



LINDSEY ARCHAEOLOGICAL SERVICES

Brauncewell Quarry
Topsoil Removal, eastern side of Extension Area B

NGR: 0330 5200
Site Code: BQW 99
LCNCC Museum Accn No.: 233.99
LCC Planning Consent No.: N/15/439/90

Archaeological Watching Brief

Report prepared for
Brauncewell Quarries Ltd

by G. Tann

August 2000

LAS Report No. 457

Lincoln County Council
Archaeology Section
25. AUG 00
over 29/8/00

EVENT 42127
SOURCES 416888 416886
61815 4181840
61823 4181849

Contents

List of Figures and Plates

Summary	1
Introduction	1
Archaeological Background	1
The Watching Brief	2
Conclusion	3
Acknowledgements	4
References	4
Archive Summary	4
Appendix 1: Context Summary	
Figures and Plates	

List of Figures and Plates

Figures

- Fig. 1** Location of Brauncewell, and position of the multiple ditch cropmarks, as plotted by J. Tipper (Inset C based on an Ordnance Survey 1:10,000 map; © Crown Copyright, reproduced with the permission of the Controller of HMSO. LAS Licence No. AL 50424A).
- Fig. 2** Position of the 1996 geophysical survey areas (based on a plan supplied by Oxford Archaeotechnics).
- Fig. 3** Location of the archaeological features observed during the watching brief, October 1999. Plan surveyed and produced by Midland Survey Engineering, August 2000.

Plates

- Pl. 1** Topsoil stripping on the quarry extension, October 1999 (looking SW to the existing quarry).
- Pl. 2** Half-sectioned post-hole 1, cut into limestone brash.
- Pl. 3** Post-hole 2, prior to excavation (scale 0.5m).
- Pl. 4** Section through the fill of post-hole 2 (scale 0.5m).
- Pl. 5** Section through the dark fill of post-hole 10 (scale 0.5m).
- Pl. 6** Possible post-packing stones in the soil fill of 3 (scale 0.5m).
- Pl. 7** Burnt soil and burnt stone fragments in the grey fill of 17.
- Pl. 8** Excavated narrow slot across shallow stone quarry pit 14, seen either side of a topsoil ridge. Blue paint marks the approximate edges of the feature (looking west, scale 0.5m).
- Pl. 9** Section through the fill of 14, showing the dense limestone brash into which it was dug (scale 0.5m).
- Pl. 10** Red/brown loam and burnt limestone spread 4, possibly the site of a hearth or fire-pit (scale 0.5m).
- Pl. 11** Possible hearth 16, with brown topsoil introduced by modern plough damage.
- Pl. 12** Although archaeological features have been identified from geophysical survey in the arable field to the north of the quarry, no features were found close to the northern edge of the extension (looking NW).

Brauncewell Quarry
Topsoil Removal, eastern side of Extension Area B
Archaeological Watching Brief
NGR: 0330 5200
Site Code BQW 99
LCNCC Museum Accn No.: 233.99
Planning Consent No. N/15/439/90

Summary

An archaeological watching brief during a further phase of topsoil removal, for the most recent extension to the limestone quarry, identified a few archaeological features, but nothing which was able to contribute significantly to knowledge of the site. A single sherd of medieval pottery was found.

Introduction

Lindsey Archaeological Services (LAS) was commissioned in October 1999 by John Dickinson, Brauncewell Quarries Ltd to conduct an archaeological watching brief during topsoil removal in preparation for an extension to the existing limestone quarry at Nipton Lane, Brauncewell (Fig. 1). The watching brief was required by Lincolnshire County Council to fulfil the remaining condition of Planning Consent No. N/15/439/90. Works were conducted in accordance with the Scheme of Works (dated March 1997).

Groundworks were monitored by G. Tann and Mark Williams, on 13th, 14th and 18th October 1999.

The Application Site

The extension is located to the east of the previous quarry area, 0.4km SW of the A15 Lincoln-Sleaford Road. The site extends from a narrow level area close to Nipton Lane, down a slope. The land has been in arable use.

Archaeological Background

The cropmarks of a triple linear ditch system (Lincolnshire County Sites and Monuments Record PRNs 1765 and 1767), crossing to the east of the limestone quarry at Brauncewell, were clearly defined by aerial photography in 1992. Multiple linear ditches, thought to represent boundaries, are known from various locations in Lincolnshire and elsewhere, and have frequently been identified as of prehistoric date, although certain dating has often been elusive (Boutwood 1998). In some instances a sherd of late Bronze Age pottery has been found in the ditch backfills, but these may represent residual sherds entering from the upcast banks. At Brauncewell, Romano-British activity is adjacent to, and overlies, the backfilled ditches, and an Iron Age date is probable.

Subsequent research revealed that the ditch system is faintly visible on a 1971 commercial vertical air photograph taken on behalf of Lincolnshire County Council for that year's Census (Field 1993;

Hunting Surveys 1971). Selected geophysical survey and excavations were carried out as part of an archaeological evaluation in advance of extensions to the quarry in 1994 and 1995 (Field 1994; Tipper 1994). These located the anticipated boundary ditches, together with an extensive unsuspected complex of Romano-British features that included substantial quarry pits, enclosures, burials and a dense scatter of pits and postholes. A second phase of geophysical survey was undertaken in 1996 (Johnson 1996). Further archaeological excavation in 1997, in the eastern half of another extension (designated Area B), identified a series of enclosures adjacent to the triple boundary ditch, one of which contained a late Iron Age post-built structure (Taylor 1998).

The eastern half of Area B, to the east of the 1997 archaeological excavations, appeared from the 1996 geophysical survey to be low in magnetic activity, suggesting a low level of archaeological activity on this part of the site (Johnson 1996). For this reason, a watching brief during topsoil removal was considered more appropriate for identifying and recording archaeological features than further evaluation or excavation.

The Watching Brief (Figs. 2 and 3)

Method

The area of the quarry extension was stripped of topsoil with a loading-shovel. The topsoil here was about 0.2m thick and contained limestone that had been disturbed from the underlying bedrock by ploughing. The loading-shovel was driven onto the topsoil surface with its front bucket lowered, peeling the topsoil off the limestone. Although much of the removed soil went into the bucket, part formed substantial ridges to either side of the machine pass (Pl. 1). A series of passes was required before a west-east strip was cleared across the area, tipping onto a spoil heap/topsoil bund along the eastern edge of the extension.

From experience of this topsoil removal method on the previous extension areas at Brauncewell Quarry, it was known that although these initial passes produced a clean surface, subsequent removal of the intervening ridges produced a thin spread of redeposited soil, which could not be easily cleared. By arrangement with Brauncewell Quarries, the initial passes were monitored closely, and the resultant surface recorded, before any of the ridges were cleared. No further features could be seen when the ridges had been removed.

The presence of apparently burnt limestone provided the easiest way of identifying possible archaeological features, which were then hoed for better definition, prior to photography. Most of the features were then half-sectioned in order to discover their depth and to check the fills for dating evidence. Each identified feature was assigned a number by LAS for recording purposes, and these numbers are used on the plans and sections, and in this report text in bold. Planning of the site posed a problem, because of the area involved and the spoil ridges, but a survey was produced by Midlands Survey and Engineering, using a survey station positioned on the southern perimeter bund.

The descriptions of the identified features are presented in Appendix 1.

Post-holes

The bases of four certain post-holes were seen. Contexts **1**, **2** and **10** were about 0.4m diameter and about 0.15m deep (Pls. 2-5). Post-hole **3** was 0.7m diameter, but a similar depth (Pl. 6). Although none produced any dateable finds, charcoal was present in the fill of **2**, and possible limestone packing stones were seen in **3**.

Contexts **6**, **7**, **17**, **19** and **20** may also have been post-holes but were less well-defined. Most were a similar diameter to the others, but **7** was larger. Burnt stone was present in the fills of **7** and **17** (Pl. 7).

Pits

Two possible shallow stone quarry pits were noted, but the conditions were not good for identification or recording. **14** was seen in two adjacent stripped runs, and appeared to be about 8m x 10m; a narrow slot dug through its fill suggested that only 0.5m survived, cut into dense brash (Pls. 8 and 9). A very abraded sherd of medieval pottery was found close to this feature, apparently derived from the topsoil. **15** was 1.2m diameter, and was cut into silt and brash.

Hearths

Areas of burnt soil and limestone, apparently representing either an *in-situ* fire site where heat had penetrated through overlying soil, or the base of a truncated fire-pit, were seen at contexts **4**, **5**, **8**, **11-13** and **16** (Pls. 10 and 11).

Conclusion

The watching brief permitted the close inspection of about 50% of the extension area in good conditions for identifying archaeological features. This proportion was distributed across the area evenly, and allowed recognition of a clustering of archaeological activity on the upper slope. Only one sherd of pottery was retrieved (a medieval sherd), providing a further indication of the low level of activity in this area, compared with the previously examined areas of the site. This supported the interpretation of the 1996 geophysical survey.

The features that were identified were not obviously associated with each other, and seem to represent activity at the periphery of the occupation and industrial site. This provides an eastern limit to the site's extent. Puzzlingly, the concentration of features did not increase to the north, although the cropmark and geophysical evidence indicates a high level of activity on the lower slope immediately north of the present quarry (Pl. 12). This lower area may also have a similar eastern extent.

Acknowledgements

LAS is grateful for the co-operation received from John Dickinson and the machine operators at Brauncewell Quarries Ltd. Further assistance was received from the Lincolnshire County Archaeological Section (now the Built Environment Team). The features were surveyed by Martin and plotted by Paul (Midland Survey and Engineering Ltd).

The report was collated and produced by Jane Frost.

Geoff Tann
Lindsey Archaeological Services
24th August 2000

References

Boutwood, Y. 1998 "Prehistoric linear boundaries in Lincolnshire and its fringes" in Bewley, R.H. (ed.) *Lincolnshire's Archaeology from the Air*. Society for Lincolnshire History and Archaeology, Occasional Paper 11.

Darling, M. 1994 *Report on the Roman Pottery from Brauncewell Quarry 1994*. CLAU Report 117, August 1994.

Field, N. 1993 *Brauncewell Limestone Quarry: Archaeological Desk-top Study*. LAS Report, November 1993.

Field, N. 1994 *Brauncewell Limestone Quarry Extension: Archaeological Evaluation*. LAS Report, March 1994.

Field, N. 1996 *Brauncewell Limestone Quarry: Proposals for Further Archaeological Recording*. LAS Report, July 1996.

Hunting Surveys 1971 Air photographs by Hunting Aerofilms Ltd. HSL UK 71 155, Run 03/2034-5, 30/6/71.

Johnson, A.E. *Brauncewell Limestone Quarry: Topsoil Magnetic Susceptibility and Gradiometer Survey*. Oxford Archaeotechnics Report, October 1996.

LAS 1997 *Brauncewell Limestone Quarry Extension: Archaeological Scheme of Works*. LAS Report, May 1997.

Tann, G. 1999 *Brauncewell Water Main Replacement: Archaeological Watching Brief*. LAS Report No. 354, May 1999.

Taylor, C. 1998 *Brauncewell Limestone Quarry Extension, Excavations 1997*. Network Archaeology Ltd/LAS Report. LAS Report No. 279, January 1998.

Tipper, J.B. 1994 *Archaeological Excavations at Brauncewell Limestone Quarry*. LAS Report No. 105, August 1994.

Archive Summary

Correspondence

Photographs: LAS colour print film nos. 99/160/8-13; 99/136/35-37; 99/144/00-36 (including those used in this report).

Survey plan

Context sheets

Medieval pottery sherd and Pottery archive list

APPENDIX 1

Context Summary

Context No.	Type	Description	LAS photo no.
1	post-hole	0.45m diameter, 0.15m deep, cut into brash. Filled with black loam with charcoal flecks.	99/136/37; 99/144/6
2	post-hole	0.4m diameter, 0.14m deep, cut into sand and sandy brash. Sloping sides, rounded base. Filled with red/brown loam.	99/136/38,39; 99/144/00, 0, 1, 7
3	post-hole	0.7m diameter, 0.12m deep, cut into fine brash. Sloping sides, rounded base. Filled with red loam, with small limestone rubble, perhaps used as post packing.	99/144/2-3, 8
4	?hearth	Ovoid area of burnt stone in a red loam matrix, 1.5m west-east, 0.65m north-south. Sited on fine brash. Cut by a plough score.	99/144/4,5, 9
5	?hearth	Sub-circular area of burnt stone, 0.9m diameter. Sited on dense limestone bedrock.	99/144/10
6	?post-hole	0.3m north-south, 0.2m west-east. Cut into dense brash, filled with red/brown loam. Not excavated.	99/144/11
7	?post-hole/pit	1.4m north-south, 0.6m west-east. Cut into dense brash, filled with red loam, burnt stone and small limestone rubble. Not	99/114/12
8	?hearth	0.5m diameter area of burnt stone and red loam, sited on dense limestone bedrock.	99/144/13
9		Over 0.8m north-south, 0.5m west-east. A narrow groove cut into dense limestone bedrock, filled with red loam, burnt stone and	99/144/14
10	post-hole	0.4m diameter, 0.15m deep, cut into dense brash. Shallow feature with rounded base; filled with dark brown loam (65% limestone rubble), with pea grit at the base.	99/144/15
11	?hearth	0.65m diameter spread of burnt stone and red soil, sited on	99/144/16
12	?hearth	0.5m diameter area of burnt stone and red loam, sited on dense limestone bedrock and brash.	99/144/17
13	hearth	Ovoid area of red loam, limestone rubble and infrequent burnt stone, sited on limestone brash. 1.3m north-south, 0.8m west-	99/144/18
14	?pit	8m west-east, about 10m north-south (poorly defined), 0.5m deep. Pit has a sloping west face, and a steeply sloping east side. Cut into dense brash; filled with red/brown loam (85% fine brash). One sherd of medieval pottery from the stripped surface	99/144/21-23; 30-33
15	?pit	1.2m diameter feature, cut into silt and brash. Filled with red loam and limestone rubble, not excavated.	99/144/19
16	?hearth	0.6m diameter spread of red soil and fragments of burnt stone. Sited on dense sandy brash.	99/144/28
17	?post-hole	0.35m diameter, cut into dense limestone brash and bedrock. Filled with burnt material, including fragments of burnt stone.	99/144/34,36
18	not identified	0.8m diameter spread of red loam and burnt stone in a depression sited on yellow ?sand (or limestone derived silt). Apparently overlain by undisturbed limestone brash.	99/144/29
19	?post-hole	1m diameter spread of brown loam, cut into silt and brash. 0.35m area of burnt stone and charcoal at south end.	99/160/10-13
20	?post-hole	0.35m diameter, cut into dense limestone brash and bedrock. 0.12m deep. Filled with red/brown loam.	99/160/4-7

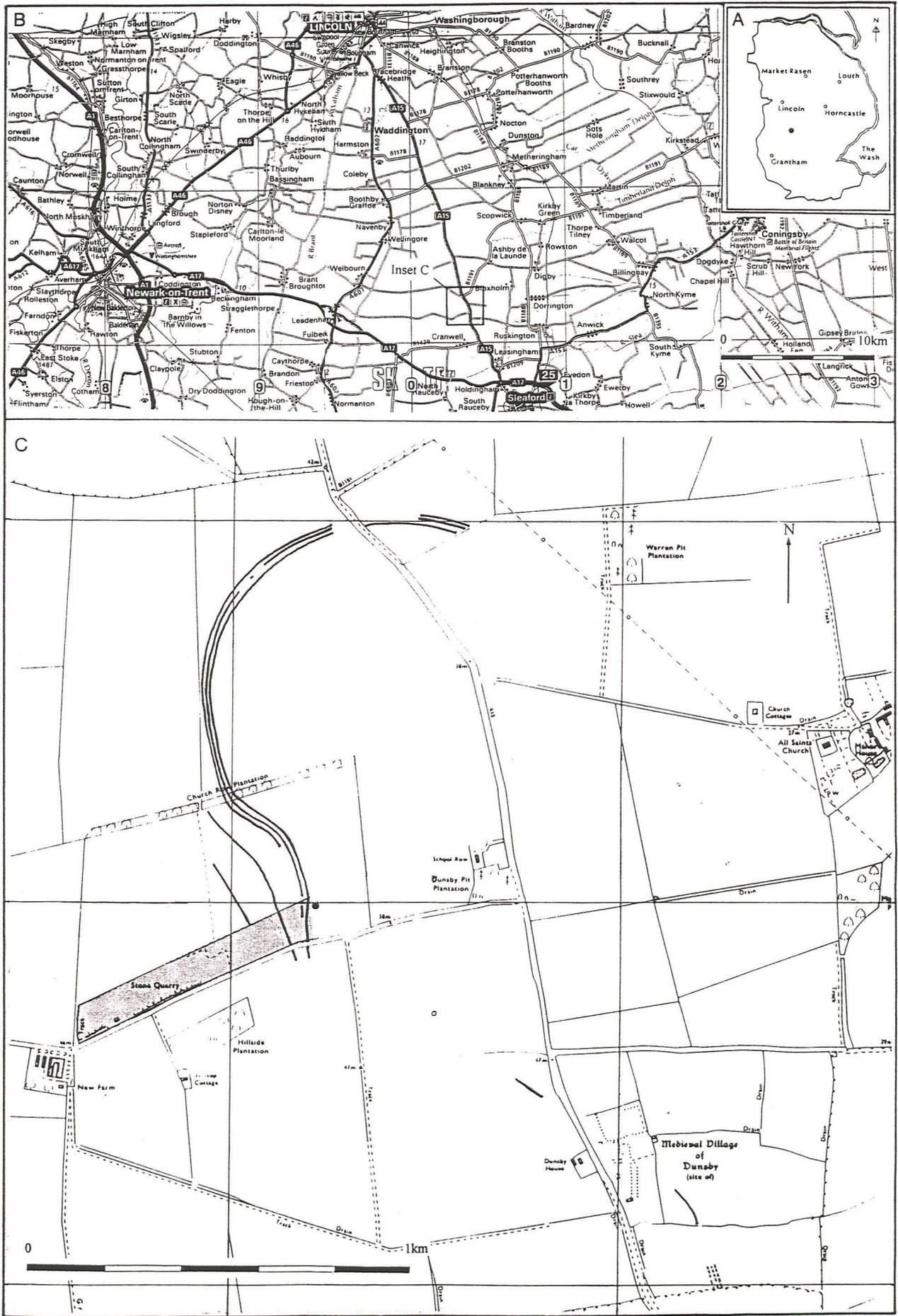


Fig. 1 Location of Brauncewell, and position of the multiple ditch cropmarks, as plotted by J. Tipper (Inset C based on an Ordnance Survey 1:10,000 map; © Crown Copyright, reproduced with the permission of the Controller of HMSO. LAS Licence No. AL 50424A).

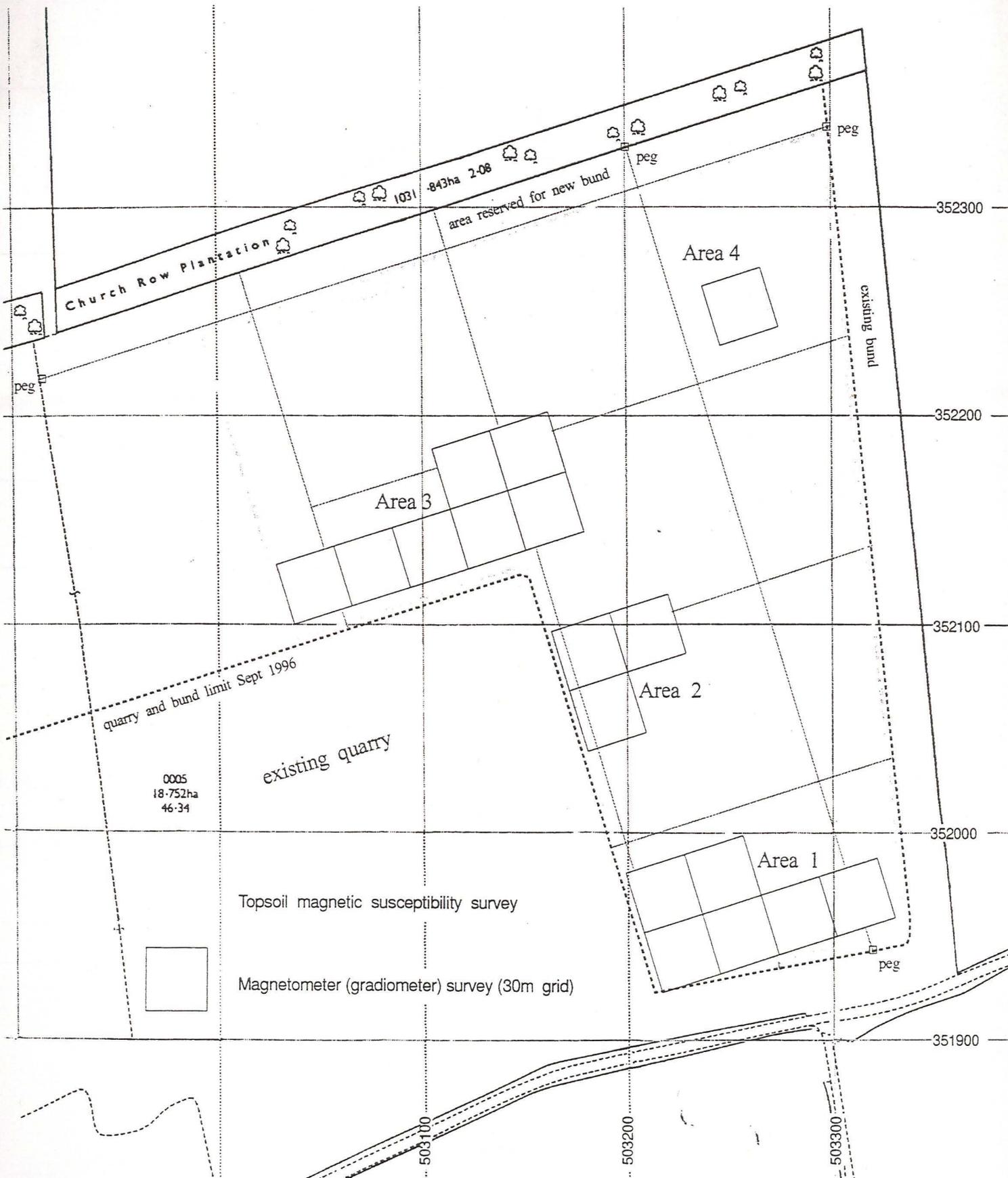


Fig. 2 Position of the 1996 geophysical survey areas (based on a plan supplied by Oxford Archaeotechnics).



Quarry Area
1997

1997 Excavation Area

ramp

topsoil bund

Geophysical survey grid line

topsoil bund

Quarry Extent October 1999

Watching Brief Area
1997

soil bund

Nipton Lane

Braucewell Quarry Extension Watching Brief October 1999



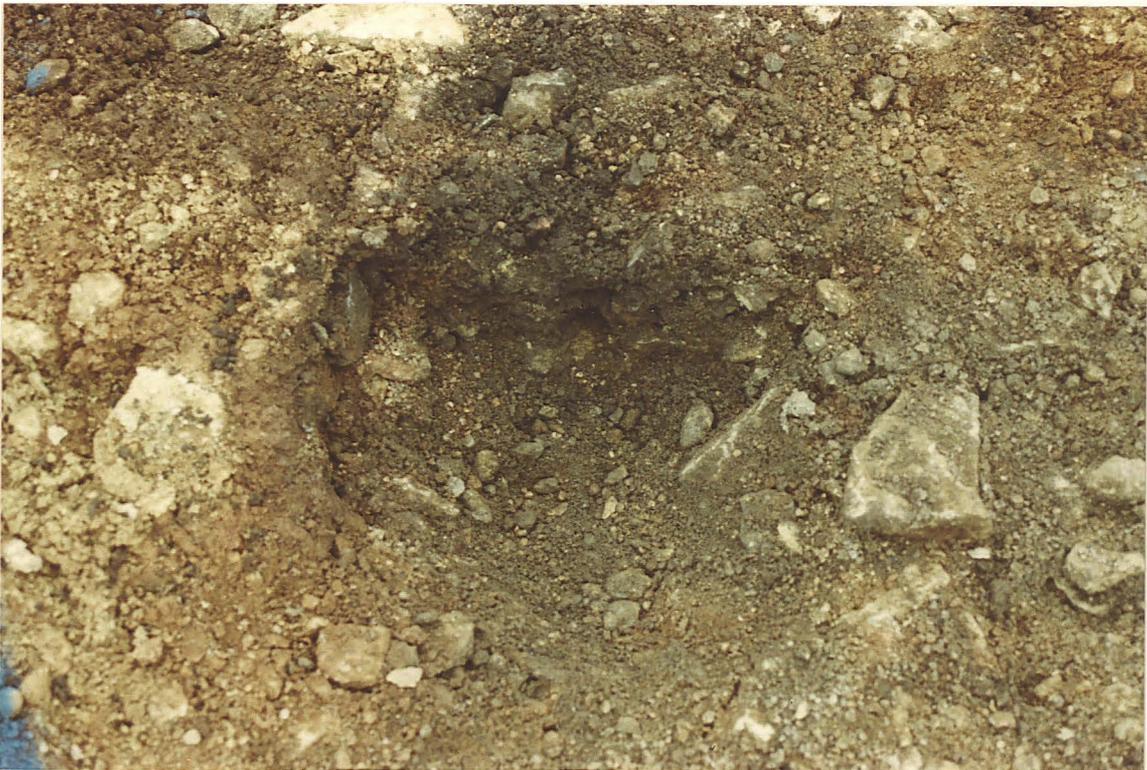
LINDSEY ARCHAEOLOGICAL SERVICES
25 WEST PARADE LINCOLN LN1 1NW
TELEPHONE 01522 544554 FACSIMILE 01522 522211
EMAIL las@lasarchaeology.demon.co.uk

Scale : 1/1250 Plan Ref. : LA/MSE/1533-1 Date : 24/08/00



Pl. 1 Topsoil stripping on the quarry extension, October 1999 (looking SW to the existing quarry).

Pl. 2 Half-sectioned post-hole 1, cut into limestone brash.





Pl. 3 Post-hole 2, prior to excavation (scale 0.5m).

Pl. 4 Section through the fill of post-hole 2 (scale 0.5m).





Pl. 5 Section through the dark fill of post-hole 10 (scale 0.5m).

Pl. 6 Possible post-packing stones in the soil fill of 3 (scale 0.5m).





Pl. 7 Burnt soil and burnt stone fragments in the grey fill of 17.

Pl. 8 Excavated narrow slot across shallow stone quarry pit 14, seen either side of a topsoil ridge. Blue paint marks the approximate edges of the feature (looking west, scale 0.5m).

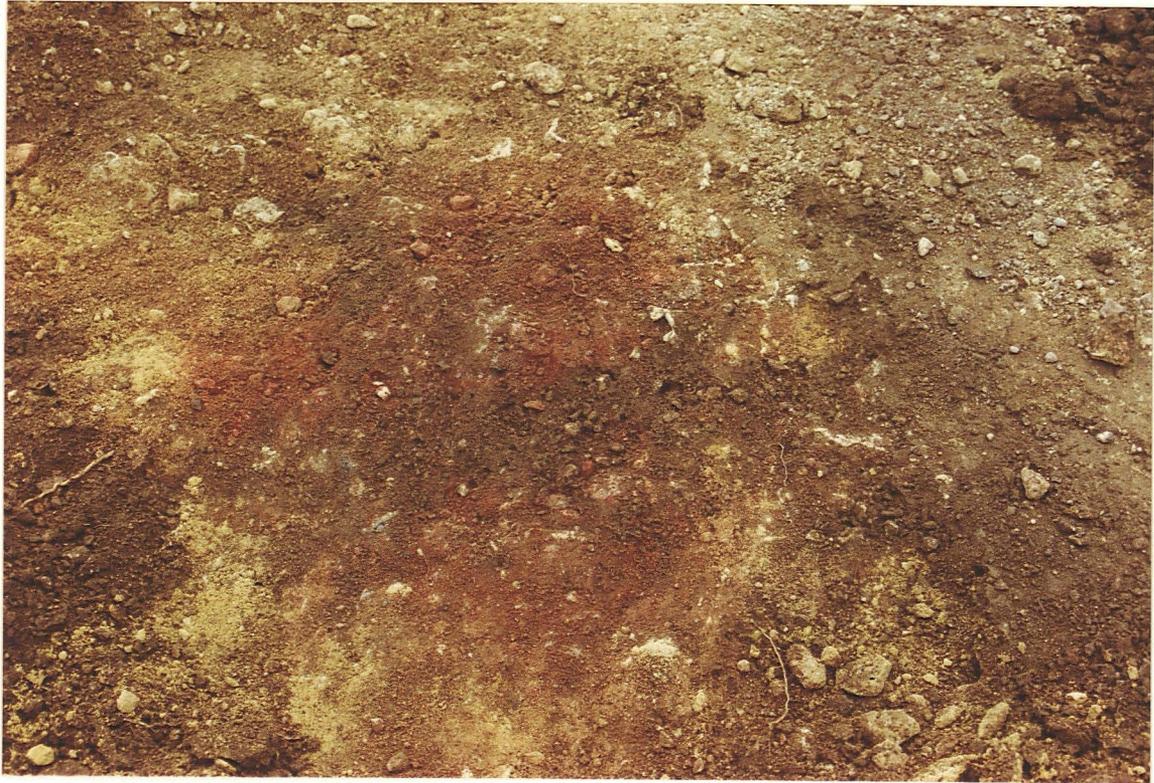




Pl. 9 Section through the fill of 14, showing the dense limestone brash into which it was dug (scale 0.5m).

Pl. 10 Red/brown loam and burnt limestone spread 4, possibly the site of a hearth or fire-pit (scale 0.5m).





Pl. 11 Possible hearth 16, with brown topsoil introduced by modern plough damage.



Pl. 12 Although archaeological features have been identified from geophysical survey in the arable field to the north of the quarry, no features were found close to the northern edge of the extension (looking NW).