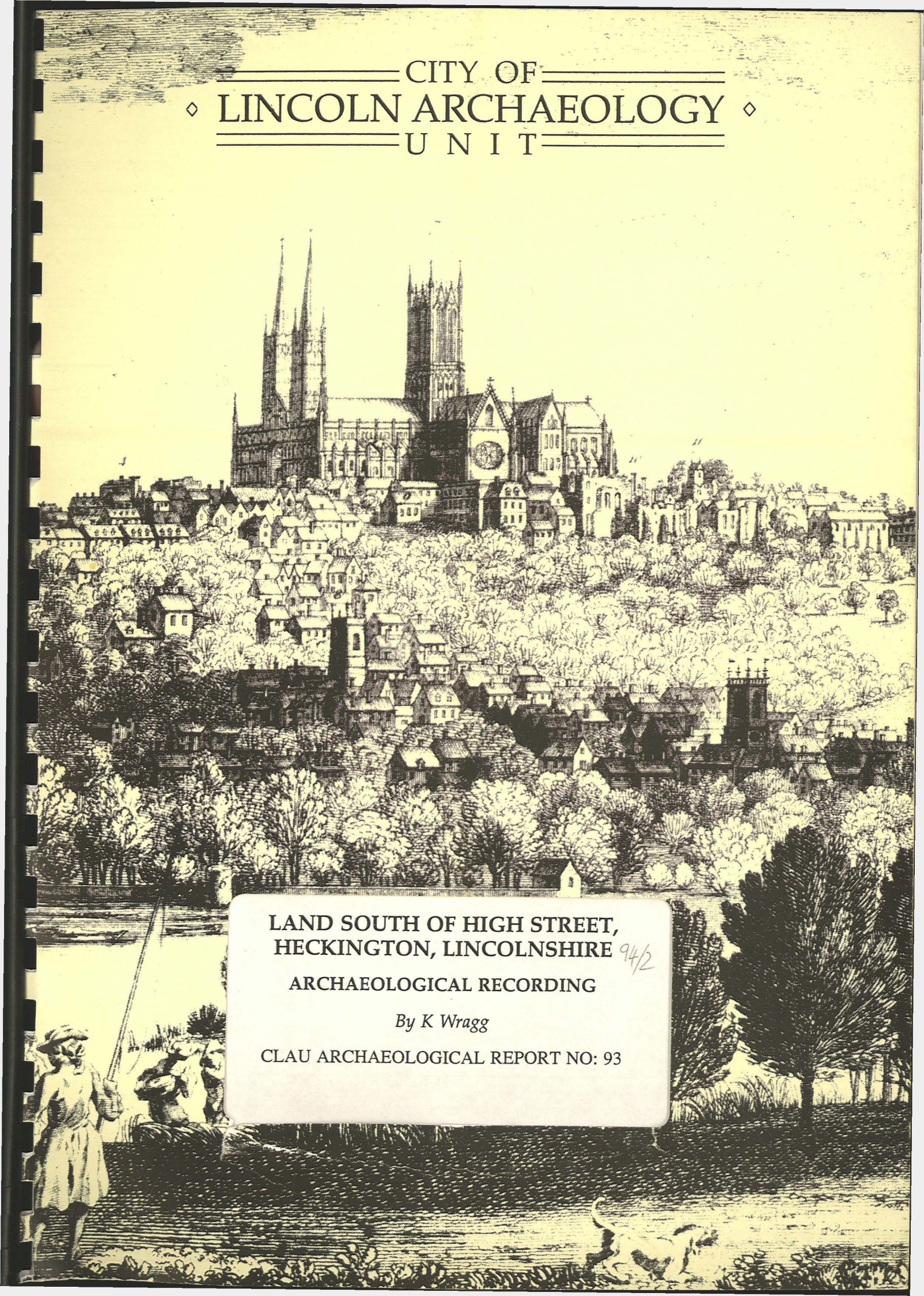


CITY OF
◇ LINCOLN ARCHAEOLOGY ◇
UNIT



LAND SOUTH OF HIGH STREET,
HECKINGTON, LINCOLNSHIRE 94/2

ARCHAEOLOGICAL RECORDING

By K Wragg

CLAU ARCHAEOLOGICAL REPORT NO: 93

60561 - Undated
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A

Report to
Melbourne Holdings Ltd

March 1994

Prepared by

*The City of Lincoln Archaeology Unit
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**LAND SOUTH OF HIGH STREET,
HECKINGTON, LINCOLNSHIRE** 94/2

ARCHAEOLOGICAL RECORDING

By K Wragg

CLAU ARCHAEOLOGICAL REPORT NO: 93

LAND TO THE SOUTH OF HIGH STREET, HECKINGTON, LINCOLNSHIRE

ARCHAEOLOGICAL RECORDING

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LAND TO THE SOUTH OF HIGH STREET, HECKINGTON, LINCOLNSHIRE

ARCHAEOLOGICAL RECORDING

Introduction

During January 1994, the City of Lincoln Archaeology Unit (C.L.A.U.) was commissioned by Clive Wicks Associates (consultant architects), on behalf of Melbourne Holdings Ltd, to provide an archaeological evaluation on this site in response to a Planning Condition.

The project involved an irregular parcel of land, the site of a proposed residential development comprising forty-four detached and semi-detached dwellings, to the south of High Street, Heckington (see Fig.1). The site has a total surface area of approximately 19400 sq.m., which was mainly under rough grass at the time of survey, although approximately 7200 sq.m. to the west of the site was covered with mature trees.

The information in this document is presented with the proviso that further data may yet emerge. The Unit, its members and employees cannot, therefore, be held responsible for any loss, delay or damage, material or otherwise, arising out of this report. The document has been prepared in accordance with the terms of the Unit's Articles of Association, the Code of Conduct of the Institute of Field Archaeologists, and *The Management of Archaeological Projects 2* (English Heritage, 1991).

Background

The site lies in an area of considerable archaeological importance with finds dating from the Roman, Saxon, Medieval and Post-Medieval periods recorded in and around the village of Heckington. These discoveries are detailed within the Desk-top Assessment document (C.L.A.U. Report no.84) commissioned as the first element of the archaeological evaluation of this site.

Of particular significance to this project are the discoveries of Romano-British occupation to the south of the site, at Cobham Hall (south of the railway line), and the probable Anglo-Saxon burials to east of the site, in an area known as Butts Hill Field. Although these findspots are not contained within the development area it is possible that remains of similar ancient occupation extend on to the site.

Methodology

In accordance with an archaeological specification agreed with the North Kesteven District Archaeological Officer, Ms N.Nuttall, a programme of archaeological evaluation was carried out on this site during February 1994.

The first element of this comprised a programme of Geo-physical investigation (by magnetometer) carried out across the whole site, excluding the wooded area to the west, in an attempt to identify any underlying archaeological features (see Appendix II - Geo-physical results). The results from this survey were then used to help locate suitable positions for the trial trenches, specified as the second element of the evaluation. In total six trenches were machine excavated, evenly spaced across the accessible areas of the site, each measuring approximately 10.0m by 2.0m, with a completed depth of between approximately 1.0m and 1.5m. Unfortunately no investigation, by either Magnetometry or excavation, was possible within the wooded area of the site, owing to access problems and general obstruction of the ground surface.

Results

The results from the geo-physical investigation (see Appendix I) undertaken prior to excavation, failed to provide any positive indications of surviving archaeological features, other than a possible linear anomaly running north-south and present at the northern end of the site. This resulted in the six Trial Trenches being located largely at random across the accessible areas of the development site.

Little or no evidence for ancient occupation was seen across this site, with the exception of one possible linear cut feature appearing in Trial Trench 3. The general stratigraphic make-up encountered consisted of natural sands and gravels, overlain by sands and clays, finally sealed by the topsoil forming the present ground surface.

The earliest deposit seen during this evaluation was in Trial Trench 4 (this trench was taken slightly deeper than the other trenches resulting in a maximum depth

of 1.5m below the modern ground surface), and comprised [105] a layer of well compacted mid (purple) blue-grey clay, containing only small to medium sized pieces of flint, and very occasional small pieces of limestone. This layer was at least 200mm thick to the Limit Of Excavation (L.O.E.), and was sealed by [102], a moderately compacted, slightly friable layer of mixed clay, sand and gravel. The colour of this layer ranged from light grey (mainly around clay patches) to rich yellow-brown, with gravel (approximately 30% of the total), crushed flint and limestone flecks present throughout.

Layer [102] was seen in all the Trial Trenches investigated and appeared to represent the natural surface geology of the area (a deposit very similar to this layer was seen during the nearby evaluation on Station Road). The mottling present within this deposit (caused by the mixing of the sands, gravels and clays) sometimes gave the impression of possible features, although upon investigation the "features" appeared to be the result of water action upon the underlying deposits, rather than Human activity.

Within Trial Trench 3, layer [102] was cut by a seemingly linear feature, [104], which had steep sides and a flat base and was oriented roughly NE-SW, continuing into both east and west facing sections of the trench. This was approximately 350mm deep and at least 2.5m in length, and was filled by [103], a moderately compacted mid orange-brown slightly clayey sand containing only small rounded pebbles. The fill of this feature was very similar to the overlying layer [101], which was seen in all Trial Trenches.

[101] comprised a layer of moderate-well compacted mid orange-brown clayey, sandy earth (20:20:60) containing no inclusions, and was overlain by the topsoil layer [100]. This layer was present across the entire site and consisted of a mid grey-brown clayey earth (50:50), containing only very occasional small rounded pebbles and root/plant remains.

The topsoil [100] was sealed, towards the north of the site, by the final deposit recorded during this project, which consisted of a narrow (c.1.2m) linear strip of mid-dark grey sandy earth [106], containing modern brick and limestone rubble (the limestone appears to have been used as hardcore). This "feature", although obscured by grass, was clearly visible in the surface of the ground (and had been identified as an anomaly by the Magnetometer survey), being slightly lower than the surrounding ground level, forming a shallow channel. It is possible that the dumped material was originally deposited in order to backfill an existing channel/hollow to provide a more level surface, although this cannot be established for certain.

Conclusions

The ground make-up revealed during this evaluation was basically identical to that seen during the recent project carried out at the nearby proposed site of a development to the east, adjacent to Station road (C.L.A.U. Report no. 92), including an almost total lack of evidence indicating previous occupation or landuse.

The only probable archaeological feature revealed during trenching was seen in Trial Trench 3, and comprised a linear cut feature, possibly part of a ditch. In an attempt to discover the extent and nature of this cut, a further Trial Trench (no.6) to the south-west of Trench 3 was excavated across the probable line of the feature, but this unfortunately revealed no further sign of a continuation to the south. The possible ditch was half-sectioned to discover the full depth and profile, but unfortunately no dating evidence was recovered, therefore neither the exact nature of this feature nor its origins are clear.

Apart from the possible feature detailed above, no additional signs of activity on the site were seen, other than the obviously modern brick and rubble filled depression recorded at the north of the evaluation area. Although it is possible that archaeological remains survive at other, uninvestigated, locations on the site, the likelihood is perhaps remote in view of the results detailed in this report.

ARCHIVE DEPOSITION

The archive consists of:

No.	Description
1	Site diary
1	Report
7	Context records
6	Scale drawings
1 set	Photographic records - Colour slides
1	Stratigraphic matrix

The primary archive material, as detailed above, is currently held by :

The City of Lincoln Archaeology Unit, Charlotte House, The Lawn, Union Road, Lincoln, Lincolnshire, LN1 3BL.

It is intended that transfer to the City and County Museum, Friars Lane, Lincoln, in accordance with current published requirements, under Museum Accession Number 38.94, will be undertaken within approximately six months of completion of this project.

Landscape Research Centre Ltd

Magnetometer Survey

Heckington, Lincolnshire

20th February, 1994

Summary :

A magnetometer survey was carried out by the Landscape Research Centre Ltd. for the City of Lincoln Archaeology Unit, as part of an archaeological assessment of a proposed development at Heckington, Lincolnshire. The surveyed area had a number of magnetic anomalies which are discussed in detail below. However, none of the anomalies can definitely be assumed to be of archaeological significance.

Enclosed :

The report consists of this document, several plans and images, and one table, numbered below. All plans have north pointing to the top of the page.

1) An A3 sheet at a scale of 1:1000 showing the position and numbers of the grid used in the magnetometer survey. The grid is at 20 metre intervals. The plan also shows the boundaries of the proposed development, as well as the position of the railway line to the south of the site and the roads surrounding the site. Because of tree coverage making magnetometer survey unfeasible, the Lincoln Archaeology Unit decided that a survey of the east side of the development area would provide an adequate sample. The area they wished to be surveyed is marked on the plan with diagonal lines. The area to the west of the surveyed area is an old orchard.

2) This is a plan of the magnetometer data displayed as a greyscale image. The plan is at a scale of 1:769. This scale was dictated by the image output. In addition, a disk with the image data in its correct geographical position is provided should you wish to print out the data at a different scale. The grid is at 30 metre intervals.

3) This is an A3 plan of the digitised interpretation of the magnetic anomalies with the numbers used in the text below at a scale of 1:500. In all, four anomalies were detected. The grid is at 30 metre intervals. Note that these are the digitised outlines of magnetic signals and need not necessarily equate with the true size of the feature, which might be either larger or smaller than the extent of the magnetic signal.

4) This is a greyscale image showing grids 7 and 8 at a scale of 1:256. This is included to give a better view of the anomalies. The data had to be suppressed in order to obviate the presence of the extremely strong signals given by anomaly number one.

5) Table one giving the raw data and statistics of each individual grid. Included are the minimum and maximum values, the range, the average value and standard deviation for each of the sixteen grids.

Report :

The subject of this report is the discussion of the results of a magnetometer survey carried out on behalf of the City of Lincoln Archaeology Unit. The site in question is a proposed development at Heckington, Lincolnshire. The magnetometer survey was conducted using a *Geoscan Research* fluxgate gradiometer (model FM36), hereafter referred to as a magnetometer. Due to spatial constraints, a combination of 30 metre and 20 metre grid squares were used to survey the area. The zigzag traverse method of survey was used. The survey was conducted by taking readings every 25cm along the north/south axis and every metre along the east/west axis (thus 3600 readings for every 30m grid and 2400 readings for every 20m grid). The data has been processed and presented using the programs GeoImage (a program dealing with the processing of geophysical data) and Geosys (a program which can display, process and present digitised plans and images).

The survey was carried out on the 20th February, 1994. The personnel involved were James Lyall and Heather Clemence. The survey area was based on the plan sent to us by Lisa Donel and encompassed the area to the north of the railway line. The survey grid consisted of four 30 metre grid squares and four 20 metre grid squares. The total area covered was 5300 square metres or 0.53 hectares.

The magnetometer data:

The magnetometer data is displayed both as an image (Plans two and four) and as a digitised interpretation (Plan three). Plans two and four are presented as greyscale images. The anomalies are the areas of lighter and darker grey, which indicate areas of high and low magnetic response. In all four magnetic anomalies were detected, and these are discussed in detail below.

Grid numbers one to six.

These grids, which cover the area immediately to the north of the railway line, are apparently devoid of anomalies which could be interpreted as being of archaeological origin. The sinuous line at the south of the surveyed area can be attributed to the proximity of the railway line. The white signal in the north of grid one is caused by dummy logging the points due to the presence of a metal fence enclosing a garden. The slight dark area in the centre north of grid five is due to the presence of a mound of rubble. To the west of grid six is an area of recently flattened topsoil and building rubble. This caused the strong signals in the extreme south/west of grid six. The number of high points (shown as white or black in the image) can be attributed to pieces of metal, but whether they are of recent or ancient origin cannot be proven by magnetometer survey. Although there are no anomalies which can be attributed to being of archaeological origin, this does not preclude the possibility of archaeological features existing in this area.

Grid numbers seven and eight.


These two grids provide all three of the anomalies detected on the survey. Anomaly one is an extremely strong north/south oriented linear anomaly. The strong positive/negative signals are characteristic of modern activity, and may be attributed either to a power line or some form of pipe, for instance a water main. A strong second anomaly appears to connect with anomaly one in the south of grid eight, and extends from this anomaly in an east/west orientation. There are two weaker anomalies which have a NW/SE orientation (anomalies three and four). It is possible that they are the remains of ploughmarks, but due to the presence of the powerful anomalies this interpretation cannot be certain, and they may have a function connected with anomaly number one. The set of two parallel SE/NW lines in grid seven was caused by the presence of wheel ruts, presumably caused by the machine which recently spread the topsoil and rubble mentioned above.

Conclusion :

In conclusion, the magnetic response of the surveyed area was low to average. No anomalies could definitely be assigned an archaeological origin, although it is always possible that archaeological features which are not responsive to magnetometer survey could be present. The plans should allow any archaeological investigation (if such is deemed to be necessary) of the area to concentrate in the specific areas believed to be significant. The United Kingdom latitudes are such that there can be a distortion of up to half a metre in position between the magnetic anomalies shown and the position of the actual features themselves.

Report by James Lyall

Landscape Research Centre Ltd.



GRID NO	MIN	MAX	RANGE	AVERAGE	STD. DEV.
1	-403.1	174	577.1	4	253
2	-133.3	386.5	519.7	1	101
3	-77.1	111.4	188.5	-28	69
4	-229	30	259	-8	110
5	-97.5	27.1	124.6	-31	68
6	-324.9	334.5	659.4	-39	189
7	301	404.5	705.5	15	488
8	-382	423.1	805.1	146	512

Table one

A table giving the statistics of the values in the eight grids of the magnetometer survey.

MIN - the minimum value in nanoTesla.

MAX - the maximum value in nanoTesla.

RANGE - the range of values in nanoTesla.

AVERAGE - the average value of the grid in nanoTesla.

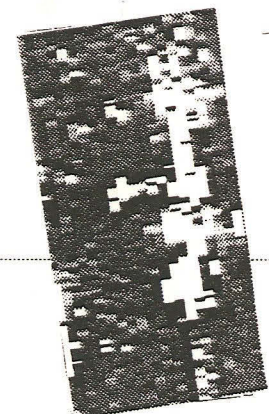
STD DEV - the standard deviation of the grid.



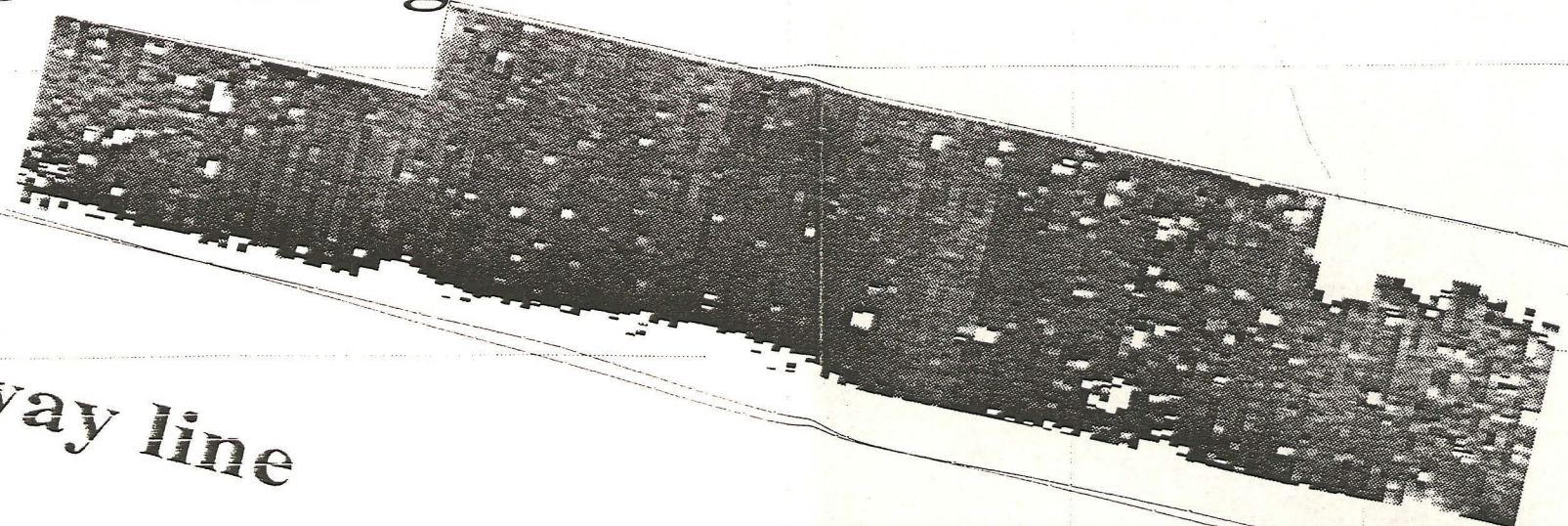
Magnetometer survey

Heckington, Lincolnshire

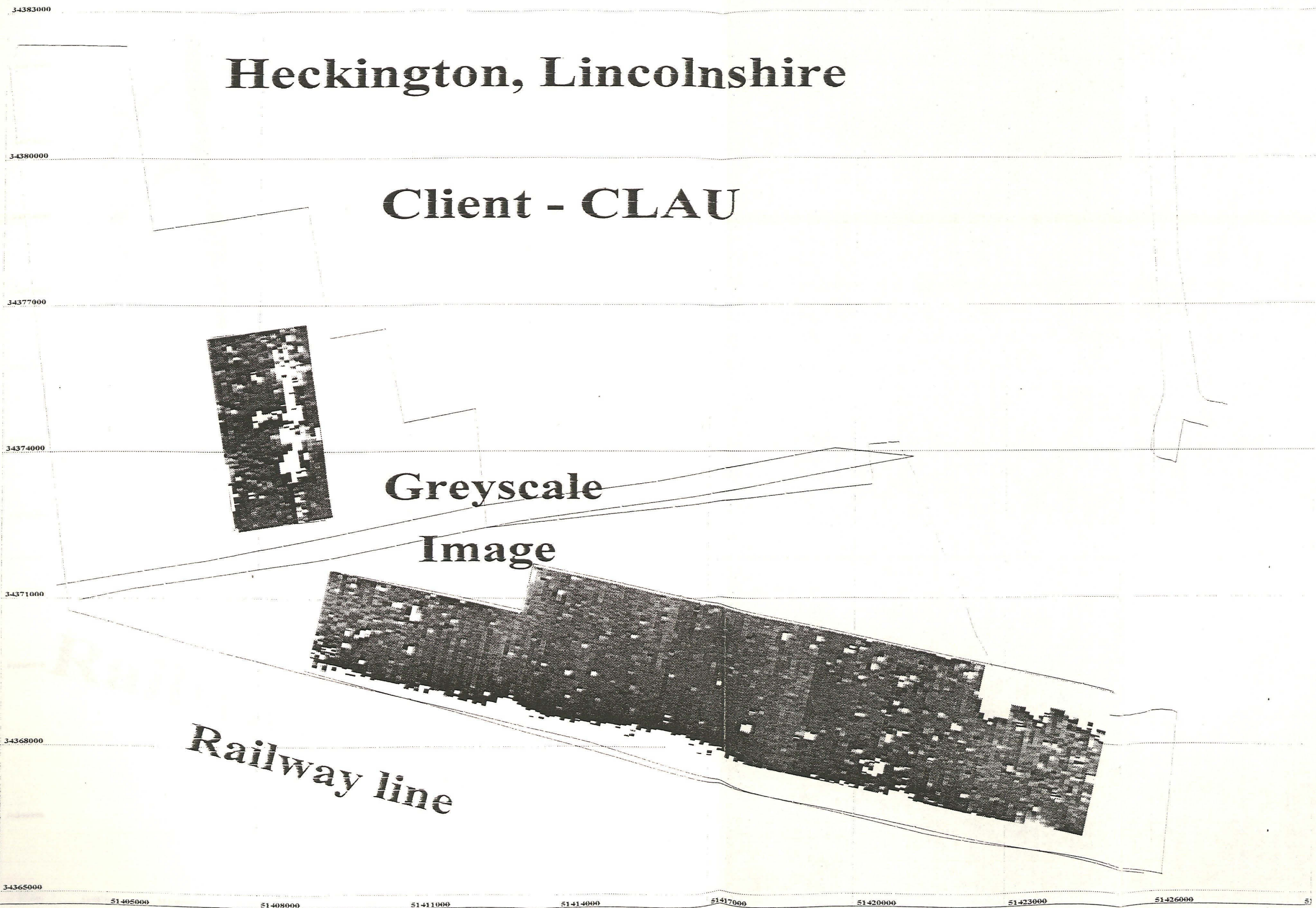
Client - CLAU



Greyscale
Image



Railway line



3437800

34377000

34376000

34375000

34374000

34373000

34372000

34371000

34370000

34369000

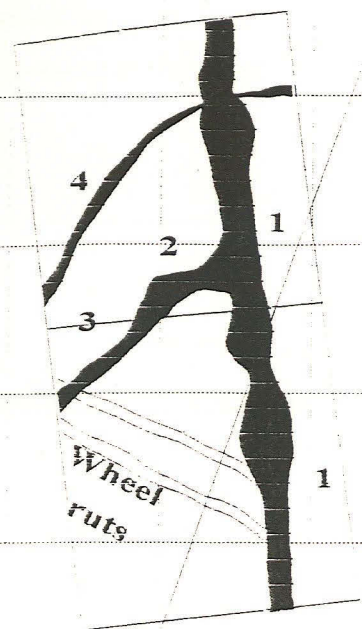
34368000

34367000

34366000

34365000

51406000 51407000 51408000 51409000 51410000 51411000 51412000 51413000 51414000 51415000 51416000 51417000 51418000 51419000 51420000 51421000 51422000 51



Anomalies detected

6

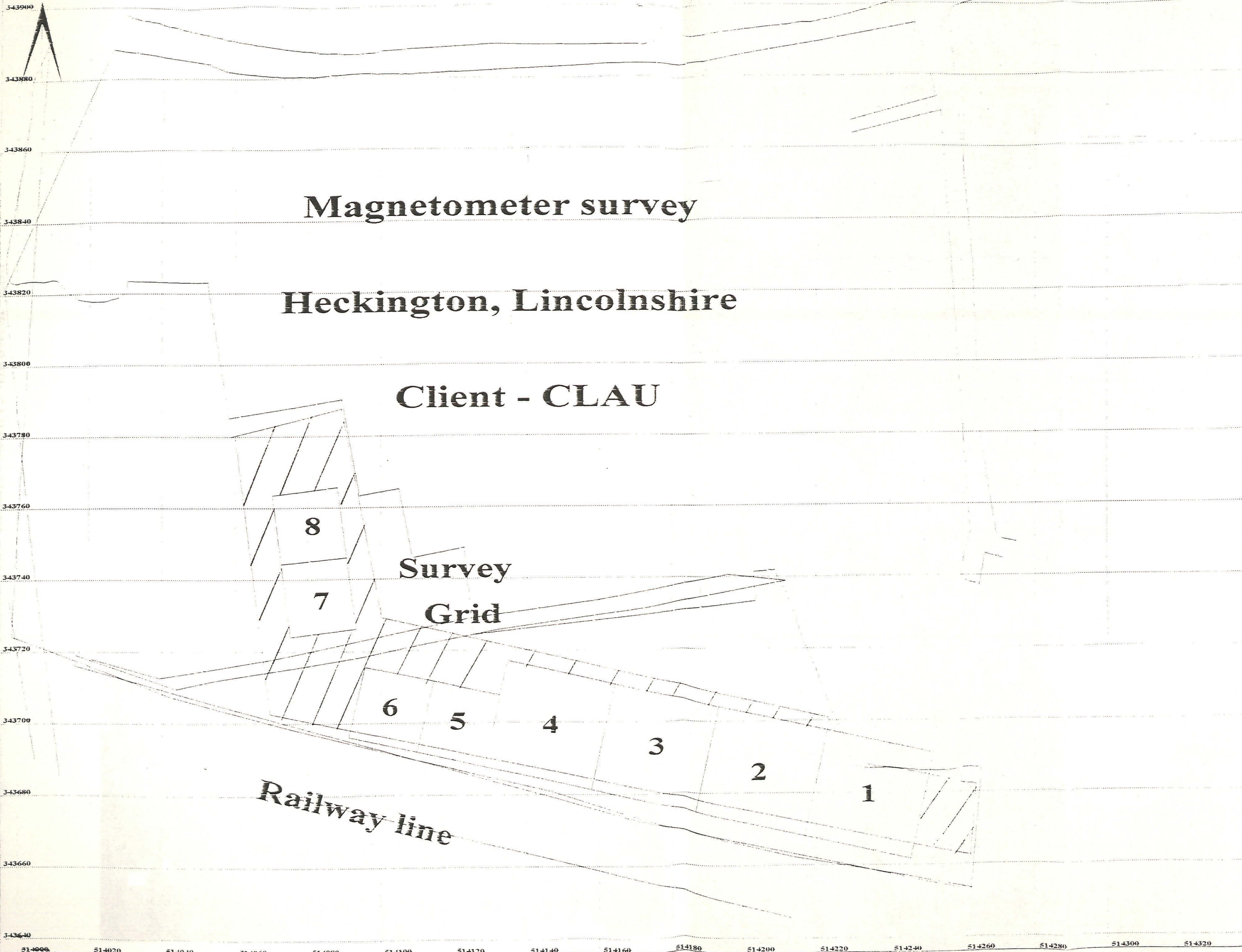
5

4

3

2

Railway line



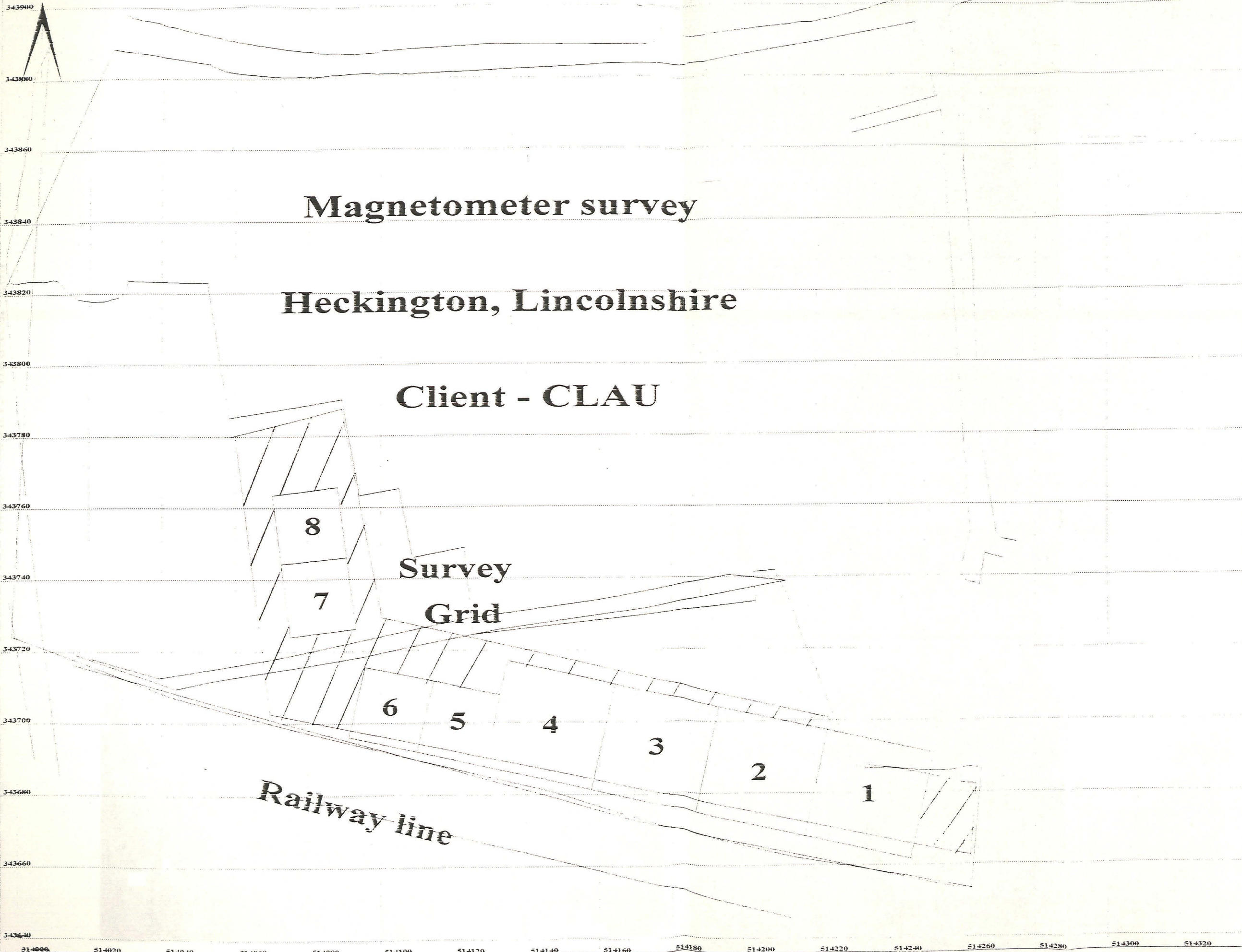
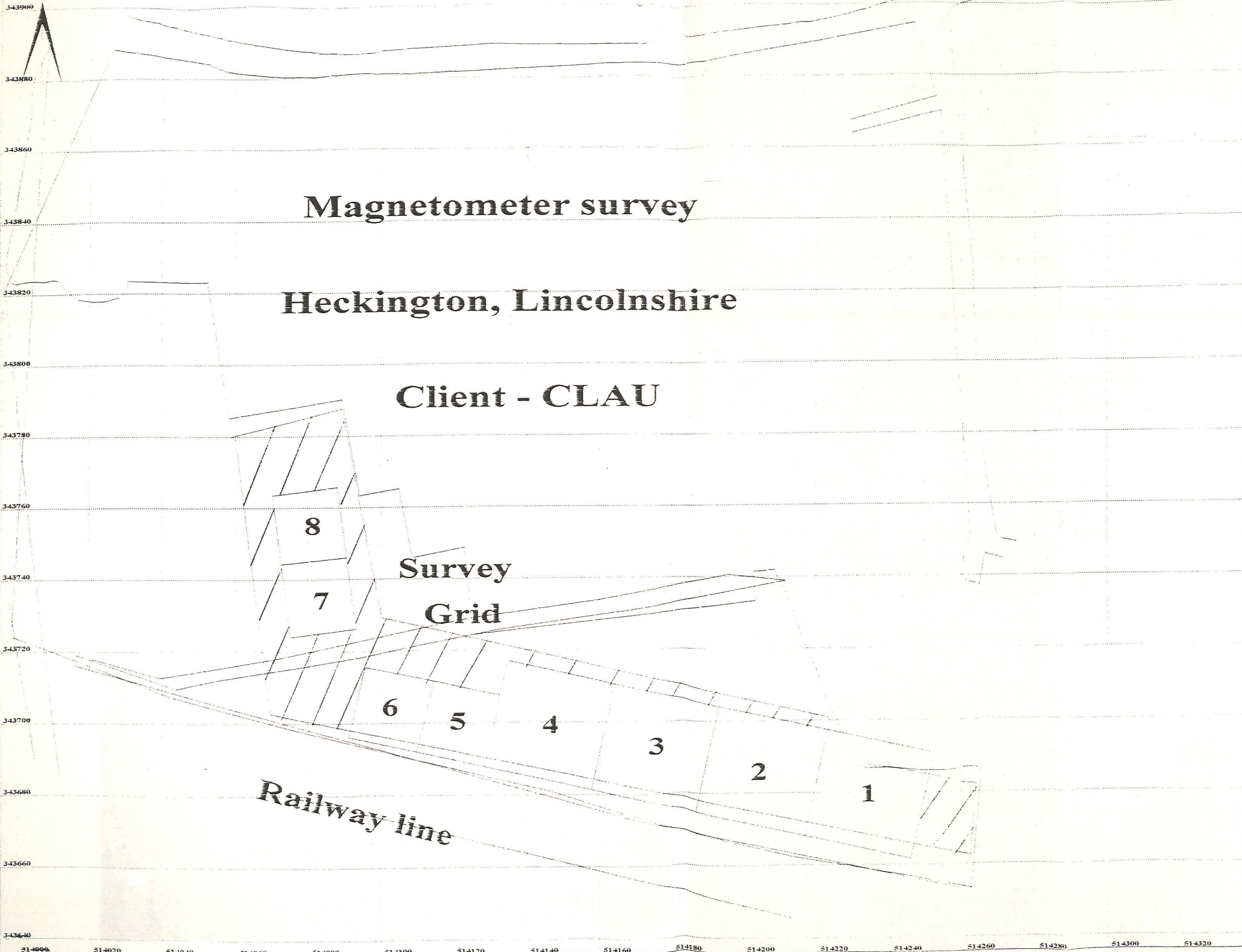
Magnetometer survey

Heckington, Lincolnshire

Client - CLAU

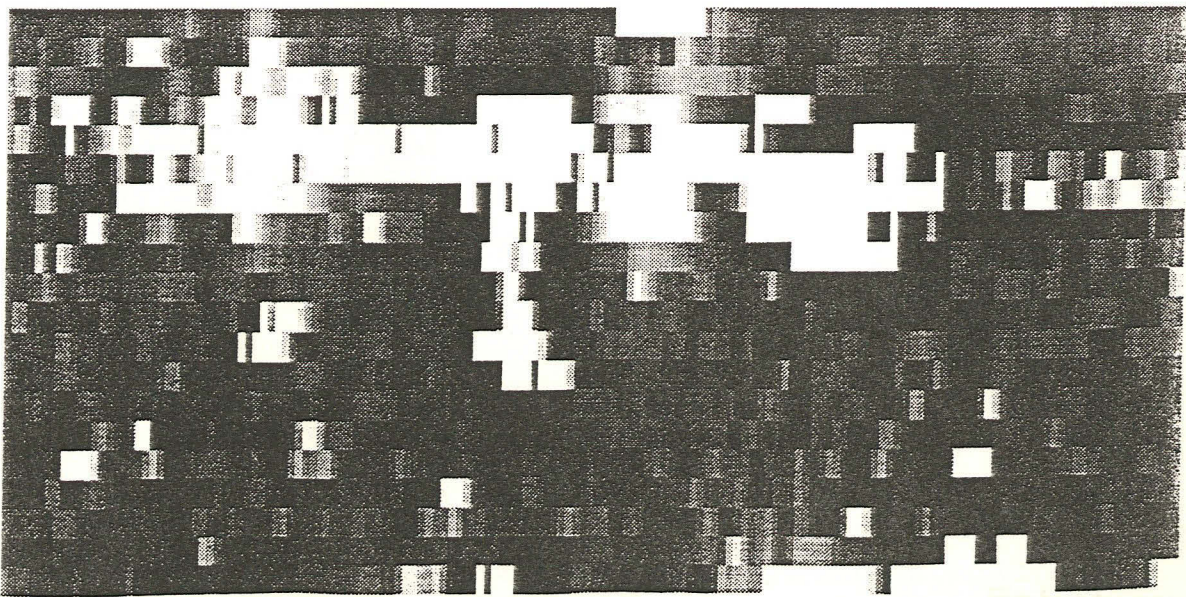
**Survey
Grid**

Railway line



Pages 250
Boards 512

Site:heck2 Origin:50/130 Size:20x40m. Band: 102mT. Shades: 250



BY OFFICE OF INDIAN ARCHAEOLGY UNIT

1978

1978

1978

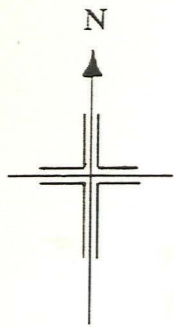
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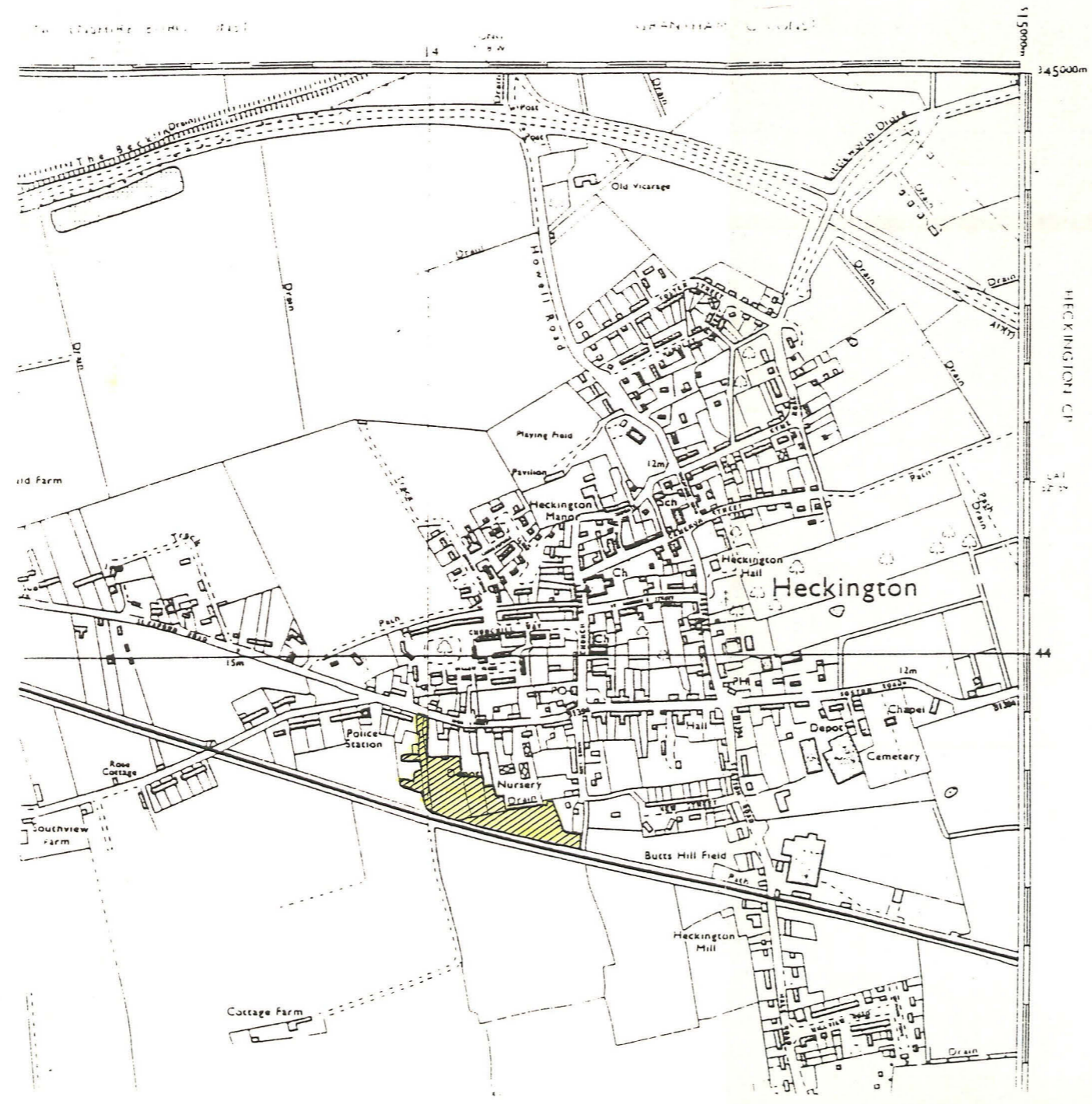
1978

1978

1978



CITY OF LINCOLN ARCHAEOLOGY UNIT		
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CLIENT: Melbourne Holdings Ltd.		
DESCRIPTION: Site Location Plan		
SCALE: 1:10 000	ARCHIVE NO:	
DRAWN BY:	CHECKED:	DATE: 01/03/94
MUSEUM ACCESSION NO: 38.94		



KEY


 Site Location

Fig.1

CITY OF LINCOLN ARCHAEOLOGY UNIT

SITE CODE: HEH94 | PLAN/ELEV/SECTION NO:

CLIENT: Melbourne Holdings Ltd.

DESCRIPTION:
Plan showing location of Trial Trenches

SCALE: 1:1250 | ARCHIVE NO:

DRAWN BY: | CHECKED: | DATE: 01/03/94

MUSEUM ACCESSION NO: 38.94

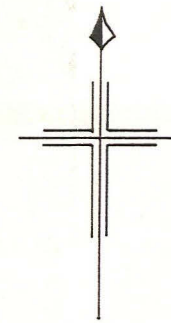


Fig.2

CITY OF LINCOLN ARCHAEOLOGY UNIT		
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CLIENT: Melbourne Holdings Ltd.		
DESCRIPTION: Plan of linear feature Trial Trench 3		
SCALE: 1:20	ARCHIVE NO:	
DRAWN BY: KW	CHECKED:	DATE: 01/03/94
MUSEUM ACCESSION NO: 38.94		

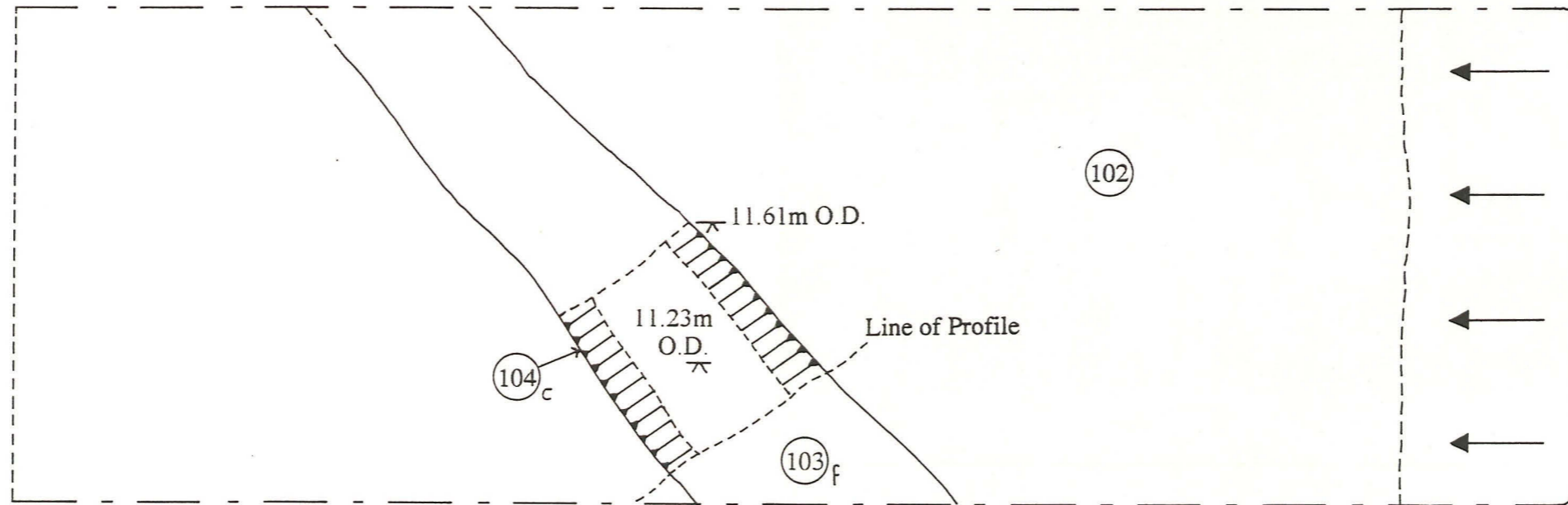
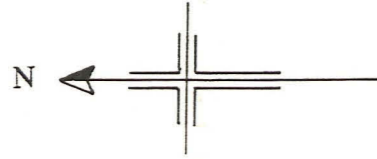


Fig.3

CITY OF LINCOLN ARCHAEOLOGY UNIT

SITE CODE: HEH94	PLAN/ELEV/SECTION NO:	
CLIENT: Melbourne Holdings Ltd.		
DESCRIPTION: North Facing Section Trial Trench 1		
SCALE: 1:10	ARCHIVE NO:	
DRAWN BY: KW	CHECKED:	DATE: 01/03/94
MUSEUM ACCESSION NO: 38.94		

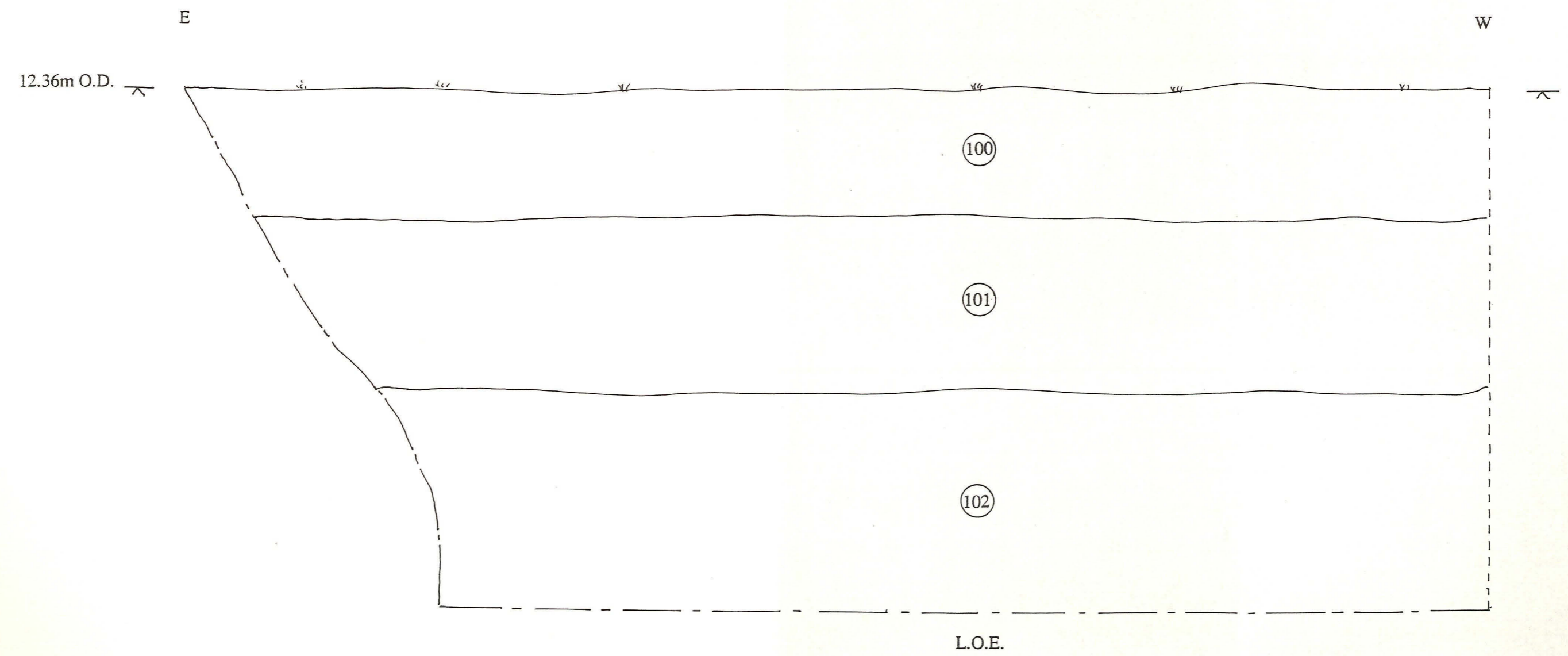


Fig.4

CITY OF LINCOLN ARCHAEOLOGY UNIT

SITE CODE: HEH94 | PLAN/ELEV/SECTION NO:

CLIENT: Melbourne Holdings Ltd.

DESCRIPTION:
East Facing Section Trial Trench 3

SCALE: 1:10 | ARCHIVE NO:

DRAWN BY: KW | CHECKED: | DATE: 01/03/94

MUSEUM ACCESSION NO: 38.94

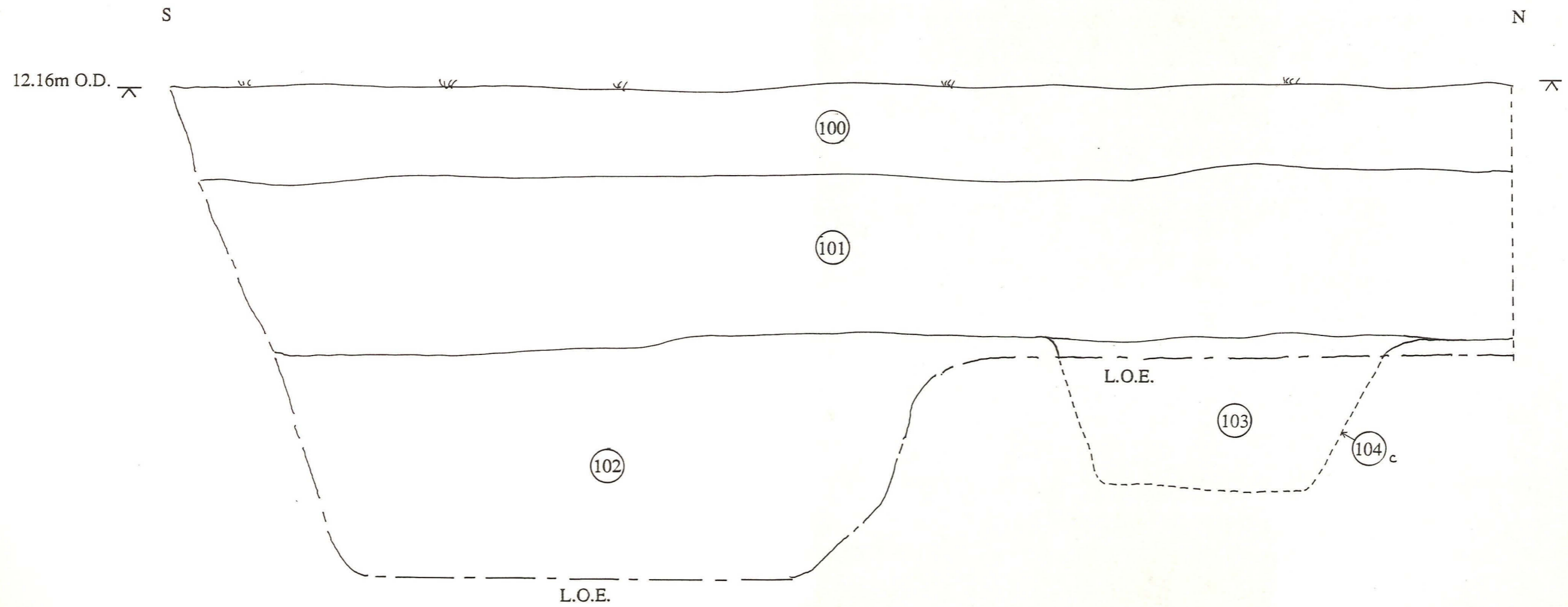


Fig.5

CITY OF LINCOLN ARCHAEOLOGY UNIT

SITE CODE: HEH94 | PLAN/ELEV/SECTION NO:

CLIENT: Melbourne Holdings Ltd.

DESCRIPTION:
North Facing Section Trial Trench 5

SCALE: 1:10 | ARCHIVE NO:

DRAWN BY: KW | CHECKED: | DATE: 01/03/94

MUSEUM ACCESSION NO: 38.94

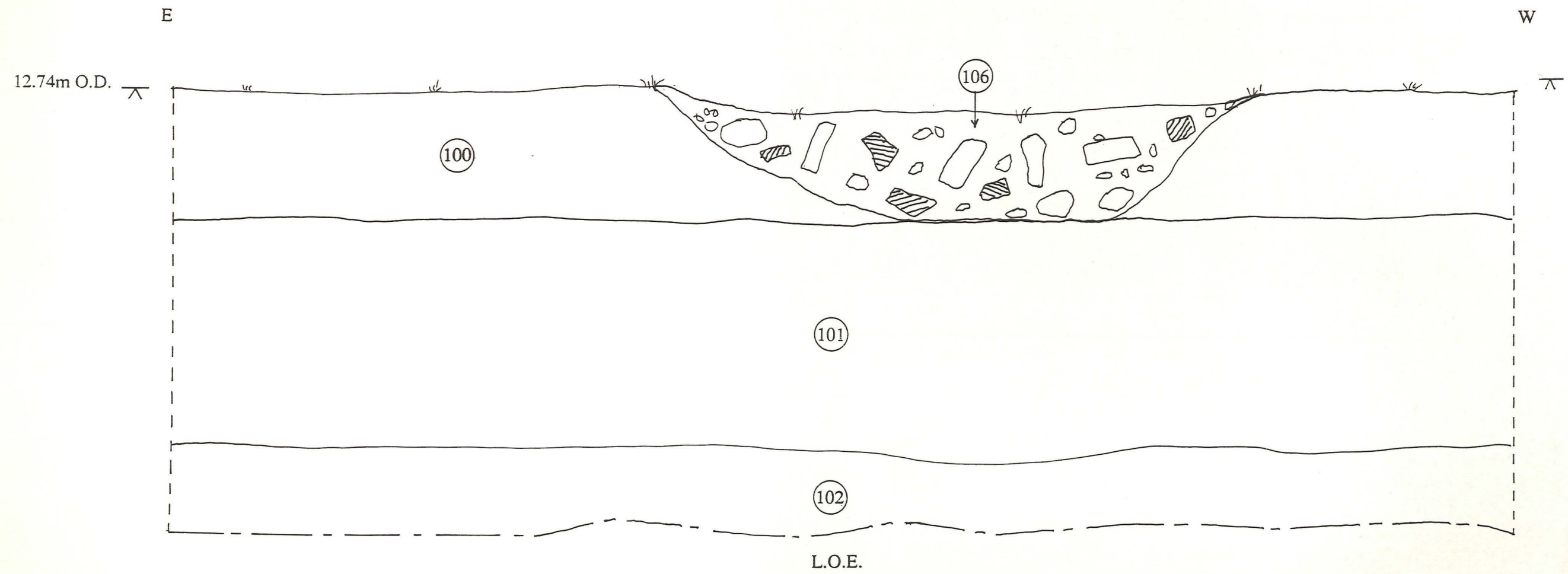
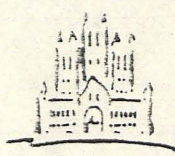
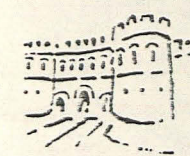


Fig.6

94/2



CITY OF LINCOLN ARCHAEOLOGY UNIT



Charlotte House - The Lawn - Union Road - Lincoln LN1 3BL
Tel (0522) 545326 - Fax (0522) 548089

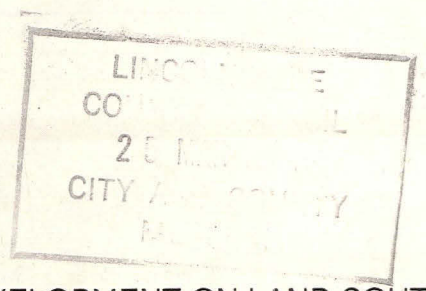
Director: Michael J. Jones MA.FSA.MIFA

Assistant Director: Alan G. Vince BA.PhD.FSA.MIFA

Administrator: John T. Wilford BA.FSA

24th March 1994

Melbourne Holdings Limited
Station Road
Heckington
Sleaford
Lincs
NG34 9NF



Dear Sirs,

PROPOSED RESIDENTIAL DEVELOPMENT ON LAND SOUTH OF HIGH ST, HECKINGTON ARCHAEOLOGICAL EVALUATION - HEH94

Please find enclosed three copies of our report detailing the process and results of the archaeological evaluation carried out at the above site (one copy for your use in submissions to the planning department of North Kesteven District Council).

A further copy of the report is sent under cover of a copy of this letter to the District Archaeological Officer.

The project archive will be lodged with the City and County Museum, Lincoln under museum accession No.38.94, and a copy of the report forwarded to the County Sites and Monument Record.

Our invoice for the final total cost of £2,883.00 is enclosed. The final cost, being less than our original estimate, reflects the largely negative result of the evaluation and economies achieved in joint production of the earlier Desk-Top Assessment.

We trust this meets with your approval and look forward prompt payment and the opportunity of working with you on future projects.

Yours faithfully,

John Hockley
Projects Officer

- c.c Ms Nicola Nuttall, District Archaeological Officer, North Kesteven DC.
- . Mr C Wicks, Clive Wicks Associates
- . Lincolnshire Sites & Monuments Record Office, Lincoln.