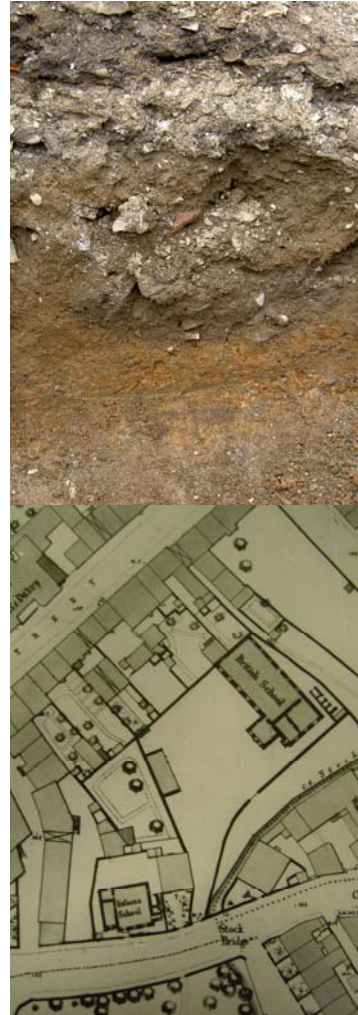


LAND TO THE REAR OF 3 CASTLE STREET, KENDAL, CUMBRIA

Archaeological Watching Brief



Client: Acorn Developments
(Kendal) Ltd
Planning Ap. Ref: 5/07/0571

NGR: SD 5396 9302

© Greenlane Archaeology Ltd
April 2008



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

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

Contents

Illustrations.....	2
List of Figures.....	2
List of Plates.....	2
Non-Technical Summary.....	3
Acknowledgements.....	3
1. Introduction.....	4
1.1 Circumstances of the Project.....	4
1.2 Location, Geology, and Topography.....	4
2. Methodology.....	6
2.1 Desk-Based Assessment.....	6
2.2 Watching Brief.....	6
2.3 Archive.....	7
3. Desk-Based Assessment Results.....	8
3.1 Background History.....	8
3.2 Castle Street – Wildman Street Area.....	9
3.3 Map Regression.....	10
3.4 Previous Archaeological Investigation and HER Information.....	12
3.5 Discussion.....	13
4. Watching Brief.....	15
4.1 Removal of Concrete.....	15
4.2 Trench 1.....	15
4.3 Footings.....	15
4.4 Finds and Environmental Samples.....	20
4.5 Discussion.....	24
5. Conclusion.....	26
5.1 The Watching Brief.....	26
5.2 Recommendations.....	26
6. Bibliography.....	27
6.1 Primary and Cartographic Sources.....	27
6.2 Secondary Sources.....	27
Appendix 1: Project Brief.....	30
Appendix 2: Project Design.....	34
Appendix 3: Summary Context List.....	40
Appendix 4: Summary Finds List.....	41
Appendix 5: Environmental Samples.....	47

Illustrations

List of Figures

Figure 1: Site Location.....	5
Figure 2: Site plan following removal of concrete and excavation of Trench 1	14
Figure 3: Foundation trench plan.....	18
Figure 4: Sections.....	19

List of Plates

Plate 1: (left) John Todd's Plan of Kendal, 1787	11
Plate 2: (right) John Wood's Plan of Kendal, 1833.....	11
Plate 3: (left) Corn Rent map, c1835	11
Plate 4: (right) Hoggarth's Plan of Kendal, 1853	11
Plate 5: (left) Ordnance Survey, 1861	12
Plate 6: (right) Ordnance Survey, 1898.....	12
Plate 7: Ordnance Survey, 1914	12
Plate 8: (left) Site following the removal of the concrete surface (100) showing the concrete block walls	15
Plate 9: (right) Context 103 as exposed following the removal of the concrete surface	15
Plate 10: (left) West side of site showing 104 following removal of overburden 101 and 102	16
Plate 11: (right) Pit 106 in south-west corner	16
Plate 12: (left) Ditch 117 in section.....	17
Plate 13: (right) Ditch 115 in plan with concrete block wall 112 adjacent	17
Plate 14: (left) Pit 121 (left) and ditch 119 (right) in section on north-west side of site	17
Plate 15: (right) General view showing the sequence of layers on the west side of the site ..	17
Plate 16: Thin layer 124 in section on the east side of the site	20
Plate 17: Medieval pottery from contexts other than lower subsoil 111.....	21
Plate 18: Medieval pottery from lower subsoil 111.....	21
Plate 19: Medieval pottery from lower subsoil 111 (all sandy ware except for single piece in top right corner which is reduced ware of Silverdale type).....	22
Plate 20: Industrial residue from 108.....	22
Plate 21: Selection of late 18 th to early 19 th century pottery, and bone artefact, including two patterns identified from lower subsoil 111, 'Leaves' (1) and 'Leaf' (2)	23

Non-Technical Summary

A planning application was submitted by Acorn Developments (Kendal) Ltd for the construction of a three new dwellings on land to the rear of 3 Castle Street, Kendal, Cumbria. Following a recommendation by Cumbria County Council Historic Environment Service (CCCHES), a programme of archaeological work was requested by South Lakeland District Council which comprised a rapid desk-based assessment and watching brief of the ground works. A project design was produced by Greenlane Archaeology and following the acceptance of this the desk-based assessment and watching brief were undertaken in February and March 2008.

The desk-based assessment revealed that the proposed development site is situated to the rear of plots of probable medieval origin situated along Wildman Street to the north-west. The origins of this street are uncertain, but it probably formed an extension of Stramongate, which was certainly in existence by the 13th century. Wildman Street is also occupied by two important early buildings: the Castle Dairy, which is thought to be of 14th century origin and formed part of a grange belonging to the castle, and Sleddale Hall, dated to the 1660s. The development site is situated on land that was utilised for the building of an Infants' School in 1830, which remained in existence until it was demolished 1990; the schoolmaster's house is still present. The adjoining plot to the north-east was home to the British School, established in 1835.

The watching brief revealed a remarkably deep sequence of deposits, primarily the result of the demolition of the school and earlier phases of tipping or demolition, perhaps intended to level the ground or raise it above the flood plain of the nearby confluence of the River Kent and Stock Beck. Beneath these layers was a well preserved medieval soil horizon containing a remarkably large collection of pottery, principally of late 12th to 14th century date. Cut into this deposit and the natural clay beneath were a series of linear features and pits, probably of 17th or 18th century origin but of uncertain purpose. They appear to be on the same alignment as the extant property boundaries and may be marking the position of earlier ones that were re-organised in the early 19th century.

Acknowledgements

Greenlane Archaeology would like to thank Acorn Developments for commissioning the project, in particular Steve Dodds. Further thanks are due to Ian O'Neil, Mike Robinson, and Mike Allison for their helpfulness and patience on site. Additional thanks are due to the staff of Cumbria Record Office in Kendal and Kendal Local Studies Library for help with accessing their archives. Thanks are also due to Jo Mackintosh, Historic Environment Record Officer, for providing access to the Cumbria Historic Environment Record, and to Jeremy Parsons, Historic Environment Officer at Cumbria County Council, for providing a brief and approving the project design.

The desk-based assessment was carried out by Daniel Elsworth and Steve Clarke, both of whom also undertook the watching brief. The finds were processed by Steve Clarke, and assessed by Jo Dawson, with the exception of the medieval pottery and associated residue, which was assessed by Ian Miller and Jeremy Bradley, of Oxford Archaeology North. The report was produced by Daniel Elsworth and Steve Clarke and edited by Jo Dawson, who also managed the project.

1. Introduction

1.1 Circumstances of the Project

1.1.1 A planning application was submitted by Acorn Developments (Kendal) Ltd (hereafter 'the client') for the construction of three new dwellings on land to the rear of 3 Castle Street, Kendal, Cumbria (Planning Application No. 5/07/0571; NGR SD 5396 9302). South Lakeland District Council (SLDC), after consultation with Cumbria County Council Historic Environment Service (CHES), placed an archaeological condition on the planning consent, and a brief for the works was then issued by CHES, comprising a watching brief of the groundworks during construction (CHES 2008). The watching brief 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. As part of the work a rapid desk-based assessment was also to be carried out. This was intended to set the site in its historical and topographical landscape, and establish the location, extent, survival and significance of any known archaeological remains on the site prior to the watching brief.

1.2 Location, Geology, and Topography

1.2.1 The site of the watching brief is situated to the east of the town centre at the rear of No 3 Castle Street on the north side of Castle Street and to the south of Wildman Street (Fig 1).

1.2.2 Kendal is largely situated on an area of Bannisdale Slates, but there is a large area of Carboniferous limestone to the west (Moseley 1978, plate 1). The overlying drift deposits comprise glacial material such as boulder clay, which forms a hummocky landscape outside of the town (Countryside Commission 1998, 66). The soils which underlie the urban part of Kendal are described as 'urban' by the Soil Survey of England and Wales, but the surrounding areas are all typical Brown Earths (Ordnance Survey 1983).

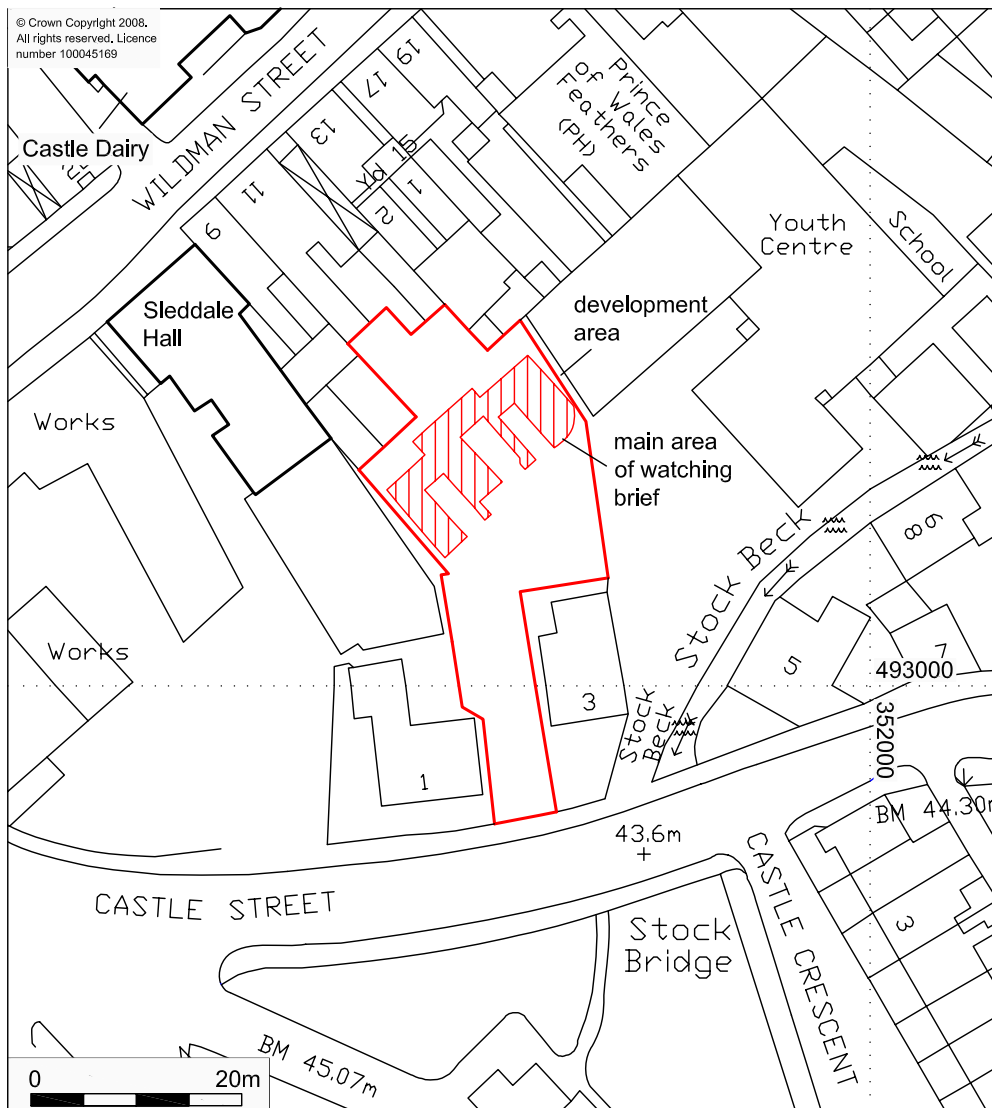
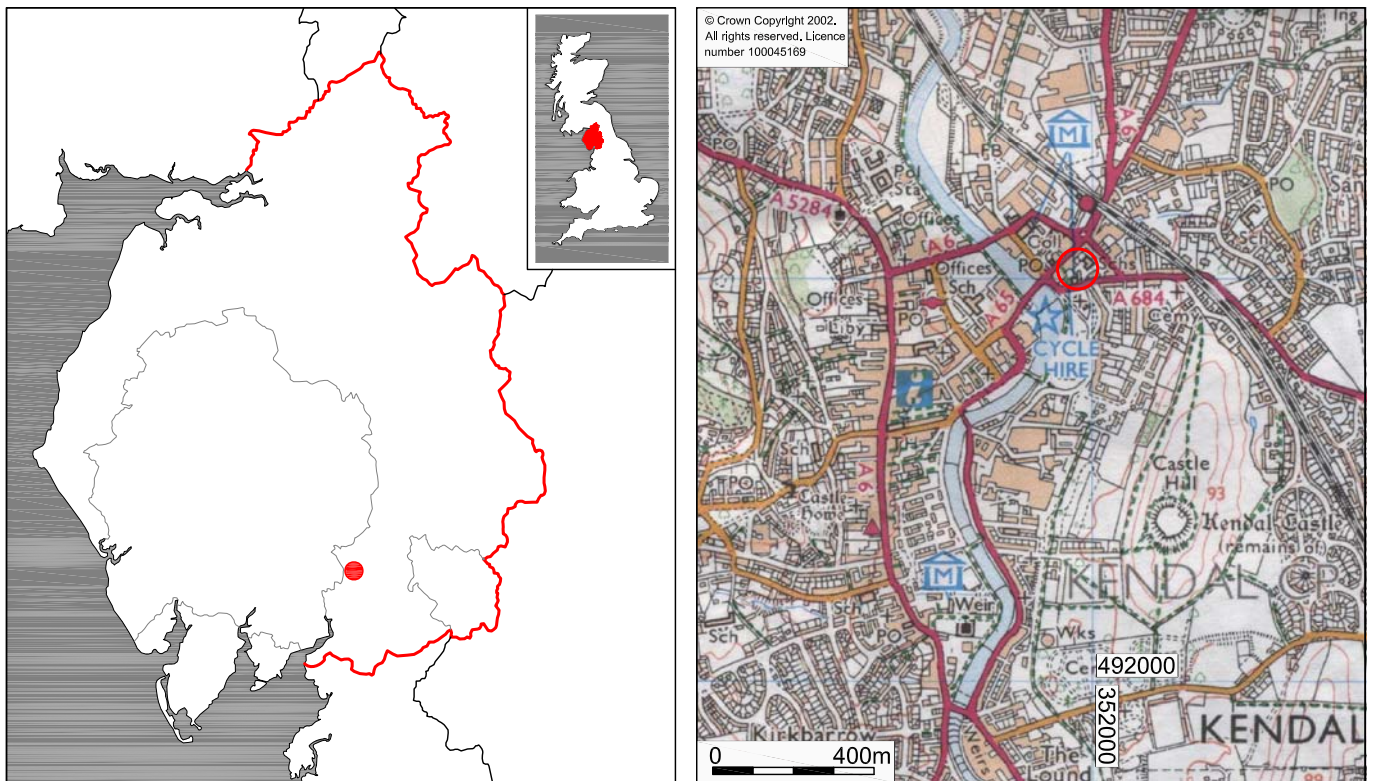


Figure 1: Site location

2. Methodology

2.1 Desk-Based Assessment

2.1.1 A desk-based assessment was carried out in accordance with IFA guidelines (IFA 2001). This principally comprised an examination of early maps of the site, the deeds, census information, and published secondary sources. A number of sources of information were used during the desk-based assessment:

- **Cumbria County Council Historic Environment Record (CCCHER):** this is a list of all the known sites of archaeological interest within the county, which is maintained by Cumbria County Council and is the primary source of information for an investigation of this kind. All of the known sites of archaeological interest within 100m of the centre of the proposed development area were examined; each identified site comes with a grid reference, description and source and any additional information referenced was also examined as necessary;
- **Cumbria County Record Office, Kendal (CRO(K)):** this was visited in order to examine early maps and plans, original documents relating to businesses and properties on the site, and local and regional histories and directories;
- **Greenlane Archaeology Library:** additional secondary sources, used to provide information for the site background, were examined.

2.2 Watching Brief

2.2.1 The brief issued by the CHES (*see Appendix 1*) required all areas of ground work including topsoil stripping, ground reduction, and excavation of footings and service trenches to be monitored. However, following the excavation of the footings and in view of the depth of deposits it was agreed that there was no need to observe the excavation of the service trenches, which would be cut through disturbed material and relatively modern demolition deposits.

2.2.2 The watching brief was carried out during February and March 2008. The concrete floor covering the site of the new buildings was stripped under archaeological supervision, and following this the excavation of the footing trenches was observed. The archaeological layers and features that were encountered were then recorded in the following manner:

- **Written record:** descriptive records of all deposits and cuts were made using Greenlane Archaeology *pro forma* record sheets. 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 watching brief, as well as general views of the site, trenches, and the surrounding landscape. 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:**
 - i. A plan of the footings, showing the location of any features of archaeological interest and relative to nearby buildings and other structures, was produced at a scale of 1:100;

- ii. sections were drawn at a scale of 1:20.

2.2.3 The contexts are summarised in *Appendix 3*.

2.3 Archive

2.3.1 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. Desk-Based Assessment Results

3.1 Background History

3.1.1 The background to the site is intended to place the results of the watching brief in its local context. More specifically, information regarding the development and use of the site, where known, is also presented, which allows a more detailed understanding of the results of the watching brief. The desk-based assessment utilises information compiled as part of an earlier report (Stephens Associates 2007) wherever applicable.

3.1.2 **Prehistory:** while there is evidence for human activity in Cumbria from the Palaeolithic onwards, the earliest evidence from the study area is a possible Bronze Age burial. An account from the Westmorland Gazette of 1868 describes how workmen digging a drain near Howard Holme (close to the A6 near the southern edge of town) came across a stone cist, containing a skeleton about 4 foot 6 inches tall, and nearby was a separate crouched burial '*which was laid on its side facing east with its knees bent up*' (Bingham 1996, 30). A Beaker period burial was found on Sizergh Fell (Fell 1953) and recent excavations at Sparrowmire Farm to the north revealed a Bronze Age burnt mound (Heawood and Huckerby 2002).

3.1.3 **Roman period:** the 1.32 hectare fort at Watercrock, a little over 1km to the south of Kendal, shows that the Romans had a presence in the area (Potter 1979). The low levels of finds from Kendal itself would, however, suggest that the Roman presence in the immediate environs of the town itself was low (CCC and EH c2002, 8).

3.1.4 **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 c AD 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.

3.1.5 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.

3.1.6 **Medieval period:** the settlement of Kirkland, at the southern end of the medieval town, was recorded in the Domesday Book (as *Chechebi*, 1086; 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 n.d.). 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).

3.1.7 **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 on a settlement that seems likely 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 (Munby 1985, 107). 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. Like much of the rest of the county Kendal was subject to numerous attacks by the Scots in the 14th century, the most notable being the great raid of 1322 (Winchester n.d., 6). These, coupled with outbreaks of sheep murrain from 1280 onwards and poor harvests, led to famines between 1315 and 1317 and a general decline in prosperity during the 14th century, and records from 1324 note a number of empty properties (*ibid*).

3.2 Castle Street – Wildman Street Area

3.2.1 Records show that Wildman Street is likely to have at least medieval origins (see CCC and EH c2002, map E); it probably formed an extension of Stramongate, which is recorded from 1365 onwards (Smith 1967, 117). It is not known when a bridge first existed at this location, although prior to a bridge's construction the river could perhaps have been forded (Bingham 1996, 97). However, a new bridge was certainly built in 1379 (Smith 1967, 118) and it would logically seem necessary for some form of bridge to have existed prior to the development of properties in this part of Kendal. Speed's plan of the town dated c1611 confirms that there were established suburbs on Wildman Street by the early 17th century and those post-medieval title deeds which have been examined describe property in this area as 'burgages' as in other parts of the town (Winchester n.d., 64). Tangible confirmation that the medieval town extended along the main routeway north-east from Stramongate Bridge is provided by the survival of the partly 14th century Castle Dairy in Wildman Street (*ibid*; Fig 1). It is thought that this served Kendal Castle, and there are references to a grange on the east side of the River Kent belonging to the castle in 1331 that may be referring to structures in this area including the Castle Dairy (Munby 1985, 107). It is also said to have contained a forge utilised by the castle estate (Curwen 1916, 101), but became the private house of Anthony Garnett in the 1560s following the loss of estates belonging to the Marquess of Northampton in 1553 (*ibid*). It was undoubtedly remodelled during the former's ownership and before, but a considerable amount of its fabric is thought to be 14th century in date (RCHME 1936, 125). Situated on the south side of Wildman Street, immediately north-west of the watching brief site, is Sleddale Hall (Fig 1), which has decorative plasterwork incorporating the initials F/IM and the date 1660 (Curwen 1900, 416; although the Listed Building details, No. 27769, state the date to be 1666).

3.2.2 Wildman Street is first recorded as Wildman Gate on Speed's map and it is subsequently recorded in the 18th century (Marshall 1975), although it also formed part of what is still known as Longpool. The early origins of this name are uncertain (Smith 1967, 117), although the area was historically subject to flooding and this may be the reason (Nicholson 1861, 146). According to legend this part of Kendal was known as 'Doodleshire' on account of Dickie Doodle who supposedly fought for Richard I and persuaded him to grant Kendal its first market charter (Bingham 1996, 428). He also apparently persuaded the king to declare that part of Kendal on the east side of the river an independent shire named in his honour, although in reality the name may be connected to the establishment of an annual race rivalling those of the town proper, during the ceremonies associated with which a mayor was elected

and which remained in existence into the early 19th century (*op cit*, 429) During the 18th century the area became somewhat industrialised, along with much of the rest of the town; a brewery was built at this time at the junction of Wildman Street and Castle Street adjacent to Sleddale Hall and workers cottages were built in a yard to the north of Wildman Street (see *Section 3.4.2*).

3.2.3 Castle Street Infants' School: the earliest records for the plot of land behind No 3 Castle Street are from 1830 when the land was sold by Edward Baycliffe, a marble mason, formerly a worsted spinner, to the Quaker Friends Meeting in Stramongate. The land, purchased on the 24th May, was described as '*all that freehold close...called the Parrock near Wildman Street in Kendal between a row of houses and gardens called Long Row which it adjoins on the west and north-west, between the lands of James Thompson on the north, half the width of Stock Beck on the east or south-east, and the road from Kendal to Sedburgh, and other parts of Parrock considerably of 400 yards on the south (lately sold by Edward Baycliffe to Edward William Wakefield and others), consisting on the whole 2,708 square yards for the following uses; moiety of the same upon such trusts of Isaac Wilson etc to establish a school and the residue used as a yard*' (Nicholls 2002). The school was enlarged in 1899 with the addition of an upper floor (*ibid*), was closed in 1968, and demolished in 1990 (*ibid*). A detached house, called 'School House', was subsequently built upon the site (*ibid*).

3.2.4 No. 3 Castle Street: this residence was originally the schoolmaster's house for Castle Street Infants' School, but was built at a later date to the school. The earliest cartographic depiction available is the Ordnance Survey map of 1853, and it must have been built after 1833 as it does not appear on John Wood's plan of that year (see *Section 3.3*). The 1910 land valuation (CRO(K) WT/DV/2/29 1910) shows that the schoolmaster's house has its own boundary which does not include the rear garden. It is probable that the garden was kept back and the land used as a school yard when the house was sold. The building was most recently used as an office and is being returned to domestic use as part of the redevelopment.

3.2.5 The British School: the British School was built in 1835 and opened on 23rd September of that year (CRO(K) WDY21 1824-1888). It was situated to the north-east of the Infants' School with a large yard to its west (Plate 4 and Plate 5). The construction of the school must have commenced after the production of the Corn Rent map of c1835 as it is not shown (Plate 3). In 1857 the school was enlarged by the addition of new classrooms and committee rooms (CRO(K) WDX/202 1961). The building is now used as a youth centre (Stephens Associates 2007).

3.3 Map Regression

3.3.1 Todd 1787: this plan shows Castle Street as little more than a track with open land on both sides heading eastwards across Stock Beck (Plate 1). Wildman Street is well established with residences on both sides of the street. On the south side the brewery is shown, with Sleddale Hall on its east side and Castle Dairy to the north-east.

3.3.2 Wood 1833: this plan shows the 'Infant School' but without the schoolmaster's house. The remainder of the area to the east between Wildman Street, Stock Beck and the plot to the east has apparently been given over to allotments (Plate 2).



Plate 1: (left) John Todd's Plan of Kendal, 1787

Plate 2: (right) John Wood's Plan of Kendal, 1833

3.3.3 Corn Rent map c1835: the site of the watching brief is situated within plot 92 in the north-west corner (Plate 3). The accompanying schedule reports that plot 92 is owned and occupied by the trustees of the Infants' School (CRO(K) W/Q/RC8 c1835), which is situated in the south-west corner of the plot. The Infants' School, schoolmaster's house and gardens have been completed at this time. It is possible that there have also been some alterations to the arrangement of the plots along Wildman Street forming the north-west edge of the development site, but the inaccuracy of the map make this difficult to ascertain with any certainty (they have certainly taken place by 1853 – see Section 3.3.4 below).

3.3.4 Hoggarth 1853: the schoolmaster's house and gardens are now shown along with the British School (Plate 4). It is also apparent that the plots along Wildman Street (the rear wall of which forms the north-west edge of the development area) have certainly been altered by this date and moved to their present position.



Plate 3: (left) Corn Rent map, c1835

Plate 4: (right) Hoggarth's Plan of Kendal, 1853

3.3.5 Ordnance Survey 1861: this 1:500 scale map essentially shows in more detail what is apparent on Hoggarth's plan; the schoolmaster's house has what appears to be gardens to the north-west beyond the boundary of the school. The detail of the internal arrangement of the Infants' School and the British School are also evident (Plate 5). An outbuilding is present against the west boundary of the British School yard. An approximately contemporary plan of the same site at a slightly smaller scale (Ordnance Survey c1858) shows much of the same information.

3.3.6 **Ordnance Survey 1898:** this is similar, although not identical, to the previous Ordnance Survey map (Plate 6). Both the Infants' School and the British School have been expanded since 1861 and an outhouse built on the south boundary of what was previously shown as a garden to the rear of the Infants' School.

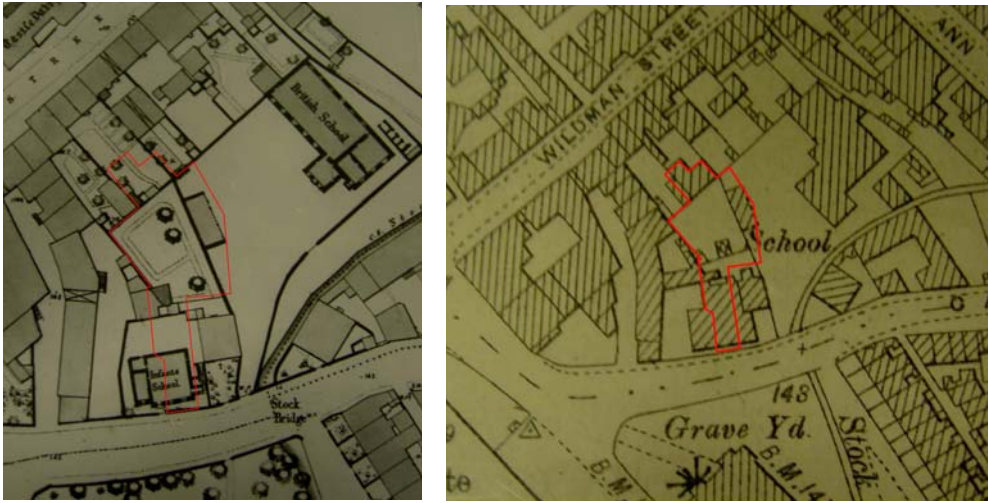


Plate 5: (left) Ordnance Survey, 1861

Plate 6: (right) Ordnance Survey, 1898

3.3.7 **Ordnance Survey 1914:** this is an enlargement of the 1898 map, produced to allow the numbers and boundaries (hand-written in red) corresponding to the 1910 land valuation (CRO(K) WT/DV/2/29 1910) to be marked on it. This map defines the boundary of the Infants' School and what is now apparently the school yard (plot 4888) and the boundary of the schoolmaster's house (plot 446) which is separate from the Infants' School (Plate 7).



Plate 7: Ordnance Survey, 1914

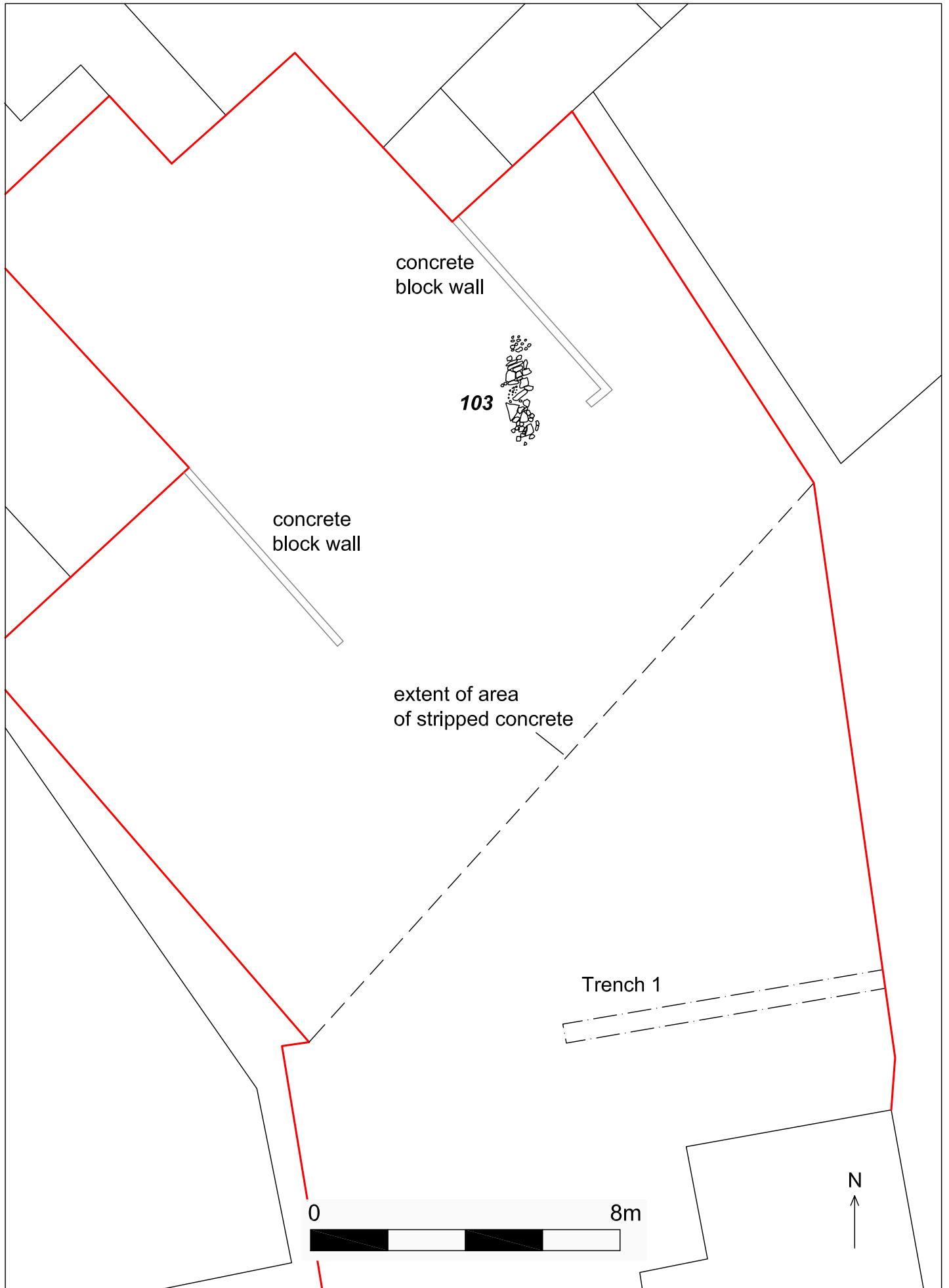
3.4 Previous Archaeological Investigation and HER Information

3.4.1 The Historic Environment Record (HER) was examined as part of the desk-based assessment. Only one piece of previous archaeological investigation is recorded in the vicinity of Castle Street, comprising a desk-based assessment and evaluation of land off Anne Street (NPA 2007a; 2007b). This identified a number of post-medieval features including the remains of buildings, and culverts perhaps connected to the Stock Beck, which ran through part of the site (*ibid*). None of these discoveries have any direct relevance to the site at Castle Street, however.

3.4.2 There are a number of find spots of items of archaeological interest recorded from the vicinity of the development area in the Historic Environment Record. These include two possible stone artefacts found at the Vineyard Garage on Tebay Road in 1988, neither of which appears to be of great importance or even antiquity (HER No. 6558). A total of 11 medieval coins has also been found in the general area, ranging in date from the 13th to the beginning of the 17th century (HER Nos. 19341-19352); but the exact location of these is not certain (they are only located to within a kilometre square), and they are likely to have been discovered outside of any urban area. A gold coin dated 1602 was also found in the grounds of Sandgate School (HER No. 19489), but this is again at some distance to the east of the site. A row of late 18th century industrial workers cottages is recorded in Yard 12 off Wildman Street, a short distance to the north-west (HER No. 19975). None of these sites have any particular significance in relation to the development area apart from indicating a general level of activity during the medieval and post-medieval period; the large quantity of coins is likely to be misleading as all but one are metal detector finds reported as part of the Portable Antiquities Scheme.

3.5 Discussion

3.5.1 The desk-based assessment has revealed that the site is situated to the rear of probable medieval burgage plots running along what is now known as Wildman Street, although it was originally perhaps an extension of Stramongate. The origins of Wildman Street are uncertain but Stramongate certainly existed by the late 13th century and the associated bridge has similarly early origins. Wildman Street was occupied by two substantial early buildings, the Castle Dairy, which is thought to have 14th century origins and formed a grange belonging to Kendal Castle, and Sleddale Hall, which dates from the 17th century but about which little is known. These factors demonstrate that Wildman Street was occupied from at least the medieval period, and the post-medieval mapping demonstrates that it was substantially reorganised in the early 19th century, adopting its present form by at least 1853. The site formed part of the grounds of the Infants' School, founded in 1830, which remained until the late 20th century.



103

concrete
block wall

concrete
block wall

extent of area
of stripped concrete

Trench 1

0

8m

N

Figure 2: Site plan following removal of concrete and excavation of Trench 1

4. Watching Brief

4.1 Removal of Concrete

4.1.1 The area to be developed was covered with a concrete surface (**100**), which extended to all boundaries of the site. Its depth was found to be very uneven, varying between 0.05m to 0.2m, due to the ground beneath. The layer beneath the concrete was principally a levelling layer which consisted of redeposited soil, gravel, and hardcore, with lenses of firm orange clay (**101**). At the north-west end of the site were the footings of two walls (subsequently numbered **112** and **122**; Fig 2) orientated north-west/south-east, 6.3m in length, and running parallel to each other at a distance of 9m apart. These walls were 0.21m in width and constructed of breeze blocks and had a return of 0.5m at the south end (Plate 8). Situated toward the east side of the site was a linear feature of limestone rubble (**103**) measuring approximately 2.6m by 0.55m and oriented north/south (Plate 9). Initially this feature appeared to be the remains of a wall footing, but when it was intersected by a foundation trench was found to be a layer of re-deposited rubble associated with the nearby concrete block wall (**122**; see *Section 4.3.4*). No other features were revealed following the removal of the concrete surface.



Plate 8: (left) Site following the removal of the concrete surface (100**) showing the concrete block walls**

Plate 9: (right) Context **103 as exposed following the removal of the concrete surface**

4.2 Trench 1

4.2.1 This trench was excavated for the footings of a boundary wall to be built at the rear of No. 3 (Fig 2). The trench was 8.4m in length by 0.65m wide, was orientated east/west, and situated 3.2m north of the house. This trench was only excavated to a depth of 0.2m where a layer of concrete was encountered. Above this layer was a 0.1m deep layer of tarmac above which was the concrete surface, 0.1m in depth. No other features were revealed.

4.3 Footings

4.3.1 An extensive arrangement of foundation trenches was excavated as part of the development comprising the entire outline of the footprint of the new dwellings and several cross-walls (Fig 3). All of the trenches were excavated by a tracked mini digger fitted with a toothed bucket approximately 0.6m wide. Across the entire site, beneath the concrete and tarmac surface previously removed (**100**) was the same thin layer of gravel bedding material (**101**), beneath which was the same mixed deposit of demolition rubble and topsoil (**102**), which, on the south-west side of the

central part of the site incorporated ceramic and plastic drains linked to a brick junction. The bricks from the junction were mid reddish-brown, machine made with a frog marked 'BARKER INGLETON'. Across the entire area below this layer was a deposit of mid orange-brown sandy-clay subsoil typically 0.2m-0.4m thick (**104**; Plate 10). In the south corner of the site, cut into this subsoil was a small oval pit partially disappearing out of the south-west side of the footings (**106**), which was filled by a dark brown to dark grey soft silty clay (**105**) and had a flattened U-shaped base (Plate 11).



Plate 10: (left) West side of site showing 104 following removal of overburden 101 and 102

Plate 11: (right) Pit 106 in south-west corner

4.3.2 It became apparent that subsoil **104** was re-deposited because beneath it was a layer of dumped mid grey-brown silty clay with c60% cobbles and numerous lumps of mortar and at least one large area of loose rubble (**110**), which was generally between 0.1m and 0.3m thick but very uneven across the site and apparently filling various hollows in the underlying subsoil/natural (**111/107**). This lower subsoil (**111**) was similar to **104** but more orange in colour, softer, and generally with little coarse content, essentially comprising the reworked natural below. The natural (**107**) comprised a firm mid orange-brown sandy clay with occasional rounded cobbles, although it also included two areas of loose gravel forming raised areas, and on the south-west side of the site became more sandy and soft indicative of having been deposited or moved by water.

4.3.3 Some of the hollow features sealed beneath **110** were more definite and took various forms including an approximately oval pit (**109**) filled with a deposit similar in character to **110** (**108**), and another large pit (**121**) again filled with a loose stony deposit (**122**) essentially the same as **110** (Plate 14). Along the north-west side of the site three linear features were revealed cutting through subsoil **111** and natural **107** (Fig 4). Each of these was orientated approximately north-west/south-east perpendicular to the frontage of Wildman Street to the north-west. The westernmost of these, which was only recorded in section, was approximately 0.95m wide and 0.15m deep and ran for approximately 2.9m (**117**). It was filled with a dark grey silty clay with gravel inclusions (**116**; Plate 12). To the east of this was another approximately 0.5m wide and 0.08m deep (**115**), the full length of which was not evident; it was at least 1m long but cannot have been much more than 2m in total (within the exposed area). It was filled with a mid brownish grey silty clay with small

quantities of mortar, gravel, and slate fragments (**114**; Plate 13). East of this was another approximately 0.75m wide, up to 0.2m deep and 2.2m long (**119**). This was filled with a more loose sandy clay containing small quantities of cobbles, slate and mortar (**118**), essentially the same as **110** (Plate 14). East of this, along the north-east side of the footings and below layers **104** and **110**, was a thin deposit of mid grey-brown silt little more than 0.05m thick, at least 1.5m wide and extending the full width of the footings (**124**; Plate 16), on top of the lower subsoil **111**.



Plate 12: (left) Ditch **117** in section

Plate 13: (right) Ditch **115** in plan with concrete block wall **112** adjacent



Plate 14: (left) Pit **121** (left) and ditch **119** (right) in section on north-west side of site

Plate 15: (right) General view showing the sequence of layers on the west side of the site

4.3.4 Cutting through the general sequence of overburden (**102**), upper soil (**104**), dumped material (**110**), lower subsoil (**111**), and natural (**107**) (Plate 15) were two modern concrete block walls (initially revealed during the removal of the concrete surface, see *Section 4.1.1*; **112** and **122**; Figs 3 and 4), which had wide cuts evident (**113** and **123**) filled with loose rubble to accommodate concrete pads supporting the walls. A further concrete footing was evident between these walls, which presumably originally supported a central column for the building (included as part of **112**). As the easternmost of these was cut through to excavate the footings it was evident that feature **103**, identified following the removal of the concrete (see *Section 4.1.1*), was in fact part of the back fill associated with wall **122** and contained lumps of concrete as well as stone.

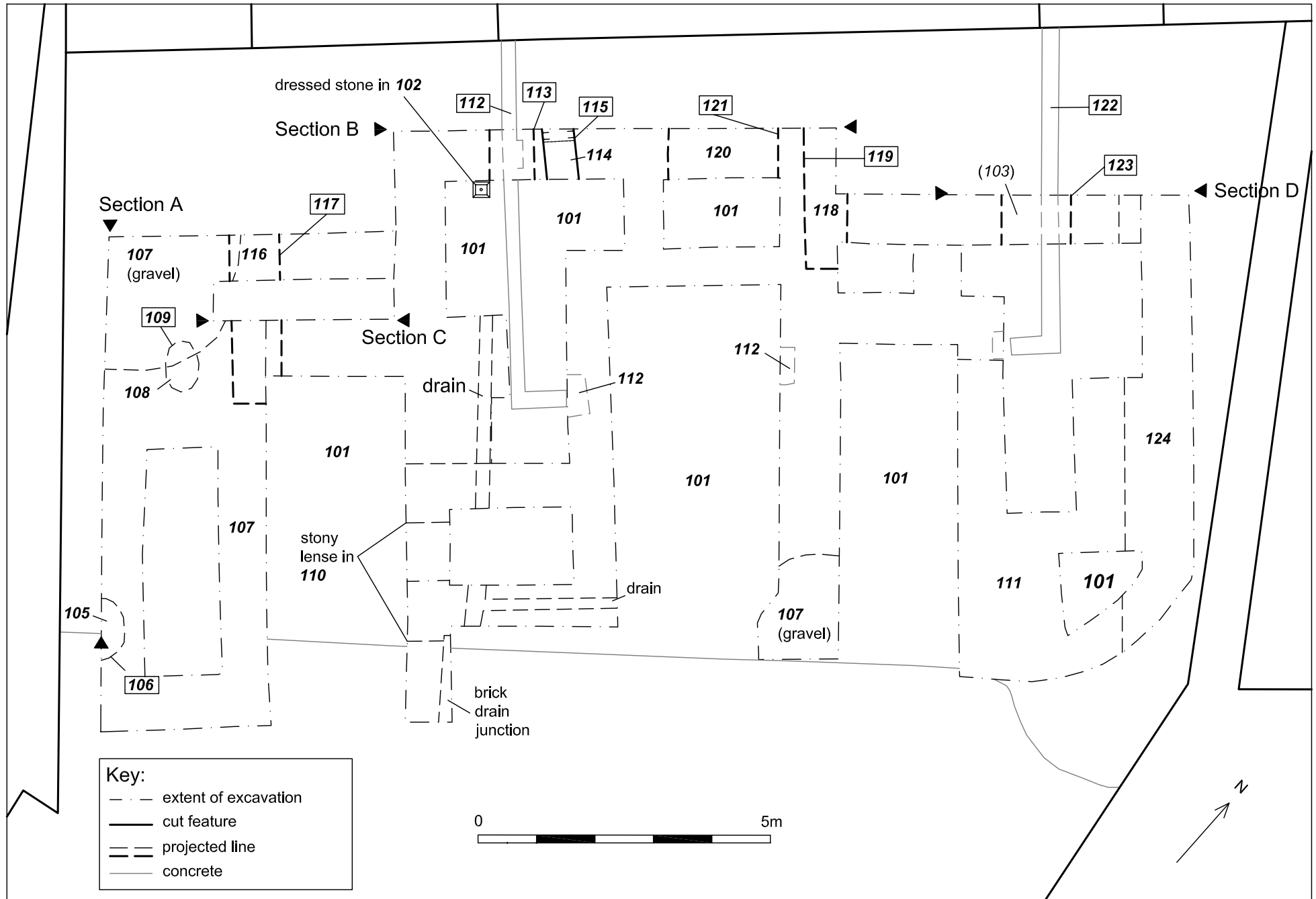


Figure 3: Foundation trench plan

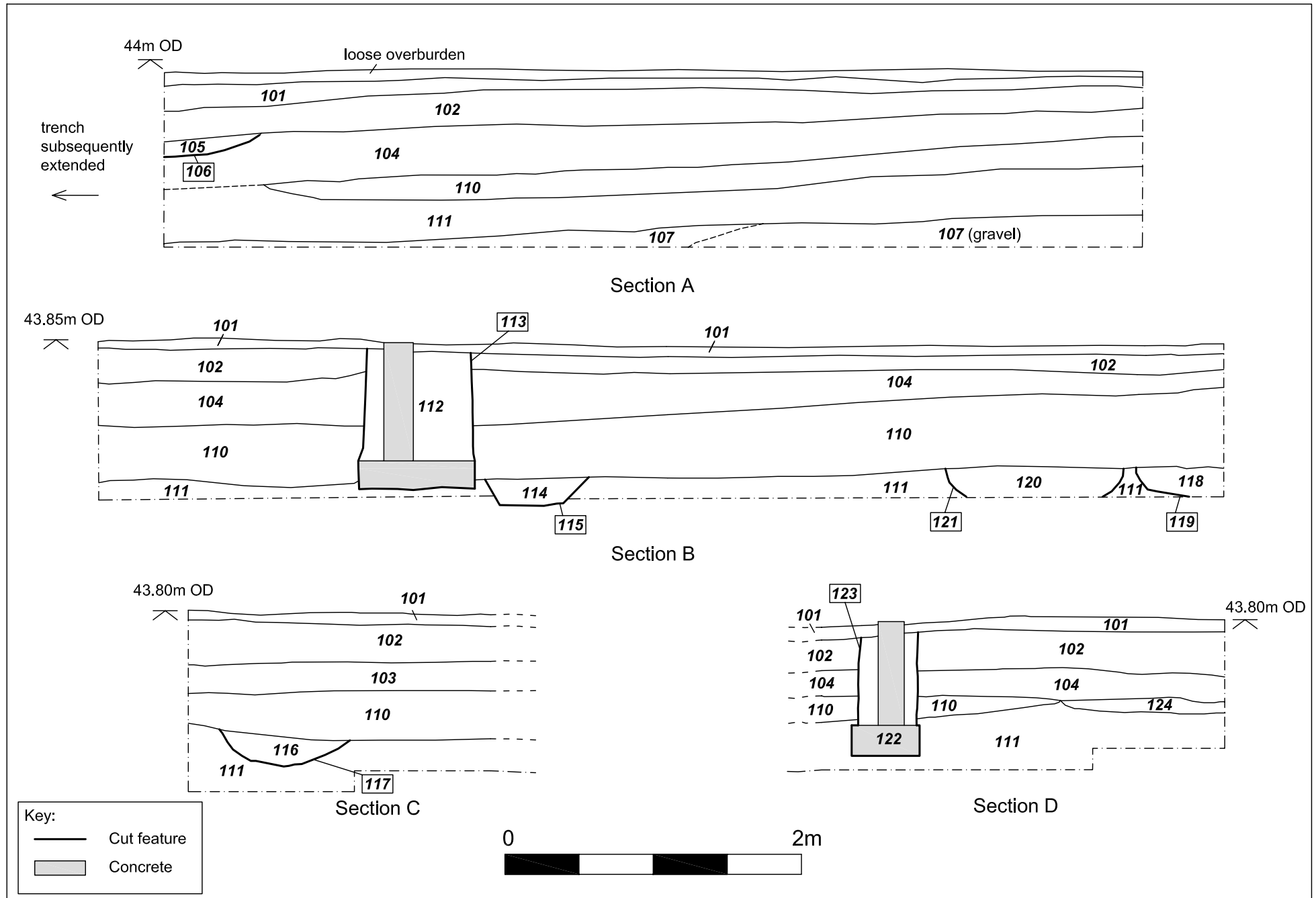


Figure 4: Sections



Plate 16: Thin layer 124 in section on the east side of the site

4.4 Finds and Environmental Samples

4.4.1 A large quantity of finds (totalling 423 individual fragments) was recovered during the watching brief, the majority from dumped deposit **110** and the two layers of subsoil (**104** and **111**). 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.

4.4.2 **Medieval pottery:** a relatively large proportion of the finds (69 individual fragments or approximately 16% of the total number of finds) comprise medieval pottery, the majority of which came from subsoils **104** and **111** (Plates 17-19), although smaller amounts were recovered from **110** and **116** or were unstratified. The medieval pottery was principally of two types, both of which are commonly found in Kendal and the general region; northern gritty ware of the late 12th to early 13th century, and sandy ware of the 13th century. A very small amount of slightly later types was also recovered. Much of the pottery has evident similarities with pottery known to have been produced in kilns at Docker Moor and Ellel (both of which are in Lancashire; numbers 1 and 3 respectively in Plate 18), with a single piece of later fully reduced pottery similar to material from Silverdale (also in Lancashire; Plate 19).

4.4.3 Although first recorded in 1911 (Moorhouse 1911, 385-387) the pottery kilns at Docker Moor have never been studied in great detail. The most comprehensive study has suggested that the kilns may have been of clamp type or the pottery was made a short distance away from where it was found as no kiln structure was identified (Gibbon 1986, 44-45), and it has been suggested that two production sites may have operated at different times (Edwards 1967, 48). The pottery is typified as being hard, with a high proportion of quartz inclusions and generally a brownish-pink to buff-white colour often with a grey core (Gibbons 1986, 45). Glaze is occasionally present, typically ranging in colour from greenish-yellow to yellowish-brown and some of these have rouletted decoration (*ibid*). Forms tend to comprise cooking pots and bowls and a variety of rim forms have been illustrated (Edwards 1967, 48-49).

4.4.4 The kilns at Ellel have also not been examined in great detail and the most detailed investigation of the site relied heavily on remains recovered during a watching brief carried out while a gas pipeline was being installed (White 1993). Again the kilns are thought to have been of clamp type, although no structure was recorded (*op cit*, 7). Several rim types have been illustrated and the fabric types are generally a brown-buff or reddish-pink or orange colour with a gritty or sandy texture and often large quartz inclusions and occasional splashed or irregular glaze (*op cit*, 10-13).



Plate 17: Medieval pottery from contexts other than lower subsoil 111



Plate 18: Medieval pottery from lower subsoil 111

4.4.5 Pottery from kilns at Silverdale has been recorded since as early as 1865; again no kilns have actually been excavated and no comprehensive study made of the pottery but the most detailed work has revealed that the typical fabric is a reduced grey body (although this can be an oxidised orange) with a green glaze, which takes a variety of forms typical of kitchenware such as bowls, jars, and jugs, and possibly also chafing dishes (White 2000, 289; Plate 19). Dating is difficult and has been suggested as generally 16th to 17th century, although documentary evidence might indicate even later periods of production (*op cit*, 290).



Plate 19: Medieval pottery from lower subsoil 111 (all sandy ware except for single piece in top right corner which is reduced ware of Silverdale type)

4.4.6 In general the types of medieval pottery recovered are typical of those found elsewhere in Kendal (Ian Miller pers comm.), although this seems to disagree with the sequences described by McCarthy and Brooks, who place Kendal within a more general Cumbria-wide tradition (1992, 30-32 and 35), rather than one associated with Lancashire, although they acknowledge its isolated topographical position in relation to the northern part of the county (*op cit*, 35). The possibly connection to kilns at Docker Moor and Ellel is, however, quite logical given their relatively close proximity to Kendal (*op cit*, 35; fig 10).

4.4.7 Of particular interest is the piece of industrial residue recovered from the fill of pit **109 (108)** (Plate 20). This has been tentatively identified as having resulted from pottery making, perhaps of late medieval or early post-medieval date, which has resulted in a deposit of green glaze being left on the surface of a piece of sandstone (Ian Miller and Jeremy Bradley pers comm.). The stratigraphic position and associated finds would suggest a 18th or perhaps 17th century date for this pit being filled.



Plate 20: Industrial residue from 108

4.4.8 There are no confirmed pottery making sites in Kendal at present, although an attempt to introduce factory-scale production in the post-medieval period was apparently made (McNeil and Newman 2006, 157; although no specific reference is given), and there are references to 'potters' in Kendal in several documentary sources from the late 18th and early 19th century (CRO(K) WD RG/405/4 1776; CRO(K) WD RG/405/5 1783; CRO(K) WQ/SR/598B/10 1804; CRO(K) WQ/SR/601/13 1805; CRO(K) WQ/SR/604/3 1805). It is perhaps more significant that a large plot of land known as 'Potter Close' was situated a short distance from the site on the opposite side of Stramongate Bridge (see Wood 1833 and Hoggarth 1853; it is now the site of Bridge Mills). However, the term 'potter' cannot always be taken to mean someone who made pots as many itinerant traders, especially but not exclusively those that dealt in earthenware, were known by this name in the region (White 1975, 121).

4.4.9 **Post-medieval pottery:** the majority of the finds were post-medieval in date, and as many were coarsewares they are of limited use in providing dating evidence. 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. A small selection of the post-medieval finewares is shown in Plate 21, below, including two identified transfer-printed patterns from lower subsoil **111** – 'Leaves', manufactured by Shorthose 1820-3 (Neale 2005, 134), and 'Leaf', manufactured by Spode during the early 19th century (Drakard and Holdway 2002, 220).



Plate 21: Selection of late 18th to early 19th century pottery, and bone artefact, including two patterns identified from lower subsoil 111, 'Leaves' (1) and 'Leaf' (2)

4.4.10 **Environmental samples:** very little of interest was recovered from the environmental samples taken from several of the ditch and pit features (see *Appendix 5*). The presence of coal, mortar, brick, glass, and post-medieval pottery in most samples further indicates that these are largely post-medieval in date and include a great deal of demolition material. The presence of industrial residue indicates some localised industrial processes (perhaps blacksmithing or similar) but nothing particularly intensive, and there was little in the way of organic remains (one

charred grain, a small quantity of bone, and some marine shell, although much of this probably derived from degraded mortar) to provide any useful information about food production or processing.

4.5 Discussion

4.5.1 The watching brief revealed a sequence of remarkably deep deposits across the entire site, in places extending to a depth of 1.4m between the concrete surface and the natural. The uppermost of these were clearly the result of quite recent activity – the demolition of the former school in 1990 (Nicholls 2002) and the subsequent erection of a garage. The earlier deposits are evidently mainly post-medieval in date, but there is substantial evidence for medieval activity in the form of a well-preserved subsoil sealed beneath a dumped deposit of probable 18th century date and cut by various pits and ditches.

4.5.2 Six phases of activity can be identified on the site spanning the period from the late 12th to the late 20th century. The latest of these can be interpreted in light of the information available in the historic and cartographic sources, and the earlier on the basis of the finds recovered and the limited documentary information for the area.

4.5.3 **Phase 1:** the earliest phase is represented by the natural boulder clay, sand, and lenses of gravel underlying the entire site (**107**). These were undoubtedly primarily laid down by glacial activity at the end of the last Ice Age more than 10,000 years ago, but they have probably been subject to some reworking as a result of alluvial action. The close proximity of the Stock Beck and the River Kent will have made this area prone to flooding before the advent of more recent canalisation and barriers and it was notable that the natural seemed to dip slightly to the south, towards the confluence of the two water courses. It is recorded historically that the area was prone to flooding, hence the name Longpool, applied to the eastern continuation of Wildman Street (Nicholson 1861, 46), and this is likely to have been a significant feature in the development of the site.

4.5.4 **Phase 2:** during the medieval period a thin subsoil developed over the natural clay (**111**). The later cartographic and historical sources indicate that this was agricultural land and it is described as a '*parrock*', an alternative word for a paddock or small enclosure (Richardson 1989, 14), in 1830, which is likely to have been the case in the preceding period. Pottery recovered from this layer indicates that the subsoil could have begun to develop as early as the late 12th century, but it was still actively cultivated until as late as the 18th or possibly early 19th century. It may have been a relatively marginal agricultural area, perhaps due to being wet and prone to flooding, and subject to only occasional ploughing as much of the medieval pottery recovered from it was in remarkably good and un-abraded condition.

4.5.5 **Phase 3:** several features were cut into the subsoil (and into the natural below in some cases). These are evident as shallow pits and ditches (**109**, **115**, **117**, **119**, and **121**). A thin layer of silt also forming an approximately linear feature (**124**) developed along the east side of the site. It is noticeable that the ditch features and layer **124**, which is linear in form and may represent a similar but much shallower, feature, are approximately 5m apart from each other and continue the alignment of property boundaries present on Wildman Street. Their contents indicate that they were filled in the post-medieval period, probably the 17th or 18th centuries, and it is likely that this event occurred only a short time before the deposition of layer **110** and the evident reorganisation of the plots on Wildman Street that is shown from the cartographic sources to have taken place in the early 19th century (Phase 4, see Section 4.5.6 below). The ditches may therefore represent the lines of property boundaries laid out as part of this reorganisation, although they were ultimately not extended this far, or earlier boundary ditches that went out of use as a result of this

reorganisation. Their considerable depth below the surface, especially relative to the extant boundaries running off Wildman Street, might suggest that the latter is more likely. It is notable that their size, form, and likely date is similar to an apparent property boundary revealed during excavation at Collin Croft off Stricklandgate, which appeared to be following, albeit in a slightly different position, the line of an earlier boundary (Greenlane Archaeology 2007). The other features also show some evidence for limited industrial activity in the general vicinity of the site and, although the exact nature of this is not certain, it may have included pottery making.

4.5.6 Phase 4: the filled ditches and pits were effectively sealed by a dumped deposit of stony clay (**110**), although this did not extend across the entire area. This seems likely to be demolition rubble, and the finds indicate that it was laid down in the 18th or 19th century. This certainly seems to coincide with the reorganisation of Wildman Street recorded in the early 19th century (perhaps as early as c1835, although the map evidence is not clear; see *Section 3.3.3*), and may represent the demolition of earlier buildings or even the levelling of the ground associated with the construction of the Infants' School in 1830. While the source of the rubble forming **110** cannot be ascertained, the presence of fragments of polished marble, presumably from a fire surround or similar decorative feature, suggests that it at least incorporated material from one or more reasonably high status buildings. The pottery, however, represents a more typical spread of types and includes large numbers of coarsewares.

4.5.7 Phase 5: the deposit of subsoil (**104**) dumped on top of the earlier rubble (**110**) was either deliberately placed to provide a suitable soil for the gardens associated with the schoolmaster's house or developed as a result of cultivation associated with this. The presence of medieval pottery within this soil, which would have had difficulty being incorporated from the lower subsoil (**111**) as it is effectively sealed beneath **110**, makes the former interpretation perhaps more likely. This would perhaps suggest that it had been brought from elsewhere in the centre of Kendal where subsoil containing medieval pottery might have been easy to acquire, although the contents are similar enough to **111** to suggest that it could have come from somewhere very close to the site.

4.5.8 Phase 6: the demolition rubble (**102**) and subsequent layers on top of this (**101** and **100**) undoubtedly relate to the demolition of the former school in 1990 and the building of a garage on the site some time after this date. A number of finds from layer **102** probably relate to the use of the site by the school – the fragment of slate writing tablet, and a Codd bottle, for example, and there were pieces of dressed limestone and iron fittings observed within the rubble but not retained that most likely originally formed part of the school building.

5. Conclusion

5.1 The Watching Brief

5.1.1 The watching brief made some significant discoveries not only because excavation within that part of the medieval town east of the River Kent has been limited, but also because a large collection of medieval and post-medieval finds was collected and features associated with the latter were identified. The historical and archaeological development of Wildman Street and the associated part of Kendal is not well known, and no modern detailed studies have been carried out into historic properties in the area such as the Castle Dairy and Sleddale Hall. The medieval pottery has shown that there was extensive activity in the area from the late 12th century onwards, and the post-medieval features appear to relate to a phase of reorganisation of Wildman Street recorded in the cartographic sources that took place in the early 19th century. The watching brief has not been able to clarify with any certainty whether or not there were actually medieval tenements situated on what became known as Wildman Street, although the cartographic sources suggest that there certainly were by the beginning of the 17th century. The medieval finds could, therefore, relate to burgage plots situated on Wildman Street, or buildings forming part of a grange, including the Castle Dairy, that is thought to have existed in the area from at least the early 14th century (although they could have been incorporated with nightsoil brought from elsewhere in Kendal). While it seems unlikely that the grange would have been situated amongst tenements it is conceivable that they were on the south side of the road and the grange was on the north, or that they developed at different times. Without further work in the local area it is unlikely that it will be possible to provide a definitive answer.

5.2 Recommendations

5.2.1 Although the finds and features are largely post-medieval in date they provide some valuable information regarding the nature of both medieval and post-medieval activity in this part of Kendal. It is recommended that the results of the watching brief be published in some form, either as a note in their own right, or as part of the larger-scale publication of work carried out across Kendal over the last 20 years currently proposed by Oxford Archaeology North (formerly Lancaster University Archaeological Unit (LUAU)). As a minimum the more diagnostic pottery forms, particularly those of medieval date (rims, bases, and decorated pieces) should be illustrated, and the nature of the features published.

5.2.2 The possible pottery making waste fragment recovered from **108** is of particular importance as no physical remains relating to this industry have been recovered from Kendal before. It is therefore perhaps worthwhile carrying out scientific testing of this object in order to determine its exact make up.

6. Bibliography

6.1 Primary and Cartographic Sources

* only title examined

*CRO(K) WD RG/405/4, 1776 *Title Deeds to Premises on the South Side of the Market Place, and in the New Shambles, Kendal: Conveyance 19 February Robert Hall of Kendal, Potter*

*CRO(K) WD RG/405/5, 1783 *Title Deeds to Premises on the South Side of the Market Place, and in the New Shambles, Kendal: 13 February Robert Hall of Kendal, Potter*

CRO(K) WDX/202, 1961 *Thomas Hill and the Kendal British School by DJ Finnemore Hill*

CRO(K) WDY/21, 1824-1888 *Thomas Hill Memoirs*, (photocopy)

CRO(K) WT/DV/2/29, 1910 *Duties on Land Values, Record of Valuations Made by the Commissioners of Inland Revenue, in Accordance with the Provisions of Part I, of the Finance (1909/10) Act: County of Westmorland Division of Kendal Ward, a Valuation Book for the Parish or Place of Kendal, Kirkland, Nethergraveship and Scalthwaiterigg*

CRO(K) W/Q/RC8, c1835 *A Plan of the Township of Kendal With Part of Nethergraveship*

*CRO(K) WQ/SR/598B/10, 1804 *Recognizance James West, of Strickland Ketel, Shoemaker, and Thomas Newby, of Kirkland, Weaver, for James West to Appear and Keep the Peace Towards William Miller, of Strickland Ketel, Potter*

*CRO(K) WQ/SR/601/13, 1805 *Recognizance John Howard of Kirkland, Potter, John Read, Weaver and Joseph Pickthall, Husbandman, Both of the Same, for John Howard to Appear and Keep the Peace Towards Leonard Harling, of Kendal, Weaver*

*CRO(K) WQ/SR/604/3, 1805 *Recognizance John Howard, of Kirkland, Potter, and James Airey, of Same, Potter, for John Howard to Appear and Keep the Peace Towards Leonard Harling, of Kirkland*

Hoggarth, H, 1853 *Plan of the Town of Kendal in the County of Westmorland from an Actual Survey*

Ordnance Survey, c1858 *Westmorland Sheet 38.8*, 1:2500

Ordnance Survey, 1861 *Westmorland Sheet 38.4.24*, 1:500

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

Ordnance Survey, 1914 *Westmorland Sheet 38.8.NE*, 1:1250, revised 1912

Ordnance Survey, 1983 *Soil Survey of England and Wales*

Todd, J, 1878 *A Plan of Kendal in the County of Westmorland from an Actual Survey*

Wood, J, 1833 *Plan of Kendal*

6.2 Secondary Sources

Bingham, R, 1996 *Kendal: a Social History*, 2nd edn, Milnthorpe

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

- 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
- County Historic Environment Service, 2008 *Brief for an Archaeological Watching Brief on Land to the Rear of 3 Castle Street, Kendal, Cumbria*
- Cumbria County Council (CCC) and English Heritage (EH), c2002 *Cumbria Extensive Urban Survey Archaeological Assessment Survey: Kendal*, unpubl rep
- Curwen, JF, 1900 *Kirkbie-Kendal*, Kendal
- Curwen, JF, 1916 Castle Dairy, Kendal, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 2nd ser, **16**, 101-107
- Drakard, D, and Holdway, P, 2002 *Spode Transfer Printed Ware 1784-1833*, Woodbridge
- Edwards, BJN, 1967 Appendix: The Docker Moor Kiln-Site, in RAC Lowndes, A Medieval Site at Millhouse, in the Lune Valley, *Trans Cumberland Westmorland Antiq Archaeol Soc*, n ser **67**, 48-50
- English Heritage, 1991 *The Management of Archaeological Projects*, 2nd edn, London
- Faull, ML, and Stinson, M (eds), 1986 Yorkshire, in J Morris (ed), *Domesday Book*, **30**, Chichester
- Fell, C, 1953 A Beaker Burial on Sizergh Fell, Near Kendal, *Trans Cumberland Westmorland Antiq Archaeol Soc*, n ser **53**, 1-5
- Gibbon, P, 1986 Docker Moor Medieval Pottery: Work in Progress, *Contrebis*, **12**, 41-46
- Greenlane Archaeology, 2007 *The Former Builder's Yard, Collin Croft, Kendal, Cumbria: Archaeological Evaluation and Building Recording*, unpubl rep
- Heawood, R, and Huckerby, E, 2002 Excavation of a Burnt Mound at Sparrowmire Farm, Kendal, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 3rd ser **2**, 29-49
- IFA, 2001 *Standard and Guidance for Archaeological Desk-Based Assessment*, 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
- McCarthy, MR, and Brooks, CM, 1992 The Establishment of a Medieval Pottery Sequence in Cumbria, England, in D Gaimster and M Redknap (ed), *Everyday and Exotic Pottery from Europe c.650-1900: Studies in Honour of John G. Hurst*, Oxford, 21-37
- McNeil, R, and Newman, R, 2006 The Post-Medieval Period Resource Assessment, in M Brennand (ed), *The Archaeology of North West England, An Archaeological Research Framework for North West England: Volume 1 Resource Assessment*, Archaeology North-West **8**, Manchester, 145-164
- Marshall, JD, 1975 Kendal in the Late Seventeenth and Eighteenth Centuries, *Trans Cumberland Westmorland Antiq Archaeol Soc*, 2nd ser, **75**, 188-257
- Moorhouse, A, 1911 Recent Finds in Whittington Parish, Kirkby Lonsdale, *Trans Cumberland Westmorland Antiq Archaeol Soc*, n 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*, n ser, **85**, 95-114
- Neale, G, 2005 *Encyclopedia of British Transfer-Printed Pottery Patterns 1790-1930*, London`
- Nicholls, AR, 2002 *A Victorian School: The Story of Castle Street Infants School, Kendal (Later Girls' and Infants' School) From its Inception in 1830 Until the End of Queen Victoria's Reign in 1901*, unpubl
- Nicholson, C, 1861 *The Annals of Kendal*, 2nd edn, London
- North Pennines Archaeology (NPA), 2007a *Report on an Archaeological Desk-Based Assessment and Walk-Over Survey on Land at Ann Street, Kendal, Cumbria*, unpubl rep
- NPA, 2007b *Archaeological Evaluation on Land at Ann Street, Kendal, Cumbria*, unpubl rep
- Pevsner, N, 1967 *The Buildings of England: Cumberland and Westmorland*, London
- Potter, TW, 1979 *Romans in North West England: Excavations at the Roman Forts of Ravenglass, Watercrock and Bowness on Solway*, *Trans Cumberland Westmorland Antiq Archaeol soc*, res ser, **1**, Kendal
- Richardson, J, 1989 *The Local Historian's Encyclopedia*, 2nd edn, New Barnet
- Royal Commission on the Historic Monuments of England (RCHME), 1936 *An Inventory of the Historical Monuments in Westmorland*, London
- Smith, AH, 1967 *The Place names of Westmorland, Part 1: Introduction, River- & Lake-Names, the Barony of Kendal*, *English Place-Names soc*, **42**, Cambridge
- Stephens Associates, 2007 *Demolition of Garages and Erection of 3 Dwellings Land to the Rear of 3 Castle Street Kendal: Archaeological Assessment*, unpubl rep
- Toulouse, JH, 1971 *Bottle Makers and their Marks*, Caldwell, New Jersey: USA
- White, A, 1975, Kiln Sites and Documentary Evidence in North Lancashire, in PJ Davey (ed), *Medieval Pottery from Excavations in the North West*, Liverpool, 121
- White, A, 1993 A Medieval Pottery Kiln at Ellel, Lancashire, *Contrebis*, **18**, 5-18
- White, A, 2000 Pottery Making at Silverdale, *Trans Cumberland Westmorland Antiq Archaeol Soc*, n ser, **100**, 285-291
- Winchester, A, n.d. *Four Historic Cumbrian Towns*, unpubl rep

Appendix 1: Project Brief

BRIEF FOR AN ARCHAEOLOGICAL WATCHING BRIEF ON LAND TO THE REAR OF 3 CASTLE STREET, KENDAL, CUMBRIA

Issued by the

County Historic Environment Service

Environment Unit, Economy, Culture and Environment



Date of Brief: 08 February 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: Land to the rear of 3 Castle Street, Kendal

Grid Reference: SD 5196 9302

Planning Application No.: 5/07/0571

Proposed Development: Erection of 3 dwellings

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 an Archaeological Watching Brief, 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 3 dwellings on land to the rear of 3 Castle Street, Kendal.
- 2.2 The scheme affects an area of archaeological potential significance on the outskirts of the medieval town. Consequently, a programme of archaeological works comprising a watching brief is required during the course of the ground works of the development.
- 2.3 This advice is in accordance with guidance given in Planning Policy Guidance note 16 (Archaeology and Planning) and with policy C19 of the South Lakeland Local Plan.

3. ARCHAEOLOGICAL BACKGROUND

- 3.1 The site is located in a part of Kendal that is considered to have formed the outskirts of the medieval town. It lies close to the 14th century Castle Dairy and Wildman Street and Castle Street are shown on Speed's 17th century map of Kendal. The area developed during the 18th and 19th centuries with the establishment of the adjacent brewery.

4. SCOPE OF THE PROJECT

4.1 Objectives

- 4.1.1 To identify, investigate and record any surviving archaeological remains revealed during the course of the development ground works.

4.2 Work Required

- 4.2.1 Before any on site work commences the County Historic Environment Record should be consulted and a rapid desk-based survey of the existing resource undertaken. This should include an assessment of those primary and secondary sources, including cartographic, referenced in the County Historic Environment Record.
- 4.2.2 All topsoil stripping, ground reduction, and excavation of footings and services trenches must be carried out under archaeological supervision. Any putative archaeological features must then be cleaned by hand and if possible a stratigraphic record made. Finds and environmental samples should be retrieved as appropriate. A reasonable period of uninterrupted access should be allowed to the archaeologist for all necessary archaeological recording.

5. SPECIFICATION

- 5.1 Before the project commences a specification 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 methods of observation 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, e.g. the number of people to be employed on site per day
 - ❖ A projected timetable for all site work and post excavation work (through to final publication of results)
- 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
 - ❖ A concise, non-technical summary of the results
 - ❖ A date when the project was undertaken and by whom
 - ❖ 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 brief photographic record of the site must be included, showing any features of archaeological interest. Where the results of the project revealed no significant archaeological remains a single photograph showing an indicative section of trench will suffice.
 - ❖ 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 six 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 A summary report should be submitted to a suitable regional or national archaeological journal within one year of completion of fieldwork. If archaeological remains of significance are identified, one or more full reports should also be submitted to a suitable journal or other publication in due course.
- 6.4 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.

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 The Code of Conduct of the Institute of Field Archaeologists must be followed.
- 9.3 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 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 4RQ
Tel: 01539 773432
Email: jo.mackintosh@cumbriacc.gov.uk

Appendix 2: Project Design

LAND TO THE REAR OF 3 CASTLE STREET, KENDAL, CUMBRIA

Archaeological Watching Brief Project Design



Client: Acorn Developments (Kendal) Limited

February 2008

Planning Application Ref. 5/07/0571

1. Introduction

1.1 Project Background

1.1.1 Following a proposal by Acorn Developments (Kendal) Limited (hereafter 'the client') to erect three dwellings with garages on land to the rear of 3 Castle Street, Kendal, Cumbria (NGR SD 5196 9302), a programme of archaeological work was recommended by South Lakeland District Council following consultation with the Cumbria County Historic Environment Service (CHES). This was to comprise a watching brief during the removal of topsoil, ground reduction, and excavation of footings and service trenches for the new buildings (CHES 2008).

1.1.2 The site is located on the edge of the medieval part of Kendal, in close proximity to the Castle Dairy, which is 14th century in date, and between Castle Street and Wildman Street, both of which are on Speed's map of 1611 and probably therefore of medieval origin. The development area is bounded on its west side by the site of Sleddale Hall, which is dated to 1666 and was home to an infant's school from at least the early 19th century (Stephens Associates 2007, 2/3). It was largely utilised as gardens until the later 19th century, when it was partially occupied by buildings relating to the British School, which was situated to the north-east (*ibid*, 3/3).

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). 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 watching brief 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 projects in Cumbria, including several recent watching briefs.

1.3.2 The watching brief will be carried out by **Sam Whitehead (BSc (Hons), MA)**. 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.

1.3.3 All artefacts will be processed by Greenlane Archaeology, and it is envisaged that they will initially be examined by Jo Dawson, who will fully assess any of post-medieval date. Finds of earlier date will be assessed by specialist sub-contractors as appropriate, and in this case it is envisaged that medieval pottery will be examined by Ian Miller at 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 their approval will be sought.

1.3.4 Environmental samples and faunal remains will be processed by Greenlane Archaeology. It is envisaged that charred plant remains will be assessed by Scott Timpany of Headland Archaeology Ltd, and faunal remains by Steve Rowland or Andy Bates, both at Oxford Archaeology North. CHES will be informed and their approval will be sought for these arrangements.

2. Objectives

2.1 Rapid Desk-Based Assessment

2.1.1 To examine information held in the Cumbria Historic Environment Record (HER), and also those primary and secondary sources referenced in the HER.

2.2 Watching Brief

2.2.1 To identify any surviving archaeological remains and to investigate and record any revealed archaeological remains or deposits.

2.3 Report

2.3.1 To produce a report detailing the results of the desk-based assessment and watching brief.

2.4 Archive

2.4.1 Produce a full archive of the results of the watching brief.

3. Methodology

3.1 Rapid Desk-Based Assessment

3.1.1 A rapid desk-based assessment will be conducted, and sources will be consulted at the following locations:

- **Cumbria Historic Environment Record (HER):** this is a list of all of the recorded sites of archaeological interest recorded in the county, and is the primary source of information for a study of this kind. Each site is recorded with any relevant references, a brief description and location related to the National Grid. All of the references relating to sites identified in the HER will be examined in order to verify them and add any necessary background information. In addition, relevant secondary sources, particularly previous archaeological investigations in the immediate area, will also be examined;
- **Cumbria Record Office (Kendal):** any primary and secondary sources referred to by the HER but not available for consultation there will be examined at the Cumbria Record Office in Kendal;
- **Greenlane Archaeology:** a number of copies of maps, local histories, unpublished reports, and journals are held in Greenlane Archaeology's library. These will be consulted as necessary.

3.2 Watching Brief

3.2.1 The groundworks are to be monitored, with one archaeologist on site.

3.2.2 The watching brief methodology will be as follows:

- Foundation trenches and/or trenches for services will be excavated by machine under supervision by staff from Greenlane Archaeology;
- All deposits of archaeological significance will be examined by hand if possible in a stratigraphic manner, using shovels, mattocks, or trowels as appropriate for the scale;

- 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. If possible, 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 detailed plans and sections at a scale of 1:20 or 1:10 where practicable or sketches where it is not, and photographs in both colour print and colour digital format;
- All deposits, drawings and photographs will be recorded on Greenlane Archaeology *pro forma* record sheets;
- All finds will be recovered during the watching brief for further assessment as far as is practically and safely possible. Should significant amounts of finds be encountered an appropriate sampling strategy will be devised;
- All faunal remains will also be recovered by hand during the watching brief as far as is practically and safely possible, 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 samples of suitable deposits by specialist sub-contractors (see *Section 1.3.4* 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 watching brief 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;
- Should any significant archaeological deposits be encountered during the watching brief 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.

3.3 Report

3.3.1 The results of the desk-based assessment and watching brief will be compiled into a report, which will include the following sections:

- A front cover including the appropriate national grid reference (NGR);
- 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 rapid desk-based assessment;

- Results of the watching brief including descriptions of any deposits identified, their extent, form and potential date, and an assessment of any finds or environmental remains recovered during the watching brief;
- Discussion of the results;
- Bibliography;
- 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;
 - copies of early maps, plans, drawings, photographs and other illustrations of elements of the site, as appropriate;
 - a plan showing the location of the ground works;
 - plans and sections of the watching brief ground works, as appropriate, showing any features of archaeological interest;
 - photographs of the watching brief, including both detailed and general shots of features of archaeological interest and the trenches;
 - photographs of individual artefacts as appropriate.

3.4 Archive

3.4.1 The archive, comprising the drawn, written, and photographic record of the watching brief, 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.

3.4.2 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, and within six months of the completion of fieldwork, three copies will be provided for the Cumbria Historic Environment Record (HER). In addition, Greenlane Archaeology Ltd will retain one copy, and digital copies will be deposited with the NMR and OASIS scheme as required.

3.4.3 The client will be encouraged to transfer ownership of the finds to a suitable museum. Any finds recovered during the watching brief will be offered to Kendal Museum. 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 **19th February 2008**, or at another date convenient to the client. It is envisaged that the project will involve tasks in the following order:

- **Task 1:** rapid desk-based assessment;
- **Task 2:** watching brief;
- **Task 3:** post-excavation work on archaeological watching brief, including processing of finds and production of draft report and illustrations;

- **Task 4:** feedback, editing and production of final report, completion of 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

CHES, 2008 *Brief for an Archaeological Watching Brief on Land to the Rear of 3 Castle Street, Kendal, Cumbria*, unpublished

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

HMSO, 1996 *Treasure Act*, <http://www.opsi.gov.uk/acts/acts1996/1996024.htm>

IFA, 2001 *Standard and Guidance for Archaeological Watching Brief*, revised edn, Reading

Stephens Associates, 2007 *Demolition of Garages and Erection of 3 Dwellings Land to the Rear of 3 Castle Street, Kendal: Archaeological Assessment*, unpubl rep

Appendix 3: Summary Context List

Context	Type	Description	Interpretation
100	Layer	Tarmac/concrete surface	Surface
101	Layer	Orangey-brown sandy gravel with small fragments of brick, concrete, and pebbles, with lenses of dark reddish orange clay	Bedding for concrete/tarmac
102	Layer	Greyish-brown sandy clay with large amounts of angular cobbles, slate and rubble, mixed with softer dark grey topsoil	Mixed demolition rubble and topsoil
103	Deposit	Loose angular limestone cobbles and concrete lumps	Fill of cut for wall 123
104	Layer	Mid orange-brown sandy clay with very infrequent pebbles	Subsoil
105	Deposit	Dark brown or dark grey silty clay with infrequent angular pebbles	Fill of 106
106	Cut	Shallow oval pit, c0.6m by 0.4m, 0.2m deep	Pit cut
107	Layer	Mid orange firm clay, very infrequent cobbles but dense lenses of loose pebbles and becoming sandy and softer on south side of site	Natural
108	Deposit	Dark grey brown silty clay with 50% angular limestone cobbles	Fill of pit 109
109	Cut	Oval pit c0.7m by 0.4m, 0.4m deep	Pit cut
110	Layer	Mid grey brown silty clay, 60% angular cobbles and mortar	Dumped deposit/demolition rubble
111	Layer	Mid orange brown sandy clay with very infrequent pebbles	Subsoil
112	Structure	Concrete block wall	Wall
113	Cut	Linear cut, near vertical sides	Cut for wall 112
114	Deposit	Mid grey brown silty clay	Fill of pit 115
115	Cut	Shallow flat bottomed ditch, 0.5m wide and 0.08m deep	Ditch cut
116	Deposit	Dark grey silty clay	Fill of ditch 117
117	Cut	Shallow flat bottomed ditch, 0.95m wide and 0.15m deep	Ditch cut
118	Deposit	Dark brown to dark grey sandy clay with 2% cobbles and occasional slate fragments and mortar	Fill of ditch 119
119	Cut	Shallow flat bottomed ditch, 0.75-0.8m wide, 0.2m deep	Ditch cut
120	Deposit	Mid grey-black silty clay, 60% angular cobbles and mortar	Fill of pit 121
121	Cut	Large pit c1.2m long and c.1.2m wide, u-shaped profile 0.2m deep	Pit cut
122	Structure	Concrete block wall	Wall
123	Cut	Linear cut, near vertical sides	Cut for wall 122
124	Layer	Grey-brown silt, 0.05m thick	Dumped deposit?

Appendix 4: Summary Finds List

Context	Find type	Quantity	Description	Date range
102	Pottery	18	Red earthenware: refitting flower pot base x 3, flower pot fragments x 2, black-glazed coarseware x 2, brown-glazed coarseware x 10 (including pantheon rim with unglazed white slip stripe on top, and straight-sided vessel base), fineware straight-sided vessel fragment with everted rim and white slip stripes	Late 17 th – early 20 th century
102	Pottery	16	White earthenware: creamware large vessel rim, 'Willow' transfer-printed x 4 (all different plates, including pearlware x 2, base marked '#' x 1), plain x 6 (including pearlware, creamware, and refitting x 2), blue banded factory-produced jug rim, blue shell edge pearlware plate rims x 3, grey-glazed hollow-ware	Mid 18 th - 19 th century
102	Pottery	2	Stoneware: brown-glazed grey-bodied cylindrical vessel, and buff-coloured hollow-ware fragment	18 th – mid 20 th century
102	Ceramic building material	1	Brick fragment	Not closely dateable
102	Animal bone	2	Butchered large mammal ribs (with saw marks)	Not closely dateable
102	Glass	1	Very light turquoise Codd bottle, mould number '2470' on base, maker's mark 'Cannington Shaw & Co Ltd / Makers / St Helens' at base of side, contents manufacturer 'Whitwell Mark & Co / Limited / Kendal' on side	c1875 – 1913 (Toulouse 1971, 147)
102	Clay tobacco pipe	1	Stem fragment, wide bore	17 th century
102	Fe	1	Nail (very corroded)	Not closely dateable
102	Stone	1	Writing slate with bevelled edge and incised lines	18 th - early 20 th century
104	Pottery	4	Northern gritty ware, similar to material from kilns at Docker Moor, some splashed glaze	Late 12 th – 13 th century
104	Pottery	1	Northern gritty ware rim	Late 12 th – 13 th century
104	Pottery	4	Sandy ware with splashed glaze and one base sherd	13 th century
104	Pottery	1	Green glazed medium sandy ware	13 th century
104	Pottery	1	Marble (red and buff-colour clay marbled into spherical toy)	Late 17 th – early 20 th century

Context	Find type	Quantity	Description	Date range
104	Pottery	13	Red earthenware: black-glazed coarseware x 4, brown-glazed coarseware x 6 (including jar fragments x 2), unglazed flower pot, brown-glazed fineware hollow ware base, brown-glazed bottle fragment with white slip stripe	Late 17 th – early 20 th century
104	Pottery	1	Brown-glazed buff-coloured earthenware	Late 17 th – early 18 th century
104	Pottery	1	Brown washed stoneware bottle mouth (grey fabric)	18 th – mid 20 th century
104	Pottery	19	White earthenware: plain x 11 (including pearlware x 2 and creamware), blue transfer printed tea cup rim x 2 (refitting), early blue transfer printed saucer rim, blue shell edge plate rim, blue shell body pearlware rim, factory produced slipware rims x 2 (including pearlware mocha mug and cylindrical vessel with blue-stained incised lines)	Mid 18 th – 20 th century
104	Pottery	1	Factory produced banded slipware (buff-coloured earthenware)	Mid 18 th – early 20 th century
104	Pottery	2	Blue painted porcelain	Mid 18 th – early 19 th century
104	Ceramic building material	1	Brick fragment	Not closely dateable
104	Glass	5	Refitting colourless faceted tumbler base x 2, and dark green bottle fragments	18 th – early 20 th century
104	Animal bone	8	Large mammal, including tooth and rib	Not closely dateable
104	Marine shell	1	Cockle valve	Not closely dateable
104	Clay tobacco pipe	8	Plain stem fragments, wide(ish) bore x 2, rest narrowish	17 th – early 20 th century
105	Animal bone	3	Large mammal bone fragments, 1 butchered	Not closely dateable
105	Animal bone	7	Small mammal(?) bones	Not closely dateable
105	Pottery	3	White earthenware including 2 refitting plate base fragments with purple transfer print	Late 18 th – early 20 th century
105	Pottery	1	Buff-coloured earthenware base (probably with factory produced slip decoration elsewhere on vessel)	Late 18 th – early 20 th century
105	Pottery	1	Brown-glazed red earthenware coarseware with white slip decoration	Late 17 th – early 20 th century
105	Ceramic building material	2	Red earthenware brick fragments	Not closely dateable
108	Pottery	1	Self-glazed red earthenware fineware from hollow-ware vessel with white slip-trailed decoration	Late 17 th – early 18 th century?

Context	Find type	Quantity	Description	Date range
108	Pottery	1	Very high fired black-glazed red earthenware crock rim, fired to effectively vitrified purple fabric	17 th – 18 th century?
108	Pottery	2	Brown-glazed red earthenware fine(ish) hollow-ware with white slip stripes	Late 17 th early 20 th century
108	Industrial residue	1	Lump of sandstone with vitrified material adhering to it – possibly waste/constructional material from pottery kiln	Late medieval – early post-medieval?
110	Pottery	2	Northern gritty ware	Late 12 th – 13 th century
110	Pottery	1	Sandy ware with orange splash glaze and grey reduced core	13 th century
110	Pottery	5	Red earthenware: 3 x flower pot, 1 probably brown glazed but top surface missing, 1 fragment	Late 17 th - early 20 th century
110	Pottery	10	Black glazed red earthenware coarseware (crock and pancheon fragments including bases, rim, and handle and high-fired thin-walled bottle fragment)	Late 17 th - early 20 th century
110	Pottery	18	Brown-glazed red earthenware coarseware (crocks, pancheons and jars/bottles) including bases and rims with unglazed white slip stripe	Late 17 th - early 20 th century
110	Pottery	11	Medium/fine brown-glazed red earthenware including dish, bowl and bottle(?) rims and fragments with white slip stripes	Late 17 th - early 20 th century
110	Pottery	4	Brown-glazed stoneware: large salt-glazed jar(?) fragment, salt-glazed jar with internal green glaze, rouletted jar with internal white slip coating, bottle(?) base fragment	18 th – mid 20 th century
110	Pottery	2	Tin-glazed earthenware blue-glazed triangular section footrim, pink-glazed blue-painted fragment	18 th century
110	Pottery	3	Bone china: 'Broseley' cup rims (1 fluted), gold-lined fragment	19 th – 20 th century
110	Pottery	4	White earthenware (plain, including 2 rims)	Late 18 th – 20 th century
110	Pottery	1	Chinoiserie blue transfer-printed white earthenware cup	19 th century
110	Pottery	4	Creamware (plain including sausage-rimmed bowls x 2, and punch bowl(?) footrim)	Mid 18 th – early 19 th century
110	Pottery	11	Pearlware, including transferred-printed 'Broseley', 'Willow' x 5 (3 refitting), 2 other prints, relief-moulded plate rim with blue edge stripe, factory produced slipware rim	Late 18 th - early 19 th century
110	Pottery	1	Self-glazed factory-produced light brown earthenware pie dish(?) rim	Mid 18 th – 20 th century
110	Ceramic building material	1	Red brick fragment	Not closely dateable

Context	Find type	Quantity	Description	Date range
110	Clay tobacco pipe	6	Plain stems (narrow and narrowish bore)	19 th – early 20 th century
110	Stone	2	Cut white marble, 1 with 2 polished surfaces	Late 18 th – 20 th century?
110	Animal bone	4	Large mammal bone fragments	Not closely dateable
110	Marine shell	2	Cockle valve fragments	Note closely dateable
110	Cu alloy	1	Nail	Post-medieval
110	Fe	1	Very corroded object	Not closely dateable
110	Glass	3	Dark green bottle fragments: neck x 2, high kick x 1	Late 18 th – early 19 th century
110	Industrial residue	3	Vitrified lumps	Not closely dateable
111	Pottery	10	Northern gritty ware similar to material from kilns at Docker Moor, including 1 glazed and two rims (number 1, Plate 18)	Late 12 th – 13 th century
111	Pottery	1	Northern gritty ware rim with red surface similar to material from Ellel (number 3, Plate 18)	Late 12 th - 13 th century
111	Pottery	2	Northern gritty ware similar to material from kilns at Ellel, including 1 rim (number 3, Plate 18)	Late 12 th – 13 th century
111	Pottery	11	Two other northern gritty ware fabrics (numbers 2 and 6, Plate 18)	Late 12 th – 13 th century
111	Pottery	17	Sandy oxidized fabrics, including two pairs of refitting body sherds and one rim (Plate 19)	14 th century
111	Pottery	4	Sandy ware, fully reduced and glazed including 2 with applied decoration (number 3, Plate 18)	Late 13 th – 14 th century
111	Pottery	2	Very fine sandy ware, 1 with brown glaze (number 4, Plate 18)	14 th – 15 th century
111	Pottery	1	Fully reduced chafing dish(?) rim sherd with drab olive green glaze, very abraded, similar to material from kilns at Silverdale (Plate 19)	15 th – 16 th century or later
111	Pottery	3	Red earthenware – unglazed pot base x 2 (probably same vessel), 1 other fragment	Late 17 th - early 20 th century
111	Pottery	2	Black-glazed red earthenware: cup strap handle, and very high fired hollow-ware fragment	Late 17 th - early 18 th century
111	Pottery	17	Brown-glazed red earthenware: coarseware and fairly fine ware, including dishes with white slip stripes and straight-sided vessel with everted rim	Late 17 th - early 20 th century
111	Pottery	2	Mottled ware vessel base (coarsish), and self-glazed buff-coloured earthenware vessel base (coarsish)	Late 17 th – early 18 th century
111	Pottery	1	Brown self-glazed stoneware coarse hollow-ware	18 th – mid 20 th century
111	Pottery	1	Porcelain saucer rim with orange enamel stripe	Mid 18 th – early 19 th century

Context	Find type	Quantity	Description	Date range
111	Pottery	2	Creamware, plain fragments	Mid 18 th – early 19 th century
111	Pottery	3	White earthenware plain fragments	Late 18 th – 20 th century
111	Pottery	2	White earthenware with transfer-printed 'Willow' pattern vegetable dish lid fragment, 1x 'Broseley' pattern fragment	19 th – early 20 th century
111	Pottery	9	Pearlware including 'Broseley', 'Leaves', 'Leaf', blue shell edge, blue-painted, factory-produced slip ware x 2 (banded and green-stained cross-hatch)	Late 18 th - early 19 th century
111	Pottery	2	Buff-coloured earthenware, one with factory-produced slip stripes	Mid 18 th – early 20 th century
111	Ceramic building material	1	Brick fragments	Not closely dateable
111	Clay tobacco pipe	3	Plain stems (widish bore x 2, narrow bore x 1)	17 th – early 20 th century
111	Glass	3	Dark green bottle fragments x 2, colourless tableware vessel base	18 th – early 20 th century
111	Bone	1	Thin pierced disk, saw marks on both sides, function unknown	Not closely dateable
111	Animal bone	5	Medium and large mammal	Not closely dateable
111	Fe	1	Nail	Not closely dateable
111	Industrial residue	1	Slag	Not closely dateable
114	Pottery	2	Black-glazed red earthenware coarseware x 1, fineware x 1	Late 17 th - early 20 th century
114	Pottery	1	Red earthenware	Late 17 th - early 20 th century
114	Pottery	1	Fine brown-glazed red earthenware	Late 17 th - early 20 th century
114	Pottery	1	Brown-glazed light red earthenware dish base with white slip decoration	Late 17 th - early 18 th century
114	Pottery	1	Creamware	Mid 18 th – early 19 th century
114	Pottery	1	Red slip-coated buff-coloured earthenware fineware candlestick(?) base	Late 17 th - early 18 th century
114	Clay tobacco pipe	2	Plain stem, wide bore	17 th century?
114	Cu alloy	1	Button base	Post-medieval
116	Pottery	1	Northern gritty ware base sherd	Late 12 th – 13 th century
116	Pottery	1	White gritty ware	13 th century
116	Pottery	1	Fine brown-glazed red earthenware	Late 17 th early 20 th century
118	Pottery	2	Brown-glazed grey-bodied stoneware bottle base and side (same vessel)	18 th – mid 20 th century
118	Pottery	2	Brown-glazed red earthenware coars(ish), vessel and rim base	Late 17 th - early 20 th century

Context	Find type	Quantity	Description	Date range
118	Ceramic building material	1	Red earthenware brick fragment	Not closely dateable
118	Glass	2	Dark green bottle fragments including base from cylindrical bottle	18 th – early 20 th century
118	Animal bone	3	Medium/large mammal fragments	Not closely dateable
118	Stone	2	Cut black stone, 1 with 2 polished surfaces	Late 18 th – 20 th century?
118	Clay tobacco pipe	2	Plain stems (narrow and widish bore)	17 th – early 20 th century
124	Pottery	1	Tin-glazed earthenware, blue glazed fragment	18 th century
124	Pottery	1	Creamware	Mid 18 th – early 19 th century
124	Mineral	7	Iron concretion and burnt coal lumps	Not closely dateable
u/s	Pottery	2	Northern gritty ware, similar to material from kilns at Docker Moor	Late 12 th - 13 th century
u/s	Pottery	1	White gritty ware	13 th century
u/s	Pottery	1	Fully reduced fine sandy ware with green glaze	14 th century
u/s	Pottery	1	Oxidized sandy ware with green glaze and impressed rouletted decoration	14 th century
u/s	Pottery	3	Red earthenware	Late 17 th - early 20 th century
u/s	Pottery	5	Black-glazed red earthenware coarseware	Late 17 th - early 20 th century
u/s	Pottery	14	Brown-glazed red earthenware, coarseware and finewares, including dish rims (many with unglazed white slip stripe on rim) and bottle fragment	Late 17 th - early 20 th century
u/s	Pottery	1	Over-fired stoneware bottle/jar base	18 th – early 20 th century
u/s	Pottery	1	Self-glazed engine-turned fine red earthenware	Mid 18 th – early 20 th century
u/s	Pottery	6	White earthenware including 'Willow' x 1, and purple geometric pattern basin(?) rim	19 th – early 20 th century
u/s	Pottery	3	Pearlware including 'Broseley'	Late 18 th - early 19 th century
u/s	Pottery	1	Blue-glazed white earthenware tankard base	Late 18 th – early 20 th century
u/s	Pottery	1	Buff-coloured earthenware factory-produced slipware rim	Mid 18 th – early 20 th century
u/s	Clay tobacco pipe	2	Plain stems, narrowish and widish bores	17 th – early 20 th century
u/s	Pb	2	Square off-cut	Not closely dateable

Appendix 5: Environmental Samples

Sample	Context	Volume (litres)	Description
1	114	2	Fill of ditch 115
2	116	2	Fill of ditch 117
3	118	2	Fill of ditch 119
4	120	2	Fill of pit 121

Table 1: Environmental samples

Sample number	1	2	3	4
Volume (litres)	c0.25	c0.25	c0.75	c0.75
Bone	+	+	++	+
Burnt bone	+	+	+	++
Ceramic (post-medieval e.g. brick)			++	++
Charcoal	++	+	++	++
Coal (burnt and unburnt)	++++	++++	++++	++
Copper alloy object				+
Glass	+	+	+	+
Industrial residue	++	++	++	++
Insect egg cases/pupae	+			
Iron concretion			+	
Iron object			+	
Medieval pottery?		+		
Marine shell	+		++	++
Mortar	+++	+	++++	++++
Post-medieval pottery	+	++	++	+

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

Sample number	1	2	3	4
Volume (millilitres)	c20	c15	c5	c20
Burnt coal	++	+++	+	++
Charcoal	+	+	+	+
Cereal indet. (charred)		+		
Insect egg case/pupae			+	+
Uncharred plant remains	+	+	+	+

Table 3: Volume and contents of flots (Key: + = 1-5%, ++ = 6-20%, +++ = 21-100%)