BURNESIDE HALL PELE TOWER, BURNESIDE HALL FARM, BURNESIDE, KENDAL, CUMBRIA

Archaeological Watching Brief

Client: Trustees of the James Cropper 1989 and 1990 Settlement

NGR: 350978 495941

SMC application ref: S00185510

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Non-Technical Summary

Following the submission of a Scheduled Monument Consent application for the carrying out of repairs to the footings of the pele tower at Burneside Hall Farm, Burneside, Kendal, Cumbria, a condition was placed requiring an archaeological watching brief of the associated groundworks. Greenlane Archaeology was appointed by the Trustees of the James Cropper 1989 and 1990 Settlement to carry out the work, which was undertaken in August 2018.

While there is evidence for human activity in the wider area from at least the end of the last Ice Age, and in the Roman period there was a fort south of Kendal, Burneside is first recorded in only the late 12th century, although the name suggests there was perhaps a settlement there before that date. The surviving elements of Burneside Hall include fabric of 14th century date, including the pele tower, the site being closely associated with the Manor of Burneside and owned by a number of prominent families. In the late 18th and early 19th centuries the village of Burneside came to be dominated by the presence of first textile mills and later a paper mill, which remains to the present day.

The groundworks comprised the hand excavation of a shallow narrow trench, partly extending below the south-west wall of the tower, in order to allow a new brick and concrete footing to be constructed to help support the wall where deposits had been lost by erosion. The trench was excavated in short sections and throughout a thin deposit of topsoil was encountered overlying the natural geological deposits, although a further deposit was encountered beneath a blocked doorway in the centre of the elevation, and a compacted deposit of possible concrete was found to the south-east of this. Finds recovered from the topsoil show that the erosion in this area could have begun as early as the 18th century, but there had clearly been some more recent disturbance, particularly associated with the blocked doorway in the centre.

Although very limited in scope, monitoring the groundworks did provide some additional information about the development of Burneside Hall, although primarily the manner in which it had been more recently affected by erosion and alterations to the fabric. No finds or features of early date were encountered although the manner of construction of the wall footing was observed. No specific evidence was found for activity predating the tower or evidence to aid its date.

Acknowledgements

Greenlane Archaeology would like to thank the Trustees of the James Cropper 1989 and 1990 Settlement for commissioning the project, their agent Carter Jonas, in particular Morgan Robinson, and their architect Crosby Granger Architects, in particular Chloe Granger, for their help during the project. Special thanks are also due to the tenants at Burneside Hall, and David and John Townley from Ellergreen Hydro who carried out the groundworks for their assistance during the project.

The watching brief was carried out by Dan Elsworth who also wrote this report, along with Tom Mace. The finds were processed by Dan Elsworth and assessed by Jo Dawson (post-medieval finds) and Tom Mace (clay tobacco pipe). The illustrations were produced by Tom Mace and the report was edited by Jo Dawson. Dan Elsworth managed the project.

1. Introduction

1.1 Circumstances of the Project

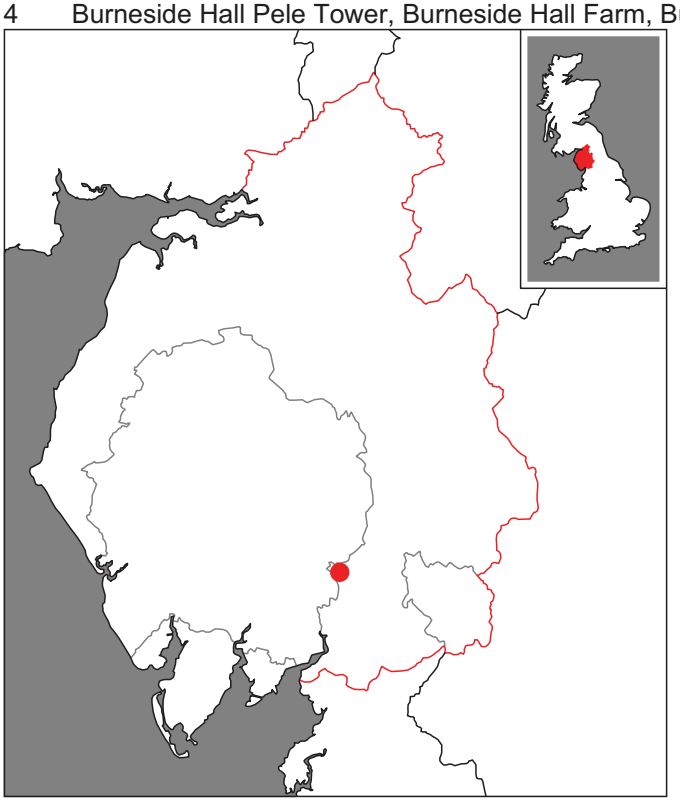
1.1.1 Following the submission of a Scheduled Monument Consent application (ref. S00185510) for carrying out repair work to the south-west side of the pele tower at Burneside Hall Farm, Burneside, Kendal, Cumbria (NGR 350978 495941) a condition (number iii) was placed by Historic England requiring an archaeological watching brief to be carried out on the associated groundworks. Greenlane Archaeology was approached by Morgan Robinson at Carter Jonas and Chloe Granger at Crosby Granger Architects on behalf of the Trustees of the James Cropper 1989 and 1990 Settlement (hereafter 'the client'), to carry out the archaeological watching brief. A project design was prepared by Greenlane Archaeology in response to this, and was approved by Historic England. The relevant groundworks were carried out on August 6th and 13th 2018.

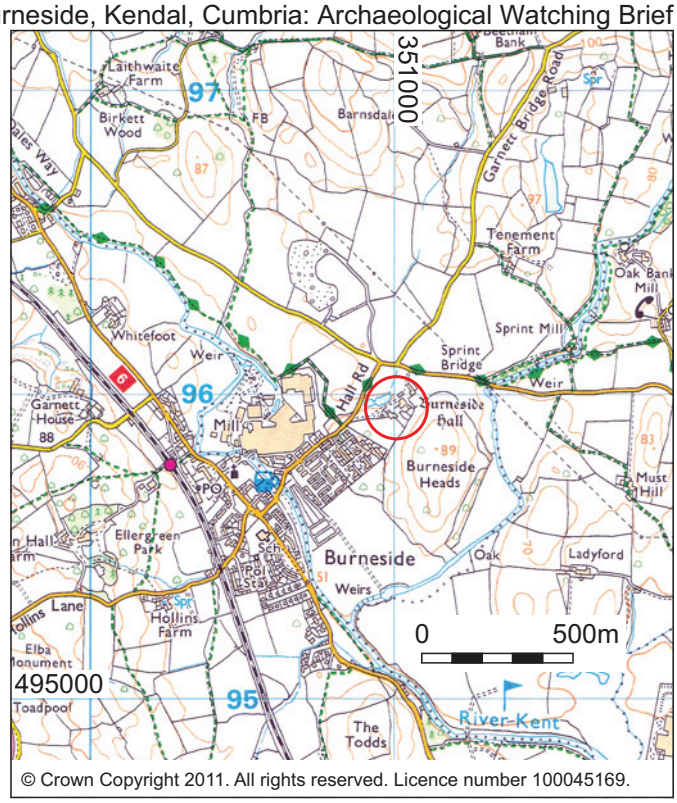
1.2 Location, Geology, and Topography

1.2.1 Burneside Hall Farm is off Hall Road to the north-east of the South Lakeland village of Burneside (Figure 1). It is approximately 60m above sea level (Ordnance Survey 2008). Burneside is approximately 1.5km north of Kendal in the South Cumbria Low Fells. The surrounding landscape, outside of the urban area of Kendal, is largely utilised for pasture for cattle and defined by small rectangular fields divided by hedges and dry stone walls (Countryside Commission 1998, 67).

Plate 1: Burneside Hall Pele Tower, with Burneside Hall adjoining it to the south-east

1.2.2 The solid geology comprises Bannisdale slates, although the site is situated on the edge of a large area of Carboniferous limestone (Moseley 1978, plate 1), with overlying drift deposits of glacial gravel (Countryside Commission 1998, 66).





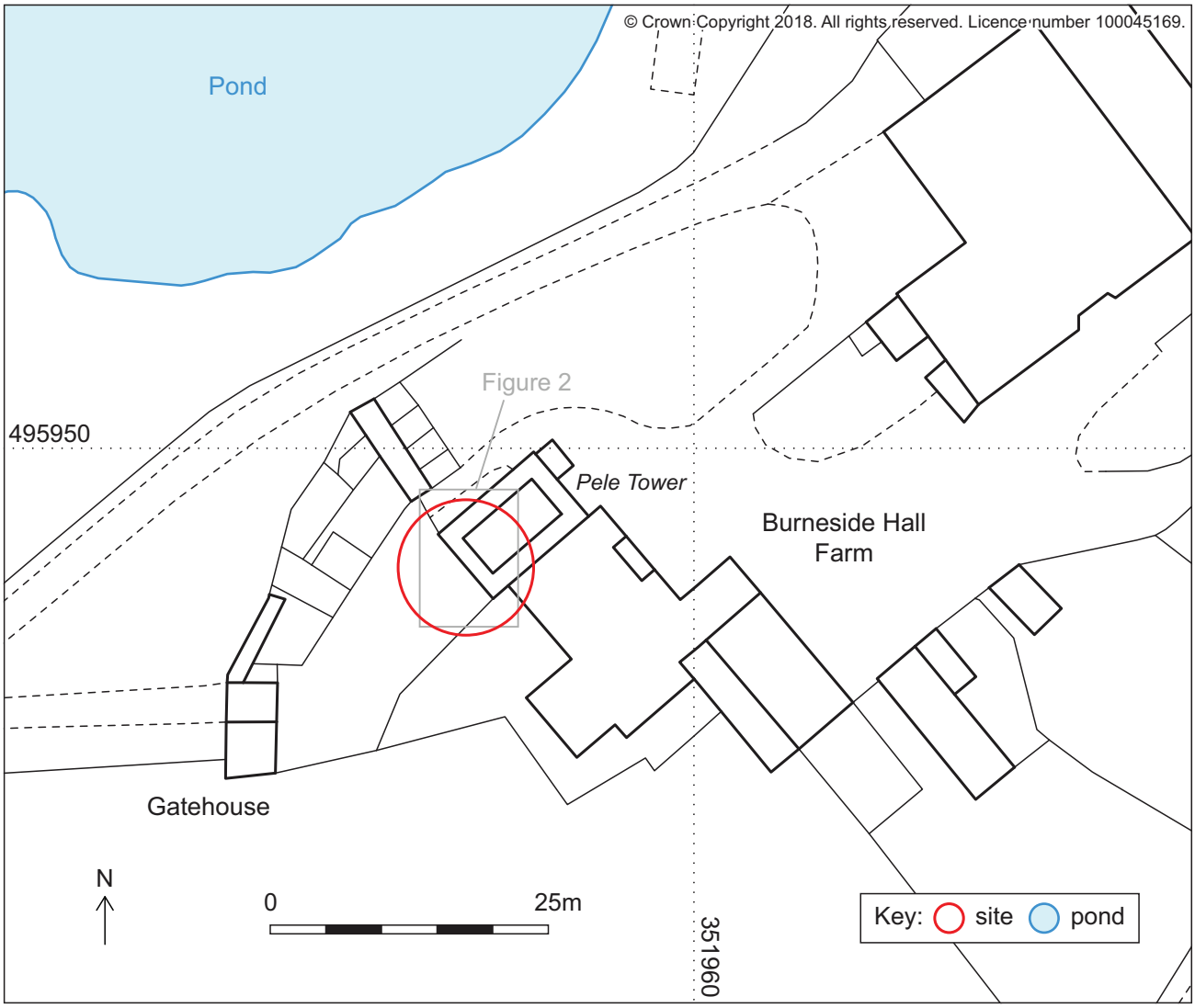


Figure 1: Site location

Client: Trustees of the James Cropper 1989 and 1990 Settlement

2. Methodology

2.1 Desk-Based Assessment

2.1.1 A rapid desk-based assessment was carried out in accordance with the guidelines of the Chartered Institute for Archaeologists (CIfA 2014a). This principally comprised an examination of early maps of the site and published secondary sources. A number of sources of information were used during the compilation of the desk-based assessment:

- ***Online resources***: early maps of the site were compiled from a variety of online resources in order to show the manner in which the building had developed and identify any features that might have impacted on the area being monitored;
- ***Greenlane Archaeology***: Greenlane Archaeology holds copies of some of the relevant early maps of the area in its library, as well as a number of additional secondary sources. These were consulted in order to provide information for the site background.

2.2 Archaeological Watching Brief

2.2.1 The repairs comprised the insertion of supporting blocks below the south-west wall of the pele tower where the original level had been eroded away exposing the footing plinth. The watching brief therefore monitored the hand excavation of areas below this plinth whereby the overlying material was removed until a firm deposit was reached, digging down by up to 0.5m below the current ground level in some cases, so that a poured concrete platform could be created onto which courses of bricks were laid up to the underside of the wall, any resulting gap being packed with slate. The excavation was carried out in two phases, with a series of short sections excavated initially, in order to prevent undue stress being placed on the wall by excavating the whole area at once. These sections were then filled with the concrete, brickwork and packing before the remaining sections were excavated.

2.2.2 All aspects of the archaeological recording were carried out according to the standards and guidance of the Chartered Institute for Archaeologists (CIfA 2014b) and Greenlane Archaeology's own excavation manual (2007). The deposits encountered were recorded in the following manner:

- ***Written record***: descriptive records of all deposits were made using Greenlane Archaeology's *pro forma* record sheets;
- ***Photographs***: photographs in 35mm colour print and colour digital format (both 12 meg JPEG and RAW file format) were taken of the site as well as general working shots. A selection of the colour digital photographs is included in this report. A written record of all of the photographs was also made using Greenlane Archaeology's *pro forma* record sheets;
- ***Drawings***: a plan of the watching brief area was produced at a scale of 1:100 based on a site plan supplied by the client.

2.3 Environmental Samples

2.3.1 No environmental samples were taken as no appropriate deposits were encountered.

2.4 Finds

2.4.1 ***Processing****:* all of the artefacts recovered from the watching brief were washed, with the exception of metal objects, which were dry-brushed. They were then naturally air-dried and packaged appropriately in self-seal bags with white write-on panels.

2.4.2 ***Assessment and recording***: the finds were assessed and identified in the first instance by Jo Dawson. The finds were recorded directly into the catalogue produced as part of this report (*Appendix 3*).

2.5 Archive

2.5.1 A comprehensive archive of the project has been produced in accordance with current CIfA standard and guidance (CIfA 2014c). The paper and digital archive and a copy of this report will be deposited in the Cumbria Archive Centre in Kendal on completion of the project. A digital and/or paper copy of this report will be provided for the client, as required, and one will be retained by Greenlane Archaeology. In addition, a digital copy of the report will be provided to the Cumbria Historic Environment Record (HER) in Kendal and a digital record of the project will be made on the *Online Access to the Index of Archaeological Investigations* (OASIS) scheme.

3. Site History

3.1 Introduction

3.1.1 While the village of Burneside is now primarily a post-medieval industrial hamlet that developed because of the readily available local water power, the wider area has a very ancient history, with activity extending into the prehistoric and Roman periods, although this is primarily recorded around Kendal and along the River Kent.

3.1.2 ***Prehistoric Period (c11,000 BC – 1st century AD)***: while there is some limited evidence for activity in the county in the period immediately following the last Ice Age, this is typically found in the southernmost part, on the north side of Morecambe Bay. Excavations of a small number of cave sites there have found artefacts of Late Upper Palaeolithic type and the remains of animal species common at the time but now extinct in this country (Young 2002). Similar remains may have been discovered at Hellsfell Cave, on the north side of Kendal, which was excavated in the late 19th century, although evidence for human activity is limited and the remains are difficult to interpret on account of having been dispersed after discovery (Wilkinson *et al* 2006). The county was clearly inhabited during the following period, the Mesolithic (*c*8,000 – 4,000 BC), as large numbers of artefacts of this date have been discovered during field walking and eroding from sand dunes along the coast, but these are typically concentrated in the west coast area and on the uplands around the Eden Valley (Cherry and Cherry 2002). A small number of microliths belonging to this period were found during excavations at the Roman fort at Watercrook, *c*4km to the south of the site (Turner 1979, 234-235); its position alongside the River Kent is one where such artefacts are often found (Middleton *et al* 1995, 202; Hodgkinson *et al* 2000, 151-152). In addition, one of the cave sites on Morecambe Bay has recently had human remains recovered from it dated to the beginning of this period, placing them as early as any known from the rest of the country (Smith *et al* 2013).

3.1.3 In the following period, the Neolithic (*c*4,000 – 2,500 BC), large scale monuments such as burial mounds and stone circles begin to appear in the region and one of the most recognisable tool types of this period, the polished stone axe, is found in large numbers across the county, having been manufactured at Langdale to the north-west of Kendal (Hodgson and Brennand 2006, 45). During the Bronze Age (*c*2,500 – 600 BC), monuments, particularly those thought to be ceremonial in nature, become more common still, and it is likely that settlement sites thought to belong to the Iron Age have their origins in this period. These are not well represented in the area around Kendal, although an enclosure on The Helme near Oxenholme perhaps has its origins in this period (Collingwood 1908), as might another one that formerly existed on what is now Kendal Fell golf course (Ferguson and Cowper 1893, 525; see also Elsworth 2014). Stray finds of Bronze Age date have been found in the Kendal area. Sites that can be specifically dated to the Iron Age (*c*600 BC – 1st century AD) are very rare; the only burials of this date were, however, found a relatively short distance away in Levens (OA North 2004). The remains on The Helme may represent a hillfort, a typical site of this period; they have never been dated but a recent survey has demonstrated the complexity of the remains and the likelihood of there having been several phases of alteration (Greenlane Archaeology 2012). Several other hillforts are also recorded from the wider region, and while many of these might be Iron Age they are generally difficult to date and probably had a complex history (Elsworth 2014). There is also likely to have been a considerable overlap between the end of the Iron Age and the beginning of the Romano-British period and it is evident that in this part of the country, initially at least, the Roman invasion had a minimal impact on the native population in rural areas (Philpott 2006, 73-74).

3.1.4 ***Romano-British to Early Medieval Period (1st century AD – 11th century AD)***: while the general area around Kendal has relatively little evidence for activity of this date, the exception is the Roman fort at Watercrook *c*4km to the south of Burneside. The fort used to be thought to have been known to the Romans as *Concangium*, but more recently it has been stated that it is difficult to be certain what its original name was (Shotter 1979, 319). The fort has been known to antiquarians since the 17th century, with a detailed account by Horsley in 1732 stating that the earthworks of the fort were clearly visible, and that remains thought to relate to the civilian settlement were frequently turned up on its west side (Potter 1979, 143). This latter observation is significant, since it is the only account that mentions

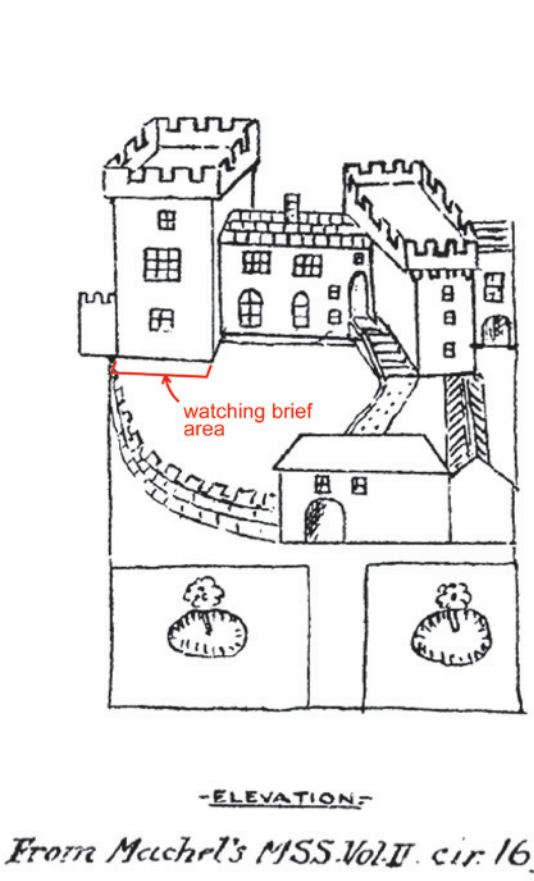
activity to the west of the fort. The only other detailed description of the site, prior to the 20th century, apart from occasional discoveries of stray finds, was Nicholson's (1861) account of a possible pottery or tile kiln found on the west side of the river close to Mill Lane (now Scroggs Lane). Nicholson also records an urn, presumably related to a cremation burial in a field on the west side of the river, an area in which other urns had been recorded before and which was known as 'Pots Land' (Gibbons 1988, 78).

3.1.5 Considerations of the fort at Watercrook were published by both William and Robin Collingwood in the early 20th century (Collingwood 1908; Collingwood 1930), including a plan based on parch marks visible in the warm summer of 1887 by the former, but it was only after 1930 that more detailed investigation and excavation was carried out. These began with excavations by North carried out in the 1930s, which determined the outline of its walls (North 1932). Further excavations in the 1940s examined further elements of the defences, and found evidence that the fort was established in the first century AD by Agricola during the Flavian period (North and Hildyard 1945). Further excavation in the 1970s of the fort and areas around it along the river in advance of flood alleviation work dated its establishment, on the basis of more comprehensive evidence, to the very end of the first century AD, perhaps AD 90-100 and therefore post-Agricola (Potter 1979, 176-177). A later stone fort was subsequently constructed in the mid-second century, followed by a period of reduced usage in the early third century (*op cit*, 178-179). There is evidence that it was reoccupied in the fourth century, although the extent of this is uncertain (*op cit*, 180). Subsequent investigation in the 1980s, in advance of the installation of a water pipe, identified further evidence for the civilian settlement to the south-east of the fort and evidence for further burials in the general area of those found previously (Gibbons 1988). A consideration of Watercrook's position in the local road network was presented in 1979 (Potter 1979, 139), although the details were not clear; an earthwork connecting directly to the fort was identified heading north-west towards Ambleside (*op cit*, 140), which presumably connects to that later identified by Thornton (1989). Many stray finds of Roman date are recorded in the area that probably relate to the fort and associated settlement, ranging from coins and small metal items to pottery, although many of these are poorly located (summarised in Greenlane Archaeology 2014).

3.1.6 The early medieval period is not well represented in the area in terms of physical archaeological remains, which is a common situation throughout the county. A piece of Anglian cross-shaft found at the church in Kendal (Collingwood 1904) and its place-name indicates that the town existed in some form prior to the Norman Conquest (Smith 1967, 115). The name Burneside, first recorded as *Brunoluesheued* in *c*1180, derives from the personal name *Brunwûlf*, which is probably Old English although there are Norse or Gaelic versions; in either case it is suggestive of activity in the area in the early medieval period just not what form this might have taken (*op cit*, 153).

3.1.7 ***Medieval Period (11th century AD – 16th century AD)***: as already mentioned Burneside as a settlement is recorded from at least the late 12th century. The manor of Burneside contained parts of the townships of Strickland Ketel and Strickland Roger – Strickland having been recorded in the Domesday survey and was clearly a very large and early estate (Winchester (ed) 2016, 74). The Manor of Burneside was held by the de Burneside family in 1348 but passed to the Bellinghams in the 14th century (*ibid*).

3.1.8 The site is, of course, located at Burneside Hall, the pre-eminent medieval monument in the village. The tower and associated hall house are thought to be 14th century in date although an outer enclosure stood to the north-west of the tower may have been earlier (Perriam and Robinson 1998, 330), and the site is seemingly recorded from the late 13th century (Weston 1883, 94). Most accounts of the site have tended to concentrate on the better preserved hall rather than the ruinous tower, but the most significant feature in the south-west elevation of the tower is the presence of a ground floor doorway, leading into a vaulted chamber, which is shown on plans as early as 1883 (Weston 1883; Plate 3) was clearly considered to be inserted by later writers (RCHME 1936, 222-225; Plate 4; Perriam and Robinson 1998, 330). However, a late 17th century drawing by Machell shows a window in this location (reproduced in Weston 1883; Plate 2).



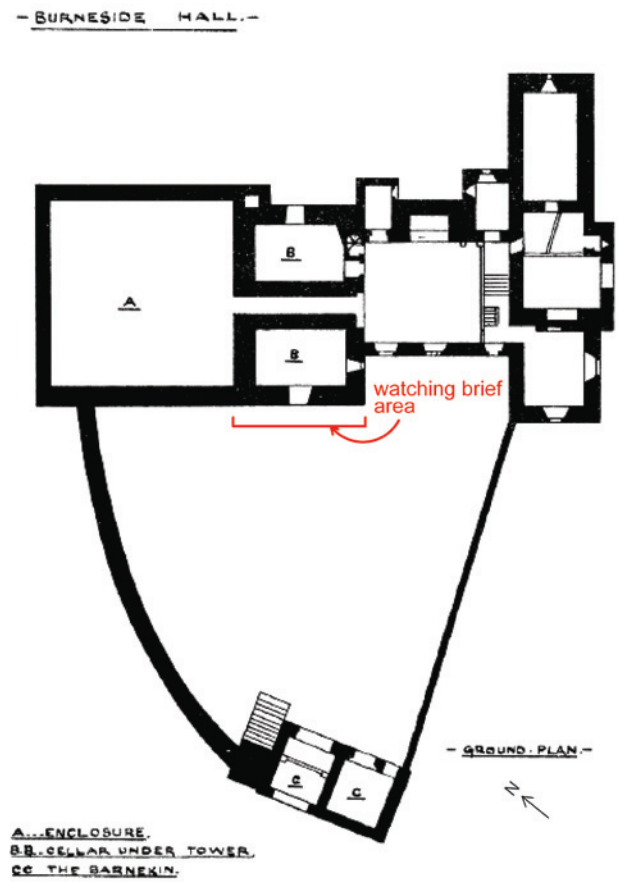


Plate 2 (left): Machell's view of Burneside Hall dated *c*1692 (reproduced in Weston 1883)

Plate 3 (right): Weston's plan of Burneside Hall (1883)

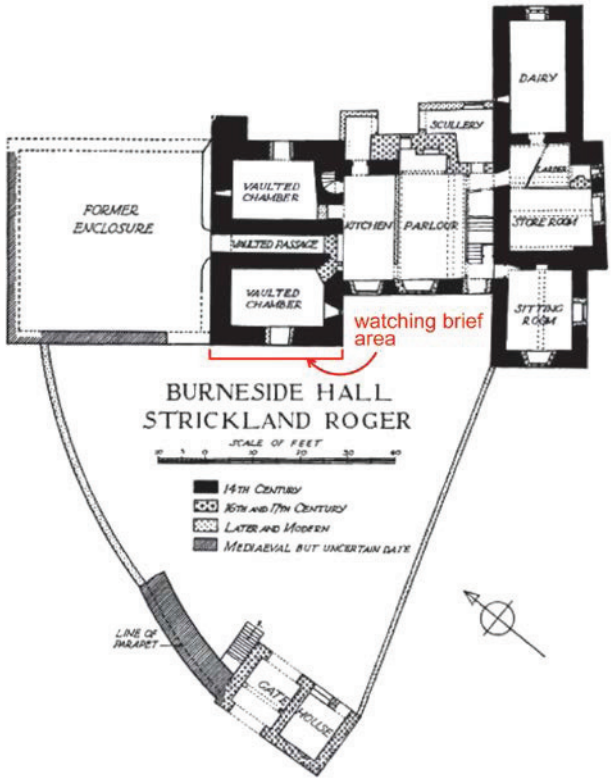


Plate 4: RCHME plan of Burneside Hall (1936)

3.1.9 ***Post-medieval Period (16th century AD – present)***: like the rest of the country Burneside changed considerably during the post-medieval period, primarily as a result of the effects of the Industrial Revolution. This is primarily due to the development of the mills alongside the River Kent, which undoubtedly had ancient origins but were transformed by the Wakefield family in the late 18th century when they constructed first a woollen mill then a cotton mill (Cropper 2004, 15). These lasted into the early decades of the 19th century but by 1833 the former cotton mill had been converted into a paper mill run by Hudson, Nicholson and Foster, which was acquired by James Cropper in 1845 (*op cit* 21-27). It remains in the ownership of the Cropper family to this day.

3.1.10 Burneside Hall remained in the Bellingham family until 1525 after which it passed through a succession of families before passing through seven generations of the Braithwaites until it was sold in 1750, when it was sold piecemeal, the majority coming to the Braddylls of Conishead Priory near Ulverston, with whom it remained until 1842 (Weston 1883, 103). The Manor of Burneside was acquired, along with Strickland Ketel and Strickland Roger, by the Lowther family in the 19th century but the Croppers had also acquired a considerable land holding in the area by this time (Winchester (ed) 2016, 74), which includes Burneside Hall.

4. Watching Brief

4.1 Introduction

4.1.1 A trench was excavated in several sections along the south-west wall of the tower, which is intact to two storeys on this side with a large window in the upper floor (Plate 5). The trench was approximately 0.4m wide and 9m long with approximately half of its width extending below the main part of the south-west wall (and a small part of the north-west wall) and the remainder outside the wall to the south-west side but mostly below the line of the projecting plinth. Close to the centre of the south-west elevation on this side there is an alcove in the form of a tall narrow doorway with a rounded-headed arch of edge-set stones, and a metal gatepost set in a concrete base was located close to the tower's west corner (Plate 6). The gatepost was cut off and removed during the work but the concrete it was set into, which was at least 0.5m deep, was left *in situ*.

Plate 5: The site prior to excavation showing the extent of the south-west wall of the tower

Plate 6: Detail of the site prior to excavation, showing the alcove and metal gatepost

4.2 Results

4.2.1 The excavation revealed a loose upper deposit (***100***) of gritty, greyish-orange (although darker where wetter) sandy clay, with 20% angular cobbles and lumps of lime mortar in places. This deposit was essentially a reworked natural deposit, less than 0.1m thick with weeds and grass growing in much of it. Below that was a firm, mid brownish-orange sandy clay, with 15% angular cobbles (***101***). This was clearly the natural boulder clay. Excavation toward the north-west end of the trench extended to a depth of 0.5m below the surface whereas bedrock or large boulders were exposed to the south-east, so the same depth of excavation was not achieved (Plate 7).

Plate 7: Excavation to a depth of 0.5m on the north-west side of the wall

4.2.2 The area immediately to the north-west of the alcove was also cleared but here deposit ***100*** came immediately onto boulders within the natural (***101***) (Plate 8). This deposit was much darker here, presumably because it was wetter. However, where the plinth was loose on the south-east side of the alcove the deposit beneath this was a loose but much darker greyish-brown gritty loam (***102***), 0.1m thick, with lots of lime mortar. This in turn lay on a compacted layer of pale, greyish-brown concreted gritty clay (***103***) (Plate 9), probably a variation in the natural (***101***), which extended to the south-east. The interior of the doorway sits on context ***102*** and the deposits to the south-east of the doorway were essentially very shallow and on top of context ***103***.

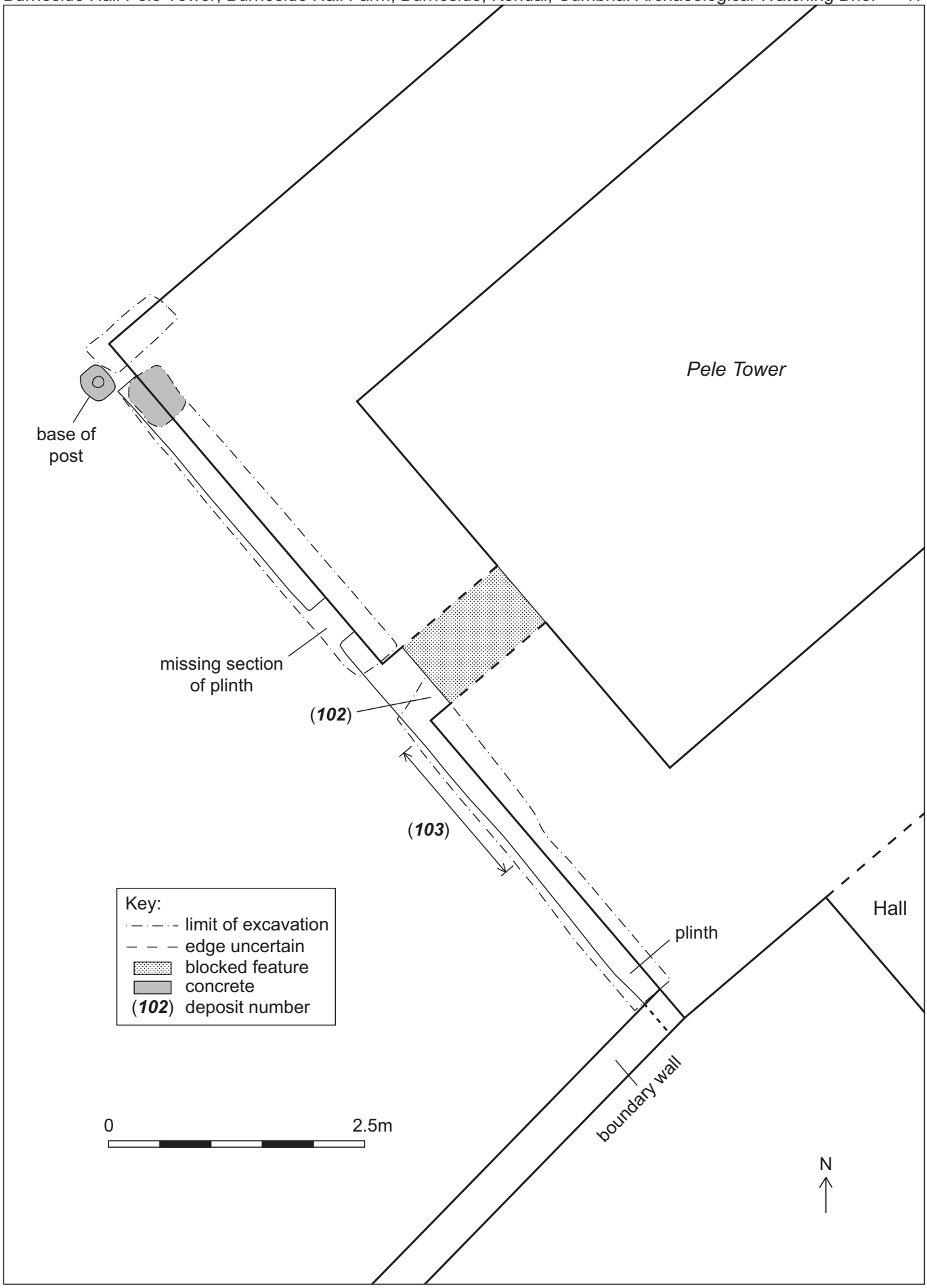
Plate 8: Excavation north-west of the alcove showing exposed boulders in *101*, with new brickwork showing on either side

Plate 9: Excavation below the loose plinth stone on the south-east side of the alcove revealing deposit *103*

4.2.3 Excavation around the west corner revealed the same deposits (***100*** and ***101***), but these had been truncated immediately to the south-east where a section below the wall had already been excavated and replaced by concrete and stone, possibly relating to the insertion of the gatepost, which was immediately to the north-west (Plate 10). At the south-east end of the wall, against a later boundary wall that was built on top of the plinth and butted the wall of the tower, the upper deposit (***100***) was a much wetter and darker gravelly loam and a fragment of post-medieval pottery and a clay tobacco pipe fragment were recovered here. At this point context ***100*** extended to at least 0.3m below the plinth onto the firm yellowish-orange clay and gravel (***101***) (Plate 11). Throughout the stones of the plinth did not seem to continue the whole thickness of the wall; this was particularly visible at the north-west end where it was found to extend under 0.3m of the thickness of the wall.

Plate 10: Excavation beyond the west corner showing deposits exposed and areas of previous disturbance, with newly inserted brickwork visible

Plate 11: Deposit *101* exposed at the south-east end of the wall and the adjoining boundary wall, with newly inserted brickwork visible



Client: Trustees of the James Cropper 1989 and 1990 Settlement

Figure 2: Site plan

4.3 Finds

4.3.1 ***Introduction***: a total of nine finds were recovered during the watching brief from the topsoil (***100***) and below the step (***102***), comprising post-medieval pottery and other ceramic material, a clay tobacco pipe fragment, a piece of a whetstone, and iron objects.

4.3.2 ***Stone***: the end of a broken whetstone of possibly 19th to 20th century date was recovered from topsoil ***100***. This is presumably made from a fine-grained stone and is well finished, with chamfered sides, although it is possibly made from an artificial composite material.

4.3.3 ***Post-medieval pottery***: three fragments of post-medieval pottery were recovered including two flower pot fragments (one from topsoil ***100*** and one from below the step (***102)***). The third fragment was a piece of mottledware/Rockingham-type ware from the topsoil, of probable late 18th to early 20th century date.

4.3.4 ***Other post-medieval ceramic material***: two lumps of red earthenware were recovered from the deposit below the step (***102***). These are both probably 19th to 20th century in date.

4.3.5 ***Clay tobacco pipe***: a plain stem fragment was recovered from topsoil ***100*** at the south-east end. The wide borehole (7/64" diameter) suggests it is probably mid-17th century to 18th century in date (after Davey 2013).

4.3.6 ***Iron***: two rusted nails were recovered from below the step (***102***). These are probably both 19th to 20th century in date.

5. Discussion and Conclusion

5.1 Discussion

5.1.1 The nature of the groundworks and their location inevitably means that deposits of archaeological interest were very shallow. In all cases these represented little more than a topsoil deposit, typically identified as ***100***, although the deposit below the 'step' into the alcove (***102***) was essentially the same. These were generally overlying a firm natural clay (***101***) although south-east of the alcove there was also a concreted material (***103***), which was probably natural but superficially had the appearance of actual concrete. It is apparent that the alcove in the south-west elevation is a relatively late feature, although it is in the location of a doorway marked on early plans (RCHME 1936; Perriam and Robinson 1998, 330), which show it as a later insertion and so has presumably been remodelled from this, although a window is shown in this location in Machell's late 17th century view (as reproduced in Weston 1883). It is apparent from the finds recovered from below the step that this was modified relatively recently. The wall has also apparently been repointed and possibly had other repair work done to it in the 20th century, which might account for the concrete-like material (***103***) below the plinth. It is apparent, however, that the erosion that has exposed the area beneath the plinth has been occurring for some time, with finds as early as at least the 18th century recovered from deposit ***100***.

5.1.2 No evidence for activity pre-dating the tower was revealed and no evidence to further aid the dating of the tower was discovered but it was apparent that the foundations for the tower comprised little more than large boulders placed on the natural ground projecting from the line of the wall and forming the present plinth. There is presumably a corresponding projecting line of boulders on the internal face too, but further investigation would be required to determine this.

5.2 Conclusion

5.2.1 While only a relatively limited investigation of a very shallow excavation, the watching brief has revealed some further information useful in the understanding of the pele tower at Burneside Hall. Most noticeably that no specific evidence for any activity pre-dating the tower was revealed but also the manner of the construction of the footings was exposed, as well as evidence that the erosion of the ground surface in this area had been occurring for a considerable amount of time, and that there was probably more recent disturbance in the area around the alcove/doorway.

6. Bibliography

6.1 Primary and Cartographic Sources

Ordnance Survey, 2008 *The English Lakes South-Eastern Area: Windermere, Kendal and Silverdale*, **OL7**, 1:25,000

6.2 Secondary Sources

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Appendix 1: Project Design

BURNESIDE HALL PELE TOWER, BURNESIDE HALL FARM, BURNESIDE, KENDAL, CUMBRIA

Archaeological Watching Brief Project Design

Client: Trustees of the James Cropper 1989 and 1990 Settlement

NGR: 350978 495941

SMC ref: S00185510

July 2018

1. Introduction

1.1 Project Background

1.1.1 Following the submission of a Scheduled Monument Consent application (ref. S00185510) for repairs to the foundations of Burneside Hall Pele Tower, Burneside Hall Farm, Burneside, Kendal, Cumbria (NGR 350978 495941) a condition requiring the archaeological monitoring of groundworks were placed on the Scheduled Monument Consent. Greenlane Archaeology was appointed by Trustees of the James Cropper 1989 and 1990 Settlement (hereafter 'the client') to carry out the archaeological work and this project design was produced in response.

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 25 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 Chartered Institute for Archaeologists' (CIfA) Code of Conduct. The rapid desk-based assessment and watching brief will be carried out according to the Standards and Guidance of the Institute for Archaeologists (CIfA 2014a; CIfA 2014b).

1.3 Project Staffing

1.3.1 The project will be managed by ***Dan Elsworth (MA (Hons)), ACIfA)***, who will also carry out the watching brief. Daniel graduated from the University of Edinburgh in 1998 with an honours degree in Archaeology, and began working for the Lancaster University Archaeological Unit, which became Oxford Archaeology North (OA North) in 2001. Daniel ultimately became a project officer, and for over six and a half years worked on excavations and surveys, building investigations, desk-based assessments, and conservation and management plans. These have principally taken place in the North West, and Daniel has a particular interest in the archaeology of the area. He has managed a number of recent projects in Cumbria and Lancashire including several archaeological watching briefs at a variety of locations.

2. Objectives

2.1 Rapid Desk-Based Assessment

2.1.1 To gather information about the history of the building so that the results of the building recording can be placed in its historical and archaeological context and a better understanding of its development be determined.

2.2 Archaeological Watching Brief

2.2.1 The monitoring of groundworks will take the form of an archaeological watching brief, which will record any features or deposits of archaeological interest revealed.

2.3 Report

2.3.1 To produce a report detailing the results of the watching brief.

2.4 Archive

2.4.1 Produce a full archive of the results of the building recording and watching brief.

3. Methodology

3.1 Rapid Desk-Based Assessment

3.1.1 A brief study of previously published secondary sources relating to the building and readily available primary sources will be carried out in order to place the results of the watching brief in their historical and archaeological context. This information will be compiled from online sources and published works held in Greenlane Archaeology's library.

3.2 Archaeological watching brief

3.2.1 The watching brief methodology will be as follows:

- The excavation of existing deposits below the foundations, which will be removed in order to replace them with new material, will be monitored by staff from Greenlane Archaeology;
- During the monitoring any features or deposits of archaeological interest, will be recorded and, where necessary, these will be investigated in order to establish their full extent, date, and relationship to any other features. Any negative features that are uncovered, such as ditches or pits, will be will be left *in situ* and covered where possible or otherwise fully investigated;
- 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 as far as is practically and safely possible for rapid assessment on site as it is envisaged that they will typically be of late date and relatively low archaeological significance, as per the results of the earlier evaluation. It is likely that the majority of the finds will not be retained but should any significant finds be encountered these will be removed from site for further processing and assessment;
- 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 (who will be appointed according to requirement following consultation with Historic England and the Historic Environment Officer at Cumbria County Council), 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. Historic England and the Historic Environment Officer at Cumbria County Council will be immediately informed as will the local coroner. Should it be considered necessary to remove the remains this will require a Ministry of Justice 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 securely 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 Historic England 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 Historic England and the Historic Environment Officer at Cumbria County Council, and subject to a variation to this project design.

3.3 Report

3.4.1 The results of the watching brief will be compiled into a report, which will provide a summary and details of any sources consulted. It 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 watching brief;
- Discussion of the results incorporating relevant information collected during the rapid desk-based assessment;

- Bibliography;
- Illustrations at appropriate scales including:

  - a site location plan related to the national grid;

  - a plan showing the relative location of the areas exposed during the groundworks and monitored by the watching brief;

  - specific drawings of any features of archaeological interest revealed during the watching brief;

  - photographs of any features of archaeological interest revealed during the watching brief and general photographs of the area monitored;

  - copies of selected historic maps and plans of the building where relevant.

3.4 Archive

3.4.1 The archive, comprising the drawn, written, and photographic record of the project, will be stored by Greenlane Archaeology until it is completed. Upon completion it will be deposited with the Cumbria Archive Centre in Kendal, together with a copy of the report. The archive will be compiled according to the standards and guidelines of the CIfA (CIfA 2014c). In addition details 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.

3.5.2 A paper and digital copy of the report will be provided to the client and to Historic England, and a digital copy will be provided to the Historic Environment Record maintained by Cumbria County Council. In addition, Greenlane Archaeology Ltd will retain one copy.

4. Work timetable

4.1 Greenlane Archaeology will be available to commence the project from the **6th August 2018**, or at another date convenient to the client. It is envisaged that the elements of the project will carried out in the following order:

- ***Task 1***: rapid desk-based assessment;
- ***Task 2***: archaeological watching brief;
- ***Task 3***: production of draft report including illustrations;
- ***Task 4***: feedback on draft report, editing and production of final report;
- ***Task 5***: finalisation and deposition of archive.

5. Other matters

5.1 Access and clearance

5.1.1 Access to the site will be organised through co-ordination with the client and/or their agent(s). It is assumed that all reasonable access to the groundworks will be made available during the watching brief, and that if this is not the case and additional visits are necessary as a result this will result in further costs to the client.

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 **£1,000,000**. 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. 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

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Appendix 2: Summary Context List

Context	Type	Description	Interpretation
100	Deposit	Loose, gritty, greyish-orange, sandy clay/gravelly loam, with 20% angular cobbles; generally less than 0.1m thick, it contained lumps of lime mortar, and appeared much darker in places where it was wetter	Topsoil comprising reworked natural geology
101	Deposit	Firm, mid brownish-orange, sandy clay, with 15% angular cobbles	Natural geology
102	Deposit	Dark greyish-brown gritty loam, 0.1m thick, with lots of lime mortar	Disturbed deposit
103	Deposit	Concreted layer of pale, greyish-brown gritty clay	Concreted natural geology

Appendix 3: Summary Finds List

Location	Context	Type	Quantity	Description	Date range
SE end	***100***	Pottery	1	(Mottledware/) Rockingham-type ware hollow-ware body fragment	(Late 17th – early 18th/) Late 18th – early 20th century
SE end	***100***	Clay tobacco pipe	1	Plain stem fragment, 25mm long, with 9-9.5mm round section and 7/64" diameter central borehole	Mid-17th to 18th century?
Centre	***100***	Pottery	1	Red earthenware flower pot rim	Late 18th – 20th century
Centre	***100***	Stone?	1	Neatly formed pointed end of a whetstone with chamfered sides, broken off at opposite end. Possibly composite material rather than stone.	19th – 20th century?
Below step	***102***	Ceramic	2	Red earthenware lumps, no surfaces present	19th – 20th century
Below step	***102***	Pottery	1	Red earthenware flower pot (?) body fragment	Late 18th – 20th century
Below step	***102***	Fe	2	Rusted nails, at least one drawn rather than forged	19th – 20th century?