
CONTENTS

Acknowledgements	2
Executive Summary	3
1. Introduction.....	4
2. Methodology	5
2.1 Project Design	5
2.2 Desk-Based Study	5
2.3 Field Survey	5
2.4 Gazetteer of Sites	5
2.5 Archive	6
3. Topographical and Historical Background.....	7
3.1 Location and Topography	7
3.2 Geology.....	7
3.3 Historical Background	7
4. Assessment of Archaeological Potential.....	9
4.1 Desk-Based Study	9
4.2 Field Inspection	10
5. Discussion.....	11
5.1 Desk-Based Study	11
5.2 Field Inspection.....	11
6. Archaeological Impact and Recommendations	12
6.1 Impact	12
6.2 Recommendations.....	12
7. Site Gazetteer	13
8. Bibliography	14
8.1 Primary Sources	14
8.2 Published Cartographic Sources	14
8.3 Secondary Sources	14
Appendix 1: Project Brief	16
Appendix 2: Project Design.....	17
Illustrations.....	23
Figure 1 Location of Keer Bridge	
Figure 2 Plan of Keer Bridge study area	

ACKNOWLEDGEMENTS

LUAU would like to thank Mr N Hupfield of Nicol Thomas Ltd for his assistance and for enabling access to the site.

Thanks are due to the staff of the Lancashire Record Office in Preston, and to Peter Iles of Lancashire County Council Archaeology Service for SMR information. The documentary research and field visit was undertaken by Caron Newman. The report was also compiled by Caron Newman, and edited by Jamie Quartermaine and Rachel Newman. The project was managed by Jamie Quartermaine.

EXECUTIVE SUMMARY

An archaeological assessment was carried out in advance of submission of a planning application on land adjacent to the A6 at Carnforth in Lancashire (centred on NGR SD 5152 7155). The assessment area comprises a rough pasture field bounded to the north by a disused Highways depot, to the east by the A6, to the south by the River Keer and to the west by the west coast main railway line. The work was carried out by the Lancaster University Archaeological Unit on behalf of Nicol Thomas Ltd, and comprised a desk-based study, compiling data from the Lancashire Sites and Monuments Record and the Lancashire Record Office in Preston, as well as a rapid field inspection.

The Sites and Monuments Record contained two sites located in the vicinity of the study area: railway sheds to the south (Site 2) and 15 inhumation burials, of unknown date, within or close to the study area (Site 1). The field inspection showed that the site was fairly low-lying and wet, but that there were no visible archaeological remains.

There is the potential for further burials to be uncovered within the study area, and also for possible peat deposits and palaeoenvironmental remains. It is therefore recommended that a programme of trial trenching be undertaken to explore the subterranean potential of the area.

1. INTRODUCTION

- 1.1 An archaeological assessment was undertaken by the Lancaster University Archaeological Unit (LUAU) on behalf of Nicol Thomas Ltd, in advance of the submission of a planning application on land adjacent to Keer Bridge at Carnforth in Lancashire (centred on NGR SD 5152 7155). The assessment area comprises a rough pasture field, within the parish of Warton with Lindeth, bounded to the north by a disused Highways depot, to the east by the A6, to the south by the River Keer and to the west by the main west coast railway line.
- 1.2 The purpose of the project was to provide an accurate archaeological assessment of the designated area, within its broader context. The survey was to collate existing information on the archaeology of the site and to determine the significance of the archaeological resource.
- 1.3 The desk-based study consisted of a search of existing records held by the Lancashire Sites and Monuments Record (SMR), and the Lancashire County Record Office in Preston (LRO) as well as available secondary sources. Both published and unpublished sources were examined. The desk-based survey and the field inspection were undertaken between 26th May and 30th May 1997.
- 1.4 This report sets out the results of the work as a gazetteer in conjunction with a methodology statement, a brief text description of desk-based and field results, an assessment of the archaeological potential within the study area, and an evaluation of the impact that the development proposals will have upon the archaeological resource, with recommendations for any further archaeological investigation.

2. METHODOLOGY

2.1 Project Design

- 2.1.1 A Project Design (*Appendix 2*) was submitted by LUAU, in response to a request from Nicol Thomas Ltd, for an archaeological assessment of a field next to Keer Bridge, Carnforth, Lancashire (centred on NGR SD 5152 7155). This was designed to meet the requirements of a Project Brief (*Appendix 1*) provided by the Lancashire County Archaeologist.
- 2.1.2 The Project Design provided for an initial archaeological assessment involving a desk-based survey and a rapid field inspection, the results being presented in the present written report. The work has been carried out entirely in accordance with the Project Design.

2.2 Desk-Based Study

- 2.2.1 Existing archaeological information was obtained from the Lancashire Sites and Monuments Record (SMR). Aerial photographs held by Lancashire County Council were examined (1:10,000 verticals, 1988), but these had no relevant information.
- 2.2.2 Manuscript maps and selected other documents were studied in the Lancashire Record Office (LRO) in Preston, along with published antiquarian sources. The availability of manuscript maps in the LRO was limited, comprising only the tithe map of 1846 (LRO DRB 1/195). The enclosure map of 1817 (LRO AE 5/146) was missing, and only the written schedule was available. There was also a document of 1740, which describes the enclosure of 'Warton Miers' for the benefit of the poor (LRO PR 2768/2), but this appears to relate to an area to the west of the study area. A copy of the first edition Ordnance Survey (6 inches to one mile, Sheet 24, 1848) was taken. There were very few documents relevant to the study area. A list of those examined is given at the end of this report.

2.3 Field Inspection

- 2.3.1 A systematic surface inspection of the a 50m wide corridor was undertaken to ensure complete coverage of the ground. The whole of the area subjected to field walking was open pasture and was walked on 20m transects to identify earthworks. All potential archaeological sites were noted and their position related to existing boundaries.

2.4 Gazetteer of Sites

- 2.4.1 The collated information on the site and its immediate environs has been presented in the form of a gazetteer in conjunction with an annotated map at 1:10,000 scale showing the locations of the sites. Locations are given as eight-figure National Grid References

(NGR) where possible. A summary description of each site is provided in conjunction with a reference to the source of the information (SMR, cartographic, documentary, field inspection) with references as appropriate. An assessment has been given of the interpretation and archaeological potential of the site. Other sites within and around the study area, which were considered to be of background relevance, are mentioned in the text with appropriate SMR references.

2.5 Archive

- 2.5.1 A full archive of the desk-based survey and field inspection has been produced to a professional standard in accordance with the current English Heritage guidelines (English Heritage 1991). The archive will be deposited with the County Record Office with a copy of the report given to the SMR. A copy of the archive will also be available for deposition with the National Monuments Record in Swindon.

3. TOPOGRAPHICAL AND HISTORICAL BACKGROUND

3.1 Location and Topography

- 3.1.1 The study area lies in the parish of Warton with Lindeth, although immediately to the south is the parish of Carnforth. The parish boundary follows the course of the River Keer at this point, and it is this which forms the southern boundary of the study area. The bridge, which carries the A6 over the River Keer, was built for the turnpike road in about 1780 (Corry 1825, 33) and is known as Keer bridge. This is one of two bridges with this name, the other lying to the west, carrying the road from Carnforth to Warton.
- 3.1.2 The site is a field under permanent pasture in an area of reclaimed mosslands (Farrer and Brownbill 1914, 161), but the ground conditions are still fairly wet because of its location close to the river. The Ordnance Survey Land Use map (Sheet 724, 1967) shows that there were some deciduous trees on the site in the 1960s. The size and shape of the field has been dictated by the enlarging and straightening of the A6 and the development of the railway in the nineteenth century. At the north end of the site, the land rises forming a substantial bank. This appears to be a natural feature, the continuation of which can be traced to the west of the railway line, where the western end has been partially ploughed away.

3.2 Geology

- 3.2.1 The underlying solid geology of the area is Carboniferous Limestone, however, the character of the study area is formed by drift deposits of glacial sand and gravels along the line of the River Keer, within a larger area of Boulder Clay and Moraine drift deposits (OS Geological Survey 1977).
- 3.2.2 The bank noted at the northern end of the study area, and continuing westwards into other fields, appears to be the remains of an esker, a ridge composed largely of sand and gravel deposited by a stream flowing beneath a glacier near its terminus (Lutgens and Tarbuck 1982, 367). Other possible eskers have been noted to the east of the study area, between the A6 and M6 (pers comm P Iles, Lancashire SMR).

3.3 Historical Background

- 3.3.1 The parish of Warton with Lindeth, and the adjacent parish of Carnforth, were both townships contained within the parish of Warton in the thirteenth century. In addition to Carnforth and Warton with Lindeth, the parish also comprised the townships (or settlements) of Yealand Redmayne, Priest Hutton and Borwick, as well as two chapelries at Yealand Conyers and Silverdale (Baines 1893, 513).
- 3.3.2 At the time of the Domesday Book in 1086, Warton was one of twelve manors which formed the lordship of Austwick held by the Saxon, Torfin (Baines 1893, 514). It became part of the Barony of Kendal, following the grant of the manor to the de Lancaster family in the twelfth century. The parish appears to have been formed

following the granting of the manor to the de Lancasters (Farrer and Brownbill 1914, 151), with Carnforth township added in the early thirteenth century (Farrer and Brownbill 1914, 152).

- 3.3.3 After the death of William de Lancaster in 1246, Warton was given to Walter de Lindsey. The manor then descended to the de Brus family, and eventually became Crown property in the early nineteenth century (Baines 1893, 514).

4. ASSESSMENT OF ARCHAEOLOGICAL POTENTIAL

4.1 Desk-Based Study

- 4.1.1 **Lancashire Sites and Monuments Record:** An examination of the Lancashire Sites and Monuments Record (SMR) revealed only two sites (01 and 02) in and around the study area, which are described in the gazetteer (*Section 6*). A water mill recorded on the SMR (PRN 2749) as located close to Keer Bridge almost certainly refers to the bridge west of the study area, and not to the turnpike bridge. The SMR grid reference locating workers' houses (PRN 4742) close to the study area is incorrect and the site is similarly beyond the study area.
- 4.1.2 The northernmost site (Site 02) lies to the south of the study area and is a brick-built railway shed which stands next to the railway line which linked the Furness and Midland railway lines. The shed was built to house locomotives and dates to 1867.
- 4.1.3 In 1931 fifteen inhumation burials were found during road widening of the A6 (Site 01). The skeletons' legs were crossed at the thighs, and with them were a number of iron objects, which were almost entirely corroded, but were possibly grave goods. The location of the burials was given as 200 yards north of Keer Bridge, and the grid reference places them just to the east of the present course of the road (SD 5041 7161), although this reference is only approximate.
- 4.1.4 **Cartographic and Documentary Evidence:** The field lies in an area of traditional meadow, known as the Launds (Lucas 1744, 40-1). The word Launds comes from Old French meaning woodland pasture (Field 1972, 123), implying that the area was once covered in trees. Because of the low-lying, wet nature of the land, such trees would possibly have been willow and alder.
- 4.1.5 The field comprising the study area is marked as Keer meadow on the tithe map of 1846 (LRO DRB 1/195), as is the field on the opposite side of the road. However, it is likely that both these fields also formed part of the Launds prior to the construction of the railway and the turnpike road, as they appear to form a cohesive area with the surrounding fields which still contained the Launds place-name on the tithe map (LRO DRB 1/195 1846).
- 4.1.6 The field to the immediate north of the study area, and its neighbouring field on the other side of the railway line, are both called Launds Hill meadow, implying that they were once part of the same enclosure. The reference to a hill in the place-name may be taken from the probable esker, which was noted in the field visit.
- 4.1.7 One field on the east side of the A6 was named Carl Pot meadow on the 1846 tithe map (LRO DRB 1/195) and is referred to by Lucas in the eighteenth century (Lucas 1744, 40-1). He explains that the name derived from a large spring called the carlepot. He gives the origins of the name as coming from the Saxon word *ceorl*, meaning peasant, and pot from the round shape of the spring or from the bubbling water resembling the boiling of a pot. Alternatively and perhaps more probably the name originates from carr (Old Norse *kjarr*), meaning marshy land, and pot (Middle English *potte*), meaning a

deep hole or hollow.

- 4.1.8 There is no indication in any of the documentary or cartographic sources that the area was known to have contained ancient burials or settlement, even though gravel extraction had traditionally taken place in the vicinity on a small scale. The Ordnance Survey 1st edition map of 1848 shows a mound next to the river, to the west of the railway line. This may have been a natural feature, such as a moraine deposit, but given the presence of inhumation burials there is also the possibility that it was a burial mound.

4.2 Field Inspection

- 4.2.1 The field is currently laid to grass but is unused for grazing. The surface is rough but there are no indications of any earthworks or other archaeological features. The fields to the immediate west of the railway line were also examined, particularly to assess the survival of a mound marked on the OS 1st edition map (1848) (Site 03). There was no sign of the remains of the mound, but the glacial ridge, or esker, noted both within the study area and to the west of the railway line, had been partially ploughed out at its western end. It is likely that the mound, whether natural or man-made, had also been ploughed out.

5. DISCUSSION

5.1 Desk-Based Study

- 5.1.1 Documentary and cartographic evidence did not reveal any definite archaeological sites within the study area. However, the discovery of burials in the area during the widening of the A6 in 1931 indicates the potential for the presence of other graves.
- 5.1.2 The information on the burials is very limited, and there is little evidence to indicate what date they may be. The presence of iron objects indicates that they may date to any period from the Iron Age onwards, although if the iron objects are grave goods then they probably pre-date the pre-Christian early medieval period as it is unlikely that burials containing grave goods would be Christian.
- 5.1.3 There is evidence that Anglo-Saxon burials were sometimes sited on boundaries (Goodier 1984, 10), and it may be significant that the burials were located close to the River Keer, which was known to have formed the southern boundary to an estate at Warton at least by the time of the Domesday Book in 1086. However, the exact location of the burials is not known, nor is the extent of the burial area. Therefore there is a likelihood that further burials may be contained within the study area.

5.2 Field Inspection

- 5.2.1 There was no indication of the presence of archaeological remains within the study area. However, the site is low-lying and possibly waterlogged and consequently there is the potential for the survival of palaeoenvironmental remains, and there may be peat deposits overlying the glacial sands and gravels. Recent archaeological survey work on the wetlands of North Lancashire has demonstrated the potential of such peat deposits for preserving inorganic archaeological remains (Middleton et al 1995).

6. ARCHAEOLOGICAL IMPACT AND RECOMMENDATIONS

6.1 Impact

- 6.1.1 This assessment has highlighted the potential for archaeological remains within the study area. There is a possibility that burials may be found, and also for the survival of palaeoenvironmental remains.
- 6.1.2 Any burials are likely to be relatively shallow features and therefore would be completely destroyed by the development, as would any other sites not detectable by documentary study or surface inspection.

6.2 Recommendations

- 6.2.1 Current policy dictates that wherever possible identified sites of archaeological importance are preserved *in-situ* as embodied in the Institute of Field Archaeologists Code of Conduct and the Department of Environment Planning Policy Guidance Note 16. The present preliminary assessment, being restricted in its scope, was able to establish areas of archaeological potential but other sites not detectable by documentary study or surface inspection may exist. It is therefore recommended that a programme of archaeological evaluation be undertaken to investigate the archaeological resource and to establish reliably the archaeological implications of the proposed development.
- 6.2.2 A programme of trial trenching is recommended to investigate sub-surface survival within the extent of the study area; it would serve as an exploratory survey technique and would be the most effective means of identifying the location of any graves. The distribution and extent of any trenching programme, however, should be subject to the specific archaeological recommendations of the County Archaeological Officer, whose views should be sought prior to proceeding with any further work on the site.
- 6.2.4 Subject to the results of the proposed evaluation, there may be a requirement, by the County Archaeological Officer, for a further programme of detailed archaeological mitigation recording to anticipate the destruction of the archaeological resource by the development.

7. SITE GAZETTEER

Site number **01**
Site name Keer Bridge
NGR SD 5041 7161
Site type Inhumation burials
Period unknown
Source SMR 2687, documentary (White 1974, 54)

Description

Fifteen inhumations with legs crossed at the thighs, and with unidentifiable associated iron artefacts, found during widening of A6 in 1931.

Assessment

The grid reference is approximate and the site lies within or close to the study area.

Site number **02**
Site name Carnforth
NGR SD 505 711
Site type Railway sheds
Period 1867
Source SMR 4741

Description

Brick-built sheds for housing railway locomotives.

Assessment

The site lies to the south of the study area.

Site number **03**
Site name Eldram's Pasture
NGR SD 5029 7160
Site type Earthwork mound
Period Unknown
Source OS 1st edn 1848

Description

Site of mound shown of unknown origin, possibly natural.

Assessment

The site lies to the west of the study area.

8. BIBLIOGRAPHY

8.1 Primary sources

8.1.1 *Aerial Photographs, Lancashire County Council*

1:10,000 vertical 1988. Run 3888, number 160

8.1.2 *Lancashire Record Office (LRO)*

DRB 1/195 1846 Plan of the Township of Warton with Lindeth in the Parish of Warton and County of Lancaster, J Watson, 5 inches to 20 chains

AE 5/146 1817 Enclosure of Warton Marsh and Wastes (no map)

PR 2768/2 1740 The enclosure of Warton Miers

8.2 Published Cartographic Sources

OS, 1848 6": 1 mile map, *Warton Sheet 24*, 1st edn, Southampton

OS, 1967 1:25,000 map, *Land Use SD47 and SD 57, Sheet 724*, Southampton

OS, 1977 1:625,000 *Geological Survey, South Sheet (Quaternary)*, 1st edn, Southampton

8.3 Secondary Sources

Corry, J, 1825 *The History of Lancashire*, **2**, London

Baines, E, 1893 *The History of the County Palatine and Duchy of Lancaster*, **5**, Liverpool

English Heritage, 1991 *Management of Archaeological Projects*, 2nd edn, London

Farrer, W, and Brownbill, J (eds), 1914 *A History of Lancashire*, **8**, Victoria County Histories of England, London

Field, J, 1989 *English Field Names: a dictionary*, 2nd edn, Gloucester

Goodier, A, 1984 The formation of boundaries in Anglo-Saxon England: a statistical study, *Medieval Archaeol*, **28**, 1-21

Lucas, J, 1744 A Topographical Description of the Parish of Warton, and Some Parts Adjacent in the County Palatine of Lancaster and the Dioces of Chester, 1710-44, in *J Rawlinson Ford and JA Fuller-Maitland (eds)*, Kendal

Lutgens, FK, and Tarbuck, EJ, 1982 *Essentials of Geology*, 3rd edn, Columbus, Ohio

Middleton R, Wells C and Huckerby E 1995 *The wetlands of North Lancashire*, Lancaster Imprints

White, A, 1974 Gazetteer, *Contrebis*, 2, 54

APPENDIX 1
PROJECT BRIEF

APPENDIX 2
PROJECT DESIGN

May 1997

Lancaster
University
Archaeological
Unit

KEER BRIDGE
Nr CARNFORTH

LANCASHIRE

ARCHAEOLOGICAL EVALUATION

Proposals

The following project design is offered in response to a request from Nichol Thomas Ltd,

for an archaeological evaluation in advance of a proposed office and warehousing development at Keer Bridge, nr Carnforth in Lancashire.

1. INTRODUCTION

1.1 An archaeological evaluation is required as a planning requirement in advance of a proposed office and warehousing development at Keer Bridge, nr Carnforth. The site is off the A6 and adjacent to the road bridge over the River Keer. There are a number of archaeological sites potentially within the vicinity of the proposed development, notably the medieval Warton mill on the River Keer, although its precise location is unknown. However, potentially the most significant site is a cemetery which was revealed by the discovery of fifteen skeletons during the widening of the A6 road in 1931. This was reported as being 200yds to the north of Keer Bridge which would place it within the immediate environs of the proposed development. The date of the cemetery is not known but the remains have the potential to be of considerable importance. County Archaeologist has therefore recommended that an archaeological evaluation be undertaken to assess the archaeological potential and sub-surface survival of the affected study area.

1.2 The Lancaster University Archaeological Unit has considerable experience of the evaluation and excavation of sites of all periods, having undertaken a great number of small and large scale projects during the past 15 years. Evaluations have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables. LUAU has the professional expertise and resource to undertake the project detailed below to a high level of quality and efficiency. LUAU and all its members of staff operate subject to the Institute of Field Archaeologists (IFA) Code of Conduct.

2. OBJECTIVES

2.1 The following programme has been designed, in accordance with a brief produced by Peter McCrone of the Lancashire County Council Archaeological Service, to provide an accurate archaeological evaluation of the designated area, within its broader context. The aims of the assessment are to inform a planning decision for the development of the site and will identify the extant surface or sub-surface archaeological resource. The assessment results will enable the implementation of a strategy for further investigation or mitigative recording of any identified archaeological resource. The brief requires the implementation of a programme of trial trenching, following an initial assessment stage; however, the form and scope of this trial trenching element is dependant upon the results of the assessment and can not therefore be defined at this stage. It is therefore proposed to submit a further evaluation project design to cover this element following the submission of the assessment report. This project design therefore addresses only the assessment as defined within Sections 7.2-7.4 of the project brief. The required stages to achieve these ends are as follows:

2.2 **Desk Top Survey**
To accrue an organised body of data to inform the field inspection.

2.3 **Identification Survey**
A walk-over survey to investigate the potential for above ground archaeological remains within the study area and provide an assessment of their archaeological significance.

2.4 **Assessment Report**
A written assessment report will assess the significance of the data generated by this programme within a local and regional context. It will advise on the mitigation measures necessary to protect and/or record (to appropriate levels) identified archaeological features and deposits, including any evaluation, excavation, or recording strategies.

3. METHODS STATEMENT

3.1 The following work programme is submitted in line with the stages and objectives of the archaeological work summarised above.

3.2 Desk Top Survey

3.2.1 The following will be undertaken as appropriate, depending on the availability of material. The level of

such work will be dictated by the timescale of the project.

- 3.2.2 **Documentary and cartographic material:** This work will rapidly address the full range of potential sources of information. It will include an appraisal of the Lancashire Sites and Monuments Record, as well as appropriate sections of County histories, early maps, and such primary documentation (tithe and estate plans etc.) as may be reasonably available. Particular attention will be paid to field- and place-names recorded on early cartographic sources as these often provide important evidence of archaeological activity. Any photographic material lodged in either the County Sites and Monuments Record or the County Record Offices will also be studied. Published documentary sources will also be examined and assessed. This work will involve visits to the County Record Office in Preston. Local museum archive will be consulted for further details of any recovered finds from the site, and in particular will investigate into the recovery of the fifteen skeletons.
- 3.2.3 **Aerial Photography:** A survey of the extant air photographic cover will be undertaken. This may indicate the range and survival of archaeological and structural features in the designated area, and if appropriate coverage is available, allow an assessment of the rate and progress of erosion of archaeological features. It will also facilitate the rapid recognition and plotting of archaeological features including those no longer visible at ground level. Identified features will be accurately plotted at 1:10,000. Aerial photographic work may entail liaison with the Royal Commission on the Historical Monuments (England), although, within the timescale available, it is unlikely that prints will be forthcoming from this body for inclusion in this report.
- 3.2.4 **Physical environment:** A rapid desk-based compilation of geological (both solid and drift), and topographical information will be undertaken. This will not only set the archaeological features in context but also serves to provide predictive data, that will increase the efficiency of the field investigation.
- 3.3 **Field Inspection**
- 3.3.1 **Access:** Liaison for basic site access will be undertaken through Nichol Thomas. It is assumed that Nichol Thomas will make initial contact with the land-owners and tenants, although LUAU will, as a courtesy, contact them prior to undertaking the survey.
- 3.3.2 **Survey Methodology:** It is proposed to undertake an identification survey of the study area. This is a rapid site investigation undertaken alongside a desk top study as part of a site assessment. It represents the minimum standard of record and is appropriate to exploratory survey aimed at the discovery of previously unrecorded sites. Its aim is to record the existence, location and extent of any such site. An early surface inspection such as this is highly recommended, as such work can frequently double the amount of archaeological information for an area.
- 3.3.3 Any ploughed fields within the study area will be subjected to a detailed artefact survey to identify surface exposed artefacts. Fields under pasture at the time of the survey will be examined for extant earthworks. The survey will not be able to examine any fields under crop at the time of the survey, unless the crop is very low and permission has been granted by the farmer.
- 3.3.4 **Earthwork Survey:** The earthwork survey reconnaissance will be undertaken in a systematic fashion, walking on approximately 20m wide transects. It will examine any surface indications of archaeological activity and will assess the significance, condition, chronology and topographic context of any archaeological features. The emphasis for the recording is on the written description which should record type and period and would not normally exceed c50 words. The extent of a site is only defined for sites greater than 50m in size and smaller sites are shown with a cross. The sites, be they earthworks or artefacts, will be located by pacing with respect to field boundaries and will achieve coordinates to an accuracy of +/- 10m. All archaeological information collected in the course of field inspection will be recorded in standardised form. The fieldwork will result in the production of plans at a scale of 1:2,500 and will record the location and distribution of any artefact scatters, and/or surface monuments, as well as documentary sites. All archaeological information collected in the course of field inspection will be recorded in standardised form, and will include eight figure national grid references. This will form the basis of a gazetteer, to be submitted as part of the report.

3.4 Assessment Report

- 3.4.1 **Archive:** The results of Stages 3.2-3.3 will form the basis of a full archive to professional standards, in accordance with current English Heritage guidelines (*The Management of Archaeological Projects, 2nd edition, 1991*). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. It will include summary processing and analysis of any features and finds recovered during fieldwork. The deposition of a properly ordered and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the IFA in that organisation's code of conduct.
- 3.4.2 This archive can be provided in the English Heritage Central Archaeology Service format, both as a printed document and on computer disks as ASCII files (as appropriate), and a synthesis (in the form of the index to the archive and the report) will be deposited with the Lancashire Sites and Monuments Record. A copy of the archive will also be available for deposition in the National Archaeological Record in London. LUAU practice is to deposit the original record archive of projects (paper, magnetic, and plastic media) with the appropriate County Record Office, and a full copy of the record archive, should any material be recovered, with the material archive (artefacts, ecofacts, and samples, at this stage from surface collections) with the County Museums Service.
- 3.4.3 **Collation of data:** The data generated by 3.2 and 3.3 (above) will be collated and analysed in order to provide an assessment of the nature and significance of the known surface and subsurface remains within the designated area. It will also serve as a guide to the archaeological potential of the area to be investigated, and the basis for the formulation of any detailed field programme and associated sampling strategy, should these be required in the future.
- 3.4.4 **Summary Report:** A brief summary report will be submitted immediately following the completion of the fieldwork and the documentary study. It will summarise the results of the assessment and will define proposals for further recording where appropriate.
- 3.4.5 **Assessment Report:** One bound and one unbound copy of a written synthetic report will be submitted to the Client, and a further copy submitted to the Cumbria County Archaeologist. The final report will include a copy of this project design, and indications of any agreed departure from that design. It will present, summarise, and interpret the results of the programme detailed above and will include a full index of archaeological features identified in the course of the project, together with appropriate illustrations, including a map and gazetteer of known or suspected sites identified within or immediately adjacent to the study area. It will also include a complete bibliography of sources from which the data has been derived, and a list of further sources identified during the programme of work, but not examined in detail. Any finds recovered from the identification survey will be assessed with reference to other local material. The report will also include a complete bibliography of sources from which data has been derived, and a list of further sources identified during the programme of work, but not examined in detail.
- 3.4.6 This report will identify areas of defined archaeology, an assessment and statement of the actual and potential archaeological significance of any features within the broader context of regional and national archaeological priorities will be made. Illustrative material will include a location map, and site plans; it can be tailored to the specific requests of the client (eg particular scales etc), subject to discussion. The report will be in the same basic format as this project design; a copy of the report can be provided on 3.5" disk (IBM compatible format).
- 3.4.7 **Proposals:** The report will make a clear statement of the likely archaeological implications of the intended development. It will also make recommendations for any further evaluation of the identified archaeological potential deemed necessary or desirable for individual sites. It will seek to achieve, as a first option, the preservation *in situ* of all significant archaeological features, and possible strategies for the mitigation of the development, including design modifications, will be considered. Where conservation is neither possible nor practical, it may be appropriate to recommend a further stage of more intensive archaeological work in order to mitigate the effects of development.
- 3.4.8 **Confidentiality:** The assessment report is designed as a document for the specific use of the client, for the particular purpose as defined in the project brief and this project design, and should be treated as

such; it is not suitable for publication as an academic report, or otherwise, without amendment or revision. Any requirement to revise or reorder the material for submission or presentation to third parties beyond the project brief and project design, or for any other explicit purpose, can be fulfilled, but will require separate discussion and funding.

3.6 Other Matters

3.6.1 **Health and Safety:** Full regard will, of course, be given to all constraints (services etc) during the excavation of the trenches, as well as to all Health and Safety considerations. LUAU provides a Health and Safety Statement for all projects and maintains a Unit Safety policy. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Archaeological Unit Managers (1991) and risk assessments are implemented for all projects.

4. PROJECT MONITORING

4.1 **Nichol Thomas:** LUAU will consult with Nichol Thomas regarding access to land within the study area. This consultation will include, if required, the attendance of a representative of the client at any meetings convened with the Lancashire County Archaeologist, or his representative to discuss progress or the report.

4.2 **Lancashire Sites and Monuments Record:** Any proposed changes to the project brief or the project design will be agreed with the Lancashire County Archaeologist in coordination with the client. LUAU will arrange a preliminary meeting, if required, and the Lancashire SMR will be informed of the commencement of the project in writing.

5. WORK TIMETABLE

The phases of work would comprise:

5.1 Desk Top Study

A one day period is required to collate all the available data.

5.2 Identification Survey

Identification survey for one day will be required.

5.3 Prepare Assessment Report

A three day period would be required to complete this element.

5.4 LUAU can execute projects at very short notice once an agreement has been signed with the client.

5.5 The project will be under the management of **Jamie Quartermaine, BA, Surv Dip, MIFA** (Unit Project Manager) to whom all correspondence should be addressed. The external contractor will be **Caron Newman BA**, who has considerable experience of desk-top studies for planning assessments and assessments.

ILLUSTRATIONS
