feature.

A very feint feature, illustrated in red on the interpretation and running approximately north-south is probably archaeological in origin.

### **Area 2**

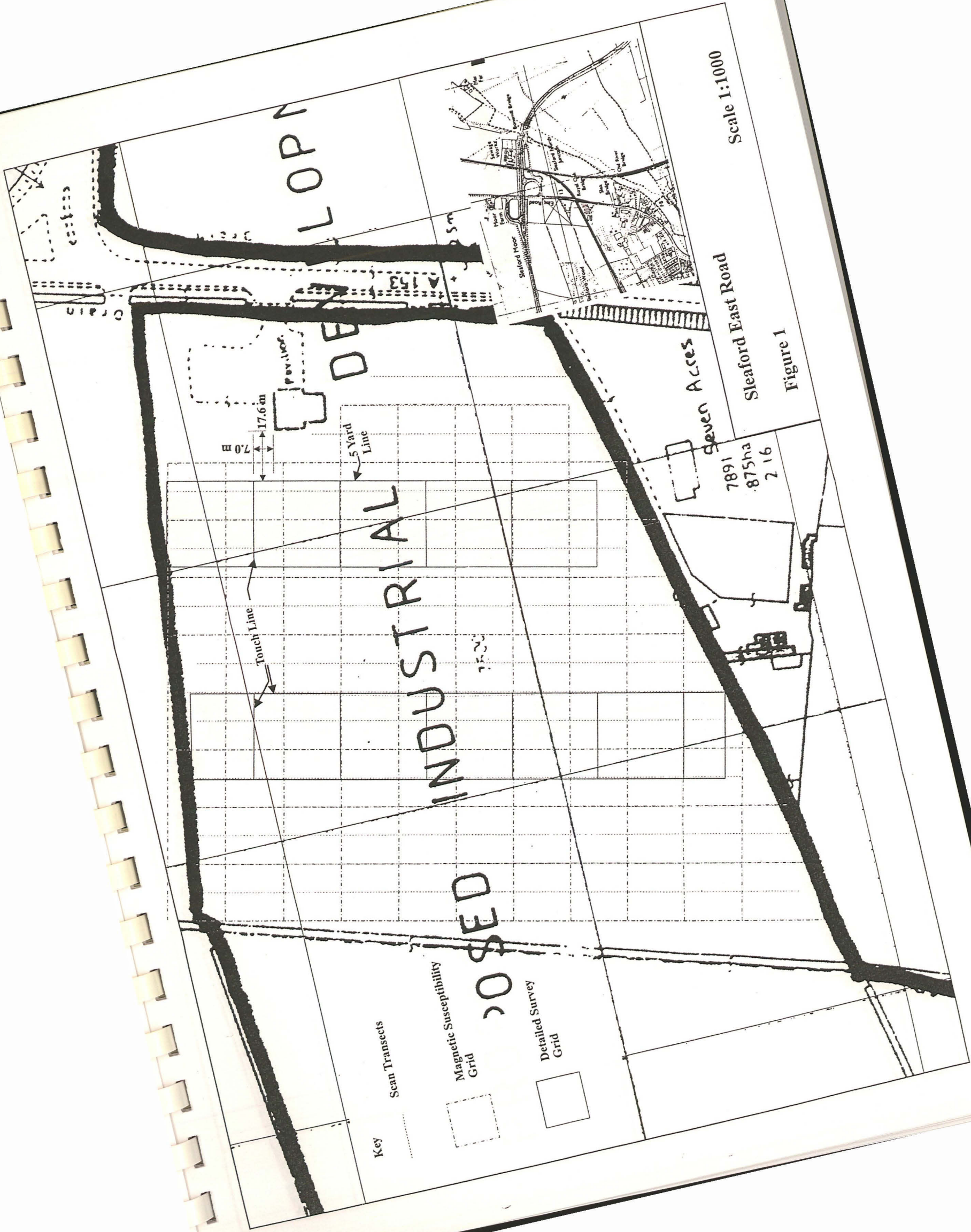
Prominent features in the northern and southern corners are caused by large bore sewage pipes.

Two large ferro-magnetic features are caused by goal posts.

A number of feint features, illustrated in red on the interpretation are probably archaeological in origin. One of these runs across the survey transect approximately east-west. The others run approximately SSW to NNW along the survey transect. Two of these run almost the full length of the transect; the others are not clearly defined but can be detected, while processing, as trends in the data. As this group of features are roughly parallel it is possible that they represent 'Rig & Furrow' cultivation.

### **Conclusions**

A number of features were detected that are probably archaeological in origin, however, the large amount of surface iron objects makes it very difficult to detect and display very slight features.



Key

Scan Transects

Magnetic Susceptibility Grid

Detailed Survey Grid

POSED

INDUSTRIAL

Touch Line

5 Yard Line

7.0 m

17.6 m

Seven Acres

7891  
.875ha  
2 16

Sleaford East Road

Scale 1:1000

Figure 1

ceases

LOPN

DE

5m

Sleaford Moor

Moore Farm

Stable Yard

Sleaford Moor

Stable Yard

Stable Yard

Stable Yard

Stable Yard

Stable Yard

Stable Yard

Stable Yard

Stable Yard

Stable Yard

Stable Yard

Stable Yard

Stable Yard

Stable Yard

Stable Yard

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Stable Yard

Stable Yard

Stable Yard

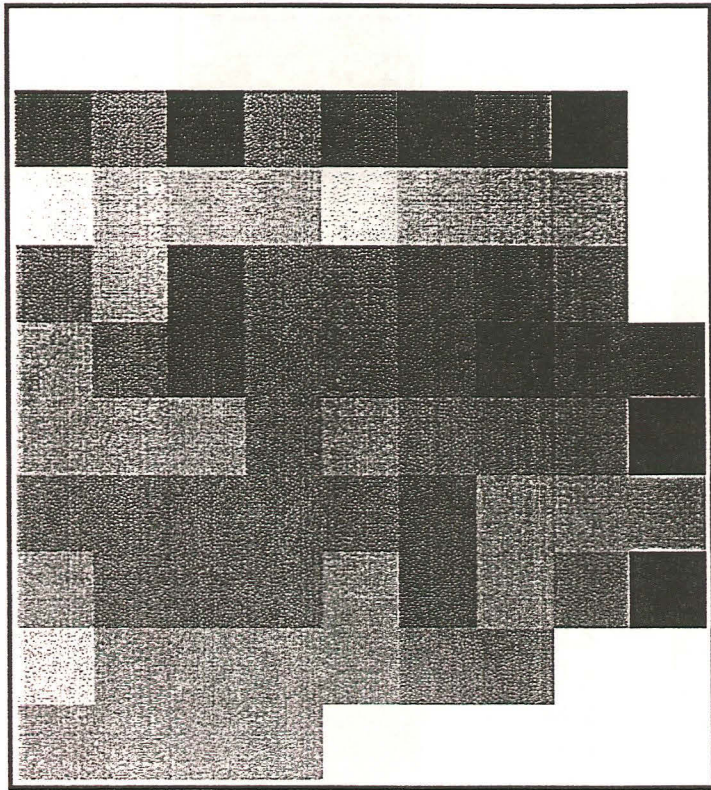
Stable Yard

Stable Yard

Stable Yard

Stable Yard

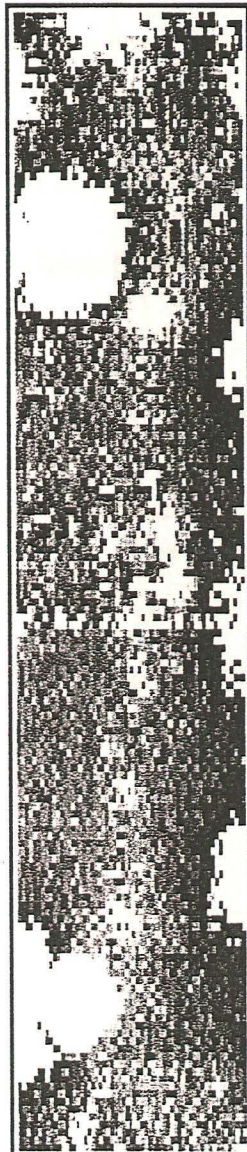




**East Road Sleaford  
Magnetic Susceptibility Data**

**Scale 1:2000**

**Figure 3**



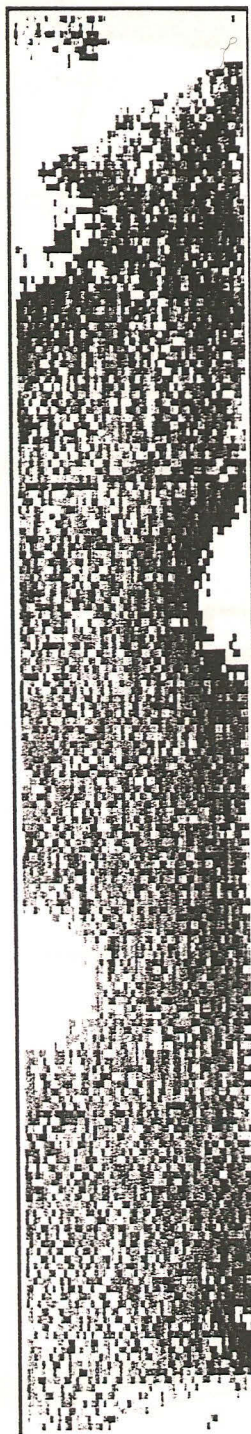
5.0  
4.2  
3.3  
2.5  
1.7  
0.8  
0.0  
-0.8  
-1.7  
-2.5  
-3.3  
-4.2  
-5.0  
nT



East Road Sleaford  
Area 1 - Magnetometer Data

Scale 1:1000

Figure 4



5.0  
4.2  
3.3  
2.5  
1.7  
0.8  
0.0  
-0.8  
-1.7  
-2.5  
-3.3  
-4.2  
-5.0  
nT

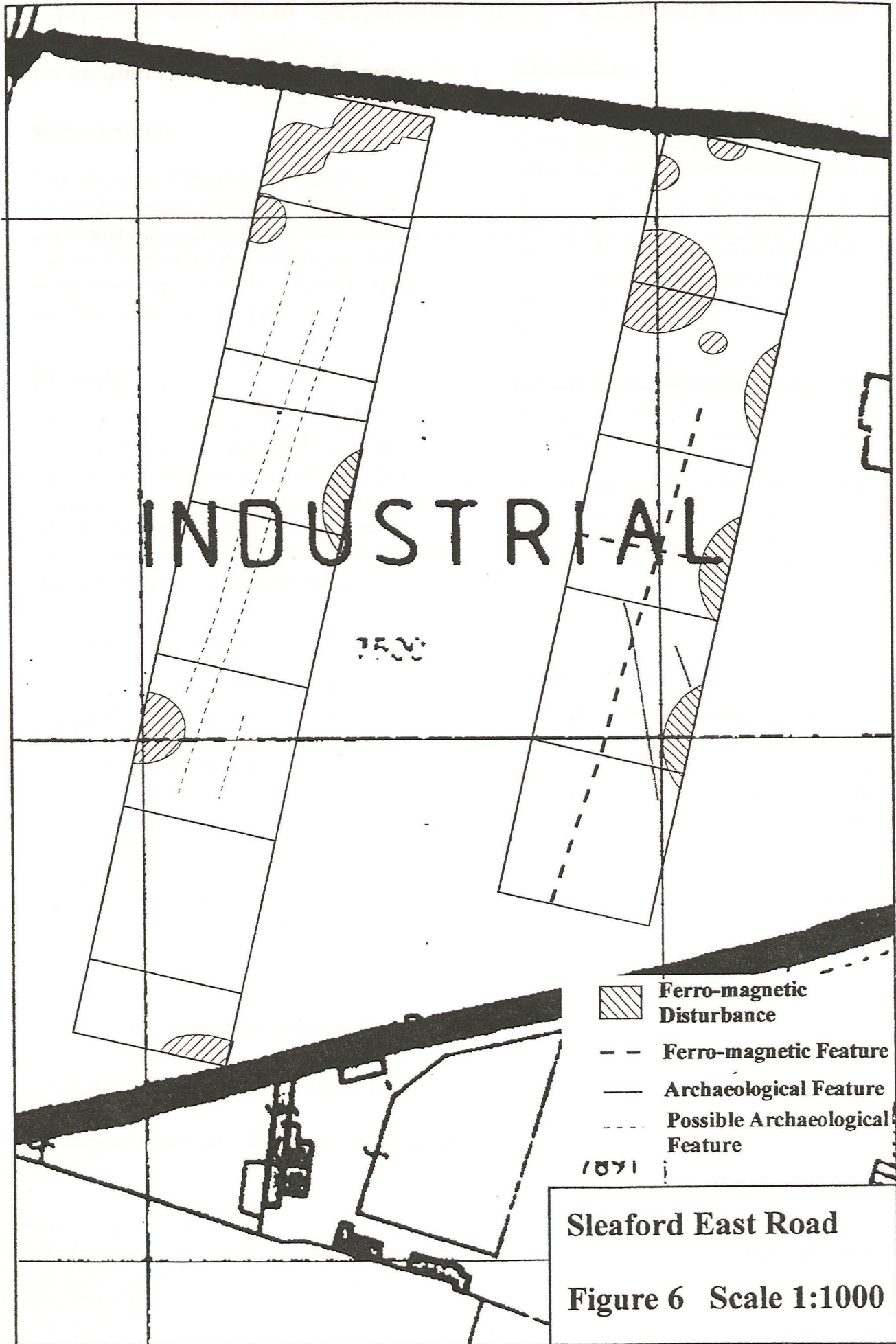


East Road Sleaford  
Area 2 - Magnetometer Data

Scale 1:1000





Figure 5





INDUSTRIAL

1500

-  Ferro-magnetic Disturbance
-  Ferro-magnetic Feature
-  Archaeological Feature
-  Possible Archaeological Feature

1571

Sleaford East Road

Figure 6 Scale 1:1000

# Sleaford East Road Geophysical Survey -Technical Information:

## **Techniques Of Geophysical Survey:**

### **Magnetometry:**

*This relies on variations in soil magnetic susceptibility and magnetic remanence 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.*

### **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/DI10**
- 3. Magnetic Susceptibility Meter - Bartington Ms2**

## **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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## Appendix 8

### The Archive

The archive consists of:

61	Context records
19	Scale drawing sheets
3	Context record sheets
2	Photographic record sheets
1	Plan record sheet
1	Section record sheet
1	Bag of finds

All primary records and finds are currently kept at:

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

The ultimate destination of the project archive is:

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

The archive will be deposited in accordance with the document titled *Conditions for the Acceptance of Project Archives*, produced by the Lincolnshire City and County Museum.

Lincolnshire City and County Council Museum Accession Number: 59.98

Archaeological Project Services Site Code: SRP98

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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## Sleaford Rugby Pitch, Sleaford - SRP99

### Environmental Archaeology Assessment

#### *Introduction*

An archaeological evaluation conducted by Archaeological Project Services at Sleaford Rugby Pitch, Sleaford uncovered a number of archaeological features and ditches, but produced very little dating evidence and many of these features remain undated. On a site visit to the evaluation two parallel ditches were observed which it was thought might indicate a trackway. However in the absence of any dating evidence it could not be ascertained whether or not these two ditches were contemporary. The area is known to have undergone changes in the water table from previous observation on the adjacent site and because snails were visible in the fills of one of the ditches it was decided that a sample from the fills of both ditches, taken at the same level (height O.D.), might suggest whether the ditches were contemporaneous or not.

#### *Methods*

The two soil samples were processed in the following manner. Sample volume and weight was measured prior to processing. The samples were washed in a 'Siraf' tank (Williams 1973) using a flotation sieve with a 0.5mm mesh and an internal wet-sieve of 1mm mesh for the residue. Both residue and float were dried, and the residues subsequently re-floated to ensure the efficient recovery of charred material. The dry volume of the flots was measured, and the volume and weight of the residue recorded.

The residue was sorted by eye but apart from snails no environmental or archaeological finds were picked out. A magnet was run through each residue in order to recover magnetised material such as hammerscale and prill, but again none was found. The residue was then discarded. The float of each sample was studied under a low power binocular microscope. The presence of environmental finds (ie snails, charcoal, carbonised seeds, bones etc) was noted and their abundance and species diversity recorded on the assessment sheet. The float was then bagged. The float and snails from the sorted residue constitute the only material archive of the samples.

The individual components of the samples were then preliminarily identified and the results are summarised below in Tables 1 and 2.

#### *Results*

Samples 1, context 104, undated ditch

The sample comprised a silty sand fill, which after washing produced a residue of 100ml of small limestone gravel, with rare flint material and a lot of mineralised soil concretions. There were no archaeological finds and the environmental finds were limited to a single small fragment of charcoal, one shell of *Succinea* sp., a few shells of the burrowing blind snail *Cecilioides acicula*, and two uncharred seeds that probably reflect contamination or movement down through the soil.

**Table 1:** Samples taken for environmental analysis and the finds from them

site	sample	context	volume in l.	residue vol in l.	charcoal *	snails */#	descrip- tion	date
SRP99	1	104	7	0.1	1	1	ditch fill	undated
SRP99	2	106	7	0.5	1	4/3	ditch fill	undated

\* frequency of items: 1=1-10; 2= 11-100; 3=101-250; 4=251-500; 5=>500

# diversity of molluscs as follows: 1=1-3; 2=4-10; 3=11-25; 4=26-50 taxa.

Sample 2, context 106, undated ditch

The fill of the second parallel ditch was very similar but after washing produced a somewhat larger residue. This sample was equally devoid of archaeological finds but contained large numbers of snail shells including many of freshwater species (Table 2).

**Table 2:** Mollusc from the soil samples

context	104	106
sample	1	2
flot vol.(ml)	1	5
<i>Cecilioides acicula</i>	+	+
<i>Carychium</i> sp.		+
<i>Succinea</i> sp.	+	+
<i>Cochlicopa</i> sp.		+
<i>Vertigo</i> sp.		++
<i>Pupilla muscorum</i>		++
<i>Vallonia excentrica</i>		+
<i>Vallonia pulchella</i>		+
<i>Vallonia</i> sp.		+
<i>Oxychilus</i> sp.		+
Zonitidae		+
<i>Hygromia hispida</i>		+
<i>Lymnaea truncatula</i>		+
<i>Planorbis leucostoma</i>		++
<i>Planorbis planorbis</i>		+
<i>Pisidium</i> sp.		+

(+ present; ++ common)

These shells clearly indicate that this ditch carried water, although the presence of *Planorbis leucostoma*, *Lymnaea truncatula* and possibly the bivalves (*Pisidium* sp.) suggests that it probably dried up seasonally. A detailed environmental reconstruction is not possible without specific identification of all the shells and their quantification, but the species suite suggests that the ditch was set in a grassland environment.

### Discussion

The purpose of taking the two samples was in order to test the theory that they bounded a trackway. With the ditches barely three metres apart and crossing soils and sub-soils of similar character there is no explanation for one of the ditches retaining large numbers of terrestrial and freshwater snails while the other did not. Certainly if the two ditches were contemporary both would have been filled with water and offered similar habitats for the snails. The fills of both ditches would have been subjected to an equal length of time buried, and changes in the burial environment, and both might have been expected to retain their snail faunas. In the event ditch 104 lacks this snail assemblage, although one shell of *Succinea* sp is present, and one explanation for this clear difference in the two fills is that this ditch was open at a time when the environment was less suited to such a snail fauna, possibly the land was less wet or marshy. It is possible that if ditch 104 was backfilled or ceased to function or be cleaned out

before 106 that some difference in the density of snails might be expected, but the snail fauna is perhaps 200 times as rich in 106, which would suggest a huge difference in the rate of infilling if the ditches were originally open at the same time. While this use of the data may not be entirely convincing the differences are sufficient that it would be unwise to consider these ditches as contemporary and their proximity and parallel relationship should perhaps be seen as fortuitous or due to a broad landscape alignment rather than the two contemporary sides of a trackway.

#### *Acknowledgments*

I should like to thank Alison Foster for the sample processing.

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28 September 1999