

THORNTON 2 WASTE TECHNOLOGY PARK, THORNTON, CLEVELEYS LANCASHIRE

Archaeological Evaluation



Oxford Archaeology North

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SUMMARY

Following the submission of an Environmental Statement by RPS Planning, Environment and Transport (RPS) on behalf of Lancashire County Council, planning permission was granted to redevelop the site of the former ICI Burn Hall site at Thornton, Cleveleys, Lancashire (site centred NGR SD 3334 4437) for the purpose of a proposed Waste Technology Park and the creation of an access road and roundabout. RPS commissioned Oxford Archaeology North (OA North) to undertake an archaeological evaluation, in accordance with their written scheme of investigation (WSI) prepared following consultation with the Lancashire County Archaeology Service (LCAS). Phase 1 of the evaluation comprised a topographic survey and magnetometer survey coordinated by OA North (ArchaeoPhysica 2005). Phase 2 comprised the excavation of a series of evaluation trenches. An initial configuration and location of ten trenches was made, based on previous work undertaken on the site for the purpose of the ES, including map regression analysis, topographical survey and a magnetometer survey. These targeted the proposed access road from the B5286. A further eight trenches were then added outside of the original proposed development area, to assess the archaeological potential in these areas. Two of these trenches were located in the vicinity of the access road and the remaining six in a field immediately to the north of the main ICI site. The evaluation work was undertaken over eleven days from 24th July to 7th August 2006. The results from this exercise will be used to inform a mitigation strategy to be imposed during construction and operation.

The known archaeological potential for the evaluation predominantly comprised the remains of the medieval Burn Hall and the later farm complex on the site, as well as its associated gardens. This was located at the western end of the proposed access road, with less known archaeological potential further east. The field to the north of the main ICI site had no known archaeological potential.

Trench 1 revealed evidence of Burn Hall shown on early mapping in the form of a wall constructed of handmade brick, located 0.07m below the ground surface. A further wall of handmade brick was also located within this trench, 0.20m below the ground surface, as well as a number of linear features and postholes probably relating to horticultural practices. Trench 2 revealed a cobbled surface, fronted by a wall made of handmade bricks, matching up with a large curving part of the farm complex shown on the 1st edition Ordnance Survey map of 1847. The remains of the possible foundations of another wall were also observed within the trench, constructed of large stones, thought to be of an earlier phase. Trench 3 produced an animal burial, whilst Trench 5 revealed a single ditch. A single ditch was also located within Trench 9, containing post-medieval pottery. This ditch correlated with a boundary shown on the 1847 Ordnance Survey map.

The evaluation demonstrated the survival of the below ground remains of Burn Hall as shown on the Ordnance Survey mapping, as well as the associated land use in terms of probable horticultural features. The impact associated with the clearance and groundworks is currently believed to be in the region of 0.5 to 1.0m, which would impact upon the features in Trenches 1 and 2 within the proposed road footprint. The construction methods used for the proposed access road and roundabout could well

impact upon the remains of Burn Hall, given its proximity to the surface, in which case a programme of mitigation works would need to be implemented.

ACKNOWLEDGEMENTS

Oxford Archaeology North would like to thank Mick Rawlings of RPS for commissioning the work, and Peter Iles (Specialist Advisor (Archaeology), Lancashire County Council Environment Directorate) for his advice on site.

The evaluation was undertaken by Paul Clark, John Griffiths, David Tonks, Pascal Eloy and Jason Clarke, with the survey undertaken by Karl Taylor and Chris Wild. Paul Clark wrote the report. The finds were examined by Christine Howard-Davis and the drawings were prepared by Marie Rowland. Emily Mercer managed the project and edited the report.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

- Following the submission of an Environmental Statement by RPS Planning, 1.1.1 Environment and Transport (RPS) on behalf of Lancashire County Council, planning permission was granted (re: 02/05/0977) to redevelop the site of the former ICI Burn Hall site at Thornton, Cleveleys, Lancashire (site centred NGR SD 3334 4437; Fig 1) for the purpose of a proposed Waste Technology Park and the creation of an access road and roundabout. One of the conditions attached to the consent called for a programme of archaeological trial trenching, to focus on the route of the proposed access road, from Fleetwood Road North eastwards to the proposed waste site, and the south-west corner of the development site. This forms Phase 2 of a programme of evaluation, using information provided by the first phase to position the trenches. Phase 1 comprised a topographic and magnetometer survey of the access road (ArchaeoPhysica 2005), coordinated by OA North. The site clearance and ground reduction associated with the development is likely to impact to a depth of c 500-1000mm from the current ground surface, adversely affecting any archaeological remains.
- 1.1.2 RPS commissioned OA North to undertake an archaeological evaluation, in accordance with their written scheme of investigation (WSI) prepared in accordance with consultation with the Lancashire County Archaeology Service (LCAS). An initial configuration and location of ten trenches was made, based on previous work undertaken on the site for the purpose of the ES, including map regression analysis, topographical survey and a magnetometer survey. A further eight trenches were then added outside of the original proposed development area, to assess the archaeological potential in these areas. Two of these trenches were located in the vicinity of the access road and the remaining six in a field immediately to the north of the main ICI site. The results of the evaluation will be used to inform any further mitigation work required.
- 1.1.3 The work was undertaken over eleven days from 24th July to 7th August 2006. The results of the evaluation are contained within this report.

1.2 SITE LOCATION, TOPOGRAPHY AND GEOLOGY

- 1.2.1 The site is located approximately 3km north of the centre of Thornton, on the peninsula between the River Wyre to the east and the Irish Sea to the west. The main area of the proposed development site comprises approximately 11ha. of land, which was formerly a chemical works. This is to be connected to the B5286 Fleetwood Road via a new access road leading west from the main part of the site.
- 1.2.2 The proposed access road is situated on gently sloping ground rising from c 4.5m above Ordnance Datum (aOD) at the entrance to the main site to c 11.5m

aOD at the proposed junction with the B5268 Fleetwood Road. The site of the former house known as Burn Hall (Bourne Hall) lies on the eastern edge of a slight rise in the ground, at around 10m aOD. This area is currently under a mixture of trees and rough scrub.

- 1.2.3 The field immediately to the north of the main ICI site, investigated with six trenches, is relatively flat at about 3.5m aOD and currently under rough scrub and grasses.
- 1.2.4 The drift geology across site comprises typical humic-alluvial gley soils of the Downholland 2 series (Soil Survey of England and Wales 1983), overlying solid geology comprising Permo-Triassic red mudstones, siltstones and sandstones (Countryside Commission 1998, 87).

1.3 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

- 1.3.1 *Introduction:* the following background has been taken from the information provided by RPS in the Environmental Statement for the site. A précis of this information is provided in order that the results of the evaluation have an archaeological and historical context.
- 1.3.2 **Prehistoric Period:** work in the Fylde area by the North West Wetlands Survey (Middleton *et al* 1995) revealed the extensive nature of prehistoric settlement in and around the mosslands. The survey located many previously unknown sites and indicated that the glacial drumlins which occur across the site are particularly favourable locations for prehistoric settlement sites because they are so well drained.
- 1.3.3 *Roman Period:* ongoing test pit evaluation work by the Wyre Archaeology Group on the west side of Fleetwood Road North has produced evidence of Roman activity, through the recovery of artefacts (Peter Iles *pers comm*).
- 1.3.4 *Medieval Period:* Thornton was a rural township lying in the parish of Poulton-le-Fylde, occupying most of the peninsula between the Irish Sea and the Wyre estuary. The earliest record for the area is in the Domesday Book which states that it formed part of the possessions of Earl Tostig, and comprised the three manors of Thornton, Rossall and Burn (Porter 1876, 268). These estates were granted to Roger of Poitou, and then to Theobald Walter, later reverting to the Crown (*ibid*). By the fourteenth century, Thornton was divided amongst a number of landholders (Farrer and Brownbill 1912, 231-2). One moiety, or portion, was bought by the Fleetwood family of Rossall in 1593, and this was later considered to be the only manor in Thornton (*op cit*, 232).
- 1.3.5 Burn Manor, the name of which is preserved in the site of Burn Hall (located immediately to the north of the western end of the proposed access road), was in the possession of the Heaton family until the fifteenth century, when it passed to the family of Westby of Mowbreck. This family retained the estate for over 300 years (RPS 2005).

- 1.3.6 The postulated site of Burn Deserted Medieval Village is likely to be within the vicinity of Burn Hall. There is little documentary evidence for this, but the implication is that the area around Burn Hall was originally more densely populated (*ibid*).
- 1.3.7 The work carried out by the Wyre Archaeology Group on the west side of Fleetwood Road North has also produced some pottery of medieval and later date, some of which may be as early as the tenth century AD
- 1.3.8 *Post-medieval Period:* Thornton Marsh, which lay in the centre of the peninsula, was common pasture until 1806, when it was enclosed by Act of Parliament (*ibid*).
- 1.3.9 The former Burn Hall survived as a standing structure until the 1960s. It is referred to in Baines (1867) as having been occupied from the fifteenth century and may have had earlier origins. The Fleetwood Hesketh family converted the hall into a farmhouse in 1784. In the 1950s the main building was described as being of two storeys, constructed in brick (plastered over), a slate roof and 'modern' doors, windows and chimneys (RPS 2005). The outbuildings were constructed in cobblestone with brick dressings. There was a 'Chapel room' on the upper floor with a fine plaster ceiling and fireplace with coat of arms. The 1847 First Edition Ordnance Survey (OS) map appears to show a farm consisting of an arrangement of buildings to the north and west with further buildings to the south and east. The land to the immediate south and east of the complex is shown as orchard and woodland, whilst the land to the north and west is open fields.
- 1.3.10 The First Edition OS map shows the area as being largely unchanged since the Tithe map of 1839 (*ibid*). Salt works were opened at Burn Naze following the discovery of salt deposits at Preesall in the 1870s. Salt from the mines would have supplied the chemical works (the main ICI site), which are marked as Ammonia Soda works on the OS map of 1932. After the start of the Second World War, in 1940, the Ministry of Supply built two chemical defence factories, one at the southern end of the Hillhouse works and the other a new facility at Burn Hall. The facility takes its name from the nearby Burn Hall Farm, which was purchased, together with some of the farmland. During the war the Burn Hall facility opened, producing various substances for the Ministry of Supply. After the war the Burn Hall site expanded and produced chemicals to manufacture a range of goods. After the closure of the ICI works the site was purchased by NPL Developments, with parts of the works being developed as a business park (*ibid*).
- 1.3.11 *Archaeological Background:* two archaeological desk-based assessments have been undertaken in the vicinity, one in July 1998 by Lancaster University Archaeology Unit (LUAU 1998) in response to a proposal to construct a combined cycle gas turbine power station on the Hillhouse site and the other by Liverpool Museum Field Archaeology Unit (LMFAU 2001) on an area of land approximately 300m to the west of the proposed development site, at Poolfoot Farm. The first study noted the recovery of a Neolithic hand axe 2km to the south-east of the site, whilst the latter recorded no direct evidence of archaeological deposits on the Poolfoot Farm site, although noted the potential

for prehistoric, Romano-British, and early medieval deposits. Ongoing work by the Wyre Archaeology Group on the west side of Fleetwood Road North has produced evidence of Roman and medieval activity (Peter Iles *pers comm*).

1.3.12 Work carried out on the proposed development site commenced with an Environmental Impact Assessment (RPS 2005) and was followed by a topographical survey and a magnetometer survey (ArchaeoPhysica 2005), the results of which highlighted the survival of parts of the farm and earthworks shown on the 1847 OS mapping.

2. METHODOLOGY

2.1 **PROJECT DESIGN**

2.1.1 A project design (*Appendix 1*), complying with a written scheme of investigation (*Appendix 2*), was submitted by OA North in response to a request by the client. The project design was adhered to in full, although a number of the trenches were moved to avoid water voles, and the work was consistent with the relevant standards and procedures of the Institute of Field Archaeologists, and generally accepted best practice.

2.2 EVALUATION TRENCHING

- 2.2.1 The topsoil was removed by a JCB 3CX, equipped with a 1.6m wide toothless ditching bucket, down to the level of the first significant archaeological deposit or the natural geology, depending on which was encountered first. This was undertaken in level spits of a maximum 0.1m thickness and under constant archaeological supervision. The exposed deposits were cleaned by hand, using an appropriate method, and inspected for archaeological features. Any further excavation undertaken was carried out by hand in a stratigraphic manner.
- 2.2.2 Investigation of deposits deeper than 1.2m was carried out by means of a machine-excavated sondage, which was recorded from the base of the main trench only. Selected pits and postholes were half-sectioned, whilst linear features were subject to no more than a 10% sample. All excavation, whether by machine or by hand, was undertaken with a view to avoiding damage to any archaeological features, which appear worthy of preservation *in situ*.
- 2.2.3 All information identified in the course of the evaluation was recorded stratigraphically, using a system adapted from that used by the Centre for Archaeology Service of English Heritage, with sufficient pictorial record to identify and illustrate individual features. The results of the investigations were recorded on *pro forma* context sheets. The site archive includes accurate large-scale plans, sections at an appropriate scale (1:50, 1:20 and 1:10) and a photographic record. All photographs included a header board detailing site name and code, date, context and north arrow. A scale was also included. All photographs were cross-referenced onto context and trench records, with all trenches photographed from at least one end.
- 2.2.4 The trenches were located with Leica differential GPS equipment, using realtime (RTK) corrections and equipped with mobile SmartNet technology to achieve an accuracy of \pm 0.01m, with altitude information established with respect to Ordnance Survey Datum.
- 2.2.5 All artefacts and ecofacts were recorded using the same system, and will be handled and stored according to standard practice (following current Institute of Field Archaeologists guidelines) in order to minimise deterioration.

2.3 ARCHIVE

2.1.1 A full professional archive has been compiled in accordance with the project design (*Appendix 1*), and in accordance with current IFA and English Heritage guidelines (English Heritage 1991). The paper and digital archive will be deposited at the County Record Office, Preston and the finds archive will be deposited in the museum of Lancashire, Preston on completion of the project.

3. RESULTS

3.1 INTRODUCTION

3.1.1 Eighteen trenches were excavated during the course of the investigations (Fig 2), seven targeting the proposed access road and its periphery (Trenches 1-7), three in the south-west corner of the proposed main development area (Trenches 8-10), two immediately to the north-west of the proposed access road (Trenches 11 and 12) and the final six (Trenches 13-18) in a field to the north of the main ICI site. The trenches varied in length from 10m to 35m, were 1.8m wide and most of them were dug as a single straight trench. Trench 1, however, was 'T' shaped, whilst Trench 2 was 'L' shaped. Full descriptive details of each trench are provided in *Appendix 3*, together with a context list in *Appendix 4*. A summary of the results for each area is presented below, together with the finds (a list of finds can be found in *Appendix 5*).

3.2 PROPOSED ACCESS ROAD (TRENCHES 1-7)

- 3.2.1 Four of the seven trenches excavated in the area of the proposed access road revealed archaeological remains, namely Trenches 1, 2, 3 and 5. At the northern end of Trench 1 (Figs 3 and 5) evidence of the farmhouse shown on the 1847 OS map was revealed in the form of an approximately aligned east/west wall, *103*, constructed of handmade brick (Plate 1). A further handmade brick wall, *104*, (Plate 2) was uncovered at the eastern end of the east/west arm of Trench 1 that may well have been a garden feature. A number of linear features, *111*, *114*, *115*, *117*, *119*, probably relating to horticultural practices. The numerous postholes, however, formed no discernible structure.
- 3.2.2 Trench 2 (Fig 4) revealed a cobbled surface, **201**, fronted by a wall, **202**, on its south-eastern side made, constructed of handmade bricks (Plate 3), correlating with a large curving part of the farm complex shown on the 1847 OS map. The remains of the possible foundations of another wall, **206**, aligned northwest/south-east were also observed within the trench to the south, and constructed of large stones.
- 3.2.3 Trench 3 produced a probable dog burial, whilst a single east/west aligned ditch, *502*, containing post-medieval pottery and brick was the only feature of significance revealed within Trench 5.

3.3 PROPOSED MAIN DEVELOPMENT AREA (TRENCHES 8-10)

3.3.1 Only one of the three trenches excavated in this area produced any archaeological remains, although all of them provided evidence of the widespread dumping of demolition debris, presumably associated with various phases of the chemical works. A probable buried post-medieval soil was revealed beneath the demolition debris within Trenches 8 and 9 (803 and 904), and possibly within Trench 10 (1004). It seems most likely that this was a

ploughsoil, which had a large amount of demolition debris dumped on top of. The only archaeological feature revealed was a ditch, *906*, (Plate 4) within Trench 9, which contained post-medieval pottery, although it had an uncertain relationship with the probable buried soil, *904*. From its position and alignment, this ditch appears to correlate with a boundary shown on the 1847 OS map.

3.4 AREA TO NORTH-WEST OF PROPOSED ACCESS ROAD (TRENCHES 11 AND 12)

3.4.1 Neither of the trenches excavated to the north-west of the proposed access road revealed any archaeological remains, although the natural stratigraphy revealed in Trench 12 highlighted the alluvial nature of the deposits in the area.

3.5 FIELD TO NORTH OF MAIN ICI SITE (TRENCHES 13-18)

3.5.1 None of the six trenches excavated in the field to the north of the main ICI site revealed any archaeological remains, although most of them contained at least one land drain, highlighting the wet conditions. Examination of the stratigraphy revealed within the trenches again highlighted the alluvial nature of the deposits in this area.

3.6 FINDS

3.6.1 In all, 57 fragments were recovered during the investigation from Trenches 1-5 (*Appendix 5*). Their distribution is shown below in Table 1. The majority of the material recovered was pottery. The sherds were medium to large-sized fragments, largely unabraded and in good condition. None of the pottery examined was likely to be earlier than the later seventeenth century, and it is likely that most derive from the later eighteenth and nineteenth centuries.

Trench	Pottery	Glass	СВМ	Bone	Other	Totals
1	14	1	4	13	6	38
2	11	0	0	0	2	13
3	3	0	0	0	0	3
4	1	0	0	0	0	1
5	0	0	2	0	0	2
Totals	29	1	6	13	8	57

Table 1: Distribution of finds

3.6.2 The pottery was dominated by kitchenwares, mainly black-glazed redwares representing a limited range of storage and preparation vessels. These are almost impossible to date with precision, developing from the early post-

medieval blackware tradition and made by a large number of potteries throughout the region through into the early twentieth century. A few of the fragments are extremely hard-fired, having a dark brown to purplish appearance, and it is likely that these represent the earliest vessels, perhaps dating back to the late seventeenth century. However, in the absence of diagnostic rim sherds this cannot be confirmed (see fragments from Trench 1 within wall **104** and unstratified in *Appendix 5*). A fragment of Cologne/Frechen-type stoneware, again from wall **104**, might reinforce this dating, as might a manganese-speckled upright cup or tankard rim found unstratified in the same trench.

- 3.6.3 Pottery from Trenches 2, 3, and 4 is unlikely to date from earlier than the very late eighteenth century, and is probably all of nineteenth century date.
- 3.6.4 Other classes of find were few. The single fragment of window glass, from cobbled surface *123*, is of a type typical of the later seventeenth and eighteenth centuries. A base metal teaspoon from wall *103* is unlikely to be earlier than the early nineteenth century.
- 3.6.5 Small fragments of flint and chert were recovered from posthole fill *108* and ditch fills *111* and *113*; none was worked, although that from ditch *111* appeared to have been burnt.
- 3.6.6 The finds reflect the post-medieval use of the site during the farmhouse phase of Burn Hall, with those trenches positioned closest to the hall site producing finds (Trenches 1-5) of late eighteenth century date or later. Trench 1, positioned on edge of the actual hall site, has also produced finds dating to the seventeenth century that may relate to activity associated with the former medieval hall. None of the finds offer potential for any further analysis.

4. CONCLUSION

4.1 **DISCUSSION**

- 4.1.1 The evaluation highlighted the survival of the remains of Burn Hall in the form shown on the 1847 OS map beneath only a very thin topsoil (0.07m), presumably as a result of the method of its demolition in the 1960s. The remains of both the main hall itself and a long curving structure were identified, in Trenches 1 and 2 respectively, although it should be noted that the remains observed lie to the north of the current proposed access road. Within the proposed road corridor the remains of two further possible walls were identified (again in Trenches 1 and 2), with the wall in Trench 1 similar in construction and materials to the wall of Burn Hall. The possible wall in Trench 2, however, was constructed of large stones and may possibly date to an earlier period than any of the brick walls discovered.
- 4.1.2 The finds recovered were concentrated in those trenches around the site of the hall (Trenches 1-5). Those datable finds from Trenches 2, 3 and 4 were from the very late eighteenth century or later, and therefore contemporary with the farmhouse phase of Burn Hall, which was converted in 1784. Finds of a relatively earlier date from Trench 1, possibly dating back to the late seventeenth century, highlight a degree of activity on site during the period of the former hall. There was no evidence of any domestic waste being spread during manuring activity in any of the remaining trenches, which may have been expected from a post-medieval farmstead.
- 4.1.3 Trenches 8, 9 and 10, within the main ICI compound site, demonstrated broadly similar stratigraphy to each other, with layers of rubble overlying a possible buried soil; this suggests that as part of the construction of the chemical works widespread dumping may have occurred raising the ground above the existing level. The discovery of a ditch containing post-medieval pottery at the base of these deposits, in Trench 9, somewhat confirms the relatively recent date for the dump deposits.
- 4.1.4 The majority of trenches, however, revealed no archaeological features and merely highlighted the nature and extent of the alluvial deposits across the area, particularly the six trenches in the field to the north of the main ICI site, which revealed nothing beyond land drains (Trenches 13-18).

4.2 SIGNIFICANCE AND POTENTIAL

- 4.2.1 The only features revealed considered to be archaeologically significant are the remains of Burn Hall located in Trenches 1 and 2, and the possible earlier wall within Trench 2, all of which are considered to be of local significance.
- 4.2.2 There is no potential for any further analysis of the results of this evaluation at this stage. However, should further work be undertaken in the future, the archive may be revisited for information purposes.

4.3 Імраст

4.3.1 The features identified within the current position of the proposed road corridor in Trenches 1 and 2 will be affected by the development. Those to the north of the proposed road corridor (the remains of Burn Hall in Trench 1 and the cobbled surface in Trench 2) will not be directly affected by the development, but given their proximity to the surface (less than 0.07m below current ground level) they could be impacted upon during the construction process.

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6. ILLUSTRATIONS

6.1 FIGURES

Figure 1: Site Location

Figure 2: Trench Location Plan

Figure 3: Plan of Trench 1

Figure 4: Plan of Trench 2

Figure 5: Section 1, Trench 1

6.2 PLATES

Plate 1: West-facing view of wall 103

Plate 2: North-east-facing view of wall 104

Plate 3: North-west-facing view of wall 202 and cobbled surface 201

Plate 4: East-facing view of ditch 906



Figure 1: Site Location

(file)









Figure 4: Plan of Trench 2







Plate 1: West-facing view of wall 103



Plate 2: North-east-facing view of wall 104



Plate 3: North-west-facing view of wall 202 and cobbled surface 201



Plate 4: East-facing view of ditch 906

APPENDIX 1: PROJECT DESIGN

1. **INTRODUCTION**

1.1 **PROJECT BACKGROUND**

- 1.1.1 RPS Planning, Environment and Transport (hereafter the 'client') have requested that Oxford Archaeology North (OA North) submit proposals to undertake an archaeological evaluation at the former ICI Burn Hall site at Thornton, Cleveleys, Lancashire (site centred NGR SD 3334 4437). Following submission of an Environmental Statement by RPS on behalf of Lancashire County Council, planning permission has been granted (re: 02/05/0977) to redevelop the site for the purpose of a proposed Waste Technology Park and the creation of an access road and roundabout. As one of the conditions to the consent a programme of trial trenching is required, to focus on the route of the proposed access road, from Fleetwood Road North eastwards to the proposed waste site, and the south-west corner of the development site. The course of the access road will run to the south of the site of Burn Hall, believed to be a medieval manor site in constant occupation until the 1960s, through the area of the associated formal gardens and orchard. Site clearance and ground reduction is likely to impact to a depth of c 500-1000mm from the current ground surface. Consequently, any remains will be removed or damaged.
- 1.1.2 The following project design has been prepared in accordance with a written scheme of investigation (WSI) provided by the client, following their consultation with the Lancashire County Archaeology Service (LCAS). The configuration and location of ten trenches has been based on previous work undertaken on the site for the purpose of the ES, including map regression analysis, topographical survey and a magnetometer survey. Recent archaeological findings on the west side of Fleetwood Road North by the Wyre Archaeology Group have also been considered in the process.
- 1.1.3 The results of the evaluation will inform the requirements for a suitable mitigation strategy. These proposals should be read in conjunction with the WSI.

1.2 OXFORD ARCHAEOLOGY NORTH

- 1.2.1 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 24 years. 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.
- 1.2.2 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 of Field Archaeologists (IFA) registered organisation, registration number 17, and all its members of staff operate subject to the IFA Code of Conduct.

2. **OBJECTIVES**

2.1 INTRODUCTION

2.1.1 The following programme has been designed to assess and evaluate the archaeological potential that may exist within the proposed development site. This should be able to establish the absence or presence, extent, nature and date, as far as possible, of any archaeological remains within the precise area of impact and the associated buffer zone, which will allow for any associated disturbance. This will enable a more informed decision as to the level and nature of any further archaeological investigation or mitigation should it be necessary prior to any development or modification of the site. The work will be carried out in accordance with IFA guidelines and current best practice, and the required stages to achieve these ends are as follows:

2.3 EVALUATION TRENCHING

2.3.1 Ten trenches equating to 387m² will be excavated to determine the quality, extent, nature, survival and significance of archaeological deposits. A contingency for an extra 20m² may be required subject to the initial evaluation results, to be employed in the form of an extension of existing trenches to better clarify the characterisation of any features.

2.4 **REPORT AND ARCHIVE**

2.4.1 A report will be produced for the client of the results of each phase of investigation of the evaluation within three weeks of completion of the fieldwork. A site archive will be produced to English Heritage guidelines (MAP 2).

3. HEALTH AND SAFETY

3.1 HEALTH AND SAFETY

- 3.1.1 OA North provides a Health and Safety Statement for all projects and maintains a Unit Safety policy. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Archaeological Unit Managers (1997). A detailed risk assessment will be completed in advance of any on-site works, with continuous monitoring and updating during the fieldwork. This can be supplied to all interested parties on request.
- 3.1.2 All project staff will be CSCS qualified. Archaeological contractors have not yet been recognised for the receipt of CSCS cards. However, proof of qualification can be provided.
- 3.1.3 *Services:* full regard will, of course, be given to all constraints (services etc) during the evaluation as well as to all Health and Safety considerations. As a matter of course OA North will employ a CAT (cable avoidance tool) prior to any excavation to scan for services. However, this is **only an approximate location tool**. Any drawings or knowledge of live cables or services that may pose a risk to OA North staff during evaluation **must be made known to the project manager** of OA North before site work. This will ensure the risk is dealt with appropriately.
- 3.1.4 *Site Welfare Facilities:* health and safety regulations require access to adequate handwashing facilities to be provided for the duration of the fieldwork. Therefore, a portable toilet and a site office/store has been included as a contingency, should the client prefer to arrange on-site facilities.
- 3.1.5 *Contamination:* any contamination issues must also be made known to OA North in order that adequate PPE can be supplied prior to commencement. Should any presently unknown contamination be discovered during excavation, it may be necessary to halt the works and reassess the risk assessment. Any specialist safety requirements or resulting stand-down may be costed as a variation.

4. METHOD STATEMENT

4.1 ARCHAEOLOGICAL EVALUATION

- 4.1.1 *Introduction:* the programme of archaeological evaluation will involve trial trenching to determine the presence or absence of any archaeological deposits and, if established, will then test their date, nature, depth and quality of preservation.
- 4.1.2 The evaluation is required by to examine 387m² in the form of ten individual trenches measuring 1.8m in width: 4 x 10m trenches, 2 x 20m trenches, 1 x 30m trench, 1 x 35m trench, an L-shaped trench consisting of 2 x 9m arms, and a T-shaped trench comprising a 20m and 30m trench.

- 4.1.3 *Methodology:* the topsoil will be subject to careful mechanical excavation (with a toothless ditching bucket) down to the depth of the first significant archaeological deposits or natural subsoils, depending on whichever is encountered first. This will be undertaken in level spits of a maximum 0.1m thickness and under constant archaeological supervision. The deposits will be cleaned by hand, using either hoes, shovel scraping, and/or trowels depending on the subsoil conditions, and inspected for archaeological features. Thereafter, all excavation would proceed by hand in a stratigraphic manner.
- 4.1.4 The trenches will not be excavated deeper than 1.2m to accommodate health and safety constraints. Investigation of substantial deposits deeper than 1.2m will be carried out by means of a machine excavated sondage in order to establish the depth and nature of underlying deposits. This will be recorded from the base of the main trench only, and under no circumstances will OA North staff enter the sondage for any purpose. Following recording the deep excavation will be backfilled immediately, and will not remain open overnight.
- 4.1.5 The site is situated on marshy land, particularly on the east side. Therefore, trench excavation may require the need for a water pump. This has been costed as a contingency should it be necessary to complete the evaluation.
- 4.1.6 Trenches will be located by use of GPS equipment which is accurate to +/- 0.25m, altitude information will be established with respect to Ordnance Survey Datum.
- 4.1.7 Any investigation of intact archaeological deposits will be manual. However, homogenous low-grade archaeological deposits may be mechanically excavated following agreement from the client or their representative.
- 4.1.8 Selected pits and postholes will normally only be half-sectioned, linear features will be subject to no more than a 10% sample, 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, whether by machine or by hand, will be undertaken with a view to avoiding damage to any archaeological features, which appear worthy of preservation *in situ*.
- 4.1.9 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, with sufficient pictorial record (plans, sections and both monochrome and colour photographs) to identify and illustrate individual features. Primary records will be available for inspection at all times.
- 4.1.10 All photographic records will include a header board detailing site name and code, date, context and north arrow. A scale will also be included. All photographs will be cross-referenced onto context and trench records, and any trenches found to be devoid of archaeological deposits will be photographed from at least one end.
- 4.1.11 Results of all field investigations will be recorded on *pro forma* context sheets. 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 Institute of Field Archaeologists guidelines) in order to minimise deterioration.
- 4.1.12 *Environmental Sampling:* environmental samples (bulk samples of 40 litres volume, to be sub-sampled at a later stage) will be collected from stratified undisturbed deposits and will particularly target negative features (gullies, pits and ditches). An assessment of the environmental potential of the site will be undertaken through the examination of suitable deposits by the in-house palaeoecological specialist, who will examine the potential for further analysis. The assessment would include soil pollen analysis and the retrieval of charred plant macrofossils and land molluscs from former dry-land palaeosols and cut features. In addition, the samples would be assessed for plant macrofossils, insect, molluscs and pollen from waterlogged deposits. The costs for the palaeoecological assessment are

defined as a contingency and will only be called into effect if good deposits are identified and will be subject to the agreement of the LCAS Archaeologist, the English Heritage Regional Scientific Science Advisor and the client.

- 4.1.13 *Faunal remains:* if there is found to be the potential for discovery of bones of fish and small mammals a sieving programme will be carried out. These will be assessed as appropriate by OA north's specialist in faunal remains, and subject to the results, there may be a requirement for more detailed analysis. A contingency has been included for the assessment of such faunal remains for analysis.
- 4.1.14 *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. The LCAS Archaeologist and the local Coroner will be informed immediately. If removal is essential the exhumation of any funerary remains will require the provision of a Home Office license, under section 25 of the Burial Act of 1857. An application will be made by OA North for the study area on discovery of any such remains and the removal will be carried out with due care and sensitivity under the environmental health regulations.
- 4.1.15 *Finds:* all finds recovered during the evaluation investigation 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.
- 4.1.16 Finds recovery and sampling programmes will be in accordance with best practice (current IFA guidelines) and subject to expert advice. OA has close contact with Ancient Monuments Laboratory staff at the Universities of Durham and York and, in addition, employs in-house artefact and palaeoecology specialists, with considerable expertise in the investigation, excavation, and finds management of sites of all periods and types, who are readily available for consultation. Finds storage during fieldwork and any site archive preparation will follow professional guidelines (UKIC). Emergency access to conservation facilities is maintained by OA North with the Department of Archaeology, the University of Durham.
- 4.1.17 Neither artefacts nor ecofacts will be collected systematically during the mechanical excavation of the topsoil unless significant deposits, for example clay pipe waster dumps, are encountered. In such an eventuality, material will be sampled in such a manner as to provide data to enhance present knowledge of the production and dating of such artefacts, although any ensuing studies will not be regarded as a major element in any post-excavation analysis of the site. Other finds recovered during the removal of overburden or metal detecting survey will be retained only if of significance to the dating and/or interpretation of the site. It is not anticipated that ecofacts (eg unmodified animal bone) will be collected during this procedure.
- 4.1.18 Otherwise artefacts and ecofacts will be collected and handled as per specification. All material will be collected and identified by stratigraphic unit during the evaluation trenching process. Hand collection by stratigraphic unit will be the principal method of collection, but targeted on-site sieving will serve as a check on recovery levels. Objects deemed to be of potential significance to the understanding, interpretation and dating of individual features, or of the site as a whole, will be recorded as individual items, and their location plotted in 3-D. This may include, for instance, material recovered from datable medieval pit groups.
- 4.1.19 Finds will be processed and administered at regular intervals (on a daily basis) and removed from the site. All finds will be treated in accordance with OA standard practice, which is cognisant of IFA and UKIC Guidelines. In general this will mean that (where appropriate or safe to do so) finds are washed, dried, marked, bagged and packed in stable conditions; no attempt at conservation will be made unless special circumstances require prompt action. In such case guidance will be sought from OA North's consultant conservator, Karen Barker.

- 4.1.20 All waterlogged finds will be treated as appropriate. In the case of large deposits of waterlogged environmental material (eg unmodified wood), advice will be sought with the OA North consultant with regard to an appropriate sampling strategy.
- 4.1.21 Where possible, spot dates will be obtained on pottery and other finds recovered from the site. Artefacts will be examined and commented upon by OA North in-house specialists.
- 4.1.22 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, and the client. Where removal cannot take place on the same working day as discovery, suitable security will be employed to protect the finds from theft.
- 4.1.23 *Reinstatement:* it is understood that there will be no requirement for reinstatement of the ground beyond backfilling. As a health and safety precaution, all trenches will be backfilled immediately on completion of excavation and recording, unless there are significant deposits.
- 4.1.24 The excavated material will be stored alongside each trench (min. of 1m from the edge of the trench), with topsoil and subsoil stored separately in order to avoid contamination for the purposes of backfilling. The ground will be backfilled so that the topsoil is laid on the top, and the ground will be roughly graded with the machine.
- 4.1.25 *Contingency plan:* a contingency costing may also be employed for unseen delays caused by prolonged periods of bad weather, vandalism, discovery of unforeseen complex deposits and/or artefacts which require specialist removal, use of shoring to excavate important features close to the excavation sections etc. This has been included in the Costings document and would be in agreement with the client.
- 4.1.26 The evaluation will provide a predictive model of surviving archaeological remains detailing zones of relative importance against known development proposals. In this way, any mitigation requirements can be proposed, and a strategy provided.

4.2 REPORT

- 4.2.1 A report will be produced in accordance with the client's WSI within three weeks following completion of the site works, subject to any outstanding specialists reports. This will be submitted to the client for approval.
- 4.2.2 A digital copy of the report will be supplied as a pdf on CD ROM to the SMR held by LCAS within eight weeks following the completion of the fieldwork.
- 4.2.3 *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.

4.3 ARCHIVE

- 4.3.1 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 (*Management of Archaeological Projects*, 2nd edition, 1991). The project archive will include summary processing and analysis of all features, finds, or palaeoenvironmental data recovered during fieldwork, which will be catalogued by context.
- 4.3.2 The archive will be formed of all the primary documentation, including the following:
 - Context Records
 - Finds Records

- Sample Records
- Field / Inked Drawings and digital copies of CAD data
- Photographic negatives, prints and colour transparencies
- Written report
- Administrative records
- Conservation records.
- 4.3.3 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 SMR (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 within 6 months of the end of the fieldwork.
- 4.3.4 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. LCAS will be notified of the arrangements made.

5. OTHER MATTERS

5.1 **PROJECT MONITORING**

5.1.1 Whilst the work is undertaken for the client, LCAS will also be kept informed of the work and its results, and will be notified a week in advance of the commencement of the fieldwork. Any proposed changes to the project design will be agreed with LCAS in consultation with the client.

5.2 ACCESS

5.2.1 It is assumed that site access for all elements of the fieldwork will be arranged by the client, and any relevant information will be conveyed to OA North. It is understood that there will be access for both pedestrian and plant traffic to the site.

5.3 FENCING/HOARDING REQUIREMENTS

5.3.1 Trenches less than 0.5m deep, and associated spoil heaps, will be fenced with netlon barrier fencing. Trenches deeper than 0.5m will be secured using heras fencing.

6. WORK TIMETABLE

- 6.1 *Trial trenching:* this element is expected to take approximately two weeks.
- 6.2 *Report:* a draft report will be completed within three weeks of the completion of the fieldwork, and the final report submitted on approval from the client.

7. STAFFING

- 7.1 The project will be under the direct management of **Emily Mercer BA (Hons) MSc AIFA** (OA North Senior Project Manager) to whom all correspondence should be addressed.
- 7.2 The trial trenching will be supervised in the field by an OA North project supervisor experienced in such work and capable of carrying out projects of all sizes. Due to present

scheduling commitments, it is not possible to provide staff details. However, once the fieldwork is commissioned these details can be provided.

- 7.3 **Christine Howard-Davis**, **BA**, **MIFA** (OA North Finds Manager) has extensive knowledge of all categories of artefacts of all periods. Christine is experienced in Roman artefacts and is a recognised expert in the analysis of metalwork and glasswork of the period. Analysis of all artefacts recovered during the course of the investigation will be undertaken by or under the auspices of Christine.
- 7.4 **Environmental management** will be undertaken by **Elizabeth Huckerby BA**, **MSc** (OA North Project Officer), who will also provide specialist input on pollen analysis/charred and waterlogged plant remains. Elizabeth has extensive knowledge of the palaeoecology of the North, and has contributed to all of the English Heritage funded volumes of the Wetlands of the North West. Elizabeth has also acted as palaeoenvironmental consultant for several archaeological investigations undertaken by Earthworks Archaeology. Elizabeth will advise on site sampling procedures and co-ordinate the processing of samples and organise internal and external specialist input as required.

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Institute of Field Archaeologists (IFA), 1992 Guidelines for data collection and compilation

SCAUM (Standing Conference of Archaeological Unit Managers), 1991 Health and Safety Manual, Poole

United Kingdom Institute for Conservation (UKIC), 1990 Guidelines for the preparation of archives for long-term storage

United Kingdom Institute for Conservation (UKIC), 1998 First Aid for Finds London

APPENDIX 2: WRITTEN SCHEME OF INVESTIGATION

- 1 Introduction
- 1.1 This document represents a Written Scheme of Investigation (WSI) for an intrusive archaeological evaluation of land associated with the site of a proposed Waste Technology Park at Thornton, near Cleveleys, Lancashire.
- 1.2 Planning permission for the development of a waste technology park and creation of a new access road and roundabout on land forming part of the former ICI Burn Hall Site at Thornton was granted on 29th November 2005, subject to 26 planning conditions (planning permission reference 02/05/0977). Condition 25 attached to the approval relates to archaeology and states:

'The development shall not commence until a scheme and programme of archaeological investigation has been approved by the Director of Strategic Planning and Transport for a topographical and geophysical survey along with appropriate evaluation trenching for the south-west corner of the site that has not been developed, the line of the proposed access road and a sufficient 'buffer zone' to allow for all disturbance associated with the construction and operation of the development. The scheme and programme shall thereafter be implemented.

- 1.3 This WSI outlines the findings of the topographical and geophysical surveys and proposes a scheme of archaeological evaluation through trial trenching as required by the condition.
- 1.4 The work will be carried out in accordance with current good practice, as well taking into account the standards and guidance issued by the Institute of Field Archaeologists, and other relevant bodies (including such briefs as may be issued by the Local Authority). Consultation regarding the number and location of the trial trenches has been undertaken with Lancashire County Council's County Archaeologist.
- 2 Location, Topography and Geology
- 2.1 The site lies on low-lying ground, part of a peninsula between the River Wyre (to the east) and the Irish Sea (to the north and west). The main part of the development site comprises approximately 11 ha. of land that was formerly a large chemical works. This is to be connected to the B5286 Fleetwood Road via a new access road leading west from the main part of the site.
- 2.2 The proposed access road is situated on gently sloping ground rising from *c*. 4.5m above Ordnance Datum (aOD) at the entrance to the main site to *c*. 11.5m aOD at the proposed junction with the B5268 Fleetwood Road. The former house known as Burn Hall (Bourne Hall) lies on the eastern edge of a slight rise in the ground, at around 10m aOD.
- 2.3 Within the footprint of the access road, silt and silty-clay overlie fine sand. These deposits have been identified as 'Older Marine and Estuarine Alluvium' and range in approximate thickness from 3m to 12m. Made ground, principally reworked clay, has been identified towards the west and also in the form of sandy-clay also to the east.
- 3 Archaeological Background
- 3.1 The Cultural Heritage chapter of the Environmental Statement submitted in support of the planning application set out the archaeological background to the site, using records of known sites, features and finds. It is not proposed to repeat that information here. However, it is worth noting that the proposed access route runs immediately to the south of a range of buildings that comprised the site of Burn Hall. This was in continuous occupation until the 1960s and is believed to have originated as a medieval manor.

4 Evaluation

- 4.1 Proposals for archaeological investigations along the route of the proposed access road were detailed in a Project Design prepared by Oxford Archaeology North in August 2005. The programme of investigations comprised geophysical survey, topographic survey and trial trenching. The aim of the evaluation was to produce information that might better characterise the remains of the Burn Hall complex in terms of extent, significance, survival and fragility (and thus allow for a more informed mitigation strategy to be developed).
- 4.2 The final approved location of the proposed road was overlaid onto the historic mapping, indicating that the area of impact passed to the immediate (southern) side of the buildings of the Burn Hall site, and through the associated gardens (earthworks) and orchards.
- 4.3 The proposed survey area was heavily overgrown with dense shrub and brambles, and in some areas with orchard trees associated with Burn Hall. Some clearance of this vegetation was undertaken in order to enable the geophysical and topographic surveys to be carried out across the site (including the areas in between the orchard trees).
- 4.4 The geophysical survey comprised a magnetometer survey. This is an effective geophysical survey technique in the location of archaeological remains, which will easily locate 'positively magnetic' material such as iron-based features and objects, or those subjected to firing such as kilns, hearths, and even the buried remains of brick walls. Given that the survey area was outside the footprint of the former buildings, it was felt that resistivity survey would not complement the magnetometer survey as any rubble associated with the 1960s demolition of Burn Hall (described in the 1950s as brick built).
- 4.5 Magnetometry was also considered the most appropriate technique to locate any sub-surface archaeological remains relating to medieval, Roman, prehistoric settlement etc. in the area of impact, to the east of the Burn Hall site. These features would most likely take the form of boundary enclosure ditches, pits and postholes.
- 4.6 In summary, the magnetometer survey did not produce significant evidence on which to target proposed evaluation trenches. This was due to the presence of substantial quantities of brick and ferrous rubbish in the soil and relatively modern structures in the form of a series of concrete tanks and a large circular concrete inspection chamber, which is now full of rubbish.
- 4.7 Topographic survey was also carried out, and the report on the results of this was summarised as follows: *The topographic survey mapped a wealth of low earthworks, many of which lack an obvious interpretation and may simply be natural hollows and former creeks in what would once have been marshland. One significant earthwork, a bank and associated terrace, has been identified as a field boundary from the 1847 OS mapping. At the western end of the survey the remains of structures forming part of the demolished farm were identified as both earthworks and exposed footings.*
- 4.8 A series of trial trenches is now proposed as the final phase of the archaeological evaluation. It is considered that further geophysical survey work would not aid this evaluation, given the nature and current conditions on-site.
- 4.9 The evaluation will allow informed decisions on mitigation proposals associated with impacts from the construction and operation of the development. The implementation of this scheme of work (including mitigation works) will satisfy the archaeological condition on the planning consent for the development scheme.
- 4.10 All work (fieldwork and any required post-excavation assessment and/or analysis) will be carried out in accordance with current good practice, as well as with the Standards and Guidance issued by the Institute of Field Archaeologists (see references, section 8) and other relevant bodies (such as English Heritage, UKIC etc.).
- 4.11 The proposed trench layout illustrated on Figure 1 has been prepared taking into consideration historic mapping, the results of the topographic and geophysical surveys, recent archaeological

findings made by the Wyre Archaeology Group to the west of the development site, all available geotechnical information and the physical constraints of the site. It has been revised in the light of recommendations made by the Lancashire County Archaeologist.

- 4.12 The trenches target both earthwork features and a sample of 'blank areas'. These trenches will examine approximately 387m² of the proposed access road footprint and the south-west corner of the proposed development site. A contingency allowance for 20m² of additional trenching will be made, to be used to extend or widen part of a trench in order to allow partially revealed features to be better characterised.
- 4.13 The evaluation will be undertaken by an experienced specialist contractor monitored by the nominated RPS Archaeology Project Manager. The work will conform to the requirements and guidelines set out in the Institute of Field Archaeologists' *Standard and Guidance for Archaeological Field Evaluation* (October 1994, as amended). Prior to the commencement of any works on site the contractor will submit a detailed Health and Safety Risk Assessment to the nominated RPS Archaeological Project Manager. He in turn will need to liase with the client and the landowner(s)/tenant(s) with regard to issues of Health and Safety.
- 4.14 Utilities information will be requested in advance from the service providers so that existing utilities can be avoided.
- 4.15 A project design incorporating a method statement for excavation and recording will be prepared by the selected fieldwork contractor prior to commencement. This will reflect the Brief provided by Northumberland County Council.
- 4.16 For each trench the topsoil and any overburden will be removed using mechanical plant (wheeled or tracked) fitted with a toothless ditching bucket, under the direction of a suitably experienced archaeologist. Overburden will be removed in level spits of no more than 100 mm down to the level of significant archaeological remains or to natural subsoils/bedrock, whichever is encountered first. If significant archaeological remains are encountered, all subsequent examination and excavation will be by hand. Trenches will not in any case exceed 1.2m in depth, without prior agreement from the RPS Archaeological Project Manager.
- 4.17 In the case of encountering substantial deposits of made ground, the contractor will machineexcavate a deeper test pit within the trench in order to establish the depth of the made ground and the nature of any underlying deposits. Any information resulting from the excavation of this deeper test pit should be recorded from the ground level within the main part of the trench, and the contractor will not be required to enter the test pit. These test pits must be backfilled immediately following recording and under no circumstances should be left open overnight.
- 4.18 Topsoil and subsoil will be removed and stored separately. When backfilled, materials will be replaced in the trench in the order they came out (i.e. subsoil goes back in first, and topsoil replaced above). Spoil from the trenches will be stored at a safe distance from the trench, at least 1.0 m from the edge of the trench. All open trenches less than 0.5m deep, and associated spoil heaps, will be fenced with orange Netlon barrier fencing supported on road pins at appropriate intervals. All open trenches greater than 0.5m deep, and associated spoil heaps, will be fenced with 2m high Heras-type anti-climb fencing.
- 4.18 On completion of the excavation and recording of the trenches, each trench will be backfilled by machine to existing ground level using the excavated material. No other reinstatement is required.
- 4.19 Archaeological layers, features, deposits and structures requiring clarification will be excavated by hand. Excavation of areas of complex archaeological remains will be circumspect, being sufficient to meet the principal aims of the evaluation but not cause any damage to material that might be better excavated under different circumstances, i.e. a detailed excavation.

- 4.20 Some further use of the mechanical excavator may be permitted on homogenous low-grade archaeological deposits, but this will only be undertaken with the consent of the nominated RPS Archaeology Project Manager.
- 4.21 In the event of the discovery of human remains, including cremation burials, these will be left *in situ* and not further examined. The nominated RPS Archaeology Project Manager will be informed immediately, and the remains covered over if necessary. If removal of human remains is necessary, a licence will be obtained from the appropriate authorities.
- 4.22 A context-based recording system acceptable to the Lancashire County Archaeologist will be used to record each trench and any archaeological deposits, features etc. Pro-forma sheets will be used to record all relevant information. In the case of any trench containing no archaeological deposits or features, a single trench record sheet can be used to record basic information including size, orientation, depth of deposits etc. A 1.0 m wide representative section will be drawn that will indicate the existing ground level, overburden and other deposits, and underlying natural subsoil or basal geology.
- 4.23 A trench location plan will be produced that will show the position of all excavated trenches. This will be tied in to the Ordnance Survey National Grid. Trench/feature plans and sections will be drawn at appropriate scales; all site drawings will include relevant information including site name, number and/or code, scale, drawing number, orientation, date and name of compiler. Drawings will also show absolute heights derived from Ordnance Datum (Newlyn).
- 4.24 The photographic record of the evaluation will include 35 mm colour transparencies and monochrome images illustrating both the detail and context of the principal archaeological features discovered. Digital images may also be created. All photographic records will include information detailing: site name and number/code, date, context, scale and orientation. The monochrome negatives and contact prints will be filed in appropriate media, and the transparencies will be mounted in appropriate hard cases. All photographs will be cross-referenced onto the context and trench records. Trenches containing no archaeological deposits and features must be photographed from at least one end.
- 4.25 Environmental sampling will be targeted upon potentially significant archaeological deposits or features, and will predominantly examine sealed and well-dated contexts. Sample size will take into account the frequency with which material appropriate for sampling will occur, but bulk samples will normally be a minimum of 10 litres. Advice will be sought from the English Heritage Regional Science Advisor and from the County Archaeologist on the need to extract, process and further examine environmental samples. Bulk sampling may also be used to collect charcoal for C14 dating where appropriate.
- 4.26 All artefacts and animal bones will be recorded, collected and labelled according to their individual stratigraphical context. Artefacts of clearly modern date will be recorded but not retained for off-site assessment. Finds from each archaeological context will be allocated an individual finds tray/bag and waterproof labels will be used for each tray/bag to identify unique individual contexts.
- 4.27 Conservation advice may be necessary on site prior to lifting of and initial treatment of fragile objects. All finds and samples will be exposed, lifted, cleaned, conserved, marked, bagged and boxed according to the United Kingdom Institute for Conservation's *Conservation Guidelines No.2*, the Council for British Archaeology's *First Aid For Finds* (Second Edition, 1987) and the Institute of Field Archaeologists' *Guidelines for Finds Work* (1992). Iron finds may require X-rays prior to conservation and similarly residues on pottery may require study ahead of any conservation, which may be appropriate.
- 4.28 In the event of the discovery of an artefact that may fall within the remit of the *Treasure Act* 1996, the nominated RPS Archaeology Project Manager and the Coroner will be informed immediately. All finds of potential treasure will be removed to a safe place.

5 Reporting

- 5.1 Following completion of the on-site works, the contractor will produce a full report on the results of the evaluation. The report will include, as a minimum:
 - A front sheet (setting out the site name, National Grid Reference to minimum eight figures, description of task undertaken, date and duration of the fieldwork, site code/number);
 - A non-technical summary of the work including the results;
 - A general introduction to the project including site description;
 - Aims and objectives;
 - Methodologies employed to undertake the works;
 - Descriptive text presenting the results of the evaluation including finds and environmental data where appropriate;
 - Confidence rating on the reliability of the results;
 - Interpretation and discussion of the results;
 - Assessment of the significance of any archaeological remains identified by the evaluation;
 - Assessment of the potential of any data for further analysis;
 - Details of the scale, nature and location of the archive and the intended place of deposition;
 - Report bibliography;
 - Sufficient illustrations to support the text including figures to show the location of the site in a national, regional and local context, location of all trial trenches, detailed trench plans and sections as appropriate;
 - An appendix comprising a table of detailed information presented on a trench by trench basis, information to include description and depth of each recorded deposit.
- 5.2 The report will be produced within three weeks of the completion of the evaluation fieldwork. Following agreement of the report with the nominated RPS Archaeological Project Manager, copies as required will be provided to the client. It may also be necessary at a later date to supply copies to the Lancashire County Sites and Monuments Record and the National Monuments Record (Swindon).
- 5.3 Copyright of the report will be retained by the contractor under the terms of the *Copyright*, *Designs and Patents Act* (1988) with all rights reserved, excepting that the contractor provides an exclusive licence to the respective client and to the local planning authority for the use of the report in all matters relating to the project.
- 5.4 The project archive consists of the records relating to the evaluation, including written records, photographs, drawings and artefacts. The contractor will ensure that the archive is fully catalogued, indexed, cross-referenced and checked for consistency.

- 5.5 The archive will be prepared in accordance with procedures outlined in *Standards in the Museum Care of Archaeological Collections* (Museums and Galleries Commission 1992) and any procedures adopted by the recipient museum.
- 5.6 The retained artefacts remain the property of the landowner with the exception of human remains and any artefacts that fall within the remit of the *Treasure Act* 1996. Subject to obtaining written consent from the landowner, the artefacts will be deposited along with the rest of the archive. Arrangements for the finds to be viewed by the landowner will be made on request.
- 5.7 A programme of monitoring of the evaluation in the field shall be agreed in advance between the contractor, the client, RPS and the Lancashire County Archaeologist. The timing of each monitoring visit will be agreed in advance with all parties.
- 5.8 Any variation or modification to the evaluation methodology will be fully discussed in advance and agreed by the contractor, RPS, the client and the Lancashire County Archaeologist.
- 5.9 The involvement of the Lancashire County Archaeologist shall be acknowledged in any report or publication generated by this project.
- 6 Programme
- 6.1 It is envisaged that the proposed evaluation would take approximately two weeks to complete in the field, with a further three weeks required for reporting.
- 7 Media
- 7.1 Enquiries or releases through the media on archaeological finds and material found during the evaluation will, in the first instance, be directed through the client. Whilst RPS support media coverage on archaeological finds and will be happy to co-ordinate such coverage, it is recommended that relevant information is released after completion of all stages of archaeological fieldwork in order to ensure that the integrity of the resource is maintained.
- 8 References
 - IFA 1994 *Standard and Guidance for Archaeological Field Evaluation*, Institute of Field Archaeologists 1994 (Revised 1999) (Amended 2001).

English Heritage 1991 Management of Archaeological Projects 2nd Edition.

APPENDIX 3: DETAILED TRENCH DESCRIPTIONS

Trench Number: 1 Alignment: ENE/WSW and NNW/SSE ('T' shaped trench) Length: 23.79m (ENE/WSW) and 20m (NNW/SSE) Width: 1.8m Maximum Depth: 1.26m Location: Proposed access road

Description: The topsoil, *100*, consisted of dark brown sandy-clay to a maximum depth of 0.2m. At the north-western end of the north-north-west/south-south-east aligned arm of the trench this overlay a wall, *103*, built of handmade bricks, with four courses remaining. The wall appeared to be built upon cobbled foundations, but confirmation of this would require further excavation. Five bricks were observed adjacent to the north-western side of the wall and it seems that these were probably used to support floor joists. They were sat upon a compacted surface, which probably represents a rammed surface, beneath the floor of the building.

Along the east-north-east/west-south-west aligned arm of the trench and for the south-easternmost 7m of the north-north-west/south-south-east aligned arm, the topsoil directly overlay the natural geology, *102*, comprising a mixture of sand and silty-clays. Further to the north-west a number of layers were observed between topsoil and natural. The latest of these, *126*, comprised a very stony brown sandy layer with a maximum thickness of 0.2m, overlying a layer, *127*, of demolition debris. This layer had a maximum thickness of 0.35m and itself overlay a very clean deposit, *128*, of brown sand containing occasional flecks of mortar. This sequence of layers was truncated to the south-east by a large modern cut, *129*. A further wall, *104*, was observed towards the north-eastern end of the east-north-east/west-south-west aligned arm of the trench, again made of handmade bricks and bonded with lime mortar. The wall survived to a maximum depth of four courses and appeared to include a number of unfired bricks as infill within the wall. A possible cobbled surface, *123*, was observed to the north-west of the wall, although it was far from convincing as a surface.

A number of features were observed within the trench cutting the natural, comprising three probable postholes (105, 107 and 109) and six linear features, 112, 114, 116, 118, 120 and 122. Linear feature 122 appeared to be the cut for a land drain. Features 116, 118 and 120 were broadly parallel to each other, as were features 112 and 114. The linear features and postholes only survived to a very shallow depth and so little can be said about their profiles and depths.

Trench Number: 2

Alignment: NE/SW and NW/SE ('L' shaped trench) Length: 11m (NE/SW) and 9m (NW/SE) Width: 1.8m Maximum Depth: 1.2m Location: Proposed access road

Description: The topsoil, 200, comprised mid greyish-brown sandy-clay to a maximum thickness of 0.15m. At the north-western end of the north-west/south-east aligned arm of the trench this directly overlay a cobbled surface, 201, made of well-rounded cobbles of varying size, but with approximately 20% of the surface roughly repaired with bricks. This surface butted up against a north-east/south-west aligned wall, 202, made of handmade bricks, three courses high and bonded with lime mortar. The wall appeared to overlay made ground, 203, although without excavating across the wall this remains unproven. The made ground comprised brown sandy-clay with occasional brick fragments and had a maximum thickness of 0.5m. This in turn overlay a possible buried soil layer, 204, comprising mid brownish-black sandy-clay. This layer directly overlay the natural geology, 205, comprising a mid reddish-brown sandy-clay. A further possible wall, 206, consisting of a number of large stones forming a rough right-angle was revealed at the south-western end of the north-east/south-west aligned arm of the trench. It was overlain by layer 203 and was possibly the foundation for a structure.

Trench Number: 3 Alignment: N/S Length: 10m Width: 1.8m Maximum Depth: 1.1m

Location: Proposed access road

Description: This trench revealed topsoil, *300*, comprising mid grey sandy-clay to a maximum depth of 0.15m. This overlay a layer of mid brown dumped clay, *301*, which had a maximum thickness of 0.75m and sealed a possible buried soil layer, *302*. This layer comprised mid black sandy-clay to a maximum thickness of 0.6m and it directly overlay the natural silty-clay, *303*. A single cut feature was observed within this trench, comprising a possible dog burial.

Trench Number: 4 Alignment: NE/SW Length: 20m Width: 1.8m Maximum Depth: 1.2m Location: Proposed access road

Description: The topsoil in this trench, **400**, comprised mid grey sandy-clay and overlay a series of tipped deposits, all tipping down towards the south-west. The uppermost of these, **401**, was a significant dump of grey clay greater than 1.2m deep at the south-west end of the trench. At the north-eastern end of the trench it was revealed to be overlying a layer, **402**, of grey sandy-clay, 0.17m thick. This in turn overlay a dump deposit, **403**, of orangeish-brown sand, containing occasional small brick fragments. This layer had a maximum thickness of 0.42m and overlay a possible buried soil deposit, **404**, of dark grey sandy-clay. This directly overlay the natural geology, **405**, comprising grey silty-clay, although this was not observed for the first 6.5m at the south-west end of the trench as the sloping deposits made it unsafe to excavate to the required depth. A possible geotechnical test pit was observed, but no archaeological features.

Trench Number: 5 Alignment: NE/SW Length: 10m Width: 1.8m Maximum Depth: 1.3m Location: Proposed access road

Description: The topsoil, *500*, in this trench comprised sandy-clay to a maximum depth of 0.42m. This overlay an orangeish-brown, seemingly natural, clay deposit, *503*, a maximum of 0.5m thick. This overlay a mid grey clay layer, *504*, which had a maximum thickness of 0.15m. This layer sealed a further clay deposit, *505*, containing a high proportion of organic material. Underlying this layer a deposit of greyish brown sand was revealed, greater than 0.2m in thickness. A single archaeological feature, sealed by the topsoil and cutting the natural, was observed within this trench, consisting of a broadly east/west aligned ditch, *502*, 0.35m deep and with a 'U'-shaped profile. The fill of this feature, *501*, contained both bricks and post-medieval pottery.

Trench Number: 6 Alignment: NW/SE Length: 10m Width: 1.8m Maximum Depth: 1.1m Location: Proposed access road Description: The topsoil in thi

Description: The topsoil in this trench, *600*, comprised a mid greyish-brown sandy-clay, to a maximum depth of 0.15m. This overlay a light brown sandy-clay deposit, *601*, which had a maximum thickness of 0.2m. Beneath this layer a deposit of light brown clay, *602*, was exposed, with a maximum thickness of 0.3m. This in turn overlay a deposit of blue clay, *603*, which was greater than 0.4m in depth. It seems probable that at least the lowest two clay layers represent the natural geology. A single ceramic field drain was the only feature observed within this trench.

Trench Number: 7 Alignment: NE/SW Length: 10m Width: 1.8m

Maximum Depth: 0.74m

Location: Proposed access road

Description: This trench revealed topsoil, **700**, to a maximum depth of 0.22m overlying a deposit, **701**, of light yellowish-brown sandy-clay containing flecks of Ceramic Building Material (CBM). This in turn overlay the natural geology, **702**, comprising a mid brown sandy-clay. No archaeological features were observed within this trench.

Trench Number: 8 Alignment: E/W Length: 30m Width: 1.8m Maximum Depth: 1.25m Location: South-west corner of main proposed development area

Description: This trench was excavated through a series of concrete slabs, 800, at the western end of the trench and a rammed aggregate surface, 801, with a maximum thickness of 0.2m, for the rest of trench. The slabs overlay further concrete slabs, whilst the rammed aggregate surface, 801, overlay a dump deposit of rubble, 802, which had a maximum thickness of 0.7m. This overlay a soil-like deposit, 803, of sandy-clayey silt, containing both charcoal and CBM flecks, to a maximum depth of 0.3m. Beneath this deposit, the underlying natural geology, 804, was exposed, comprising a light bluish-yellow silty-clay.

Trench Number: 9 Alignment: NW/SE Length: 20m Width: 1.8m

Maximum Depth: 1.4m

Location: South-west corner of main proposed development area

Description: The uppermost layers encountered within this trench comprised a concrete slab, **900**, in the middle of the trench and a rammed aggregate surface, **901**, either side of it. The concrete slab had a maximum thickness of 0.25m and was poured on to a layer of bricks, **902**, a single course thick. These bricks and the rammed surface **901**, both overlay a dump of building debris, **903**, comprising bricks, stone and wood, which had a maximum depth of 0.8m. This overlay a soil-like deposit, **904**, comprising very dark grey sandy-clayey silt, to a maximum depth of 0.35m. This overlay the natural geology, **905**, comprising light greyish-yellow silty-clay. A single feature, **906**, was revealed cutting the natural. This feature appeared to be an east/west aligned ditch, filled with a dark grey sandy-silt, **907**, containing small flecks of CBM and post-medieval pottery. Due to the depth (1.3m) at which this feature was encountered, it was not possible to excavate it.

Trench Number: 10 Alignment: E/W Length: 35m Width: 1.8m Maximum Depth: 1.2m Location: South-west corner of main proposed development area Description: The uppermost layer encountered within this trench, *1000*, comprised rammed aggregate to a maximum thickness of 0.37m. This overlay a layer of building debris (*1001*), presumably deposited as hardcore make-up, to a maximum thickness of 0.4m. This overlay a light grey silty-sand layer, *1002*, containing rare small charcoal flecks, to a maximum thickness of 0.23m. Beneath this a light yellowish-grey silty-sand, *1003*, was revealed, with a maximum thickness of 0.2m, overlying a

very dark brown sand, *1004*. This deposit was 0.24m thick and sealed a light grey silty-clay alluvium, *1005*. It is probable that layers *1003* and *1004* were also alluvial deposits, but this remains unproven.

Trench Number: 11 Alignment: ENE/WSW Length: 25m Width: 1.8m

Maximum Depth: 1.1m

Location: To the north-west of the proposed access road

Description: The topsoil in this trench, *1100*, comprised mid brownish-grey sandy-clay to a maximum depth of 0.22m. Towards the western end of the trench this overlay a localised 0.2m thick layer of dark grey sandy-clay, *1102*, containing CBM flecks. This overlay the natural geology in this trench, *1101*, comprising a light brownish-orange silty-clay. No archaeology was observed within this trench.

Trench Number: 12 Alignment: NNE/SSW Length: 25m Width: 1.8m Maximum Depth: 1.65m Location: To the north-west of the proposed access road

Description: The topsoil in this trench, *1200*, comprised sandy-clay to a maximum thickness of 0.3m, and at the southern end of the trench this directly overlay a light brown natural clay, *1201*. Proceeding northwards along the trench, a number of alluvial deposits were observed, with the stratigraphy at the northern end markedly different to that at the southern. At the northern end a light grey sandy-silt, *1202*, with a maximum depth of 0.3m, lay beneath the topsoil. This deposit overlay a dark grey sandy-silt, *1203*, which contained organic remains and had a maximum thickness of 0.25m. At the base of this deposit a thin band of well worn cobbles, *1204*, was revealed, 0.05m thick. It seems most likely that these cobbles were an alluvial deposit. The cobbles overlay a layer of white sand, *1205*, which had a maximum thickness of 0.4m and overlay a dark red clay, *1206*. This layer had a maximum thickness of 0.5m and contained what appeared to be another band of cobbles; this remained unproven as it was too deep to be examined safely and was only observed in a machine-excavated sondage. Beneath this layer a light red sand was revealed, *1207*, which was greater than 0.1m in thickness. A single ceramic land drain was the only feature found within this trench.

Trench Number: 13 Alignment: N/S Length: 25m Width: 1.8m Maximum Depth: 0.85m Location: Field to north of main ICI site Description: This trench revealed topsoil,

Description: This trench revealed topsoil, *1300*, to a maximum depth of 0.25m, comprising dark grey sandy-silty-clay, overlying a dark brown sandy-silt alluvium, *1301*. This deposit had a maximum thickness of 0.33m and overlay a light grey sandy-silt alluvium, *1302*. This deposit was greater than 0.4m in depth. No archaeological remains were revealed in this trench.

Trench Number: 14 Alignment: E/W Length: 25m Width: 1.8m Maximum Depth: 0.67m Location: Field to north of main ICI site Description: The topsoil, *1400*, comprised dark grey sandy-silty-clay to a maximum depth of 0.23m. This overlay a mid to dark grey silt, *1401*, exhibiting orange mottling. This deposit had a maximum

This overlay a mid to dark grey silt, 1401, exhibiting orange mottling. This deposit had a maximum thickness of 0.2m and overlay a similar but slightly lighter silt, 1402, which had a maximum thickness of 0.1m. Beneath this a light grey sandy-silt alluvial deposit, 1403, was revealed. A single ceramic land drain was revealed, aligned broadly north-west/south-east. No archaeological remains were observed within this trench.

Trench Number: 15 Alignment: N/S Length: 25m Width: 1.8m

Maximum Depth: 0.65m

Location: Field to north of main ICI site

Description: This trench revealed topsoil, *1500*, to a maximum depth of 0.29m and comprising dark grey sandy-silt overlying mid brownish-grey sandy-silt alluvium, *1501*. This deposit had a maximum thickness of 0.29m and sealed a lighter grey sandy-silt alluvium, *1502*. This deposit was greater than 0.05m in depth. No significant archaeological remains were encountered, although a single ceramic land drain, aligned broadly north-west/south-east, was revealed.

Trench Number: 16 Alignment: N/S Length: 25m Width: 1.8m Maximum Depth: 1.01m Location: Field to north of main ICI site

Description: The topsoil, *1600*, comprised dark grey sandy-silty-clay to a maximum depth of 0.3m and overlay a mid to dark grey sandy-silt alluvial deposit, *1601*, exhibiting orange mottling, which had a maximum thickness of 0.35m. This in turn overlay a light to mid grey sandy-silt alluvium, *1602*, which had a maximum thickness of 0.5m. Beneath this a light grey silty-sand deposit, *1603*, was revealed, containing frequent degraded shells. No archaeology was observed within this trench.

Trench Number: 17 Alignment: E/W Length: 25m Width: 1.8m Maximum Depth: 0.65m Location: Field to north of main ICI site

Description: The topsoil, *1700*, in this trench, comprised dark grey sandy-silty-clay to a maximum depth of 0.25m. This overlay a mid brownish-grey sandy-silt alluvial deposit, *1701*, which had a maximum thickness of 0.25m. Beneath this a light grey sandy-silt alluvial deposit, *1702*, was revealed, which was greater than 0.05m in depth. Two ceramic land drains were revealed, one aligned broadly north-west/south-east and the other north/south. No archaeological remains were observed within this trench.

Trench Number: 18 Alignment: E/W Length: 25m Width: 1.8m Maximum Depth: 1.2m Location: Field to north of main ICI site

Description: The topsoil, *1800*, in this trench comprised dark grey sandy-silty-clay to a maximum depth of 0.22m and overlay a mid brownish-grey sandy-silt alluvial deposit, *1801*, which had a maximum thickness of 0.12m. This in turn overlay a very light grey sandy-silt alluvium, *1802*, which was greater than 0.83m in depth. A single ceramic land drain was revealed, aligned broadly north-west/south-east, and a geotechnical test pit was observed at the western end of the trench. No archaeology was observed within this trench.

Context Number	Trench	Description
100	1	Topsoil
101	1	Subsoil
102	1	Natural
103	1	Wall
104	1	Wall
105	1	Posthole cut
106	1	Fill of 105
107	1	Posthole cut
108	1	Fill of <i>107</i>
109	1	Posthole cut
110	1	Fill of <i>109</i>
111	1	Fill of ditch 112
112	1	Ditch cut
113	1	Fill of ditch 114
114	1	Ditch cut
115	1	Fill of ditch <i>116</i>
116	1	Ditch cut
117	1	Fill of ditch 118
118	1	Ditch cut
119	1	Fill of ditch 120
120	1	Ditch cut
121	1	Fill of cut <i>122</i>
122	1	Cut of probable land drain
123	1	Cobbled surface
124	1	Fill of foundation cut <i>125</i>

125	1	Foundation cut for wall 104
126	1	Stony layer
127	1	Layer of demolition debris
128	1	Layer of sand
129	1	Pit cut
130	1	Service trench cut
200	2	Topsoil
201	2	Cobbled surface
202	2	Wall
203	2	Layer
204	2	Possible buried soil
205	2	Natural
206	2	Possible wall foundations
300	3	Topsoil
301	3	Clay dump deposit
302	3	Possible buried soil
303	3	Natural
400	4	Topsoil
401	4	Clay dump deposit
402	4	Clay dump deposit
403	4	Clay dump deposit
404	4	Possible buried soil
405	4	Natural
500	5	Topsoil
501	5	Fill of ditch 502
502	5	Ditch cut
503	5	Natural
504	5	Natural alluvial clay deposit
505	5	Natural alluvial clay deposit

600	6	Topsoil
601	6	Clay layer
602	6	Probable natural alluvial clay deposit
603	6	Natural alluvial clay deposit
700	7	Topsoil
701	7	Dump deposit
702	7	Natural
800	8	Concrete slabs
801	8	Aggregate surface
802	8	Rubble dump deposit
803	8	Probable buried soil
804	8	Natural
900	9	Concrete slab
901	9	Aggregate surface
902	9	Brick base for 900
903	9	Dump of demolition debris
904	9	Probable buried soil
905	9	Natural
906	9	Ditch cut
907	9	Fill of ditch 906
1000	10	Aggregate surface
1001	10	Demolition debris
1002	10	Sand layer
1003	10	Sand layer
1004	10	Sand layer
1005	10	Clay alluvial deposit
1100	11	Topsoil
1101	11	Natural
1200	12	Topsoil

1201	12	Natural
1202	12	Silt deposit
1203	12	Organic-rich silt deposit
1204	12	Natural cobbles
1205	12	Sand layer
1206	12	Clay layer
1207	12	Sand layer
1300	13	Topsoil
1301	13	Silt alluvium
1302	13	Silt alluvium
1400	14	Topsoil
1401	14	Silt layer
1402	14	Silt layer
1403	14	Silt alluvium
1500	15	Topsoil
1501	15	Silt alluvium
1502	15	Silt alluvium
1600	16	Topsoil
1601	16	Silt alluvium
1602	16	Silt alluvium
1603	16	Silt alluvium
1700	17	Topsoil
1701	17	Silt alluvium
1702	17	Silt alluvium
1800	18	Topsoil
1801	18	Silt alluvium

APPENDIX 5: FINDS LIST

Trench	Ctxt	OR	Material	Cat	Qty	Description	Date
1	103	7	Base metal	Spoon	1	Silver plate teaspoon	Eighteenth century or later
1	103	9	Bone	Animal	7	Animal bone, including bird.	
1	103	8	Ceramic	Vessel	1	Small whiteware lid with hand-painted blue decoration.	Eighteenth century?
1	103	10	Stone	Pencil	1	Slate pencil point.	Post-medieval
1	104	24	Bone	Animal	3	Sheep teeth	
1	104	29	Ceramic	Vessel	2	Body fragments speckled Cologne/Frechen-type	Seventeenth - Early eighteenth century
1	104	23	Ceramic	Vessel	2	Handle and rim large storage vessel, black- glazed redware.	Late seventeenth - eighteenth century
1	106	19	Ceramic	Building material	3	Three small fragments	Not closely dated
1	106	20	Bone	Animal	1	Very small fragment	
1	108	3	Ceramic	Building material	1	Very small fragment	Not closely dated
1	108	6	Stone	Unworked	1	Very small fragment haematite	Not closely dated
1	108	4	Stone	Flint	1	Very small fragment of unworked flint	Not closely dated
1	110	2	Stone	Flint Burnt	1	Fragment of burnt flint, unworked.	Not closely dated
1	113	17	Stone	Chert	1	Brown/grey chert, unworked	Not closely dated
1	123	25	Bone	Animal	2	Two abraded fragments.	
1	123	26	Glass	Window	1	Mid-pane fragment, thin greenish glass.	Late seventeenth - eighteenth century

Ctxt = Context; OR = Object Record Number; Cat = Category; Qty = quantity; U/s = unstratified

1	U/s	13	Ceramic	Vessel	1	Garden ware.	Nineteenth century or later
1	U/s	30	Ceramic	Vessel	2	Body fragments brown glazed redware jar.	Nineteenth century
1	U/s	32	Ceramic	Vessel	1	Handle in hard-fired black glazed redware - purplish fabric.	Late seventeenth - eighteenth century
1	U/s	1	Ceramic	Vessel	1	Upright cup or tankard rim in manganese- specked ware.	Late seventeenth - early eighteenth century
1	U/s	31	Ceramic	Vessel	1	Body fragment in hard- fired black glazed redware.	Late seventeenth - eighteenth century
1	U/s	16	Ceramic	Vessel	2	Joining fragments rim, large black-glazed redware storage vessel with horizontal lug	Nineteenth century
1	U/s	15	Ceramic	Vessel	1	Base in terracotta?	Post-medieval
2	200	14	Ceramic	Vessel	1	Base fragment, large manganese speckled jar.	Late eighteenth century or later
2	200	27	Ceramic	Vessel	3	Three fragments (rim to base) black-glazed redware bowl.	Nineteenth– early twentieth century
2	200	21	Ceramic	Vessel	1	Redware with white slip.	Nineteenth century
2	200	35	Ceramic	Vessel	1	Straight-walled dish, black-glazed redware.	Eighteenth century on
2	200	36	Ceramic	Vessel	2	Large bowl, blue and white underglaze transfer-printed.	Nineteenth century ?
2	200	37	Ceramic	Vessel	2	Whiteware, imitating scratch blue? Chamber pot.	Nineteenth century ?
2	200	22	Ceramic	Vessel	1	Base fragment, large grey stoneware jar.	Late eighteenth century or later
2	200	11	Iron	Object	1	Large unidentifiable object.	Not closely dated

2	200	12	Iron	Object	1	Large unidentifiable object.	Not closely dated
3	303	5	Ceramic	Vessel	1	Whiteware plate with moulded blue feathered edge.	Late eighteenth - mid nineteenth century
3	303	33	Ceramic	Vessel	1	Body fragment, black- glazed redware.	Nineteenth century ?
3	303	34	Ceramic	Vessel	1	Body fragment, slip- decorated brown- glazed redware.	Late eighteenth - nineteenth century
4	404	18	Ceramic	Vessel	1	Body fragment black- glazed redware.	Nineteenth century onwards
5	501	28	Ceramic	Building material	2	Two handmade bricks with numerous straw impressions.	Post-medieval