Clock Garage, Preston New Road, Peel, Lancashire

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Oxford Archaeology North

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SUMMARY

Kensington Developments Ltd submitted a planning application (5/2011/0381) to Fylde Borough Council for residential development at the former Clock Garage site, Preston New Road, Peel, Lancashire (NGR SD 335570 432942). The proposed development site lies in an area of potential archaeological interest, with numerous finds of flint in the vicinity indicating activity during the Neolithic and Bronze Age periods. Consequently, Lancashire County Archaeological Service (LCAS) recommended that the site should be subject to pre-determination archaeological evaluation. However, the ground levels across the site appear to have been raised during the twentieth century and much of the ground surface and underlying horizons that pre-date the twentieth century may have been buried.

Furthermore, the proposed construction methods intend to minimise the impact upon any potential archaeological remains that may be present in the underlying deposits, with each structure being constructed on suspended concrete floor slabs built up off ground beams that are supported on piles, equating to a total of 196 piles across the site, and each measuring 300mm wide. The existing finished ground level is proposed to be maintained, although the top 300mm of deposits will be initially removed for the foundation pads and ground beams, but will be replaced with imported topsoil for landscaping purposes.

In December 2011, Kensington Developments Ltd commissioned Oxford Archaeology North (OA North) to collate a statement of potential of the site. This assessment of the potential archaeological remains and their vulnerability to change, or impact, was further informed by a watching brief of a geotechnical investigation that was carried out in March 2012. This enabled the depth of made ground and underlying deposits, with the potential to contain archaeological remains, to be observed and recorded.

The results of the geotechnical investigations showed the shallowest potential deposits to be 0.7m below current ground level in TP2 and 0.8m in TP8, and thereafter 1.2m in TP10 and 1.5m in TP7. Consequently, it would appear that the removal of the top 300mm of deposits should not affect any deposits containing any potential archaeological remains.

ACKNOWLEDGEMENTS

Oxford Archaeology North (OA North) would like to thank Peter Liversidge of Kensington Developments for commissioning the project. Thanks are also due to Doug Moir of Lancashire County Archaeology Service (LCAS), Ian Ramsbottom of Wardell Armstrong, and Geoff Attwater and Richard Fox of Kensington Developments for all their help and information.

Jon Onraet undertook the fieldwork. Anna Hodgkinson prepared the illustrations. Emily Mercer, who managed the project, also wrote the report.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

1.1.1 Kensington Developments have submitted a planning application (5/2011/0381) to Fylde Borough Council for residential development at the former Clock Garage site, Preston New Road, Peel, Lancashire (NGR SD 335570 432942). The proposed development site lies in an area of potential archaeological interest, with numerous finds of flint in the vicinity indicating activity during the Neolithic and Bronze Age periods. Consequently, Lancashire County Archaeological Service (LCAS) recommended that the site should be subject to pre-determination archaeological evaluation in order to establish the nature, extent, and date of any deposits of archaeological interest within the proposed development, and a formal brief to this effect was issued (*Appendix 1*). However, the ground levels across the site appear to have been raised during the twentieth century and much of the ground surface and underlying horizons that pre-date the twentieth century may have been buried. Furthermore, the proposed construction methods intend to minimise the impact upon any potential archaeological remains that may be present in the underlying deposits, with each structure being constructed on suspended concrete floor slabs built up off ground beams that are supported on piles, equating to a total of 196 piles across the site, each measuring 300mm wide. The existing finished ground level is proposed to be maintained, although the top 300mm of deposits will be initially removed for the foundation pads and ground beams, but will be replaced with imported top soil for landscaping purposes.

1.1.2 As a result, Kensington Developments Ltd commissioned Oxford Archaeology North (OA North), in December 2011, to collate a statement of potential as part of an assessment of the impact of the potential development on any surviving below ground remains (OA North 2012). This information was further informed by the results of archaeological monitoring during a geotechnical site investigation on 6th March 2012, the purpose being to record the depth of made ground across the site and the underlying deposits that have the potential to contain archaeological remains.

1.1.3 The following documents the results of the archaeological watching brief, in a short document, and discusses the potential impact of the proposals.

1.2 LOCATION, TOPOGRAPHY AND GEOLOGY

1.2.1 The site lies on Preston New Road (A583) on relatively flat land at a height of between 8-9m aOD. It is situated immediately to the east of the suburbs of Blackpool and within 0.5km to the south of the M55 motorway (Fig 1). The area to the west is mainly occupied by retail and business parks, interspersed with the remnants of agricultural field systems, and the area to the north and east of the proposed site consists of agricultural fields fringed by residential development. A caravan park lies adjacent to the eastern boundary of the proposed site.

1.2.2 The site was formerly partially occupied by Clock Garage, which has now been replaced by the Lytham Windows outlet, together with a pair of semi-detached houses. The current proposed development site surrounds the north, east, and west sides of these properties (Plate 1).

1.2.3 The site lies to the west of the Lytham-Skipool Valley and on the slightly raised ground of the Peel-Ballam-Lytham Park ridge that lies just to the east of the transitional area between the former wetlands of Marton Moss and Lytham Moss (Middleton *et al* 1995, 85).

Plate 1: Current oblique aerial view of the proposed development site, facing north, showing the Lytham Windows showroom

1.3 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

1.3.1 The following is a short summary of the historical and archaeological background to place the study area into a wider archaeological context. A more detailed account is provided in the report preceding this (OA North 2012).

1.3.2 ***Prehistoric period:*** the earliest indication of prehistoric activity in the general area include the discovery of an elk skeleton dating to between *c* 13500 and 11500 cal BC, to the south-west of Poulton-le-Fylde, containing barbed points (Middleton *et al* 1995, 86-7). Such early evidence for human occupation in the north-west of England is rare, which makes this find extremely significant as an indicator of early hunting.

1.3.3 For later prehistoric activity, several sites of late-Mesolithic or early-Neolithic date represented by finds of worked stone artefacts have been identified within the environs of the proposed development area, and three such sites have been located on the slightly raised ridge of Peel island (*op cit*,

87), which lies 1km to the south of the study area. These finds included stone blades, well-struck flakes, and good quality raw materials (*ibid*). Sites of late-Neolithic and early-Bronze Age date are numerous in the local area and many of the examples recognised have, once more, been identified by the presence of scatters of worked stone. Perforated axe hammers have also been found at several locations and a bronze axe was found at Marton Moss, in addition to an apparent bronze axe, skin bag, and several coracles or canoes during the construction of the main dyke at Marton Mere (*op cit*, 90). Many flint scatters, mainly consisting of waste products from flint working as opposed to casual losses, have been identified at the northern edge of Lytham Moss, where the Peel island separates the moss from the Skippool Valley (*op cit*, 91). This area is one of the most dense areas of Neolithic and Bronze Age activity known in the North West (*op cit*, 91; 96), and pollen analysis suggests (*op cit*, 99) that the Peel area might have been associated with the clearance of woodland and the growth of cereals during this period. Indeed, a prehistoric struck flint was found within 450m of the proposed development site (PRN11295; Fig 1). Consequently, the potential for uncovering evidence relating to prehistoric activity within the proposed development area is high.

1.3.4 ***Romano-British period:*** there is little evidence for Romano-British activity in the immediate environs of the study area, with the nearest Roman fort to the west of the area at Dowbridge, Kirkham (Howard-Davis and Buxton 2000), and a rural settlement is known approximately 6km to the north, to the east of Poulton-le-Fylde. Therefore, the proposed development site is considered to have low potential for remains of this period.

1.3.5 ***Medieval period:*** large areas of mossland in the Lytham area are known to have remained unclaimed during the medieval period (Middleton *et al* 1995, 100), with little indication of enclosure or reclamation (*ibid*). Although, in 1530, a dispute arose concerning the seizure of waste lands, including mosses, from which local inhabitants had customarily cut rushes for thatching, and drainage ditches were being maintained for arable and pastoral land (*ibid*). A plan produced in 1532 suggests that the proposed development site lay to the east of a large moss or marsh called Myggelond. Several remnants of early field systems and cultivation ridges have been identified to the west (PRN11272; PRN20190; PRN11274; Fig 1) and north (PRN10493), and it is possible that some or all of these sites might have been in use during the medieval period.

1.3.6 ***Post-medieval and industrial periods:*** the proposed development site lay to the east of Lytham Moss during the post-medieval period, which, by at least as early as 1577, was not distinguished in documentary sources from Marton Moss (*op cit*, 102). Drainage and enclosure was undertaken in this area from at least as early as 1607, and the extents of the moss had been dramatically reduced by the production of Yates' map in 1786. By the Ordnance Survey (OS) map of 1847 the area was agricultural fields and crossed by irregular road routes, in comparison to the straight and rationalised road networks that were established in association with the methodical enclosure and sub-division of the mosses to the west. This attests to the earlier establishment of the locale of the study area as an agricultural landscape, which had been more

accessible for cultivation or pasture than the adjacent mosses due to the slightly raised and, therefore, drier, character of the topography. The use of the area for agriculture and settlement prior to the nineteenth century is also attested by the presence of several farms in the area (PRN20199; PRN20200; PRN6408; PRN31234; PRN31235) that pre-dated the OS mapping of 1847. Several field systems and areas of cultivation (PRN11272; PRN20190; PRN11274; PRN10493; Fig 1) also pre-dated the later post-medieval or industrial period agricultural enclosure of the landscape and demonstrate the longevity of agricultural settlement in the area around the proposed development site.

1.3.7 OS maps show that by 1932-3, the boundary of the proposed development site had been defined from the surrounding agricultural land, and is likely to have been associated with the earliest phase of Clock Garage. The semi-detached houses adjacent to the eastern side of the western arm of the proposed development area had also been built. Therefore, the made ground is likely to relate to the construction of these buildings in the early decades of the twentieth century. During the second half of the century the east side of the site was built on for Sunning Lea Nurseries, with greenhouses existing until the 1990s.

2. METHODOLOGY

2.1 INTRODUCTION

2.1.1 The watching brief was carried out in accordance with current Institute for Archaeologists (IfA) and English Heritage guidelines (Institute for Archaeologists 2008a, 2008b, 2010 English Heritage 2006).

2.2 WATCHING BRIEF

2.2.1 A permanent archaeological presence was maintained during the groundworks associated with the geotechnical site investigation. The purpose was to record the depth of overlying made ground deposits and then identify, investigate and record any underlying deposits or archaeological remains encountered. Both trial pits (TP) and boreholes (BH) were undertaken, together with an investigation of the bunds present on site (Fig 2). However, only the trial pits were monitored during the watching brief as the limited nature of the extraction of the boreholes by coring inhibits any below ground remains being observed *in situ*, although a copy of the borehole logs has been obtained (*Appendix 3*).

2.2.2 A record of the nature, extent and depths of groundworks was maintained throughout the duration of the project and the locations of the geotechnical investigations have been recorded on Figure 2. All archaeological contexts were recorded on OA North's *pro-forma* sheets, using a system based on that of the English Heritage former Centre for Archaeology. A monochrome and digital photographic record was maintained throughout.

2.3 ARCHIVE

2.3.1 A full professional archive has been compiled in accordance with the current IfA and English Heritage guidelines (2006). The paper and digital archive will be deposited in the Record Office, Preston, on completion of the project. As part of the archive, an OASIS form will be submitted also.

3. WATCHING BRIEF RESULTS

3.1 INTRODUCTION

3.1.1 The objective of the watching brief, during the geotechnical site investigation, was to record the depths of known made ground deposits, and identify, investigate and record any underlying remains or deposits that have the potential to contain archaeological remains. The following is a summary of the findings; the trial pits monitored during the watching brief are plotted in Figure 2 with details of the depths of deposits encountered in *Appendix 2*, and the borehole log data has been provided in *Appendix 3*.

3.2 RESULTS

3.2.1 Ten trial pits (TP1-10) were excavated under archaeological supervision, ranging in depths from 2.1m (TP2) to 4.5m (TP7), and 0.6 -1m in width. The dimensions of the trenches, being narrow and deep, meant that the deposits were recorded from the trench sides, due to health and safety reasons (Plate 2). The full details of the deposits encountered have been in provided in *Appendix 2*. Three boreholes (BH1a-3; BH1 having been abandoned at 1.2m and relocated as 1a) were also carried out, and the logs have been provided in *Appendix 3*, which correlate with the results of the trial pits. In addition, three exploratory sections were taken through the three bunds present on site (Fig 2), which appeared to be mounded topsoil with some cobble inclusions.

Plate 2: TP5, showing the unstable nature of the sides of the trench due to the rubble deposits

3.2.2 Until comparatively recently, most of the plot had been used as a car park area (TP3 and 4 showing evidence of the tarmac, which can also be seen in Plate 1), with a now overgrown access road running north/south along the western perimeter of the site. The road surface was encountered in TP2 (*Appendix 2*). The remainder of the trial pits (TP1, 5-7 and 9) had a topsoil overburden measuring 0.1-0.2m. However, TP8 and 10, both positioned on the western boundary of the site (Fig 2), had relatively thick topsoil deposits (0.7-0.8m), which were directly overlying the underlying natural clay (Plate 3). Excluding these two trial pits, made deposits were encountered across the rest of the site, in both trial pits and boreholes.

Plate 3: TP10 showing the natural clay underlying the topsoil deposit

3.2.3 There were similarities in the made ground deposits recorded in TP4, 6, 7 and 9, wherein two separate rubble deposits were observed, with a lighter coloured matrix overlying a darker silty matrix. TP3 and 5 had a seemingly single rubble made deposit. TP1 and 2 in the south-eastern corner of the site encountered a deposit of peat between 1.1-1.3m thick, although at a depth of 2.5m in TP1 and 0.7m in TP2 (Plate 4). However, no record of peat was mentioned in the data for BH1a positioned to the north-west of TP1 and 2. In addition, a 0.1m thick buried soil deposit was recorded in TP4 at a depth of 3.4m, situated in the north-east corner of the site.

3.2.4 No finds of archaeological significance were encountered during the watching brief.

Plate 4: TP2, showing the peat deposit towards the base of the trench

4. CONCLUSION

4.1 DISCUSSION

4.1.1 The site of the proposed development is within an area of archaeological potential which is vulnerable to any development. However, the site was known, from recent investigations prior to the construction of the Lytham Windows showroom, to have been raised with made ground deposits consisting mainly of rubble. It is intended that much of the proposed development will be contained within the made ground, but the precise depth of these deposits was not known.

4.1.2 The table below shows the depth below current ground level at which deposits with the potential for buried archaeological remains to survive were encountered. The proposals require removal of the top 300mm for the construction and laying of foundation pads and ground beams, with any further intrusive work being restricted to 300mm wide piles across the site. It would be preferable if the deposits had been mapped in accordance with the topography of the site in order that a three-dimensional appreciation of the occurrence of the made ground could be viewed. However, from the results of the geotechnical investigations, the shallowest potential deposits are 0.7m in TP2 and 0.8m in TP8, and thereafter 1.2m in TP10 and 1.5m in TP7. Consequently, it would appear that the removal of the top 300mm of deposits should not affect any potential archaeological remains.

INVESTIGATION	MAX. EXTENT OF OVERLYING MADE GROUND/OVERBURDEN (M)	NOTES
TP1	2.5	Peat deposit 1.1m thick
TP2	0.7	Peat deposit 1.3m thick
TP3	>3.8	
TP4	3.4	Buried soil horizon 0.1m thick
TP5	3	
TP6	2.5	
TP7	1.5	
TP8	0.8	
TP9	2.1	
TP10	1.2	
BH1	3.3	

BH2	1.8	
BH3	2.5	

Table 1: Depth at which potential archaeological deposits may be encountered from the current ground level

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Ordnance Survey First Edition map at 6" to 1 mile, Sheet 59, 1847

Ordnance Survey map at 6" to 1 mile, Sheet 59, 1932-3

Yates, W, 1786 *The County Palatine of Lancaster*

6. ILLUSTRATIONS

6.1 FIGURES

Figure 1: Site location

Figure 2: Plan showing the location of the geotechnical site investigations

6.2 PLATES

Plate 1: Current oblique aerial view of the proposed development site, facing north, showing the Lytham Wondows showroom

Plate 2: TP5, showing the unstable nature of the sides of the trench due to the rubble deposits

Plate 3: TP10 showing the natural clay underlying the topsoil deposit

Plate 4: TP2, showing the peat deposit towards the base of the trench

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Figure 1: Site location

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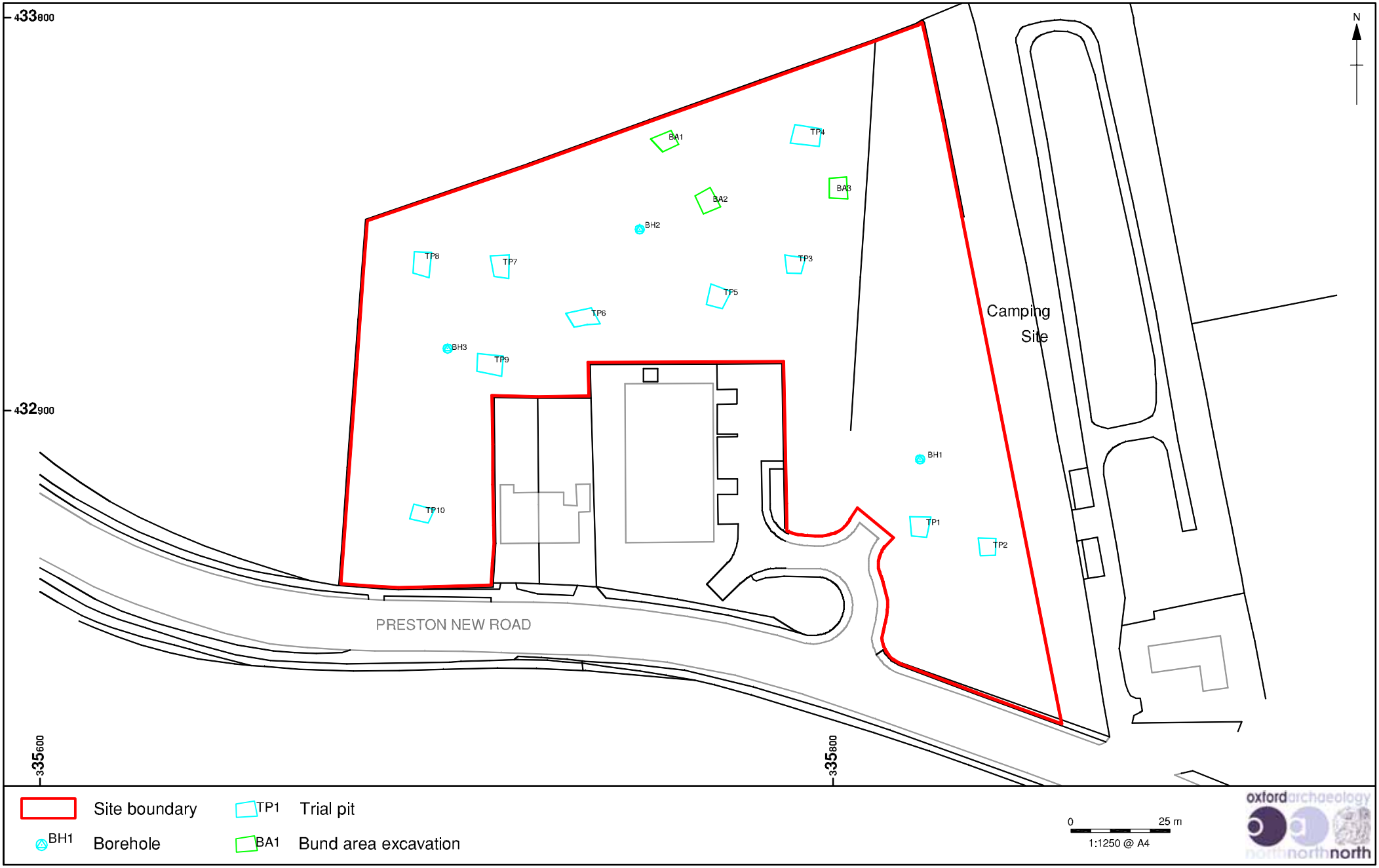

Figure 2: Plan showing the location of the geotechnical site investigations

APPENDIX 1: LCAS BRIEF

SPECIFICATION FOR AN ARCHAEOLOGICAL EVALUATION AT THE FORMER CLOCK GARAGE SITE, PRESTON NEW ROAD, PEEL (SD 335570 432942)

Specification prepared at the request of Peter Liversidge, Kensington Developments.

1. Summary

1.1 An application (5/2011/0381) has been submitted to Fylde Borough Council for residential development at the former Clock Garage site, Preston New Road, Peel. The proposal site lies in an area of potential archaeological interest; numerous flint finds in the vicinity indicating settlement in the Neolithic and Bronze Age periods.

1.2 Lancashire County Archaeology Service (LCAS) has recommended that the site be the subject of a pre-determination archaeological evaluation (trial trenching) in order to establish the nature, extent and date of any archaeological deposits that might lie within the proposal site. This specification has been written by LCAS, the holders of the Lancashire Historic Environment Record (HER). Depending upon the results obtained, LCAS may recommend that archaeological deposits be preserved in situ, or that additional archaeological work may need to be carried out. Any additional work will be governed by separate specification(s).

2. Planning Background

2.1 A planning application (5/2011/0381) has been submitted to Fylde Borough Council for residential development comprising of 12 no. detached houses and garages at the former Clock Garage site, Preston New Road, Peel.

3. Site Location

3.1 The site lies on the north side of Preston New Road (A583), Peel, to the rear of the former Clock Garage site and bounded to the east and west by caravan parks and camping sites.

4. Archaeological Interest

4.1 The area of Peel Hill has produced considerable evidence for human activity during the Neolithic and Bronze Age periods of prehistory, in the form of scatters of flint tools and debris from the manufacture of these tools. The find spots (such as LA51, LA73, LA74, LA77, LA78, LA79) are scattered widely over the area of what was an 'island' of higher ground amongst the surrounding lower lying wetland mosses in the second and third millennia BC.

4.2 The density of find spots in areas where field walking over arable land has taken place suggests that areas of undisturbed land may also contain similar concentrations of prehistoric material. These flint scatters are of great significance as they are one of the few indicators of human activity over large periods of the prehistoric past and very few have been investigated to determine if they are derived

from settlement sites or represent shorter periods of activity, such as a single phase of hunting or other tool use.

5. Aim of the Evaluation

5.1 The aim of the evaluation is to gather sufficient information to establish the extent, condition, character and date (as far as circumstances permit) of any archaeological features and deposits within the application area. The information gained will then be assessed by LCAS to determine the nature and extent of any further archaeological works that might be deemed necessary.

6. Evaluation Methodology

6.1 General Instructions

6.1.1 Health and Safety

The archaeologists on site will naturally operate with due regard for Health and Safety regulations, and the contractor must ensure that all relevant requirements are met with regard both to site personnel and to members of the public. This work may require the preparation of a Risk Assessment of the site, in accordance with the Health and Safety at Work Regulations prior to submission of the tender. **LCAS and its officers cannot be held responsible for any accidents that may occur to outside contractors engaged to undertake this work while attempting to conform to this specification.**

6.1.2 Confirmation of Adherence to Specification

Prior to the commencement of *any work,* the archaeological contractor must confirm adherence to this specification in writing to LCAS, or state (with reasons) any proposals to vary the specification. Should the contractor wish to vary the specification, then written confirmation of the agreement of LCAS to any variations is required prior to work commencing. Unauthorised variations are made at the sole risk of the contractor (see para. 13.2, below). **Modifications presented in the form of a re-written project brief will not be considered by LCAS.**

6.1.3 Confirmation of Timetable and Contractors' Qualifications

Prior to the commencement of *any work*, the archaeological contractor should provide LCAS **in writing** with a projected timetable for the site work, and with details regarding staff structure and numbers. The names and *curriculum vitae* of key project members (the project manager, site supervisor, any proposed specialists *etc.*), along with details of any specialist sub-contractors, should also be supplied to LCAS (if *C.V.s* have not previously been supplied). All project staff provided by the archaeological contractor must be suitably qualified and experienced for their roles. The timetable should be adequate to allow the work to be undertaken to the appropriate professional standard, subject to the ultimate judgement of LCAS.

6.1.4 Documentary research

Prior to the commencement of *fieldwork*, the SMR should be visited by either the project manager or the site supervisor, in order to gain an overview of the archaeological/historical background of the site and environs. In addition to providing a knowledge base for the work in hand, the results of this assessment may be incorporated into the contractor's report where they are considered to contribute to

that report, but any extraneous material should be omitted. Please note that the SMR makes a charge for consultations of a commercial nature. The results of this exercise should be used to inform the whole project. **Please note, however, that a formal desk-based report is not required and the results of this stage of work should be incorporated in the final report.**

7. Trenching Methodology

7.1 Trench Size and Placement

The work will involve the excavation of nine 30m long x 2m wide trenches (a 4% sample of the total area of the application site – 1.38ha.) which can be machine-opened. **The location of the trenches is to be agreed with LCAS but it is expected that they will test the proposed house plots**. The contractor should also allow for a contingency allowance of a further 60 sq m of the site. The use of the contingency will depend upon the results obtained in the initial trial trenching. The use of the contingency will be at the decision of LCAS, whose decision will be issued in writing, if necessary in retrospect after site discussions.

7.2 Method of Excavation

The trial trenches may be opened and the topsoil and recent overburden removed down to the first significant archaeological horizon in successive level spits of a **maximum** 0.2m. thickness, by the use of an appropriate machine using a wide toothless ditching blade. **Under no circumstances should the machine be used to cut arbitrary trenches down to natural deposits.** Any machine work must be carried out under direct archaeological supervision and the machine halted if significant archaeological deposits are encountered. The top of the first significant archaeological horizon (pre-19th century) may be exposed by the machine, but must then be cleaned by hand and inspected for features and then dug by hand.

7.3 Method of Recording

The trenches are to be recorded according to the normal principles of stratigraphic excavation. The stratigraphy of each trial trench is to be recorded even where no archaeological deposits have been identified. No archaeological deposits should be entirely removed unless this is unavoidable in achieving the objectives of this evaluation, although generally a 50% sample of any features identified is expected to be half-sectioned and the depth of archaeological deposits must be assessed. Modern artefacts are to be noted but not retained (18th-century material and earlier should be retained.)

7.4 Use of Metal Detectors on Site

7.4.1 Spoil heaps are to be scanned for non-ferrous metal artefacts using a metal detector capable of making this discrimination, operated by an experienced metal detector user (if necessary, operating under the supervision of the contracting archaeologist). Modern artefacts are to be noted but not retained (18th-century material and earlier should be retained.)

7.4.2 If a non-professional archaeologist is to be used to carry out the metal-detecting, a formal agreement of their position as a sub-contractor working under direction must be agreed in advance of their use on site. This formal agreement will apply whether they are paid or not.

7.4.3 To avoid financial claims under the Treasure Act a suggested wording for this formal agreement with the metal detectorist is: "In the process of working on the archaeological investigation at [*location of site*] between the dates of [*insert dates*], [*name of person contributing to project*] is working under direction or permission of [*name of archaeological organisation*] and hereby waives all rights to rewards for objects discovered that could otherwise be payable under the Treasure Act 1996."

7.5 Environmental Sampling Strategy

Deposits must be sampled for retrieval and assessment of the preservation conditions and potential for analysis of all bioarchaeological remains. A sampling strategy must be agreed with a recognised bioarchaeologist, and the sampling methods should follow the procedures outlined by the English Heritage's Centre for Archaeology Guidelines, *Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation* (2002/01). Provision should be also be made for the specialist to visit the site and discuss the sampling strategy, if necessary.

7.6 Conservation Strategy

A conservation strategy must be developed in collaboration with a recognised laboratory. All finds must be assessed in order to recover information that will contribute to an understanding of their deterioration and hence preservation potential, as well as identifying potential for further investigation. Furthermore, all finds must be stabilised and packaged in accordance with the requirements of the receiving museum. As a guiding principle only artefacts of a "displayable" quality would warrant full conservation, but metalwork and coinage from stratified contexts would be expected to be X-rayed if necessary, and conservation costs should also be included as a contingency.

7.7 Documentation

The actual areas of trenching and any features of possible archaeological concern noted within the trenches, should be accurately located on a site plan and recorded by photographs, summary scale drawings and written descriptions sufficient to permit the preparation of a report on the material. The site grid is to be accurately tied into the National Grid and located on the largest scale map available of the area (either 1:2500 or 1:1250).

7.8 Location of Services, etc.

The archaeological contractors will be responsible for locating any drainage pipes, service pipes, cables *etc.* which may cross any of the trench lines, and for taking the necessary measures to avoid disturbing such services.

7.9 Human Remains

Any human remains that are discovered must initially be left in-situ, covered and protected. If removal is necessary, this must comply with the relevant legislation, any Home Office and local environmental health regulations and English Heritage's and The Church of England's *Guidance for best practice for treatment of human remains excavated from Christian burial grounds in England* (2005) where relevant. Ethical guidance for burial grounds of non-Christian faiths should be sought from the appropriate religious authorities.

7.10 Treasure Act

The terms of the Treasure Act 1996 must be followed with regard to any finds that might fall within its purview. Any finds must be removed to a safe place and reported to the local coroner as required by the procedures as laid down in the "Code of Practice". Where removal cannot be effected on the same working day as the discovery, suitable security measures must be taken to protect the finds from theft.

8. Commencement of work

8.1 Notification

The project will be monitored as necessary and practicable by LCAS, in its role as "curator" of the county's archaeology. LCAS should receive as much notice as possible and certainly one week of the intention to start fieldwork. This notification is to be supplied in writing, and copied to the relevant Museum (see para. 10.1 below). A copy of the contractor's risk assessment should accompany notification of intention to commence work.

9. Access/Monitoring Methodology

9.1 The representative of LCAS will be afforded access to the site at any reasonable time. It is usual practice that the visit is arranged in advance, but this is not always feasible. LCAS' representative will be provided with a site tour and an overview of the site by the senior archaeologist present and should be afforded the opportunity to view all trenches, any finds made that are still on site, and any records not in immediate use. It is anticipated that the records of an exemplar context that has previously been fully recorded will be examined. Any observed deficiencies during the site visit are to be made good to the satisfaction of LCAS' representative, by the next agreed site meeting.

10. Excavation Archives Deposition.

10.1 Before commencing any fieldwork, the archaeological contractor must contact the relevant museum archaeological curator to determine the museum's requirements for the deposition of an excavation archive. In this case the contact is Stephen Bull, Curator of Military History & Archaeology, Museum of Lancashire, Stanley Street, Preston, PR1 4YP; telephone 01772 534080, fax: 01772 534079. Agreement for deposition should be confirmed in writing by the archaeological contractor; this correspondence is to be copied to LCAS.

10.2 It is the responsibility of the archaeological contractor to endeavour to obtain consent of the landowner, in writing, to the deposition of finds with the Museum of Lancashire.

10.3 It is the responsibility of the archaeological contractor to meet the Museum of Lancashire's requirements with regard to the preparation of excavation archives for deposition.

10.4 The museums officer named in 10.1 above should be notified in writing of the commencement of fieldwork at the same time as LCAS (see para. 8.1).

11. Unexpectedly Significant or Complex Discoveries

11.1 Should there be unexpectedly significant or complex discoveries made that warrant, in the professional judgement of the archaeologist on site, more detailed recording than is appropriate within the terms of this specification, then the archaeological contractor should urgently contact LCAS with the relevant information to enable them to resolve the matter with the developer.

12. Post-Excavation Work

12.1 After Completion of Fieldwork

On completion of the fieldwork, any samples taken shall be processed and any finds shall be cleaned, identified, assessed, dated (if possible), marked (if appropriate) and properly packed and stored in accordance with the requirements of national guidelines. A fully indexed field archive shall be compiled consisting of all primary written documents, plans, sections, photographic negatives and a complete set of labelled photographic prints. An index to the field archive is to be deposited with LCAS (preferably as an appendix in the report). The original archive is to accompany the deposition of any finds, providing the landowner agrees to the deposition of finds in a publicly accessible archive (see para. 10.2 above). In the absence of this agreement the field archive (less finds) is to be deposited with LCAS.

12.2 Report Format and Content

A report should be produced, which should include background information on the need for the project, a description of the methodology employed, and a full description and interpretation of results produced. It is not envisaged that the report is likely to be published, but it should be produced with sufficient care and attention to detail to be of academic use to future researchers. Location plans should be produced at a scale which enables easy site identification and which depicts the full extent of the site investigated (a scale of 1:50,000 is not regarded as appropriate unless accompanied by a more detailed plan or plans). Site plans should be at an appropriate scale showing trench layout (as dug), features located and, where possible, predicted archaeological deposits. Upon completion of each evaluation trench all sections containing archaeological features will be drawn. Section drawings (at a minimum scale of 1:20) must include heights O.D. Plans (at a minimum scale of 1:50) must include O.D. spot heights for all principal strata and any features. Where no archaeological deposits are encountered at least one long section of each trench will be drawn. Artefact analysis is to include the production of a descriptive catalogue with finds critical for dating and interpretation illustrated. Details of the style and format of the report are to be determined by the archaeological contractor, but should include a full bibliography, a quantified index to the site archive, and as an appendix, a copy of this specification.

12.3 Publicity

If the project is to be publicised in any way (including media releases, publications etc.), then it is expected that LCAS will be given the opportunity to consider whether it wishes its collaborative role to be acknowledged, and if so, the form of words used will be at LCAS' discretion.

12.4 Consideration of Appropriate Mitigation Strategy

The report should not give a judgement on whether preservation or further investigation is considered appropriate, but should provide an interpretation of results, placing them in a local and regional, and if appropriate, national context. However, a client may wish to separately commission the contractor's view as to an appropriate treatment of the resource identified.

12.5 Report Deposition

An 'Adobe Acrobat pdf' copy of the report on CD-ROM is to be supplied to the HER held by LCAS within a period of two months following completion of fieldwork unless specialist reports are awaited. In the latter case a revised date should be agreed with LCAS. The report will be supplied on the understanding that it will become a public document after an appropriate period of time (generally not exceeding six months, unless otherwise agreed).

12.6 OASIS

Archaeological contractors must complete the online OASIS form at http://ads.ahds.ac.uk/project/oasis/. Contractors are advised to contact Lancashire *HER* prior to completing the form. Once a report has become a public document by submission to or incorporation into the HER, Lancashire HER may place the information on a web-site. Please ensure that you and your client agree to this procedure in writing as part of the process of submitting the report to the case officer (Ken Davies) at Lancashire HER.

13. General considerations

13.1 Authorised alterations to specification by contractor

It should be noted that this specification is based upon records available in the HER and on a brief examination of the site by LCAS. Archaeological contractors submitting tenders should carry out an inspection of the site prior to submission. If, on first visiting the site or at any time during the course of the recording exercise, it appears in the archaeologist's professional judgement that

i) a part or the whole of the site is not amenable to recording as detailed above, and/or
ii) an alternative approach may be more appropriate or likely to produce more informative results, and/or
iii) any features which should be recorded, as having a bearing on the interpretation of the structure, have been omitted from the specification,

then it is expected that the archaeologist will contact LCAS as a matter of urgency. If contractors have not yet been appointed, any variations which LCAS considers to be justifiable on archaeological grounds will be incorporated into a revised specification, which will then be re-issued to the developer for redistribution to the tendering contractors.

13. 2 Unauthorised Alterations to Specification by Contractor

It is the archaeological contractor's responsibility to ensure that they have obtained LCAS's consent in writing to any variation of the specification prior to the commencement of on-site work or (where applicable) prior to the finalisation of the

tender. Unauthorised variations may result in LCAS being unable to recommend determination of the planning application and are therefore made solely at the risk of the contractor.

14. Further details

14.1 Further information about the proposed development can be obtained from Peter Liversidge, Kensington Developments Ltd, 94 Park View Road, Lytham St Annes, FY8 4JF. Tel: 01253 796888.

14.2 Any technical queries arising from the specification detailed above, should be addressed to LCAS without delay.

15. Valid period of specification

15.1 This specification is valid for a period of one year from date of issue. After that time it may need to be revised to take into account new discoveries, changes in policy or the introduction of new working practices or techniques.

Doug Moir
Planning Officer (Archaeology)

Tel 01772 531734
Fax 01772 533423.
E-mail: Douglas.moir@lancashire.gov.uk

July 2011

APPENDIX 2: SUMMARY OF TRIAL PIT DETAILS

TP No.	Alignment	Dimensions (m)	Max depth (m)	Comment
1	E/W	4 x 0.7	4	Topsoil – 0.1m Made deposits – 2.4m Peaty subsoil – 1.1m Natural clay – 0.4m +
2	N/S	4 x 0.8	2.1	Topsoil – 0.2m Made deposits/road deposits – 0.5m Peaty subsoil – 1.3m Natural clay – 0.1m +
3	E/W	3.5 x 0.7	3.8	Tarmac – 0.2m Made deposits; loose brick, stone and concrete rubble (some very large blocks) in gravel and sand matrix – 3.6m
4	N-E/S-W	3 x 1	3.5	Tarmac – 0.2m Made deposits; brick and concrete rubble in a light sandy matrix – 1.4m Made deposits; dark grey sandy gravels with brick, concrete, clinker and coal inclusions – 1.8m Buried soil – 0.1m Natural clay – 0.0m +
5	N/S	4 x 1	3.1	Topsoil – 0.1m Made deposits; loose mid-brown and dark grey silty-sand matrix with brick, stone and concrete rubble inclusion – 3m Natural clay – 0.0m +
6	E/W	3.5 x 0.8	3.2	Topsoil – 0.1m Made deposits; homogenous loose, light yellowish-brown sand containing large rounded river stones and some occasional brick rubble – 1m Made deposits; dark grey, soft sandy-silt with brick rubble – 1.4m Natural clay – 0.7m +
7	N/S	3.5 x 0.8	4.5	Topsoil – 0.1m Made deposits; light yellow-brown sandy deposit – 0.3m Made deposits; dark grey friable silty-sandy deposit – 1.1m Natural clay – 3m +
8	N-W/S-E	3.5 x 0.6	3	Topsoil (partly redeposited) – 0.8m Natural clay – 3.2m+
9	N/S	3 x 0.8	4.2	Topsoil – 0.1m Made deposits; loose, light yellowish-brown sand containing brick rubble – 0.8m Made deposits; dark grey, soft sandy-silt with brick and stone rubble – 0.7m Natural clay – 1.1m+
10	N-E/S-W	3 x 0.7	3	Topsoil – 0.7m Natural clay – 2.4m+

APPENDIX 3: BOREHOLE LOG DATA

GEO-VENTURES (UK) LIMITED
Geotechnical and Environmental Services

Site	Borehole Number
Former Clock Garage, Lytham	BH 1

Boring Method	Casing Diameter	Ground Level (mOD)	Client	Job Number
Cable Percussion	150mm cased to 10.00m		Kensington Developments	12-435

Location	Dates	Engineer	Sheet
	05/03/2012	Wardell Armstrong LLP	1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.00-0.50	B						MADE GROUND : loose /medium dense grey / black soil, clay, broken brick and concrete fill		
0.50-1.00	B					(1.90)			
1.20-1.65	SPT(C) N=41			4,7/12,11,10,8					
1.20-1.65	B								
						1.90			
							Complete at 1.90m		

Remarks
Casing diverting within made ground material, borehole abandoned and re-drilled as BH 1A
Services inspection pit excavated by hand to 1.20m

Scale (approx)	Logged By
1:50	J. Crook

Figure No. 12-435.BH 3

GEO-VENTURES (UK) LIMITED
Geotechnical and Environmental Services

Site	Borehole Number
Former Clock Garage, Lytham	BH 1A

Boring Method	Casing Diameter	Ground Level (mOD)	Client	Job Number
Cable Percussion	150mm cased to 10.00m		Kensington Developments	12-435

Location	Dates	Engineer	Sheet
	05/03/2012-06/03/2012	Wardell Armstrong LLP	1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
0.00-0.50	B						MADE GROUND : loose /medium dense grey / black soil, clay, broken brick and concrete fill			
0.50-1.00	B									
1.20-1.65	SPT(C) N=7			1,0/1,2,2,2						
1.20-1.65	B					(3.30)				
2.00-2.45	SPT(C) N=11			1,3/4,3,2,2						
2.00-2.45	B									
3.00-3.45	SPT(C) N=6			1,0/1,1,2,2						
3.00-3.45	B									
3.30-3.50	B					3.30				
							Firm to firm / stiff brown sandy CLAY with bands of brown fine / medium sand		▼1	
4.00-4.45	UB NR			23 blows						
				Moderate(1) at 4.30m, rose to 3.50m in 20 mins, sealed at 5.00m.					▽1	
4.50-4.95	DB									
4.50-4.95	SPT N=13			2,2/2,3,4,4						
5.00-5.45	SPT N=14			2,3/3,3,4,4						
5.00-5.45	DB									
						(4.70)				
6.00-6.45	U			42 blows						
6.50	D									
7.00-7.45	SPT N=15			2,2/3,3,4,5						
7.00-7.45	DB									
8.00-8.45	U			60 blows		8.00				
							Stiff brown slightly sandy CLAY			
8.50	D									
9.00-9.45	SPT N=19			2,3/4,4,5,6		(2.00)				
9.00-9.45	DB									
10.00	D					10.00				

Remarks
Services inspection pit excavated by hand to 1.20m
Chiselling from 2.10m to 2.40m for 1.00 hour.

Scale (approx)	Logged By
1:50	J. Crook

Figure No. 12-435.BH 3

GEO-VENTURES (UK) LIMITED
Geotechnical and Environmental Services

Site	Borehole Number
Former Clock Garage, Lytham	BH 2

Boring Method	Casing Diameter	Ground Level (mOD)	Client	Job Number
Cable Percussion	150mm cased to 10.00m		Kensington Developments	12-435

Location	Dates	Engineer	Sheet
	06/03/2012	Wardell Armstrong LLP	1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
0.00-0.50	B					(0.10) 0.10	TOPSOIL			
							MADE GROUND : brown sand, gravel and broken brick fill			
0.50-1.00	B					(0.90)				
						1.00				
							MADE GROUND : medium dense brown soily clay fill with broken brick			
1.20-1.65	SPT(C) N=11			1,2/2,3,3,3						
1.20-1.65	B					(0.80)				
						1.80				
							Stiff brown slightly sandy CLAY with bands of brown silt / fine sand		▼1	
2.00-2.45	U			41 blows						
2.50	D					(1.70)				
3.00-3.45	SPT N=21			2,3/4,4,6,7						
3.00-3.45	DB								▽1	
				Moderate(1) at 3.30m, rose to 2.00m in 20 mins, sealed at 6.00m.		3.50				
							Firm / stiff brown sandy CLAY with bands of gravelly fine / medium sand			
4.00-4.45	U			43 blows						
4.50	D									
5.00-5.45	SPT N=16			2,3/5,5,3,3						
5.00-5.45	B									
6.00-6.45	U			33 blows					▼2	
						(6.50)				
7.00-7.45	SPT N=13			2,2/3,3,4,3						
7.00-7.45	DB									
									▽2	
				Moderate(2) at 8.00m, rose to 6.30m in 20 mins.						
8.00-8.45	UB NR			32 blows						
8.50-8.95	SPT N=16			2,3/3,4,4,5						
8.50-8.95	DB									
9.00-9.45	SPT N=18			2,3/4,4,5,5						
9.00-9.45	DB									
						10.00				

Remarks
Services inspection pit excavated by hand to 1.20m
Chiselling from 1.50m to 1.80m for 1.00 hour.

Scale (approx)	Logged By
1:50	J. Crook

Figure No.
12-435.BH 3

GEO-VENTURES (UK) LIMITED
Geotechnical and Environmental Services

Site	Borehole Number
Former Clock Garage, Lytham	BH 3

Boring Method	Casing Diameter	Ground Level (mOD)	Client	Job Number
Cable Percussion	150mm cased to 10.00m		Kensington Developments	12-435

Location	Dates	Engineer	Sheet
	07/03/2012	Wardell Armstrong LLP	1/1

Depth (m)	Sample / Tests	Casing Depth (m)	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
0.00-0.50	B						MADE GROUND : loose grey / black soil / clay fill with fragments of broken brick			
0.50-1.00	B									
1.20-1.65	SPT(C) N=8			1,1/2,2,2,2		(2.50)				
1.20-1.65	B								▼1	
2.00-2.45	B			Moderate(1) at 2.00m, rose to 1.60m in 20 mins, sealed at 2.50m.					▽1	
2.00-2.45	SPT(C) N=9			1,1/2,3,2,2		2.50	Stiff brown CLAY			
3.00-3.45	SPT N=23			2,3/4,5,6,8						
3.00-3.45	DB									
4.00-4.45	UB NR			47 blows		(3.00)				
4.50-4.95	SPT N=20			2,3/4,4,5,7						
4.50-4.95	DB									
5.00-5.45	SPT N=22			2,3/4,5,6,7						
5.00-5.45	DB									
						5.50	Firm to firm / stiff brown slightly sandy CLAY			
6.00-6.45	U			58 blows						
6.50	D									
7.00-7.45	SPT N=11			1,2/2,3,3,3						
7.00-7.45	DB									
						(4.50)				
8.00-8.45	U			37 blows						
8.50	D									
9.00-9.45	SPT N=12			1,2/2,3,3,4						
9.00-9.45	DB									
						10.00				

Remarks
Services inspection pit excavated by hand to 1.20m
Chiselling from 1.80m to 2.00m for 1.00 hour.

Scale (approx)	Logged By
1:50	J. Crook

Figure No.
12-435.BH 3