Land off Pinfold Lane, Skerton, Lancaster, Lancashire

Archaeological Strip and Map Report

Oxford Archaeology North
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# CONTENTS

**SUMMARY** .......................................................................................................................... 3

**ACKNOWLEDGEMENTS** ...................................................................................................... 4

1 **INTRODUCTION** ............................................................................................................. 5
   1.1 Circumstances of Project ............................................................................................... 5
   1.2 Location, Topography and Geology .............................................................................. 5
   1.3 Historical and Archaeological Background .................................................................... 5

2 **METHODOLOGY** ............................................................................................................. 7
   2.1 Project Design ................................................................................................................ 7
   2.2 Strip, Map And Record .................................................................................................. 7
   2.3 Archive .......................................................................................................................... 7

3 **FIELDWORK RESULTS** ................................................................................................ 8
   3.1 Introduction .................................................................................................................... 8
   3.2 Results ........................................................................................................................... 8

4 **CONCLUSION** ................................................................................................................ 11
   4.1 Discussion ...................................................................................................................... 11

5 **BIBLIOGRAPHY** .......................................................................................................... 12
   5.1 Primary And Secondary Sources ................................................................................. 12
   5.2 Web Resources .............................................................................................................. 12

6 **ILLUSTRATIONS** ........................................................................................................... 13
   6.1 Figures .......................................................................................................................... 13
   6.2 Plates ............................................................................................................................ 13

**APPENDIX 1: PROJECT DESIGN** .................................................................................... 14
SUMMARY

Melrose Construction Ltd was granted planning permission for the demolition of a former resource centre and erection of twelve affordable dwellings and associated access, parking and landscaping (12/00877/FUL). The site lies between Norfolk Street, to the north, and Pinfold Lane, to the south, in Skerton, north Lancaster, Lancashire (SD 47921 62838).

The settlement of Skerton is believed to originate from the ninth or tenth centuries, and was mentioned in the Domesday survey of 1086. The first edition Ordnance Survey (OS) map of 1848 shows Skerton prior to it being subsumed into the urban expansion of Lancaster, with rows of terraced housing development during the late nineteenth century. The settlement and surrounding fields shown on the OS map are reminiscent of a medieval layout. It was possible that any post-medieval remains would have medieval origins. Due to the potential for below-ground archaeological remains on the southern half of the site fronting Pinfold Lane, in the area previously occupied by possible medieval or post-medieval buildings (the northern half of the site having been laid down to gardens), discussions between Oxford Archaeology North (OA North) and the Lancashire County Archaeology Service (LCAS), led to a programme of strip, map and record being agreed.

The fieldwork was completed in March 2013, after the demolition of the resource centre. The modern overburden was removed down to the level of the natural geology, and the foundations of the resource centre were observed cutting into the natural boulder clay. All trace of the possible medieval or post-medieval buildings had been removed prior to the resource centre being built. As no archaeology was observed, there was no requirement for any further archaeological work.
ACKNOWLEDGEMENTS

Oxford Archaeology North (OA North) would like to thank Melrose Construction Ltd for commissioning the project, particularly Andy Wilkinson for arranging the on-site works, and Tim Butler Plant Hire Ltd.

The work was undertaken by Becky Wegiel and Mike Birtles. Becky Wegiel wrote the report and the drawings were produced by Mark Tidmarsh and Adam Parsons. The project was managed by Emily Mercer, who also edited the report.
1 INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

1.1.1 Melrose Construction Ltd was granted planning permission for the demolition of a former resource centre and erection of twelve affordable dwellings and associated access, parking and landscaping (12/00877/FUL) on land off Pinfold Lane, Skerton, Lancaster, Lancashire (Fig 1).

1.1.2 Consequently, following discussions between Oxford Archaeology North (OA North) and the Lancashire County Archaeology Service (LCAS), the county council’s body responsible for advising local planning authorities on cultural heritage matters, a programme of strip, map and sample was proposed to fulfil the archaeological condition of the planning permission. A project design (Appendix 1) for the scheme of works was compiled in accordance with a verbal specification. Work was only required on the southern half of the site fronting Pinfold Lane, with no requirement for archaeological work on the northern half fronting Norfolk Street.

1.1.3 This report sets out the results of the work undertaken in the form of a short document, outlining the findings and assessing the impact of the proposed development.

1.2 LOCATION, TOPOGRAPHY AND GEOLOGY

1.2.1 The site lies between Norfolk Street, to the north, and Pinfold Lane, to the south, in Skerton, north Lancaster, Lancashire (SD 47921 62838; Fig 1), at approximately 11m (aOD). The site was previously occupied by a former resource centre, which had been demolished prior to the archaeological fieldwork.

1.2.2 The underlying bedrock geology of the area consists of siltstone, mudstone and sandstone, and the superficial deposits comprise sand and gravel. (http://mapapps.bgs.ac.uk/geologyofbritain/home.html). The soil consists of freely draining, slightly acid, loamy soils (https://www.landis.org.uk/soilscapes/).

1.3 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

1.3.1 The following section presents a brief summary of the historical and archaeological background of the general area. This is presented by historical period, and has been compiled in order to provide a wider archaeological context to the site.

1.3.2 The settlement of Skerton is believed to originate from the ninth or tenth centuries, when a profusion of Norse place-names along the lower Lune valley (White 2003, 4) suggests that the river was used as a route, although, a Bronze Age finds spot known in Skerton, amongst others, suggests that the river was likely to have been as important during the prehistoric period (Lancashire
County Council and Egerton Lea Consultancy 2006). Skerton was known to be a vill in 1066 as part of an estate centred on Halton and was mentioned in the Domesday survey of 1086, assessed at six ploughlands, and part of the demesne of the lords of Lancaster (Farrer and Brownbill 1914).

1.3.3 The settlement continued in existence during the medieval period and the first edition Ordnance Survey (OS) map of 1848 (Fig 2) shows Skerton prior to it being subsumed into the urban expansion of Lancaster, with rows of terraced housing development during the late nineteenth century. The settlement and surrounding fields shown on the OS map are reminiscent of a medieval layout. The buildings positioned on the Pinfold Lane frontage of the site shown on the OS plan of 1848 may, therefore, be of medieval origin. The potential for archaeological remains on the northern portion of the site, fronting Norfolk Street is low, or of lower significance, as these were laid down to the gardens.
2 METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 A project design (Appendix 1) was submitted by OA North in response to a verbal brief from LCAS. The project design was adhered to in part, as no archaeology was observed there was no record phase. The work was consistent with the relevant IfA and English Heritage guidelines (Institute for Archaeologists 2008a, 2008b, 2012; English Heritage 2006).

2.2 STRIP AND MAP

2.2.1 The modern overburden was removed by machine (fitted with a toothless ditching bucket) under archaeological supervision to the natural geology. This deposit was cleaned by hand, using either hoes, shovel scraping, and/or trowels depending on the subsoil conditions, and inspected for archaeological features.

2.2.2 All information identified in the course of the site works was recorded stratigraphically, using a system adapted from that used by the former Centre for Archaeology of English Heritage, with an accompanying pictorial record (plans and digital photographs). Primary records were available for inspection at all times.

2.2.3 Results of the field investigation were recorded on pro forma context sheets. The site archive includes both a photographic record and accurate large-scale plans at an appropriate scale.

2.3 ARCHIVE

2.3.1 A full professional archive has been compiled in accordance with the project design (Appendix 1), and in accordance with current IfA (Institute for Archaeologists 2008b) and English Heritage guidelines (English Heritage 2006). The paper and digital archive will be deposited in Preston Record Office on completion of the project.
3 FIELDWORK RESULTS

3.1 INTRODUCTION

3.1.1 An area approximately 400m$^2$ was excavated (Fig 3; Plate 1), to the level of the natural geology. A north/south-aligned baulk, approximately 4m wide was left in, to support the live services running through the site. The northern extent of the strip was dictated by the location of the site welfare cabins.

![Plate 1: North-east-facing view across the site](image)

3.2 RESULTS

3.2.1 The natural geology $102$, a mid-yellowish brown and mid-reddish brown mixed sandy-clay, was observed at a depth of 0.8 – 1m below current ground level. The concrete foundations of the former resource centre were cut into this deposit, with only patches of $102$ visible amongst the concrete (Plate 2). A mix of mid reddish brown sandy-loam and building rubble ($101$, 0.5 – 0.7m thick) had been used to level up the area. This had been covered with a layer of sub-base $100$, approximately 0.2m thick. No archaeology was observed.
Plate 2: East-facing view of site, showing concrete foundations with patches of natural geology showing through.
4 CONCLUSION

4.1 DISCUSSION

4.1.1 The medieval origins of Skerton are well documented, and settlement continued through the post-medieval period to the present. The first edition OS map of 1848 showed that the development area was positioned over buildings from this period. The settlement and surrounding fields shown on the OS map are reminiscent of a medieval layout, and it was possible that the buildings shown were medieval in origin.

4.1.2 The archaeological investigation showed that the whole area had been levelled to natural geology, probably to find suitable ground for the construction of the resource centre. The foundations of the later building were cut into the natural geology, and no trace of earlier structures, either of the early buildings, pre-late nineteenth century or of the terraced houses, were observed. The area had been made up using modern soil and demolition rubble. No archaeology was observed, and no further archaeological work is recommended.
5  BIBLIOGRAPHY

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5.2  WEB RESOURCES

https://www.landis.org.uk/soilscapes/

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6  ILLUSTRATIONS

6.1  FIGURES

Figure 1: Site location

Figure 2: Development boundary superimposed on the Ordnance Survey First Edition 6":1 mile map, 1848

Figure 3: Development boundary superimposed on the modern Ordnance Survey mapping

6.2  PLATES

Plate 1: North-east-facing view across the site

Plate 2: East-facing view of site, showing concrete foundations with patches of natural geology showing through
Figure 1: Site location
APPENDIX 1: PROJECT DESIGN

1 INTRODUCTION

1.1 PROJECT BACKGROUND

1.1.1 Melrose Construction Ltd has been granted planning permission for the demolition of a former resource centre and erection of twelve affordable dwellings and associated access, parking and landscaping (12/00877/FUL), with a number of conditions, one of which (number 16) concerns archaeology. The site lies between Norfolk Street, to the north, and Pinfold Lane, to the south, in Skerton, north Lancaster, Lancashire (SD 47921 62838).

1.1.2 The settlement of Skerton is believed to originate from the ninth or tenth centuries, when a profusion of Norse place-names along the lower Lune valley (White 2003, 4) suggests that the river was used as a route. Although, a Bronze Age finds spot known in Skerton, amongst others, suggests that the river was likely to have been as important during the prehistoric period (Lancashire County Council and Egerton Lea Consultancy 2006). Skerton was known to be a vill in 1066 as part of an estate centred on Halton and was mentioned in the Domesday survey of 1086, assessed at six ploughlands, and part of the demesne of the lords of Lancaster (Farrer and Brownbill 1914).

1.1.3 The settlement continued in existence during the medieval period and the first edition Ordnance Survey (OS) map of 1848 (see attached plan) shows Skerton prior to it being subsumed into the urban expansion of Lancaster, with rows of terraced housing development during the late nineteenth century. The settlement and surrounding fields shown on the OS map are reminiscent of a medieval layout. The buildings positioned on the Pinfold Lane frontage of the site shown on the OS plan of 1848 may, therefore, be of medieval origin. There is a high potential for sub-surface remains of these buildings to exist under the southern part of the twentieth century former resource centre. These may be impacted upon during the proposed construction works for the residential development. The potential for archaeological remains on the northern portion of the site, fronting Norfolk Street is low, or of lower significance, as these were laid down to the gardens for the buildings concerned.

1.1.4 Consequently, following discussions between OA North and the Lancashire County Archaeology Service (LCAS), the county council’s body responsible for advising local planning authorities on cultural heritage matters, a programme of strip, map and sample is proposed to fulfil the archaeological condition. However, this is only required on the southern half of the site fronting Pinfold Lane, with no requirement for archaeological work on the northern half fronting Norfolk Street.

1.1.5 The following project design for that scheme of works has been compiled in accordance with a verbal specification, and to meet all the requirements and standards of the Institute for Archaeologists (IfA) and, within the framework of MoRPHE (EH 2006), which represents a methodology, for fieldwork and post-excavation reporting. Should significant archaeological remains be identified during the programme of strip, map and sample, it will be necessary to produce an updated project design for a programme of detailed archaeological excavation, archive processing, and post-excavation assessment, making allowance for any appropriate analysis and publication.

1.2 OXFORD ARCHAEOLOGY NORTH

1.2.1 Oxford Archaeology is an educational charity under the guidance of a board of trustees with over 35 years of experience in archaeology, and can provide a professional and cost-effective service. We are the largest employer of archaeologists in the country (we currently have more than 300 members of staff throughout three regional offices in Oxford, Cambridge and Lancaster), and can thus deploy considerable resources with extensive experience to deal with any archaeological obligations you or your clients may have.

1.2.2 Oxford Archaeology North has considerable experience of sites of all periods, having undertaken a great number of small and large scale projects throughout Northern England.
during the past three decades. Evaluations, assessments, watching briefs and excavations have taken place within the planning process, to fulfil the requirements of Clients and planning authorities, to very rigorous timetables.

1.2.3 OA North has the professional expertise and resources to undertake the project detailed below to a high level of quality and efficiency. OA North is an Institute for Archaeologists (IfA) registered organisation, registration number 17, and all its members of staff operate subject to the IfA Code of Conduct (2012).

2 AIMS AND OBJECTIVES

2.1 ACADEMIC AIMS

2.1.1 The main research aim of the investigation, given the nature of the development, will be to establish the presence or absence of buried archaeological remains on the site and, if present, compile a detailed record to mitigate their removal during the course of the development in accordance with the National Planning Policy Framework (NPPF, DCLG 2012).

2.2 OBJECTIVES

2.2.1 The objectives of the project may be summarised as follows:

• the main objective of the archaeological investigation is to determine the presence or absence of any buried remains of archaeological interest within the proposed development area;

• to investigate the nature, extent and significance of the remains of the former buildings, presumed houses observed from first edition OS mapping (1848);

• to determine the presence or absence of any medieval remains within the proposed development area;

• to compile an archival record of any archaeological remains within the proposed development area.

2.2.2 To these ends, the following programme of archaeological work has been designed, in accordance with English Heritage (1991) and the Institute for Archaeologists (IfA) (2008a, b and 2012) standards and guidelines. The results will provide information as to whether more detailed works are required during the fieldwork or post-exavcation stages of the project.

3 HEALTH AND SAFETY

3.1.1 Risk Assessment: OA North provides a Health and Safety Statement for all projects and maintains a Company 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 (1997). A written risk assessment will be undertaken in advance of project commencement and copies will be made available on request to all interested parties.

3.1.2 Services and other constraints: full regard will, of course, be given to all constraints (services etc) during the investigation, as well as to all Health and Safety considerations. As a matter of course the field team will use a Cable Avoidance Tool (CAT) and Signal Generator prior to any excavation to test for services. However, this is only an approximate location tool. Any information regarding services, i.e. drawings or knowledge of live cables or services, within the study area and held with the client should be made known to the OA North project manager prior to the commencement of the investigation. If the client does not hold the remaining service drawings, OA North can purchase these at cost on behalf of the client, although this is likely to delay the commencement of the site work.
3.1.3 **Contamination:** any known contamination issues or any specific health and safety requirements on site should be made known to OA North by the client to ensure all procedures can be met, and that the risk is dealt with appropriately. Should any presently unknown contamination be discovered during excavation, it may be necessary to halt the works and reassess the risk assessment. Should it be necessary to supply additional PPE or other contamination avoidance equipment this will be costed as a variation.

3.1.4 **Staff issues:** all project staff will be CSCS qualified, proof of which can be provided in the form of CSCS cards.

3.1.5 A toilet and hand washing facilities is required and can be provided and positioned on or adjacent to the site, although it is assumed that the client would prefer to arrange alternative facilities. Therefore, the cost would be agreed as a variation.

3.1.6 **Fencing requirements:** a site visit noted that heras-type security fencing surrounded the whole proposed construction site. However, the area of the archaeological investigation will not only require protection from public access, but also separation from other construction groundworks taking place on the northern part of the site. Any other requirements for fencing at the client’s request may be charged as a variation should it be necessary that OA North arrange supply.

3.1.7 **Insurance:** OA North has professional indemnity to a value of £2,000,000, employer's liability cover to a value of £10,000,000 and public liability to a value of £15,000,000. Written details of insurance cover can be provided if required.

4 **METHOD STATEMENT**

4.1 **Introduction**

4.1.1 The following methodology is to archaeologically supervise the stripping of topsoil deposits down to the underlying natural or archaeological deposits, whichever is encountered first, to survey-in any archaeological features and deposits revealed, and then sample-excavate a proportion of these deposits so that their nature, quality, extent and importance can be established, and an appropriate programme of detailed investigation devised. This methodology will provide a flexible, iterative approach, to allow the implementation of an appropriate strategy for dealing with the remains. The strip and map investigations will be undertaken in two stages:

4.1.2 **Stage 1:** comprises the removal of the overlying topsoil and overburden material to expose the first archaeological horizon. The former resource building has been demolished (Plate 1), and that the associated hard standing and car park surfaces have been stripped away to reveal the underlying modern make-up layers. It is proposed, therefore, to undertake further groundworks on site to remove this layer down to the required level under archaeological supervision using a mechanical excavator fitted with a toothless bucket. This is designed to expose the character and nature of the archaeological remains, and assess their potential research value. It will not be necessary for this exercise to include groundworks continuing below the surface of the underlying natural geology once this has been demonstrated to be barren of archaeological remains.
4.1.3 All archaeological features thus exposed will be sufficiently cleaned to allow a pre-excavation plan to be produced. This will be used in consultation with LCAS to agree a strategy for the next stage; Stage 2, which comprises the sample excavation and recording of any archaeology revealed in the Stage 1. The sample will be appropriate and proportional to the importance, quantity and complexity of the archaeology exposed, as well as its perceived research value.

4.1.4 The primary aims of Stage 1 will be:

- to expose archaeological remains across the southern half of the site, fronting onto Pinfold Lane, by the mechanical removal of topsoil and any masking subsoil;
- to create a pre-excavation plan of exposed deposits;
- to collect datable/activity specific material from the surface of exposed deposits;
- to confirm the priorities for and level of further archaeological investigation.

4.1.5 Stage 2: further archaeological investigations will be designed to recover data sufficient to allow for “preservation by record” as a form of mitigation, and establish the extent, date, character and significance of the archaeological remains. The primary aims will be:

- to characterise the overall nature of the archaeological resource and to understand the process of its formation;
- to create a detailed plan of all archaeological features;
- to establish the character of those features in terms of cuts, soil matrices and interfaces;
- to recover, where appropriate, across the archaeological site representative ecofactual and palaeoenvironmental samples to provide evidence of function and past landuse;
to establish in outline a dated sequence of structures and/or deposits and thus to define changes in site organisation over time.

4.2 STRIPPING (STAGE 1)

4.2.1 This will be undertaken by a team of two archaeologists: one to machine watch and one to clean and plan. It is anticipated that the maximum period of time required would be four man-days, depending on the depths of overburden. This is also dependent upon the level of archaeology encountered and weather conditions.

4.2.2 During the investigation, a mechanical 360 excavator, or equivalent, fitted with a toothless ditching bucket will be required (to be provided by the client) to remove the remaining overburden under archaeological supervision over an area c. 40m x 20m fronting Pinfold Lane, covering the area of the buildings seen on the OS map of 1848 (attached); no machine work will be carried out in the absence of an archaeologist. The top/subsoils will be stripped in a systematic and logical manner, to ensure that where practicable the excavator does not rut, compact or otherwise damage buried or exposed archaeological features and deposits by crossing previously stripped areas.

4.2.3 Stripping will proceed in successive spits until the uppermost horizons of significant archaeological remains have been revealed or, where these are absent, the natural substrate. All machine stripping will be carried out at a speed which will leave a good standard of finished surface, i.e. a smooth, even and clean surface, with a minimum of smearing, polishing and rutting. The stripped areas, including the edges if necessary, will be cleaned sufficiently to enhance the definition of features. The surface of the exposed natural deposits will be inspected for archaeological finds. Mechanically-excavated spoil will be monitored in order to recover artefacts that will assist in meeting the aims of the project, before being removed to a designated storage area (see 4.2.5, below).

4.2.4 If appropriate, further machine excavation will be carried out after hand-excavation and recording of deposits has been completed. Such techniques are only appropriate for the removal of homogenous low-grade deposits, which may give a “window” into underlying levels; or for characterising features where there is no danger of removing important stratigraphic relationships and sufficient stratigraphy will remain to allow the excavation of hand-excavated samples.

4.2.5 It is assumed that the topsoil/modern overburden and any subsoil will need to be kept separate, therefore a significant proportion of the site, if not all, will be stripped of topsoil/modern overburden before subsoil is removed. Spoil will be tamped down by the mechanical excavator.

4.2.6 Stripping will extend to as close as possible to the existing surrounding buildings without causing any disruption to their foundations, depending on depth of excavation.

4.2.7 Significant archaeological discoveries: during supervision of the machining, should archaeological remains be identified, the archaeologist will stop the machine so that they can examine what has been revealed. In the very rare event that the findings are extremely fragile, the archaeologist may cease excavation within that part of the site. The archaeological features or deposits will be demarcated with netlon fencing or candy tape. LCAS will be informed of the discovery of the features, and will be kept abreast of the results of subsequent exploratory investigations. Ordinarily, the archaeologist will utilise the machine to strip the soil from around the feature of archaeological interest, gradually expanding this area until the limits of the archaeological find are defined.

4.3 MAPPING (STAGE 1)

4.3.1 The stripping team will pay close attention to achieving a clean-stripped surface, using the mechanical plant under close archaeological supervision, to reduce the need for extensive hand cleaning, which uses either hoes, shovel scraping, and/or trowels depending on the soil
conditions. Limited areas may still require hand-cleaning, to clarify complex feature intersections. The principal aim of the initial work will be to produce a plan of the revealed features that can be used to define and quantify the second stage of formal and detailed excavation. Plans will be maintained as stripping progresses and features will be defined on the ground by a process of scoring around the feature, or other such methods. A general site plan will be produced at an appropriate scale to map the exposed features. The plan will be presented to LCAS and the level of Stage 2 works agreed. This consultation normally causes a short delay in the progress of the fieldwork.

4.3.2 It should be borne in mind that over the course of several days, archaeological features can ‘weather-out’ and become visible as the minerals within their fills oxidise (i.e. rust) upon exposure to the air. This means that features such as ditches and pits may only be visible after several days. For these reasons, it may be some days before an archaeologist is able to sign-off seemingly archaeologically blank areas of the site.

4.3.3 The area will be planned digitally by experienced surveyors utilising GPS to record the sites according to Ordnance Survey (OS) coordinates. A Leica differential GPS will be employed that uses real-time (RTK) corrections using mobile SmartNet technology to achieve an accuracy of ± 0.01m. The accuracy of the OA North GPS system provides for a quick and effective means of recording the position and extent of sites. The digital survey data will be transferred, via Leica Geo Office (V.4), as shp files into a CAD system (AutoCAD Map 2004), and superimposed onto the embedded digital OS data. Should coverage prevent the use of GPS, a EDM Total Station will be used, based on a site grid related to the national grid obtained from client base mapping.

4.4 Sample Excavation (Stage 2)

4.4.1 This stage would follow a consultation period with LCAS. The number of archaeologists on site may increase, depending on the complexity of features requiring excavation. The research value of the archaeology and the necessity to achieve “preservation by record” in advance of the development will inform the second stage excavation sampling strategies. The exact sampling levels will be determined by the nature of the remains uncovered.

4.4.2 Any archaeological deposits will be excavated to the extent that they are sufficiently characterised and understood, this will involve excavating a representative range of elements such as postholes, ditches etc. Some sufficiently important features, e.g. hearths or burials, require 100% samples.

4.4.3 A selection of the features will be sample-excavated in order to ascertain depths, state of preservation, complexity, function, date and significance. All such investigation of intact archaeological deposits will be exclusively manual. Selected discrete features, such as pits and postholes, would be subject to 50% examination (i.e. half-sectioned), linear features will be subject to a 25% sample where the fill is found to be non-uniform, and 10% where the fill is uniform, and extensive layers will, where possible, be sampled by partial rather than complete removal. It is hoped that in terms of the vertical stratigraphy, maximum information retrieval will be achieved through the examination of sections of cut features. All excavation will be undertaken with a view to avoiding damage to any archaeological features, which appear worthy of preservation in situ.

4.4.4 For other features, such as working hollows, quarry pits, etc., all relationships will be ascertained. Further investigation will be a matter of on-site judgement, but should seek to define their extent, date and function. If features/deposits are revealed which need to be removed and which are suitable for machine excavation, such as large-scale dump deposits, large areas of cultivation soil, or substantial linear cut features, then they would be sample-excavated to confirm their homogeneity before being removed by machine. Large post-medieval deposits/features will be fully recorded, such as cobbled or flagged surfaces, and machine-removed.

4.4.5 Cut features identified against the edges of the excavation will not be excavated below a safe working limit unless it is confirmed by LCAS that they are of exceptional importance.
4.4.6 Should any particularly deep-cut feature, such as a well pit, be revealed this will be manually excavated to a safe working limit. Thereafter, if LCAS wishes to see the further excavation of any such feature, this could be achieved by reducing the general area of the feature (i.e. a 1m ‘cordon’) using a machine to allow further safe manual excavation.

4.4.7 **Significant Archaeological findings:** should, following the exploratory investigation of the features, it be found that the archaeological remains are highly significant, it is likely that LCAS would recommend a more formal process of excavation and a revision to the present ‘sampling’ project design, more accurately reflecting the nature of the discovery, and the attendant academic aims and objectives, both in terms of the fieldwork requirements, and of the post-exavcation programme, which may include detailed analysis and publication. All such works would be submitted to the client as a resource variation to the present scope of works.

4.4.8 **Recording Strategy:** all information identified in the course of the site works will be recorded stratigraphically, using a system, adapted from that used by Centre for Archaeology Service of English Heritage, and in accordance with IfA standards (2008b), with sufficient pictorial record (plans, sections, and photographs) to identify and illustrate individual features. Primary records will be available for inspection at all times. Results, comprising a full description and preliminary classification of features or materials revealed, will be recorded on pro-forma context sheets, and will be accompanied with sufficient pictorial record to identify and illustrate individual features. Sections will be generated and features will be planned accurately at appropriate scales. An indexed photographic record, utilising archivable monochrome print and digital imaging, will be undertaken simultaneously and all frames will include a visible, graduated metric scale. The site archive will include both a photographic record and accurate large scale plans and sections at an appropriate scale (1:50, 1:20 and 1:10). All artefacts and ecofacts will be recorded using the same system, and will be handled and stored according to standard practice (following current IfA guidelines (2008a)) in order to minimise deterioration.

4.4.9 **Treatment of finds:** all finds will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the United Kingdom Institute for Conservation (UKIC) *First Aid For Finds*, 1998 (new edition) and the recipient museum’s guidelines, likely to be the Museum of Lancashire. All identified finds and artefacts will be retained, although certain classes of building material can sometimes be discarded after recording if an appropriate sample is retained on advice from the recipient museum’s archive curator.

4.4.10 **Treasure:** any gold and silver artefacts recovered during the course of the excavation will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act, 1996. Where removal cannot take place on the same working day as discovery, suitable security will be employed to protect the finds from theft.

4.4.11 **Human Remains:** any human remains uncovered will be left in situ, covered and protected. No further investigation will continue beyond that required to establish the date and character of the burial. LCAS and the local Coroner will be informed immediately. If removal is essential, the exhumation of any funerary remains will require the provision of a Ministry of Justice licence, under section 25 of the Burial Act of 1857. It is likely that the discovery of human remains will necessitate a revision to this project design and to the present agreed resources. The removal of human remains will be carried out with due care and sensitivity under the environmental health regulations.

4.4.12 **Environmental sampling for plants, faunal remains, technological remains and artefacts:** the recovery of adequate samples of environmental material can provide useful information for an understanding of processes acting upon the site and for placing the site within a wider ecological context. Bulk sediment samples of c 40 litres will be collected from any suitable (undisturbed, uncontaminated and of non-modern origin) deposits or features of demonstrable anthropological origin for the recovery of plant and faunal remains.

4.4.13 **Samples for absolute dating:** should deposits, or material within deposits, suitable for radiocarbon assay be encountered, samples will be taken wherever possible. These would include well-stratified artefacts and ecofacts, but also suitable material collected from
environmental samples through flotation and, in the case of ceramics, from any bulk sieving, wet sieving and hand-collection.

4.4.14 **Contingency plan:** In the event of significant archaeological features being encountered during the watching brief, discussions will take place with the Planning Archaeologist or his representative, as to the extent of further works to be carried out. All further works would be subject to a variation to this project design. In the event of environmental/organic deposits being present on site, it would be necessary to discuss and agree a programme of palaeoenvironmental sampling and or dating with the Planning Archaeologist.

4.5 **REPORT**

4.5.1 Unless there is a requirement for more detailed excavation and subsequent programme of post-excavation work, which is beyond the scope of this project design, a bound copy of the final report, together with a digital copy on CD, will be submitted to the client within approximately eight weeks of the completion of the fieldwork, depending on any outstanding specialist reports. One digital copy will be forwarded to LCAS. The report will include:

- a site location plan related to the national grid;
- a front cover to include the planning application number and the NGR;
- a concise, non-technical summary of the results;
- the dates on which each phase of the programme of work was undertaken;
- an explanation to any agreed variations to the brief, including any justification for any analyses not undertaken;
- a description of the methodology employed, work undertaken and results obtained;
- plans and sections at an appropriate scale showing the location and position of deposits and finds located;
- photographs as appropriate;
- a list of and dates for any finds recovered and a description and interpretation of the deposits identified;
- a description of any the results obtained;
- a summary of the impact of the development on any archaeological remains and, where possible, a model of potential archaeological deposits within as-yet unexplored environmental or other specialist work undertaken and areas of the development site;
- a copy of this project design, and indications of any agreed departure from that design;
- the report will also include a complete bibliography of sources from which data has been derived;
- a summary of the archive.

4.5.2 This report will be in the same basic format as this project design; a copy of the report can be provided on CD, if required. Recommendations concerning any subsequent mitigation strategies and/or further archaeological work following the results of the field evaluation will be provided in a separate communication.

4.5.3 **Confidentiality:** All internal reports to the client are designed as documents for the specific use of the client, for the particular purpose as defined in the project brief and project design, and should be treated as such. They are not suitable for publication as academic documents or otherwise without amendment or revision.

4.6 **ARCHIVE**

4.6.1 The results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with current English Heritage guidelines (1991). The
The deposition of a properly ordered and indexed project archive in an appropriate repository is essential and archive will be provided in the English Heritage Centre for Archaeology format and a synthesis will be submitted to the Lancashire HER, Preston (the index to the archive and a copy of the report). OA North practice is to deposit the original record archive of projects with the appropriate Record Office (in this instance, that at Preston).

All artefacts will be processed to MAP2 standards and will be assessed by our in-house finds specialists. The deposition and disposal of any artefacts recovered in the evaluation will be agreed with the legal owner and an appropriate recipient museum. Discussion regarding the museum’s requirement for the transfer and storage of finds will be conducted prior to the commencement of the project, and LCAS will be notified of the arrangements made.

**OASIS:** an OASIS form will be completed as part of the works.

**5 WORK TIMETABLE**

**5.1 STAGE 1**

**5.1.1 Strip and map fieldwork:** the duration of the first phase of site work is likely to be approximately three to four days.

**5.1.2 Consultation:** following the strip and map fieldwork, approximately one week will be required to a) draw up the digital plan of the archaeological features, which will be used during b) consultation with LCAS as to the second phase of site work, recording the necessary features. The requirement for monitoring meetings will be established with the Client and the archaeological curator at the outset of the project. Monitoring of the project will be undertaken by LCAS, who will be afforded access to the site at all times.

**5.2 STAGE 2**

**5.2.1 Sample excavation and recording of features:** the time required to investigate any archaeological features is not possible to predict presently, given that the quantity and nature of any below ground remains is not currently known.

**5.2.2 Reinstatement:** it is assumed that reinstatement of the area covered of archaeological fieldwork will not be required given the ongoing construction works. Therefore, this element has not been included in the costing.

**5.2.3 Report and archive:** approximately eight weeks will be required for the compilation of the report and archive following the completion of the fieldwork, unless more detailed excavation has been undertaken. In which case a programme of post-excavation will be necessary. An interim statement on any salient results can be produced sooner, if required. The archive will submitted within approximately six months.

**5.2.4 Lead-in time and mobilisation:** OA North can execute projects at very short notice once an agreement has been signed with the Client.

**6 STAFFING PROPOSALS**

**6.1 OA NORTH STAFF**

The project will be under the overall charge of **Emily Mercer BA MSc MIFA** (OA North senior project manager) to whom all correspondence should be addressed. The fieldwork will
undertaken under the direction of an OA North project officer who will be a highly experienced field archaeologist, used to working within on-site plant, and capable of running sites of all sizes. Due to scheduling requirements it is not possible to provide these details at the present time. All OA North field staff hold CSCS cards and the vast majority are qualified to degree and often, to post-graduate level.

6.1.2 Health and Safety advice will be provided by Murray Cook (OA North Project Manager) who is NEEBOSH trained.

6.1.3 Assessment of any finds from the excavation will be undertaken by OA North's in-house finds specialist Christine Howard-Davis (OA North Finds Manager). Christine has extensive knowledge of all finds of all periods from archaeological sites in northern England, and is a recognised expert in the study of post-medieval artefacts.

6.1.4 Any palaeoenvironmental assessment will be carried out under the auspices of OA North’s palaeoenvironmental manager, Elizabeth Huckerby MSc. Elizabeth has extensive knowledge of the North West through her work on the English Heritage-funded North West Wetlands Survey.

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