130-136 STRICKLANDGATE, KENDAL, CUMBRIA

Archaeological Evaluation



Client: Lake District Estates Co Ltd Planning Ap. Ref.: 5/08/0070 NGR: SD 5145 9305

© Greenlane Archaeology Ltd August 2008



Greenlane Archaeology Ltd, 2 Albrights Yard, Theatre Street, Ulverston, Cumbria, LA12 7AQ

Tel: 01229 588 500 Email: info@greenlanearchaeology.co.uk Web: www.greenlanearchaeology.co.uk

Contents

Illustratio	ons	
List of	f Figures	3
List of	f Plates	3
Non-Ted	chnical Summary	4
Acknowl	ledgements	4
1. Intr	roduction	5
1.1	Circumstances of the Project	5
1.2	Location, Geology, and Topography	5
2. Me	thodology	7
2.1	Evaluation	7
2.2	Environmental Samples	7
2.3	Finds	8
2.4	Archive	8
3. Ba	ckground	9
3.1	Historical and Archaeological Background	9
3.2	Map Regression (Figures 2-3)	10
4. Eva	aluation	14
4.1	Trench 1	14
4.2	Trench 2	14
4.3	Trench 3	16
4.4	Trench 4	16
4.5	Trench 5	24
5. Fin	nds and Samples	26
5.1	Finds	26
5.2	Finds – Discussion	31
5.3	Samples	32
5.4	Samples – Discussion	33
6. Dis	scussion	34
6.1	Introduction	34
6.2	Medieval	34
6.3	Late medieval	34
6.4	Post-medieval	34
6.5	19 th century	35
6.6.	Summary	35
7. Pot	tential	37
7.1	Potential	37
8. Bib	oliography	39
8.1	Primary and Cartographic Sources	39

8.2	Secondary Sources	39
Appendix	1: Project Brief	41
Appendix	2: Project Design	47
Appendix	3: Summary Context List	54
Appendix	4: Summary Finds List	58
Appendix	5: Environmental Samples	63

Illustrations

	_	_	
1 10+	\sim	_ 10	
1 151	\mathbf{c}		ures

Figure 1: Site location	6
Figure 2: Map regression 1787-c1859 showing excavated features appearing to co to structures shown on the maps	
Figure 3: Map regression 1859-1938 showing excavated features appearing to corre structures shown on the maps	spond to
Figure 4: Trench location plan	15
Figure 5: Plan of Trenches 4 and 5	17
Figure 6: Trench sections	20
Figure 7: Pit sections	21
Figure 8: Trench locations and archaeological potential	38
List of Plates	
Plate 1: (left) General view of Trench 1 showing deposits	14
Plate 2: (right) The large ditch in Trench 2 in section	14
Plate 3: Building 493 from the north	18
Plate 4: Hearth 404 from the east	18
Plate 5: Pit 418 in foreground and 422 behind	19
Plate 6: Pit 453 truncating soil horizon 490	19
Plate 7: Pit 435 from the south	23
Plate 8: Pit 418 from the north	23
Plate 9: Well 581 from the west	25
Plate 10: Pit 591 and western part of Trench 5 from the south-west	25
Plate 11: Medieval pottery from context 410	27
Plate 12: Medieval and transitional medieval/post-medieval pottery from context 303; inscribed 'trident' design on the central piece	
Plate 13: Medieval pottery from context 580	28
Plate 14: Medieval pottery from context 413	28
Plate 15: Medieval pottery from context 421	29
Plate 16: Medieval pottery (clockwise from top left): (top row) five fragments from con handle and two pieces of Midland purple ware reassembled to form part of the r context 412; (right, middle row) another fragment from context 412; (bottom right) from context 510; fragment from context 427; the remaining pieces are from context 5	im, from fragment
Plate 17: Medieval pottery: the fragment on the right is from context 461, the of fragments are from context 582	
Plate 18: A selection of medieval pottery (clockwise from top left): single fragm context 471 (note the incised 'trident' decoration); single fragment from context 40 fragment from context 507; single fragment from context 590; three fragments from 413 (gritty ware); single fragment from 503; single fragment from 469	4; single n context

Non-Technical Summary

A planning application was submitted by Lake District Estates Company Ltd for the construction of a new hotel and restaurant, and the extension of existing properties at 130-136 Stricklandgate, Kendal, Cumbria. Following a recommendation by Cumbria County Council Historic Environment Service, an archaeological planning condition was imposed by South Lakeland District Council. The work required a desk-based assessment, which was then followed by an archaeological evaluation that consisted of five trenches encompassing 110 square metres. A project design was produced by Greenlane Archaeology and following the acceptance of this the evaluation was undertaken between 29th April and 12th May 2008.

The trenches on the west side of the site revealed relatively shallow deposits, although a large ditch of post-medieval date was encountered, which was thought to be a garden feature. On the east side of the site numerous intercutting medieval pits were revealed, whose fills contained pottery dating from the 12th to the 16th centuries. Some of the pits were found directly below a very organic medieval soil layer, and one of the pits had been capped with re-deposited natural, preserving waterlogged material at the base. A medieval well was revealed close to the modern frontage of Stricklandgate and pottery associated with its construction and backfill suggests that it dated from the 15th to 16th centuries. A number of post-medieval wall foundations and a ha-ha ditch were also discovered, and these could be accurately dated by reference to the available historic maps. Environmental samples recovered from several features contained small quantities of grain and other evidence for cultivated plants, although the waterlogged deposits contained evidence for weed type plants, perhaps suggesting that the feature they had come from had been left open for some time.

The evaluation demonstrated that there was high potential for archaeological remains of the medieval period to be present in the area immediately to the rear of Stricklandgate. In the area immediately adjoining Stricklandgate it was clear that there had been extensive disturbance while the rear of the site, having originally been open fields, contained little of archaeological interest.

Acknowledgements

Greenlane Archaeology would like to thank the Lake District Estates Company Ltd for commissioning the project, and Mike Meredith for his information and help on site. Additional thanks are due Jeremy Parsons, Historic Environment Officer at Cumbria County Council, for providing a brief, approving the project design and proposed trench location, and monitoring the evaluation, which was also monitored by Mark Brennand, Senior Historic Environment Officer at Cumbria County Council. The medieval pottery was examined by Ian Miller at Oxford Archaeology North, and the environmental samples were assessed by Scott Timpany at Headland Archaeology.

The evaluation was carried out by Sam Whitehead and Steve Clarke, who also produced the report. The samples were processed and the retents assessed by Dean Williams, and the flots and waterlogged samples were assessed by Scott Timpany of Headland Archaeology. The medieval pottery was assessed by Ian Miller at Oxford Archaeology North, the photographs were taken by Tom Mace, and the post-medieval finds were assessed by Jo Dawson. The project was managed by Daniel Elsworth, who also edited the report, along with Jo Dawson.

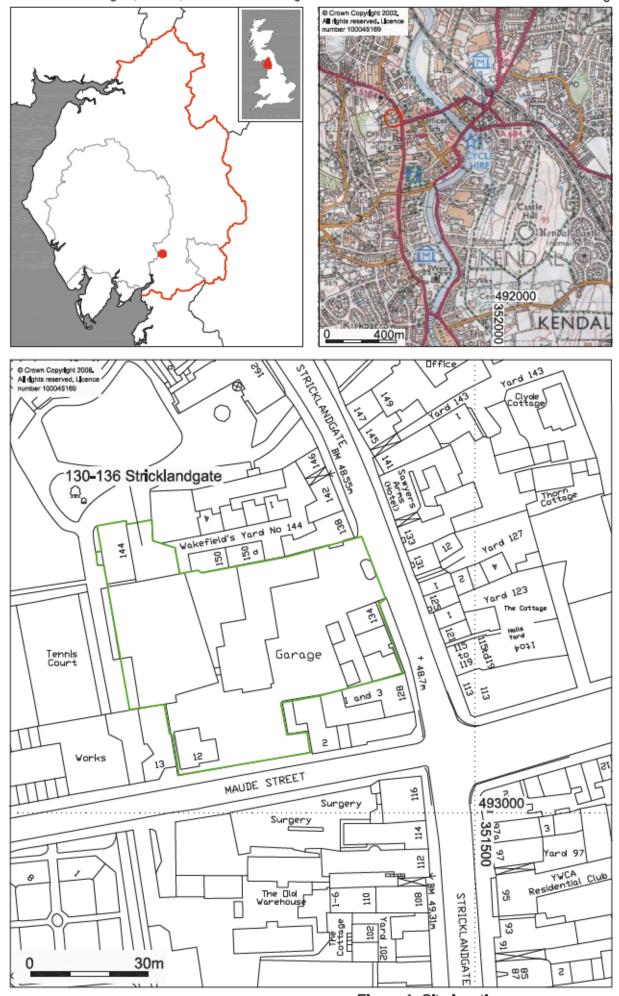
1. Introduction

1.1 Circumstances of the Project

1.1.1 A planning application was submitted by Lake District Estates Company Ltd for the construction of a new hotel and restaurant, and the extension of existing properties at 130-136 Stricklandgate, Kendal (Planning Application No. 5/08/0070; NGR SD 5154 9305). One of planning conditions placed on the development was for a programme of archaeological work to be carried out, given the sites location within the medieval core of the town. A brief for the archaeological work was issued by Cumbria County Council Historic Environment Service, which included a desk-based assessment of the site and its environs. Following the completion of this (Greenlane Archaeology 2008), during which the potential for significant archaeological remains to be present within the development area was identified, a brief for an archaeological evaluation was issued. Following the acceptance of a project design produced by Greenlane Archaeology, the evaluation was carried out in April and May 2008.

1.2 Location, Geology, and Topography

- 1.2.1 The site covers an area of approximately 0.3 ha, fronting Stricklandgate to the west and Maude Street to the south (Fig 1). 130-136 Stricklandgate is at the north end of Kendal's commercial centre and is located amongst a variety of commercial properties. Stricklandgate is the town's main thoroughfare and runs roughly north/south.
- 1.2.2 The site lies on relatively flat ground and is approximately 50m above sea level (Ordnance Survey 2002). The river Kent is located some 300m to the north-east and drains the higher ground to the north-west of Kendal into Morecombe Bay to the south-west. The solid geology comprises Bannisdale slates but is situated on the edge of a large area of Carboniferous limestone (Moseley 1978, plate 1), with overlying drift deposits of glacial gravel (Countryside Commission 1998, 66).



Client: Lake District Estates Co Ltd
© Greenlane Archaeology Ltd, August 2008

Figure 1: Site location

2. Methodology

2.1 Evaluation

- 2.1.1 The brief (see Appendix 1) issued by the CHES requested a minimum of 110 square meters of trenching, it was decided that this should comprise five separate trenches that would adequately sample the available site area (Fig 4). Due to the presence of standing buildings certain areas were unavailable for evaluation, although two trenches were excavated within the largest building as this could be accessed by machine, but the eventual distribution of trenches provided a reasonable coverage of the site as a whole. The evaluation was carried out according to the standards and guidance of the Institute of Field Archaeologists (IFA 2001).
- 2.1.2 The overburden and made ground/demolition layers were machine stripped down to the depth of the archaeological deposits, these were further reduced by the machine and manually until features cutting the natural geology were revealed. All archaeological deposits were then recorded in the following manner:
 - Written record: every context was allocated a unique number and descriptive records of all deposits and cuts were made using Greenlane Archaeology pro forma record sheets; a summary context list is presented in Appendix 3. In addition, a general record of each trench and the day's events was also made;
 - Photographs: photographs in both 35mm colour print and colour digital
 format were taken of all archaeological features uncovered during the
 evaluation, as well as general views of the evaluation trenches, the
 surrounding landscape and working shots. A selection of the colour digital
 photographs is included in this report, and the remainder are presented on
 the accompanying CD. A written record of all of the photographs was also
 made on Greenlane Archaeology pro forma record sheets;
 - Drawings: drawings produced for each trench included the following:
 - a trench plan at a scale of 1:50;
 - sections at a scale of 1:10 and 1:20.
- 2.1.3 The location of the trench was recorded relative to the known location of nearby buildings and other structures that were evident on the site plans and Ordnance Survey maps.
- 2.1.4 During the excavation a number of still active water pipes were left intact to avoid flooding the trench. As a result of this it was extremely difficult to examine some areas in adequate detail, and some features were only recorded in section as the only means of evaluation was by excavating narrow sondages between pipes.

2.2 Environmental Samples

- 2.2.1 **Strategy**: samples were taken from any negative cut feature that was deemed to have the potential for the preservation of organic matter or fine industrial residues; these residues were then analysed with a view to help understand the function of the feature, and also aid dating.
- 2.2.2 **Processing**: the non-waterlogged samples were processed using flotation techniques, with 250µm and 500µm sieves used for the flot, and a 1mm mesh used for the retent. The flots and retents were then naturally air dried.

2.2.3 **Assessment and recording:** artefacts and ecofacts were removed from the retents and were assessed. The content of the retents was recorded on *pro forma* record sheets, and this information is summarised in *Appendix 5*, together with the contents of the flots and waterlogged sample. The flot samples and two 250ml waterlogged sub-samples were submitted to Headland Archaeology for detailed analysis. The waterlogged sub-samples were gently wet sieved through 1mm and 0.50mm meshes. Both the flot samples and waterlogged sub-samples were then analysed using a stereomicroscope at magnifications of x10 and up to x100 where necessary to aid identification. Identifications were confirmed using the modern reference material and seed atlases including Cappers *et al* (2006). Plant nomenclature follows that of Stace (1997) with ecological information taken from Clapham *et al* (1962).

2.3 Finds

- 2.3.1 **Processing:** all of the artefacts were washed, with the exception of metal and glass, which were dry-brushed. They were then naturally air-dried and packaged appropriately in self-seal bags with white write-on panels.
- 2.3.2 **Assessment and recording:** the finds were assessed and identified, and were recorded on *pro forma* record sheets. A catalogue of the finds was produced giving the quantity, a brief description, and date (where known) of each type of find (*Appendix 4*).

2.4 Archive

2.4.1 A comprehensive archive of the project has been produced in accordance with the project design (see Appendix 2), and current IFA and English Heritage guidelines (Brown 2007; English Heritage 1991). The paper and digital archive and a copy of this report will be deposited in the Cumbria Record Office in Kendal on completion of the project. Three copies of this report will be deposited with the Cumbria Historic Environment Record, one with the client, and one will be retained by Greenlane Archaeology. In addition, a record of the project will be made on the OASIS scheme.

3. Background

3.1 Historical and Archaeological Background

- 3.1.1 *Introduction:* the majority of the site background is taken from the earlier desk-based assessment (Greenlane Archaeology 2008), and is intended to put the results of the evaluation in their local and regional context. The results of the map regression, which was also carried out as part of the earlier desk-based assessment, are also included as they have some specific bearing on the interpretation of the results of the evaluation (see *Section 6*).
- 3.1.2 The site is located on the edge of the later medieval and early post-medieval town, as shown by Speed's map of Kendal dated 1611. Archaeological investigations on the opposite side of Maude Street, at 110-112 Stricklandgate, revealed remains of activity in the backplots of dwellings fronting Stricklandgate dating between the late 12th to mid 14th centuries and the late 14th to 17th centuries (OA North 2004). As any remains present on the site are likely to be principally medieval or post-medieval in date the more general site history focuses on these and other potentially relevant periods.
- 3.1.3 **Early Medieval period:** as is the case throughout Cumbria, the evidence for early medieval activity is scant. Once the administration of Rome was finally rescinded in cAD 410 it seems likely that Kendal became part of the British Kingdom of Rheged (Kirkby 1962). From the early-mid 7th century onwards the expanding kingdoms of Northumbria began to influence the area. A fragment of an Anglian cross discovered in Trinity Church, Kendal is one of the few tangible pieces of evidence relating to this period (Collingwood 1904). This suggests a pre-Norman church existed on the site and that Kirkland was the early medieval focus of what was to become Kendal.
- 3.1.4 During the 9th and 10th centuries the region was subject to the influence of populations of Hiberno-Norse extraction. Place-name evidence (Smith 1967) indicates that these people were present throughout Cumbria, hence the proliferation of Norse names in the area.
- 3.1.5 **Medieval period:** the settlement of Kirkland, at the southern end of the medieval town, was recorded in the Domesday Book (as *Chechebi*; Faull and Stinson 1986), from which it may be inferred that the mother church of the area was there. The settlement became the centre of a Norman Barony in the later 11th century. The earliest fortification in Kendal, which could potentially have been the seat of the Barony, is Castle Howe (RCHME 1936, 122). The castle is one of a series of early post-conquest motte and bailey fortifications established along the river valleys of the North West and probably dates from the 12th century (Winchester 1979). A later fortification was Kendal Castle to the east of the River Kent which has earthworks and masonry dating to the 13th century onwards (Pevsner 1967, 256-7).
- 3.1.6 **Early town development:** Richard I granted a Saturday market in 1189, and at some time between 1222 and 1246 William III of Lancaster, the lord of the manor, confirmed borough status to a settlement which seems to have been encouraged to the north of Kirkland (Munby 1985). The earliest map is John Speed's of 1611 and this suggests there was some deliberate town planning. There is a notable contrast between the winding course of Kirkland, round the church, and the long straight streets of Highgate, Stricklandgate, and Stramongate, all of which converge on the market place in Kendal. The streets had narrow burgage plots extending back from the street frontage, and documents dating to 1310 and 1390 suggest that there were around 144 tofts in the town, the width of the tofts being fairly wide allowing further

sub-division laterally (CCC and EH c2002, 9). The charter of between 1222 and 1246 has a specific clause relating to fulling and dyeing (Munby 1985, 103), indicating there was an established cloth-based economy in Kendal by this period. Kendal was subject to numerous raids from Scotland in the 14th century, the most notable being the great raid of 1322. There were also outbreaks of sheep murrain from 1280 onwards and poor harvests led to famines between 1315 and 1317 (Winchester 1979, 6).

- 3.1.7 **Post-medieval period:** the woollen industry came to dominate the town's economy during the later medieval and post-medieval period and remained the town's major source of wealth for some time (CCC and EH c2002, 10). During the 18th and 19th century the population expanded rapidly and settlement became considerably more dense within the town centre, with the effect that many of the older burgage plots were in-filled with new buildings. This gradually led to the development of the present Yard system, which provided access to properties behind the main streets while retaining some open space (op cit, 14-15). It is evident from the map regression that this infilling occurred to the rear of 130-136 Stricklandgate (see Section 3.2 below).
- 3.1.8 During the late 18th century some major developments took place in close proximity to the site; the land to the north was developed by John Wakefield and Son prior to 1788 and used as a woollen manufactory (Curwen 1900, 334; their weaving shop and workers cottages are evident on the maps from 1787 onwards, see *Section* 3.2 below). They made use of a beck that flowed from Maudes Meadow to the west through their property and across the street to wash yarn (*op cit*, 335). They also established a bank next to their dwelling house on Stricklandgate in 1788, and an inn known as the 'Black O'Moor' or the 'Labour in Vain' (*ibid*). Both were subsequently demolished, but the weaving shop was clearly still present until the end of the 19th century (see *Section* 3.2 below).
- 3.1.9 The beck from Maudes Meadow subsequently formed part of a scheme to drain Maudes Meadow begun in 1863, although it was culverted from as early as 1820 (op cit, 334). Maude Street was constructed in 1897, and led to the destruction of several houses, including the former home of a Dr Shaw 'the famous orientalist' (ibid). Alterations and improvements had already been made to Sandes Avenue on the opposite side of Stricklandgate (CRO(K) WSMB/K 82a 1872), and the development of Maude Street seems to be part of a more general period of improvements to this part of the town at this time. At least part of the area behind 130-136 Stricklandgate was apparently know as the 'Jack Shop Yard' (ibid), perhaps suggesting it was at some time connected to the manufacture of armoured coats for archers or infantrymen (Friar 1991, 206); armourers are known to have been amongst the guildsmen recorded in Kendal from as early as the late 16th century (Satchell 1998, 27).

3.2 Map Regression (Figures 2-3)

- 3.2.1 **Todd 1787:** this map shows there are properties on the site with frontages to Stricklandgate and buildings to the rear. Behind these buildings are rectangular areas which were possibly allotments or gardens. There is property running along the south boundary with access via a passageway through property on Stricklandgate; more detail of this arrangement can be seen on the subsequent Ordnance Survey maps.
- 3.2.2 **Wood 1833:** this appears to be a more simplified or schematic map than Todd's, and shows that there are established properties on the site with frontages onto Stricklandgate, with buildings running parallel to the rear. On the west side of the property boundaries there is a field which is marked as belonging to a Mrs Braithwaite.

- 3.2.3 **Hoggarth 1853:** this map shows the same properties and boundaries as Wood's map, but with slightly more detail. There is now what may be an established garden to the rear of the largest plot and several smaller buildings to the south of it.
- 3.2.4 **Ordnance Survey c1859 and 1859:** these maps (of different scales but essentially the same date) are extremely detailed, and show the divisions within the buildings and the design of the large garden to the rear, which includes a small octagonal building in the north-west corner, probably a summerhouse. The field to the west has now been divided into smaller plots, and a weaving shop is shown just outside the north boundary of the site. It is striking that the layout of the buildings is closer to that shown by Todd in 1787 than to that shown by Wood or Hoggarth in the intervening period.
- 3.2.5 **Ordnance Survey 1898:** this map shows that there has been little change to the properties with the site area and the boundaries are unchanged, but due to changes in the Ordnance Survey's mapping conventions the detail of the garden has not been shown. In the top north-west corner of the site there is now a detached property. To the south of the site, three properties on the west side of Stricklandgate and a row of seven properties running east/west have been demolished allowing greater access to the field to the west. The row of buildings on the south boundary of the site is still extant.
- 3.2.6 **Ordnance Survey 1912:** to the south of the site boundary opposite Sandes Avenue the access shown on the Ordnance Survey 1898 is now Maude Street. This street continues along the south boundary of what was Mrs Braithwaite's field, terminating at the west end. A strip of land running north/south on the east side of the field appears to have been given over to buildings, which are accessed from Maude Street. The Rating Valuation (CRO(K) WT/DV/2/27 1910) shows that the two cottages within the proposed development area on Maude Street belonged to a Reverend Maude, another on Maude Street belonged to George Burrow (now Maudlands), and the properties on Stricklandgate (now numbers 130-136) belonging to a Thomas Leighton (although they are described as a single cottage).
- 3.2.7 **Ordnance Survey 1933:** this map indicates that many of the buildings on Stricklandgate within the site boundary have been demolished and been replaced by fewer smaller properties. There is also a very large building running north/south along the north boundary of the site which was a garage constructed c1920 (CRO(K) WSMB/K11/S150 1920).
- 3.2.8 **Deposited Plans 1920-1961:** in 1920 the majority of the earlier buildings were swept away and replaced with the present garage (see *Section 3.2.7* above), which continued to expand into the 1960s. There are several early plans detailed the development of the site and the additional buildings that were added, which are discussed in detail in the earlier desk-based assessment (Greenlane Archaeology 2008). Suffice is to say that they included the addition of at least seven fuel tanks, primarily positioned in the space fronting onto Stricklandgate. More buildings have been added since 1961 but the plans of these were not available.

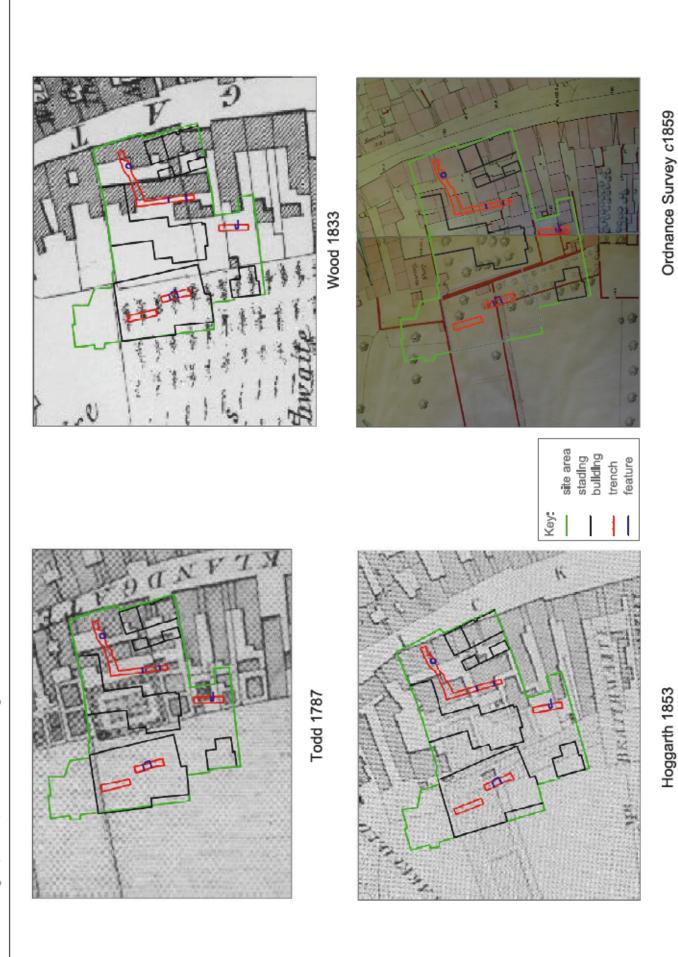


Figure 2: Map regression 1787-c1859 showing exacavated features appearing to correspond to structures shown on the maps

© Greenlane Archaeology Ltd, August 2008

Clent: Lake District Estates Co Ltd

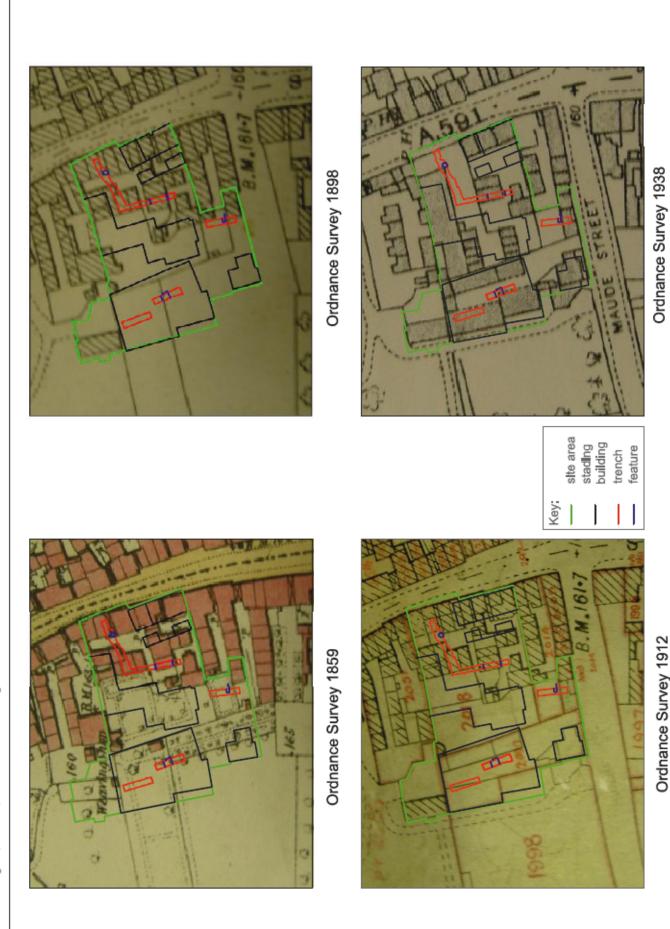


Figure 3: Map regression 1859-1938 showing excavated features appearing to correspond to structures shown on the maps

Cllent: Lake District Estates Co Ltd
© Greenlane Archaeology Ltd, August 2008 appearing

4. Evaluation

4.1 Trench 1

4.1.1 This trench contained no archaeological features (Figure 4). There were two layers present beneath the concrete garage floor slab (100) and its associated gravel bedding (Plate 1). The upper of these two layers was a stony demolition/made ground layer (101) from which 10 fragments of 18th to 20th century pottery were recovered and a single fragment of 19th century bottle glass. This compact greyish-brown sandy-clay contained moderate sub-angular and sub-rounded gravels and pebbles as well as crushed mortar. Layer 101 was approximately 0.30m thick and overlay a buried soil layer (102), which appeared to have been truncated. From this cultivation horizon 12 fragments of post-medieval pottery were recovered whose dates range was from the 17th to 20th century with the majority dating from the 18th century onwards, glass and animal bone were also recovered. The deposit comprised a moderately compact silty, sandy-clay with moderate quantities of sub-angular and sub-rounded gravels and pebbles. Beneath this was the natural glacial till (103), which comprised a sandy clay with numerous stones.





Plate 1: (left) General view of Trench 1 showing deposits

Plate 2: (right) The large ditch in Trench 2 in section

4.2 Trench 2

4.2.1 This trench contained two related features, a ditch (208) and a stone structure within the ditch base (207; Figures 4 and 6). Ditch 208 was 2.80m wide, orientated roughly east/west, and had a maximum depth of 0.70m. The ditch had an unusual profile with a very steep flat northern side the base of which met a long gently sloping and slightly concave southern side (Plate 2). The single fill within this ditch (204) was a loose mid-brown sandy clay that contained 25 fragments of pottery that dated from the late 17th to the late 19th century; in addition, a range domestic refuse including clay pipe stems, butchered bone, glass, and nails were also recovered. Within the cut of this ditch, only visible in the eastern trench section, a small stone structure had been constructed (207), which appeared to run north/south and followed the gently sloping southern cut of the ditch. The structure was made of mortared limestone rubble and at first appeared to have been constructed to part block the ditch. Sealing the ditch was a gravelly sandy clay layer (202), which was interpreted as made ground and included cockle shell, bottle glass, and pottery that largely dated from the 19th century. Immediately above this was another modern levelling layer (201) that related directly to the laying of the concrete slab that this trench was cut through.

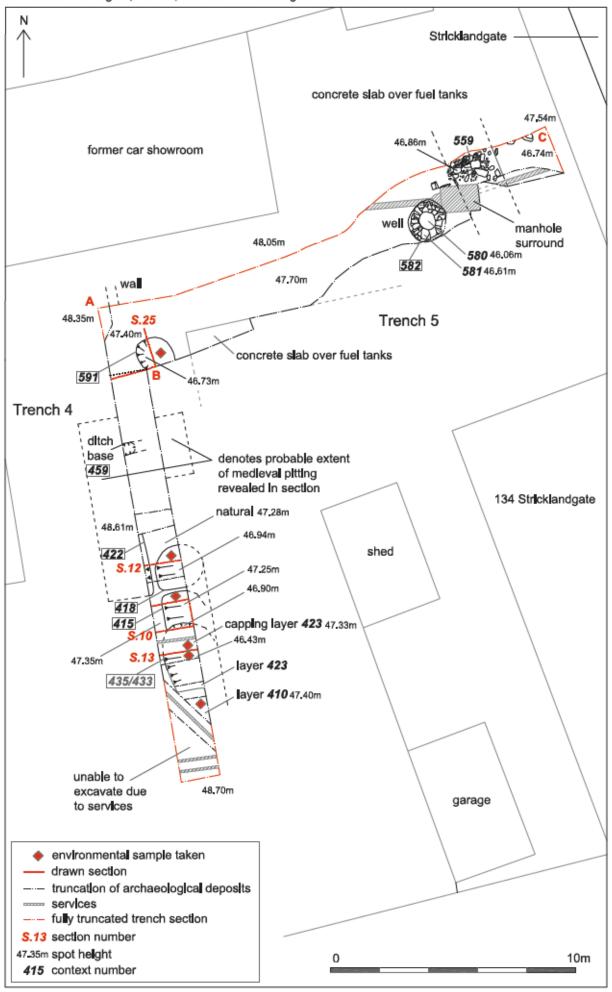
Figure 4: Trench location plan

4.3 Trench 3

This trench had much deeper deposits than either Trench 1 or 2, although the majority of this depth consisted of made ground which included demolition rubble and re-deposited soils. The first deposit encountered beneath the tarmac surface (300) was a stony layer (301), which was approximately 0.10m thick and comprised frequent sub-angular limestone cobbles. This layer extended southwards 7m from the north-east corner of the trench and was directly below the tarmac that this trench was cut through. There were no finds associated with 301 although it appeared to be associated with layer 302. Deposit 302 extended for the full width of the trench and was generally 0.30m thick; this levelling layer was a greyish-brown sandy gravel containing frequent pebbles, cobbles, and occasional clinker pieces. Below 302 was the main deposit of made ground (303); this loose brown clayey sand appeared to be a mixture of subsoil and building rubble and contained crushed mortar, several fragments of pottery that date from the 15th to the 17th century, as well as nine fragments of red earthenware that probably date from the 18th or 19th centuries. The single feature in this trench was what appeared to be a wall foundation, the cut for which (305) truncated layer 303 and was sealed by 302. The construction cut for the walls foundation trench was 1.25m wide and 1.00m deep. The primary fill of the wall trench (304) comprised un-mortared cobble sized limestone rubble in a matrix of greyish-brown sandy, silty clay. Above this, but also within the wall cut, was a deposit of dark brown sandy clay (308). From within the wall foundation deposit (304) finds with a possible date range from the 17th to the late 19th century were recovered and included animal bone, ceramic building material, pottery, and slag.

4.4 Trench 4

- 4.4.1 This trench (see Figure 5) was excavated in two phases due to a floor slab (403/406) (Plate 3) that was uncovered just beneath the gravel bedding (401) for the tarmac (400) in the southern half of this trench. The results are therefore divided into the upper deposits, those associated with this floor slab and considered to date to the 19th century, and the lower, earlier deposits.
- 4.4.1 **19**th **century:** the floor slab was partially truncated by modern services, but its original extent of 6m north/south was still evident. Associated with the floor slab was a tiled hearth (**404**; Plate 4) that was approximately midway along its west side and just east of a wall (**405**), which would appear to be the base of the associated chimney breast. Also associated with the floor slab was **402**, an irregular patch of cobbles located adjacent to the north end. For ease of discussion these features have been allocated the group number **493**.



Cllent; Lake District Estates Co Ltd
© Greenlane Archaeology Ltd, August 2008

Figure 5: Plan of Trenches 4 and 5





Plate 3: Building 493 from the north

Plate 4: Hearth 404 from the east

- 4.4.3 Another wall foundation (476/475) located in the east section of the trench may have formed the north elevation of this building and has been included in the group (493). The un-mortared limestone rubble was laid in courses into a vertically sided and flat-bottomed cut that was at least 1m wide.
- 4.4.4 **Post-medieval**: the cut for the wall foundation truncated a thick layer of demolition/made ground (**407**) which contained a single fragment of late medieval pottery and 13 fragments of post-medieval pottery that dated from the 17th to 19th century. Layer **407** would appear to relate to deposits **467**, and in the opposing trench section **436** and **448**, which are both made ground/levelling layers that contain red and white earthenware pottery, animal bone, and glass; these finds have a possible date range from the early 18th century to the early 20th century. Each of these layers of made ground are greyish-brown sandy clay with moderate to frequent gravels, pebbles, and cobbles of mixed shapes as well as mortar fragments. The group number for these layers of made ground is **494**. Cutting through layer **436** was a broad pit (**477**), with two fills (**443** and **444**). Of these the earliest (**443**) comprised a mix of sandy clay with mortar fragments, slate, and charcoal, while the later (**444**) comprised blackish firm silty clay.
- 4.4.5 **Soil horizon 490 (late medieval/early post-medieval):** beneath the layers of post-medieval made ground there were earlier soil horizons represented by deposits **438**, **457**, and **460** in the west section, and **471** and **410** in the east section of the trench; these have been grouped under **490**. Deposit **438** was located at the southern end of the west section of the trench and was 0.20m thick. This deposit was a mid-brown sandy clay that contained occasional sub-angular gravels and pebbles and occasional flecks of charcoal, no finds were recovered from this deposit that was only recorded in section. Deposit **457** was a firm mid-brown sandy clay with occasional sub-rounded gravels and pebbles, once again this deposit was only recorded in section and no finds were recovered. Deposit **460** was a firm, light brown sandy clay with occasional sub-rounded gravels and pebbles and moderate quantities of charcoal flecks, once again no finds were recovered. It is probable that layer **460** is the same as **457** and both have been truncated by pit **453**. Unfortunately no finds were recovered from the fills of pit **453** (**451** and **452**) either as it was only recorded in section.
- 4.4.6 Layer **471** was located to the north end of the east section of Trench 4 where it sealed pit **473** (and fill **472**). **471** was a light orangey brown slightly sandy clay that contained moderate quantities of sub-angular gravels and pebbles, and from it a single fragments of 15th century Northern reduced greenware pottery was recovered. Layer **410** was very distinctive and was evident in the east section for about 6m; it

comprised a firm, greyish brown sandy clay that contained occasional sub-rounded gravels, charcoal, and preserved plant remains. From this layer there were four large fragments of 15th century pottery and a single fragment of earlier Northern gritty ware dating from the 12th century, six further fragments of this earlier pottery were recovered from the environmental samples but given the small size and abraded nature of these fragments it would seem likely that they are residual. While layer **410** has been included as part of the soil horizon group **490** its character was distinctly organic and it is likely that it incorporated elements of pit fills probably due to later cultivation disturbing the earlier deposits or a continuation of refuse dumping in this area after the pits had been filled.

- 4.4.7 **Later pits:** these features, recorded both in plan and section can be divided into two main phases, those that are sealed by the late medieval soil horizons (**490**), and those that cut layer **490**, and are clearly later in date. Features **422**, **453**, **456**, and **470** all cut layer **490** and will be dealt with first. These have been given the group number **491**:
- 4.4.8 Pit **422** was just evident in plan at the west edge of Trench 4, and was clearly visible in that section. The pit had a linear rather than circular appearance (see Plate 5), it measured 3.50m north/south and had a depth of at least 0.60m. Due to its location it could not be satisfactorily excavated, however the section revealed that it had at least two fills **446** and **445**. Fill **446** was the earlier of the two fills evident in the section and was a loose, mid-brown sandy clay containing frequent limestone cobbles and pebbles. Fill **445** was the upper fill of the pit and was a firm light reddish brown sandy clay with occasional sub-angular and sub-rounded gravels and pebbles. No finds were recovered from either of the fills of this pit. This pit cut through a layer of probably re-deposited yellowish brown sandy clay (**437**), which may represent part of a capping deposit and/or be part of **423**.
- 4.4.9 Pit **456** was located towards the north end of the trench, and once again was only revealed in section where it truncated both **490** and an earlier underlying feature (**459**). The southern side of the pit had been truncated by a wastewater pipe, while the northern side revealed a concave bowl-shaped profile which appeared to have a flattish base. The north/south extent of the pit was 1.35m and this is estimated to be about half of its length, the pit was 0.55m deep and had two fills. Primary fill (**455**) was a loose deposit of greyish brown sandy clay with frequent sub-rounded gravels and pebbles, which was 0.30m thick. Upper fill **454** was a firm yellowish brown slightly sandy clay with charcoal pieces; once again this pit was only revealed in section and no finds were recovered to help date it.





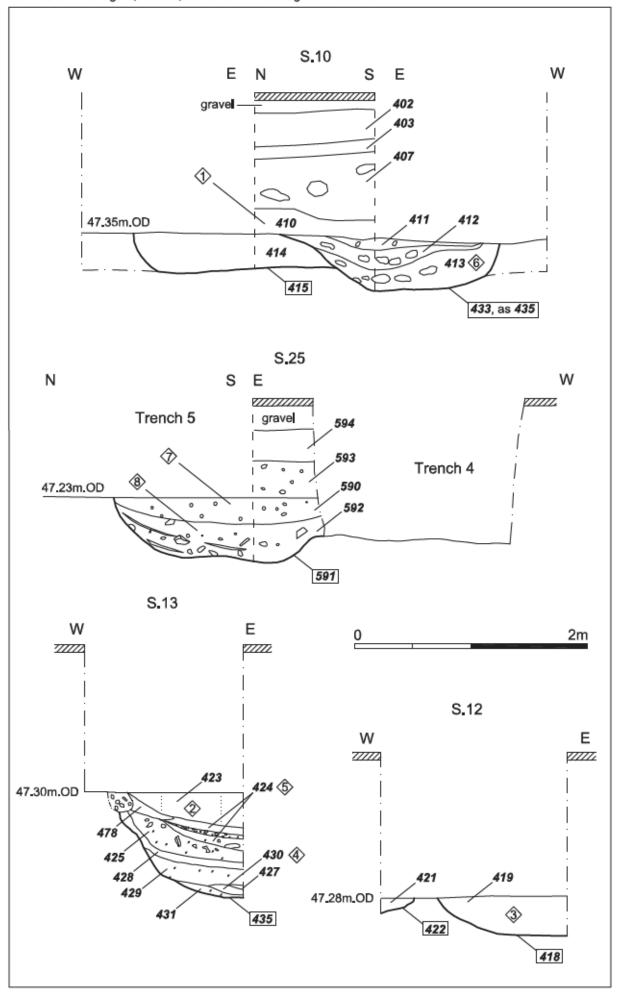
Plate 5: Pit 418 in foreground and 422 behind Plate 6: Pit 453 truncating soil horizon 490

Figure 6: Trench sections

© Greenlane Archaeology Ltd, August 2008

Clent: Lake District Estates Ltd

504



Client; Lake District Estates Co Ltd © Greenlane Archaeology Ltd, August 2008

Figure 7: Plt sections

- 4.4.10 Pit **453** was located at the north end of the west section of Trench 4, it measured 2m north/south and was 0.50m deep. The pit clearly cut the late medieval soil horizons and contained two fills **451** and **452** (Plate 6). The primary fill (**452**) was a firm mid-brown sandy clay with occasional sub-angular gravels and pebbles and moderate quantities of charcoal. The upper fill (**451**) was a firm mid-brown sandy clay with moderate quantities of sub-angular gravels, pebbles, and charcoal. No finds were recovered from this pit, which was recorded in section only.
- 4.4.11 Pit **470** was located towards the north end of the east section of Trench 4 and truncated layer **490** and an earlier pit (**473**). The north side of this pit was truncated by a modern wastewater pipe, however it would appear that the pit was circular with concave sides a gently rounded base and would have been 1.50m in diameter. The pit had a maximum depth of 0.55m and contained a single fill (**469**). Fill **469** was a firm light brown silty clay with occasional gravels and charcoal flecks, from this fill a small fragment of glazed partially reduced ware was recovered that dated from the 13th or 14th century. It seems likely that this pit cut pit **473**, but the date of the pottery recovered does raise doubts about its relationship with **490**.
- 4.4.12 *Earlier features*: these mainly comprised pits that were revealed beneath the late medieval soil horizon (*490*) were *415*, *435/433*, *418*, *473*, and ditch *459*. They have been given the group number *492*. Two further pits that fit into this phase are *591* and *506* which are located in Trench 5 and are discussed in *Section 4.5.4*.
- 4.4.13 Pit **415** was sealed below layer **410**, which produced a significant quantity of 15th century pottery. The pit was truncated at its southern side by pit **435/433**, but it was revealed in plan, excavated and sampled (see Figures 5 and 7). The pit was a minimum of 1.30m north/south, 1.10m east/west, and 0.30m deep. This shallow pit had steep concave sides that led to a flat base and contained a single fill (**414**). This comprised a firm, greyish brown slightly sandy clay, it contained occasional gravels, charcoal flecks, two pieces of animal bone, and a single fragment of Silverdale type pottery dating from the 15th century.
- 4.4.14 Pit 435/433 was the deepest pit excavated and contained nine fills, which represent different phases of dumping (see Figure 7; Plate 7). It may represent two separate intercutting pits (hence the different numbers) but this could not be ascertained with any certainty during the evaluation. The pit measured approximately 2m in diameter and was 0.90m deep. It was sub-circular in plan with steep, slightly concave sides and a gently rounded base. Fill 431 was the earliest, although this probably represents material that has slipped from the sides of the pit. Above this was very different deposit (430, which can be seen in Plate 7), its composition being a firm dark grey sandy silt that had a high organic component including preserved vegetation. Above this was a smaller lense of re-deposited natural (427). Fill 429 was a firm mid brownish grey slightly clayey silt with some orange mineral mottling and occasional charcoal flecks, the mineral staining may be indicative of past water logging. Above 429, about midway up the pit, was a layer of re-deposited natural (428), this appears to have been introduced to cap the pit with a sterile deposit, this was presumably done for hygiene reasons. Above this, fill 425 was very similar in composition to 429 except that it contained a lense of angular limestone pebbles. Fill 424 was the secondary fill and was a soft mid brownish grey silt that contained a lense of degraded stone and four fragments of 12th to 14th century pottery. At the top of the pit there was a thin layer of pale mid grey silty sand (478) and capping the pit was a deposit of firm yellowish grey sandy clay, probably re-deposited natural (423). In the west-facing section only three deposits within the pit were observed. The earliest, 413, comprised a mid grey sandy clay (412), above this was a dark reddishbrown silty clay with charcoal, and these were capped with a firm yellowish clay

(411). 411 is likely to correspond with layer 423, which sealed pit 435, while the other two deposits may be the same as 425 and 429.





Plate 7: Pit 435 from the south Plate 8: Pit 418 from the north

4.4.15 The upper fill of this pit was **423**, which was a 0.30m thick capping of redeposited natural, this layer was sampled and was found to contain five highly abraded fragments of Northern gritty ware dating from the 12th to early 13th century. Other unstratified pottery from this pit included two fragments from the 15th century and a further fragment of 12th century Northern gritty ware. From the section further to the north (**433**) that was excavated to check the relationship between this pit and pit (**415**) there were two fragments of 12th to 13th century pottery, two fragments of 15th to 16th century pottery, and a fragment dated to the 16th or 17th century. The pottery assemblages from this pit, and pit **415** are clearly confusing, it would seem most likely that the pits are late medieval and incorporate earlier pottery, this is supported by the freshly broken later wares and the small and highly abraded fragments of Northern gritty ware that were found.

4.4.16 Pit **418** was 1.70m north/south and had a depth of 0.35m, the shape, size, and fill were all very similar to pit **415** (Plate 8). From fill **419** there were 22 fragments of pottery recovered, from these 19 dated from the 12th to 14th centuries, and three were from the 15th to 17th centuries. Twelve of the earlier fragments were recovered from samples and were very small, highly abraded, and presumably residual fragments.

4.4.17 Pit **473** was located towards the north end of the trench in the eastern section and was truncated at its northern end by pit **470**. The pit measured 1.70m minimum north/south and had a depth of 0.45m, the south side was shallow, slightly concave and joined imperceptibly to a flattish base. The pit had a single fill (**472**), which was a firm dark brown slightly silty sandy clay that included moderate quantities of subangular gravels and pebbles; no finds were recovered.

4.4.18 Ditch **459** was located in the western section towards the north end of the trench, it measured a minimum of 1.20m north/south and was 0.60m deep. Its south end was truncated by pit **456**, and it had a single fill (**458**), which was a firm greyish brown sandy clay with occasional gravels and charcoal flecks. Once again no finds were recovered as only the base and is profile in section were revealed.

4.5 Trench 5

- 4.5.1 In keeping with the description of Trench 4 the results of Trench 5 are described in terms of their stratigraphic sequence and groups of relative dates. In this case the upper deposits comprise mainly made ground truncated by later pipes, rather than any building remains.
- 4.5.2 19th century: a large proportion of the upper deposits in this area were affected by modern truncation (see Figure 2), however the natural ground appeared to be largely undisturbed within the trench, apart from where a large fuel tank had been inserted along the southern section. The stratigraphy in the northern section at the west end of this trench was well preserved and layers of demolition/made ground (501 and 502) above a garden soil (503 and 510) was recorded. The deposit of made ground appeared to be associated with a stone wall foundation (505) at the west end of the north section of the trench (see Figure 6). The wall appeared to be running north/south and comprised irregular slabs of loose limestone rubble that were unmortared and within a construction cut (504) that was 0.70m wide and 0.45m deep. From the construction cut of this wall trench a single fragment of brown-glazed red earthenware pottery was recovered that has a date range from the late 17th to the 20th century. Associated with wall **505** was a layer of demolition/levelling (**501**), which comprised brownish pale grey sandy gravels with a small silt component. Included within this deposit were occasional brick fragments, charcoal, mortar, and subangular gravels and pebbles. Approximately 4m to the east deposit 501 became mixed with layer 502, which was typical of the made ground layers in Trench 4. Deposit 502 comprised a mid-brown silty sand incorporating large broken limestone cobbles, broken slate, and gravels. A small section of this made ground deposit was also evident at the west end of the south section of the trench where it was 0.30m thick and comprised a mid-brown silty sand incorporating limestone cobbles, pebbles, and gravels. At the far east end of the trench, beyond much of the modern disturbance and the well (see Section 4.5.3 below) the deposits were relatively simple, seemingly comprising a made ground deposit of sandy clay with some gravels and lumps of concrete (554). To the west of this was a large and thick area of made ground (459) largely containing a large number of sub-angular boulders, which appeared to be made ground, although the dating was not certain.
- 4.5.2 Late medieval: beneath these layers of made ground there was a layer of garden soil represented by contexts 503 and 510. Context 503 was a greyish midbrown slightly sandy silt with occasional mixed gravels, charcoal, and some orange mineral mottling; from this context a single fragment of 13th to 14th century partially reduced lead glazed pottery was recovered. Context 510 comprised a grevish midbrown sandy silt with moderate quantities of gravels, occasional charcoal flecks, and a piece of brick. From this deposit a single fragment of late medieval Silverdale ware was recovered which may suggest that the brick was intrusive and possibly relates to the modern wastewater pipe that partially truncates this layer. A third garden soil deposit (593) was located at the west end of the trench's southern section. The south section of this trench was almost entirely truncated by later intrusions and 593 was only evident for 1m from the western end of the trench. The deposit was 0.30m thick and comprised a mid-brown silty sand with moderate quantities of mixed gravels and occasional sub-rounded pebbles; unfortunately no finds were recovered from this deposit. Again, at the east end of the trench, a thin soil horizon was recorded, comprising a brown firm sandy clay (555) below 554.
- 4.5.3 A second element to this phase was represented by a well which was closer to the street frontage in a part of the trench that was highly disturbed. It was stonelined and uncovered at the level of the natural geology, 1m below the ground surface; all deposits above this were truncated by modern intrusions. The walls of the well

(581) were 0.35m wide with a 0.75m aperture; it was constructed from roughly coursed, irregular limestone slabs, which were un-mortared (Plate 9). The well had been completely backfilled, the upper part of this fill (580) consisted of stone rubble and a good quantity of thick Westmorland roof slates of various sizes and Northern reduced greenware pottery with a 14th century date. Silverdale pottery of a later medieval date was recovered from the construction cut of the well (582), suggesting that the well had a rather limited lifespan. It is unfortunate that a variety of constraints prevented excavation of the well down past the loose stony infill, which would also have been a hindrance to auguring the lower deposits.





Plate 9: Well 581 from the west

Plate 10: Pit 591 and western part of Trench 5 from the south-west

4.5.4 **Earlier pitting**: two pits were revealed in trench 5, possible pit (**506**) in the northern section and pit (**591**) in the southern section (Plate 10). Pit (**506**) was heavily truncated by a wastewater pipe and unfortunately as a result of this it was not possible to determine its relationship with to the garden soil. The pit measured a minimum of 0.85m across from west to east and 0.10m deep, the base of this feature was all that was visible and it had a rounded gently curving base. The fill of this pit (**507**) was a mid-dark brown sandy-silt from which a single fragment of 13th – 14th century pottery was recovered. Pit (**591**) was located at the junction of trenches 4 and 5, it was 1.45m in diameter, 0.55m deep and had two fills. Upper fill (**590**) was a greyish mid-brown clay-silt with a small sand component and occasional to moderate quantities of sub-rounded pebbles and gravels. From this fill there were five fragments of 13th -14th century pottery. Lower fill (**592**) was a brownish pale-mid grey clayey-silt with occasional fine sandy lenses and moderate quantities of sub rounded gravels and sub-angular pebbles. From this deposit eleven fragments of pottery dating from the 12th – 14th centuries were recovered.

5. Finds and Samples

5.1 Finds

- 5.1.1 A relatively large quantity of finds (totalling 256 individual fragments) was recovered during the evaluation, the vast majority of which comprised pottery. A summary list of all of the finds is presented in *Appendix 4*, with additional information on the medieval pottery given below, followed by a brief account of some of the post-medieval pottery.
- 5.1.2 **Medieval pottery:** a large proportion of the finds (103 individual fragments or approximately 40% of the total number of finds) comprise medieval pottery, the majority of which came from stratified deposits such as pit fills and buried soils (Plates 11-18). For the purposes of this report medieval pottery is considered to include types that date as late as the 17th century (see *Appendix 4*). the medieval pottery was principally of three types, all of which are commonly found in Kendal and the general region; northern gritty ware of the late 12th to early 13th century, partially reduced sandy ware of the 13th to 14th century, and more fully reduced greenware dating from the 15th to 16th century or possibly later. A very small amount of other, more unusual types was also recovered, including Midland purple type ware, dated to the 16th to 17th century. Two refitting base fragments of an apparently transitional ware of unknown origin and probable 16th to 17th century date were also recovered (Plate 12).
- 5.1.3 Much of the earliest pottery was heavily abraded and probably residual, with exception of that recovered from pit **591**. Some of it has affinities with material known to have been produced in kilns at Docker Moor (Gibbon 1986). The sandy ware was less common, and like the gritty ware, often abraded and apparently residual, again with the exception of the fills of pit **591** and possibly **506**. The more fully reduced greenwares were much more common, occurring in several sealed contexts and in buried soils and made ground deposits. Many of these have obvious similarities with pottery produced in Silverdale, which is thought to date to the 15th to 16th century, but could continue in use for longer (White 2000). Many of these fragments were large and un-abraded suggesting that they were from their primary context. Interestingly, two fragments were found with the same inscribed 'trident'-shaped mark, which may be part of a particular pattern or an individual potter's signature. The more unusual types, particularly the purple ware, are rare in Kendal. These too were also generally in good condition, even refitting, suggesting that they are from their original contexts.



Plate 11: Medieval pottery from context 410



Plate 12: Medieval and transitional medieval/post-medieval pottery from context 303; note the inscribed 'trident' design on the central piece



Plate 13: Medieval pottery from context 580



Plate 14: Medieval pottery from context 413



Plate 15: Medieval pottery from context 421



Plate 16: Medieval pottery (clockwise from top left): (top row) five fragments from context 419; handle and two pieces of Midland purple ware reassembled to form part of the rim, from context 412; (right, middle row) another fragment from context 412; (bottom right) fragment from context 510; fragment from context 427; the remaining pieces are from context 592



Plate 17: Medieval pottery: the fragment on the right is from context 461, the other two fragments are from context 582



Plate 18: A selection of medieval pottery (clockwise from top left): single fragment from context 471 (note the incised 'trident' decoration); single fragment from context 414; single fragment from context 507; single fragment from context 590; three fragments from context 413 (gritty ware); single fragment from 503; single fragment from 469

5.1.5 **Post-medieval pottery:** a similar amount of the finds (97 fragments or almost 38%) comprised post-medieval pottery, and as many were coarsewares they are of limited use in providing dating evidence. For the purposes of this report post-

medieval finds are considered to be those with a date-range beginning in at least the 17th century (see *Appendix 4*). In contrast, finewares, which were more readily subject to changing fashions and therefore more useful for dating, were considerably fewer in number. All the artefacts are summarised in *Appendix 4*, and the dating evidence has been incorporated into the discussion on phasing, below. The coarsewares typically comprised black- and brown-glazed red earthenware, in a variety of utilitarian forms such as crocks and pancheons, which would have been widely used and are particularly difficult to date. Of interest, however, is a fragment of lug handle from the fill of ditch *208* (*204*), which had impressed finger decoration that would have been more common in the medieval period. The finewares include tinglazed earthenware, salt-glazed stoneware, porcelain, creamware, and pearlware, dating to the 18th and 19th century, and majolica and transfer-printed white earthenware dating from the 19th to 20th centuries. Again, many of these are relatively common types for the period and are mainly useful in dating features.

5.1.6 Other finds: smaller amounts of other finds were also recovered:

- 14 fragments of glass, all probably from vessels and some coloured and largely 19th to 20th century in date;
- 27 fragments of animal bone, mostly from large mammals, some showing signs of butchery, and some burnt. These are inherently undateable, but many came from evidently post-medieval contexts; they probably all represent typical household waste;
- Five fragments of clay tobacco pipe, all from the fill of ditch 208 (204), which were difficult to date;
- Two amorphous lumps of industrial residue, perhaps associated with iron working;
- Several fragments of roofing slate were recovered from the fill of well (580), the two most complete examples of which were retained. These were relatively irregularly shaped, although evidently approximately rectangular, and thick compared to modern slates, with a single peg hole at the top;
- One piece of lead window kame;
- One square section iron nail;
- One piece of cockle shell;
- One fragment of hand-made brick;
- One lump of charcoal.
- 5.1.7 In addition, three other very small abraded fragments of pottery, which are perhaps medieval in date, were also recovered. None of these finds add greatly to the interpretation of the site although they might be considered indicative of the types of structures in the vicinity, and the possibility that industrial activity was carried out nearby. The slates are perhaps the most significant having been recovered from a demonstrably medieval feature, they demonstrate that slate was being used as a roofing material in the area perhaps as early as the 16th century.

5.2 Finds – Discussion

5.2.1 **Medieval pottery:** the assemblage represents a remarkable collection given that it is from only five evaluation trenches. A relatively small amount of the fragments are abraded and many are very large and in good condition, indicating that they are from stratified contexts, with only a small amount of residual material. There

are also some interesting fragments that are not immediately identifiable, and perhaps more unusual types such as the possible urinal. The collection will add considerably to the known examples of pottery from Kendal and the stratified sequences will be extremely useful in helping to determine dating, which in many cases is not well defined.

5.2.2 **Post-medieval pottery and other finds:** the post-medieval pottery is much less remarkable, and, although it represents the typical types that might be found on such as site, they have generally come from contexts such as made ground, buried soils, and garden soils. Only those from **204** are from a sealed context, but this appears to be little more than a garden feature. The relative lack of finewares also reduces the usefulness of the assemblage in terms of dating, and it should therefore be considered of limited interest. The other finds are typically very small in number and relatively unremarkable, perhaps deriving from demolition material and household rubbish. A small amount of industrial material potentially indicates some iron working nearby but not enough to be greatly significant. Only the roofing slates from the fill of the well (**580**) are of any great significance.

5.3 Samples

- 5.3.1 *Introduction*: the detailed results for individual features or contexts are presented in Tables 2 (retents), 3 (flot samples), and 4 (waterlogged samples) in *Appendix* 5.
- 5.3.2 **Flot samples**: all plant remains found were preserved through charring. Charred cereal grain was present within all of the floatation samples (Table 3). The grain assemblage includes barley (*Hordeum vulgare*) and oat (*Avena* sp.). A small number of grains were in such a poor state of preservation that identification was not possible; these are shown as 'cereal indet' (see Table 3). Weed seeds were generally sparse throughout the samples (see Table 3). The most commonly recovered seeds included fat-hen (*Chenopodium album*), corn marigold (*Chrysanthemum segetum*), sun spurge (*Euphorbia helioscopia*), common chickweed (*Stellaria media*) and grasses (*Poa* sp.).
- 5.3.3 Wood charcoal fragments are present in all of the floatation samples, often of a size and condition suitable for identification and/or Accelerated Mass Spectrometry (AMS) dating (see Table 3).
- 5.3.4 **Waterlogged samples**: the waterlogged sub-samples showed very good organic preservation of seeds, with leaf, wood, and moss fragments, together with wood charcoal also surviving (see Table 4). The plant assemblage was dominated by uncharred wood fragments and the seeds of pale persicaria (*Polygonum lapathifolium*), Knotgrass (*Polygonum aviculare*), creeping buttercup (*Ranunuculus repens*), smooth sowthistle (*Sonchus oleraceus*), common chickweed (*Stellaria media*), stinging nettle (*Urtica dioca*), violets (*Viola sp*), hemp-nettles (*Galaeopsis sp.*) and docks (*Rumex sp.*).
- 5.3.5 **Cereal grain and weed seeds**: charred cereal grain was found in all of the samples processed. Mostly these were small quantities of poorly preserved grain. The preservation of the grain, being slightly broken and abraded, indicates that it had been exposed and moving around on the surface before accumulating in the deposits. The presence of a small number of arable weed species within samples containing charred grain suggests that these taxa were being accidentally collected with the cereals during harvesting. No evidence was found for any processing of the cereals (e.g. threshing and winnowing) within the samples suggesting either this material has not survived or that only small-scale (domestic) processing was taking place in the vicinity of the site.

- 5.3.6 **Wood Charcoal**: all six floatation samples contained charcoal fragments between 1 and 2.9cm in length and therefore of a size and condition suitable for radiocarbon dating (See Tables 3 and 4). The larger fragments, present in sizes up to 2.9cm, are indicative of *in-situ* or deliberately dumped deposits. The smaller sized fragments (e.g. less than 1.0cm) may have been transported across the site by mechanisms such as wind blow and surface run-off.
- 5.3.7 **Waterlogged deposits**: the seeds are primarily from plants that are specific of damp marshy areas though the stinging nettle, docks, and chickweed are more indicative of disturbed nitrogen-rich ground (Clapham *et al* 1962). The assemblage would be commonly found on waste ground or the unstable banks of a damp watercourse or ditch.
- 5.3.8 **Retents:** the samples having been primarily taken from medieval negative features such as pits confirm the general interpretation of their contents containing domestic rubbish, with the presence of bone (both burnt and unburnt) and charcoal being noticeable in most; of interest is a single fish bone from Sample 1, the rarity of which suggests that fish did not make up a significant part of the diet. Hazelnut shell fragments were present in two contexts and marine shell in one, again demonstrating at least their presence in the local diet. Small quantities of medieval pottery were also present in all the retents, much of which is probably residual as was found throughout the evaluation, and smaller amounts of industrial residue indicate some likelihood of metal working nearby. Mortar was generally restricted to Sample 1, the slightly later subsoil, which perhaps indicates it was not widely in use in the earliest phases. The single lithic fragment is apparently a flint-like material but not evidently worked, and may be intrusive from one of the deposits of gravel used to backfill the modern service trenches.

5.4 Samples - Discussion

5.4.1 The flots are indicative of general household waste, with small numbers of cereal grains and seeds associated with their cultivation, but these are in general not present in large numbers. The waterlogged deposits do not seem to relate to domestic activity, comprising mainly species that might be found growing alongside a water filled feature, such as pit **435**, although the whole deposit may have been brought from elsewhere and dumped as part of backfilling. There is some potential for further analysis of these deposits, if only to learn more about the local environment, and the likelihood that the waterlogged conditions might preserve other objects.

6. Discussion

6.1 Introduction

6.1.1 Within the five evaluation trenches four basic phases were identified, medieval, late medieval, post-medieval, and 19th century. Finds and features from these phases will be discussed below with reference to the results of the desk-based assessment where appropriate. The medieval deposits and soil horizons encountered were very similar in form and arrangement with those uncovered during the excavations on the south side of Maude Street (OA North 2004), although with the benefit of still being sealed beneath the post-medieval deposits, and again similar deposits were discovered during excavations at Elephant Yard to the south (LUAU 1998, 32).

6.2 Medieval

6.2.1 The only feature that undoubtedly belongs to this phase is pit **590** in Trench 5, from which there were 16 fragments of pottery recovered all of which were 12th to14th century in date. This pit was the most northerly one evident in plan during the evaluation and therefore may represent activity in a separate plot to those to the south. Pit **506** may also be representative of the same phase of activity however without further investigation it would be unwise to assume this.

6.3 Late medieval

6.3.1 This phase is represented by a soil horizon, pitting (including those sealed by the soil horizon and those cutting through it), and a stone-lined well, all of which were located in Trenches 4 and 5. Without further excavation there is little that can be said about well 583; pottery from the construction cut backfill dates the feature to the 15th or 16th century. While the pits that appeared to be stratigraphically earlier than the soil layer 490 (492) did contain more fragments of earlier medieval pottery such as Northern gritty ware, sandy wares, and partially reduced wares, they all included pottery with a later medieval date such as the 15th to 16th century Silverdale ware. What this suggests is that in the vicinity of Trench 4 there was some early activity from the 12th century onwards illustrated by the quantity of residual pottery encountered, but that none of the features excavated can be ascribed such an early date. The time distinction between features that are sealed and those that cut through the collective soil horizon 490 (491) is not as great as first imagined and it would appear that the cultivation of these plots and the pitting encountered are all roughly contemporary indicating that the plot was a focus of intensive development around the 15th century. The relationships between pits and the soil horizon would benefit from closer scrutiny in plan and without the constraints of narrow evaluation trenches

6.4 Post-medieval

6.4.1 It is likely that all construction layers included in group **494** are post-medieval and at least partly pre-date the 19th century. Along with those made ground layers in Trench 4 one could probably add those in Trench 5 (**501** and **502**), as well as deposit **303** from Trench 3. All these deposits have a mixture of pottery dates that range from the 17th century through to the early 20th centuries. Deposit **303** demonstrated the most variable date range out of all the made ground contexts with four fragments of 15th to 17th century pottery and nine fragments of pottery that date from the late17th century to the early 20th century. It would appear that this part of the site has seen some heavy disturbance or landscaping during which any soils present have been

incorporated into this made ground layer. It is assumed the made ground was at least partly formed prior to 1787, presumably to facilitate the construction of the properties shown on that map to exist just to the east of the trench.

6.5 19th century

- 6.5.1 The two deposits encountered in Trench 1 both belong to this phase. The map regression (Figures 2 and 3) shows this area of the site to have been under pasture until at least 1833, after which it appears to have been part of a formal garden until at least 1898. It is certain that deposit **102** relates to this pre-1898 phase and the quantity of finds is in keeping with a well-tended garden soil. Between 1898 and 1912 a property was constructed on Maude Street whose yard ran northwards encompassing the area, this property was owned and occupied by George G Burrow and is currently the client's office. It would appear that this part of the site remained a yard until the construction of the buildings sometime between 1912 and 1938. Deposit **101** would therefore seem likely to relate to the yard surface in part as well as later made ground laid prior to the construction of the post 1912 buildings.
- 6.5.2 Within Trench 2 the ditch (208) can be explained by reference to the 1859 Ordnance Survey map (Figure 2) that shows what appears to be a ditch in this location. It had an east/west wall at its north edge and another north/south wall running up to it. The two features encountered in this trench therefore represent the ditch, the northern, steep edge of which probably represents the construction cut for the east/west wall, the only remnant of the north/south wall being that masonry present in the ditch base. This type of arrangement is reminiscent of a ha-ha, perhaps constructed to allow an unrestricted vista from the summerhouse shown just to the north-east of these features when this area of land appears to have been turned into a garden. The ha-ha ditch would have gone out of use between 1859 and 1898 so the finds may have been deposited at this time, although given that some are a little earlier in date it is possible that they were imported with other soil to fill the ditch. The later levelling layer or made ground (202), would equate to 101 and the construction of the post-1898 yard surface and the post-1912 buildings.
- 6.5.3 It is probable that the wall in Trench 3 (**305**) is part of this phase also, and while it could conceivably be the wall represented on Todd's 1787 map (see Figure 2) the presence of brick fragments within the construction cut suggests a later date. The main deposit of made ground within Trench 3 is older than the 19th century and is clearly cut by the wall trench, however the upper and shallower levelling layer (**302**) probably fits this phase and incorporates the cobble layer (**301**). It is worth noting how **301** and **305** seem to respect each other in Figure 6.
- 6.5.4 Nineteenth century activity within Trench 4 was represented by building **493**, which was constructed between the time of Wood's plan of 1833 and Hoggarth's plan of 1853 (see Figure 2), and was still evident on the 1938 Ordnance Survey map. It seems likely that the concrete floor and hearth tiles are 20th century additions while the chimney breast in the centre of the west gable end would be original. Wall **475**, in the eastern section, formed part of the north elevation of this building.
- 6.5.5 Wall **505** within Trench 5 would also appear to fit this phase, a good match with a building appearing on Wood's 1833 map (Figure 2). This building was constructed sometime between 1787 and 1833 and the pottery obtained from this feature also suggests a 19th century date.

6.6. Summary

6.6.1. The evaluation revealed four basic phases of activity at the site from the medieval period through to the 19th century, the locations of the trenches also

enabled the site to be divided into four areas of varying archaeological potential. The area with the highest archaeological potential contains Trenches 4 and 5 (see Figure 5). Within Trenches 4 and 5 a series of intercutting late medieval pits were revealed in association with a soil layer of the same date, these features were aligned roughly north/south and ran parallel to Stricklandgate some 20-25m to the west. A single pit of 12th to 13th century date was also found at the north of this alignment along with a large quantity of residual pottery of this date suggesting the area had been developed from this time onwards before it became the focus of more intensive activity in the 15th and 16th centuries. It would appear that the pits were located at the back edge of medieval burgage plots that ran perpendicular from Stricklandgate, the well of 15th or 16th century date may indicate the rear of the area used for housing within these plots, some 8m west of Stricklandgate. The pits encountered were probably mainly used for the disposal of domestic refuse, although the samples from the waterlogged deposits seem to demonstrate that at least one had been left open for some time (whether intentionally or not is not certain) before being filled, although their relationship with the soil horizons needs to be further clarified.

7. Potential

7.1 Potential

7.1.1 It is evident that the different areas of the site that were examined produced quite different results, and that the reason for this is closely connected to the recorded historical development of the site. It is evident that the position of the medieval plots can indeed be relatively easily identified on the post-medieval mapping and this is confirmed by the identification of medieval remains within the area adjoining Stricklandgate. It is also evident that the different parts of the site have considerably different potential for revealing remains of archaeological interest and significance. Figure 8 shows the development site divided into four areas of archaeological potential, A-D, with A having the highest potential and D having the lowest. As can be seen from the figure,

- Area A is the area in which the well-preserved medieval pits and other features were present;
- Area B is where the well and features along the street frontage were located, which, although of high potential because of its location relative to Stricklandgate, is less likely to reveal remains of archaeological interest because of the extensive disturbance known to have occurred there;
- Area C has some potential for early remains but has clearly seen an extensive build-up of deposits and some disturbance, and no definite medieval features were revealed here;
- Area D was largely agricultural land until the late 19th or early 20th century; the
 evaluation revealed only very shallow deposits in this area, and the one
 feature identified was clearly quite late in date.

Figure 8: Trench locations and archaeological potential

© Greenlane Archaeology Ltd, August 2008

8. Bibliography

8.1 Primary and Cartographic Sources

CRO(K) WSMB/K11/S150, 1920 Stricklandgate. New Garage for Messrs Craghill & Co Ltd

CRO(K) WSMB/K 82a 1872 Plan of Proposed Lines of New Road - Sandes Avenue

CRO(K) WT/DV/2/27 1910 The Commissioners of Inland Revenue Duties on Land Values, Record of Valuations Made by the Commissioners of Inland Revenue, in Accordance with Part 1 of the Finance (1909/1910) Act, 1910. County of Westmorland, Division of Kendal Ward, A Valuation Book for the Parish or Place of Kendal, Kirkland, Nethergraveship and Scalthwaiterigg

Hoggarth, H, 1853 Plan of the Town of Kendal, from an Actual Survey

Ordnance Survey, c1859a Kendal Sheet 38.8.2, 1:500

Ordnance Survey, c1859b Kendal Sheet 38.8.3, 1:500

Ordnance Survey, 1859 Westmorland Sheet 38.8, 1:2500

Ordnance Survey, 1898 Westmorland Sheet 38.8, revised 1897, 1:2500

Ordnance Survey, 1912 Westmorland Sheet 38.8.NW, revised 1912, 1:1250

Ordnance Survey, 1938 Westmorland Sheet 38.8, revised 1938-1939, 1:2500

Ordnance Survey, 2002 The English Lakes South-Eastern Area: Windermere, Kendal & Silverdale, Explorer **OL7**, 1:25000

Todd, J, 1787 A Plan of Kendal, from an Actual Survey

Wood, J, 1833 Plan of Kendal

8.2 Secondary Sources

Brown, DH, 2007 Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer, and Curation, IFA, Reading

Cappers, RTJ, Bekker RM, and Jans JEA, 2006 Digital Seed Atlas of the Netherlands Groningen

Clapham, AR, Tutin, TG, and Moore, DM, 1962 Flora of the British Isles, 2nd edn, Cambridge

Collingwood, WG, 1904 An Anglian Cross-Fragment at Kendal, *Trans Cumberland Westmorland Antiq Archaeol Soc*, n ser, **4**, 330-333

Countryside Commission, 1998 Countryside Character, Volume 2: North West, Cheltenham

CCC (Cumbria County Council) and EH (English Heritage), c2002 Extensive Urban Survey, Archaeological Assessment Report: Kendal, unpubl rep

Curwen, JF, 1900 Kirkbie-Kendall, Kendal

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

Faull, ML, and Stinson, M, 1986 Yorkshire, in J Morris (ed), *Domesday Book,* 30, Chichester

Friar, S, 1991 The Batsford Companion to Local History, London

Gibbon, P, 1986 Docker Moor Medieval Pottery: Work in Progress, Contrebis, 12, 41-46

Greenlane Archaeology 2008, 130-136 Stricklandgate, Kendal, Cumbria: Archaeological Desk-Based Assessment, Unpubl rep

Institute of Field Archaeologists (IFA), 2001 Standard and Guidance for Archaeological Field Evaluation, revised edn, Reading

Kirkby, DP, 1962 Strathclyde and Cumbria: a Survey of Historical Development to 1092, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 2nd ser, **62**, 77-94

Lancaster University Archaeological Unit (LUAU), 1998 Elephant Yard, Kendal, Cumbria: Stage Two Archaeological Evaluation and Excavation, unpubl rep

Moorhouse, A, 1911 Recent Finds in Whittington Parish, Kirkby Lonsdale, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 2nd ser, **11**, 385-389

Moseley, F (ed), 1978 The Geology of the Lake District, Yorkshire Geological Society, occ publ 3, Leeds

Munby, J, 1985 Medieval Kendal: the First Borough Charter and its Connexions, Trans Cumberland Westmorland Antiq Archaeol Soc, 2nd ser, **85**, 95-114

Oxford Archaeology North (OA North), 2004 Yards 110 and 112 Stricklandgate, Kendal, Cumbria: Archaeological Excavation Assessment Report, unpubl rep

Pevsner, N, 1967 The Buildings of England: Cumberland and Westmorland, London

RCHME, 1936 An Inventory of the Historical Monuments in Westmorland, London

Satchell, J, 1998 Life and Traditional in a Kendal Yard: The Evolution of Collin Croft, in Kendal Group CWAAS and Kendal Civic Society (ed), *The History of Kendal: Lectures Given at Stricklandgate House, Kendal*, 26-34

Smith, AH, 1967 The Place names of Westmorland, English Place-Names soc, 42:1, Cambridge

Stace, C, 1997 New flora of the British Isles, 2nd edn, Cambridge

White, A, 2000 Pottery Making at Silverdale, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 2nd ser, **100**, 285-291

Winchester, AJL, 1979 Cumbrian Historic Town Survey: Kendal, unpubl rep

Appendix 1: Project Brief

BRIEF FOR AN ARCHAEOLOGICAL EVALUATION AT 130-136 STRICKLANDGATE, KENDAL, CUMBRIA

Issued by the

County Historic Environment Service

Environment Unit, Economy, Culture and Environment



Date of Brief: 18 April 2008

This Design Brief is only valid for 1 year after the above date. After this period the County Historic Environment Service should be contacted. Any specification resulting from this Brief will only be considered for the same period.

1. SITE DESCRIPTION AND SUMMARY

Site: 130 - 136 Stricklandgate, Kendal

Grid Reference: SD 5145 9305

Planning Application No.: 5/08/0070

Scope of Proposed Development: Erection of a hotel and restaurant, and extensions to existing buildings in

3100 square metre site

Detailed proposals and tenders are invited from appropriately resourced, qualified and experienced archaeological contractors to undertake the archaeological project outlined by this Brief and to produce a report on that work. The work should be under the direct management of either an Associate or Member of the Institute of Field Archaeologists, or equivalent. Any response to this Brief should follow IFA Standard and Guidance for Archaeological Field Evaluations, 2001. No fieldwork may commence until approval of a specification has been issued by the County Historic Environment Service.

2. PLANNING BACKGROUND

- 2.1 Cumbria County Council's County Historic Environment Service (CCCHES) has been consulted by South Lakeland District Council regarding a planning application for the erection of a hotel and restaurant, and extensions to existing buildings at 130 – 136 Stricklandgate, Kendal.
- 2.2 The site has been the subject of an archaeological desk-based assessment (Greenlane Archaeology, 2008, 130 136 Stricklandgate, Kendal, Cumbria, Archaeological Desk-Based Assessment, unpublished report) which highlights it's archaeological and this brief must be read in conjunction with that report.
- 2.3 Because of the high archaeological potential of the site, a condition has been placed on planning consent requiring a scheme of archaeological work to be undertaken at the site. The next phase of this work will be an archaeological evaluation to assess the nature and potential of the site. This Brief deals solely with this phase.
- 2.4 This advice is in accordance with guidance given in Planning Policy Guidance note 16 (Archaeology and Planning) and with local sub-regional and regional planning policy.

3. ARCHAEOLOGICAL BACKGROUND

- 3.1 The site has been the subject of an archaeological desk-based assessment (Greenlane Archaeology, 2008, 130 136 Stricklandgate, Kendal, Cumbria, Archaeological Desk-Based Assessment, unpublished report) and this brief must be read in conjunction with that report.
- 3.2 The site is located on the edge of the later medieval and early post medieval town, as shown by Speed's map of Kendal dated 1611. Archaeological investigations on the opposite side of Maude Street, at 104 112 Stricklandgate, revealed remains of activity in the backplots of dwellings fronting Stricklandgate dating between the late 12th to mid 14th centuries and the late 14th to 17th centuries. The site has been the subject of modern disturbance from its recent use as a garage and the desk-based assessment provides a useful plan showing levels of modern disturbance and areas of archaeological potential.

4. SCOPE OF THE PROJECT

4.1 Objectives

- 4.1.1 The evaluation should aim to determine the location, extent, date, character, condition, significance and quality of any surviving archaeological remains liable to be threatened by the proposed development. An adequate representative sample of all areas where archaeological remains are potentially threatened should be studied.
- 4.2 Work Required
- 4.2.1 The excavation of a series of linear trial trenches to adequately sample the threatened available area, and the investigation and recording of deposits and features of archaeological interest identified within those trenches. All features must be investigated and recorded unless otherwise agreed with the County Historic Environment Service. Modern overburden can be removed by machine, but subsequent cleaning and investigation must be by hand. A minimum sample of 110 square metres of the total site area should be investigated.
- 4.2.2 One of the trial trenches must be excavated on the Stricklandgate street front, between nos. 134-138. Below ground tanks and utility services are expected to be located in this area, but archaeological remains may survive in between the areas of modern disturbance. An area of hardstanding measuring approximately 10m by 10m should be removed in this area to a sufficient depth to reveal the tanks and other features of modern disturbance. Within this open area a trial trench should be excavated targeting any areas of potential archaeological survival.
- 4.2.3 The evaluation should provide a predictive model of surviving archaeological remains detailing zones of relative importance against known development proposals. An impact assessment should also be provided, wherever possible.
- 4.2.4 The following analyses should form part of the evaluation, as appropriate. If any of these areas of analysis are not considered viable or appropriate, their exclusion should be justified in the subsequent report.
 - A suitably qualified specialist should assess the environmental potential of the site through the
 examination of suitable deposits, including: (1) soil pollen analysis and the retrieval of charred plant
 macrofossils and land molluscs from former dry-land palaeosols and cut features, and; (2) the retrieval
 of plant macrofossils, insect, molluscs and pollen from waterlogged deposits.
 - Advice is to be sought from a suitably qualified specialist in faunal remains on the potential of sites for
 producing bones of fish and small mammals. If there is potential, a sieving programme should be
 undertaken. Faunal remains, collected by hand and sieved, are to be assessed and analysed, if
 appropriate.
 - The advice from a suitably qualified soil scientist should be sought on whether a soil
 micromorphological study or any other analytical techniques will enhance understanding site formation
 processes of the site, including the amount of truncation to buried deposits and the preservation of
 deposits within negative features. If so, analysis should be undertaken.

5. SPECIFICATION

- 5.1 Before the project commences a project proposal must be submitted to, and approved by, the County Historic Environment Service.
- 5.2 Proposals to meet this Brief should take the form of a detailed specification prepared in accordance with the recommendations of The Management of Archaeological Projects, 2nd ed. 1991, and must include:
 - A description of the excavation sampling strategy and recording system to be used
 - A description of the finds and environmental sampling strategies to be used
 - A description of the post excavation and reporting work that will be undertaken
 - Details of key project staff, including the names of the project manager, site supervisor, finds and environmental specialists and any other specialist sub-contractors to be employed
 - Details of on site staffing, expressed in terms of person days
 - A projected timetable for all site work and post excavation work
 - The proposed locations of the trial trenches.
- 5.3 Any significant variations to the proposal must be agreed by the County Historic Environment Service in advance.

6. REPORTING AND PUBLICATION

- 6.1 The archaeological work should result in a report, this should include as a minimum:
 - A site location plan, related to the national grid
 - A front cover/frontispiece which includes the planning application number and the national grid reference of the site
 - The dates on which the fieldwork was undertaken
 - A concise, non-technical summary of the results
 - An explanation of any agreed variations to the brief, including justification for any analyses not undertaken (see 4.2.4)
 - A description of the methodology employed, work undertaken and the results obtained
 - Plans and sections at an appropriate scale showing the location and position of deposits and finds located
 - A list of, and dates for, any finds recovered and a description and interpretation of the deposits identified
 - A description of any environmental or other specialist work undertaken and the results obtained
- 6.2 Three copies of the report should be deposited with the County Historic Environment Record within two months of completion of fieldwork. This will be on the understanding that the report will be made available as a public document through the County Historic Environment Record.
- 6.3 The results of the evaluation will need to be made available for inclusion in a summary report to a suitable regional or national archaeological publication if further archaeological fieldwork is expected.
- 6.4 Recommendations concerning any subsequent mitigation strategies and/or further archaeological work following the results of the field evaluation should not be included in the report. Such recommendations are welcomed by the County Historic Environment Service, and may be outlined in a separate communication.
- 6.5 Cumbria HER is taking part in the Online Access to Index of Archaeological Investigations (OASIS) project. The online OASIS form at http://ads.ahds.ac.uk/project/oasis must therefore also be completed as part of the project. Information on projects undertaken in Cumbria will be made available through the above website, unless otherwise agreed.

7. THE ARCHIVE

- 7.1 An archive must be prepared in accordance with the recommendations in Brown, DH, 2007, Archaeological Archives A Guide To Best Practice In Creation, Compilation, Transfer and Curation, Archaeological Archives Forum. Arrangements must be made for its long term storage and deposition with an appropriate repository. A copy shall also be offered to the National Monuments Record.
- 7.2 The landowner should be encouraged to transfer the ownership of finds to a local or relevant specialist museum. The museum's requirements for the transfer and storage of finds should be discussed before the project commences.
- 7.3 The County Historic Environment Service must be notified of the arrangements made.

8. PROJECT MONITORING

- 8.1 One weeks notice must be given to the County Historic Environment Service prior to the commencement of fieldwork.
- 8.2 Fieldwork will be monitored by the Historic Environment Officer on behalf of the local planning authority.

9. FURTHER REQUIREMENTS

- 9.1 It is the archaeological contractor's responsibility to establish safe working practices in terms of current health and safety legislation, to ensure site access and to obtain notification of hazards (eg. services, contaminated ground, etc.). The County Historic Environment Service bears no responsibility for the inclusion or exclusion of such information within this Brief or subsequent specification.
- 9.2 All aspects of the evaluation shall be conducted in accordance with the Institute of Field Archaeologist's Code of Conduct and the IFA's Standard and Guidance for Archaeological Field Evaluations.
- 9.3 Human remains must be left in situ, covered and protected when discovered. No further investigation should normally be permitted beyond that necessary to establish the date and character of the burial, and the County Historic Environment Service and the local Coroner must be informed immediately. If removal is essential, it can only take place under appropriate Department for Constitutional Affairs and environmental health regulations.
- 9.4 The involvement of the County Historic Environment Service should be acknowledged in any report or publication generated by this project.

10. FURTHER INFORMATION

For further information regarding this brief, contact

Jeremy Parsons
Historic Environment Officer
Cumbria County Council
County Offices
Kendal
Cumbria LA9 4RO

Cumbria LA9 4RQ Tel: 01539 773431

Email: Jeremy.Parsons@cumbriacc.gov.uk

For further information regarding the County Historic Environment Record, contact

Jo Mackintosh Historic Environment Records Officer Cumbria County Council County Offices Kendal Cumbria LA9 4RO

Cumbria LA9 4RQ Tel: 01539 773432

Email: jo.mackintosh@cumbriacc.gov.uk

Appendix 2: Project Design

FORMER CRAGHILLS GARAGE, 130-136 STRICKLANDGATE, KENDAL, CUMBRIA

Archaeological Evaluation Project Design



Client: Lake District Estate Co Ltd

April 2008

Planning Application Ref. 5/08/0070

1. Introduction

1.1 Project Background

- 1.1.1 A planning application was submitted by Lake District Estates Company Ltd (hereafter 'the client') for the construction of a new hotel and extensions to other buildings at the former Craghills Garage, 130-136 Stricklandgate, Kendal, Cumbria (Planning Application No. 5/08/0070; NGR SD 5154 9305). South Lakeland District Council, after consultation with Cumbria County Council Historic Environment Service (CHES), placed an archaeological condition on the planning consent, the first phase of which was a desk-based assessment, which was carried out by Greenlane Archaeology in March 2008 (Greenlane Archaeology 2008). This identified several areas of archaeological potential, as well as areas in which post-medieval and more recent contamination and disturbance was likely. Following this, further work was requested by CHES comprising an evaluation of part of the site and a brief for this was then issued (CHES 2008). The evaluation is intended to establish, where possible, whether any remains of archaeological significance are present on the site, their nature, degree of survival, extent, significance, and date. This project design covers the evaluation phase only, and has been produced in response to the brief.
- 1.1.2 The proposed development site is at the north end of Stricklandgate, within an area of tenements that make up the core of the medieval town (Greenlane Archaeology 2008). Previous archaeological investigations, particularly those to the south of the site on the opposite side of Maude Street, have revealed quite extensive deposits of medieval date, and it is likely that similar remains will be present at 130-136 Stricklandgate. There is also evidence of extensive post-medieval activity on the site, and it is significant in having an open area alongside the street frontage, which could provide a rare opportunity to examine an area of this type as such locations typically have extant buildings on them.

1.2 Greenlane Archaeology

1.2.1 Greenlane Archaeology is a private limited company based in Ulverston, Cumbria, and was established in 2005 (Company No. 05580819). Although a relatively new company, its directors, Jo Dawson and Daniel Elsworth, have a combined total of over 16 years continuous professional experience working in commercial archaeology, principally in the north of England and Scotland. Greenlane Archaeology is committed to a high standard of work, and abides by the Institute of Field Archaeologists' (IFA) Code of Conduct. The desk-based assessment and evaluation will be carried out according to the Standards and Guidance of the Institute of Field Archaeologists (IFA 2001).

1.3 Project Staffing

1.3.1 The project will be managed by **Jo Dawson (MA (Hons), AIFA)**. Since graduating from the University of Glasgow in 2000 with a joint honours degree in Archaeology and Mathematics, Jo has worked continuously in commercial archaeology. Her professional career started at Glasgow University Archaeological Research Division (GUARD), for whom she worked for six months, following which she worked for Headland Archaeology, in Edinburgh, for two years, and for Oxford Archaeology North, in Lancaster, for three years. During this time she has been

involved in a range of different archaeological projects, and, over the past few years, has concentrated on desk-based assessments and environmental impact assessments, as well as finds reports. She has extensive experience of both planning and pre-planning projects, and has undertaken assessments of all sizes. Since establishing Greenlane Archaeology, she has managed many projects in Cumbria, including several recent evaluation projects.

- 1.3.2 The archaeological evaluation will be supervised by **Sam Whitehead (BSc (Hons), MA)**, with assistance from a suitably qualified individual. Sam graduated from the University of Liverpool in 1994 with an honours degree in Archaeology, and has more than seven years continuous professional experience in commercial archaeology, much of which was in a supervisory capacity. He has extensive experience of excavations, evaluations, and watching briefs, as well as report writing and illustration production. Recent relevant projects include evaluations at Upper Brook Street, Ulverston (Greenlane Archaeology 2007c), and Collin Croft, Kendal (Greenlane Archaeology 2007b).
- 1.3.3 All artefacts will be processed by Greenlane Archaeology, and it is envisaged that they will initially be assessed by Jo Dawson, who will fully assess any of post-medieval date. Finds of earlier date or faunal remains will be assessed by specialist sub-contractors as appropriate, and in this case it is envisaged that these may include Steve Rowland for faunal remains, and lan Miller for medieval pottery, both of Oxford Archaeology North. CHES will be notified of any other specialists, other than those named, who Greenlane Archaeology wishes to engage, before any specialist contracts are awarded, and the approval of CHES will be sought.
- 1.3.5 Environmental samples and faunal remains will be processed by Greenlane Archaeology. It is envisaged that they will be assessed by Scott Timpany at Headland Archaeology Ltd depending on his timetabling constraints. CHES will be informed and their approval will be sought for these arrangements.

2. Objectives

2.1 Archaeological Evaluation

2.1.1 To excavate a series of evaluation trenches or test pits comprising an area of at least 110m². These will assess the presence or absence of features of archaeological interest within the area, their extent, date, and significance.

2.2 Report

2.2.1 To produce a report detailing the results of the evaluation, that will assess the potential of the site and significance of the remains and provide recommendations regarding the need for further work.

2.3 Archive

2.3.1 Produce a full archive of the results of the desk-based assessment and evaluation.

3. Methodology

3.1 Archaeological Evaluation

- 3.1.1 A total of at least 110m² of evaluation trenching is required by the brief (CHES 2008). Depending on any on-site constraints such as contamination or the presence of services, it is envisaged that this will be covered by excavating six trenches each approximately 10m long and 1.7m wide (a standard excavator bucket width), until significant archaeological deposits or the natural geology are reached, or to a depth of 1.2m (for reasons of health and safety). These trenches will target the areas identified during the desk-based assessment as having the greatest archaeological potential, following consultation with CHES. In addition, an area 10m by 10m will be stripped from the area known to formerly contain below-ground fuel tanks in order to more accurately locate these and enable further evaluation trenches, making up the remainder of the required area, to be excavated It is anticipated that the evaluation will take 20 person days.
- 3.1.2 The evaluation methodology, which is based on Greenlane Archaeology's excavation manual (Greenlane Archaeology 2007a), will be as follows:
 - The site will be checked with a Cable Avoiding Tool (CAT) in order to establish the presence of live electrical services. Any existing service plans supplied by the client will also be consulted in order to identify the presence of other services;
 - The trenches will be excavated with regard to the position of any services, focussing on the areas of high archaeological interest or potential, and avoiding areas which are likely to have been severely damaged or truncated by later activity, unless they are considered to have a high potential;
 - The overburden (which is likely to largely comprise relatively modern make-up deposits) will be removed by machine under the supervision of an archaeologist until the first deposit beneath it is reached;
 - All deposits below the overburden will be examined by hand in a stratigraphic manner, using shovels, mattocks, or trowels as appropriate for the scale. Deposits will only be sampled, rather than completely removed, below the first identified level of archaeological interest, unless specified by the CHES, with the intension of preserving as much in situ as possible;
 - The position of any features, such as ditches, pits, or walls, will be recorded and where necessary these will be investigated in order to establish their full extent, date, and relationship to any other features. Negative features such as ditches or pits will be examined by sample excavation, typically half of a pit or similar feature and approximately 10% of a linear feature;
 - All recording of features will include hand-drawn plans and sections, typically at a scale of 1:20 and 1:10, respectively, and photographs in both 35mm colour print and colour digital format;
 - All deposits, trenches, drawings and photographs will be recorded on Greenlane Archaeology pro forma record sheets;
 - All finds will be recovered during the evaluation for further assessment as far as is practically and safely possible. Should significant quantities of finds be encountered an appropriate sampling strategy will be devised in consultation with CHES;

- All faunal remains will also be recovered by hand during the evaluation, but where it is considered likely that there is potential for the bones of fish or small mammals to be present appropriate volumes of samples will be taken for sieving:
- Deposits that are considered likely to have preserved environmental remains will be sampled. Bulk samples of between 10 and 40 litres in volume, depending on the size and potential of the deposit, will be collected from stratified undisturbed deposits and will particularly target negative features (gullies, pits, and ditches) and occupation deposits such as hearths and floors. An assessment of the environmental potential of the site will be undertaken through the examination of suitable deposits by specialist subcontractors (see Section 1.3.5 above), who will examine the potential for further analysis. All samples will be processed using methods appropriate to the preservation conditions and the remains present;
- Any human remains discovered during the evaluation will be left in situ, and, if
 possible, covered. CHES will be immediately informed as will the local
 coroner. Should it be considered necessary to remove the remains this will
 require a Home Office licence, under Section 25 of the Burial Act of 1857,
 which will be applied for should the need arise;
- Any objects defined as 'treasure' by the Treasure Act of 1996 (HMSO 1996)
 will be immediately reported to the local coroner and secured stored off-site,
 or covered and protected on site if immediate removal is not possible;
- Each evaluation trench will be backfilled following excavation although it is not envisaged that any further reinstatement to its original condition will be carried out.
- 3.1.3 Should any significant archaeological deposits be encountered during the evaluation these will immediately be brought to the attention of CHES so that the need for further work can be confirmed. Any additional work and ensuing costs will be agreed with the client and according to the requirements of CHES, and subject to a variation to this project design.

3.2 Report

- 3.2.1 The results of the evaluation will be compiled into a report, which will include the following sections:
 - A front cover including the appropriate national grid reference (NGR) and planning application number;
 - A concise non-technical summary of results, including the date the project was undertaken and by whom;
 - Acknowledgements;
 - Project Background;
 - Methodology, including a description of the work undertaken;
 - Results of the evaluation including descriptions of any deposits identified, their extent, form, and potential date, and an assessment of any finds or environmental remains recovered during the evaluation;
 - Discussion of the results including an assessment of the significance of any archaeological remains present within the study area, areas of

further archaeological potential, areas in which further work is recommended, and appropriate types of further work;

- Bibliography, including both primary and secondary sources;
- Illustrations at appropriate scales including:
 - a site location plan related to the national grid;
 - a plan showing the location of the study area in relation to nearby structures and the local landscape;
 - a plan showing the position of the evaluation trenches;
 - plans and sections of the evaluation trenches showing any features of archaeological interest;
 - photographs of the evaluation, including both detailed and general shots of features of archaeological interest and the trenches;
 - illustrations of individual artefacts as appropriate.

3.3 Archive

- 3.3.1 The archive, comprising the drawn, written, and photographic record of the evaluation, formed during the project, will be stored by Greenlane Archaeology until it is completed. Upon completion it will be deposited with the Cumbria Record Office in Kendal (CRO(K)). The archive will be compiled according to the standards and guidelines of the IFA (Brown 2007), and in accordance with English Heritage guidelines (English Heritage 1991). In addition details of the project will be submitted to the Online AccesS to the Index of archaeological investigationS (OASIS) scheme. This is an internet-based project intended to improve the flow of information between contractors, local authority heritage managers and the general public.
- 3.3.2 A copy of the report will be deposited with the archive at the Cumbria Record Office in Kendal, one will be supplied to the client, one to the client's agent, and within two months of the completion of fieldwork, three copies will be provided for the Cumbria Historic Environment Record (HER). In addition, Greenlane Archaeology will retain one copy, and digital copies will be deposited with the NMR and OASIS scheme as required.
- 3.3.3 The client will be encouraged to transfer ownership of the finds to a suitable museum. Any finds recovered during the evaluation will be offered to Kendal Museum. The museum is, however, currently at close to full capacity, and it is unlikely that it would be willing to take anything unless it was of exceptional importance. If no suitable repository can be found the finds may have to be discarded, and in this case as full a record as possible would be made of them beforehand.

4. Work timetable

- 4.1 Greenlane Archaeology will be available to commence the project on **23rd April 2008**, or at another date convenient to the client. The project will comprise the following tasks:
 - Task 1: archaeological evaluation;

- Task 2: post-excavation work on archaeological evaluation, including processing of finds and production of draft report and illustrations;
- Task 3: feedback, editing and production of final report and archive.

5. Other matters

5.1 Access

5.1.1 Access to the site for the site visit will be organised through co-ordination with the client and/or their agent(s).

5.2 Health and Safety

5.2.1 Greenlane Archaeology carries out risk assessments for all of its projects and abides by its internal health and safety policy and relevant legislation. Health and safety is always the foremost consideration in any decision-making process.

5.3 Insurance

5.3.1 Greenlane Archaeology has professional indemnity insurance to the value of £250,000. Details of this can be supplied if requested.

5.4 Environmental and Ethical Policy

5.4.1 Greenlane Archaeology has a strong commitment to environmentally and ethically sound working practices. Its office is supplied with 100% renewable energy by Good Energy, uses ethical telephone and internet services supplied by the Phone Co-op, is even decorated with organic paint, and has floors finished with recycled vinyl tiles. In addition, the company uses the services of The Co-operative Bank for ethical banking, Naturesave for environmentally-conscious insurance, and utilises public transport wherever possible. Greenlane Archaeology is also committed to using local businesses for services and materials, thus benefiting the local economy, reducing unnecessary transportation, and improving the sustainability of small and rural businesses.

6. Bibliography

Brown, DH, 2007 Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer, and Curation, Institute of Field Archaeologists (IFA), Reading

Cumbria Council Historic Environment Service (CHES), 2008 Brief for an Archaeological Evaluation at 130-136 Stricklandgate, Kendal, Cumbria, unpublicument

English Heritage, 1991 *The Management of Archaeological Projects*, 2nd edn, London Greenlane Archaeology, 2007a *Archaeological Excavation Manual*, unpubl rep

Greenlane Archaeology, 2007b The Former Builder's Yard, Collin Croft, Kendal, Cumbria: Archaeological Evaluation and Building Recording, unpubl rep

Greenlane Archaeology, 2007c 23-25 Upper Brook Street, Ulverston, Cumbria: Archaeological Watching Brief and Evaluation, unpubl rep

Greenlane Archaeology, 2008 130-136 Stricklandgate, Kendal, Cumbria: Archaeological Desk-Based Assessment, unpubl rep

HMSO, 1996 *Treasure Act*, http://www.opsi.gov.uk/acts/acts1996/1996024.htm
IFA, 2001 *Standard and Guidance for Archaeological Field Evaluation*, revised edn, Reading

Appendix 3: Summary Context List

N.B. The first digit of each context number is also the trench number

Context	Туре	Description	Interpretation	
100	Structure	Concrete	Concrete floor	
101	Deposit	Greyish brown, compact sandy clay, inclusions of gravel and building debris	Made ground /demolition layer	
102	Deposit	Dark brown firm slightly silty sandy clay	Cultivation horizon	
103	Deposit	Fine sandy clay, very stony	Natural glacial till	
201	Deposit	Blackish brown sandy clay, gravel and stone	Levelling layer for concrete surface	
202	Deposit	Reddish brown firm sandy clay, moderate inclusions of small-medium stones, gravel	Made ground	
204	Fill	Brown friable dry sandy clay, moderate inclusions of small-medium stones	Fill of 208	
207	Structure	Mortared stone wall of medium to large square rough-cut limestone, and smaller flattish sub-angular stone	Terminal of north/south boundary wall	
208	Cut	Linear feature running east/west with near vertical north side and shallow sloping south side	Ha-ha and east/west wall construction cut	
300	Deposit	Tarmac	Car park surface	
301	Deposit	Sub-angular medium sized stones packed with sandy clay	Stone surface	
302	Deposit	Greyish brown firm sandy clay soil, 50% stone, clinker and gravel	Make-up/levelling layer for 300	
303	Deposit	Brown friable sandy clay, with inclusions of stone, sand and building debris	Make-up/levelling layer	
304	Fill	Greyish brown friable sandy silty clay, 90% small-medium sub-angular stone rubble	Primary fill of 305	
305	Cut	Linear feature with concave sides and flat base	Possibly a pit to backfill waste or a robber trench	
308	Fill	Dark brown friable sandy clay, with inclusions of small–medium stones	Upper fill of 305	
400	Deposit	Tarmac	Car park surface	
401	Deposit	Pinkish grey limestone chippings, sand and gravel	Levelling layer for tarmac surface 400	
402	Deposit	Blackish brown sandy clay with 70% cobble stones	Remnants of cobbled surface	
403	Structure	Disturbed concrete floor slab, south part	Floor	
404	Structure	Glazed tiles	Hearth	
405	Structure	Mortared limestone wall base	Chimney breast	
406	Structure	Northern half of floor slab	Floor	
407	Deposit	Brown friable sandy clay with 20% medium- large stones	Make-up/levelling layer of re-deposited soil	
408	Deposit	Small-medium concrete fragments	Demolition debris	
409	Deposit	Small lens of orange compact clay	Backfill	
410	Deposit	Greyish brown firm fine sandy clay, occasional small sub-rounded stones, moderate flecks of charcoal	Relict soil horizon	

Context	Type	Description	Interpretation
411	Fill	Yellowish grey firm slightly sandy clay,	Clay capping over pit
440	F:11	occasional small stones	433
412	Fill	Dark reddish brown firm silty clay, moderate small-medium sub-angular stones,	Fill of pit 433
		moderate amounts of charcoal	
413	Fill Mid grey compact slightly sandy clay,		Fill of pit 433
		moderate inclusions of small-medium sub-	
		angular stones	=:::
414	Fill	Firm, greyish-brown, slightly sandy-clay, it	Fill of pit 415
		contained occasional gravels, charcoal flecks, pot and bone	
415	Cut	Concave sides, flat based shallow feature	Waste pit
		with straight sides, truncated by 435 on	·
	0.1	south side	
418	Cut	Shallow concave sides with flat base	Waste pit
419	Fill	Greyish brown firm sandy clay, occasional	Sole fill of pit 418
		small sub-rounded stones and flecks of	
420	Deposit	Light grey sandy gravel	Makeup layer
			. ,
421	Deposit	Light brown sandy clay, 50% small-medium sub-angular stone	Re-deposited topsoil/building debris
422	Cut	Shallow linear feature with flat base	Truncated pit/ditch
423	Fill	Vollowich grow firm clightly candy clay	Clay capping over pit
423	FIII	Yellowish grey firm slightly sandy clay, occasional small stones	413
424	Fill	Mid brown, firm silty clay, occasional small-	Fill of pit 435
		medium stone	·
425	Fill	Greyish brown sandy silt, moderate small	Fill of pit 435
427	E:II	limestone fragments	Fill of pit 425 ro
421	Fill	Orangey brown sand	Fill of pit 435 – re- deposited natural
428	Fill	Orangey brown sand. Fill of pit 435	Fill of pit 435 – re-
			deposited natural
429	Fill	Mid brownish grey slightly clayey silt, some	Fill of pit 435
430	Fill	orange mottling, occasional charcoal flecks Dark grey organic sandy silt. Primary fill of	Domestic waste
430	' '''	pit 435	Domestic waste
431	Fill	Mid brown sandy silt, some orange mottling.	Slippage of pit sides
		Fill of pit 435	
433	Cut	Part of large steep concave sided feature	Large waste pit
435	Cut	with irregular edge Same as 433	Large waste pit
436	Deposit	Greyish black firm sandy clay with moderate small-large sub-angular stones	Make-up/levelling layer
437	Deposit	Light yellowish brown compact fine slightly	Clay capping, same
	Боробк	sandy clay	as 423
438	Deposit	Brown silty sandy clay with occasional	Relict soil horizon,
		small-medium sub-angular stone, and flecks	same as 410
443	Fill	of charcoal Greyish white mix of sandy clay and mortar,	Primary fill of pit 477
443		with occasional small –medium stones, and	Fillinary IIII OI PIL 477
		inclusions of charcoal and slate fragments	
444	Fill	Blackish grey firm silty sandy clay,	Upper fill of pit 477
		moderate small-medium sub-angular stone	
AAF	Cill	and gravel	Upper fill of nit 400
445	Fill	Light reddish brown compact slightly sandy clay, occasional small sub-rounded stone.	Upper fill of pit 422
		Liay, occasional small sub-rounded stone.	l .

Context	Туре	Description	Interpretation
446	Fill	Brown friable sandy clay with moderate small-large sub-angular stones.	Primary fill of pit 422
448	Deposit	Blackish brown firm silty sandy clay, moderate small-medium sub-angular stone. Inclusions of shell, glass and bone	Make up/levelling layer
451	Fill	Mid brown firm sandy clay, occasional flecks of charcoal and small-medium sub-angular stones	Upper fill of pit 453
452	Fill	Mid brown firm sandy clay with moderate flecks of charcoal and occasional small subrounded stones	Primary fill of pit 453
453	Cut	Shallow cut with slightly concave base	Small pit
454	Fill	Yellowish-brown firm slightly sandy clay, occasional medium sub-angular stones and small deposits of charcoal	Upper fill of pit 456
455	Fill	Greyish brown friable sandy clay, 60% small-medium sub-rounded stone	Primary fill of pit 456
456	Cut	Shallow feature with concave side and base, west side truncated by modern service trench	Small pit
457	Deposit	Brown firm fine sandy clay, occasional small-medium sub-rounded stone	Truncated relict soil horizon
458	Fill	Greyish brown compact silty sandy clay, occasional fragments of charcoal	Primary fill of ditch 459
459	Cut	Steep sides with narrow concave base, truncated on south side by 456	Small ditch orientated east -west
460	Deposit	Brown firm fine sandy clay, occasional small-medium sub-rounded stone	Truncated relict soil horizon
467	Deposit	Blackish brown sandy clay, inclusions of brick, slate, 20% small-medium sub- rounded stone	Make up layer of re- deposited topsoil and building rubble
469	Fill	Light brown firm silty clay, occasional flecks of charcoal and small sub-rounded stones	Fill of pit 470
470	Cut	Steep sided feature with concave base	Small ditch running east/west
471	Deposit	Light orangey brown slightly sandy clay, 30% small-medium sub-angular stones	Clay capping over pit 473
472	Fill	Blackish brown silty sandy clay, 50% small- medium sub-angular stones	Fill of pit 473
473	Cut	Shallow linear feature running east/west, concave sides and flat base	Shallow pit
475	Structure	Layered flattish sub-angular stone within 476	Dry stone wall
476	Cut	Vertical sided, flat based cut running east/west	Cut for wall 475
477	Cut	Shallow sided flat based feature cutting overburden, filled by 443 and 444	Modern backfilled pit
478	Fill	Pale mid grey silty sand with occasional manganese	Upper fill of pit 435
490	Group	Late medieval soil horizon, incorporating deposits 410 , 471 , 460 , 457 , 438 , 510 and 593 .	Soil horizon
491	Group	Late medieval/early post-medieval pits, incorporating 422, 456, 453 and 470.	Pits
492	Group	Medieval pits incorporating 415, 435/433, 418, 473, and 459	Pits

Context	Type	Description	Interpretation
493	Group	Floor slab 406/403, hearth (404) and walls (405 and 475)	Building
494	Group	Deposits 407, 467, 436 and 448	Made ground
501	Deposit	Pale brownish gray sandy gravels with occasional mortar and charcoal	Make up layer
502	Deposit	Mid brown silty sand with large broken limestone rubble, cobbles and slate fragments	Make up layer
503	Deposit	Greyish mid brown slightly sandy silt with orange mineral mottling, occasional inclusions of mixed gravels, flecks of charcoal	Relict soil horizon
504	Cut	Construction cut for wall 505	Foundation trench
505	Structure	Un-mortared limestone rubble wall foundation in construction cut 504	Wall foundation
506	Cut	Shallow concave cut	Truncated pit
507	Fill	Mid brown firm silty sand. Fill of pit 506	Fill of pit 506
510	Deposit	Greyish mid brown slightly sandy silt with orange mineral mottling, occasional flecks of charcoal	Relict soil horizon
554	Deposit	Greyish brown friable sandy clay, small- medium stone rubble and large concrete fragments	Make up layer
555	Deposit	Brown firm sandy clay, moderate small- medium sub-angular stone, occasional flecks of charcoal	Relict soil horizon
559	Deposit	Mid brown firm-compact sandy clay, 20% large sub-angular stone	Make up layer
580	Deposit	Mid brown firm sandy clay, moderate inclusions of small-medium sub-angular stone and building rubble	Fill of well 581
581	Structure	Roughly coursed, un-mortared irregular limestone slabs	Wall of well
582	Cut	Circular in plan	Construction cut of well
590	Fill	Greyish – mid-brown silty clay	Upper fill of 591
591	Cut	Ovoid shaped feature with shallow concave sides and irregular base	Waste pit
592	Deposit	Pale greyish brown sandy clay, moderate inclusions of sub-rounded gravels and stones, lens of sand	Primary fill of pit 591
593	Deposit	Mid brown firm silty sand moderate inclusions of gravels and occasional sub-rounded stone	Garden soil layer

Appendix 4: Summary Finds List

N.B. Date range is in centuries, early = E, mid = M, and late = L. Not closely dateable = Ncd. S = recovered from a sample

Cxt	Find	Qty	Description	Date range
U/S	Pottery	3	Silverdale type ware body fragments and strip	15 th – 16 th
			handle fragment	
U/S	Pottery	1	Mottledware press-moulded dish rim fragment	L 17 th – E 18 th
101	Pottery	3	Brown-glazed red earthenware	L 17 th – E 20 th
101	Pottery	2	Black-glazed red earthenware	L 17 th – E 20 th
101	Pottery	1	White salt-glazed stoneware teacup base?	18 th
101	Glass	1	Blue fragment	18 th – E 20 th
101	Pottery	3	Bone china flatware including base, two refitting, and saucer rim with enamel stripe	19 th – E 20 th
101	Pottery	1	White earthenware	L 18 th – 20 th
102	Animal	3	Large mammal fragments, one sawn	Ncd
	bone			
102	Pottery	4	Stoneware, including part of handle and knop, and salt-glazed bottle fragement	18 th – E 20 th
102	Pottery	1	White earthenware, industrial slip ware with brown and blue bands, carinated bowl fragment	L 18 th – 20 th
102	Pottery	1	White earthenware, base	19 th – 20 th
102	Pottery	1	Pearlware with blue transfer-printed pattern, saucer fragment	L 18 th – E 19 th
102	Pottery	1	Pearlware press moulded plate rim with blue painted and relief moulded edge	L 18 th
102	Pottery	1	Brown-glazed red earthenware vessel rim with unglazed white slip stripe on rim	L 17 th – E 20 th
102	Pottery	2	Black-glazed red earthenware	L 17 th – E 20 th
102	Pottery	1	Black-glazed pinkish-orange earthenware	L 17 th – E 20 th L 17 th – E 18 th
102	Glass	3	Dark green bottle fragments, two refitting all from one vessel	19 th – E 20 th
202	Marine shell	1	Cockle	Ncd
202	Glass	3	Dark green bottle fragments	L 18 th – 20 th
202	Pottery	3	Brown-glazed red earthenware	L 17 th – E 20 th
202	Pottery	1	Black-glazed red earthenware coarseware base	L 17 th – E 20 th
202	Pottery	1	Brown-glazed white earthenware, hollow ware with moulded design, tea pot?	Mid 18 th – E 20 th
202	Pottery	1	Majolica	19 ^{tn} − E 20 ^{tn}
202	Pottery	2	White earthenware, one with blue dabbed print	L 18 th – 20 th
204	Animal bone	10	Large and medium mammal fragments, many sawn	Ncd
204	Clay tobacco pipe	5	Four stems, one with yellow glaze, one wide bore, three narrowish bore, and one bowl fragment	18 th – E 20 th
204	Pottery	3	Black-glazed red earthenware, two crock fragments from single vessel including lug handle with impressed finger decoration, one fineware fragment	L 17 th – E 20 th
204	Pottery	11	Brown-glazed red earthenware, including three fineware, one with white slip stripe, one jug(?) base fragment with handle terminal,	L 17 th – E 20 th

Cxt	Find	Qty	Description	Date range	
	type		glozad on undereide		
204	Dotton	4	glazed on underside	18 th – 20 th	
204 204	Pottery Fe	1	Unglazed red earthenware, flower pot Square section nail	18" – 20" Ncd	
204	Glass	4	Very light turquoise and dark green bottle	18 th – E 20 th	
			fragments		
204	Pb	1	Window kame	Ncd	
204	Pottery	1	Buff coloured earthenware, industrial slipware with white slip bands	Mid 18 th – E 20 th	
204	Pottery	1	White earthenware industrial slipware with blue band	Mid 18 th – E 20 th	
204	Pottery	1	Yellow ware	L 17 th – E 18 th	
204	Pottery	1	White earthenware	L 18 th – 20 th	
204	Pottery	1	White earthenware plate base fragment with double recessed foot rim and blue transfer-printed 'Willow' pattern	19 th	
204	Pottery	1	Porcelain saucer base with enamel painted pattern	Mid – L 18 th	
204	Pottery	1	Pearlware with blue transfer-printed pattern	L 18 th – E 19 th	
303	Pottery	1	Silverdale type ware with a very similar signature to that from 471 , probably the same maker	15 th ?	
303	Pottery	3	Reduced greenware refitting fragments, probably from straight-sided jar, glazed internally and externally	15 th – 16 th	
303	Pottery	2	Refitting base fragments from very hard fired rounded jar or big dish, very well produced	(16 th -) 17 th	
303	Pottery	1	Brown-glazed red earthenware, fineware	L 17 th – E 20 th	
303	Pottery	8	Black-glazed red earthenware, including pancheon rim with refitting piece and three others probably from same vessel, and jug(?) base glazed on underside	L 17 th – E 20 th	
303	Pottery	1	Fine brown-glazed red earthenware dish rim with tortoise shell pattern over internal white slip coating	L 17 th – L 18 th ?	
304	Animal bone	1	Medium mammal long bone fragment	Ncd	
304	Pottery	1	Black-glazed red earthenware crock rim fragment with lug handle	L 17 th – E 20 th	
304	СВМ	1	Dark reddish brown hand-made brick fragment	L 18 th – mid 19 th	
304	Industrial residue	1	Vesicular lump	Ncd	
407	Animal bone	4	Broken fragments of large mammal long bones and ribs, some cut marks	Ncd	
407	Glass	1	Large vessel rim with moulded edge, colourless	L 19 ^{tn} – 20 ^{tn}	
407	Glass	1	Opaque blue fragment	L 19 th – 20 th	
407	Pottery	6	White earthenware with transfer-printed patterns in purple, grey, blue, black and green, three rims, two bedroom ware vessels, two refitting	Mid 19 th – 20 th	
407	Pottery	2	White earthenware, one tea cup handle fragment	19 th – 20 th	
407	Pottery	1	White earthenware with blue sponge print design, saucer rim	19 th – E 20 th	
407	Pottery	1	White earthenware, industrial slipware with blue band	L 18 ^{tn} – 20 ^{tn}	

[©] Greenlane Archaeology Ltd, August 2008

Cxt	Find	Qty	Description	Date range
	type	_	•	
407	Pottery	1	Silverdale type fully reduced strap handle fragment	15 th – 16 th
407	Pottery	1	Black-glazed red earthenware base	L 17 th – E 20 th
407	Pottery	1	Glazed buff coloured earthenware vessel rim	L 17 th – E 18 th
407	Pottery	1	Fine brown-glazed grey bodied earthenware	L 17 th – E 20 th
410	Animal bone	3	Large mammal fragments, including one rib	Ncd
410	Pottery	6	Very abraded gritty ware fragment, and very	12 ^{tn} – 13 ^{tn}
(S1)	′		small fragments of same fabric	
410	Pottery	1	Very abraded small Northern gritty ware fragment (residual)	12 th – 13 th
410	Pottery	2	Reduced greenware with nice lead glaze, from rounded/globular jug with thumbed decoration around the rim and a strap handle below the rim – not something I Miller recognises (rim and refitting fragment)	15 th – 16 th
410	Pottery	2	Reduced greenware with neater and smaller rim than previous though probably from the same kiln, with thumbed strip around a narrow mouth, probably a rounded jug; strap handle fragment may be from same vessel	15 th – 16 th
410	Pottery	2	Refitting Silverdale ware body fragments from a fairly sizeable jug or jar, with part of incised decoration or signature [trident shaped]	15 th – 16 th
412	Pottery	3	Midland purple type ware refitting fragments from rim of multi-handled cup	(16 th -) 17 th
412	Pottery	1	Silverdale type ware	15 th – 16 th
413	Pottery	3	Very small, abraded	Ncd
413	Pottery	1	Northern gritty ware fragment	12 th – 13 th
413	Pottery	1	Northern gritty ware with external green glaze	E 13 ^m ?
413	Pottery	9	Silverdale ware urinal (?) rim with handle terminal, and 8 refitting fragments probably from elsewhere on same vessel – is there any evidence of cess from this feature?	15 th – 16 th
414	Animal bone	2	Large mammal fragments, sawn	Ncd
414	Pottery	1	Silverdale type ware, probably a jar	15 th – 16 th
419	Pottery	3	Northern gritty ware, one very abraded, and clearly residual, one glazed body fragment (the glaze is unusual), and an everted collared rim fragment, probably from a jar	12 th – E 13 th
419	Pottery	1	Partially reduced ware body fragment, probably from a jug, abraded	13 th – E 14 th
419	Pottery	4	Refitting Silverdale or reduced greenware large jar fragments, with stacking scars on base so could be a second	15 th – 16 th
419	Pottery	1	Midland purple-type ware, with decoration possibly copying Cistertian ware with a dot of white clay on the surface below the glaze. Fragment has a handle terminal and is probably a cup. This fabric is rare for the area	16 th – 17 th
419 (S3)	Pottery	1	Northern gritty ware from Docker Moor	L 12 th – E 13 th
419 (S3)	Pottery	1	Very small fragment of partially reduced ware	13 th – 14 th
419 (S3)	Pottery	9	Very small fragments of sandyware, many very abraded	13 th – 14 th

[©] Greenlane Archaeology Ltd, August 2008

Cxt	Find	Qty	Description	Date range
	type			
419 (S3)	Pottery	1	Reduced greenware small fragment	15 th – 16 th
419	Pottery	1	Northern gritty ware from Docker Moor	12 th - 13 th
419	Pottery	2	Refitting abraded sandyware fragments	13 th
419	Pottery	1	Partially reduced body fragment, glazed so probably from a jug	13 th ?
419	Pottery	1	Abraded sandyware fragment	13 th - 14 th
421	Pottery	1	Silverdale type ware large jar, with stacking scar on base so might have been a second	15 th – 16 th
421	Pottery	1	Silverdale ware bunghole cistern	15 th – 16 th
424 (S5)	Pottery	3	Very small body fragments, including one abraded	12 th – 13 th
424	Pottery	1	Sandyware jug strap handle	13 th – 14 th
427 (S5)	Pottery	1	Gritty ware, similar to that east of the Pennines	12 th – E 13 th
427	Industrial residue?	1	Vesicular lump	Ncd
U/S	Pottery	1	Northern gritty ware from Docker Moor , probably a cooking pot, with a sooted exterior	12 th – E 13 th
U/S	Pottery	1	Reduced greenware body fragment in oxidised sandy fabric, with a sharp curve so possibly a jug, locally produced	15 th
U/S	Pottery	1	Small Silverdale ware fragment, possibly with incised decoration	15 th – 16 th
436	Pottery	1	Black-glazed red earthenware strap handle	L 17 th – E 20 th
436	Pottery	2	Tin-glazed earthenware	18 th
436	Pottery	3	White earthenware	L 18 th – 20 th
444	Pottery	3	Black-glazed red earthenware including crock rim	L 17 th – E 20 th
444	Pottery	1	Black-glazed light orange earthenware tea pot base?	18 th – 20 th
448	Glass	1	Turquoise bottle fragment with mould seem	19 [™] – E 20 [™]
448	Pottery	1	Black-glazed red earthenware rim fragment, pancheon	L 17 th – E 20 th
448	Animal bone	2	Medium mammal fragments	Ncd
461	Pottery	1	Reduced greenware, could be a jar or a jug	15 th
467	Animal bone	1	Fragment	Ncd
467	Pottery	1	Creamware	M to L 18 th
467	Pottery	4	Brown-glazed red earthenware fineware fragments including rim and base	L 17 th – E 20 th
469	Pottery	1	Small body fragment of partially reduced ware with a nice glaze	13 th (-14 th)
471	Pottery	1	Northern reduced greenware with an attempt at an incised pattern on the edge (trident shaped), possibly a rounded jug	15 th
503	Pottery	1	Small fragment of partially reduced ware with a lead glaze	13 th – 14 th
505	Pottery	1	Creamware bowl base	M to L 18 th
505	Pottery	1	Midland purple type ware?	17 th ?
507	Pottery	1	Abraded body fragment in an oxidised sandy fabric with a lot of grits, quite crude but still wheel-thrown	L 13 th (?) – 14 th
F40	Pottery	1	Small body fragment of Silverdale ware	15 th – 16 th
510			Indicate the contract of the contract o	14 th

Cxt	Find type	Qty	Description	Date range
			of medium or slender proportions, all probably from a single vessel	
582	Pottery	2	Silverdale type ware, including fragment from large jar	15 th – 16 th
590 (S7)	Pottery	2	Gritty ware, very small fragments, one very abraded	12 th – 13 th
590 (S7)	Pottery	2	Cream sandyware, very small fragments, both glazed	13 th
590	Pottery	1	Medium coarse sandyware with splashes of glaze, probably a locally-produced jug or jar	13 ^{tn} ?
592 (S8)	Pottery	1	Grittyware? (very small fragment)	L 12 th – 13 th
592	Pottery	2	Partially reduced wares	12 th – E 13 th
592	Pottery	5	Small gritty ware body fragments	12 th – 13 th
592	Pottery	1	Coarse sandyware rim	13 th – 14 th
592	Pottery	1	Small sandyware fragment	13 th – 14 th
592	Pottery	1	Sandyware fragment possibly from throat of jug with very nice glaze	13 th – 14 th
592	Charcoal	1	Lump of charcoal	Ncd
592	Animal bone	1	Burnt fragment	Ncd

Appendix 5: Environmental Samples

Sample	Context	Volume (litres)	Description
1	410	40	Layer
2	423	40	Clay capping(?) layer
3	419	40	Fill of pit 418
4	430	10	Waterlogged deposit from base of pit 435
5	424	20	Waterlogged deposit from upper fill of pit 435
6	413	40	Upper fill of pit 433
7	590	20	Upper fill of pit 591
8	592	20	Lower fill of pit 591

Table 1: Environmental samples

Sample number	1	2	3	4*	5	6	7	8
Volume (litres)	c1.15	c1.1	c1	-	c0.6	c1.2	c1.4	c0.65
Bone (Burnt)	+++	++	+++	-	++	+++	++	+++
Bone (Unburnt)	++		+++	-		+		
Charcoal	+++	+++	+++	-	++	+++	+++	+++
Cinders	++			-		+		
Fish bone	+							
Industrial residue	++		+	-		++		
Iron concretion			+++	-	++	++	+++	++
Iron (Fe) object			+	-				
Lithics		+		-				
Medieval pottery	++	++	++	-	+	++	+	+
Mortar	+++		+	-				
Post-medieval pottery	+							
Hazeinut shell (charred)	+			-				
Hazelnut shell (waterlogged)					+			
Wood (waterlogged)					++			
Post-medieval pottery	+			-				
Shell (Marine)			+	-				
Uncharred organics				-	++	+		

Tables 2: Volume and contents of retents (Key: + = 1-5, ++ = 6-20, +++ = 21-100, ++++ = >100)

^{*}Due to its waterlogged condition Sample 4 was only sub-sampled and so no retent was recorded

Sample number	1	2	3	6	7	8
Volume (millilitres)	c80	c120	c95	c110	c60	c50
Avena sp.			+		+	
Hordeum vulgare		+	+	+		
Cerealia indet.	+				+	
Chenopdium album	+					
Poaceae sp.	+			+		
Stellaria media	+					
Euphorbia heliscopia		+				
Crysathemum segetum				+		
Charcoal	++++	++++	++++	+++	++++	++++

Table 3: Volume of flots and contents (Key: + = rare, ++ = occasional, +++ = common, ++++ = abundant)

Sample number	4	5
Moss fragments	+	++
Wood fragments	++	++++
Leaf fragments	++	
Polygonum lapathifolium/perscaria	+++	++++
Polygonum aviculare	++	+++
Ranunculus repens	++	++++
Rumex sp.	+	
Sonchus oleraceus	+	
Urtica dioca	+++	
Chenopodium album		+++
Galaeopsis sp.		+++
Lamium purpureum		+++
Charcoal	++	+++

Table 4: Volume of waterlogged samples and contents (Key: + = rare, ++ = occasional, +++ = common, ++++ = abundant)