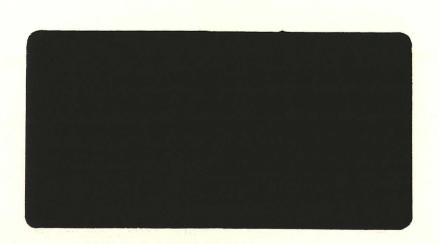


# Lincolnshire County Council Archaeology Section

1 0. OCT 97

12 Friars Lane LINCOLN LN2 5AL Tel: 01522 575292 Fax: 01522 530724



### A

# Report to Vincent & Associates on behalf of Bishop Grosseteste College, Lincoln

October 1997

#### Prepared by

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

Tel: Lincoln (01522) 545326 Fax: Lincoln (01522) 548089

© CLAU

Site Code: BGB95 LCCM Accession No.: 84.95 NGR: SK 9769/7277

LIBRARY EXTENSION, 97 113
BISHOP GROSSETESTE COLLEGE,
NEWPORT, LINCOLN

ARCHAEOLOGICAL EXCAVATION

By K Wragg

CLAU ARCHAEOLOGICAL REPORT NO:262

# LIBRARY EXTENSION, BISHOP GROSSETESTE COLLEGE, NEWPORT, LINCOLN

### Archaeological Excavation

Contents				
NON-TECHNICAL SUMMARY				
1.0 INTRODUCTION.				
2.0 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND				
2.1 Historical Ev	2.1 Historical Evidence			
2.2 Archaeologic	2.2 Archaeological Evidence			
3.0 RESULTS9				
3.1 Period 0	Natural Geological Deposits	9		
3.2 Period 1(a)	Initial Roman site clearance and levelling, mid-late 2 <sup>nd</sup> century	9		
3.3 Period 1(b)	Possible Roman timber phase, mid-late 2 <sup>nd</sup> century	11		
3.4 Period 2(a)	First Roman stone phase, late 2 <sup>nd</sup> - early 3 <sup>rd</sup> centuries	11		
3.5 Period 2(b)	Continued Roman occupation, early 3 <sup>rd</sup> - late 3 <sup>rd</sup> centuries	11		
3.6 Period 3(a)	Re-occupation of the site in the Saxo- Norman/early medieval period, late 11 <sup>th</sup> - early/mid 12 <sup>th</sup> centuries	15		
3.7 Period 3(b)	Consolidation of the site, mid 12 <sup>th</sup> - early 13 <sup>th</sup> centuries	16		
3.8 Period 4	Reorganisation and gradual decline, 13 <sup>th</sup> century	19		
3.9 Period 5	The final phases of occupation and eventual abandonment, late 13 <sup>th</sup> - late 14 <sup>th</sup> centuries	22		
3.10 Periods 6/7	Post-medieval and modern land-use	23		
4.0 DISCUSSION OF RESULTS & CONCLUSIONS				
5.0 ACKNOWLEDGEMENTS 29				

# LIBRARY EXTENSION, BISHOP GROSSETESTE COLLEGE, NEWPORT, LINCOLN

## Archaeological Excavation

Contents (contin	ued)	Page
6.0 BIBLIOGRAPHY		
7.0 LHA NOTES/ARCHIVE DETAILS		
7.1 LHA	A Note Details	29
7.2 Arcl	nive Details	29
APPENDIX A -	Photographic Plates 1 - 4	30
A DDENIDIN D	And in Demoking	22
APPENDIX B -	Archive Deposition	32
APPENDIX C -	A Summary Report of the Roman Pottery from	33
	Bishop Grosseteste, by B.J.Precious	33
APPENDIX D -	Report on the analysis of two Infant Burials from Bishop Grosseteste College, Lincoln (BGB95), by	
	A.Boylston	35
A PDENIDIY E _	Plant & Animal Macrofossils, and other remains,	
AITENDIX E	from Bishop Grosseteste College, Lincoln (BGB95): An Assessment, by V.Fryer & P.Murphy	40
	rm rissessment, by viriyor & rividipity	-10
APPENDIX F -	Animal Bone Assessment, by D.James Rackham	48

# LIBRARY EXTENSION, BISHOP GROSSETESTE COLLEGE, NEWPORT, LINCOLN

### Archaeological Excavation

#### List of Illustrations

Fig.1	Site Location Plans	- Scales 1:10000 & 1:1250
Fig.2	Plan of Proposed Development	- Scale 1:100
Fig.3	Plan of Period 1(a) Features	- Scale 1:100
Fig.4	Plan of Period 1(b) Features	- Scale 1:100
Fig.5	Plan of Period 2(a) Features	- Scale 1:100
Fig.6	Plan of Period 2(b) Features	- Scale 1:100
Fig.7	Plan of Period 3(a) Features	- Scale 1:100
Fig.8	Plan of Period 3(b) Features	- Scale 1:100
Fig.9	Plan of Period 4 Features	- Scale 1:100
Fig.10	Plan of Period 5 Features	- Scale 1:100
Fig.11	Plan of Period 6 & 7 Features	- Scale 1:100
Fig.12	Plan of Infant Burials	- Scale 1:5

# LIBRARY EXTENSION, BISHOP GROSSETESTE COLLEGE, NEWPORT, LINCOLN

# ARCHAEOLOGICAL EXCAVATION

#### NON-TECHNICAL SUMMARY

Development proposals for the above site involved the construction of a new two storey extension on the western side of the existing library, which is situated at the south-western limit of the main College complex, together with some limited landscaping, and service connections.

The results of the archaeological evaluation carried out on the site in April 1995 had shown that important remains were present across the site. In the absence of measures to preserve the remains beneath the development, it was decided, by the City of Lincoln Planning Committee, that an archaeological excavation should be carried out in advance of the groundwork phases of the development, and planning permission was conditioned appropriately.

The City of Lincoln Archaeology Unit (C.L.A.U.) was accordingly commissioned by Vincent & Associates, on behalf of Bishop Grosseteste College Lincoln, to undertake the required excavation, and archaeological recording was carried out on the site between the 28<sup>th</sup> of June and 24<sup>th</sup> of September 1995.

Based upon the results of the excavation, and the subsequent watching brief, the following stratigraphic sequence can be put forward (from earliest to latest):

1) Undisturbed geological deposits, including limestone bedrock, Lias clay, limestone 'brash', and a layer of sand, the latter occurring throughout the area of the

investigation at a level of approximately 62.81m O.D. - 62.34m O.D.;

2) Roman occupation dating to the mid-late 2<sup>nd</sup> century.

This activity possibly represents a site clearance phase in advance of the colonisation of the site and the construction of permanent structures, although the presence of some early (1<sup>st</sup> & 2<sup>nd</sup> century) pottery and other indistinct features could perhaps suggest earlier occupation in the vicinity pre-dating this phase.

3) A possible Roman timber phase, dating to the mid-late  $2^{nd}$  century.

Although the evidence for this particular phase is somewhat limited (basically relating to an arrangement of post-holes), it is clear that some form of activity was undertaken between the phase of levelling and the construction of the first phase of stone buildings. It is not however possible to determine with any certainty the nature of this activity.

4) Consolidation of the Roman occupation, with the construction of a large stone building, probably in the late 2<sup>nd</sup> - early 3<sup>rd</sup> centuries.

This building measured c. 9m N-S, and the easternmost 9m of the structure was revealed on the site, continuing into the east facing section (possibly extending to front on to the Roman Ermine Street to the west, resulting in a possible length of c.30m). The building itself featured a mortared internal floor surface, with a linear cut running parallel to the south wall possibly representing a drainage gully (to contain run-off water from the roof, a basic form of gutter).

To the north of the building, a large metalled area was present, probably representing a yard.

5) Continued Roman occupation, through the 3<sup>rd</sup> century, until abandonment probably in the late 3<sup>rd</sup> century.

During this period of occupation, the large building constructed during the previous phase appears to have been extensively modified, if not completed demolished and rebuilt.

Again only the easternmost 9m of the structure was revealed in the excavation trench, but this showed that the stone walls belonging to the original building had been demolished, with a new limestone wall, oriented N-S, constructed c.7m further to the west.

A possible timber structure was then erected, on an alignment closely respecting the outline of the previous stone building, apparently featuring timber beam foundations. No evidence for a new timber wall at the eastern end was found, suggesting that this was possibly an open ended structure, probably used as a workshop or storage area rather than for domestic/residential purposes. A cutfeature, possibly the remains of an oven or hearth, was discovered within this wooden structure.

To the south of the building, a new metalled surface was constructed, while to the north, the original metalled area was repaired and resurfaced in several places.

6) Re-occupation of the site in the Saxo-Norman/Early Medieval period, late 11<sup>th</sup> early/mid 12<sup>th</sup> centuries.

The most noticeable features associated with this phase were three large pits revealed along the eastern side of the site. It seems likely that these cut features represent stone-quarrying activities on the site.

Also revealed were several smaller cut features, including a possible cess-pit, and at the extreme eastern end of the site, a stone well was present.

Only one structure appeared to be associated with this phase, a possible timber building found to the west of the quarry pits, apparently oriented E-W. No evidence for eastern or western end walls, or internal flooring was found, possibly indicating that this structure did not have a residential purpose, and was possibly related to the stone-working activities.

The remains associated with this phase would seem to suggest temporary occupation of the site beginning probably in the late 11<sup>th</sup>/early 12<sup>th</sup> century, possibly indicating a somewhat

hurried colonisation of the site, with a well and timber structures constructed to provide the essential elements for subsistance, while quarrying was undertaken to provide building materials for a more permanent structures in the future.

7) Consolidation of the site, probably during the mid 12<sup>th</sup> - early 13<sup>th</sup> centuries, involving the construction of at least four stone buildings across the site.

The stone pits and the cess-pit belonging to the earlier period appear to have served their purpose and were backfilled, followed by the construction of a series of limestone structures, each measuring between 5m and 6m wide (N-S), and continuing beyond the boundaries of the excavated area to the west. The timber building appears to have been replaced by a new stone building, which followed its outline almost exactly, and a new metalled lane was constructed towards the north of this building to provide access to the east of the site.

The well also appears to have continued in use during this phase.

8) Re-organisation of the site, undertaken during the 13<sup>th</sup> century.

All of the buildings in use during the above Period seem to have been demolished, and/or superseded by three, or possibly four, new structures, in what appears to have been a gradual re-organisation of the site.

The construction of one of the new buildings effectively blocked the metalled lane between the earlier structures, and a new metalled roadway was constructed to the south of the new building. A further new building was then erected immediately to the south of the new lane, again comprising a c.5m wide stone walled structure oriented E-W.

A new metalled yard surface was also constructed, which covered much of the northern part of the site. At the northern edge of this possible yard area, another stone building was constructed, with a large cut feature also present in this area.

The only other substantial development recorded during this phase included the

construction of a 6m+ long limestone 'trough' (which appeared to have been clay-lined), butting against the eastern side of the well, presumably to allow water to be channelled to the east, perhaps to be used in some industrial process.

9) The final phases of occupation, and eventual abandonment, late 13<sup>th</sup> - early 14<sup>th</sup> centuries

Only one of the above buildings appears to have continued in use during this phase of the occupation: the structure to the north of the possible access lane, which was re-floored at least twice. Of the other two buildings belonging to the earlier phase, both were demolished, and only the structure situated at the northern edge of the metalled yard was replaced.

The replacement building comprised substantial stone walls, with a very sturdy floor consisting of pitched limestone. The purpose of such a heavy duty floor construction was not apparent, but was in marked contrast to the mortar floors seen within the other buildings, and might indicate that this building was used for the stabling of stock, rather than as a residential and/or workshop property.

To the east of the site some evidence was found of rutting, possibly the result of wagons using unmetalled routes across the site, but more probably the marks left by ploughing. Unfortunately these remains had been truncated by modern activity, and no positive conclusions could be drawn.

Finally, towards the end of this period, it would seem that the remaining structures were also abandoned, with remains of pitting and robbing apparent across the site.

10) Possible post-medieval land-use, and later modern occupation.

Little or no evidence was actually found to conclusively prove post-medieval occupation on the site, and the only features and deposits post-dating the medieval occupation were all associated with the present college buildings and the landscaping of the grounds.

#### Evidence for function

The nature of the occupation throughout the life of the site appears to have been essentially domestic, with little or no evidence for any industry or trade being carried out (however, see *Smithing*, below). The only obvious deviation from the purely domestic occupation is the presence of quarrying on the site, but this was probably a case of necessity, rather than an indication of commercial activity.

#### Roman

It would appear, on the basis of the pottery analysis, that the site during Roman times was of relatively high status. This is denoted by the presence of quantities of samian ware, and other imported and Romano-British fine wares, particularly beaker forms. There is also a moderate proportion of imported amphorae. In common with most sites there is also a substantial amount of culinary activity (see Appendix C, below).

This would tend to suggest that the site was perhaps part of a Roman villa or farm, belonging to a relatively affluent person/family.

The buildings revealed during this investigation however, while apparently well-made, show no sign of certain appointments associated with affluence (although some painted wall plaster was recovered), but it should be remembered that only a very small part of the establishment was uncovered. It may be the case that the more impressive buildings of the complex lie closer to the line of the Roman Ermine Street to the west.

It is also possible, given the other Roman buildings found both on this site, and along Newport in general, that the structures are actually part of a commercial ribbon development, perhaps similar to the Suburb identified to the south of the City. In view of the importance of Ermine Street during the Roman period, as the main route to York and the north, it would seem to be a prime location for trade. It could then be possible that we have part of the house of a relatively prosperous merchant or trader.

#### Medieval

The post-Roman pottery recovered from this site forms a large and important assemblage. The material ranges in date from the 10th century to the 20th century, although only material from the late 11th to the late 13th or early 14th century was stratified. The early groups clearly show that by the late 11th century, the reduced 11th century Saxo-Norman wares made at Lincoln and Torksey are no longer being produced, as they are entirely absent from the site. The range of fabrics and forms show continual occupation of the area between the late 11th century and the late 13th or early 14th centuries and the often high residuality rate shows re-working of deposits on the site.

The assemblages are entirely domestic in nature, with only a few imports and quality vessels present. The groups contrast sharply with those from the lower city, where in 12th and 13th groups of similar size, highly decorated vessels from Stamford and a number of French and German imports would be expected. Many of the 13th century vessels have internal white deposits caused by either storing urine or by heating a liquid in the vessel, similar concentrated use of vessels was found on sites at Flaxengate (to the south of the Cathedral) in 12th century deposits, and on the former S<sup>t</sup>.Marks railway station site in 15th century deposits.

It has been suggested that the occupation of this part of the City, creating the suburb of Newport during the early medieval period, was made necessary by the forced eviction of large numbers of people from the site chosen for the Norman castle (in 1068), and also possibly from the site of the Cathedral.

The evidence from this excavation would seem to support the idea of a basically poor or peasant population, rather than the more affluent occupants during the Roman period. More investigation would however be required, over a greater area, to provide conclusive evidence of both this, and the date at which the settlement was established.

What can be said however, is that it appears that this part of the Newport suburb site was re-occupied probably in the late 11<sup>th</sup>/early 12<sup>th</sup> century, which was around the time of the construction of the castle.

The nature of this initial phase of occupation appears somewhat temporary, with timber structures erected to provide immediate shelters while quarrying is carried out to provide a source of building material.

This possibly indicates a rather hurried colonisation of the site, followed by a gradual development and consolidation of more permanent structures across the site, as time and the supply of building materials allowed.

The final abandonment of the settlement in the early 14<sup>th</sup> century would appear to be in accord with the gradual shrinking of the population in the parish of St.John the Baptist (the medieval parish in which the site was located) which is shown, by Church records, to have begun at this time.

The population was to deteriorate to such a level that the parish was virtually abandoned by the early 16<sup>th</sup> century, and had to be merged with a neighbouring parish to the south.

#### Smithing

This site produced a small assemblage of slag, much of which has been identified as smithing slag (together with a small amount of hammerscale). Also, the medieval ironwork includes an unusually high proportion of horseshoe nails of 'fiddle-key' type, many of which were from the successive phases of metalling in the northern part of the site, or from that between the buildings in the central western area. Almost half of those recovered date generally to between the mid-13<sup>th</sup> and early 14<sup>th</sup> centuries. Fragments of several horseshoes were also recovered, and a curved fragment of iron possibly represents the 'blank' for making another.

These finds suggest use of the metalled surfaces by horses, with stabling possibly provided at this location, conveniently situated alongside the main route northwards. In view of the presence of smithing slag, perhaps the services of a blacksmith were also available.

Perhaps there was similar provision for travellers (i.e., accommodation & stabling) in the early periods of occupation on this site; this might explain the high proportion of 'quality' pottery, and particularly beakers.

# LIBRARY EXTENSION, BISHOP GROSSETESTE COLLEGE, NEWPORT, LINCOLN

# ARCHAEOLOGICAL EXCAVATION

#### 1.0 INTRODUCTION

Development proposals involved the construction of a new two storey extension on the western side of the existing library, which is situated at the south-western limit of the main College complex (see Figs.1 & 2), together with some limited landscaping, and service connections.

The proposed extension measured approximately 32m (N-S) x 9.5m (E-W), and was to be erected in an area currently under lawns. The ground level of the chosen site sloped down (at an angle of c.10 degrees to the horizontal) towards the east, and, in order to maintain a similar ground floor level with the existing library, excavation would be required to reduce the ground level (removing up to 1m of material across the majority of the proposed building footprint), together with deeper excavation required for the new foundations.

The results of the archaeological evaluation carried out on the site in April 1995 (see 2.0, below), had shown that important remains were present across the site. In the absence of engineering solutions to preserve archaeological remains, it was therefore decided, by the City of Lincoln Planning Committee, that an archaeological excavation should be carried out in advance of the groundwork phases of the development, and permission conditioned planning was appropriately.

A project design was formulated, through consultation with all involved parties, which proposed the raising of the ground floor level of the new building by 350mm, with archaeological excavation then required to an

approximate level of 63.15m O.D. (the nominal topsoil surface level was 63.60m O.D.).

It was realised that this would probably result in some archaeological deposits remaining undisturbed, and it was planned to protect the upper level of any surviving archaeology with a layer of terram sheeting, and a covering of sand.

The building would then be constructed, spanning the majority of the remains, with an archaeological watching brief proposed to record any finds or features revealed during excavation for the foundations, which would be required to bear on the limestone bedrock.

This was recognised at the outset to be compromise (a common floor level in the existing library building and the new extension being obviously desirable), and when the scale of the archaeological remains preserved on the site (which somewhat exceeded initial expectations) was fully evident, it was realised that it would be of mutual benefit to excavate the site fully. This would allow the required floor level in the extension, and provide a much more complete archaeological record to be produced, and it was therefore decided to extend the scope of the original project design accordingly.

The City of Lincoln Archaeology Unit (C.L.A.U.) was subsequently commissioned by Vincent & Associates, on behalf of Bishop Grosseteste College Lincoln, on the 21<sup>st</sup> of June 1995, to undertake the required excavation. Archaeological recording was carried out on the site between the 28<sup>th</sup> of June and 24<sup>th</sup> of September 1995.

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 of Institute of Conduct the Archaeologists, and The Management of Archaeological Projects 2 (English Heritage, 1991).

#### 2.0 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

#### 2.1 Historical Evidence

The chronological history of this part of the City is as follows:

Pre-Roman (1st century B.C.and earlier)

The case for any substantial pre-historic settlement in Lincoln remains unproven, although traces of 1st century B.C. activity have been identified, notably during excavations on the east side of the Brayford Pool.

In the area immediately surrounding the proposed development, finds including Neolithic and Bronze Age arrowheads, and stone axes have been uncovered from various locations, mainly from areas close to Newport, but no positive evidence for occupation has been found.

Romano-British period ( $1^{st}$  -  $4^{th}$  century AD)

The uphill area of Lincoln (known to the Romans as *Lindum*) was probably the first part of the city to be colonised by the Romans, as their military base during the *Legionary Fortress* period, (c.AD50-c.80). Later this became the administrative centre during the *Colonia* period (c.AD80-c.450). Since examples of both are rare in Britain, remains of the Roman period are of vital importance.

Excavations have established the line of the wall and defensive ditches of the fortress and Colonia, the northern boundary of which lay at the southern end of Newport (the present Newport Arch was originally the Roman north gate leading to *Ermine Street* and points north).

The area of the present scheme would have been adjacent to the main Roman route to the important city of York (*Eboracum*), and within sight of the main Colonia defences. The nature of the occupation may have been primarily rural (possibly farms or villa establishments), but the existence of a northern commercial suburb, similar to that found to the south of the

Roman Lower City could also be a possibility, although little or no evidence has been found to support this theory.

Anglo-Saxon and Anglo-Scandinavian period (5th - late 11th centuries)

Abandonment of the Roman City seems to have started in the late 4<sup>th</sup> Century with town life reduced to a small community between the 5<sup>th</sup> to late 9<sup>th</sup> centuries. Following the Viking take-over of Lindsey in 874, Lincoln became a centre for a Viking army and, subsequently, a Viking town. Evidence for increasing urbanisation in the 10<sup>th</sup> and 11<sup>th</sup> centuries has emerged from all parts of the former Roman city with Lincoln forming one, and perhaps the most important, of the so-called Five Boroughs of the present East Midlands.

The Saxo-Norman/early medieval period (late 11th - 13th centuries)

At the time of the Norman conquest Lincoln was home to perhaps 6-7000 people and formed one of the largest settlements in the newly conquered kingdom.

The main post-conquest change to be noted archaeologically is the re-introduction of stone buildings, the most prominent being the Castle and the Cathedral. The Cathedral, under its first bishop Remigius, took about twenty years to build and was dedicated in 1092.

The Castle was constructed by William the Conqueror within the south-west corner of the old upper Roman city as a stonghold for his new governors of Lincolnshire. Construction of the new structure is said to have involved the destruction of 166 houses, resulting in a large group of people being made homeless.

It appears to be around this time that the suburb of Newport was created, and it is possible that this was undertaken to provide new land for those dispossessed by the construction of the Castle. The suburb was later enclosed by the so-called "Newport earthwork", remains of which are present within the grounds of the College.

By the 12<sup>th</sup> century Lincoln had become a major European city and, in terms of both population and trade, was second only to

London. Prospering on the commercial success of the wool trade and cloth making the city's wealth and importance was reflected in the privilege of self government, the formation of guilds and the construction of extensions to the city walls.

Late-medieval/post-medieval periods ( $14^{th}$  -  $18^{th}$  centuries)

The late 14<sup>th</sup> to 17<sup>th</sup> centuries saw a period of decay in the city. This was partly due to the decline of the cloth indutry, the ravages of the Black Death, the loss of trade privileges to Boston, and the related poor state of the river Witham and Fossdyke. The city declined in importance and the population shrank, many houses and churches being demolished (including the church of S<sup>t</sup>.John the Baptist in Newport, which lay to the south-west of the college site) and by the second quarter of the 16<sup>th</sup> century large areas of the city were in a ruinous state.

#### 19th Century and later

The industrial revolution and introduction of the railways led to rapid expansion of the city during the 19<sup>th</sup> and early 20<sup>th</sup> centuries, and the majority of the housing in the area immediately surrounding the site appears to date from this period.

#### 2.2 Archaeological Evidence

The site lies c.20m to the east of the modern street of Newport which follows approximately the line of the Roman *Ermine Street*. Early development along Ermine Street has been identified by the discovery of the remains of substantial Roman and medieval occupation (the latter apparently associated with the post-Norman conquest suburb of Newport and the so-called "Newport earthwork") during excavations in the grounds of Bishop Grosseteste College in 1937, in the 1970's, and most recently during 1995 and 1996 (see below).

Elements of the graveyard of the medieval church of S<sup>t</sup>.John the Baptist together with evidence for quarrying activity have also been identified in several locations south and west of the site of the proposed development.

The archaeological work undertaken in the grounds of the college (immediately to the south of the area under consideration in this report) between 1970 and 1977 provides the best evidence for the nature of the site, but unfortunately the results still remain unpublished, and some of the provisional interpretation of that work has in fact been proved incorrect by the results of this investigation.

The basic information on the discoveries, however, is available in an interim report written in the early 1980's, and a brief chronological breakdown of the major features recorded on the site is as follows:

- 1) Roman occupation beginning possibly in the second century A.D.;
- 2) Re-development and levelling of the site possibly in the early third century;
- 3) Further re-building and re-development in the third and fourth centuries, with the site apparently going out of use at some point in the fourth century;
- 4) Re-occupation of the site, possibly in the early 13<sup>th</sup> century, re-using some of the Roman foundations and building materials;
- 5) In the late 13<sup>th</sup> to early 14<sup>th</sup> centuries, the site was completely rebuilt, retaining only the lower courses of the original structures;

6) Abandonment, for a second time, in the late 14<sup>th</sup> century, presumably remaining derelict for some time before being levelled for use as agricultural/horticultural land (the site was in use for many years as allotments).

The archaeological evaluation carried out at the request of the Local Planning Authority in April 1995, provided further information regarding the history of the site, with the following stratigraphic sequence being identified (from earliest to latest):

- 1) Undisturbed limestone 'brash' occurring throughout the area of the evaluation at levels of between 62.20m O.D and 62.70m O.D.;
- 2) Roman occupation on the site, including structures, a burial and potentially quarry/stone-working (this may possibly have been the origins of the large pit found in T.T.1, although there is no definite evidence at present to support this theory) beginning in the second century.
- 3) A period of dereliction and disuse following abandonment of the Roman structures, apparently in the late third to early fourth centuries.
- 4) Re-occupation of the site during the medieval period (possibly beginning in the late 11<sup>th</sup> and early 12<sup>th</sup> centuries, as indicated by medieval pottery recovered from several deposits).
- 5) Subsequent abandonment of the medieval structures, possibly during the 15<sup>th</sup> or 16<sup>th</sup> centuries (it was at about this period that the nearby parish church of St.John the Baptist in Newport became derelict and was abandoned, reflecting the decline of the medieval city).
- 6) Agricultural/horticultural use of the land, with subsequent landscaping of the site, continuing into the modern period.

A further small-scale investigation was also carried out to the east of the site, within the grounds of the Principal's House, during September 1996 (Wragg, 1996). The results of this project, while not physically connected with those further to the west, do further confirm the general chronological sequence:

- 1) Undisturbed limestone 'brash' occurring throughout the area of the investigation at a level of approximately 61.70m O.D.;
- 2) 2<sup>nd</sup> 3<sup>rd</sup> century Roman land-use and possible occupation on, or close to, the site, including a burial, and a cut feature, possibly a drainage ditch or boundary marker;
- 3) Layers of indeterminate date, raising the level of the surrounding area to c. 62.40m O.D., including a possible limestone & mortar surface;
- 4) Various modern layers associated with the construction of the existing house on the site, its landscaping and service arrangements.

Although not within the immediate boundaries of the College site, other works adjacent to Newport have revealed further discoveries which reinforce the importance of the area.

These have included a possible Roman trader's house found to the north of Lilly's Road (at the southern end of Newport), and finds which possibly indicate the presence of a Roman building, with indications of some affluence, on the site of the former Broadway service station (to the south-west of the site, on the western side of Newport).

#### 3.0 RESULTS

The excavation trench covered an area measuring approximately 35m (N-S) x 11m (E-W), and was primarily hand excavated to a average depth of 1.0m.

The site had been disturbed in several locations by the insertion of modern drainpipes, a large brick-built soakaway and the foundations for the existing library buildings (see 3.10, below). In addition, the southernmost 5m of the trench extended over part of the area excavated during the 1970's, with the result that no archaeological remains survived in this area.

The bulk of the archaeological record was secured during the excavation period, although some additional information was revealed during the subsequent watching brief carried out on the contractors' groundworks. It has not been possible, however, to incorporate any of the evidence produced during the earlier 1970's investigations.

Archaeological deposits and features (contexts) were recorded by both graphic means, including plan and section drawings, and photographs. Each individual context was then described in detail on recording sheets before removal. The context record then formed the basis for subsequent stratigraphic analysis, allowing a matrix to be created; when allied to the finds dating information this allowed a chronology for the site to be produced. The following text is occasionally described in terms of the individual contexts (shown e.g., [248]), or more usually, in groups of contexts representing particular related events (shown e.g., CG.1). Where the context group forms a building, this has been identified by the use of a Structure number (shown for example as Structure II), and where associated with an inhumation, a Burial number has been allocated (e.g. Burial 1).

Analysis of the most recent archaeological record, has identified the following possible periods of activity/occupation on the site:

#### 3.1 Period 0 - Natural Geological Deposits

In order to provide the new structure with a solid foundation it was necessary for the contractors to excavate to the surface of the underlying limestone bedrock, which was encountered at a depth of c.3m below the existing ground level (G.L.) at approximately 60.50m O.D.

As a result, it was possible to record not only the sequence of the archaeological deposits, but also those of natural (i.e., geological) origin.

A total of four deposits (CG.1) was recorded, the earliest of which was the limestone bedrock itself ([596]). This was overlain by a 1m thick layer of sandy clay ([398]/[432]), which itself was sealed by a layer of limestone 'brash' ([390]), which was c.400mm thick, and is characteristic of the natural deposits in this area.

The uppermost natural deposit comprised a 200mm-300mm thick layer of orange sand ([248]), which raised the ground level to between 62.34m & 62.81m O.D. Some pottery was recovered from the disturbed surface of this deposit, dating to the Roman Legionary period (see 3.2, below, and Appendix C), suggesting that this was the probable ground level at the time of the first occupation of the site.

## **3.2 Period 1(a)** - Initial Roman site clearance & levelling, mid-late 2<sup>nd</sup> century (Fig.3)

In general, deposits and features associated with this period of occupation on the site were only discovered in the final days of the excavation. As a result, owing to pressures of time, it was not possible to excavate these contexts fully, and consequently little in the way of detailed interpretation has been possible.

The only area of the site to be investigated to any extent was along the western side of the central part of the excavated area, and the following contexts are primarily from this part of the site, although some deposits were later identified in the trench sections as belonging to this period.

The earliest archaeological features recorded on the site were found cutting into the surface of the natural sand deposits, described above, and comprised parts of two shallow linear, or possibly part-circular, cut features (CG.2 & CG.7). The purpose of these features was not obvious, although it is possible that they could be associated with the levelling of the site.

The larger of the two cuts (CG.2) was filled by a series of dumps of mid brown sandy silt, mixed with mortar and frequent limestone pieces (CG.50), which possibly represented an area of 'hardstanding', although too little of the deposit was revealed to be certain.

To the south-east of CG.2 & 7, a large area (measuring at least 5m x 1.5m) of well-compacted sandy clay and gravel was revealed, with a burnt upper surface (CG.6), which raised the ground level to 62.80m O.D. This deposit was sealed by two possible features, a group of roof tiles (CG.5) and a circular area of burnt clay and limestone (CG.4).

CG.5 comprised two groups of Roman *Tegula* roof-tiles, the larger group (to the west) possibly forming part of a linear feature with a definite edge or face along its eastern side. The remaining group was approximately 500mm to the east, and made up of at least two tiles standing vertically in a shallow cut, lying parallel to the first group. Too little of this feature was discovered to allow any firm interpretation of its purpose to be made, but it is possible that it represents part of an early structure, perhaps belonging to the early occupation hinted at by the pottery dating.

CG.4, which lay to the north-west of CG.5, consisted of a roughly circular area (measuring c.1.4m in diameter) of light grey-brown clay and irregularly shaped limestone pieces with a burnt upper surface, possibly representing a hearth.

A further deposit (CG.8) was seen to overlie the natural sand, comprising a 100mm thick layer of sandy silt mixed with frequent limestone pieces. Unfortunately, this deposit was only recorded in the east facing section of the site, and little can be said regarding its extent and purpose.

A layer of multi-coloured burnt sandy silt (CG.3) was then encountered, sealing all of the aforementioned deposits and features, raising the level of the site to 62.75m O.D. on average. This deposit was present across the whole site, and could possibly indicate that the site had finally been cleared with the aid of fire (perhaps to clear a scrub/wooded landscape), but unfortunately these deposits were not fully removed owing to time restrictions, and this theory could not be conclusively proven. It is also possible that the burning was associated with the destruction of the very earliest phase of Roman occupation, although again this cannot be proved beyond doubt.

This extensive burnt horizon was then sealed towards the southern end of the site by a series of deposits (CG.9), comprising mixed silt and clay layers, with an upper surface of flat, worn limestone pieces, present at c.62.84m O.D. It is possible that this formed part of a metalled surface belonging to an earlier phase, but again too little was revealed to be certain.

The above series of deposits was then sealed below the final context attributed to this period of occupation, CG.12, a dark grey sandy silt containing frequent limestone pieces, which again raised the general site level (to around 63.00m O.D.), and also appeared to be part of an earlier metalled area.

This activity in general has been interpreted as a preparation phase for the later building works, although it is quite likely that some of deposits and features are actually representative of some form of early occupation. It has been mentioned that early legionary-type pottery was recovered from both these deposits, and the upper surface of the underlying natural sand, and the possible remains of an infant burial were noted amongst the animal bone sent for assessment. Unfortunately, insufficient investigation was possible at this late stage of the project, and further detailed investigations would be required to prove the existence of occupation during the first century of Roman rule.

## 3.3 Period 1(b) - Possible Roman timber phase, mid-late 2<sup>nd</sup> century (Fig.4)

Following the site preparation phase, it would then appear that some form of timber structure (Structure I) was erected, indicated by the presence of a series of post-holes (CG.13), oriented primarily E-W.

It is probable that this represents the presence of a building, but in the absence of any other obviously related features this can not be confirmed, and it is possible that the alignment of posts originally formed a fence or similar feature.

#### Dating

Periods 1(a) & 1(b) are almost exclusively dated to the mid to late 2<sup>nd</sup> century. However some of the contexts contain 1<sup>st</sup> to early 2<sup>nd</sup> century Roman fabrics, notably Native tradition Grit-tempered ware & Native tradition Shell-tempered ware from Context Group 3.

# 3.4 Period 2(a) - First Roman stone phase, late 2<sup>nd</sup> - early 3<sup>rd</sup> centuries (Fig.5)

This period of occupation features the construction of the first of the stone buildings to be found on the site (CG.14; Structure II), which appeared to be oriented E-W.

This building measured c. 9m N-S, and the easternmost 9m of the structure was revealed on the site, continuing into the east-facing section (possibly extending to front on to the Roman Ermine Street to the west, resulting in an approximate length of c.30m). The building itself featured walls of roughly hewn limestone blocks bonded with a lime mortar, founded on a trench-built pitched limestone base. It appeared that a buttress was present on the north wall, and the interior of the building had a floor of small limestone pieces bonded with mortar and silt, with some evidence for burning.

At some point in the life of the building the floor was repaired (CG.49), with a mixture of limestone pieces, gravel and mid-brown silt used to infill hollows.

To the south of the building all trace of the earlier timber structure was removed and the post-holes backfilled with a mid brown sandy silt deposit (CG.16). A linear cut (CG.47), running parallel to the south wall, was then excavated, possibly representing a drainage gully (to contain run-off water from the roof).

To the north of the building, a large metalled area (CG.15) was established, featuring small limestone pieces packed with mid-brown sandy silt. This was seen to extend over the majority of the northern part of the site (covering an area of at least 15m x 5m) and probably represents a yard. Some areas of burning were revealed, and in several places the surface had been stained, possibly by cess material, indicating that the yard may have been used for a variety of purposes, including the holding of stock.

#### Dating

This Period produced a proportion of mid to late 2nd century pottery but also evidence of early to mid 3<sup>rd</sup> century wares. Those contexts containing the later pottery appear to have continued in use for a period of time. The largest group of pottery (from CG.15, a metalled surface) contains a small proportion of mid to late 3rd century wares, but this surface was clearly in use for some time. Also dated to the 3rd century are a posthole in CG.16, and CG.49, a repair to a floor, which again are likely to have originated in the earlier period but continued in use to a later date. Lastly, within CG.14, the floor of the building produced good evidence for later 2nd to early 3<sup>rd</sup> century occupation, but also contained sherds of intrusive medieval pottery suggesting some re-working in this area.

## **3.5 Period 2(b)** - Continued Roman occupation, early 3<sup>rd</sup> - late 3<sup>rd</sup> century (Fig. 6)

Structure II mentioned above appears to have continued in use into the 3<sup>rd</sup> century, albeit with some modifications. The most significant of these apparently involved the demolition of the easternmost end of the stone structure.

A new eastern end wall (CG.37) was constructed in stone c.6m to the west of the original wall, with an extension, presumably

of timber (as indicated by the beam-foundation trenches; CG.36: Structure IIA), erected to the east closely respecting the outline of the original stone walls.

No evidence for a wall enclosing the eastern end of the building was found, which could indicate that the extension was a store or workshop, rather than residential structure.

Following the construction of the extension, it would appear that the area between the walls was levelled, with a series of three dump layers of mid-brown sandy silt (CG.32). Each of the deposits contained limestone, pebble and mortar inclusions. The uppermost deposit then appears to have served as a floor surface. A further layer possibly associated with this phase of levelling was revealed in the trench section, consisting of a thin (c.20mm) spread of mid grey-brown sandy silt (CG.31).

Above this, a possible clay hearth (CG.10) was revealed, lying directly upon the floor surface, comprising a roughly square area of red baked clay measuring approximately 640mm (N-S) x 500mm (E-W). This was slightly concave and contained a mixture of light-mid brown sandy silt and burnt/discoloured sand & ash (ranging in colour from white, through red-orange to black). Two thin layers of burnt sand, clay and ash (CG.26) were also found, sealing the original floor, probably associated with the hearth feature.

This particular floor surface, and the possible hearth, were subsequently covered by a new phase of dumping and levelling (CG.11), which consisted of a number of thin layers of sandy silts and clays; and raised the ground level to c.62.90m O.D. These layers contained limestone fragments, mortar and charcoal as seen elsewhere on the site, in addition to a substantial number of large *Amphora* fragments present in one of the deposits.

This phase of infilling and levelling then formed the base for a new mortar and limestone floor (CG.35), comprising small-medium sized, generally flat, limestone pieces bonded with an off-white coarse lime mortar. The stones in this surface showed signs of wear, probably indicating that the floor was in use for some time. The floor itself covered an area measuring approximately 5m x 5m, and was c.100mm thick. A similar mortared surface (CG.27) was revealed in the east-

facing trench section, and probably represents the corresponding floor within the main (stone) building to the west.

Several features were revealed cutting into the floor, including: two infant burials (CG.41 & 42; see Figs.6 & 12, and Appendix D) found close to the north wall; the possible remains of an oven (CG.40) in the centre of the 'room'; an isolated 200mm diameter post-hole (CG.39); and a possible cremation burial (CG.43) at the extreme eastern end of the building. A thin spread of clayey sandy silt (CG.34) was also found overlying the mortared floor at its north-eastern corner.

Of the two inhumations, CG.41 (Burial 1) included the remains of an infant lying in a crouched position on its right hand side on an east-west alignment (with the head to the west), while the individual in CG.42 (Burial 2) had been decapitated and the head placed between the legs positioned so that it faced towards the trunk.

This latter grave was orientated south-west/north-east with the head at the south west. The infant was placed on its back with the legs in a spread-eagle position and the lower legs raised. The left arm was parallel to the trunk and the right was missing with only the right scapula remaining.

Both infants were less than 3 months old (see Appendix D), and as such had been judged to be non-persons, as the contemporary belief was that an individual possessed a soul only after they had acquired their milk teeth. It was common Romano-British practice to dispose of infants within the settlement in a number of locations such as in pits, within the foundation trenches of the walls, beneath the floors of the houses, under the eaves or even in special infant cemeteries. It is difficult, however, to prove that such infants were deliberately sacrificed as foundation deposits, although the remarkably consistent age at death of buried infants in such circumstances may be evidence of such a practice, and documentary evidence shows that in Roman times the father, as head of the family, had the right to decide which of his children would survive. The decapitation of one of the burials is also an example of a Romano-British burial practice which was relatively common in rural cemeteries (Boylston, 1997).

CG.40 comprised a 'key-hole' shaped cut feature, situated along the centre-line of the building, oriented E-W. The feature was approximately 4m long, and varied in depth from 300mm (along the linear section to the west) to 500mm (in the 1.2m diameter 'bowl' at the eastern end), and it would appear that it represents the remains of an oven.

The final feature revealed within the building, CG.43, comprised an area of light brown sandy silt, which contained a large amount of limestone & pottery fragments, shell, burnt bone, and fragments of two separate glass bottles. These fragments include a substantial proportion (parts of shoulder, body and base) of a cylindrical bottle. Cylindrical bottles were sometimes reused as cinerary urns, and together with the presence of burnt bone fragments, could possibly represent the remains of a cremation burial. Unfortunately, accurate interpretation proved impossible owing to extensive truncation by later modern activity.

The building appears to have remained at this stage of development for a period of time before repairs to the floor proved necessary. Prior to the re-laying of the floor surface, the oven, CG.40, was removed and infilled with a moderately compacted mid brown sandy silt, which contained limestone pieces (some burnt), and mortar flecks (CG.51). A new surface of flat limestone pieces mixed with mid brown sandy silt and lime mortar (CG.38) was then laid across parts of the building (primarily at the eastern end), infilling hollows in the underlying floor.

To the south of the building a well-made cobbled area was constructed, following the infilling of the possible drainage gully associated with **Structure II**, with a brown sandy silt mixed with limestone pieces (CG.17).

The cobbled area (CG.44), probably part of a yard, extended at least 6m E-W x 2m N-S (being truncated to the south by the cut for the 1970's excavation), and was at least 100mm thick. It comprised tightly packed small-medium sized rounded cobbles, with no obvious bonding other than fine brown sandy silt apparently packed into the gaps between stones.

In several places, especially to the east, the possible yard was overlain by thin spreads of 'pea-grit', pebbles and degraded limestone (CG.45), while towards the southern edge of the newly excavated area (i.e., on the boundary with the cut for the earlier archaeological excavation), the yard surface was cut by a 3m x 800mm rectilinear 'slot'. The slot contained multiple fills, the earliest of which was a loose-moderately compacted mid-light grey mix of ash and fine sand (CG.46).

This primary fill deposit was then sealed by a 200mm thick 'platform' made up of flat limestone slabs with smaller pieces of limestone used as packing (CG.52). The upper part of this surface lay at c. 62.84m O.D., and was overlain by a 100mm thick layer of sandy silt, containing bone fragments (including several teeth), limestone, and pottery (CG.53).

A further 'platform' of limestone slabs (CG.54), virtually identical to CG.52, was then present, although in this case the surface was only approximately 50mm thick (with an upper of 62.99m O.D.). This final surface was then sealed by the uppermost fill of this feature, CG.55, another 100mm thick layer of mid brown sandy silt, this time containing limestone pieces (some burnt), tile, pottery, shell fragments and small patches of sand.

The purpose of this feature is not understood, although it seems certain that it was not simply a rubbish pit, but was dedicated to a specific, albeit unknown use.

The yard area present to the north of Structure II (Period 2(a)) appears to have continued in use, although by this time it probably had little more than a hard-packed earth surface, represented by the build-up of a moderately compacted mid-light brown sandy silt (CG.19; layer [479]) over its surface.

This deposit was approximately 100mm thick, containing frequent fragments of pottery and limestone, together with patches of gravel. It was present across much of the northern end of the site, its upper surface lying between 62.57m and 62.70m O.D.

Various locations on the yard surface appeared to have been repaired with dumps of limestone pieces, up to 100mm thick, presumably used to infill hollows in the underlying metalling (CG.21).

Sealed below these probable repair deposits were two small cut features, CG.18 and 20, which were revealed in the trench section at the north end of the trench, cut into the exposed areas of the natural sand.

Of these, CG.18 comprised a 300mm deep bowl-shaped pit which measured approximately 700mm E-W, while CG.20 was slightly smaller, between 500mm and 600mm in diameter, and again bowl-shaped with a depth of 250mm. Both cuts were filled with a material very similar to the surrounding layer [479] (CG.19).

Towards the southern end of the metalled area, a thin layer of well compacted yellow-orange sandy clay, mixed with limestone fragments and grey clay patches (CG.22), was revealed.

This layer extended across an area measuring approximately 5m (E-W) x 3m (N-S), and again possibly represents a repair. Two possible pits had then been cut nearby, one towards the centre of the site (CG.23), the other close to the eastern side (CG.24), cutting into this layer, and the underlying repaired metalling.

CG.24 was the larger of the cuts, measuring approximately 900mm in diameter, but was very shallow (only c.100mm at the centre), with gently sloping sides. CG.23 was of a similar depth, but only c.500mm in diameter. Both cuts were filled with a similar mid greybrown, slightly sandy, silt containing limestone and charcoal flecks.

Towards the end of this period of occupation, it appears that the timber building (Structure IIA), was demolished; the timber ground beams removed; and the resulting voids filled with a moderately compacted mid-brown sandy silt containing mortar and limestone inclusions (CG.188).

A possible stone surface (CG.28), comprising limestone fragments mixed with gravel and mid grey-brown sandy silt, was next laid across part of the area previously occupied by the building, possibly indicating that the remainder of the site was still in use at this time.

This surface was eventually sealed by further deposits of sandy silt and limestone fragments (CG.29), which could possibly represent repair or consolidation. These latter deposits extended across an area measuring c. 3m<sup>2</sup>, and raised the ground level to approximately 63.00m O.D. at its highest point.

Part of a shallow pit was then present, cutting into CG.29, comprising an oval concave cut measuring c. 650mm (N-S) x 1m (E-W) x 140mm (deep). This feature (CG.30) was filled with well compacted light brown sandy silt containing frequent limestone inclusions and charcoal flecks.

Three further indistinct deposits (comprising CG.25 & 33) were also found towards the eastern boundary of the site, but they had been extensively truncated by modern occupation. While definitely associated with the Period 2(b) land-use, it has not been possible relate these layers to the general activity taking place on the site at this time.

#### Dating

The pottery from Period 2(b) is predominantly later 2<sup>nd</sup> to mid-3<sup>rd</sup> century in date, but includes a proportion of mid to late 2<sup>nd</sup> century wares.

It seems likely that the Roman occupation on this part of the site came to an end in the late 3<sup>rd</sup> century, with the buildings probably abandoned at this time. It would then appear that the site was disused for the next 700-800 years, as no evidence for occupation between the Roman and Saxo-Norman periods was found.

3.6 Period 3(a) - Re-occupation of the site in the Saxo-Norman/Early Medieval period, late 11th - early/mid 12th centuries (Fig. 7)

The activities on the site at this time appear to be represent the first steps towards the establishment of a permanent medieval suburb. The quarrying of limestone forms a prominent part of the occupation, presumably to provide a ready supply of building materials for the planned structures, while work was also undertaken to provide basic shelter and a supply of fresh water.

The majority of the evidence for the quarrying was found on the eastern side of the site, comprising three large cuts, measuring between 5m and 8m in diameter, and reaching depths of between 2m and 3m.

At the north-east corner of the site two pits were revealed (CG.61 & 101). The earliest of these, CG.61, was only partially uncovered, but was found to be at least 2m in depth. It had been backfilled with a mixed sandy silt and clay (CG.60), which contained frequent limestone, mortar, and shell inclusions. This fill also contained a small group of domestic pottery, mainly jars, dating to the late 11<sup>th</sup> to early 12<sup>th</sup> century.

The second large pit (CG.101) was subsequently excavated immediately to the west of CG.61, this time consisting of a roughly circular feature, at least 4m in diameter and in excess of 2m deep, which cut into the fill of the earlier feature. This pit was also backfilled, but in this case only partially, the dumping predominantly concentrated along its southern side. The backfilling included: a mottled mid grey/mid grey-brown sand and silt deposit (CG.62); and two mixed layers of sand, silt and clay, containing burnt clay, limestone pieces, shell, gravel and charcoal (CG.65). CG.62 contained a single sherd from a 11<sup>th</sup> or 12<sup>th</sup> century jar.

Immediately to the south of CG.101, a small patch of angular limestone fragments, mixed with light-mid brown sandy silt, was revealed (CG.67), and this was also possibly associated with either the working, or the backfilling, of this quarry pit.

The other large cut associated with the quarrying was located towards the south-eastern corner of the site, and again comprised

a basically circular pit (CG.73) measuring at least 8m in diameter, and reaching depths of between 2m and 3m.

In a similar way to CG.61 & 101 described above, CG.73 was backfilled during this Period, presumably having fulfilled its purpose, and become exhausted of usable stone. The backfill again comprised a number of deposits (as CG.101), rather than the single fill revealed in CG.61. Up to seven individual contexts (CG.71) were recorded, ranging from blue clay (containing very few inclusions) to mixed sandy silts with frequent limestone, pottery, bone and tile inclusions. The pottery recovered from the fill deposits included a small group of dating to the first half of the 12<sup>th</sup> century, comprising mainly jars but also including two bowls, a pitcher and a jug.

Several deposits and features were then recorded cutting into the upper fills of this quarry backfill. Unfortunately, owing to modern truncation in this area, they were quite indistinct, and their relationship to other activity on the site is difficult to assess.

Included among this activity was: a cut feature, CG.74, consisting of an irregular shallow pit filled with sandy silt and clay, limestone pieces, mortar and pebbles; CG.79, a 300mm deep, bowl-shaped, limestone feature, with a pitched outer 'ring', possibly part of a hearth but exhibiting no signs of burning; CG.84, a  $1.5 \,\mathrm{m}^2$  area of well compacted grey-brown silt containing charcoal, mortar, pebble, limestone and pottery inclusions, the latter including a single sherd from an  $11^{\mathrm{th}}$  or  $12^{\mathrm{th}}$  century jar.

On the western side of the site, a timber building (CG.69; Structure III) was constructed, situated within the 'footprint' of the Roman Structure IIA described above. In spite of the proximity of the earlier wall remains, no attempt at robbing away usable building stone appears to have been made, probably indicating that little remained, or at least could be seen, of the original buildings.

Structure III was identified by an arrangement of seventeen post-holes, forming two parallel lines, which appeared to suggest a c.5m wide building, oriented E-W. No evidence for a wall at the eastern end was found, so this could indicate that this side of the building was open, possibly forming a workshop or storage area.

A sizeable cut feature (CG.80), positively identified (from analysis of the fill deposit) as a cess-pit, was present to the rear of building, comprising a roughly square, 1.25m deep pit. This lay immediately to the north of the large quarry pit (CG.73) described above, measuring 1.7m (N-S) x 1.9m (E-W), and was filled with a green stained sandy silt/cess, up to 1m thick, which identified its function.

Along the northern edge of the cess-pit, the remains of a possible wall (CG.83) were present, comprising three courses of limestone blocks laid with no bonding. A remnant measuring approximately 1.5m (E-W) was revealed, but its full extent and purpose are not known. The use of stone in the construction is however at odds with the other structures belonging to this Period, probably indicating that it dates from close to the end of this phase of the occupation.

To the east of the cess-pit a further (smaller) cut feature was revealed. This comprised a roughly rectangular pit (CG.70), c.300mm deep, with vertical sides. The base of the feature was generally flat throughout the southern half, but sloped down to the north in the remainder of the pit. The cut measured approximately 900m (N-S) x 600mm (E-W), and was filled with a mid brown sandy silt, containing irregularly shaped limestone pieces, charcoal and mortar flecks, and a single sherd from an 11<sup>th</sup> or 12<sup>th</sup> century jar.

In the northern half of the site, the Period 2(b) metalled area may have been re-used, with two small pit features (CG.58 & 59) found cutting into its surface. Both of these were approximately 500mm in diameter, and between 100mm and 150mm deep, but CG.58 was 'bowl-shaped' while CG.59 had steep sides and a flat base. Other than these two small features, very little sign of occupation could be found.

Towards the end of the Period this part of the site appears to have been levelled, prior to construction of a group of stone buildings (see 3.7, below). Two groups of deposits were recorded, comprising CG.56, two mixed layers of clayey silt and mortar, with limestone inclusions, and CG.57; an extensive layer of fine grey-brown sandy silt, again containing limestone inclusions and a small number of post-Roman sherds dating to the late 11<sup>th</sup> to 12<sup>th</sup> centuries (along with 774 residual Roman

sherds). A further deposit probably associated with this phase of levelling was also recorded slightly further to the south. This comprised CG.72, a mixed mid brown clayey silt with patches of burnt sand, limestone pieces and charcoal flecks.

At the extreme southern edge of the excavated area, a stone-built well (CG.85), measuring c. 2.5m in diameter, was revealed, lying approximately 8m to the south of Structure III. This was originally uncovered during the 1970's investigations, when it was incorrectly interpreted as a Roman feature (based on material recovered from its fill, rather than from the actual fabric of the well). No attempt was made to excavate this feature, as the well had been emptied to a depth of 5.5m during the 1970's, and the present fill was of modern origin. The upper courses of the stonework, however, were removed to the top of the natural sand, and medieval dating including a single 12th century sherd from a cooking pot was recovered from amongst the stones.

3.7 Period 3(b) - Consolidation of the site, mid  $12^{th}$  - early  $13^{th}$  centuries (Fig.8)

This phase of occupation appears to reflect a consolidation of the preceding phase, together with considerable expansion, in the form of new limestone buildings erected across the site.

In the central part of the site, the timber walls of **Structure III** (above) were removed, and the post-holes were backfilled with a mid brown sandy silt (**CG.109**). Two similar deposits (**CG.115** & **108**) were then dumped over this part of the site, raising the ground level to approximately 63.05m O.D. These deposits covered an area measuring 6.3m (N-S) x 5.6m (E-W), and were up to 120mm thick. Small groups of domestic pottery of 11<sup>th</sup> to 12<sup>th</sup> century date were found in these deposits, consisting of shell-tempered jars, bowls and cooking pots, although a small number of jugs were also found.

At the eastern end of the former Structure III, a number of patches of mortar (CG.114) were then revealed overlying CG.115, extending across an area c. 4m<sup>2</sup>, probably associated with

the construction of the later Structure IIIA (see below).

Close to the east-facing trench section, CG.108 was cut by a large circular pit, measuring up to 2m in diameter. This cut (CG.107) had steep sides and was at least 500mm deep (owing to time pressures it was not fully excavated). On the eastern side of this feature, a further smaller cut was revealed (CG.106), comprising a 500mm deep, roughly oval, pit (c. 1.6m x 850mm).

These cuts were filled with a mixture of silty clay containing limestone, charcoal, burnt clay, mortar and shells, together with a group of apparently coursed limestone (CG.105). This latter element of the backfill was concentrated at the southern end of the larger of the two cuts, and at first appeared to be part of a wall. Subsequent investigation, however, could prove no link with any of the surrounding structures, nor offer explanation of the purpose of this substantial feature. The combined fill deposits were then overlain by a dark grey-brown silty clay layer containing charcoal and limestone flecks (CG.104).

Further levelling deposits were then present, extending over much of the width of this part of the site, comprising sandy silts mixed with limestone, charcoal and mortar (CG.110).

At this point, a new stone structure was constructed in the central part of the site (CG.112; Structure IIIA), which closely following the alignment of the previous Structure III. The new building was approximately 4m wide, and appeared to have at least two distinct rooms (see Fig.8).

At the extreme northern end of the site, a further series of dump layers and cut features was revealed. These comprised: CG.86, a part-circular shaped cut measuring at least 3m in diameter, filled with mid green-brown silty clay; CG.87, an area of burnt yellow clay containing frequent burnt limestone and charcoal inclusions, and a single 12<sup>th</sup> century sherd from a cooking pot; a 1.7m x 1m area of very dark brown silt, again containing burnt limestone and charcoal (CG.91); and CG.93, a part-circular cut feature up to 2m in diameter, backfilled with mid brown clayey silt

containing a mixed group of mid/late 12<sup>th</sup> to early 13<sup>th</sup> century jars and jugs as well as an imported ladle.

A second stone structure (CG.88; Structure IV) was then built, apparently oriented E-W, sealing CG.87. Only the south wall of this building, with part of an associated mortar floor, fell within the boundaries of the excavation trench, and therefore little could be determined about its extent and use.

Between this structure and the aforementioned Structure IIIA, the open area/yard present in the earlier periods appears to have continued in use, with a number of deposits and features gradually accumulating over its surface.

Two main deposits, CG.92 and 94, covered the area, comprising a mottled mid-dark greybrown/yellow-brown sandy silt, and a mid grey-brown sandy silt, respectively. Small groups of 11<sup>th</sup> to 13<sup>th</sup> century pottery including jars, bowls, jugs and an early pipkin were recovered from these two deposits. CG.94, was subsequently cut by a part circular pit feature (CG.96), and part of a linear cut (CG.95). The latter feature was very shallow (between 50mm and 100mm) and, owing to truncation by later modern features, its full extent could not be determined.

Further dump deposits were then present, including: CG.90, a mid yellow-brown sandy silt containing mortar, limestone and gravel, which was only revealed in the east-facing trench section; and CG.97, two mixed sandy silt layers, each containing limestone pieces. A small number of 12<sup>th</sup> and 13<sup>th</sup> century pottery sherds was also recovered from deposit the latter deposit.

It would also appear that efforts were made to rob away the final elements of the north wall of the long-buried Roman Period 2(b) building. This activity was represented by the presence of a linear cut feature, filled with a mixed yellow-brown mortar and grey-brown sandy silt deposit (CG.98), which closely followed the line of the underlying wall remains.

This backfill material was then overlain by a 200mm thick layer of mid brown sandy silt, which contained limestone inclusions (CG.99).

The continued usage of this open area appears to have been relatively short-lived, with two further stone structures (CG.89; Structure V, and CG.100; Structure VI) soon constructed at relatively even spacings across the former yard. The size and orientation of the new buildings was similar to that seen before. Structure VI produced pottery ranging in date from the 11<sup>th</sup> to the 13<sup>th</sup> century, including jars, jugs and a cooking pot.

Between the southernmost of the latter structures, and the previously mentioned Structure IIIA, a new area of metalling (CG.111) was laid, forming a slightly cambered surface made up of small limestone pieces packed with grey-brown sandy silt. This feature presumably formed a lane, giving access to the eastern parts of the site from the road to the west.

Towards the north-east of the wider part of the site, the backfilling of the large quarry pit (CG.101) was completed, with the dumping of two groups of mixed silts, clays and sands, CG.102 and 103. Small groups of pottery came from this backfill material, mainly of 11<sup>th</sup> and 12<sup>th</sup> century date. The possible remains of a further stone structure (CG.66; Structure XII) was then present, overlying the upper fill deposit. This comprised a small section (c.1m²) of pitched limestone foundations, supporting four courses of roughly worked limestone blocks, bonded with yellow-brown mortar, and including a small number of 11<sup>th</sup> and 12<sup>th</sup> century pottery sherds.

This feature appeared to run parallel to the rear wall of **Structure VI**, but too little was preserved to indicate its original size or purpose. To the east of this possible wall (i.e., on the inside of the presumed building), a further group of contexts was revealed, **CG.68**, comprising layers of silt and sandy clay, containing limestone, mortar and shell.

Further towards the south-east corner of the excavated area, a complex series of features and deposits was seen, located to the north of quarry pit CG.73.

Unfortunately, as with previous periods, there was a considerable amount of later truncation affecting the features in this location, and only limited interpretation of these contexts was possible.

The earliest of the activity in this area was related to the backfilling of the cess-pit itself, firstly with a random dump of limestone pieces (CG.78), present along its southern edge. This dump also extended over parts of the backfilled quarry pit, which itself was also cut by a shallow indistinct feature filled with mixed sandy silt, containing limestone, mortar and shell inclusions, and a fair sized group of pottery, almost entirely jars and cooking pots, dating to the 11<sup>th</sup> and 12<sup>th</sup> centuries (CG.77). Both CG.77 and 78 were then overlain by CG.75, a further dump of sandy silt, limestone and mortar.

The latter deposit was then sealed by two further dump layers, comprising: CG.126, a fine mid-brown sandy silt containing limestone, mortar, ash and bone; and CG.125, further sandy silt deposits with shell mortar and limestone inclusions. Both of these layers contained fair sized groups of pottery, dating to the second half of the 12<sup>th</sup> century, and comprising jugs, jars and cooking pots. A single sherd from an imported ladle was also present.

The remains of a possible wall (CG.124; Structure XIII) lay directly above these dump layers. Only one rough course of pitched limestone was revealed, extending only 1.5m E-W, and therefore it was not possible to determine how this feature related to other structures on the site, although it was possibly part of a building to the south of Structure IIIA. The small number of pottery sherds recovered from Structure XIII date to the 12<sup>th</sup> century.

Along the eastern side of the cess-pit, a layer of yellow-brown sandy silt containing charcoal, mussel shell, limestone, pottery and bone (CG.81) was recorded. This was in turn sealed by a series of burnt sand and clay deposits (CG.82), which extended over much of the eastern edge of the site. Small groups of pottery, mostly of late 11<sup>th</sup> to early/mid 12<sup>th</sup> century date (consisting entirely of jars) together with worn fragments of two 10<sup>th</sup> century vessels were recovered from these layers.

This latter group of deposits, and the aforementioned Structure XIII, were then overlain by CG.123, a 100mm thick layer of mid grey-brown sandy silt, which also

extended across the backfilled cess-pit, and contained a large group of pottery dating to the last quarter of the 12<sup>th</sup> century.

Following this, a new pit feature was excavated, cutting into this backfill deposit. This new feature comprised an irregularly shaped cut (with two possible stake-holes present in its base), which was subsequently filled with a very fine multi-coloured burnt sand/ash (CG.122). An oval limestone feature, forming a concave 'bowl', was then placed on the upper level of this fill, forming what appeared to be a hearth (CG.121). This feature was up to 350mm deep, and was filled with a mix of clayey silt, burnt clay, ash and burnt limestone pieces (CG.120), which possibly represented the remains of an early lining. CG.122 contained a small number of late 11th or possibly 12th century domestic vessels, with similar material found in CG.121. A single 12th jug sherd came from CG.120.

A semi-rectilinear cut feature (CG.119) was present to the north-west of the hearth, but it was not clear whether it was associated with the hearth itself, or even with Structure IIIA, present to the west. This cut feature was backfilled with a loose, dark-mid brown silt mixed with limestone and pebbles (CG.118).

Both this fill, and the previously mentioned CG.120, were then sealed by what appeared to be a relatively intact hearth lining, CG.117. This consisted of a red burnt clay, with a hard grey outer crust, which was up to 70mm thick.

Finally, this lining was sealed beneath a dump/fill of light brown sandy silt containing limestone pieces, charcoal, burnt clay and a small number of 11<sup>th</sup> and 12<sup>th</sup> century vessels (CG.116).

At the extreme southern end of the excavated area, it would appear that the Period 3(a) well continued in use.

3.8 Period 4 - Re-organisation of the site, 13<sup>th</sup> century (Fig.9)

All of the buildings in use during Period 3(b) appear to have been demolished, and/or superseded by new structures, in what appears

to have been a gradual re-organisation of the site.

In the central part of the site, Structure IIIA appears to have been demolished, with the walls reduced to foundation level. A thin layer of mid-brown sandy silt (CG.113), containing limestone, shell and charcoal inclusions, then sealed the wall remains, together with a small post-hole (CG.141) found towards the northern side of the former building, and a small area of burnt sandy silt and ash, containing a single 13<sup>th</sup> century cooking pot sherd (CG.140).

The metalled surface referred to in Period 3(b) (CG.111), also appears to have gone out of use, being covered by an uneven layer of middark grey-brown silty sand containing frequent limestone, shell and charcoal inclusions (CG.139).

Along the eastern side of the site, the backfilling of the large quarry pit (CG.73) finally appears to have been completed, with the deposition of a 300mm thick dump of well compacted blue-grey clay (CG.143). Slightly further to the north, a 130mm thick dump layer of mid grey-brown clayey earth, containing frequent limestone, mortar, tile and shell inclusions (CG.142) was revealed. covered deposit an area measuring approximately 3.8m (N-S) x 5.3m (E-W), and possibly represents demolition material from the former Structure IIIA. The few pottery sherds from CG.143 date to the 12th and 13th centuries, while CG.142 contained a large group of mixed material with the latest pottery dating to the 13th century.

Further west, Structure IIIA was eventually replaced by a more substantial stone building (CG.138; Structure VII). The new structure was located approximately 1m further to the north, and comprised c. 750mm thick stone walls enclosing an area approximately 4m wide (N-S). The walls incorporated partiallyworked limestone facing blocks enclosing a rough core of smaller limestone pieces. The northern and eastern boundaries of the were built upon relatively building insubstantial foundations, in contrast to the south wall which was founded on several courses of stepped limestone blocks. Very little evidence for a proper floor was found within this building and it may be that the underlying

dump layers were levelled and utilised as a basic floor surface. The small number of pottery sherds recovered from **Structure VII** mainly date to the 11<sup>th</sup> or 12<sup>th</sup> centuries, with only two sherds belonging to the 13<sup>th</sup> century.

A further new building was then erected approximately 2m to the south of Structure VII, again comprising a c. 5m wide stone walled structure oriented E-W (CG.146; Structure VIII). During construction of this building, it would appear that the buried remains of the Period 2(a) Roman stone structure (CG.49) were again revealed, and extensively robbed away (robber trench and fill CG.144) down to their foundation level. It is probable that any suitable building stone was then incorporated into the walls of the new structure.

Little attempt seems to have been made to provide any floor surfaces within Structure VIII, relying instead on the hard packed surface of the underlying silt deposit (CG.145).

This layer comprised a mixed yellowbrown/grey silt. containing limestone inclusions, and extended throughout the interior of the building, and also beyond the eastern wall. Inside the structure, CG.145 was overlain by a small, roughly circular, area of burning (CG.147), possibly indicating the locations of small fires or hearth. To the east of the building a further small deposit was revealed, CG.148, comprising a mixed silt and mortar dump. This could possibly be related to the construction process for the building, but too little was preserved to be certain.

The repositioning of Structure VII effectively blocked the metalled lane between the earlier structures (IIIA and VI), and to reinstate access to the east of the site, a new, partially metalled, trackway was constructed between the two new buildings. It comprised a 300mm thick layer of grey-brown sandy silt (CG.48), mixed with limestone pieces, mortar, and including charcoal, pebbles and shell inclusions. A further layer of similar material (CG.178) was later seen to overlay CG.48, possibly indicating a repair to the original surface. Both of the surfaces extended at least 6m E-W. While only two 11th or 12th century pottery sherds came from CG.48, CG.178 produced a large group of pottery, comprising

predominantly late 11<sup>th</sup> to 12<sup>th</sup> century domestic vessels.

At the extreme southern end of the site, the well appears to be still in use, but with the addition of a stone feature constructed on its eastern side.

This feature (CG.149) comprised a 500mm deep 'trough' or 'gully', oriented approximately E-W. The sides of the gully were made from three courses of roughly worked limestone blocks, with no apparent bonding, extending at least 6m (E-W).

This feature had first been excavated during the 1970's, when a post-hole was also revealed between the well and the gully. This was interpreted as the position of a derrick or hoist used to transfer buckets of water from the well, to be discharged into the channel.

If this feature had been used to channel water from the well, as seems likely, bonding or a lining would have been essential to prevent leakage. Unfortunately very little was left of its original fill (this having been removed during the first excavation, with no apparent sign of lining material) to confirm this. Close inspection did however reveal the presence of small traces of mortar or sandy clay pressed into the gaps between individual stones, which could possibly represent the remains of a lining.

The purpose of the channel, other than to allow water to be channelled to the east, is unclear, although it perhaps supplied water for an as yet unidentified industrial process, or perhaps for watering grazing stock animals.

Further substantial alterations to the settlement layout also took place in the northern half of the site. Immediately to the north of the new **Structure VII**, it is possible that **Structure VI** continued in use, but this situation was not to last. Within a relatively short period of time it would appear that all three of the Period 3(b) buildings had been demolished (**Structures IV**, **V**, and **VI**, see above), and the remains sealed with a series of dumping deposits.

These dumps (CG.134) comprised sandy clays mixed with limestone, pottery, tile and bone fragments, and were present across the

majority of this area of the site, raising the level to c.63.15m O.D. Unfortunately, **CG.134** contained very little pottery, but vessels that were present probably belong to the early 13<sup>th</sup> century.

At the extreme north west corner of the site CG.134 was cut by a small pit feature (CG.133) which was only revealed in the east-facing trench section. A further group of dumping layers (CG.132) sealed this cut feature, comprising mid brown sandy silts up to 150mm thick (maximum), containing a few sherds of pottery dating to the 12<sup>th</sup> and 13<sup>th</sup> centuries.

The upper level of this dumping horizon was then cut by the remains of an E-W limestone wall CG.131 (Structure XI), which possibly formed part of the southern wall of another building, almost all of which laay beyond the boundaries of this investigation. To the south the wall was abutted by a layer of well compacted yellow-brown sandy clay (CG.130), which possibly served as a rudimentary yard surface, extending approximately 5m N-S.

Between this clay layer and the new buildings constructed to the south, a more permanent metalled yard surface was created, comprising an area of limestone pieces packed with dark grey silt (CG.135). This surface was up to 200mm thick (filling underlying low areas), and contained frequent shell, pottery, tile and bone fragments. The pottery formed a large group, comprising mainly of residual Roman and early medieval material, although a single jug sherd can be dated to the 13th century. Two silver pennies of Henry I (BMC type XIV (pellets in quatrefoil), issued c 1122-4), one adhering to the surface dirt of the other, were also found in CG.135. Both are clearly residual finds in this group, but the juxtaposition of these two coins, and the occurrence of a third penny of identical type within a later level (CG.153, Period 5) just to the north strongly suggests that these may represent the remains of a 'hoard'. Coins of this issue were still available in the early years of Stephen's reign, occurring within hoards concealed during the Civil War; the three coins found here may be the remains of such a hoard or, perhaps equally likely, the contents of a purse that had been dropped and later dispersed.

At the north-east corner of the surface, a further small section of limestone wall was revealed (CG.136; Structure IX), oriented E-W. Unfortunately, very little of this particular structure had been preserved, so it is difficult to say if it represented the remains of a further substantial stone building, or perhaps a smaller storage shed or similar.

Towards the southern edge of the surface, a large, roughly circular, patch of burnt sand and clay (CG.137) was present, lying directly on the metalling. This measured approximately 1.9m in diameter, and probably represents the position of a large fire.

The only other feature associated with this period of occupation was a large pit found to the north of the metalled surface, cutting into the rudimentary clay surface present in this location (CG.130, see above).

This was made up of a series of four interrelated cuts, producing an irregular overall shape (see Fig.9), up to 1.5m in depth (CG.129). The purpose of this feature was not apparent, but it is possible that the pit was for localised quarrying of limestone. Its depth was sufficient to reveal the underlying limestone brash, and almost reach the natural bedrock, although its positioning would appear to be somewhat inconvenient, given the other activities taking place in this area at that time.

Once the pit had served its purpose, it was backfilled with a series of mixed sandy silt, clay and sand fills (CG.128), generally containing only occasional limestone inclusions. The uppermost fill effectively reinstated this area to the level of the surrounding ground.

A large group of pottery came from CG.128, representing a considerable number of vessels. The group comprises mainly jugs with a small number of jars, pipkins and cooking pots and single occurences of a bottle/ewer and a curfew. A number of the vessels contain internal white deposits, either caused by the storage of urine or heating of water.

A partially metalled surface (CG.127), made up of small limestone pieces mixed with mid-light yellow-brown mortar, was then laid across the top of the pit fills, probably enabling this area to return to its original use as a yard.

3.9 Period 5 - The final phases of occupation, and eventual abandonment, late 13<sup>th</sup> - early 14<sup>th</sup> centuries (Fig. 10)

Although it would appear that the well and gully, together with the metalled yard, continued in use from the earlier Period, only one of the buildings (Structure VII) appears to have done so.

Within this building, part of the underlying Structure IIIA appears to have been revealed, by the excavation of a rectilinear cut feature measuring 1.1m (E-W) x 400mm (N-S). This feature was presumably to allow the robbing of the underlying masonry, and was backfilled with a mid brown sandy silt containing small limestone pieces (CG.173). A large almost entirely contemporary group of pottery came from CG.173, dating to the late 13th or early 14th centuries and comprises mainly jugs, a number of which are decorated. Almost one third of the jugs and one cooking pot have white internal deposits, with only nine of these vessels having evidence of sooting indicating heating of the contents.

Following the backfilling of the robber trench, the building was then re-floored, with at least two compacted layers of mid brown silt containing small limestone pieces, gravel and quantities of pottery, tile, charcoal, shell and bone (CG.165 & 172). These deposits contained further large pottery groups of the same composition as that of CG.173, and a number of joining vessels within the groups indicate that all three deposits are contemporary.

To the north of **Structure VII**, an area of rough metalling measuring at least  $4m^2$  was present (**CG.159**), which enlarged the yard constructed in the earlier phase. This metalling contained a small group of pottery mainly dating to the 13<sup>th</sup> century.

At the northernmost end of the site, parts of the original Period 4 metalling were sealed by a series of mixed dumping deposits (CG.154), which comprised silts and clays with inclusions of limestone, mortar and burnt material. It would appear likely that these deposits were associated with the demolition of Structures IX and XI.

A small area of mid brown sandy silt (CG.155) was also revealed in the east facing trench section, again probably connected with the demolition works, or with subsequent site levelling.

A new building was then constructed (CG.153; Structure X) over these deposits, at the northern edge of the metalled yard. It comprised substantial stone walls to the north and south. No evidence for an end wall to the east was revealed, and this may indicate that this building was open ended, although the remains of the original wall may well have been removed by later truncation. Within the building, a very sturdy floor was present, comprising a foundation of pitched limestone with a mortar bedding, overlain by deposits of sandy silt.

The purpose of such a heavy duty floor construction was not apparent, but was in marked contrast to the mortar or earth floors seen within the other buildings, and might indicate that this building was used for the stabling of stock, rather than as a residential and/or workshop property.

To the north of Structure X, a further area of finer metalling (CG.152) was revealed, abutting the northern wall of the building.

A further two layers and a cut feature were also present at the extreme northern end of the site. Unfortunately, they were only seen in the trench section, making interpretation of their role in the occupation at this time difficult. It may be possible that they were actually associated with later (possibly post-medieval) land-use. These layers comprised mid-brown sandy silts containing shell and limestone inclusions (CG.150), while the feature, CG.151, was up to 450mm deep and had steep sides. This possible pit cut into both CG.150, and the metalled area CG.152.

At the southern end of the site, the former Structure VIII appears to have been abandoned, with a layer of fine grey-brown silt (CG.176) accumulating over its floor surfaces and parts of its walls. Ultimately the building was demolished, with CG.76, a mixed deposit of silt, limestone, and mortar probably representing demolition material. Its walls were comprehensively robbed away (with the exception of the majority of the end wall to the

east, which was fairly well preserved), with only the linear robber cut and associated fills (CG.175) delineating its original outline. CG.76 contained surprisingly little pottery, with the few sherds present dating to the 11<sup>th</sup> and 12<sup>th</sup> centuries.

The lane which had existed to the north of this structure also appears to have become disused, and was obscured by various layers of sandy silt containing mortar and limestone inclusions (CG.177), probably deriving from the demolition process.

In the eastern half of the site, a layer of firm mid-dark grey sand (CG.171) was revealed, covering most of this area This deposit contained a large group of pottery dating to between the 11<sup>th</sup> and late 13<sup>th</sup>/early 14<sup>th</sup> centuries. The contemporary pottery is similar to that found in CG.173, CG.165 and CG.172 (see above), and joining vessels may indicate that all these deposits were laid down at the same time. The pottery indicates that this is unlikely to be an accumulation deposit and more probably represents a dump or levelling.

The remains of three linear features (CG.170) were present in the upper surface of this deposit, taking the form of three ruts, running parallel to each other and oriented N-S. Each was at least 14m long and approximately 100mm deep. They possibly represent the effects of wagons using unmetalled routes across the site, or more probably the are the result of ploughing. Unfortunately these remains had been truncated by modern activity, and no positive conclusions could be drawn.

Each of the ruts was filled with mid grey brown sandy silt, which was very similar to the overlying layer (CG.169), which covered most of the eastern side of the site, lying immediately below the later topsoil.

A further isolated feature was revealed in the eastern half of the trench, comprising part of a small probably circular pit (CG.174). This was filled with a deposit again very similar to the surrounding CG.169, but owing to extensive truncation by modern features, it was impossible to ascertain its function or its relationship to other features across the site.

It would seem that this Period of occupation was relatively short-lived, and ultimately the remaining structures were also abandoned, and probably demolished, with various pits and robbing features apparent across the site.

In the metalled area, between Structures VII and X, three cut features were revealed. These included: CG.156, a 4m long (E-W) robber trench backfilled with a mixture of mortar, limestone pieces, mid-brown sandy silt, charcoal and a few 12<sup>th</sup> to 14<sup>th</sup> century pottery sherds; and CG.157 & 158, a pair of small pits, each filled with sandy silt and clay with inclusions of charcoal, limestone and bone.

To the south, in the vicinity of Structure VII, several cut features and dump/demolition deposits were present, all sealing the floor surfaces and (in places) the remains of the walls. Amongst these contexts were: two small cut features (CG.164 & 166), each backfilled with mid-brown sandy silt containing mortar, limestone and charcoal fragments; A number of dump layers (CG.161, 162, 163 & 167), each approximately 100mm thick, comprising sandy silt mixed with demolition material in the form of limestone, mortar, tile and charcoal; and two larger pit features (CG.160 & 168), each between 300mm and 450mm in depth, filled with similar demolition debris.

This phase of activity marked the end of the life of the settlement, at least in this immediate area.

## **3.10 Periods 6 & 7 -** *Post-medieval and modern land use (Fig.11)*

Owing to time constraints, the majority of the deposits possibly associated with any post-medieval occupation of the site were removed by mechanical excavator.

In the event, however, it did not appear (from the trench sections) that any substantial remains had been sacrificed, and no obvious post-medieval horizons could be identified.

Some post-medieval dating was recovered from the topsoil deposit (CG.179), and this could indicate some land-use in this period, but the focus or nature of this occupation is unknown.

The only positively identifiable features to post-date the final phase of medieval occupation were all of obviously modern origin, and were primarily associated with the existing college buildings, and the landscaping of the surrounding gardens.

These features included: the existing walls and construction trenches of the archive and main library buildings (CG.180 & 186); surface water drainpipes and the associated brick-built soakaway (CG.183 - 185); and the turf of the existing lawned garden (CG.187). The majority of these contexts date from the late  $20^{th}$  century (in fact from 1970 onwards).

The only other intrusive activity to have been recorded on the site was associated with the archaeological excavation carried out between 1970 and 1977, namely the cut for the excavation trench (CG.181), and its subsequent backfill deposits (CG.182).

#### 4.0 DISCUSSION OF RESULTS AND CONCLUSIONS

Based upon the results as outlined above the following stratigraphic sequence can be put forward (from earliest to latest):

- 1) Undisturbed geological deposits, including limestone bedrock, Lias clay, limestone 'brash', and a layer of sand, the latter occurring throughout the area of the investigation at a level of approximately 62.81m O.D. 62.34m O.D.;
- 2) The first obvious period of activity on the site, indicated by the presence of cut features and levelling deposits, dating to the mid-late  $2^{nd}$  century.

This activity possibly represents a site clearance phase in advance of the colonisation of the site and the construction of permanent structures, although the presence of some early (1st & 2nd century) pottery and other indistinct features could perhaps suggest earlier occupation pre-dating this phase;

3) A possible Roman timber phase, dating to the mid-late 2<sup>nd</sup> century.

Although the evidence for this particular phase is somewhat limited (basically relating to an arrangement of post-holes), it is clear that some form of activity was undertaken between the phase of levelling and the construction of the first phase of stone buildings. It is, however, not possible to determine with any certainty the nature of this activity;

4) Consolidation of the Roman occupation, with the construction of a large stone building, probably in the late 2<sup>nd</sup> - early 3<sup>rd</sup> centuries.

This building measured c. 9m N-S, and the easternmost 9m of the structure was revealed on the site, continuing into the east facing section (possibly extending to front on to the Roman Ermine Street to the west, resulting in a length of c.30m). The building itself featured a mortared internal floor surface, with a linear cut running parallel to the south wall possibly representing an drainage gully (to contain runoff water from the roof, a basic form of gutter).

To the north of the building, a large metalled area was present, probably representing a yard;

5) Continued Roman occupation, through the 3<sup>rd</sup> century, until abandonment probably in the late 3<sup>rd</sup>/early 4<sup>th</sup> century.

During this period of occupation, the large building constructed during the previous phase appears to have been extensively modified, if not completed demolished and rebuilt.

Again only the easternmost 9m of the structure was revealed in the excavation trench, but this showed that the stone walls belonging to the original building had been demolished, with a new east wall constructed c.7m further to the west.

A possible timber structure was then erected to its east, on an alignment closely respecting the outline of the previous stone building, probably based on timber beam foundations. No evidence for a new timber wall at the eastern end was found, suggesting that this was possibly an open ended structure, probably used as a workshop or storage area rather than for domestic/residential purposes. A cutfeature possibly the remains of an oven or hearth was discovered within this wooden structure.

To the south of the building, a new metalled surface was constructed, while to the north, the original metalled area was repaired and resurfaced in several places;

6) Re-occupation of the site in the Saxo-Norman/Early Medieval period, late 11<sup>th</sup> early/mid 12<sup>th</sup> centuries.

The most noticeable features associated with this phase were three large pits revealed along the eastern side of the site. It seems likely that these cut features represent quarrying activities on the site.

Also revealed were several smaller cut features, including a possible cess-pit, and at the extreme eastern end of the site, a stone well was present.

Only one structure appeared to be associated with this phase, a possible timber building found to the west of the quarry pits, apparently oriented E-W. No evidence for eastern or western end walls, or internal flooring was found, possibly indicating that this structure did not have a residential purpose, and was possibly related to the stone-working activities (althoug the floor may have been removed by the following phase of occupation).

The remains associated with this phase would seem to suggest occupation of the site beginning probably in the late 11<sup>th</sup>/early 12<sup>th</sup> century, possibly involving temporary occupation of the site, with a well and timber structures constructed to provide the essential elements for subsistance, while quarrying was undertaken to provide building materials for a more permanent structures in the future;

7) Consolidation of the site, probably during the mid 12<sup>th</sup> - early 13<sup>th</sup> centuries, involving the construction of at least four stone buildings across the site.

The stone pits and the cess-pit belonging to the earlier period appear to have served their purpose and were backfilled, followed by the construction of a series of limestone structures, each measuring between 5m and 6m (N-S), and continuing beyond the boundaries of the excavated area to the west. The timber building appears to have been replaced by a new stone building, which followed its outline almost exactly, and a new metalled lane was constructed towards the north of this building to provide access to the east of the site.

The well also appears to have continued in use during this phase;

8) Re-organisation of the site, undertaken during the 13<sup>th</sup> century.

All of the buildings in use during the above Period seem to have been demolished, and/or superceded by three, or possibly four, new structures, in what appears to have been a gradual re-organisation of the site.

The construction of one of the new buildings effectively blocked the metalled lane between the earlier structures, and a new metalled roadway was constructed to the south of the new building. A further new building was then erected immediately to the south of the new

lane, again comprising a c. 5m wide stone walled structure oriented E-W.

A new metalled yard surface was also constructed, which covered much of the northern part of the site. At the northern edge of this possible yard area, another stone building was constructed, with a large cut feature also present in this area.

The only other substantial development recorded during this phase included the construction of a 6m+ long limestone 'trough' or channel (which appeared to have been claylined), butting against the eastern side of the well, possibly to allow water to be channelled to the east, perhaps to be used in some industrial process.

9) The final phases of occupation, and eventual abandonment, late 13<sup>th</sup> - early 14<sup>th</sup> centuries

Only one of the above buildings appears to have continued in use during this phase of the occupation, the structure to the north of the possible access lane, which was re-floored at least twice. Of the other two buildings belonging to the earlier phase, both were demolished, and only the structure situated at the northern edge of the metalled yard was replaced.

The replacement building comprised substantial stone walls, with a very sturdy floor consisting of pitched limestone. The purpose of such a heavy duty floor construction was not apparent, but was in marked contrast to the mortar floors seen within the other buildings, and might indicate that this building was used for the stabling of stock, rather than as a residential and/or workshop property.

To the east of the site some evidence was found of rutting, possibly the result of wagons using unmetalled routes across the site, but more probably the marks left by ploughing. Unfortunately these remains had been truncated by modern activity, and no positive conclusions could be drawn.

Finally, towards the end of this period, it would seem that the remaining structures were also abandoned, with pitting and robbing apparent across the site.

The final abandonment of the settlement in the early 14<sup>th</sup> century would appear to be in accord with the gradual shrinking of the population in the parish of St.John the Baptist (the medieval parish in which the site was located) which is shown, by Church records, to have begun at this time. The population was to deteriorate to such a level that the parish was virtually abandoned by the early 16<sup>th</sup> century, and had to be merged with a neighbouring parish to the south.

10) Possible post-medieval land-use, and later modern occupation. Little or no evidence was actually found to prove conclusively post-medieval occupation on the site, and the only features and deposits post-dating the medieval occupation were all associated with the present college buildings and the landscaping of the grounds.

The nature of the occupation throughout the life of the site appears to have been essentially domestic, with little or no evidence for any industry or trade being carried out (however, see *Smithing*, below). The only obvious deviation from the purely domestic occupation is the presence of quarrying on the site, but this was probably a case of necessity, rather than an indication of commercial activity.

It would appear, on the basis of the pottery analysis, that the site during the Roman periods was of relatively high status. This is denoted by the presence of quantities of samian ware, and other imported and Romano-British fine wares, particularly beaker forms. There is also a moderate proportion of imported amphorae. In common with most sites there is also a substantial amount of culinary activity (see Appendix C, below).

This would tend to suggest that the site was perhaps part of a Roman Villa or farm, belonging to a relatively affluent person/family.

The buildings revealed during this investigation however, while apparently well-made, do not appear to feature the usual signs of affluence (although some painted wall plaster was recovered), but it should be remembered that only a very small part of the settlement was uncovered. It may be the case that the more impressive buildings of the

complex lie closer to the line of the Roman Ermine Street to the west, or perhaps further to the east.

It is also possible, given the other Roman buildings found both on this site, and along Newport in general, that the structures are actually part of a more widespread settlement, perhaps similar to the suburb identified to the south of the City. In view of the importance of Ermine Street during the Roman period, as the main route to York and the north, it would seem to be a prime location for trade. It could then be possible that we have part of the house of a relatively prosperous merchant or trader.

During the later periods on the site, the pottery tends to suggest that the site was rather average, with only common local wares in evidence.

It has been suggested that the occupation of this part of the City, creating the suburb of Newport during the late 11<sup>th</sup> century, was made necessary by the forced eviction of large numbers of people from the site chosen for the Norman castle.

The evidence from this excavation would seem to support the idea of a basically poor or peasant population, rather than the more affluent occupants during the Roman period. More investigation would however be required, over a greater area, to provide conclusive evidence of both this, and the date at which the settlement was established.

What can be said however, is that it appears that this part of the Newport suburb site was re-occupied probably in the late 11<sup>th</sup>/early 12<sup>th</sup> century, which would agree with the date of the construction of the castle.

The nature of this initial phase of occupation appears somewhat temporary, with timber structures erected to provide immediate shelters while quarrying was carried out to provide a source of building material.

This possibly indicates a rather hurried colonisation of the site, followed by a gradual development and consolidation of more permanent structures across the site, as time and the supply of building materials allowed.

The final abandonment of the settlement in the early 14<sup>th</sup> century would appear to be in accord with the gradual shrinking of the population in the parish of St.John the Baptist (the medieval parish in which the site was located) which is shown, by Church records, to have begun at this time.

The population was to deteriorate to such a level that the parish was virtually abandoned by the early 16<sup>th</sup> century, and had to be merged with a neighbouring parish to the south.

#### Smithing

This site produced a small (9.8kg) but possibly significant assemblage of slag, much of which has been identified as smithing slag (with a small amount of hammerscale). Fragments of hearth-bottom were also recovered, while possible industrial residues were also noted in several environmental samples.

Small quantities of slag were present in contexts of Periods 2(b) to 5 and 7; the bulk of this material was incorporated within the areas of metalling, or the repairs to it, in the northern part of the site. This in itself is not an unusual occurrence because slag is frequently included within the 'hard core' used as infill or repairs to road and yard surfaces (similar use was made of quernstones - see note below). No features that could be definitely associated with industrial activity were identified but it is likely that the origin of the slag is somewhere in the vicinity.

Five contexts contained small assemblages (a minimum of 0.5kg) of slag:

Period 3(a)	<b>CG.57</b> ([357]): 0.5kg
Period 3(b)	CG.92 ([381]): 1.7kg
Period 3(b)	CG.94 ([352]): 1.6kg
Period 4	CG.134 ([322]): 2.2kg
Period 4	CG.135 ([220]): 0.7kg

Although all are post-Roman contexts, four of these contained an overwhelming proportion of residual Roman material while in the fifth the proportion of residual material is almost matched by post-Roman finds. It is therefore

possible that much of the slag in these contexts is also residual, and of Roman date.

The medieval ironwork includes an unusually high proportion of horseshoe nails of 'fiddlekey' type, many of these are also from the successive phases of metalling in the northern part of the site, or from that between the buildings in the central western area. Almost half of those recovered are of 'eared' form, dating generally to between the mid-13th and early 14th centuries. Fragments of several horseshoes were also recovered, and a curved fragment of iron (from CG.113, Period 4) possibly represents the 'blank' for making another. These finds suggest use of the metalled surfaces by horses; perhaps stabling was provided here, conveniently situated alongside the main route northwards. In view of the presence of smithing slag, perhaps the services of a blacksmith were also available.

Of particular interest here, although from a Roman context, is a coarse iron file with a cranked tang, found within the repairs (CG.21) to the metalled surface of Period 2(b); tools of this kind are identified as carpenters' 'floats', or farriers' rasps; in view of the smithing waste found on the site, the latter identification may be more likely. Perhaps there was similar provision for travellers (i.e., accommodation & stabling) in the early periods of occupation on this site; this might explain the high proportion of 'quality' pottery, and particularly beakers (see Appendix C).

#### 5.0 ACKNOWLEDGEMENTS

The City of Lincoln Archaeology Unit would like to thank the following for their assistance during this project: The Principal, Mr L.Marsh, and staff of Bishop Grosseteste College, Newport, Lincoln; Mr Kit Vincent, of Vincent Designers Associates, & Consultants, 32 Grange Lane, Cople, Bedfordshire, MK44 3TT; Mr J.Rae, of Lincoln City Council Planning Department; Mr D.Hodgson, of The Huxtable Hodgson Partnership, Consulting Civil & Structural Engineers, 2 Upper Northgate Street, Chester, CH1 4EE; and on-staff of R.W.Asher Building Contractors, The Old Vicarage, Vicarage Lane, Harmston, Lincolnshire.

#### 6.0 BIBLIOGRAPHY

Donel, L 1994 Proposed New Fire Station, Newport, Lincoln, CLAU Archaeological Report 79, City of Lincoln Archaeology Unit, Lincoln

Rollin, P 1976 Lincoln - Bishop Grosseteste College, in White, A J (ed) Archaeology in Lincolnshire and South Humberside, 1975 Lincolnshire History & Archaeology 11, 59

Rollin, P 1977 Lincoln, Bishop Grosseteste College, in Ambler, R W (ed) Archaeology in Lincolnshire and South Humberside, 1976 Lincolnshire History & Archaeology 12, 75

Rollin, P 1978 Lincoln - Bishop Grosseteste College, in White, A J (ed) Archaeology in Lincolnshire and South Humberside, 1975 Lincolnshire History & Archaeology 13, 79

Trimble, R 1994 The Former Broadway Service Station, Newport, Lincoln, CLAU Archaeological Report 115, City of Lincoln Archaeology Unit, Lincoln

Trimble, R 1994 Former Broadway Service Station, Newport, Lincoln, in Jones, Michael, J (ed) *Lincoln Archaeology*, Annual Report 6, 12-13, City of Lincoln Archaeology Unit, Lincoln

Wragg, K 1995 Bishop Grosseteste College Newport, Lincoln, CLAU Archaeological Report 171, City Lincoln Archaeology Unit, Lincoln Wragg, Kevin 1995 Bishop Grosseteste College, Lincoln: Proposed Library Extension, in Jones, Michael J (ed) *Lincoln Archaeology*, Annual Report 7, 17, City of Lincoln Archaeology Unit, Lincoln

Wragg, K 1996 Principal's House, Bishop Grosseteste College Newport, Lincoln, CLAU Archaeological Report 280, City Lincoln Archaeology Unit, Lincoln

#### 7.0 LHA NOTE/ARCHIVE DETAILS

#### 7.1 LHA NOTE DETAILS

CLAU CODE: BGB95

PLANNING APPLICATION NO.: LC46/0093/95

FIELD OFFICER: K. Wragg

NGR: SK 9769/7277

CIVIL PARISH: Lincoln

SMR No.:

DATE OF INTERVENTION: 28/06/95 - 24/09/95

TYPE OF INTERVENTION: Excavation

UNDERTAKEN FOR: Vincent & Associates (Designers & Building Consultants), 32 Grange Lane, Cople, Beds., MK44 3TT on behalf of Bishop Grosseteste College, Newport, Lincoln.

#### 7.2 ARCHIVE DETAILS

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

FINAL LOCATION: The City and County Museum, Friars Lane, Lincoln.

MUSEUM ACCESSION No.: 84.95

ACCESSION DATE:

## APPENDIX A - PLATES



Plate 1: Roman walls and features, Periods 2(a) & 2(b)



Plate 2: Period 2(a) Roman metalled surface at northern end of site

#### APPENDIX A (continued)



Plate 3: Medieval walls and features, Periods 3(a) & 3(b)

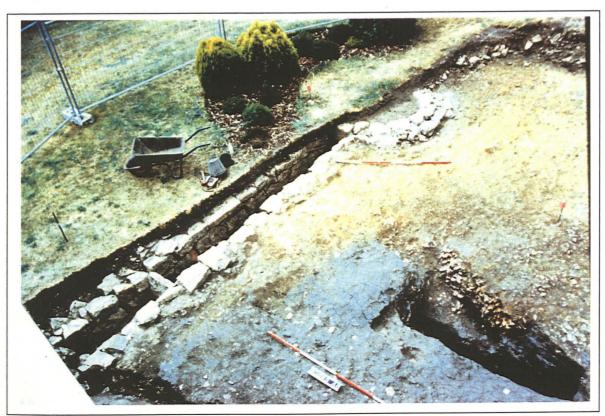


Plate 4: Medieval well and limestone gully

### APPENDIX B - ARCHIVE DEPOSITION

The archive consists of:

No.	Description
2	Site diaries
1	Report
406	Context records
97	Site Plan drawings
36	Site Section drawings
30	Composite Plan drawings
22	Colour slide films
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 84.95, will be undertaken following completion of this project.

#### APPENDIX C - A Summary Report of the Roman Pottery from Bishop Grosseteste

**B J Precious** 

#### 1) Introduction

The primary site (BGB95) produced 24 boxes of Roman pottery, a total of 6811 sherds; of which 4016 sherds (c 59%) were derived from Roman stratigraphy and 2795 sherds (c 41%) from post-Roman layers. In addition there are 27 sherds from Context 204 which appear to be miscellaneous dumping from a previous excavation by P.Rollin and which are not included in the data sets for the main site. A further 221 sherds were recorded from the secondary site - BGA95. This large Roman assemblage has been recorded according to the CLAU Basic Ceramic Archive.

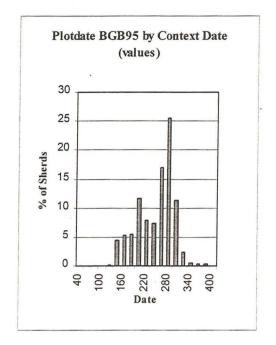
#### 2) Condition

A number of the contexts, in particular those in post-Roman stratigraphy show signs of abrasion and include Roman pottery of mixed dates, for example context 322. There is a high proportion of sherd joins from the site, mainly derived from seven distinctive vessels, which suggests that there was a high level of redistribution or re-working of the material. Evidence of burning has also been noted within a relatively high proportion of contexts. These included contexts containing 1<sup>st</sup> century pottery, most notably Context 248, which came from stratigraphy phased as Natural, above which there was evidence of burning possibly associated with the clearance of the site.

#### 3) Dating

The overall plotdate (see below) for the site shows that the main period of occupation began in the mid to late 2<sup>nd</sup> century, and increased into the early 3<sup>rd</sup>. However the bulk of the material, although containing a high proportion of residual pottery from the earlier period, is mid to late 3<sup>rd</sup> century in date. There is little evidence for the site having been

occupied much beyond the early 4<sup>th</sup> century, with pottery of this date only occurring in post-Roman layers.



Although Context 248 (disturbed natural), contains pottery of mid to late 2<sup>nd</sup> century date it also included a sherd of grey Legionary-type ware (LEG) which is associated with the earliest occupation of Lincoln. Several other contexts also produced this ware as well as other fabrics of this date, notably Pink Micaceous ware (PINK), Native tradition Grit-tempered ware (IAGR), Native tradition Shell-tempered ware (IASH), and 1st century Samian ware from South Gaul. These occurrences are rare but indicate that there was early Roman occupation on the site. Unfortunately, excavation constraints did not allow sufficient time to fully explore the earliest sequences on the site which may have enhanced the understanding of early Roman occupation in this part of the City.

Periods 1(a) & 1(b), a possible site-clearance phase, followed by a possible timber phase, are almost exclusively dated to the mid to late 2<sup>nd</sup> century. However some of the contexts contain 1<sup>st</sup> to early 2<sup>nd</sup> century Roman fabrics, notably IAGR and IASH (see above) from Context 300.

Period 2(a), the original Roman stone Phase, produced a proportion of mid to late 2<sup>nd</sup> century pottery but also evidence of early to mid 3<sup>rd</sup> century wares. Those contexts containing the later pottery appear to have

been in use for a period of time. The largest group, Context 424, a metalled surface, contains a small proportion of mid to late 3<sup>rd</sup> century wares, but this activity clearly continued in use. Also dated to the 3<sup>rd</sup> century are Contexts 539, a posthole, and 557, repair to a floor, which again are likely to have originated in the earlier but continued in use to a later date. Lastly, Context 293 the floor of the building, which produced good evidence for later 2<sup>nd</sup> to early 3<sup>rd</sup> century occupation, also contained sherds of intrusive medieval pottery suggesting some re-working in this area.

The pottery from Period 2(b), continued Roman occupation, is predominantly later 2<sup>nd</sup> to mid-3<sup>rd</sup> century in date, however there is still a proportion of mid to late 2<sup>nd</sup> century wares.

#### 4) Potential & Further Work

There are several aspects of this site which provide potential for furthering our understanding of both Roman Lincoln and the associated ceramic assemblages. From the point of view of dating this site provides a large assemblage of mid to late 2<sup>nd</sup> and early to mid 3<sup>rd</sup> century ceramics, which are relatively cohesive. There is currently a lack of reasonably dated groups which transpose from the later 2<sup>nd</sup> into the 3<sup>rd</sup> century and the material from BGB95 would enhance our knowledge for this period.

Analysis of the pottery suggests that the site was of relatively high status, as denoted by the high presence of samian ware and other imported and Romano-British fine wares, particularly beaker forms. There is also a moderate proportion of imported amphorae. In common with most sites there is also a substantial amount of culinary activity.

In terms of fabrics the most notable examples which require further analysis is the presence of colour-coated wares from a probable South Carlton kiln source. These wares are uncommon in the City and it is thought that they were produced primarily for export to the frontier site together with the associated mortaria production. The location of this site near the access route to South Carlton may

indicate that some of this production was arriving in Lincoln by this route.

A further group of ceramics which stands out from the rest of the assemblage is a distinctive ware closely imitating black-burnished wares in both form and fabric. It is important that these wares are more closely analysed to determine the source and to compare them with products from the Lincoln Racecourse kiln.

#### 4.1 Drawing

Despite the collation of numerous vessels for the Corpus of the Roman pottery from Lincoln (Darling and Precious, forthcoming) this site produced 24 vessels which do not appear within the above and which would therefore justify illustration.

#### 4.2 Specialist Wares

The samian ware (312 sherds) and mortaria (33 sherds) require specialist examination both to enhance the dating of the site and to further the understanding of the distribution of these wares. This assemblage contains nine stamped samian sherds which will provide external dating for the site.

# APPENDIX D - Report on the analysis of two infant burials from Bishop Grosseteste College, Lincoln (BGB95)

A.Boylston, Calvin Wells Laboratory, Department of Archaeological Sciences, University of Bradford

#### 1) Introduction

An excavation carried out at Bishop Grosseteste College from June to September 1995 revealed 7 possible phases of occupation lasting from pre-Roman times to the 15th century AD. In Phase 2 a large stone structure was uncovered which dated to the Romano-British period and measured 7-8m in width by up to 30 m in length. Two infant burials were found beneath the stone floor of a room at the end of this building. One of these (context 419) had been decapitated and the head placed between the legs positioned so that it faced towards the trunk. The grave was orientated south-west/north-east with the head at the south-west. The infant was placed on its back with the legs in a spread-eagle position and the lower legs raised. The left arm was parallel to the trunk and right was missing; only the right scapula remained. The other infant (context 409) was lying in a crouched position on its right hand side in an east/west alignment with the head to the west.

#### 2) Methods

Both burials were laid out in anatomical alignment and measurements were taken of all intact long bones, scapulae, clavicles, pelvic bones and those cranial bones, mainly from the base of the skull, for which standards are available for assessment of age (Fazekas and Kosa, 1978). The teeth were also examined and their stage of development recorded (Moorrees, Fanning and Hunt, 1963) as was the tympanic ring which fuses at a particular age (Weaver, 1979). The surrounding soil was sieved in order to retrieve any small bones which had been missed during excavation of the burials.

#### 3) State of Preservation

Both infants were well-preserved and most skeletal elements had been retrieved. had been some crushing of the cranial vault bones since these are very delicate. The skull of burial 419 had survived better than that of burial 409 which may have been due to the protection afforded by the position of the legs. In both cases a few hand and foot bones were missing but the assemblage was otherwise almost complete. The missing arm of burial 419 is difficult to explain: it may have been lost during excavation or the child may have been mutilated before burial. However, the soil surrounding the burial was sieved and no trace of the arm bones was found. There was no osteological evidence of cut marks which might suggest mutilation but if this had been carried out after death, such marks would not be obvious on the bones.

#### 4) Age at Death

Measurement of the femoral length gave an age of 39 weeks plus/minus 2.08 weeks for both infants. However, development of the cranial bones suggested that burial 409 was more mature than 419. In the former case the two parts of the temporal bone had fused and the tympanic ring was completely fused, giving an age of birth to 6 months (Weaver, 1979). However the dental development for this burial suggested a neonatal infant with completely formed incisor crowns coalescence of molar cusps. Both infants were less than 3 months old since their vertebral neural arches were still in two parts. These fuse together between 3 and 9 months of age. In the case of burial 419 the tympanic ring was lying free and the two parts of the temporal bone were still unfused. Although some of the cusps of the molar teeth had started to coalesce they were not as well developed as the teeth of burial 409.

#### 5) Decapitation

It was the custom until at least the third century AD for children and adults to be cremated after death and burials were collected in large cemeteries outside the city walls adjacent to roads leading away from the settlement. Only infants who were judged to

be non-persons before they had acquired their milk teeth, were buried intramurally.

Fifteen neonatal infants have already been found beneath the foundations of buildings of Roman Lincoln during excavations carried out since 1972. Twelve of them came from the Wigford area of the city, one from the Upper and two from the Lower Cities; therefore this practice was widespread in the city of Lincoln. This is in accordance with the Romano-British practice of disposing infants within the settlement in a number of locations such as in pits, within the foundation trenches of the walls, beneath the floors of the houses, under the eaves or even in special infant cemeteries (Philpott, 1991). In towns these buildings are often private houses. Only from the 4th century AD are they found within the cemetery In effect, infant burials are often precinct. associated with buildings and Mays (1993) has commented on the remarkably consistent age at death of these babies who all died around the time of birth. The 15 infants from Lincoln also succumbed between the ages of 38 and 41 weeks, namely during perinatal period.

The ritual nature of such deposits has been attributed to the desire to confer longevity on a building. However, it is difficult to prove that such infants were deliberately sacrificed as foundation deposits (Philpott, 1991) although Mays (1993) considered that their remarkably consistent age at death was evidence of such a practice and highlighted documentary evidence that in Roman times the father, as head of the family, had the right to decide which of his children would survive. In many societies infanticide is used as a form of birth control even today.

The decapitation of one of the burials is also an example of a Romano-British burial practice which was relatively common in rural cemeteries; such customs have been observed during the excavation of over 70 burial grounds in a lowland area to the south-east of a line between the Severn and the Wash from Dorset in the South to Cambridgeshire in the east of England (Fig 1). Lincoln lies at the north-eastern extremity of this Individuals of both sexes and all ages have been accorded this ritual. However, it was rarely practised in the case of infants. Philpott (1991) records seven sites where such burials have been found, namely Alcester, Leicester, Springhead, Stanground, Sea Mills, Lankhills and Poundbury 3. The child is described as 'aged about 3 - 4 years' (Clarke, 1979); however, the vertebrae were not fused at the neural arch, a process which occurs between 3 and 9 months of age which suggests that this burial represented a much younger infant. The child at Poundbury had been severely mutilated but some of the lumbar vertebrae had fused neural arches, suggesting that this infant was at least three months old, although the mutilation is described in the text as an embryotomy - deliberate mutilation of the foetus *in utero* to make the birth of a dead baby less painful (Farwell and Molleson, 1993).

Two pairs of infants (one of each pair was decapitated) were used as foundation deposits beneath the corners of the temple *cella* at Springhead dating to the second century AD (Philpott, 1991). Their heads were missing and may have been displayed within the temple. Yet the excavation report (Penn, 1957) makes no reference to the age of the babies and no mention is made of any osteological analysis. The grave of a decapitated baby was cut into an infilled ditch containing 4th century material at Leicester. At Alcester an area of open ground near a ditch was used as an infant cemetery in the late 4th century.

The positioning of the head between the knees and legs represents the most common placement of the skull in this type of burial, representing around a third of all such burials.

#### 6) Bibliography

Clarke, G. (1979) The Roman cemetery at Lankhills. Vol. 3 in Biddle, M. (ed) Winchester studies: Pre-Roman and Roman Winchester.

Farwell, D.E. and Molleson, T.I. (1993) Poundbury. Vol. 2: The cemeteries. Dorset Natural History and Archaeological Society Monograph Series. No. 11.

Fazekas, I.G. and Kosa, F. (1978) Forensic fetal osteology. Akademiai Kaido, Budapest.

Mays, S. (1993) Infanticide in Roman Britain. *Antiquity*, 67: 883-8.

Moorrees, C.F.A., Fanning, E.A. and Hunt, E. (1963) Age variation stages for 10 permanent teeth. *J. Dent. Res.*, 42: 1490-1502.

Penn, W.S. (1957) The Romano-British settlement at Springhead. Excavation of the baker, site A. *Archaeologia Cantiana*, 71: 53-105.

Philpott, E. (1991) Burial practices in Roman Britain: a survey of grave treatment and furnishing A.D. 43 - 410. British Archaeological Reports, British Series, vol 219.

Weaver, D.S. (1979) Application of the likelihood ratio test to age estimation using the infant and child temporal bone. *Amer. J. Phys. Anthropol.*, 50: 263-70.

#### Catalogue

#### Burial 409

Neonatal infant

Age: 39 weeks +/- 2.08 weeks (femur)

Preservation: Good. More than 90% of burial is present. The skull is fragmentary. Bones present: Both humeri, radii and ulnae, both ilia, pubic bones and right ischium, both femora, tibiae and one fibula. 20 vertebral bodies and 44 neural arch halves, 11 right and 9 left ribs, both scapulae and right clavicle. 5 right and 5 left metacarpals, 3 metatarsals? side. Fragmentary cranial vault, right maxilla, complete mandible. Measurements: Right humerus 68 mm; ulnae 60 mm, radii 53 mm, femora 75 mm, tibiae 66 mm, fibula 60 mm.

<u>Dentition</u>: The incisor crowns are fully formed and molar crowns are quite well developed.

Tympanic ring development: Stage II - birth to 6 months.

Fusion of temporal bone: Complete.

#### **Burial 419**

Neonatal infant

Age: 39 weeks +/- 2.08 weeks.

<u>Preservation</u>: Good. More than 75% of burial is present. Right arm missing. <u>Bones present</u>: Left humerus, radius and ulna, both scapulae, both ilia and ischia, both femora, tibiae and fibulae, 18 vertebral bodies, 47 neural arch halves - atlas found with cranium. 4 left metacarpals, 4 metatarsals. Fragmentary skull, complete maxilla and mandible.

Additional bones: 1 animal bone (femoral head).

<u>Teeth present:</u> 4 maxillary incisor crowns, 2 mandibular incisor crowns, parts of 2 canine crowns, 2 maxillary molar cusps, 1 coalescing molar cusp.

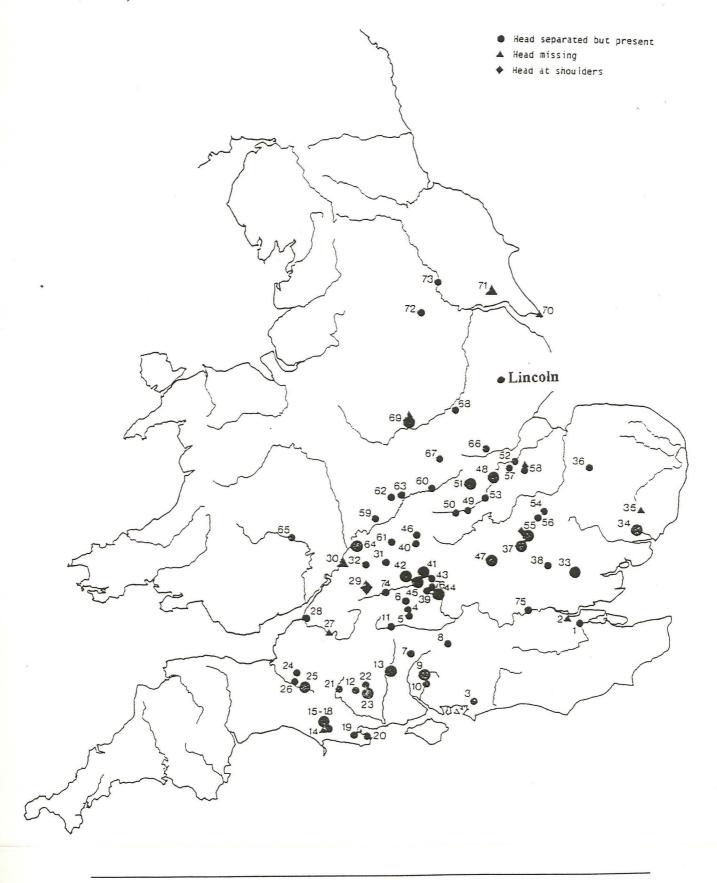
Measurements: Left ulna 60 mm, left radius 53 mm, femora 77 mm, tibiae 69 mm, fibulae 65 mm.

<u>Dentition</u>: The incisor crowns are fully formed and the maxillary molar cusps are quite well developed; one molar cusp is still coalescing; only the tips of two canines are calcified.

<u>Tympanic ring development:</u> The tympanic ring is not fused to the temporal bone, neither are the two parts of this bones fused together.

Developmentally this skeleton is less mature than context 409. However the incisor crowns are completely formed and the molar cusps are coalescing, although the crowns are only just forming. The long bone lengths slightly exceed those of 409.

Fig.1: Romano-British sites where ritual decapitation was practised (after Philpott, 1991)



#### APPENDIX E - Plant and Animal Macrofossils, and other remains, from Bishop Grosseteste College, Lincoln (BGB95): An Assessment

V. Fryer and P. Murphy, Centre of East Anglian Studies, University of East Anglia, Norwich

Note: Since this report was completed further stratigraphic analysis has taken place, with the result that the 'Phase' definitions used in the text have been replaced by an expanded series of 'Period' designations. In order to use this report in context with the site report, the following key should be used:

Phase I	becomes	Period 1(a)
Phase II	becomes	Period 2(b)
Phase III	becomes	Period 2(b)
Phase IV	becomes	Periods 3(a) - 4
Phase V	becomes	Period 3(b)

#### 1) Introduction

Twelve samples were submitted for assessment from features of possible pre-Roman, Roman and early medieval date. Seven probable phases of occupation/site use were noted and samples were taken from contexts in Phases I to V. Phase I (pre-Roman/Roman) showed no evidence for structures but samples (59 and 60) were taken from extensive burnt deposits. Phase II saw the construction of Roman stone buildings and a sample (50) was taken from a dump overlaying an associated metalled area. Samples from Phase III contexts included the fills of an oven (sample 44) and a linear feature (samples 8, 9 and 11) associated with a rebuild of the Phase II structures. Phase IV was a possible early medieval structure with ancillary features including a cesspit (sample 30) and yardage (samples 13, 21 and 43 taken from dumps on the yard surface). A hearth (sample 12) in Phase V was associated with the rebuild in stone of the Phase IV buildings.

#### 2) Methods

The samples were processed by manual water flotation/washover, collecting the flots in a 500

micron mesh sieve. The dried flots were scanned under a binocular microscope at low power and the macrofossils and other remains noted are listed on Tables 1 - 5. Plant macrofossils were preserved by charring unless otherwise stated. Modern contaminants including roots, seeds/fruits, leaf fragments and arthropods were present in all samples. The non-floating residues were collected in a lmm mesh sieve and dried.

#### 3) Plant Macrofossils

With a very few exceptions the broad composition of the assemblages was consistent throughout all phases of the site. Seeds/fruits of common herb species (weeds and grassland plants) were present in small numbers in all samples. They included Agrostemma githago (corn cockle), Atriplex sp. (orache), Bromus sp. (brome), Centaurea sp. (?cornflower), Chenopodium album (fat hen), Euphrasia/Odontites sp. (eyebright/red bartsia), small Fabaceae indet. (small legumes), Fallopia convolvulus (black bindweed), Fumaria officinalis (fumitory), Hyoscyamus niger (henbane), Medicago/Trifolium/Lotus (medick/clover/trefoil), Plantago lanceolata (ribwort plantain), Poaceae indet. (grasses), Prunella vulgaris (self-heal), Raphanus raphanistrum (wild radish), Rumex sp. (dock), Sherardia arvensis (field madder, Stellaria media (chickweed), Urtica urens (small nettle), Veronica hederifolia (ivy-leaved speedwell) and Vicia/Lathyrus (vetch/vetchling). Anthemis cotula (stinking mayweed) is indicative of heavy clay soil habitats while Rumex acetosella (sheep's sorrel) is a plant of dry, acid sand soils. grassland or marginal aquatic taxa included Carex sp. (sedge), Cladium mariscus (saw-Eleocharissp. (spike-rush) sedge), Nutshell Sparganium erectum (bur-reed). fragments of Corylus avellana (hazel) and a single seed of Sambucus nigra (elderberry) were also noted. Other plant macrofossils included fragments of charcoal and charred root, rhizome or stem, relatively abundant stem fragments of indeterminate Ericaceae (heathers) and indeterminate buds, culm nodes and inflorescence fragments. Mineral-replaced root, rhizome or stem fragments were present in sample 30.

Cereal grains and/or chaff were noted at varying densities in all samples. Preservation was variable and many grains had become puffed and distorted during charring. Triticum sp. (wheat) was predominant but Hordeum sp. (barley) was also present in all but sample 30. Glume bases and/or spikelet bases of Triticum spelta (spelt wheat) were noted in samples 8, 9, 13 and 50 and rachis nodes of T. aestivum/compactum (bread wheat) type were recovered from samples 21 and 43. Only one possible rachis internode of Hordeum sp. was noted in sample 21 but grains were present throughout and included asymmetrical lateral grains of H. vulgare (six-row barley) in samples 8, 21, 43 and 59. Grains of Avena sp. (oat) were noted in samples 9, 11 and 43 and awn fragments were present in samples 13 and 44. In the absence of the diagnostic floret bases, it is not possible to ascertain whether these are from a wild or cultivated variety. Possible single grains of Secale cereale (rye) were recovered from samples 13 and 21 and a single cotyledon of a large-seeded species in the family Fabaceae, possible Pisum sativum (pea) was noted in sample 11.

#### 4) Molluscs

Although sieving was not carried out specifically for shell retrieval, mollusc shells occurred at a moderate to high density in all samples. Burnt specimens were present at a very low density. The species present fall into all four of Evans (1972) ecological groups, namely woodland or shade loving species (Discus rotundatus and Vitrea sp.), open country species (Helicella itala, Pupilla muscorum, Vallonia costata, V. excentrica, and V. pulchella), catholic species (Cepaea sp., Cochlicopa sp. and Trichia hispida group) and marsh/freshwater slum species (Lymnaea truncatula, Vertigo antivertigo and V. angustior). A single fragment of an obligate freshwater aquatic snail (Planorbis sp.) was noted in sample 50. Shells of Cecilioides acicula were present in all samples but as this is a burrowing species, these are probably modern contaminants.

#### 5) Other materials

Animal macrofossils included bone fragments, fish bone, small mammal and/or amphibian bone, mineral replaced arthropods and marine

mollusc shell fragments. Possible industrial residues included metallic globules and vitreous material. The black tarry droplets/concretions and fragments of black porous 'cokey' material are probably the residue of the combustion of organic material including cereals and chaff at a very high temperature. Small fragments of coal were present throughout and a high density of matt black material in sample 43 may be low grade coal although it appears to be more laminated and friable.

#### 6) Discussion

The assemblages of plant remains from all phases appear to be composed predominantly of a low density scatter of charred macrofossils, presumably including crop processing waste, fuel residues and other material of probable domestic origin. No concentrations of charred material clearly related to a specific activity or event were noted.

The samples from the Phase I pre-Roman/Roman layers (59 and 60) included charred cereal grains and chaff with segetal weed seeds. Rare detached embryos and possible germinated grains were also present, relating either to grain spoilage or malting.

The assemblage from a dump layer over a second to third century metalled area or courtyard in Phase II was completely uninterpretable because of the low density of material, other than charcoal.

The exact function of the possible oven (sample 44) in Phase III cannot be ascertained because of the low density of material from the sample of its fill. The very low level of weed seeds as opposed to the abundance of cereal grains (with a possible seed of Pisum sativum) may indicate either the drying of fully processed prime products or differential preservation during charring. Samples 8, 9 and 11 from the fills of a Phase III linear feature consist largely of an uninterpretable low-density scatter of charred plant material. However, it is of note that possible industrial residues in the form of metallic globules and especially vitreous material were present in all three samples.

The early medieval cesspit (sample 30, Phase IV) contained an extremely low density of material with the exception of mineralreplaced concretions and fish bone. mineral-replaced plant food wastes were recorded. The dump layers (samples 13, 21 and 43) on the yard surface again appear to be largely composed of domestic refuse with some possible industrial residue. Sample 13 possibly contained cereal processing residue with segetal weed seeds, grains and chaff. It is notable that spelt wheat is the predominant cereal identified in this sample. Spelt was the main Roman wheat crop, and certainly continued in cultivation into the 5th century, as at West Stow, Suffolk. However, in Eastern England, cultivation would appear to have ceased thereafter. The possibility of charred plant material derived from a Roman context being present in this sample has to be considered.

The assemblage from the Phase V hearth (sample 12) consisted largely of seeds of ruderal species, cereal grains and charcoal. Again, there is no basis for functional interpretation.

The mollusc shell assemblage indicates that during all phases of the site represented, conditions were predominantly open with some shaded habitats. The marsh/freshwater slum and aquatic obligate species were probably imported to the site along with the wetland plant species, the latter perhaps being used as litter or bedding.

#### 7) Conclusions

The plant macrofossil assemblages are typical of those from Roman and early medieval urban occupation deposits: an indeterminate low-density scatter of charred plant material, no doubt derived from a range of domestic, industrial and cereal processing activities. The presence of a moderate density of spelt chaff in an early medieval (thirteenth century) deposit is, however, unusual. Either this is a very late occurrence or, more probably, material re-worked from Roman contexts was present.

#### 8) Recommendations for further work

The samples are undistinctive in terms of defining particular activities or processes and densities of material are generally low. It is not considered that quantitative analysis would add further to the interpretation of the site.

#### 9) Bibliography

Evans, J. 1972. Land Snails in Archaeology. London.

#### KEY TO TABLES

x = present (0-10 specimens) xx = common (10-100 specimens) xxx = abundant (100+ specimens)

sil = siliqua fragments

p = present ss = sub-sample b = burnt

pmc = possible modern contaminant

coty = cotyledon m = mineral replaced

Table 1: Macrobotanical & other remains from Period 1(a) contexts. Bishop Grosseteste College, Lincoln.

Sample number	59	æ
Context number	550	300
	22 M V	19 11
Anthemis cotula L.	X	X
Asteraceae indet.		
Atriplex sp.	X	
Brassicaceae indet.		xcf
Bromus sp.		X
Chenopodium album L.	X	
Chenopodiaceae indet.	X	
Fumaria sp.	1 1	X
F. officinalis L.	××	
Medicago/Trifolium/Lotus sp.	X	
Poaceae indet.	XX	Х
Pruneila vuigaris L.	xcf	
Ranunculaceae indet.	1	xcf
Raphanus raphanistrum L.	xsil xstem	
Veronica hederifolia L.		xcf
Vicia/Lathyrus sp.	xcf	
I resistante appropriation de la marcha		eriest.
Corvius aveilana L.	X	X
Wetland/aquatic plants	177774,05	
	X	-
Eleocharis sp.	XX	
	xcf	
and garmani. Crootani. a.		
Chop plants make the control of the		
Cereal indet. (grains)	X	X
(detached embryos)	:	X
rordeam sp. (grants)	x .	X
Triticum sp. (glume bases)	1	X
(rachis internodes)	X	
ther plant macrofossils	and the great Physics	halfe out their
Charcoal	XX	XX
Charred root/rhizome/stem	X	X
ungal scierotia	X	X
ndet, thorn	X	X
folluscs	a said the	A 10 10 10 10 10 10 10 10 10 10 10 10 10
Voodland/shade loving species	1	
Discus rotundatus	×	X
Conitidae indet.		×
Open country species	<del>-</del>	
Helicella itala		X
Pupila muscorum	X	XX
allonia sp.	X	X
. costata		X
. excentrica	X	
. pulchella	XX	X
atholic species	i	
Sepaea sp.		X
richia hispida group	X	XX
ther species	i	
ecilioides acicula	p i	Р
ther material		
lack tarry drops/concretions	X	
	X	
lack porous cokey material	^	
ish bone	X	
mail coal frags.	X I	XX
mall mammal/amphibian bone		x
treous material	x	×
ample volume (lit.)	9.5ss	9.5ss
olume of flot. (lit.)	0.1	0.1

Table 2: Macrobotanical & other remains from Period 2(b) contexts. Bishop Grosseteste College, Lincoln.

Sample number	50
Context number	479
Medicago/Trifolium/Lotus sp.	xcf
Vicia/Lathyrus sp.	X
Wetlandæpatie plants	The second of the second of the second
Carex sp.	X
Crep plants	
Cereal indet. (grains)	XX
Hordeum sp. (grains)	X
Triticum sp. (grains)	X
(glume bases)	X
(spikelet bases)	X
T. spelta L. (glume bases)	X
Other plant macrofossils	
Charcoai	XXX
Charred root/rhizome/stem	XXX
Ericaceae indet, stem	XX
Mollusca	The Control of the Co
Woodland/shade loving species	į
Discus rotundatus	X
Open country species	
Pupilla muscorum	X
Vallonia sp.	XX
V. excentrica	X
V. pulchella	X
Catholic species	
Cochlicopa sp.	X
Trichia hispida group	XX
Aquatic species	-
Planorbis sp.	X
Other species	
Cecilioides acicula	р
Other material	i inggrafika sasiga.
Black tarry drops/concretions	X
Black porous cokey material	XX
Bone	x bx
Aetallic globules	X
Small coal frags.	XX
Small mammal/amphibian bone	X
Sample volume (lit.)	9.5ss
olume of flot. (lit.)	0.1
flot sorted	100%

Table 3: Macrobotanical & other remains from Period 2(b) contexts. Bishop Grosseteste College, Lincoln.

Sample number	8	9	11	44
Context number	275	354	357	302
Harbard States States Services		15. 15. 15	of Fig. 1980	2
Anthemis cotula L.			X	X
Asteraceae indet.			x	
Atripiex SD.	xomc	X	×	
Bromus sp.	X	X		
Cantaurea sp.		1	X	
Сћепородішт ашит 🗀			х	
Chenopodiaceae indet.		X	X	10
Small Fabaceae indet.		. X	XCCTY	
Fallopia convolvulus (L.)A.Love		xtf	· XC1	
Plantago ianceolata L.	X	Х	-	X
Poaceae indet.	. х	X	X	*
Polygonaceae indet.			X	
Raphanus raphanistrum L	-	issi		-
Rumex sp.		. X	X	!
R. acetoseila L.		1		X
Sherardia arvensis L		X		1
Stellana media (L.) Vill		X	<u>:</u>	
Vicia/Lathvrus so.	: X	* X	I to the same of the Part Control of the Part	I CONTRACTOR OF
			C.P. Specialists to	
Corylus aveilana L.	X	X	- Land	, X
Sambucus nigra L	Notes to Decision to	titri di tala producente	: XCI	et Batan Sanda
Carex sp. Eleochans sp.	X	X	-	X
ros plants so.	pur Chipmonth		. A Supposition of the latest	
Avena sp. (grains)	· · · · · · · · · · · · · · · · · · ·	xcr	X	the series taken
(awn)	<del></del>	AGI		×
Careal indet (grains)	xx	×x	xx	:X
arge Fabaceae indet.			xcoty	×
Hordeum sp.(grains)	×	X	. X	X
inticum sp. (grains)	X		×	X
(giume bases)	1		X	
speria L. (giume bases)	X	X		
Merpiest mecroives le				e Japan et Line
harcoal	×	×	XX	×
harred root/thizome/stem	×	X		X
ricaceae indet. stem	: X	××		X
ndet, bud				
naet, inflorescence frags.		X		
				194-194
foodland/shade loving species				
iscus rotundatus				x
rtrea sp.	X			
onitidae indet.	1	X	X ·	
pen country species				
eliceila itala	X	X	X	X
ericidae indet.	X		1	
upila muscorum	XXX	XXX	××	х
alionia sp.	X	xx	xx	X
costata	xx	xx	xx	X
excentrica	×	xx	xx	X
pulcheila	X	X	xx	×
atholic species				
epaea sp.			X i	
ochicopa sp.		X		
nchia hispida group	XXX	xxx :	×	x
arsh/freshwater slum species				
mnaea truncatula		XD !	1	
artigo antivertigo angustior		xcf xD	X	X
diffuotion			X	
ther species				
ecilioides acicula	<u> </u>	P		D
1190 00.			D 2	
her material				
the material ack tarry drops/concretions	X		~ '	
ther material ack tarry drops/concretions ack porous cokey material	X	x	X	×
ther material ack tarry drops/concretions ack porous cokey material one	X	X	x i	X
ther material ack tarry drops/concretions ack porous cokey material ane etallic glooules	X X	X	X X	
ther material ack tarry drops/concretions ack porous cokey material and acted training gloonles are attailing gloonles are replaced arthropods	X	X	X X	×
ther material ack tarry drops/concretions ack porous cokey material and action	X	x	X X X	x
ther material ack tarry drops/concretions ack porous cokey material ine etallic glooules neral replaced arthropods nail coal frags. nail mamma/amphibian bone	X X	X X X	X X X X X X	X X X
the material ack tarry drops/concretions ack porous cokey material ine etailic glooules neral replaced arthropods nail coal frags. nail mamma/amphibian bone reous material	X X	X X X X X X X X X X X X X X X X X X X	x x x x x x x x x x x x x x x x x x x	x x x
ther material ack tarry drops/concretions ack porous cokey material ine etallic glooules neral replaced arthropods nail coal frags. nail mamma/amphibian bone	X X	X X X	X X X X X X	X X X

Table 4: Macrobotanical & other remains from Periods 3(a) - 4 contexts. Bishop Grosseteste College, Lincoln.

Sample number	13	21	30	43
Context number	322	352	443	37
Herbs. 1977 1978 1979 1979 1979 1979 1979 1979		American State of		* * *
Agrostemma githago L.	xci		xcf	
Anthmis cotula L.		X		
Brassicaceae indet.  Bromus sp.	xcf			
	×		xcf	
Small Fabaceae indet.	xcory			
Fallopia convolvulus (L.)A.Love				Х
Medicago/Trifolium/Lotus sp.	X			-
Poaceae indet.	X			
Porygonaceae indet.	X	<del></del>		
Ranunculaceae indet. Raphanus raphanistrum L.	xcf			
Rumex sp.	XSII			
Rumex/Carex sp.	X	X	<u> </u>	
Metiand/aquatic plants - 34444	X	diamental Comprises Proprie	name of the Property of the contract	nothinally must a
Cladium manscus (L)Poni			THE TOWNS OF THE PARTY OF THE P	minute Salar Sand
Stop plants the Stop plants to the Stop plants	X	i 	t serie, inclusional allegations for a	CONTRACTOR
	e politica de la companya del companya de la companya de la companya del companya de la companya	Armed attachmiltamina	And the last of th	
Avena sp. (grains)	<del>                                     </del>	-	-	X
(awn)	X		-	-
Cereal indet. (grains)	XXX	XX	, X	XXX
Hordeum sp. (grains)	X	X	1	X
(rachis internodes)		xcf	-	
Secale cereale L.(Grains)	xcf	xcf	1	
Triticum sp. (grains)	X	xx	X	xx
(glume bases)	XX	X		
(rachis internodes)	X	,d		
.aestivum/compactum type (rachis nodes)	1	xcf	<del>!</del>	xcf
f. speita L. (glume bases) (spikelet bases)	XX	-		-
(spikeler pases)	. XX	or and hander to have been	attended at .	C P less page as as
Charcoal				
charred root/rhizome/stern	XX		XX	- XXX
	×	X	X	××
// // // // // // // // // // // // //			X	
ricaceae indet. stem	, X	X	X	xx
ndet, culm node	Translatings are also	X	P'EL effettemb	- Landilli-
	SHIP TO STATE OF THE PARTY.	And the second second	SCHRIST AND PROPERTY.	
Woodland/shade loving species		<u> </u>		
iscus rotundatus	X			
pen country species		-		
lelicella itala	X		X	X
elicidae indet.			X	
upilla muscorum	X	X	X	xx
allonia sp.		XX	Χ !	
. costata	X	X		X
excentrica	X	X		X
. pulcheila	X	X	1	X
atholic species				
epaea sp.				X
ochlicopa sp.	X	X		X
richia hispida group	xx	XX	X	xx
arsh/freshwater slum species				
ertigo antivertigo	X			
ther species				
ecilioides acicula	р	р	р	р
	tope special comments	a marine to	Maria de la companya del companya de la companya del companya de la companya de l	•. •
ack tarry drops/concretions		x		
ack porous cokey material	xx	X		xx
one	x bx	i	1	xb
sh bone	1		xx	X
att black material	7	i		xxx
arine molluscs	1	I	1	×
neralised/faecal concretions			xxx i	
neral replaced arthropods	x	i	X	×
stallic globules	xx	X	1	××
nall coal frags.	XX I	xx	i	××
	×	X	×	×
nall mammal/amphibian bone	^ :			
nan manimus ampinoism bone	Y !	1		
reous material	X 9 See	9 5ee	2	9 5ee
	9.5ss 0.1	9.5ss 0.1	2 <0.1	9.5ss 0.2

Table 5: Macrobotanical & other remains from Period 3(b) contexts. Bishop Grosseteste College, Lincoln.

Sample number	12
Context number	365
Herbs	approximately the second secon
Euphrasia/Odontites sp.	xcf
Hyoscyamus niger L.	xcf
Lamiaceae indet.	X
Poaceae indet.	X
Polygonaceae indet.	X
Rumex sp.	xm
Urtica urens L.	XX
Vicia/Lathyrus sp.	XX
rees/stribs	
Corylus avellana L.	X
<u>Nelembragiani a dan Sudebba</u>	
Carex sp.	X
etop jobniši i se vije sredeni u	
Cereal indet. (grains)	XX
Hordeum sp. (grains)	X
Other plant macrofossils	
Charcoal	XXX
Charred root/rhizome/stem	X
Ericaceae indet. stem	X
koluses .	
Open country species	
Helicella itala	X
Pupilla muscorum	X
/allonia sp.	Х
/. costata	X
/. excentrica	X
Catholic species	
richia hispida group	XX
Other species	
Cecilioides acicula	р
/ertigo sp.	X
Other materials	Internation.
Black porous cokey material	X
sumt/fired clay	XXX
fineral replaced arthropods	X
small coal frags.	Х
mall mammal/amphibian bone	X
ample volume (lit.)	9.5ss
olume of flot (lit.)	<0.1
flot sorted	100%

#### APPENDIX F - Bishop Grosseteste College, BGB95 -Animal Bone Assessment

© D.James Rackham

#### 1) Introduction

A sample of 4257 animal bone fragments, contained in nine archive boxes, from the excavations at Bishop Grosseteste College were submitted for assessment. In addition the animal bone finds from a series of eight soil samples processed for environmental analysis were also studied. The following methodology was used for the excavated animal bone.

The bone fragments from each context were weighed and scanned. The individual species present in the context were identified and a list of each of the bone elements of each species recognised during the scan was recorded. This list may not be comprehensive since time was restricted and little time was spent trying to identify the smaller fragments. The presence of non-domestic animals was recorded but no attempt was made to identify these bones to species. The frequency of individual bone elements in the context was not recorded only their presence. A record was made of the number of bone fragments which might justify measurement. This was taken to be fragments on which at least two measurements illustrated for that bone by Von den Driesch (1976) could be taken. The number of jaws, mandibular or maxillary, in each context that carried sufficient teeth to permit a relatively tight age estimate for the age at death of the animal was recorded for cattle, sheep and pig. No vertebral or rib fragments were recorded during this scan except where they have been assigned to species. The data was entered into a relational database (ACCESS) using the codes used by the Environmental Archaeology Consultancy for recording animal bone assemblages (see Appendix 1) along with the archaeological information on phasing, bone fragment counts and context descriptions.

This data was summarised within the site phase groupings (Table 1) with the frequency of the different species being analysed in terms of the number of contexts from which they were identified. A more detailed analysis of the skeletal elements of cattle, sheep and pig was undertaken in the same manner (Tables 2-4) by recording the frequency of contexts in which a particular element had been identified. These results take no account of the size of the sample of bones in each context and the frequency data has been used only as a broad measure to permit some assessment of whether the collection shows any pronounced patterns that can be attributed to functional activity on site or broad changes in 'meat' supply during the history of the site.

The data collected during this exercise is presented in the Appendix.

#### 2) Results

The following species were identified in the collection:

human, horse, cattle, sheep, goat, pig, dog, cat, red deer, rabbit, chicken and goose. Not specifically identified material included a bone of a small carnivore from phase 3, seventeen bones of wild birds from phases 1a, 1b, 2a, 2b, 4 and 6 and six fish bones from phases 2a, 2b, 3 and 4.

The bulk of the sample derives from phase 2b (Table 1), the mid 12th and early 13th century deposits, with half as much again each from the Saxo-Norman/early medieval and 13th century deposits before and after. medieval assemblage comprises approximately 83% of the collection. The relatively low number of measureable bones is indicative of the level of fragmentation of the collection in general (36 cattle; 57 sheep/goat; 2 pig), but the bones themselves are in good condition and apart from some evidence of canid gnawing and scavenging, much of the collection is identifiable and uneroded. A crude measure of the fragment size has been gained by dividing the weight of bone in each context by the number of fragments. This has taken no account of different species proportions in the contexts. Figure 1 presents this information by phase. The mode indicates a fragment weight between 6 and 7 grammes. There are slight variations between phases. Phase 4 shows a distribution indicating a generally smaller fragment size and the mean, 8.6g, is at least 2.5g lower than the earlier phases except phase 2a (9.9g). Phase 1a has the largest average fragment weight at 12.9g and perhaps suggests a lower level of

trampling and fragmentation in deposits of this period than later phases although the sample size for this phase is small.

Data on the age at death of the animals is reasonably well represented although only in phase 2b and only for the sheep is the frequency of jaws with dentition sufficient to reconstruct the slaughter pattern. considerable number of loose teeth of both cattle and sheep should help to fill out details of their age at slaughter. There is additional data relevant to ageing from the epiphyses of the bones but no record of the number of these was taken during the scanning. In any respect detailed analysis of the sex of the domestic animals and their size is not possible from this collection although the data can be compared with previous studies (O'Connor 1982; Dobney et al 1996), while an analysis of the cull structure is possible for the medieval samples, at least for sheep and cattle. Both lambs and calf bones occur, with the former including bones that probably derived from neonates and suggesting animals may have been lambing at the site during phases 2 and 4.

Of interest is the size of the sheep and cattle. Cattle with very small horn cores and small gracile sheep were present in the Saxo-Norman and medieval phases. How these bones compare with contemporary collections from elsewhere in the city can only be established through further work, however it was clear during the assessment that some contexts at this site included much larger and more robust animals.

There is no indication from the data collected that the ratios of the major domestic species changed very much throughout the history of the site. The relative frequency of contexts with sheep and cattle bones remained remarkably consistent, although the frequency with pig fragments fluctuated rather more (Table 1). Consideration of the bone element frequency data for cattle and sheep (Tables 2 and 3) indicates that a greater frequency of particular elements of sheep, the mandible, metacarpus and metatarsus, occurs than cattle which suggests that more individuals of sheep may be represented in these deposits than cattle, but again there is no clear evidence of through the phases. Detailed information on this aspect can only be obtained by full recording and analysis.

There is no indication of any bone-working at the site. The only fragment that might indicate a functional use was a red deer tine from phase 2b, but no bone waste or offcuts were present. A little information is available from the element data (Tables 2-4). While these data do not measure the frequency of particular bones they do give an indication of the relative frequency of the different elements in the contexts of each phase. There is in both the cattle and sheep assemblages a tendency for skull, mandible, metacarpus and metatarsus fragments to occur in a larger number of contexts. This may in part be due to robustness of the bone, however, the bones of sheep that most often survive due to their robusticity (the distal humerus, proximal radius and distal tibia) while present in relatively high numbers do not attain the frequency of the metapodials. The frequency of these bones and the phalanges suggests that the samples include a proportion of material derived from primary butchery. The equally, or nearly equally, abundant remains of scapula, humerus, radius and tibia (Tables 2 and 3) indicate that the bones associated with those parts of the carcass that carry much of the meat are also present in the samples. This distribution indicates that the assemblages from all periods include material from both the primary processing of the carcass and subsequent stages in preparation and consumption. This pattern is fairly typical of domestic waste found in most urban contexts. The frequency of pigs bones is low and on these data (Table 4) there is insufficient material to warrant interpretation.

Bones of human babies were recovered from two Roman contexts, 578 and 586, and may relate to infant burials recovered during excavation.

Four contexts were identified as of particular interest or priority; context 479 a dump/surface from Roman phase 1a, context 379 a layer from phase 2a, context 381 a layer from phase 2b, and context 220 a metalled surface from phase 3. None of these appear to be in any way particular although the latter, 220, may contain a rather larger proportion of primary butchery waste than the other contexts.

In addition to the excavated bone a small amount of material was recovered from the soil samples processed for other environmental data. One of these, sample 30 context 443 from

phase 3, was supplied unsorted so a subsample of the >1mm residue was sorted for bone finds. This context was clearly a cess pit. the residue being largely composed of phosphatic concretions and mineralised material. Only approximately one twentieth of this sample residue was sorted and this fraction produced a number of fish bones, mainly eel but with other small fish present, one or two small bird bones plus fragments of amphibian and small mammal bone. Although most of the samples produced very little (Table 5) and can make no contribution to the analysis and interpretation of the site the contents of context 443 serve to illustrate that fish bones are likely to have been considerably more abundant on site than the few remains recovered from the excavation might indicate. and that eel and other small fish were probably an important element of the medieval diet.

#### 3) Recommendations

Detailed consideration of the changes in availability of domestic food animals at the site and the primary economic purpose of these animals (derivable from their sex and age structure) can only be obtained by a full analysis of the assemblage. Only the samples from the medieval levels can really sustain this level of analysis and the 3537 bones from phases 2-4 constitute the priority material in the collection. This sample compares well with the samples studied by Dobney et al (1996) who considered only 2912 bone fragments spanning an equivalent period from a number of different sites, although much larger samples of this date were obtained from Flaxengate (O'Connor 1982). This is also the only collection from this part of Lincoln, north of the Roman Fortress and medieval town. The analysis of the different parts of the carcass present and the level of postdepositional destruction that may have occurred can be more fully dealt with, than has the cursory analysis above, from a detailed catalogue of the material. The wild bird and fish bones, from the excavated and cesspit samples, should be identified to species to indicate which species were being exploited for food. The results of any further analysis should be compatible with and compared to the assemblages reported by Dobney et al (1996).

It is recommended that any further work is restricted to the medieval samples, although a brief appraisal of the 426 bone fragments from the Roman phases could be undertaken.

#### 4) Conclusions

There is no evidence from this assessment exercise that the major domestic species change in frequency during the development of the site. Sheep are likely to have been the most frequent species in all phases although cattle will have contributed the most meat. There was some indication that the size of cattle and sheep changed but owing to the limited number of measureable bones this is not likely to be quantifiable.

Animals may have been kept and bred at the site since examples of neonates occurred in phases 2 and 4. The samples in general are typical of domestic waste and produced no evidence of bone working, and although there is an indication that primary butchery waste is present this cannot be attributed to butchers or slaughter house refuse.

Wild bird and fish remains were exploited in most phases, and the latter may have made a considerably greater contribution to the diet of the inhabitants of the site than the recovered bones suggest.

#### 5) Bibliography

Dobney, K.M., Jaques, S.D. and Irving, B.G. 1996 *Of Butchers and Breeds*, Lincoln Archaeological Studies No.5

Grant, A. 1982 The use of tooth wear as a guide to the age of domestic animals, in B.Wilson, C.Grigson and S.Payne (eds) Ageing and sexing animal bones from Archaeological sites, 91-108. BAR Brit.Ser.109, Oxford

O'Connor, T.P. 1982 Animal Bones from Flaxengate, Lincoln c 870-1500. The Archaeology of Lincoln Vol. XVIII-I, CBA

Von den Driesch A. 1976 A guide to the measurement of animal bones from archaeological sites, Peabody Museum Bulletin 1, Harvard University.

Figure 1: Average fragment weight in each context for Phases 1(a) - 4

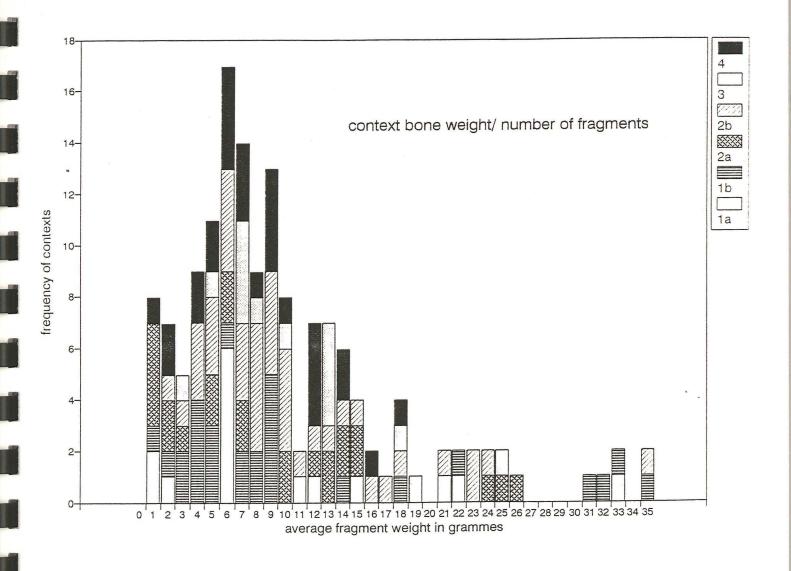


Table 1: Data of weight, fragments, species present and number of measureable bones and jaws by phase.

Phase	Weight of bone	No. frags	No. contexts	< no.contexts with bones of >							
				cattle	sheep	pig	horse	dog	cat	chicken	goose
la	2174	156	10	5	7	3	2			1	
1b	3302	270	28	15	16	3	3	1		2	
2a	7878	727	25	14	13	8	2	2		5	2
2b	14994	1488	41	35	37	18	3	3	3	9	4
3	7724	788	15	14	14	5	4		2	3	
4	4289	534	28	22	21	9	3	1	2	6	3
5	1414	147	1	1	1	1	1				
6	1606	134	8	6	6	1	1	2			

Phase	Weight	No.	No.		Ageable mandib		dibles
	of bone	frags	contexts				
				measurable bones	sheep	pig	cattle
la	2174	156	10	3	3		1
1b	3302	270	28	2	4	1	3
2a	7878	727	25	15	7	2	4
2b	14994	1488	41	43	30		7
3	7724	788	15	19	4		2
4	4289	534	28	7	3	1	1
5	1414	147	1	4	2	1	
6	1606	134	8	2			

Table 2: Frequency of contexts in each phase with individual bone elements of cattle present

Bone	1a	1b	2a	2b	3	4	5	6
horn core	1			2	1			1
skull	1	2	3	11	2	3		1
maxilla		1	3	11		1		
mandible	1	4	3	11	4	7	1	<del> </del>
loose teeth	2	2	9	11	5	10		4
atlas		2	1	3	2	4		<del>                                     </del>
axis			1	4	1	1		
scapula	1		3	12	6	3		3
humerus	1	3	3	10	3	2		1
radius		1	3	5	3	1	1	
ulna		2	2	4	1	1	1	1
carpal	1	1	3	4	1			
metacarpus	1	2	3	11	1	3	1	
innominate	1	2	4	9	4	2		3
femur	2	1	1	6	1	3		1
patella					1	1		
tibia	2		4	9	5	4		1
astragalus		1	1	3	3	1	1	
calcaneum			2	7	4			1
centroquartal		1		4	1			
metatarsus	2		4	10	4		1	
phalanx 1	2	7	7	8	3	9	1	2
phalanx 2	1	1	2	7	3	4 .	1	
phalanx 3	1		1	2		1	1	

Table 3: Frequency of contexts in each phase with individual bone elements of sheep/goat present

Bone	1a	1b	2a	2b	3	4	5	6
horn core			1	5	1			-
skull			6	11	2	4		-
	1				2	4	<del>                                     </del>	
maxilla	1	1	3	5			1	
mandible	1	4	5	21	5	5	1	1
loose teeth	1	6	6	13	8	9	1	4
atlas		1	3	3	2			
axis			1	2	1	2		
scapula		2	5	6	4	2		
humerus	3	3	1	8	5	5	1	2
radius	4	6	2	10	4	4	1	4
ulna			1	3		3		
carpal				1				
metacarpus		1	5	15	6	4	1	3
innominate	1	2	3	6	4	7		1
femur	2	1	1	6	4	4	1	1
patella			1					
tibia	2	7	6	13	7	11	1	1
astragalus				5	2		1	
calcaneum				2	1	1	1	
centroquartal								
metatarsus	2	6	7	19	5	10	1	2
phalanx 1	1	2	4	10	2	3	1	1
phalanx 2				2		3		1
phalanx 3			1					

Table 4: Frequency of contexts in each phase with individual bone elements of pig present

Bone	1a	1b	2a	2b	3	4	5	6
			<b>_</b>	-		-		-
skull			4	1	1	1		
maxilla				3		1	1	
mandible	1	1	4	1	1			
loose teeth		1	4	3	2	3		1
atlas								
axis								
scapula	1		2	1		1 .		1
humerus		1	1	1		2		
radius	1			1	1			
ulna			1	4		2		
carpal								
metacarpus			1	2	1			
innominate			1	3		1		
femur				1				
patella								
tibia	1		1					1
astragalus				1			1	
calcaneum						1		
centroquartal		,						
metatarsus				3				
metapodial					2	1	1	
phalanx 1				1	1			
phalanx 2								
phalanx 3			_					

Table 5: Animal bone from environmental soil samples

Sample no.	context	weight g.	no. fragments	phase	
8	275	7	11	1b	mainly unidentifiable fragments, including one fish bone, 3 calcined pieces and a cut small piece of distal sheep humerus
9	354	4	6	1b	unidentifiable fragments including two calcined pieces
11	357	4	13	1b	mainly unidentifiable, one cattle upper molar at wear stage g (Grant 1981)
12	365	18	28	2b	mainly unidentifiable fragments, but including a cattle 2nd phalanx, a burnt sheep 3rd phalanx, and a fragmented burnt cattle tooth
13	322	18	30	3	mainly unidentifiable fragments, bit including sheep skull, mandible and 1st phalanx fragments, and rib a cervical vertebra fragments from a sheep sized animal
30	443	3	50+	3	many fish bones, mainly eel, with some amphibian, small mammal and bird bones (only sub-sample sorted)
43	379	10	18	2a	mainly unidentifiable fragments, but including sheep maxillary tooth and a bird rib
50	479	12	4	la	3 unidentified fragments and a fragment of sheep humerus with an unfused proximalepiphysis

#### APPENDIX 1

#### ASSESSMENT CATALOGUE OF ANIMAL BONE FROM

#### BISHOP GROSSETESTE COLLEGE - BGB95 LCCM 84.95

D.James Rackham
The Environmental Archaeology Consultancy

17 September 1997

Key to codes used in the cataloguing of animal bones

SPECI	IES	BONE		SIDE	FUSION
BOS	cattle	SKL	skull	W - whole L - left side	Records the fused/unfused condition of the epiphyses P - proximal; D - distal; E - acetabulum;
CSZ	cattle size	TEMP	temporal	R - right side	N - unfused; F - fused; C - cranial; A - posterior
SUS	pig	FRNT	frontal	F - fragment	
OVCA	sheep or goat	PET	petrous	TOOTH WEAR - Code	s are those used in Grant, A. 1982 The use of tooth
OVI	sheep	PAR	parietal		de to the age of domestic animals, in B.Wilson,
SSZ	sheep size	OCIP	occipital	C.Grigson and	S.Payne (eds) Ageing and sexing animal bones from
EQU	horse	ZYG	zygomatic		l sites, 91-108.
CER	red deer	MAN	mandible		follows in the tooth wear column:
CAN MAN	dog human	MAX ATL	maxilla atlas	h ldpm4/dupm4 H lpm4/upm4	f ldpm2/dupm2 g ldpm3/dupm3
UNI	unknown	AXI	axis	I lml/uml	g Tapins/ aupins
CHIK	chicken	CEV	cervical vertebra	J lm2/um2	
GOOS	goose, dom	TRV	thoracic vertebra	K lm3/um3	
LEP	hare	LMV	lumbar vertebra		
UNB	indet bird	SAC	sacrum		
MALL	duck, dom.	CDV	caudal vertebra		d the part of the bone present.
GULL	gull sp.	SCP	scapula	The key to eac	ch zone on each bone is on page 2
FISH UNIB	fish bird indet	HUM RAD	humerus radius		
UNIF	fish indet	MTC	metacarpus	MEASUREMENTS - Any me	asurements are those listed in A.Von den Driesch (1976)
GSZE	goose size	MC1-4	metacarpus 1-4		de to the Measurement of Animal Bones from Archaeological
BEAV	beaver	INN	innominate	Sites,	Peabody Museum Bulletin 1, Peabody Museum, Harvard, USA
CORV	crow or rook	ILM	ilium		
BUZZ	buzzard	PUB	pubis		
		ISH FEM	ischium femur		
		TIB	tibia		
		AST	astragalus		
		CAL	calcaneum		
		TTM	metatarsus		
		MT1-4	metatarsus 1-4		
		PH1 PH2	1st phalanx 2nd phalanx		
		PH3	3rd phalanx		
			3 Lower molar 1 - molar	3	
		UM1-UM	3 upper molar 1 - molar	3	
		LPM1-L	STREET OF STREET		
		UPM1-U			
			4 deciduous lower premo 4 deciduous upper premo		
		MNT	mandibular tooth	Siai 1-4	
		MXT	maxillary tooth		
		LBF	long bone		
		UNI	unidentified		
		STN	sternum		ř
		INC	incisor		
		TTH CMP	indet, tooth carpo-metacarpus		
		OI IL	and the man and a langer		

#### Assessment Catalogue of Animal Bone from Bishop Grossteste College

sitecod	e con	feature type	wt g.	frag nos	no. meas urable	cow	cattle	cattle bones	S/G	S/G tooth	sheep/goat bones	pig	pig tooth	pig bones	others	bird	fish	comments	phas
BGB95	200	LAYER-TOPSOIL	1414	147	4	Y	o 0	RAD,MTC,AST,MAN,PH1, PH2,PH3,MTT,ULN	Y	row 2	MTC,MTT,TTH,HUM, MAX,TIB,CAL,AST,PHI,	Y	row l	MAX,MTP, AST	EQU,MTP			LOTS LOOSE SHEEP TEETH, SMALL	5
BGB95		BLUE CLAY FILL	229	9	2	Y	0	TIB,RAD,AXI	Y	1	FEM,MAN,RAD MAN,HYD,TTH		0					ANIMALS	3
BGB95	203	MODERN FILL	31	6			0		Y	0	MTC,MTT,TTH		0						6
BGB95	204	MODERN FILL	473	21		Y	0	SCP,FEM,INN,TIB,TTH	Y	0	MTC,RAD,HUM		0		EQU,MTT CAN,HUM				6
BGB95	205	LAYER/DUMP	245	44	1	Y	0	FEM,TIB,TTH	Y	0	TIB,MTT,INN,TTH		0			CHIK,CMC		SMALL GRACILE SHEEP	4
BGB95	207	MODERN FILL	511	60		Y	0	HUM,INN,PH1,TTH	Y	0	FEM,MTT,RAD,PH1,PH2, CEV,MAN,TTH		0		CAN, VER	UNIB		SMALL BIRD TIB	6
BGB95	208	MODERN FILL	4	1			0			0	, , , , , , , , , , , , , , , , , , , ,		0		SSZ,RIB				6
BGB95		MODERN FILL	60	1		Y	0	INN		0			0						6
BGB95		MODERN FILL	30	2		Y	0	TTH	Y	0	RAD		0						6
BGB95		UNSTRAT	261	6		Y	1	MAN,NAS	Ý	0	TTH	Y	0	MTC					U
BGB95		METALLED	2911	364	9	Y	0	SKL,PH1,PH2,ATL,TIB,	Y	0	ATL,SCP,AST,MTC,MAN,	Y	0	PH1,SKL		CHIK, TIB	MED	CATTLE HODAL CODES	3
DOD9.	220	SURFACE	2311	304	,	1	O	AST,CQ,CAL,MTT,SCP, MAN,MTC,HC,INN,TTH	1	U	FEM,MTT,CAL,INN,HC,	1	V	FIII,SKL		CHIK, I IB	VER	CATTLE HORN CORES VERY SMALL-LOTS LOOSE SHEEP TEETH	3
BGB95	221	LAYER (INT BUILDING)	18	2		Y	0	MAN	Y	0	PH2		0					LOOSE SHEET TEETH	4
BGB95	222	LAYER (INT BUILDING)	198	28	1	Y	0	PH1	Y	0	MAN,INN,FEM,MTC, HUM,SKL,TTH	Y	0	RIB		CHIK, TIB GOOSE, TIB			4
BGB95	223	MODERN FILL	117	11		Y	0	ULN,SCP,TTH	Y	0	RAD,TTH		0			GOODE, IID			6
BGB95		L/S SURFACE	142	21		Y	0	TTH	Y	0	MTT,TIB,RAD,TTH		0		CAN,ULN, MTP				4
BGB95	225	L/S WALL	19	2		Y	0	INC		0			0						4
BGB9		PITCHED L/S	31	5		•	0		Y	0	MTT,MAN		0						4
DOD).	220	FEATURE	51	5			U		1	0	WII I, WEST		U						4
BGB9	228	BURNT FILL/SURFACE	328	23		Y	0	MAN,FEM,PH1,PH2,SKL, INN.INC.TTH	Y	0	MTT,TIB		0		EQU, CAL FEL,MAN				4
BGB9	231	FILL	380	32	2	Y	0	CAL,HC,SCP,PH1	Y	0	MTC,TIB,HUM,INN,TTH	Y	0	SCP, TIB, TTH				PROBABLE GOAT MTT	6
BGB9		MORTAR SURFACE	20	3		Y	0	PH2		0	, , , , , , , , , , , , , , , , , , , ,		0	, ,				TROBI DEB GOTT MITT	4
BGB9	233	FILL	39	3		Y	0	TTH	Y	0	TIB		0						3
BGB9		FILL/DUMP	76	7		Y	0	SKL,SCP	Y	0	MTT		0						2B
BGB9		SHELL DUMP/LAYER	77	11		•	0	511,501	Y	2	MAN,TIB,MTT,SKL		o						2B
BGB9	240	FILL/LAYER	21	1		Y	0	PH1		0			0						2B
BGB9		L/S	139	10	1	Y	0	FEM,HUM	Y	1	MAN,MTC,HC		0						2B
		FEATURE/FILL							-					A					
BGB9		LAYER	524	58		Y	0	PH1,RAD	Y	3	MAN,SKL,MTT,CAL,PH1, FEM,INN,HUM,SCP,TTH	Y	0	SKL,TTH	CRA,MTC			NEONATE LAMB	4
BGB9		L/S FEATURE	25	2		Y	0	HUM		0		Y	0	SCP					2A
BGB9	248	NATURAL SAND	114	7		Y	1	MAN,SKL		0			0						Q
BGB9	249	POSS. ROB. TR.FILL	291	35		Y	0	MTC,HUM,TTH	Y	0	MTC,FEM,SCP,INC,MTT		0						2B
BGB9	5 250	DUMP LAYER	101	25	1	Y	0	MTC,TTH	Υ.	0	SKL,ATL,MAN,TIB,RAD, CAL,TTH	Y	0	FIB,MTC,MT T		ř			2B

sitecode	con	feature type	wt g.	frag nos	no. meas urable	cow	cattle tooth	cattle bones	S/G	S/G tooth	sheep/goat bones	pig	pig tooth	pig bones	others	bird	fish	comments	phas
BGB95	251	L/S FEATURE HEARTH?	26	9	unuoic	Y	row 0	MAN	Y	row 0	MAN,RAD		row 0						2B
BGB95	252	FILL POSS WHEEL RUT	54	13		Y	0	TTH	Y	0	ULN,PH1,TTH	Y	0	TTH					4
BGB95	253	FILL POSS WHEEL RUT	17	2		Y	0	PH1		0	at .		0						4
BGB95	254	LAYER/DUMP	473	65		Y	0	PH1,TIB,INN,HUM,TTH	Y	0	MTC,MTT,HUM,ULN, MAN	Y	0	ULN,HUM, VER		CHIK,ULN, FEM			4
BGB95	257	LAYER/FILL	1366	161	7	Y	0	HUM,MTC,INN,CAL,MTT ,FEM,MAN,CQ,ATL,SCP, ULN,SKL,CAR,PH2,TTH	Y	3	MTT,MTC,AST,TIB,MAN, RAD,AXI,ATL,HUM,PH1, SKL,HC,TTH	Y	0	ULN,PH1, TTH	FEL,HUM, MTP CAN,MAN	GOOS,CMC, TMT			2B
BGB95	260	LAYER	172	13	2	Y	0	TIB,PH1,INC	Y	0	HUM,RAD,MTC,MTT,TT H		0		,				3
BGB95	268	L/S FOUNDATIONS	115	15		Y	0	AST	Y	0	MTC,TTH	Y	0	CAN,MAN	FEL,RAD				3
BGB95	269	INTERNAL L/S SURFACE	311	20	1	Y	0	SCP,MTT,RAD,CEV,MTC, TTH	Y	1	MTT,MAN,TIB		0						2B
BGB95	270	POSS L/S WALL	387	40		Y	1	MAN,AST,MTT,RAD,TTH	Y	1	MAX,SKL,HC,MTT,PH1, MAN,TTH		0			GOOS,FEM BIRD,TMT			2B
BGB95	271	LAYER/FILL	205	24		Y	0	INN,MAN,SCP,CAR,PAT, TTH	Y	0	AST,INN,TIB,SCP,FEM, TTH		0		CARN, RAD	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		SMALL CARNIVORE	3
BGB95	272	L/S FOUNDATIONS	47	2	1		0		Y	1	MAN,HUM		0						2B
BGB95	273	LAYER	58	4			0		Y	0	TIB		0		EQU,TTH	CHIKZ,TMT			4
BGB95	275	FILL	11	3			0		Y	0	HUM		0						1B
BGB95	276	LAYER	441	70	2	Y	0	TIB,PH1,PH2,PH3,HUM, MAN,SKL,SCP,INC	Y	0	MTT,PH1,PH2,ULN,MTC, HUM,TIB,SKL,RAD,FEM, INN,TTH	Y	0	ULN,MTP, SCP		СНІК,ТІВ			4
BGB95	278	POSS FLOOR SURFACE	131	17		Y	0	HUM,PH1	Y	0	HUM,SCP,INN,MTT,TIB, RAD,TTH		0						1B
BGB95	279	MORTAR SURFACE	37	5			0		Y	0	RAD,TIB,MTT		0						3
BGB95	285	LAYER/DUMP	54	8		Y	0	PH1	Y	0	ULN,TTH	Y	0	RAD					2B
BGB95	293	ROUGH L/S SURFACE	298	19		Y	0	TIB,PH1	Y	0	MAN,SCP		0		EQU,CAL				2A
BGB95	296	LAYER/DUMP	1052	198	3	Y	0	ATL,FEM,PH1,PH2,TIB, AXI,CQ,HUM,CAR,CAL,	Y	2	MAN,CEV,MTC,MTT, PH1,PH2,AST,CAL,TIB,	Y	0	ULN,LMV, SAC,INN	CAN,RAD, FEM	CHIK,STN, HUM		LOTS LOOSE CATTLE TTH	2B
								SKL,PH3,SCP,TTH			ULN,INN,CAR,RAD,SCP, TTH								
BGB95	300	BURNT DEPOSIT	16	7			0		Y	0	PH1		0						1A
BGB95	302	FILL OF LINEAR SLOT	32	7		Y	0	ULN	Y	0	MTT		0						1B
BGB95	308	POSS BURNT LAYER	10	7			0		Y	0	TTH		0						2A
BGB95	312	LAYER	146	19		Y	0	MTC,PH1,ULN	Y	0	TTH		0					(*)	1B
BGB95	313	FILL OF L/S GULLY CO	51	14		Y	0	MTP	Y	0	TIB,AXI		0						3
BGB95	315	LAYER	142	25	1	Y	0	SCP	Y	0	HUM,FEM,MTC		0		EQU,TTH	CHIK,ULN GSZE,ULN			3
BGB95	319	POSSIBLE SURFACE	515	56	1	Y	1	MAN,PH1,ULN,MTC,TTH	Y	0	RAD,MAN,TIB,MTT	Y	0	INN		GOOS,CMC BIRD,TIB	VER	LARGE FISH VERT,POSS DUCK	4

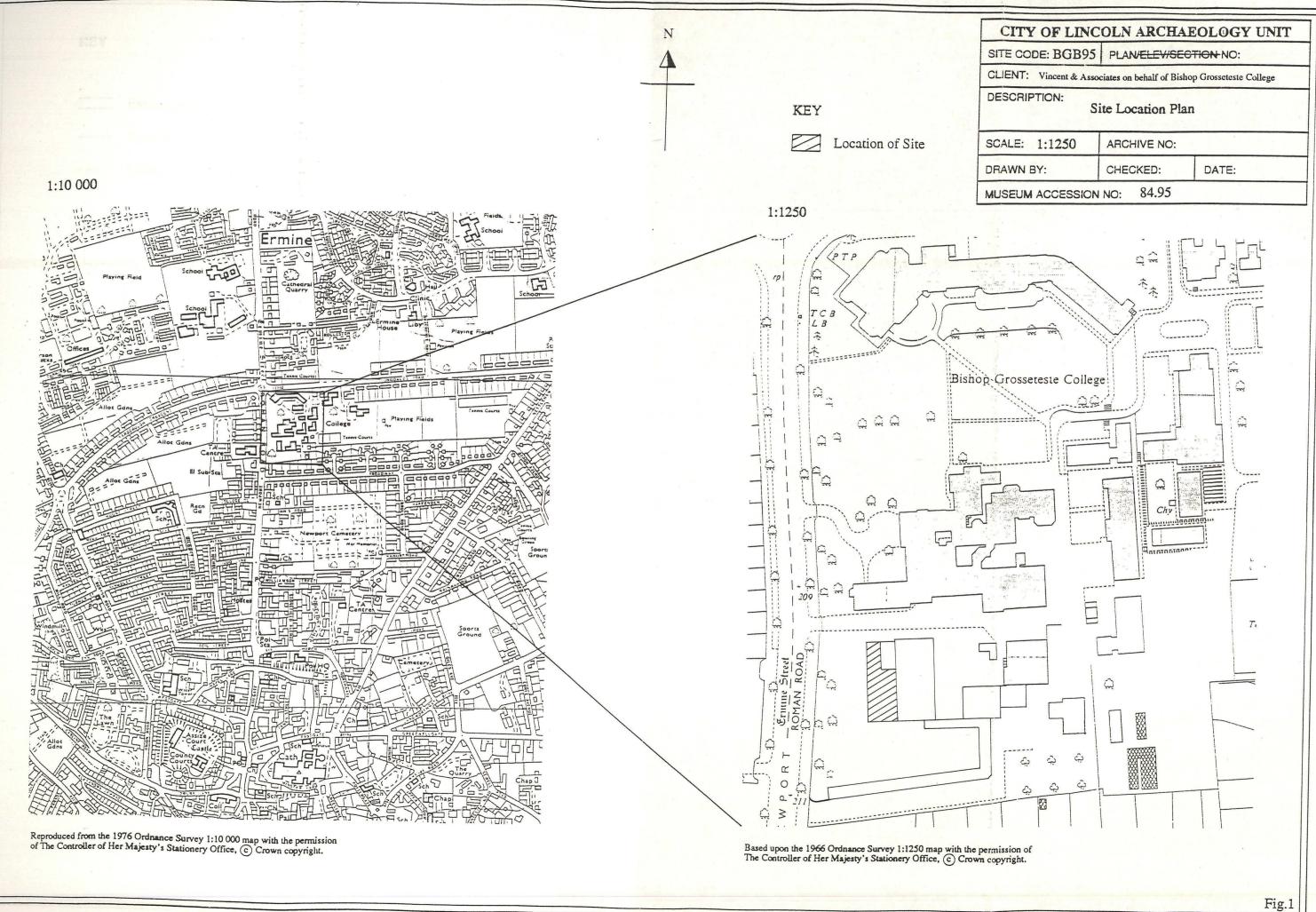
sitecode	con	feature type	wt g.	frag nos	no. meas urable	cow	cattle tooth	cattle bones	S/G	S/G tooth	sheep/goat bones	pig	pig tooth	pig bones	others	bird	fish	comments	phas
paper	220	7 (0 11141)	27		urable		row	110		row			row						100
BGB95	320	L/S WALL	27	4		Y	0	HC		0			0						2B
BGB95	321	FILL	2	1			0		Y	0	PH2		0						4
BGB95	322	LAYER	1728	160	1	Y	0	PH1,INN,MTT,TIB,HUM,	Y	1	MAN,MTC,MTT,FEM,INN	Y	0	MTP,RAD,	EQU,MAN			HORSE JAW WITH	3
								SCP,CAL,MAN,PH2			ATL, SCP, SKL, HUM, TIB,			MTC, TTH	MPL			TEETH	
											TTH								
BGB95	323	LAYER	61	6		Y	0	MAN	Y	0	TIB		0						4
BGB95	325	POSS WALL	153	12		Y	0	SCP	Y	0	AXI,TTH	Y	1	MAX	FEL, FEM				1
BGB95	327	FILL OF ROB	360	30		Y	0	ATL,AST,PH1,PH2,MTC,	Ý	0	TIB,INN,HYD,MTT,TTH	•	0	WII LEE	EQU,TIB				4
DODYS	321	TRENCH	300	30		(1)	U	TTH	ı	V	116,1110,1110,1111,1111		U		EQU, HB				4
DODOS	220		122	0		V	0		Y	0	Mart Art		0						an
BGB95	329	MORTAR FLOOR	133	8		Y	0	CAL,SCP			MTT,ATL		0			120124-00-000-000			2B
BGB95	330	COBBLED	405	12		Y	0	PH1,CQ,TTH	Y	0	TIB,PH1	Y	0	HUM	EQU MAN	BIRD,TMT		EQU MAN WITH	1B
		SURFACE																TEETH	
BGB95	331	FILL POSS	4	1			0		Y	0	INN		0						4
		WHEEL RUT																	
BGB95	336	FILL	23	3		Y	0	MAN,PH1	Y	0	MTC		0						4
BGB95	338	FILL	18	1		Y	0	SCP		0			0						4
BGB95	341	FILL	2	1			0			0			0						4
BGB95	342	POSS FLOOR	398	37		Y	0	MAN,PH1,HUM,CAL,AXI,	Y	0	HUM,MTC,TTH		0		FEL, TIB			RED DEER TINE	2B
		SURFACE						MTC,SCP							CER,ANT			THE PROPERTY OF	20
BGB95	344	FILL	361	67	2	Y	0	PAT,MTC,MAN,FEM,SKL,	V	0	SKL,MTT,RAD,TIB,SCP,	Y	0	CAL, HUM	ODIC, IIII	CHIK, TIB			4
DGD73	544	TILL	301	07	-		U	TTH		O	SKL,AXI,INN,TTH		U	Crib, How		GOOS,PH1,			-
								1111			DKL,AM,IIVIV, I III					TMT,COR			
BGB95	345	LAYER	18	1		Y	0	CAL		0			0			INII,COR			2
	346	LAYER	1134	79	2	Y	1	MAN, TIB, INN, HC, SKL,	Y	1	MAN,MTC,TIB,MTT,PHI,	Y	0	LMV	FEL, FEM,	CHILL TID		GOOGE ADVIOUR DAD	3 2B
BGB95	340	LAIEK	1134	19	2	1	1		1	1		1	U	LIVIV		CHIK,TIB		GOOSE/DUCK RAD	2B
								MTC,HUM,PH2,PH3,SCP,			TTH				MTP	BIRD,RAD			
Danes		1	50					TTH	.,		N error								
BGB95	347	LAYER	53	2	2		0		Y	0	MTT		0	mm					2A
BGB95	352	LAYER	1324	72	4	Y	0	MAN,TIB,MTT,MTC,AST,	Y	3	MAN, SKL, RAD, TIB, MTT,	Y	0	FEM,TRV,	EQU,MTC	CHIKZ,TMT			2B
								PH1,PH2,ULN,FEM			MTC,SKL,HC,TTH			TTH		GULZ,ULN			
BGB95	353	LAYER	31	5		Y	0	SKL	Y	0	MTT		0			CHIK, COR			2B
BGB95	354	FILL	27	5			0			0			0						1B
BGB95	355	FILL	13	3			0		Y	0	FEM		0						2B
BGB95	356	L/S FEATURE	22	1		Y	0	ATL		0			0						1B
BGB95	357	FILL	11	2			0		Y	0	FEM		0						1B
BGB95	358	FILL	24	2		Y	0	TTH	Y	0	TIB		0						4
BGB95	359	LAYER	142	24	2	Y	0	TIB	Y	0	MTC,MTT,FEM	Y	0	TTH					2B
BGB95	361	L/S FEATURE	13	3	_		0			0			0						1B
BGB95	364	L/S	21	2	1	Y	0	AST		0		Y	0	AST					2B
DGD/S	304	FOUNDATIONS	21	-	•	•	0	7101		U		•		1101					20
BGB95	365	FILL	1251	126	6	Y	0	SCP,INN,AXI,PH1,CAL,	Y	1	SKL,MTC,MAN,HUM,AST	Y	0	LMV,SCP		GOOS,CMC		PATH COW PHI,	2B
DGD93	303	LILL	1231	120	O	1	U		1			,	U	LNIV,BCI		GOOD, CIVIC			213
								RAD,TIB,PH2			,PH1,AXI,INN,MAX,MTT,							YOUNG LAMBS	
Danes	2.40										SCP,RAD,TTH								200
BGB95	368	WALL	9	3	_		0		Y	0	PH1		0						2B
BGB95	369	FILL	155	27	2	Y	0	HUM	Y	0	TIB,SCP,MTC,MAN	Y	0	ULN,INN		CHIKZ,TMT	VER		2B
		a constant		-			-									BIRD,COR		No.	-
BGB95	370	LAYER	278	33	1	Y	0	MTC,ATL	Y	1	SKL,MTC,TIB,MAN		0					*	2B
BGB95	373	LAYER	417	31		Y	0	FEM,CAL,PH2,RAD,SKL,	Y	0	MAN,PH1,MTP,HUM		0						3
								TTH											
BGB95	374	MORTAR	188	12		Y	0	MTT,PH1,CAR	Y	0	TIB,ATL,MTT,SKL,TTH		0					NEONATE SHEEP	2A
		FEATURE														r			
BGB95	375	POSS WALL	123	14		Y	0	MTT	Y	0	MTT,MAX,TTH	Y	0	MAX	EQU,INC				2B

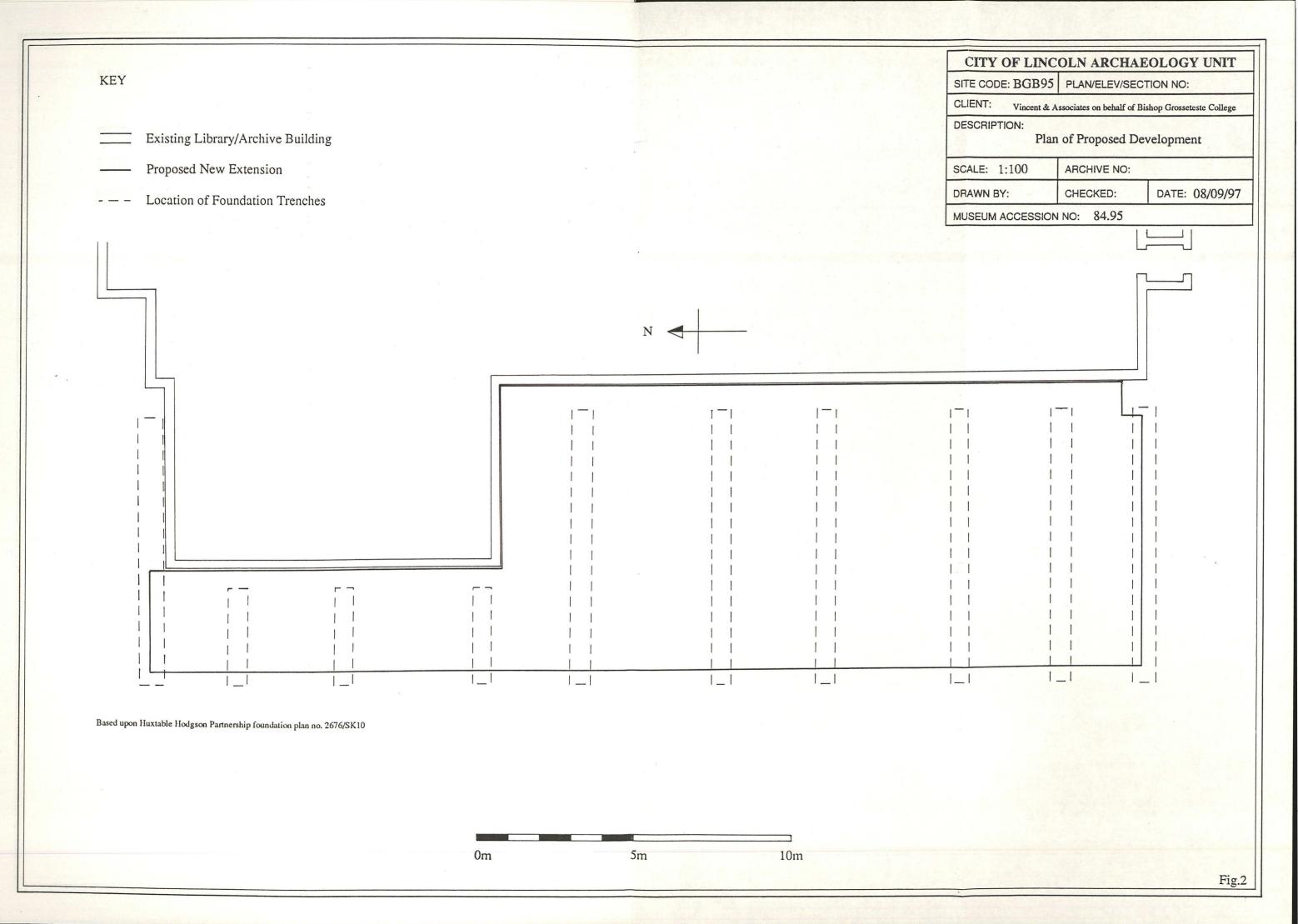
sitecode	con	feature type	wt g.	frag nos	no. meas urable	cow	cattle tooth row	cattle bones	S/G	S/G tooth row	sheep/goat bones	pig	pig tooth row	pig bones	others	bird	fish	comments	phas
BGB95	378	POSS FOUNDATIONS	1128	32	3	Y	1	MAN,MTT,TIB,CQ,SCP, HUM,MTC	Y	0	MTC,SKL	Y	0	SKL	EQU,HUM				2B
BGB95	379	LAYER	3257	315	6	Y	0	AST,MTC,RAD,MTT,HU M,TIB,INN,PH1,PH2,PH3, SCP,CAL,MAN,FEM,TTH	Y	3	MTC,RAD,TIB,HUM,INN, PH1,SCP,FEM,INN,MTT, MAN,ULN,SKL,AXI,MAX, TTH	Y	1	MAN,SCP, INN,HUM, TTH	EQU,PH3, MTT,TRV, FEM,TTH	GOOS,RAD CHIK,TIB, FEM BIRD,HUM, FEM		SHEEP SMALL	2A
BGB95	381	LAYER	1505	125		Y	1	PH1,PH2,SCP,MAN,MTT, ULN,SKL,INN,FEM,CAL, TIB,MTC,RAD,TTH	Y	0	FEM,HUM,MTC,MTT, AST,PH1,RAD,ULN,HYD, TTH	Y	0 .	MTC,MAX, ULN	CAN,INN	CHIK,TIB CHIKZ,TMT		CALF	2B
BGB95	384	FILL	84	6		Y	1	MAX	Y	0	TIB		0						2A
BGB95	385	FILL	282	37		Y	0	MTT,TIB,CAR,PH2,INN, TTH	Y	2	MAN,PHI,INN	Y	0	INN		CHIK,HUM BIRD,TIB			2B
BGB95	386	FILL	1355	100	3	Υ	2	MAN,MTT,ULN,INN,ATL, SCP,HUM,TIB,TTH	Y	2	MAN,MTC,TIB,INN,MTT, SKL,HUM,SCP,PH1,RAD, TTH	Y	0	TRV,MTP	EQU,TTH FEL,INN, HUM	CHIK,FEM GSZE,HUM			3
BGB95	388	LAYER	91	13	1	Y	0	AST, HUM, SCP	Y	0	RAD,TTH	Y	0	TTH					3
BGB95	391	FILL	546	48	2	Y	1	MAN,INN,MTT,CEV,SCP, ULN,RAD	Y	1	MAN,RAD,HUM,SKL		0				FISH		2B
BGB95	392	FILL	214	11		Y	0	RAD,MTT	Y	0	TIB		0		EQU,MPL				3
BGB95	393	FILL/LAYER	1156	138		Y	2	MAN,CQ,SCP,MTP,FEM, SKL,CAR	Y	4	MAN,SCP,HUM,HC,SKL, PH1,PH2,RAD,TIB,MAX, INN,MTC,MTT,TTH	Y	0	MAX		BIRD,ULN	FISH		2B
BGB95	394	FILL/LAYER	907	116	3	Y	0	INN,MTC,MTT,PH1,SCP, RAD,ULN,CAL,TTH	Y	2	MAN,MAX,ATL,SCP,HC, TIB,MTT,SKL,MTP,TTH	Y	0	ULN,TIB, SKL,LMV		CHIK,INN, LSA,COR GOOS,HUM BIRD,ULN			2A
BGB95	402	FILL/DUMP	522	36		Y	1	MAX,TIB,SKL,TTH	Y	0	SKL,MAX,RAD,PH3	Y	0	SKL	CAN, INN	BIKD, OLN		SHEEP SKL POLLED	2A
BGB95	403	FILL/DUMP	136	19	1	Y	0	PH1,RAD,TTH	Y	1	MAN,SKL,PHI,MTC,MTT, INN.TTH		0	OKL	CAN,IIVIV	CHIK,INN	VER	SHEEF SKL FOLLED	2A
BGB95	404	LAYER	150	22	1	Y	0	MAN	Y	0	AST,TIB,TTH	Y	0	MAN					2B
BGB95	405	LAYER	208	22	2	Y	0	MTT,TTH	Y	0	TIB,MTT	-	0						2B
BGB95	407	LAYER	274	23		Y	0	MTT,TIB,CAR,TTH	Y	0	RAD, HUM, MTT, FEM		0						1A
BGB95	408	GRAVE FILL	7	3			0	According to a contract of the		0			0						1B
BGB95	412	FILL	418	66	1	Y	0	SCP,PH2,MAN,CAR,TTH	Y	1	MTT,MAN,TIB,SCP,ATL, MTC,SKL,TTH	Y	0	FIB,SKL, MAN,TTH	ORC,RIB				2A
BGB95	420	FILL	203	15		Y	0	INN,SKL,TTH		0		Y	0	TTH					2A
BGB95	423	FILL	13	3		Y	0	CAR,SKL		0			0					CALF	1B
BGB95	424	METALLED SURFACE	170	8		Y	0	MTT,TIB,TTH	Y	0	RAD		0						1A
BGB95	425	BURNT CLAY SURFACE	30	7			0		Y	0	MAN,SCP		0						2B
BGB95	427	PH FILL	5	2			0			0			0						2A
BGB95	429	PH FILL	9	5			0		Y	0	MTC		0						2A
BGB95	431	FILL	1569	65	1	Y	2	MAN,MTC,MAX,ULN, ATL,PHI,HUM,MTT,TIB, INN,AXI,CAR,TTH	Y	0	INN,TIB,PHI,SCP,MTT	Y	0	TRV,CEV, MTC,SKL, MAN,RIB,		CHIK,ULN BIRD,SKL			2A
BGB95	437	PH FILL	5	4			0			0			0	TTH		ž.			2.4
BGB95	441	PH FILL PH FILL	2	1			0			0			0						2A
נפסטט		THE CHIE	-	1			U			Ü			U						2A

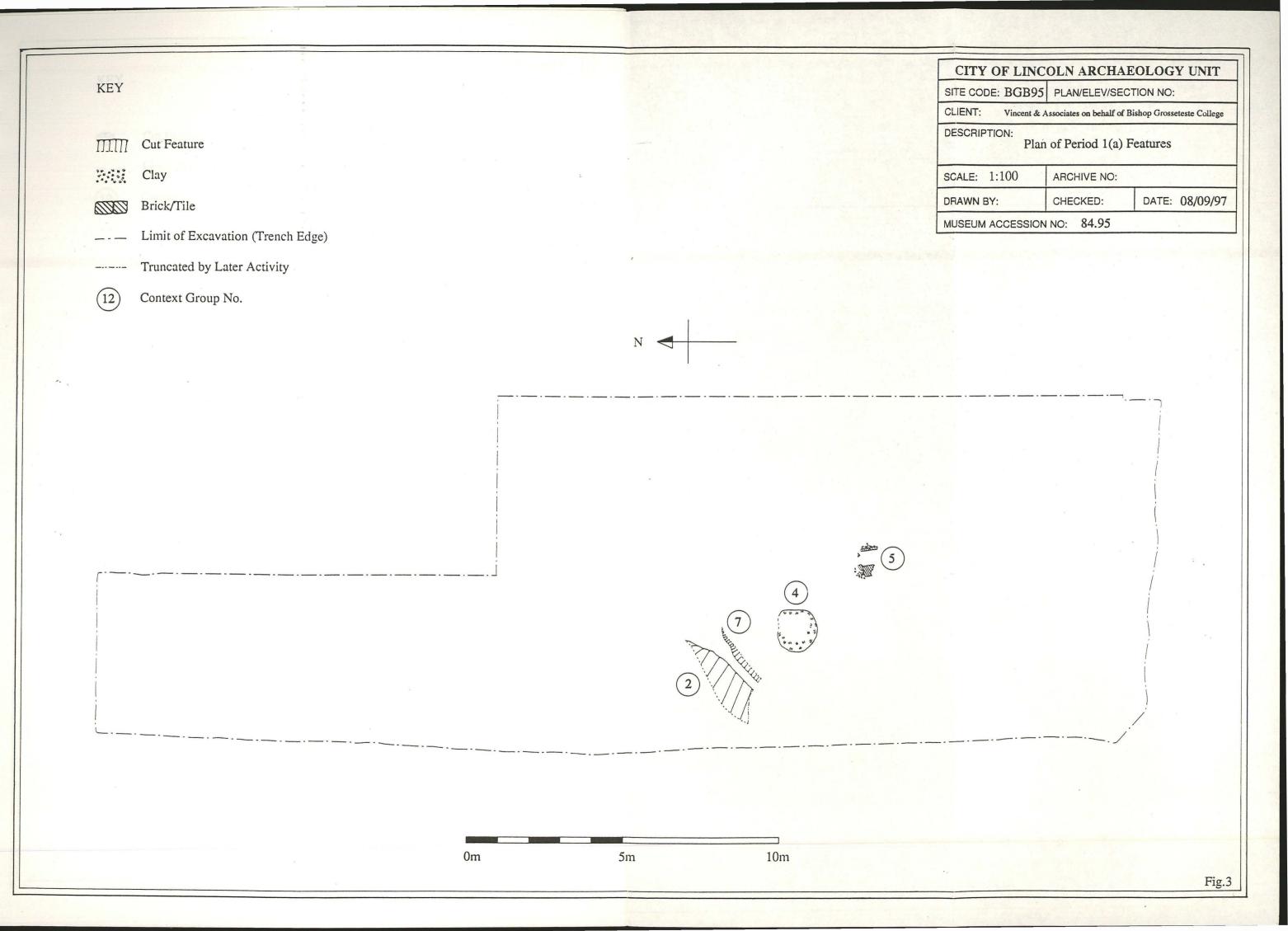
sitecode	con	feature type	wt g.	frag nos	no. meas urable	cow	cattle tooth	cattle bones	S/G	S/G tooth	sheep/goat bones	pig	pig tooth	pig bones	others	bird	fish	comments	phas
BGB95	444	STONE FILL	78	20	1	Y	row 0	SKL,TTH	Y	row 0	МТС,РАТ,РН1		row 0		CAN.LMV	CHIK,TMT			2A
BGB95 BGB95 BGB95	449 450 459	PH FILL PH FILL PH FILL	21 96 2	4 10 2		Y	0 1 0	MAN		0 0		Y	1 0 0	MAN		BIRD,INN			2A 1B 2A
BGB95 BGB95	461 473	PH FILL FILL	13 36	1		Y	0	PH1	Y	0	ATL.MTT.TIB		0						2A 1B
BGB95	474	FILL	27	3			0		Y	0	RAD		0						1B
BGB95	475	FILL	25	1		Y	0	TTH		0			0						2A
BGB95	477	METALLED SURFACE	82	12	1		0		Y	1	RAD,TIB,MAX	Y	0	RAD		СНІК,ТІВ		PIGLET	1A
BGB95	478	DUMP/SURFACE	252	7		Y	0	MAN,PH1		0			0						1B
BGB95	479	DUMP/SURFACE	1334	86	1	Y	1	MAN,FEM,HUM,PH1,PH2, PH3,MTC,HC,SCP,INN	Y	2	MAN,HUM,INN,RAD,MT T,FEM,TTH	Y	0	TIB,MAN	EQU,MAN ,RAD,TTH	BIRD,LSA			1A
BGB95	480	DUMP/SURFACE	92	11			0		Y	0	TIB,RAD,MTT,PH1		0						1B
BGB95	483	DUMP/SURFACE	95	3			0		Y	0	RAD		0		EQU,PH1			FUSED 1ST ABD 2ND PHAL OF EQU	1B
BGB95	484	DUMP/SURFACE	611	63	1	Y	0	AST,ATL,MAX,SKL,TTH	Y	1	MAN,MAX,SCP,TIB,SAC, MTT,HUM,TTH	Y	1	MAN,TTH					1B
BGB95	485	DUMP/SURFACE	106	12		Y	0	FEM		0			0		EQU,MTP				1B
BGB95	491	LAYER	99	10		Y	0	PH1,HUM	Y	0	RAD	Y	0	RIB	CAN,ATL				1B
BGB95	492	METALLED SURFACE	67	2		Y	0	LMV		0			0						1A
BGB95	495	LAYER	44	8		Y	0	PH2	Y	0	TIB,TTH		0			CHIK.FEM			1B
BGB95	498	FILL	623	19		Y	1	MAN,INN,PH1,RAD	Y	1	MAN,TTH		0						1B
BGB95	509	PH FILL	34	2			0		Y	1	MAN,MTT		0						2B
BGB95	511	L/S FEATURE	81	8		Y	0	INN,SKL	Y	1	MAN		0			CHIK, TMT			2B
BGB95	513	LAYER	18	1			0			0			0						1B
BGB95	514	LAYER	294	21	1	Y	1	MAN,MTC,HUM,INN	Y	1	MAN,INN,RAD,TIB,MTC, MTT,TTH		0						1B
BGB95	515	WALL	26	6		Y	0	PH1	Y	1	MAN		0						1B
BGB95	516	FILL	149	9		Y	0	AXI,TTH	Y	0	TIB,HUM,FEM		0						4
BGB95	524	DUMP/POSS FILL	519	53	2	Y	0	MTC,SKL,PH1,INN,HUM, TIB	Y	4	MAN,MAX,MTT,SKL, RAD,HUM,INN,FEM	Y	0	MTT,HUM		CHIK,FEM BIRD,TIB			2B
BGB95	529	FILL	152	21	1	Y	0	SKL,TTH	Y	0	FEM,MTC,TIB,PH1	Y	0	MTT		GOOS,PH			2B
BGB95	542	LAYER	112	5	1	Y	0	PH1,FEM	Y	0	TIB		0						1A
BGB95	543	PITCHED L/S FOUNDATION	1	1			0			0			0						1A
BGB95	545	DUMP	46	7			0			0			0						1B
BGB95	546	LAYER/FILL	21	2			0			0			0						2A
BGB95	547	FILL	193	8		Y	0	INN,AXI,SKL,HUM	Y	0	INN		0						2B
BGB95	550	BURNT LAYER=300	5	3			0			0			0			BIRD,FEM			1A
BGB95	557	LAYER	15	3			0			0			0	~					2A
BGB95	567	FILL	23	1		Y	0	CAL		0			0						2B
BGB95	572	BURNT	3	1		100	0	ncas(RRCR)		0			0			CHIK,ULN			1B
		DUMP/FILL														WAY THE PERSON DISTRICTS OF THE			
BGB95	578	LAYER	16	9			0			0			0		MAN, TIB			BABY TIBIAE	1B
BGB95	580	LAYER	48	4		Y	0	TIB		0			0			1			4
20073	200			9.00		•	7	990275774		121									

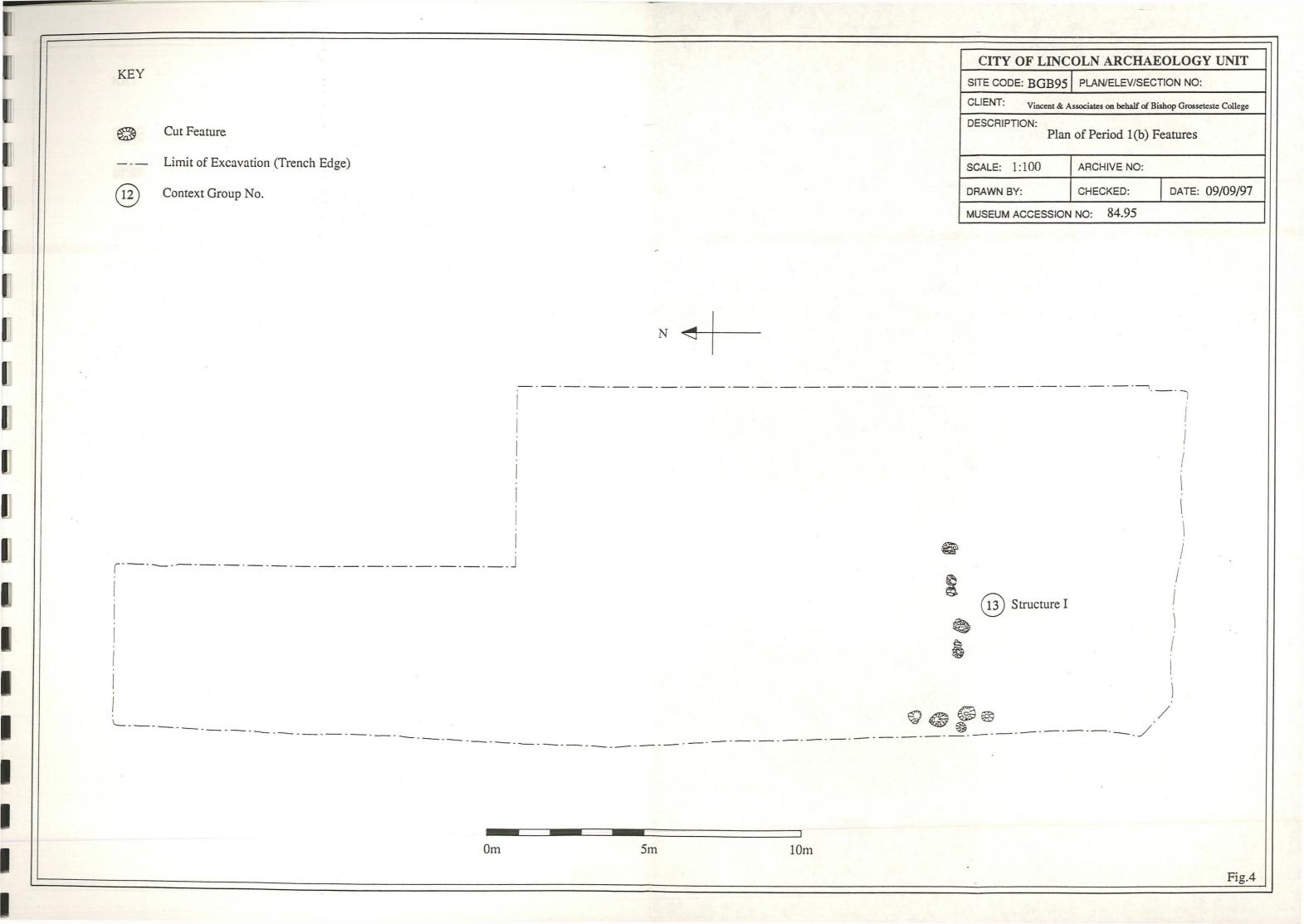
sitecode	con	feature type	wt g.	frag nos	no. meas	cow	cattle tooth	cattle bones	S/G	S/G tooth	sheep/goat bones	pig	pig tooth	pig bones	others	bird	fish	comments	phas
					urable		row			row			row						
BGB95	582	DUMP/POSS FILL	1	1			0			0		Y	0	TTH					4
BGB95	585	PH FILL	12	2			0			0			0						2A
BGB95	586	STONE	113	9			0		Y	0	HUM	Y	0	SCP	EQU,PH1			HUMAN BONES -BABY	1A
		SURFACE													MAN, RAD				
															,ULN,FEM				

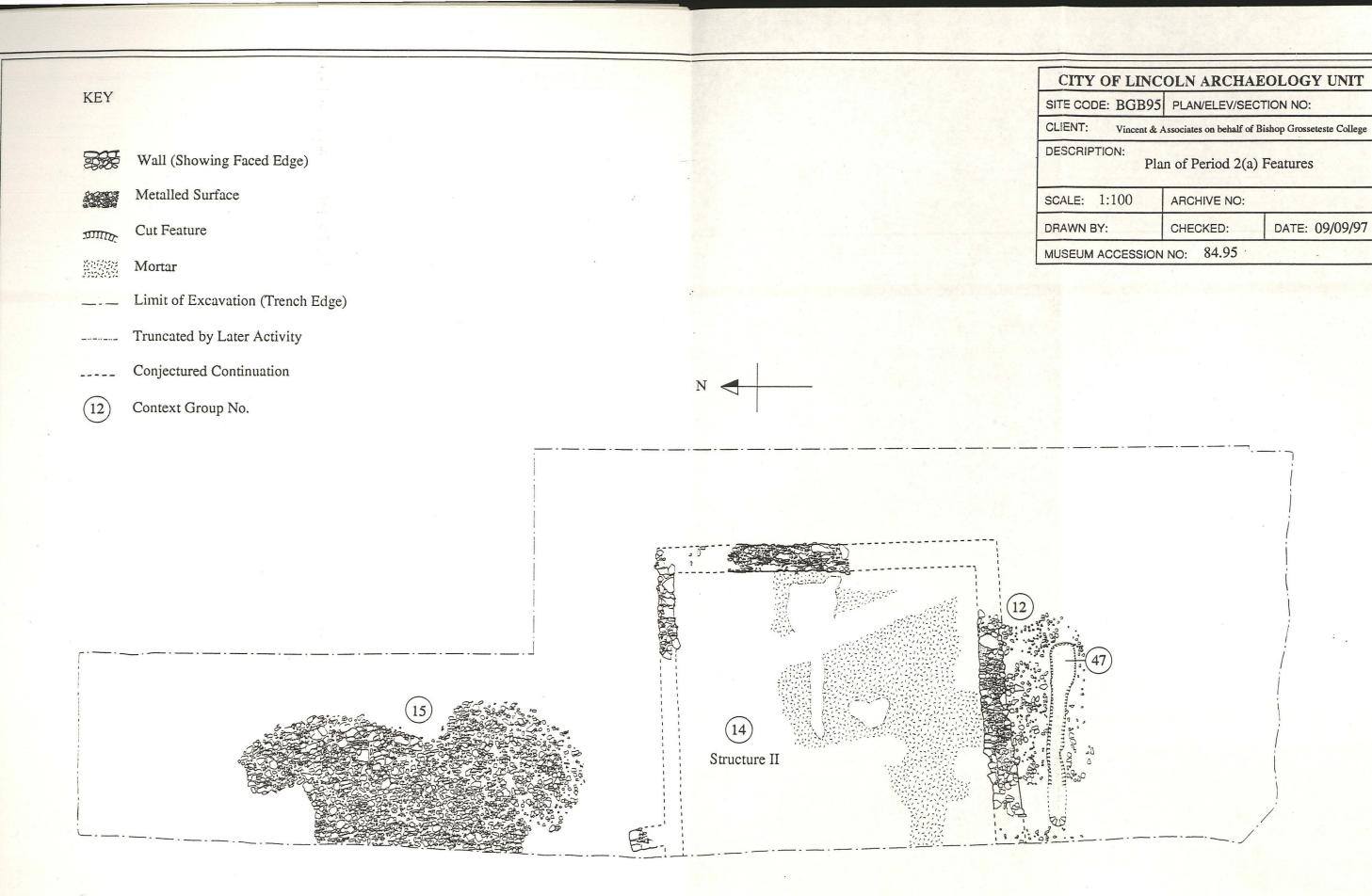
## Illustrations





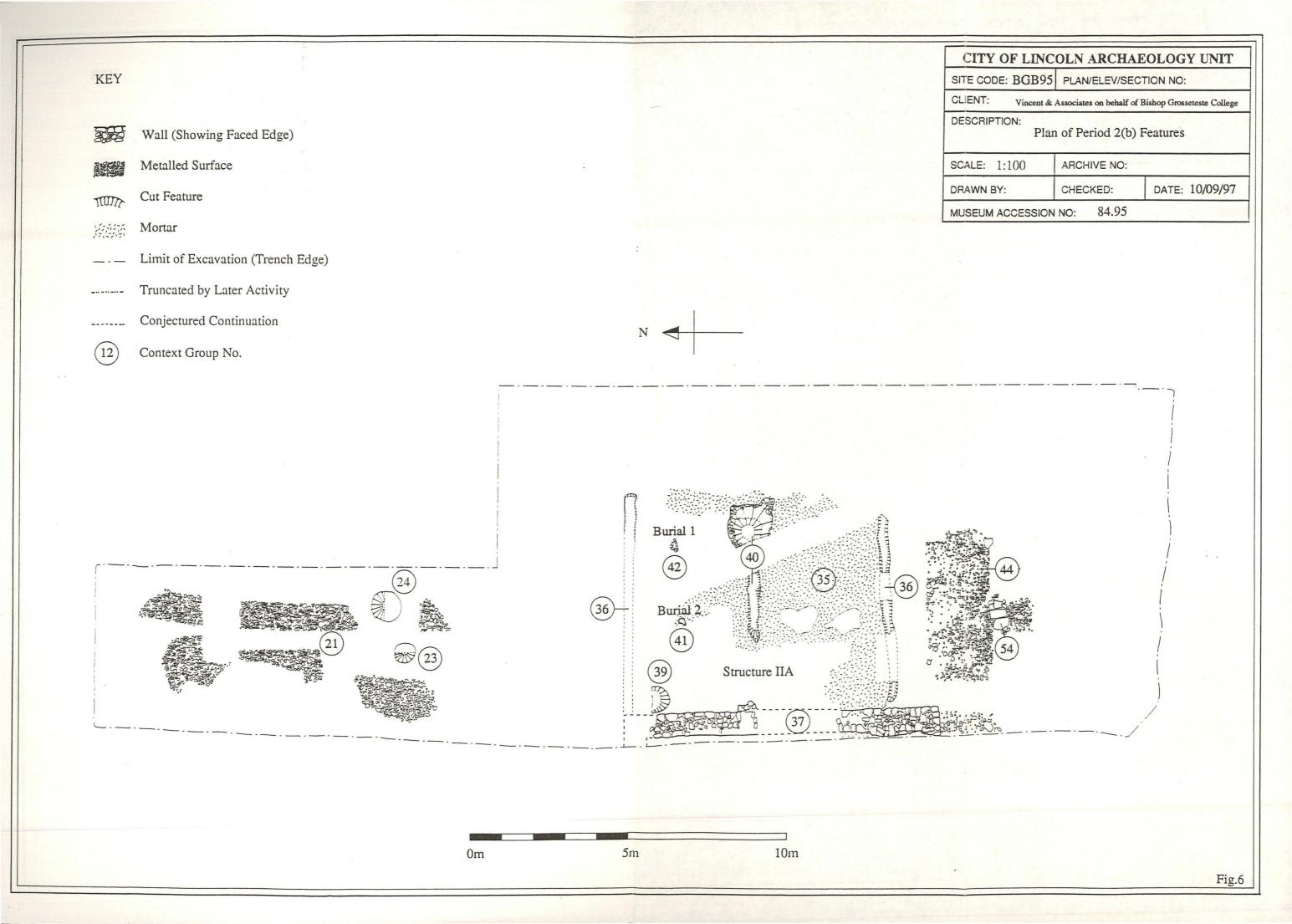






5m

10m



CITY OF LINCOLN ARCHAEOLOGY UNIT KEY SITE CODE: BGB95 PLAN/ELEV/SECTION NO: Vincent & Associates on behalf of Bishop Grosseteste College DESCRIPTION: Limestone Feature amo Cut Feature SCALE: 1:100 DRAWN BY: Limit of Excavation (Trench Edge) Conjectured Continuation Context Group No. (12) 61 (101)

5m

0m

<u>59</u>

Structure III

10m

Plan of Period 3(a) Features ARCHIVE NO: DATE: 10/09/97 CHECKED: MUSEUM ACCESSION NO: 84.95

Fig.7



Wall (Showing Faced Edge)

Metalled Surface

Cut Feature

\_\_\_\_ Earlier Feature Continuing in Use

\_\_\_ Limit of Excavation (Trench Edge)

---- Conjectured Continuation

(12) Context Group No.

CITY OF LINCOLN ARCHAEOLOGY UNIT

SITE CODE: BGB95 PLAN/ELEV/SECTION NO:

CLIENT: Vincent & Associates on behalf of Bishop Grosseteste College

DESCRIPTION:

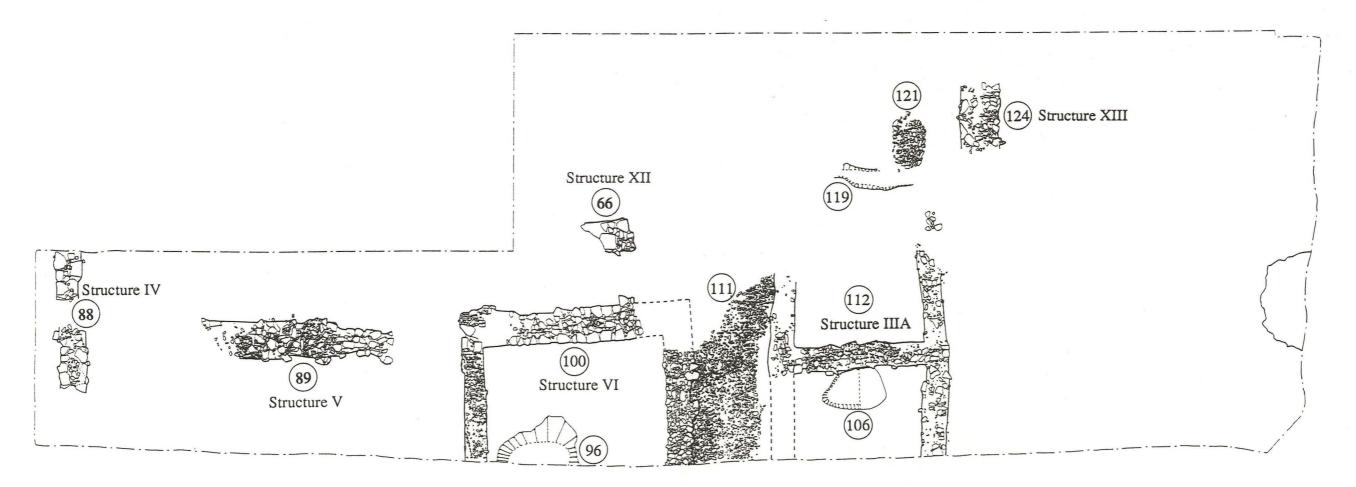
Plan of Period 3(b) Features

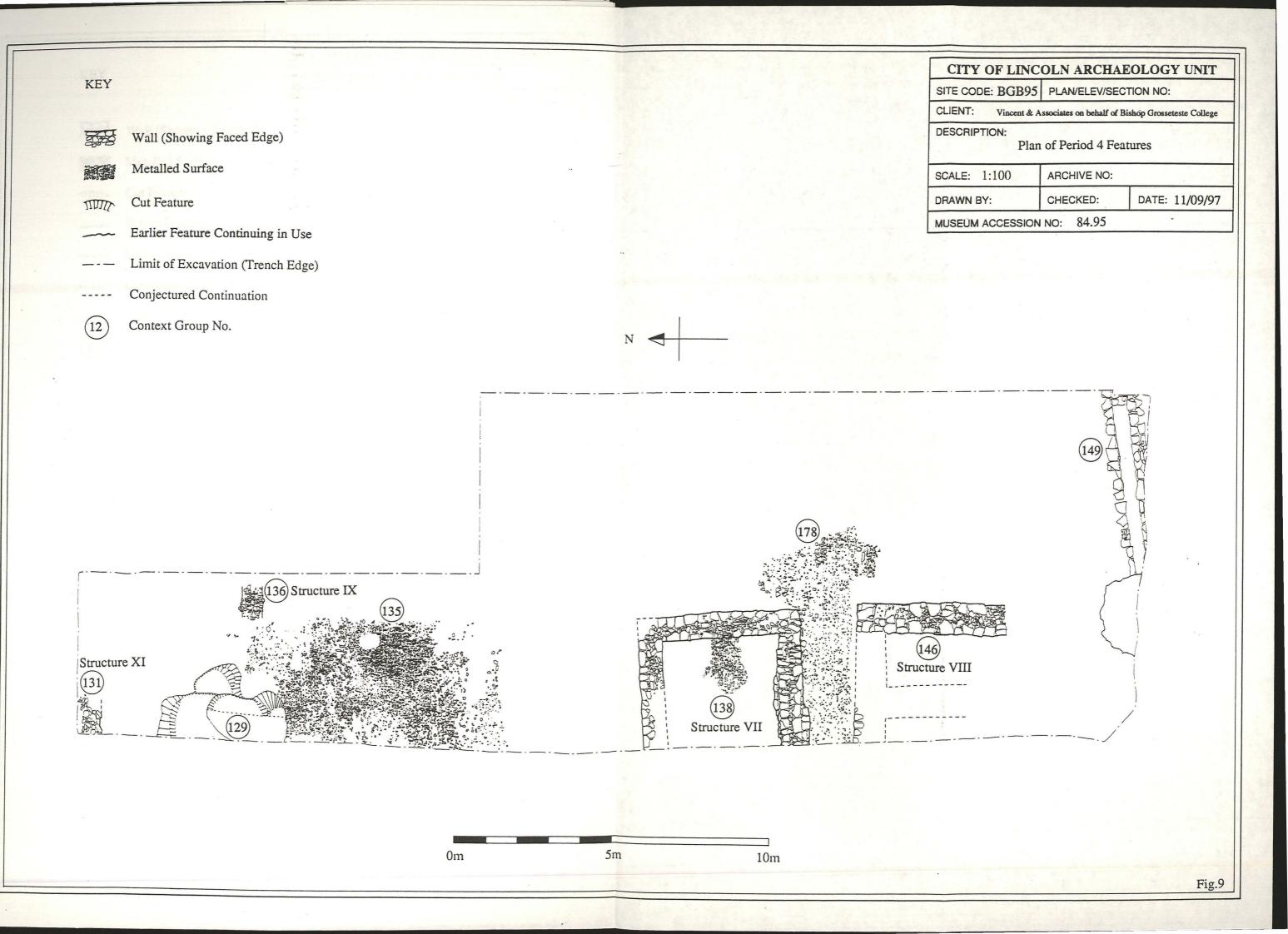
SCALE: 1:100 ARCHIVE NO:

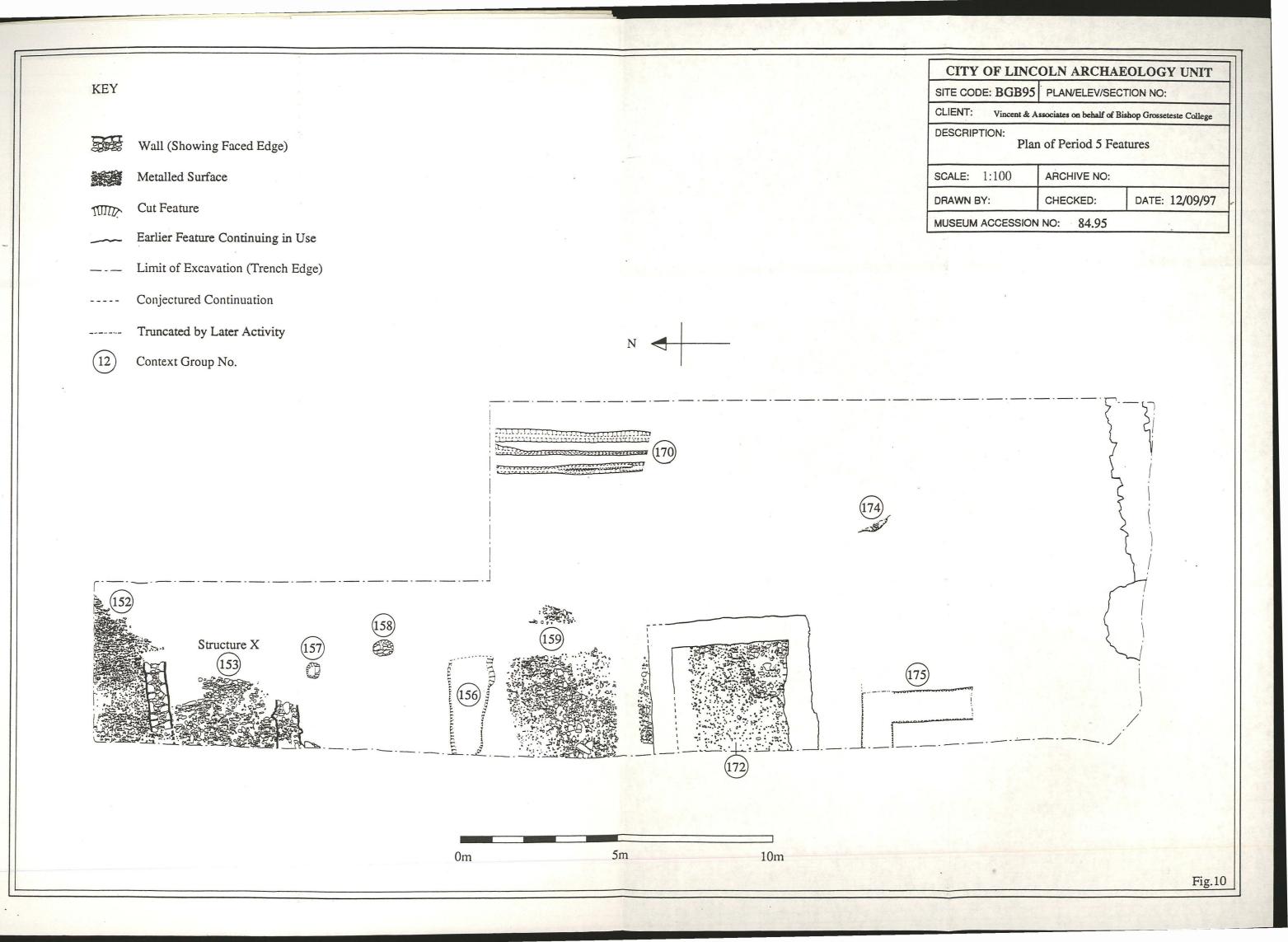
DRAWN BY: CHECKED: DATE: 11/09/97

MUSEUM ACCESSION NO: 84.95









KEY

mann Cut Feature

—- Limit of Excavation (Trench Edge)

(12) Context Group No.

CITY OF LINCOLN ARCHAEOLOGY UNIT
SITE CODE: BGB95 PLANELEV/SECTION NO:

CLIENT: Vincent & Associates on behalf of Bishop Grosseteste College

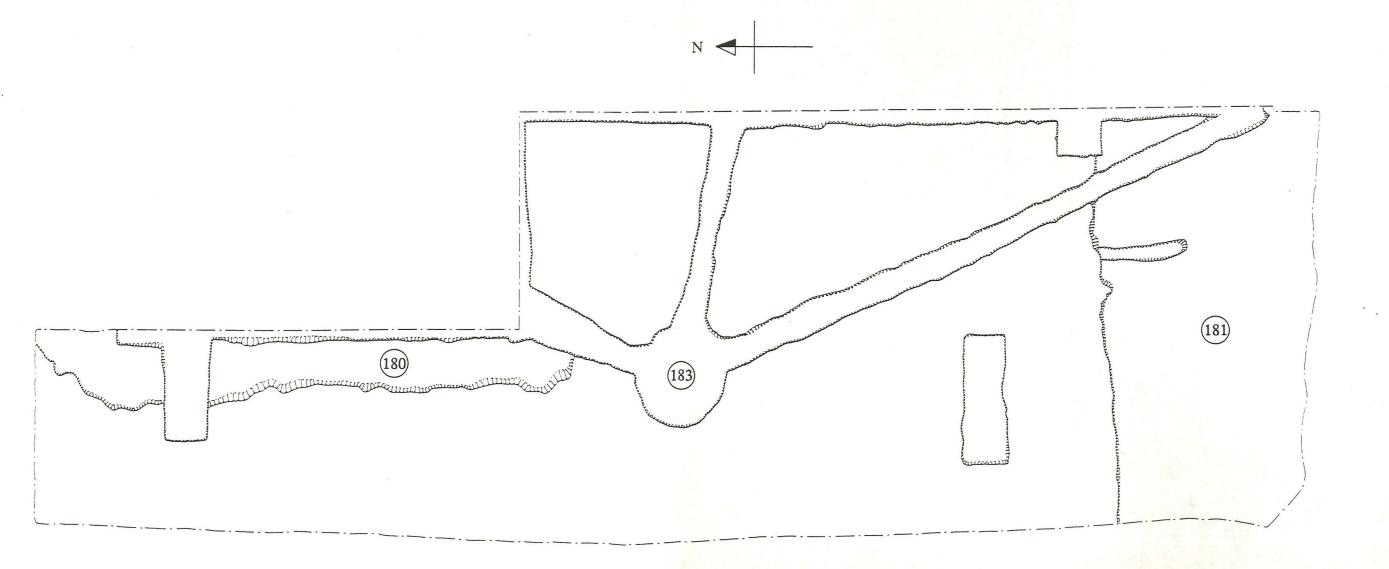
DESCRIPTION:

Plan of Period 6 & 7 Features

SCALE: 1:100 ARCHIVE NO:

DRAWN BY: CHECKED: DATE: 12/09/97

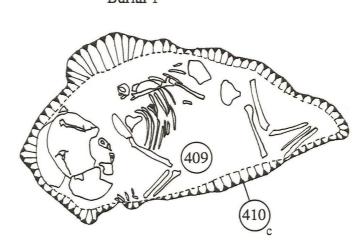
MUSEUM ACCESSION NO: 84.95



# CITY OF LINCOLN ARCHAEOLOGY UNIT SITE CODE: BGB95 PLANELEV/SECTION NO: CLIENT: Vincent & Associates on behalf of Bishop Grosseteste College DESCRIPTION: Plan of Infant Burials SCALE: 1:5 ARCHIVE NO: DRAWN BY: K.W. CHECKED: DATE: 13/01/97 MUSEUM ACCESSION NO: 84.95

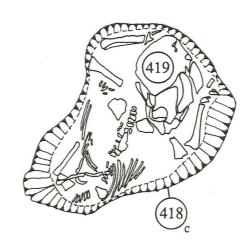
Burial 1





Burial 2





0m

0.5m