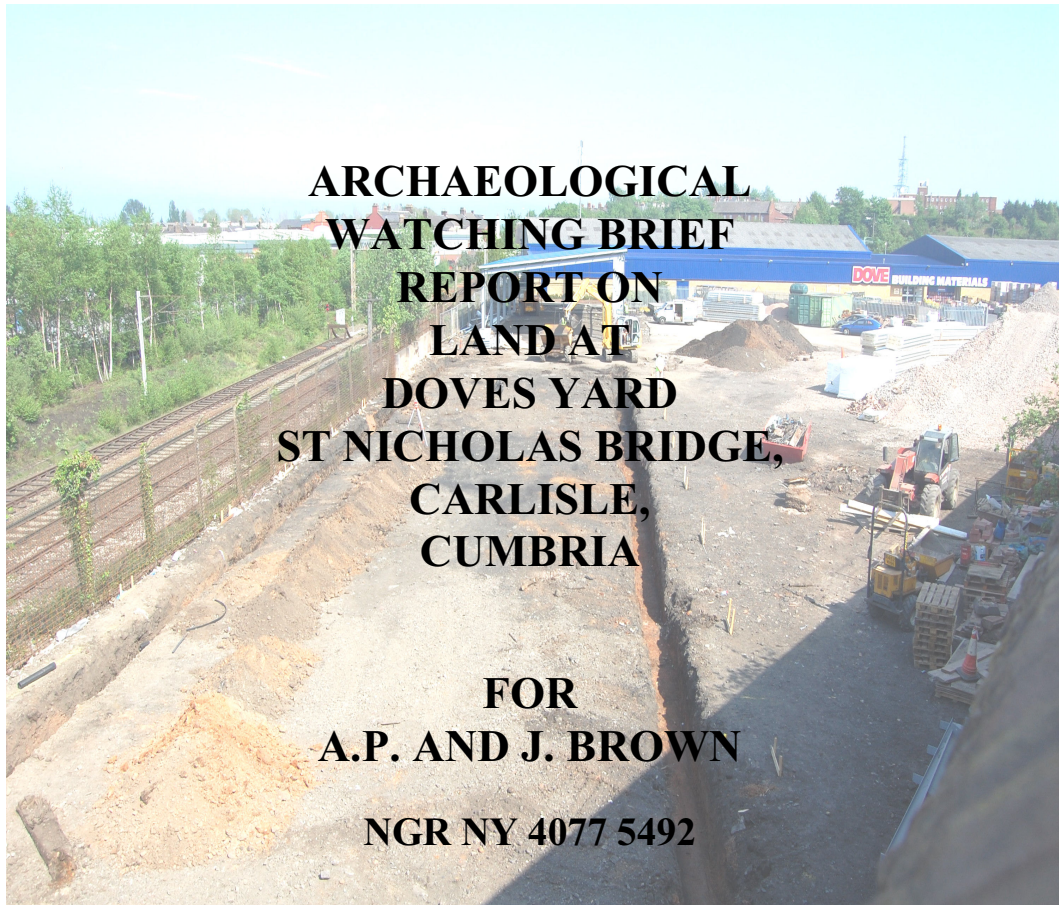


# **NORTH PENNINES ARCHAEOLOGY LTD**

**Client Reports No. CP642/08**



**OASIS REF: northpen3-42347**

Martin Sowerby and Matthew Town  
North Pennines Archaeology Ltd  
Nenthead Mines Heritage Centre  
Nenthead  
Alston  
Cumbria CA9 3PD  
Tel: (01434) 382045  
Fax: (01434) 382294  
Email: [info@nparchaeology.co.uk](mailto:info@nparchaeology.co.uk)

21<sup>st</sup> July 2008



---

# CONTENTS

---

	<i>Page</i>
LIST OF ILLUSTRATIONS.....	III
EXECUTIVE SUMMARY .....	IV
ACKNOWLEDGEMENTS .....	V
<b>1 INTRODUCTION .....</b>	<b>6</b>
<b>1.1 CIRCUMSTANCES OF THE PROJECT .....</b>	<b>6</b>
<b>2 METHODOLOGY .....</b>	<b>7</b>
<b>2.1 PROJECT DESIGN.....</b>	<b>7</b>
<b>2.2 THE WATCHING BRIEF.....</b>	<b>7</b>
<b>2.3 ARCHIVE .....</b>	<b>8</b>
<b>3 BACKGROUND.....</b>	<b>9</b>
<b>3.1 SITE LOCATION .....</b>	<b>9</b>
<b>3.2 HISTORICAL BACKGROUND .....</b>	<b>9</b>
<b>4 WATCHING BRIEF RESULTS.....</b>	<b>12</b>
<b>4.1 THE ARCHAEOLOGICAL WATCHING BRIEF .....</b>	<b>12</b>
<b>4.2 TRENCH 1.....</b>	<b>12</b>
<b>4.3 TRENCH 2.....</b>	<b>13</b>
<b>4.4 TRENCH 3.....</b>	<b>15</b>
<b>4.5 TRENCH 4.....</b>	<b>16</b>
<b>5 FINDS .....</b>	<b>17</b>
<b>5.1 INTRODUCTION .....</b>	<b>17</b>
<b>5.2 MEDIEVAL CERAMIC VESSELS .....</b>	<b>17</b>
<b>5.3 MEDIEVAL FIRED CLAY FRAGMENTS.....</b>	<b>18</b>
<b>5.4 METAL OBJECTS .....</b>	<b>18</b>
<b>6 ENVIRONMENTAL ANALYSIS.....</b>	<b>19</b>
<b>6.1 INTRODUCTION .....</b>	<b>19</b>
<b>6.2 ENVIRONMENTAL REMAINS.....</b>	<b>19</b>

---

## CONTENTS

---

<b>6.3 SAMPLE 1 (CONTEXT 102, TRENCH 2)</b> .....	<b>20</b>
<b>6.4 DISCUSSION</b> .....	<b>21</b>
<b>6.5 CONCLUSION AND RECOMMENDATIONS</b> .....	<b>21</b>
<b>6.6 SCIENTIFIC DATING METHODS</b> .....	<b>21</b>
<b>7 CONCLUSIONS</b> .....	<b>22</b>
<b>7.1 CONCLUSIONS</b> .....	<b>22</b>
<b>8 BIBLIOGRAPHY</b> .....	<b>23</b>
<b>8.1 PRIMARY SOURCES</b> .....	<b>23</b>
<b>8.2 SECONDARY SOURCES</b> .....	<b>23</b>
<b>APPENDIX 1: FIGURES</b> .....	<b>25</b>

---

## LIST OF ILLUSTRATIONS

---

*Page*

FRONTISPIECE: PHOTOGRAPH OF SITE FROM ST NICHOLAS BRIDGE .....	FRONT COVER
PLATE 1: EXCAVATION OF THE FOUNDATION TRENCH NORTHERN EXTENT OF THE SITE, FACING WEST	12
PLATE 2: EXCAVATION OF THE FOUNDATION TRENCH, FACING NORTH, NOTE DEMOLITION RUBBLE. ...	13
PLATE 3: TRENCH 2, FACING NORTH .....	14
PLATE 4: TRENCH 2 DITCH <b>105</b> , FACING EAST.....	14
PLATE 5: TRENCH 2 DITCH <b>105</b> , FACING NORTH-EAST .....	15
PLATE 6: TRENCH 3, FACING WEST.....	16
PLATE 7: TRENCH 3, FACING EAST .....	16
FIGURE 1: LOCATION OF STUDY AREA .....	APPENDIX 1
FIGURE 2: TRENCH PLAN.....	APPENDIX 1
FIGURE 3: SECTION DRAWING OF DITCH <b>105</b> .....	APPENDIX 1
FIGURE 4: PLAN OF <b>105</b> .....	APPENDIX 1

---

## EXECUTIVE SUMMARY

---

During May 2008, North Pennines Archaeology Ltd (NPAL) were invited by A.P. and J. Brown to undertake an archaeological watching brief at Dove's Yard, St Nicholas Bridge, Carlisle Cumbria (NGR NY 4077 5492). The watching brief was required as part of ongoing works for the construction of a commercial and retail development on land previously occupied by the London and North Western Railway Company and JT Dove Building Supplies. Carlisle City Council had granted prior planning consent for the development; however, an earlier archaeological evaluation on the site, also undertaken by NPAL Ltd identified the remains of two timber structures and a buried soil horizon of possible medieval date.

The subsequent ground works involved the excavation of a foundation trench measuring approximately 57m long east west by 14m-north south, at an average width of 1m. The maximum depth of the trench was 1.50m. A substantial east west aligned medieval ditch was exposed at the western portion of site, which probably forms part of a complex of medieval features revealed during the initial evaluation.

The eastern section of the site revealed no further evidence of archaeological features or deposits, this is probably due in part to the area being heavily disturbed by the building of the railway and associated engine sheds on site. It is highly likely that the majority of archaeological features in this immediate area have been severely truncated by post-medieval activities.

The analysis of this data will inevitably provide new and important information for land use during the medieval period, which may be amalgamated with the body of evidence that has already been compiled for the area, to produce a much-enhanced picture of the land surrounding the main settlement foci of Carlisle.

---

## ACKNOWLEDGEMENTS

---

North Pennines Archaeology Ltd would like to thank A.P and J. Brown, for commissioning the project. Further thanks are extended to Steve Carrig for his assistance on site.

The archaeological watching brief was undertaken by Martin Sowerby. The report was written by Martin Sowerby and Matthew Town. The finds section was completed by Helen Noakes, and the environmental section by Patricia Shaw. The project was managed by Frank Giecco, Technical Director for NPA Ltd. The report was edited by Martin Railton, Project Manager for NPA Ltd.

---

# 1 INTRODUCTION

---

## 1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 North Pennines Archaeology Ltd (NPA Ltd) was invited by A.P and J. Brown to undertake an archaeological watching brief on land at Dove's Yard, Carlisle, Cumbria (NGR NY 4077 5492). All groundworks were associated with the excavation of a construction trench for a new retail and commercial development. The objective of this watching brief was to obtain an adequate record of any archaeological deposits or finds, which were disturbed or exposed by work associated with the development. All stages of the archaeological work were undertaken following approved statutory guidelines and professional standards (IFA 2002).
- 1.1.2 Prior planning consent has been granted by Carlisle City Council for the development of the area (Planning Application No: 1/031305); however, a previous archaeological evaluation was undertaken on the site in 2004 by NPA Ltd (Jones 2004), which identified the remains of two timber structures of possible medieval date. In addition, the site lies in close proximity to a Roman road to the fort and settlement in Carlisle, and numerous Roman burials have been recorded along its length. The site also lies close to the medieval hospital of St Nicholas.
- 1.1.3 All ground reduction, and the foundations of the proposed development, have the potential to impact on the remains to some extent, and therefore the Historic Environment Officer for Cumbria County Council recommended a watching brief during the course of all ground works relating to this project, as it was possible that important archaeological remains survive within the site, which would be disturbed by the proposed works.
- 1.1.4 This report comprises the results of the archaeological work programme, namely: the archaeological monitoring of the excavation of the foundations.

---

## 2 METHODOLOGY

---

### 2.1 PROJECT DESIGN

2.1.1 A project design was submitted by North Pennines Archaeology Ltd in response to a request by A.P and J. Brown for archaeological monitoring of proposed ground works, in accordance with a brief prepared by CCHES. Following acceptance of the project design, North Pennines Archaeology Ltd was commissioned by the client to undertake the work. The project design was adhered to in full, and the work was consistent with the relevant standards and procedures of the Institute of Field Archaeologists (IFA), and generally accepted best practice.

### 2.2 THE WATCHING BRIEF

2.2.1 The works involved a structured watching brief to observe, record and excavate any archaeological deposits from the development site. A watching brief is a formal programme of observation and investigation conducted during any operation carried out for non-archaeological reasons, on a specified area or site on land, inter-tidal zone or underwater, where there is a possibility that archaeological deposits may be disturbed or destroyed (Institute of Field Archaeologists 2002).

2.2.2 The aims and principal methodology of the watching brief can be summarised as follows:

- to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record them;
- to carry out further excavation and recording work in adequate time, if intact archaeological remains are uncovered during the project;
- to accurately tie the area watched by the archaeologist into the National Grid at an appropriate scale, with any archaeological deposits and features adequately levelled;
- to sample environmental deposits encountered as required, in line with English Heritage (2002 *Environmental Archaeology: A Guide to the Theory and Practice of Methods from Sampling and Recording to Post-Excavation*) guidelines;
- to maintain a photographic record of all contexts in colour transparency and black and white print, and including a graduated metric scale;
- to recover artefactual material, especially that useful for dating purposes;
- to prepare a bound report for the Client with each page and paragraph numbered, setting out the salient conclusions;
- and to produce a site archive, following the guidance set out in the *Management of Archaeological Projects* (2<sup>nd</sup> Edition, 1991);



- depending upon the results of the work, to prepare a report for publication.
- 2.2.3 The foundation trenches formed a rectangle approximated to 57m x 14m, with the foundation cuts measuring approximately 1.0m in width. The foundation trenches were stripped of topsoil and overburden to the required formation levels. Archaeological monitoring and supervision of groundworks associated with the stripping commenced on Monday 12<sup>th</sup> May 2008. A summary of the findings of the watching brief is included within this report.

## **2.3 ARCHIVE**

- 2.3.1 A full professional archive has been compiled in accordance with the Project Design, and with current UKIC (1990) and English Heritage guidelines (1991). The archive will be deposited within an appropriate repository and a copy of the report given to the Cumbria County Council Historic Environment Services in Kendal, Cumbria, where viewing will be available on request. The archive can be accessed under the unique project identifier NPA08, DYC-B, CP642/08.
- 2.3.2 North Pennines Archaeology Ltd supports the Online Access to the Index of Archaeological Investigations (OASIS) project. This project aims to provide an online index and access to the extensive and expanding body of grey literature created as a result of developer-funded archaeological fieldwork. As a result, details of the results of this study will be made available by North Pennines Archaeology Ltd, as a part of this national project. The site has been given the unique identifying number *northpen3-42347* for further reference.

---

## 3 BACKGROUND

---

### 3.1 SITE LOCATION

- 3.1.1 The study area is situated on low-lying ground, which forms part of the Carlisle Plain at approximately 30m AOD. It is located approximately 250m south of the Historic Centre of Carlisle within an area of mixed industrial and residential use, adjacent to St. Nicholas Bridge. The site is perpendicular to the principal Roman road south (the modern A6) and the site of a Roman cemetery. The site is also located close to the site of the medieval St Nicholas Hospital, which was founded in the 12<sup>th</sup> century as a leper hospital and later used as almshouses (Figure 1).
- 3.1.2 The development area forms a block of land between the Canal Branch of the London, Midland and Scottish Railway and the London and North Western Railway, and consists of an open area covered by tarmac. The remains of two 19<sup>th</sup> century buildings, a former Wagon Repair Shed and a Creosoting Shed, were originally located on the site but have since been demolished. The area is shown in Figure 2.
- 3.1.3 The underlying natural drift geology consists of boulder clay interleaved with alluvial sand and gravels, which occurs along the rivers and merges into marine alluvium near the upper limits of tidal waters. The boulder clay has been deposited by ice and is derived from bedrock traversed by glacial movement and is heterogeneous (SSEW 1984). The site lies approximately equidistant between the Rivers Caldew and Petteril, which as tributaries flow northwards into the Eden. The River Petteril forms the Parliamentary and Municipal Boundary and marked the extent of the medieval Sockage Manor of Carlisle.

### 3.2 HISTORICAL BACKGROUND

- 3.2.1 **Introduction:** this historical background is compiled mostly from secondary sources, and is intended only as a brief summary of historical developments specific to the study area.
- 3.2.2 **Prehistoric:** there is extensive evidence for prehistoric activity within and around Carlisle, including the remains of ard marks from prehistoric ploughing at Blackfriars Street and Lowther Street. Neolithic and Bronze Age pottery was found at Scotby Road, including Grooved Ware and Beaker pottery, and a collared urn and burnt mound were excavated at Garlands Hospital (Perriam 1992, 3). Flints of Neolithic and Bronze Age date have also been found, and two socketed Late Bronze Age axes were found at Kings Meadow, Stanwix (SMR No. 525). It has been suggested that the promontory on which Carlisle Castle now stands has been a defended site since at least the Iron Age and possibly a pre-Roman *dun*.
- 3.2.3 **Roman:** a substantial fort was established on a promontory overlooking the River Eden in AD 70, and the *vicus* or civilian settlement outside the fort grew up to be the substantial town of *Luguvalium*, the name written on tablets dating from c. AD 80 (McCarthy *et al* 1990, 4). There was a substantial 2<sup>nd</sup> century fort at Stanwix; on the

north bank of the Eden, and dredging of the old Priest Beck resulted in a substantial quantity of Roman artefacts, including the discovery of metalwork.

- 3.2.4 The area perpendicular to London Road and Botchergate has long been known to contain Roman remains, with some 39 burials recovered during building works in the 19<sup>th</sup> century, and other remains recovered during systematic archaeological excavation during the 1990s (Carlisle Archaeology, Lancaster University Archaeological Unit). Little is known, however, regarding the extent of the Roman cemetery (and settlement) or the nature and extent of medieval settlement.
- 3.2.5 **Medieval:** the site of St Nicholas Bridge lay outside the principal area of medieval settlement, and probably formed part of the agricultural landscape of that period. The closest area of medieval activity is the site of St Nicholas Hospital, approximately 100m north west of the current site. The hospital was situated off St Nicholas Street, a significant distance away from the main area of settlement and was established in the twelfth century as an isolation hospital for lepers. Following the gradual decline in the number of cases of leprosy, the hospital admitted 'generally infirm' persons during the late 13<sup>th</sup> and early 14<sup>th</sup> centuries. Lying outside the protection of the city walls, the hospital witnessed frequent raids during the 13<sup>th</sup> and 14<sup>th</sup> century conflict between England and Scotland, and was destroyed during the 1645 siege of Carlisle during the English Civil War. The extent of the graveyard is not precisely known, however, it is said to have 'abutted the highway to the south and east' (VCH Vol II; 1901). In January 2004 North Pennines Archaeology Ltd undertook an archaeological field evaluation on the site; a series of stakeholes were observed cut into the natural subsoil within Trenches 1 and 2, one of which contained medieval pottery. The stakeholes were sealed by ploughsoils containing medieval pottery, confirming a medieval presence in the area (Jones 2004).
- 3.2.6 **Post-medieval:** following the Union of the English and Scottish Crowns with the accession of James I to the English throne in 1603, a programme of pacification of the borderlands began. This saw a modernisation of tenure ships of great benefit to northern landowners and a breakdown of the traditional forms of Border service (Spence 1984; 64). This process of modernisation led to the undertaking of two detailed surveys of the Socage or manorial lands of Carlisle, by Thomas Johnson in 1608 and Aaron Rathbone in 1611 (*ibid*, 67). The site of St Nicholas Bridge lies within an area of open land some 42 acres in extent, known in 1611 as 'Almerye Holme', a relict place-name with no mention or derivative within modern day Carlisle. A map of 1746, based on an earlier edition, similarly shows the site as situated among open fields. The map also shows the approximate location of the Parliamentarian mound during the Civil War to the southwest of the site.
- 3.2.7 In 1837 the Canal Branch of the London and North Western Railway was constructed, cutting through part of the hospital graveyard (Perriam 1992), evidenced from Studholme's map of 1842 and the Botchergate Tithing Map of 1847. The Tithing Map shows the adjacent fields as owned by the Lancaster and Carlisle Railway Company.
- 3.2.8 The Ordnance Survey First Edition Map of 1865 showed the sidings and sheds of the London and North Western Railway Goods Depot occupied the site. Between 1865 and 1901 the goods depot had become a wagon repair shop and a separate creosoting shed

had been constructed, and were still in use by 1926 as evidenced on the Ordnance Survey Third Edition.

- 3.2.9 The site in the 20<sup>th</sup> century was occupied by two large warehouses, which formed part of the wagon repair and creosoting sheds, since demolished. The remainder of the site is covered by a layer of tarmac and used as a car park.

---

## 4 WATCHING BRIEF RESULTS

---

### 4.1 THE ARCHAEOLOGICAL WATCHING BRIEF

4.1.1 Summary results of the watching brief are presented below. Figure 2 shows the location of the watching brief and Figures 3 and 4 the location of the archaeological features. As the trench was excavated in four different sections, effectively forming a rectangle, each section was numbered Trench 1 to 4 for the report (see Figure 2).

### 4.2 TRENCH 1

4.2.1 The groundworks commenced on the northern extent of the site, adjacent to the railway (see Figure 2; Plate 1). Approximately 57m of trenching was undertaken from the western to eastern portions of the site, which showed that the ground had been extensively disturbed by post-medieval activities, namely the construction of the London and North West Railway buildings. The recent demolition of these structures and the resulting debris raised the ground level by approximately 0.60m (see Plate 1). The initial machining involved the removal of this layer and is described as modern overburden **100**.



**Plate 1:** Excavation of the foundation trench northern extent of the site, facing west

4.2.2 The earliest horizon observed was the naturally occurring glacial till **104**. The character of the natural varied considerably across the excavated trench, consisting of deep red to orange, sterile gritty clayey sand with c20-30% small to medium sub-rounded to angular stone inclusions. In the western corner of the site, it had much

higher sand content and contained lenses of pea-grit rich sandy gravel. The natural subsoil in the middle and eastern extents of the trench were contaminated with a fuel like substance; therefore any archaeological features or layers were not observed as the contaminants had discoloured the natural.



**Plate 2:** Excavation of the foundation trench, facing north, note demolition rubble.

- 4.2.3 Overlying the natural was a dark brown to black silty deposit **108**, with a reddish brown burnt component, up to 0.90m deep. Approximately 80% of this deposit comprised modern building rubble. No significant archaeological layers of features were observed during the course of the excavation.

### **4.3 TRENCH 2**

- 4.3.1 The trench was located along the western extent of the site and is directly aligned with St Nicholas Bridge (see Figure 2 and 3; Plate 3). The trench measured 14m long by 0.90m wide. The natural was exposed at a maximum depth of 1.20m and consists of the same deep red to orange, sterile gritty clayey sand observed in Trench 2. A large ditch was observed cutting the natural within the middle portion of the trench (see Plate 4). The ditch, **105**, measured 1.2m wide and had an average depth of 0.60m with a U-shaped profile giving way to a concave base and was orientated broadly east-west. The nature of the silty primary fill **103** indicated accumulation of material from the slow erosions of the ditch sides, whilst the overlying fill **102** appears to have been deposited more rapidly, suggesting deliberate backfilling. The fill **102** produced a small assemblage of medieval pottery and a significant amount of burnt and heated clay which has been tentively identified as fragments of an oven or kiln which has been deposited into the ditch, perhaps when it went out of use. The ditch also

contained a small circular post or stake hole **107** on the northern side of the feature indicating a palisade type structure.



**Plate 3:** Trench 2, facing north



**Plate 4:** Trench 2 ditch **105**, facing east

4.3.2 The ditch was sealed by an anthropogenic humic silt, **101**, that was interpreted as a buried soil horizon. It was not present across the entire excavation area, and was only recorded in the section. The layer was seen to incorporate occasional charcoal flecking, presumably indicative of human activity and was the same soil horizon identified during the initial evaluation (Jones 2004). No dating evidence was recovered from the

layer, however it may represent the original ground surface before the construction of the London and North Western Railway. Approximately 0.60m of overburden made up the remaining depth of the trench.



**Plate 5:** Trench 2 ditch **105**, facing north-east

#### **4.4 TRENCH 3**

- 4.4.1 The trench was located on the southern extent of the site, adjacent to the site entrance (see Figure 2; Plates 6 and 7). Again approximately 57m of trenching was undertaken from the western to eastern portions of the site, which showed that the ground had been extensively disturbed in the post-medieval period. The ground level had been raised by approximately 0.80m due to demolition rubble. The initial machining involved the removal of this layer and is described as modern overburden **100**.
- 4.4.2 The lowest horizon encountered was indurated reddish clay sand **104**, which was clearly of natural origin. This was overlain by 0.35m of loose, pale grey silty sand, which was similarly of natural origin and was visible for approximately 35m in the south and north facing sections of the trench **109**. This formed the upper surface of the natural subsoils, into which a succession of post-medieval archaeological features was seen to have been cut, predominately within the eastern section of the site. These features consisting of brick walls and surfaces, as well as the remains of a substantial stonewall **110**, which relates to the London and North Western Railway wagon repair shop. Approximately 0.20m of demolition rubble and modern overburden **111**, made up the remaining depth of the trench.





**Plate 6:** Trench 3, facing west



**Plate 7:** Trench 3, facing east

## **4.5 TRENCH 4**

- 4.5.1 Trench 4 was located on the eastern extent of the site, adjacent to a new prefabricated building (see Figure 2). The trench measured 14m in length by 0.90m in width. The natural was exposed at a maximum depth of 0.90m and consisted of compacted reddish brown silty sand with patches of staining caused by diesel waste. Overlying the natural was 0.90m of modern overburden. No archaeological features or deposits were exposed during the course of the excavation.

---

## 5 FINDS

---

### 5.1 INTRODUCTION

- 5.1.1 The finds were cleaned and packaged according to standard guidelines, and recorded under the supervision of F.Giecco (NPA Ltd Technical Director). The metalwork was placed in a stable environment and was monitored for corrosion.

### 5.2 MEDIEVAL CERAMIC VESSELS

- 5.2.1 In total, 6 fragments of medieval ceramic vessels were recovered. Of these, 3 sherds were red gritty wares, 1 sherd was a sandy ware and the remaining 2 sherds were partially reduced grey wares. All of these were retrieved from within context **102**, which was interpreted as the second fill within the ditch **105** in Trench 2.
- 5.2.2 The red gritty wares retrieved included one sherd of Fabric One, which had a distinct brown glaze, and two sherds of Fabric Two. The main difference between these types is that Fabric One, which is the earlier form, is grittier than Fabric Two. These wares are so called due to the distinct grittiness created by the use of large, hard quartz inclusions within the tempering. Red gritty ware developed as a local, Cumbrian variant to northern gritty ware, and was used to create specific ceramic forms only, such as jugs, cooking pots, pitchers and jars. The date of this assemblage is approximately the 12<sup>th</sup> and early 13<sup>th</sup> centuries AD.
- 5.2.3 The sandy ware retrieved was of Fabric 51 Type, and exhibited the characteristic whitish-pink interior, with an exterior of apple green glaze. This form may originate from nearby Penrith, as regional wares similar to Fabric 51 have been proven to be manufactured from both here and further along the Cumbrian coast. The dating for this type of pottery is late 12<sup>th</sup> to early 13<sup>th</sup> century AD.
- 5.2.4 The final two sherds were partially reduced grey wares. This form of pottery developed in the 13<sup>th</sup> century AD and reached its height of use during the 14<sup>th</sup> century. This form had a distinct 'sandwich effect' cross section, which included a reduced grey core surrounded by pale grey margins. Both sherds were glazed olive green, which was commonplace during manufacture. This style of pottery was restricted to the manufacture of jugs.
- 5.2.5 The pottery assemblage therefore, can be roughly dated to the 12<sup>th</sup> to late 14<sup>th</sup> centuries AD. Until the later middle ages, Carlisle was one of the sole pottery production centres of the north-west, the only other being Newcastle in the north east. The assemblage appears to correlate to known forms being made within the north-west area, and therefore it is suggested that the origin for these sherds is likely to have been Carlisle.
- 5.2.6 The wide range of dates suggests that the deposition of context **102** is likely to have occurred sometime after the 13<sup>th</sup> century AD, due to the mixing of the various forms. All these types were manufactured at their height by the 13<sup>th</sup> century. However, it is highly likely that these finds represent a later deposition, as the

inclusion of pottery within ditches was a common practice to increase the drainage of waterlogged areas, especially within the later medieval periods.

### 5.3 MEDIEVAL FIRED CLAY FRAGMENTS

5.3.1 A total of 83 pieces of fired clay fragments were recovered from deposit **102**, within the ditch **105**, during the watching brief.

5.3.2 These fragments were observed to have striations on the surface, but visible inclusions of organic materials indicated that it was of a low quality temper. It is suggested that these are the waste materials from a kiln, although no evidence for a kiln was recovered from the site during the watching brief.

5.3.2 Due to the inclusion within the backfill deposit of **102**, the dating of this waste material has to be contemporaneous with that given for the pottery assemblage. Again, the deposition of these fragments may be later than the 13<sup>th</sup> century AD.

### 5.4 METAL OBJECTS

5.4.1 A total of 6 Fe objects were recovered from the watching brief at Doves Yard, Carlisle. The 6 Fe objects were recovered from context **102**, from within the ditch **105**, in Trench 2 (see finds table, below). The assemblage was dominated by corroded nails, which along with a small circular object, were unfortunately too corroded to identify or date. The size of the objects ranged from small fragments of 50mm to larger heavier fragments of 100mm.

Context	Trench	Material	Quantity	Weight (kg)	Period
(102)	2	Pottery	6	0.071	Medieval
(102)	2	Fe Objects	6	0.099	Medieval?
(102)	2	Ceramic fragments	83 pieces	5.685	Medieval?

Table 1: Finds Table of Artefacts Recovered from the Watching Brief.

---

## 6 ENVIRONMENTAL ANALYSIS

---

### 6.1 INTRODUCTION

- 6.1.1 Groundworks associated with the excavation of a construction trench for a new retail and commercial development were submitted to a watching brief after previous work had revealed archaeological features in the area (Jones 2004). The objective of this watching brief was to obtain an adequate record of any archaeological deposits or finds that were disturbed or exposed by work associated with the development. Only one environmental sample was recovered whilst the watching brief was being carried out. The objective of the environmental analysis was to establish the presence/absence, nature, extent and state of preservation of any ecofactual remains recovered and to determine their origins.
- 6.1.2 Context **102** was the fill of a ditch **105**. The environmental sample was recovered from this ditch. The fill overlay a possible erosion layer (Context **103**) that was an accumulation of material from the slow erosions of the ditch sides.

### 6.2 ENVIRONMENTAL REMAINS

- 6.2.1 The whole earth sample was selected for processing in order to assess the environmental potential of the material recovered. This will help provide further information as to the depositional processes involved in the formation of the material. The methodology employed required that the whole earth sample be broken down and split into the various different components. This was achieved by a combination of water washing and flotation. The recovered remains were then assessed for content.
- 6.2.2 Flotation separates the organic, floating fraction of the sample from the heavier mineral and finds content of sands, silts, clays, stones, artefacts and waterlogged material. Heavy soil and sediment content measuring less than the mesh size falls through the retentive mesh to settle on the bottom of the tank. Flotation produces a 'flot' and a 'residue' for examination, whilst the heavier sediment retained in the tank is discarded. The method relies purely on the variation in density of the recovered material to separate it from the soil matrix, allowing for the recovery of ecofacts and artefacts from the whole earth sample.
- 6.2.3 The retent, like the residue from wet sieving, will contain any larger items of bone, or artefacts. The flot or floating fraction will generally contain organic material such as plant matter, fine bones, cloth, leather and insect remains. A rapid scan at this stage will allow further recommendations to be made as to the potential for further study by entomologists or palaeobotanists, with a view to retrieving vital economic information from the samples. Favourable preservation conditions can lead to the retrieval of organic remains that may produce a valuable suite of information in respect of the depositional environment of the material, which may include anthropogenic activity, seasonality and climate and elements of the economy. Nomenclature follows Stace (1997).
- 6.2.4 The contents of the sample are listed below in Tables 2 and 3.

SAMPLE NUMBER	CONTEXT NUMBER	SAMPLE SIZE (litres)	FLOT SIZE (cm <sup>3</sup> )	RETENT SIZE (cm <sup>3</sup> )
1	102	10	150	2000

Table 2. Details of samples and contexts

DETAILS			RETENT						LIGHT FRACTION						
Context	Context type	Sample number	Root material	Charred wood	Magnetic material	Amorphous organic	Gravel	Stones	Amorphous organic	Charred oats	Charred grain	Charred wood	<i>Agrostema githago</i>	Roots	Woody plant parts
102	Fill	1	1	2	1	1	2	2	1	1	1	2	1	2	1

Table 3. Contents of flot and retent residues from the sample.

**Key to tables:** Fill = gully fill, Dep = deposit. Contents assessed by scale of richness 0 to 3. 0 = not present, 1 = present, 2 = common, 3 = abundant.

### 6.3 SAMPLE 1 (CONTEXT 102, TRENCH 2)

- 6.3.1 This moderately compacted dark brown deposit of silty sand was recovered from the fill of ditch **105**. The matrix consisted of 60% burnt clay and 40% charcoal fragments with some root material. Context **102** was the fill of the ditch **105** and overlay context **103**, a silty primary fill made up from the deposition of material from the sides of the ditch. The deposit **102** appeared to be an event of deliberate backfilling and produced a small assemblage of medieval pottery with a significant amount of burnt and heated clay that has been tentatively identified as fragments of an oven or kiln that were deposited into the ditch, perhaps when it went out of use.
- 6.3.2 The retent was made up of mainly gravel with some stones. Fired clay was also present and a fragment of medieval pottery. Small amounts of burnt bone were also recovered. Two metal objects were also recovered.
- 6.3.3 The flot had a number of large plant roots within the matrix. The remainder of the material recovered was charcoal with an amount of charred grain and a few charred seeds. The grain was, on the whole, well preserved. A total of 18 oats were recovered, varying in size, but in general very well preserved. The other 20 grains were more difficult to identify. Wheat, barley and possibly also rye were present and some were well preserved. The seed species present were *Agrostemma githago* corncockle and *Chenopodium* species fat hen. Corncockle is a weed of cereal crops.

## **6.4 DISCUSSION**

- 6.4.1 The feature from which the sample came has been tentatively interpreted as a field boundary ditch. Finds recovered from the context were fired or burnt and heated clay. The context seems to have been a dump or deposit of material laid down at the same time as one deliberate backfill. The matrix is conducive with that which would be recovered from a kiln as indicated by the burnt clay and charcoal. The charred grain indicates a corn-drying kiln, especially with the presence of the charred weed seeds. This may have been a secondary use for the kiln, perhaps originally constructed for metalworking.
- 6.4.2 Two metal artefacts were recovered from the retent of the sample. The first appears to be a corroded nail but the other was difficult to interpret. It was globular in shape and had the appearance of a large metal globule similar to those deposited from the smithing process. Under the microscope it could be seen that the sphere was hollow and had a small hole in one side of it. The metal was very shiny and first impressions would determine it as silver, although without proper analysis it cannot be firmly identified.
- 6.4.3 The weed seeds recovered were definitive. Corncockle is a weed of cereal crops and indicates that the grain was not 'clean'. Fat hen is an annual weed of damp nitrogen rich soils and it was also used as a subsistence food for both the seeds and the leaves in times of hardship. It is an associated arable weed as well and indicates the presence of arable farming or crop processing. These seeds together indicate arable farming and possibly crop processing. From the volume of the material recovered it suggests that this is only a small fragment of the initial material deposited and there was possibly more in the unexcavated portion of the ditch.

## **6.5 CONCLUSION AND RECOMMENDATIONS**

- 6.5.1 Charred grain was recovered in the flot from the sample and also weed seeds associated with arable crops. This indicates grain drying or cooking in the areas from which the sample originally came although it was redeposited in the ditch.
- 6.5.2 The potential for further information being gained from the examination of this material is limited and so it is recommended that no further work be done on the sample.

## **6.6 SCIENTIFIC DATING METHODS**

- 6.6.1 The finds were easily dateable by typology. Contexts were secure and there did not seem to be any mixing. The need for scientific dating methods is therefore unnecessary, following English Heritage Guidelines. The charred organic material recovered from the samples is not really suitable for carbon dating as it is charcoal from wood of unknown date so the result could potentially add approximately 400 years to the actual date as some of the wood could be as old as 4 or 500 years.

---

## 7 CONCLUSIONS

---

### 7.1 CONCLUSIONS

- 7.1.2 The results of a previous desk-based assessment showed that the site lay in close vicinity to an important medieval site, St Nicholas' Hospital, a medieval leper hospital dated to the late 13<sup>th</sup> to early 14<sup>th</sup> century, which was destroyed during the siege of Carlisle in 1645 (Jones 2004). A subsequent evaluation undertaken at the site uncovered medieval stakeholes and deposits in two trenches, thought to be contemporary with the hospital's use (*ibid*). Though there had been post-medieval and modern activity on the site, which had affected the area, it was clear that undisturbed and well preserved sub-surface archaeological remains could still exist.
- 7.1.2 Despite the high archaeological potential of the area, the watching brief did not encounter many significant archaeological remains, which confirmed the apparent truncation of the site during the 19<sup>th</sup> and 20<sup>th</sup> centuries. However, the remains of a medieval ditch were uncovered in one of the western foundation trenches. The ditch was fairly well-preserved, and contained 13<sup>th</sup> to 14<sup>th</sup> century medieval pottery within its upper fills, as well as the remains of what appears to be kiln fabric, potentially from a corn-drying kiln. The kiln may originally have been used for metal-working, as a metal globule, potentially silver, was uncovered within the fill. The secondary fill was clearly a back-fill deposit. The date of the ditch fits with the known dates for the medieval hospital 100m to the north-west.
- 7.1.3 As the groundworks were confined to the excavation of foundation trenches, there remains the possibility of localised survival of archaeological features at a similar depth in other areas of the site. The locations of all groundworks associated with the development were monitored, and an archive kept for future reference. Due to the continuing high archaeological potential of the area, any further development may be subjected to a similar scheme of archaeological mitigation, subject to the advice of the Historic Environment Officer for Cumbria County Council.

---

## 8 BIBLIOGRAPHY

---

### 8.1 PRIMARY SOURCES

- 1611 Carlisle and the Socage Manor
- 1746 Plan of St Nicholas, Carlisle, Based on an early 18<sup>th</sup> century map
- 1842 Studholme's Map of St Nicholas, Carlisle
- 1847 Botchergate Tithe Map
- Ordnance Survey 1<sup>st</sup> Edition 1865. HMSO © Crown Copyright
- Ordnance Survey 2<sup>nd</sup> Edition 1901. HMSO © Crown Copyright
- Ordnance Survey 3<sup>rd</sup> Edition 1925. HMSO © Crown Copyright

### 8.2 SECONDARY SOURCES

- Archaeology Data Service Website, [www.ads.ahds.ac.uk/](http://www.ads.ahds.ac.uk/)
- Countryside Commission, 1998, *Countryside Character Volume 2: The North-West*, Cheltenham
- English Heritage, 1991, *Management of Archaeological Projects (MAP2)*. London: English Heritage.
- Ferguson, R. S., 1890, *A History of Cumberland*. London: Elliot Stock.
- Giecco, F.O., 2001a, *Preliminary Report on Excavations at Botchergate*. Carlisle Archaeology. Unpublished Report.
- Giecco, F.O., 2001b, *An Archaeological Desktop Assessment on land at 84-88 Botchergate, Carlisle*. Carlisle Archaeology Project Designs and Client Reports 13/01.
- Giecco, F.O., 2001c, *Excavation Manual*. North Pennines Archaeology Ltd: Unpublished Document.
- IFA, 2002, *Standards and Guidance for Archaeological Watching Briefs*
- Jones, C, 2004, *Report on an Archaeological Desk-Based Assessment and Field Evaluation of Land at St Nicholas Bridge, Carlisle, Cumbria*. NPAL CP97/04 Unpublished Report.
- Jones, S., Taylor, J, and Ash, F, 2004. *Seed Identification Handbook: Agriculture, Horticulture and Weeds*. Cambridge: NIAB.
- McCarthy, M. R., H. R. T. Summerson & R. G. Annis, 1990, *Carlisle Castle: A Survey of the Documentary History*. London: Historic Buildings and Monuments Commission for England.



- Perriam, D. R., 1992, *Carlisle: An Illustrated History*. Carlisle: Bookcase, Cumbria Library and Tullie House Museum.
- Reeves, J., 2000, *Report on an Archaeological Evaluation at King Street, Botchergate, Carlisle*. Carlisle Archaeology Ltd. Client Report.
- Spence, R.T., 1984, The Backward North Modernized? The Cliffords, Earls of Cumberland and the Socage Manor of Carlisle 1611-1643. *Northern History*. XX: 64-87.
- SSEW, 1984, *Soils and their use in Northern England*. Soil Survey of England and Wales.
- Stace, C, 1997, *New Flora of the British Isles*. 2<sup>nd</sup> Edition, Cambridge
- UKIC, 1990, *Guidelines for the preparation of excavation archives for long-term storage*
- VCH, 1901, *Victoria County History: Cumberland*. Vol. II.
- Zant, J and Giocco, F., 1999, Recent work in Carlisle. *Current Archaeology*. 164, 306-9.

---

## **APPENDIX 1: FIGURES**

---