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REPORT ON
AN ARCHAEOLOGICAL
DESK-BASED ASSESSMENT
AND FIELD EVALUATION OF
LAND AT ST NICHOLAS
BRIDGE
CARLISLE
CUMBRIA

For MR A BROWN

NGR NY 4080 5490

Planning Application No. 1/03/1305

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NON-TECHNICAL SUMMARY

In January 2004 North Pennines Archaeology Ltd undertook an archaeological desk-based assessment and field evaluation on land adjacent to St Nicholas Bridge, Carlisle, Cumbria. This was in response to a brief prepared by Cumbria County Council Archaeology Service following a planning application for a commercial development by the client, Mr A Brown.

The work involved the assessment of historic sources held within the Cumbria County Sites and Monuments Record, Kendal and the County Record Office, Carlisle in order to set the site within its proper archaeological, historical, topographical and geographical context. This was followed by the excavation of four linear trial trenches in order to assess the presence/absence, extent, nature and state of preservation of archaeological deposits within a minimum 5% sample of the proposal area.

A series of stakeholes were observed cut into the natural subsoil within trenches 1 and 2, one of which contained medieval pottery. A layer of buried ploughsoil containing a significant quantity of medieval pottery sealed these stake holes. Pre-1900 deposits were significantly truncated by deposits associated with the London and North Western Railway, which included a Wagon Repair and a Creosoting Shed, both of which survive on site.

ACKNOWLEDGEMENTS

Thanks are due to the following people and institutions for their help, advice and communication provided throughout the project: Frank Giecco, Ken Denham, Patricia Crompton, Joanne Beaty of North Pennines Archaeology Ltd, Jeremy Parsons of Cumbria County Council Archaeology Service, Denis Perriam and Mr A Brown.

1 INTRODUCTION AND LOCATION

- 1.1 In January 2004 North Pennines Archaeology Ltd was commissioned by Mr A Brown to undertake archaeological works on land adjacent to St Nicholas Bridge, Carlisle, Cumbria (Planning Application Reference No. 1/03/1305). This consisted of a desk-based assessment and field evaluation. This report fulfils a brief prepared by Cumbria County Council Archaeology Service and concludes archaeological work on the site.
- 1.2 St Nicholas Bridge is situated close to the centre of the Historic City of Carlisle (NGR 4080 5490) and 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 12th century as a leper hospital and later used as almshouses.
- 1.3 The site is located on 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 19th century buildings, a former Wagon Repair Shed and a Creosoting Shed survive on the site in extended form. The area is shown in figure 1b.
- 1.4 The purpose of the assessment was to evaluate the site in order to define the presence or absence of archaeological remains. The fieldwork was undertaken in a single phase of five days duration. Archaeological deposits were excavated in plan and, where appropriate, in section, and were recorded in order to achieve an understanding of their nature, extent, depth and state of preservation. Any artefactual material was collected to facilitate the interpretation and date of the archaeological features. Bulk samples were taken in accordance to the NPA Ltd standard procedure in order to provide detailed paleo-environmental information.

2 PREVIOUS WORK

- 2.1 There has been no direct archaeological investigation on the site of the proposed development.
- In the late 19th century a number of Roman burials were discovered on both sides of Botchergate, extending from Court Square to London Road and Gallows Hill. At least 39 burials are known to have been discovered at different times, these comprise cremations and inhumations, together with miscellaneous discoveries of Roman pottery and other items (Giecco 2001).
- In 1997 traces of a small Roman settlement, possibly a farmstead, were found at St Nicholas Yard during an excavation by Lancaster University Archaeological Unit. The work revealed two broad, shallow ditches, which appeared to be separated by a metalled surface. Traces of possible burials and other features were also located. The excavations also revealed putative medieval features including an oven and the remains of walls, possibly associated with the former 12th century leper hospital (Howard-Davis and Leah 1999).

- During July and August 1997, Carlisle Archaeological Unit undertook a rescue excavation on land at 40-78 Botchergate, revealing a complex sequence of Roman period activity, including part of a large linear earthwork (Zant and Giecco 1999).
- A series of evaluations followed by large-scale excavations were carried out by Carlisle Archaeology during 1998 and 1999 between Tait Street and Mary Street on the eastern side of Botchergate, revealing Roman deposits including a number of cremation burials (Zant and Giecco 1999; Giecco 2001).
- 2.6 An evaluation was carried out in July 2000 by Carlisle Archaeology at King Street, revealing extensive archaeological deposits throughout the site, the vast majority of Roman date (Reeves 2000).

3 AIMS AND METHODOLOGY

3.1 The work undertaken consisted of a desk-based assessment, visual site inspection and field evaluation.

3.2 Project Design

3.2.1 A project design was prepared in response to a brief prepared by Cumbria County Council Archaeology Service. This included a detailed specification of works to be carried out, which consisted of a desk-based assessment prior to field evaluation.

3.3 Desk-Based Assessment

- 3.3.1 The desk-based assessment involved the consultation of the County Sites and Monuments Record in Kendal and County Record Office, Carlisle in the first instance. This involved the assessment of all readily available primary and secondary documentary and cartographic material and all available aerial photographs. Consultation of this material allowed a comprehensive understanding of the geographical, topographical, archaeological and historical context of the site.
- 3.3.2 The desk-based assessment was undertaken in accordance with the Institute of Field Archaeologists *Standards and Guidance for Archaeological Desk-Based Assessments* (IFA 1994).

3.4 Visual Site Inspection

- 3.4.1 A visual site inspection was undertaken in order to note any surface features of potential archaeological interest and to identify any potential hazards to health and safety, such as the presence of live services or constraints to undertaking archaeological fieldwork, such as Tree Preservation Orders and public footpaths.
- 3.4.2 No constraints or hazards could be identified from a visual site inspection. A survey of the site using a CAT scanner was undertaken in order to establish the locations of live services prior to the excavation of trial trenches.

3.5 Field Evaluation

3.5.1 This consisted of the excavation of 4 linear trial trenches in order to produce a predictive model of surviving archaeological remains detailing zones of relevant importance against known development proposals.

- 3.5.2 In summary, the main objectives of the evaluation were:
 - to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record these were they were observed;
 - to establish the character of those features in terms of cuts, soil matrices and interfaces;
 - to recover artefactual material, especially that useful for dating purposes;
 - to recover paleoenvironmental material where it survives in order to understand site and landscape formation processes.
- Each trench was mechanically excavated by a JCB 3CX excavator equipped with a toothless ditching bucket to the top of archaeological deposits, or the natural substrate, whichever was encountered first. Each trench was then manually cleaned and all features investigated and recorded according to the North Pennines Archaeology Ltd standard procedure as set out in the North Pennines Archaeology Ltd Excavation Manual. Photography was undertaken using a Canon EOS 100 Single Lens Reflex (SLR) manual camera. A photographic record was made using 400 ISO colour print film.
- 3.7 All work was undertaken in accordance with the Institute of Field Archaeologists Standards and Guidance for Archaeological Field Evaluations (IFA 1994).

4 HISTORICAL BACKGROUND

4.1 Place Name Evidence

4.1.1 In Roman times the settlement at Carlisle was known as *Luguvalium*. During the Later Medieval period the settlement was referred to as *Caer-luel*, meaning 'city of the king' or *Carleil*. French influence later added a silent 's', from which the modern day spelling *Carlisle* derives (Ferguson 1890, 344).

4.2 Prehistoric

4.2.1 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 including Grooved Ware and Beaker pottery was found at Scotby Road, 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*.

4.3 Roman

- 4.3.1 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 second 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.
- 4.3.2 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 19th 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.

4.4 Medieval

4.4.1 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 12th 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 13th and early 14th centuries. Lying outside the protection of the city walls, the hospital witnessed frequent

raids during the thirteenth and fourteenth 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; 199).

4.5 Post Medieval

- 4.5.1 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 border lands began. This saw a modernisation of tenureships 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). Figure 3 shows 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 (Figure 4), 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 south-west of the site.
- 4.5.2 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 (Figure 5) and the Botchergate Tithe Map of 1847 (Figure 6). The Tithe Map shows the adjacent fields as owned by the Lancaster and Carlisle Railway Company.
- 4.5.3 The Ordnance Survey 1st Edition of 1865 (Figure 7) shows the site occupied by the sidings and sheds of the London and North Western Railway Goods Depot. 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 3rd Edition (Figure 9).
- 4.5.4 In the early 21st century the site was occupied by two large warehouses, which formed part of the wagon repair and creosoting sheds. The remainder of the site is covered by a layer of tarmac and used as a car park.

5 RESULTS

- The trial trenches were machine excavated under the supervision of Frank Giecco, BA, Dip Arch AIFA, Principal Archaeologist. The evaluation was directed in the field by Chris Jones, BA, MA, PIFA, Assistant Archaeologist, North Pennines Archaeology Ltd. He was assisted by Joanne Beaty, Patricia Crompton and Ken Denham, Project Assistants.
- A total of four linear trial trenches were excavated, measuring between 20m and 30m in length, providing a 5% sample of a total area approximately 4700m².
- 5.3 All references to cardinal directions refer to site grid north.

5.4 Trench 1

- 5.4.1 Trench 1 was located at the far northwest part of the site and measured approximately 20m x 1.0m. The trench was oriented west-east for approximately 7m and northwest southeast for 13m forming a 'dog-leg' owing to the limitations of the site caused by the proximity of standing buildings. The natural substrate was observed at a depth of 1.20m and consisted of an orange-brown sandy clay (143).
- 5.4.2 This was cut by a series of small stake holes 0.05m 0.10m in diameter (Contexts 146, 148, 150, 152, 154, 156, 158, 160, 162, 164, 166, Figure 11; Plate 1). These appeared to form the outline of the north-western corner of a probable small timber building. A small sherd of 12^{th} century red gritty ware pottery was recovered from the fill (147) of stake hole (146).
- 5.4.3 The natural substrate (143) was sealed by a layer of mid-brown silty loam consistent with a buried ploughsoil (110) which contained a significant quantity of Roman and medieval pottery sherds. This was sealed by a re-deposited layer of orange-brown gravelly clay (109), these were in turn sealed by a mid-grey silty clay deposit containing gravel > 25% of the context. The matrix lay beneath a gritty black clinker layer 0.20m thick and of likely modern origin (106), which was in turn sealed by a layer of 20th century concrete (100) (Figure 10).

5.5 Trench 2

- 5.5.1 Trench 2 was located in the north-central part of the site and measured 20m x 4.0m, and the trench was oriented northwest–southeast. The natural substrate was observed at a depth of 1.20m and consisted of an orange-brown silty clay (143).
- A small highly truncated linear feature (137) was recorded running approximately north-south along the eastern limit of the trench. This feature was filled by a grey silt (136, sample number 1) and measured approximately 0.60m in width and 0.20m in depth. It is possible that this feature may represent the base of a medieval field boundary.
- 5.5.3 Towards the south western limit of trench 2 context 143 was cut by two small, circular stake holes c. 0.10m in diameter (139 and 171), which may indicate the presence of a slight timber structure.

- 5.5.4 Both the stakeholes (139 and 171) and the ditch fill (136) were sealed by a layer of mid-grey silty clay loam (105), which is likely to represent a plough soil containing a finds assemblage dating from the Roman period through to the early 19th century. This layer was then sealed by a levelling layer consisting of redeposited gravelly orange brown sandy clay 0.15m thick (102). This context was sealed by a black gritty clinker deposit (101) characteristic of a levelling layer prior to the creation of the railway yards.
- 5.5.5 Contexts 105 and 143 were cut by a modern brick culvert oriented east-west. A similar brick and stone culvert filled by grey silty clay and pink clay cut 143, which was also cut by a number of modern service trenches.

5.6 Trench 3

- Trench 3 was located in the eastern half of the site, measuring approximately 30m x 1.50m and oriented north south and east west, forming a 'dog-leg' caused by the presence of live services on the site. The natural substrate was observed at a depth of 1.20m and consisted of a gravelly sandy clay (143). This was cut by a sub-oval pit (144), filled by a mid-grey silt (145) containing modern porcelain and iron fragments. In areas of limited 19th century truncation the natural substrate was sealed by a deposit of mid-grey silty loam characteristic of a buried ploughsoil (172). This deposit, unlike context (110) did not contain fragments of Roman or medieval pottery, although it is likely similarly related to the agricultural use of the site prior to industrialisation. Neither did the deposit extend across the whole of the trench, as it was cut by 19th century clinker pits and modern service trenches.
- 5.6.2 Context 110 was sealed by a layer of redeposited orange-brown gravelly sandy clay (109), which was covered by a deposit of slag and rubble (168), sealed by a layer of modern tarmac.
- No archaeological features prior to the 19th century could be identified within this trench.

5.7 Trench 4

- 5.7.1 Trench 4 was located in the eastern part of the site, measuring approximately 30m x 1.50m and oriented northeast southwest, although this trench was not linear owing to the presence of live services. The natural substrate was observed at a depth of 1.20m and consisted of an orange brown, gravelly, sandy clay (143).
- 5.7.2 The archaeological deposits and structures within trench 4 were exclusively 19th and 20th century in date and included brick walls and platforms along with a brick structure which appeared to be a maintenance pit. The pit contained an ash and clinker fill ounded by brick walls and a series of timber planks. No anthropogenic material was recovered from this trench.

6 THE FINDS

The finds have been recorded using the NPHT standard methods, and have been packaged appropriately for long term storage using airtight plastic bags and boxes. A complete quantitative list is provided in the table below.

Trench No	Context No.	Glass Frags	Glass bottle	Brick	PMP	Roman pot	Medieval pot	Clay Pipe Frag s		Tile	Bone	Stone
1	110	0	0	6	9	6	79	2	2	0	3	0
1	121	1	0	0	6	0	0	0	0	1	0	0
1	147	0	0	0	0	0	1	0	0	0	0	0
2	110	1	0	0	4	1	29	2	0	0	2	1
2	105	0	3	0	0	0	0	1	0	0	0	0
3	145	0	0	0	2	0	0	1	11	0	0	0
Totals		2	3	6	21	15	101	6	13	1	5	1

Table 1: St Nicholas Bridge STN-A: Finds by Context.

- The Roman pottery assemblage was all highly abraded and appears to be residual within context 110. The assemblage was made up of 4 fragments of Mancetter-Harts hill mortarium, 1 body sherd of oxidised ware and 1 sherd of grey Crambeck ware.
- 6.3 The medieval pottery sherds were dominated by body sherds all showed signs of abrasion and dated from the 12th to the 15th centuries and included fragments of red gritty ware, partially reduced grey ware and late medieval reduced grey wares.
- Three fragments of burnt bone were recovered from the buried ploughsoil, this may be indicative of disturbance of cremation burials through extensive ploughing as Roman cremations are known from the surrounding area.
- 6.5 There were 2 unidentified iron fragments from within the buried ploughsoil (110), however the bulk of the iron fragments were from contexts dating to the 19th century or later.
- 6.6 The Glass assemblage apart from 1 small fragment of possible clear medieval window glass (from context 105) was made up of late 19th/early 20th century material.

7 THE BONE, SHELL, AND ENVIRONMENTAL REMAINS

7.1 THE BONE

7.1.1 Very little bone was recovered from the site, all of which was from context 110 the buried plough soil. All three fragments were burnt, two to a high temperature and the other, as it was still quite friable, to a lower temperature. None of the fragments were identifiable to species. Throughout history the remains household refuse including the ash of spent fires have been used to fertilise and enhance soils. As pieces of cinder, coal and charcoal were also recovered from this context, this would be a possible origin for these bone fragments.

7.2 ENVIRONMENTAL REMAINS

CONTEXT	TYPE	ERA (see	Description
NUMBER		finds)	
105	Plough soil	Medieval-	Chenopodium species seeds found
(Sample 2)		early 19 th	
		century	
136	Silt	medieval	Suite of seeds found
(Sample 1)			
141	Fill of stake	medieval	Root material and charcoal particles found
(Sample 3)	hole		

- 7.2.1 Only two contexts were suitable for sampling for environmental evidence, a third small sample being taken from a stake hole. The samples were each passed through a flotation tank to separate the heavy 'retent' fraction from the lighter 'flot' or floating fraction. The soil matrix was separated out and removed via a 1mm mesh. The retent and the flot were then examined for environmental remains. The contexts sampled were 105 (sample 2), 136 (sample 1) and, from the stake hole, context 141 (sample 3).
- 7.2.2 Context 105 (trench 2, sample 2) has been interpreted as a buried ploughsoil and is thought to be contemporary with 110, the buried plough soil found in trench 1. Unusually the only seed type found in context 105 were those from the *Chenopodium* species, mostly Fat hen. This is a weed of arable land and waste ground. Up until the early 19th century both the seeds and leaves of Fat hen were frequently utilised as an edible crop.
- 7.2.3 The seeds recovered from this context were very well preserved. This suggests the conditions for seed recovery should be good. It is unusual to find only one species present. Over time this soil may have become sterile through neglect or non use, at this time the land may have been invaded by the *Chenopodium* species. It is possible, but unlikely, that the species were cultivated for consumption if the ground was unfit for other crops.

- 7.2.4 The retent of this sample contained several finds. There were 2 pieces of Medieval pottery, one of green glazed ware and the other of red gritty ware. A piece of window glass could be either Roman or Medieval. A fragment of pipe stem was recovered from the retent that also contained coal fragments and some charcoal. Household waste including waste hearth material were known to have been used as fertiliser and soil enhancers from very early periods, which explains their presence in the soil. The remainder of the retent was made up of small stones and medium grit
- 7.2.5 Sample 1 (context 136) was composed of silt with inclusions of twigs and a few small stones, and appeared to be the primary fill of a truncated ditch. After processing the retent was found to be composed of waterlogged twigs, ranging in size from 1 cm to 0.2 cm diameter. There were several medium stones present to 10 cm in length. A larger piece of red sandstone (15 x 15 cm) had several lines etched into the surface in a sunray design.
- 7.2.6 There were large quantities of nematode egg cases suggesting an active soil in the area of wash down into the ditch. Insects found comprised weevils and wings from small fly species, possibly midges. There were a few pieces of moss present.
- 7.2.7 The suite of seeds found was very interesting and they were well preserved due to the waterlogged conditions that would have prevailed at the bottom of the ditch. There were several seeds associated with waste places and arable land. These included docks (*Rumex* species), chickweed (*Stellaria media*), corn spurrey (*Spergula arvensis*) and Fat hen (*Chenopodium album*). There were also seeds of shady places and hedgerows such as raspberry (*Rubus idaeus*), crab apple (*Malus silvestris*), and wood sorrel (*Oxalis acetosella*). The twigs were also those of hedgerow species rather than trees. They included blackthorn and crab apple. Wild grasses were also present and numerous seeds of the lettuce family (*Lactuca* sp.) with some common nettle (*Urtica dioica*).
- 7.2.8 These seeds, with their very different requirements, suggest that there were several different types of habitat within the vicinity of the ditch. There would have been arable, cultivated land as well as shaded hedgerows as a source of the seeds with an area from which wild grasses and plants from the lettuce family could have come. This suggests a system of arable farming with boundaries of hedgerows. Some weed intrusion would also have been present. No crop seeds were found apart from those of the lettuce family.

8 CONCLUSIONS

- 8.1 The evaluation has revealed that large parts of the site have been heavily truncated by 19th century structures associated with the Victorian goods yard and later wagon repair shop. The presence of numerous modern service trenches has also destroyed large areas of potential archaeology.
- A series of stake holes surviving in trench 1 and trench 2 and possible boundary ditch in trench 2 suggest the remains of possible timber structures of probable medieval date surviving in plan. Furthermore, the survival in places of a buried ploughsoil containing redeposited Roman and medieval pottery and fragments of cremated bone are evidence at least of the site's proximity to areas of Roman and medieval activity and suggest a possible survival of similar deposits elsewhere on the site.

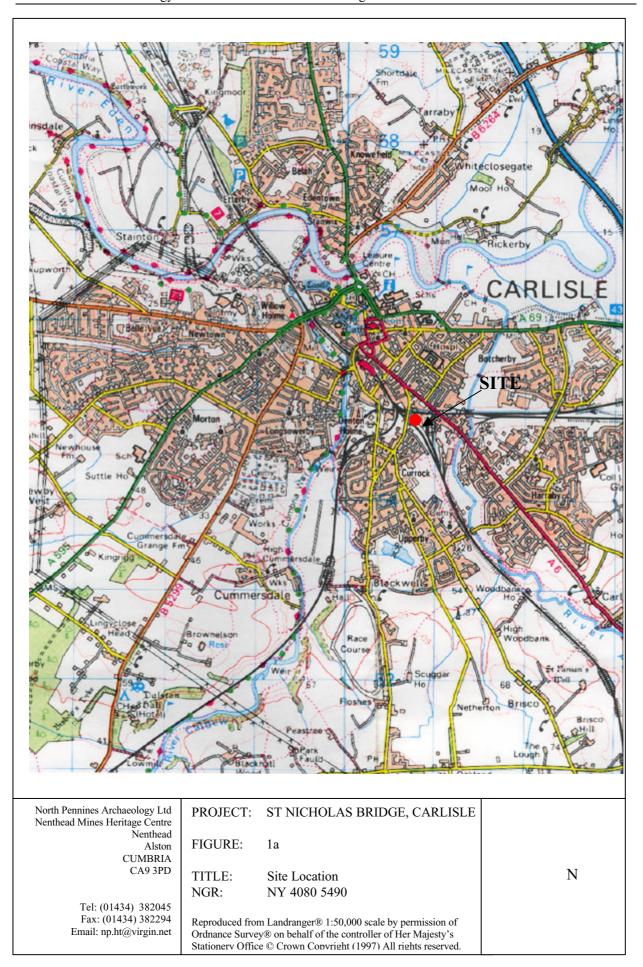
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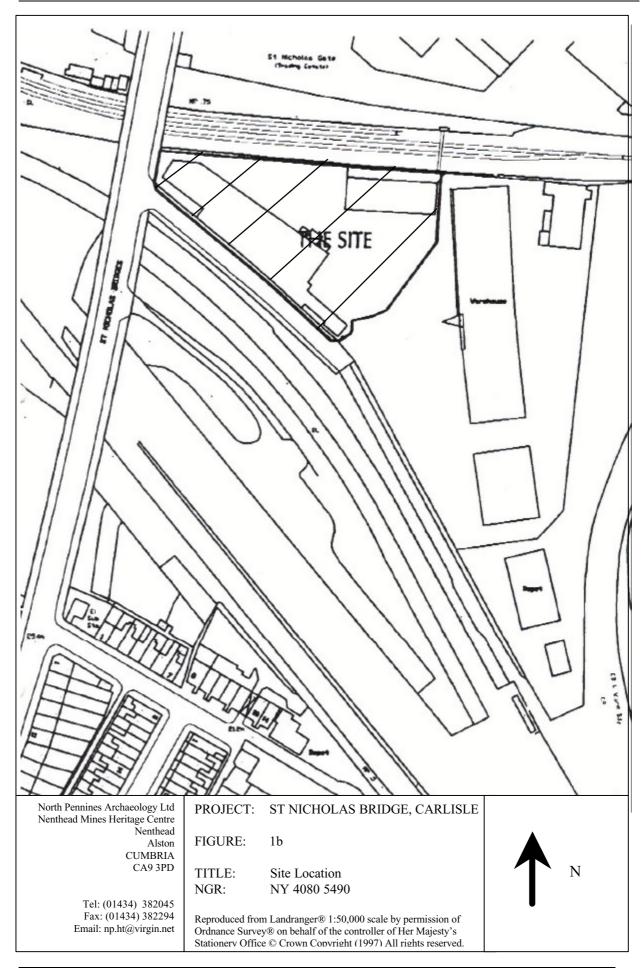
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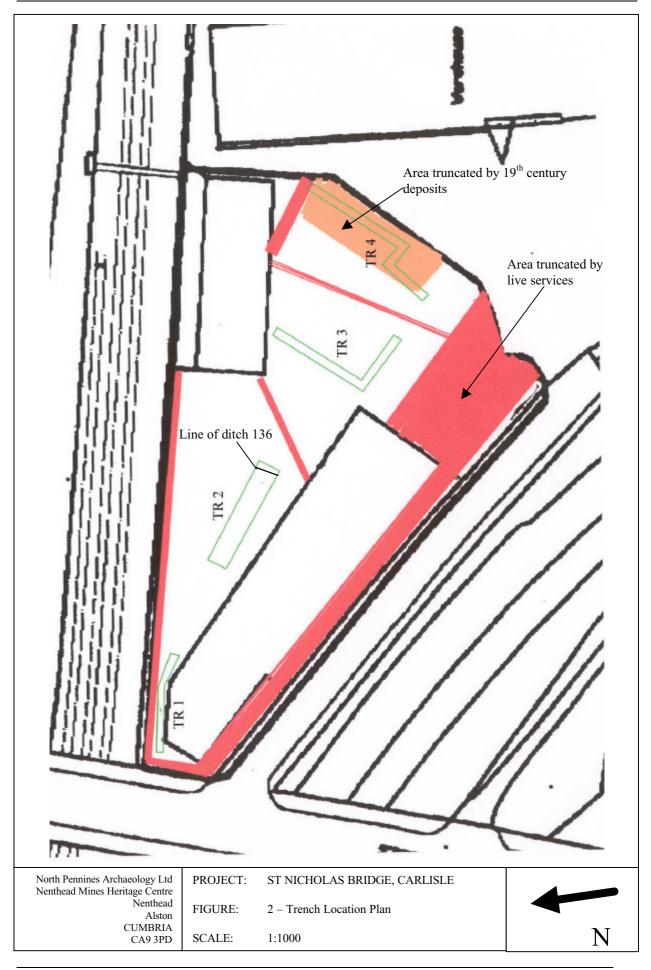
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- Ordnance Survey 2nd Edition 1901. HMSO © Crown Copyright
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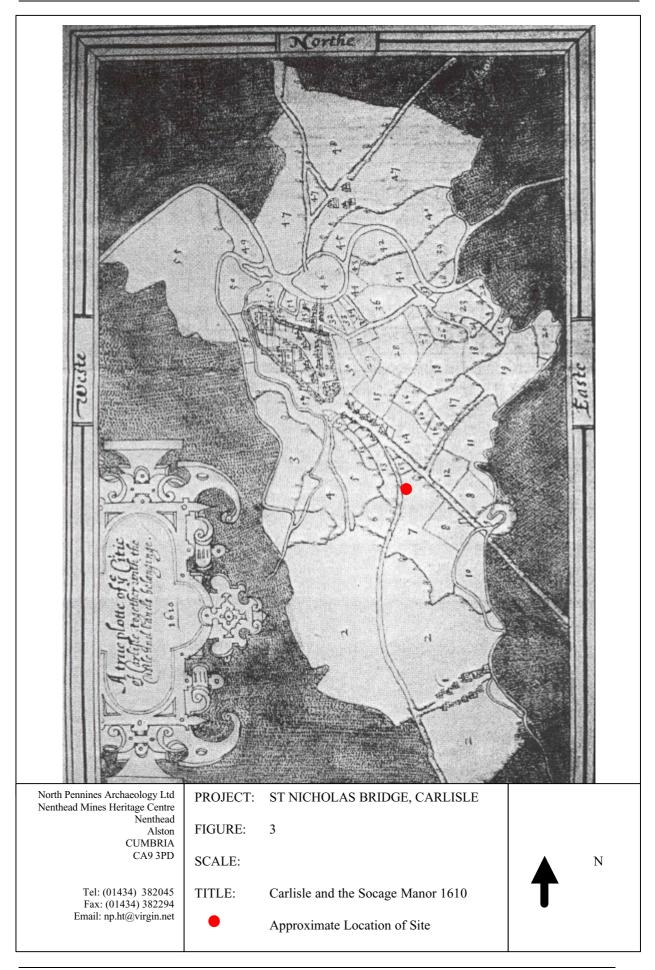
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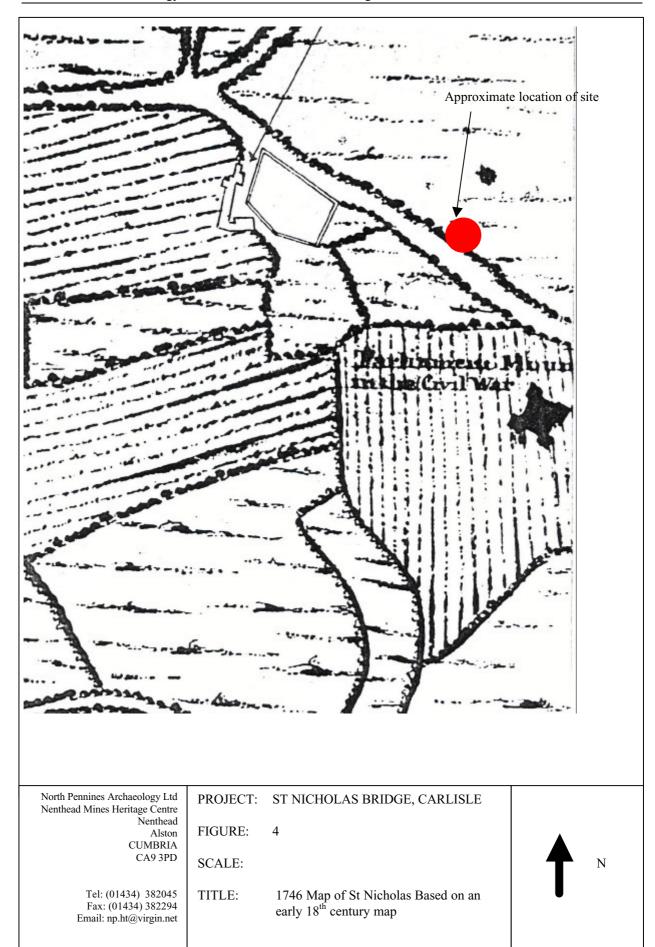
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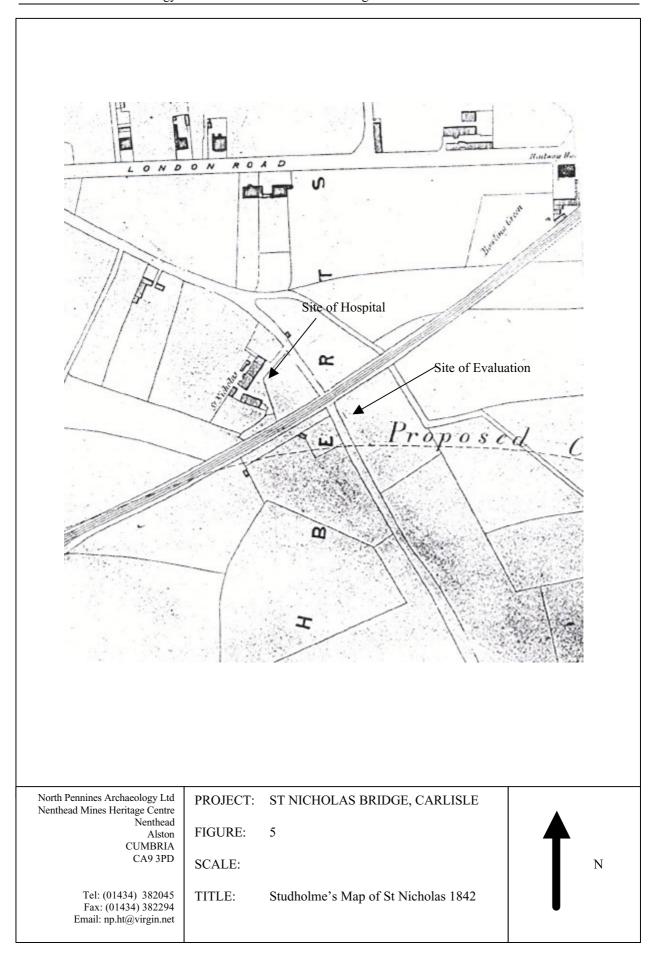


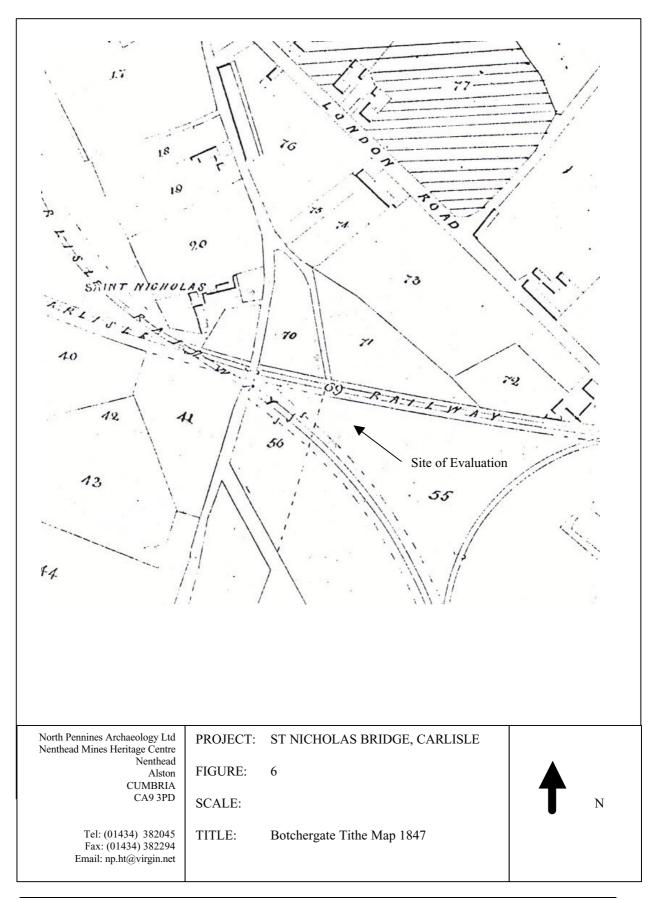


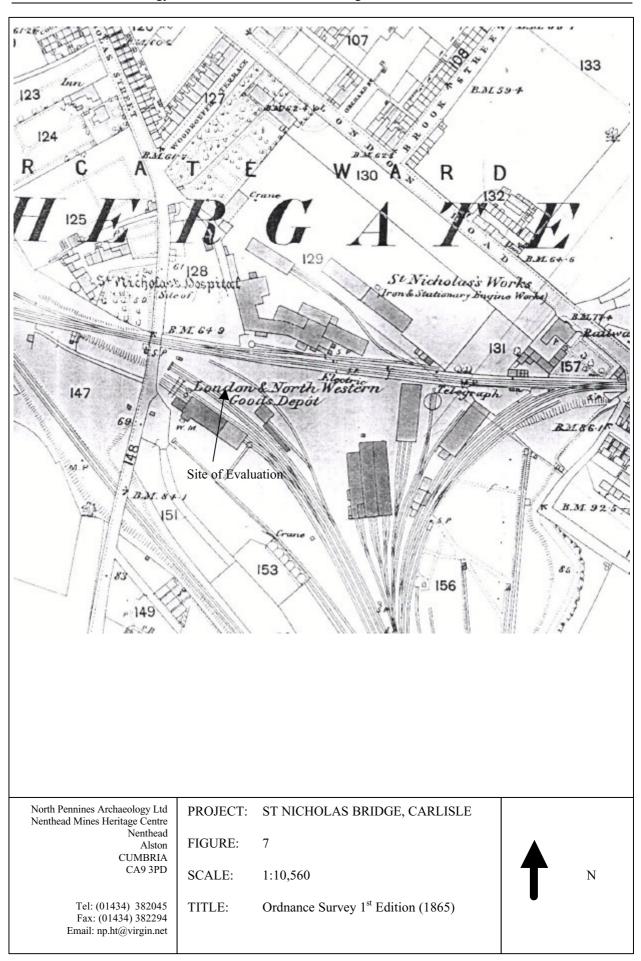


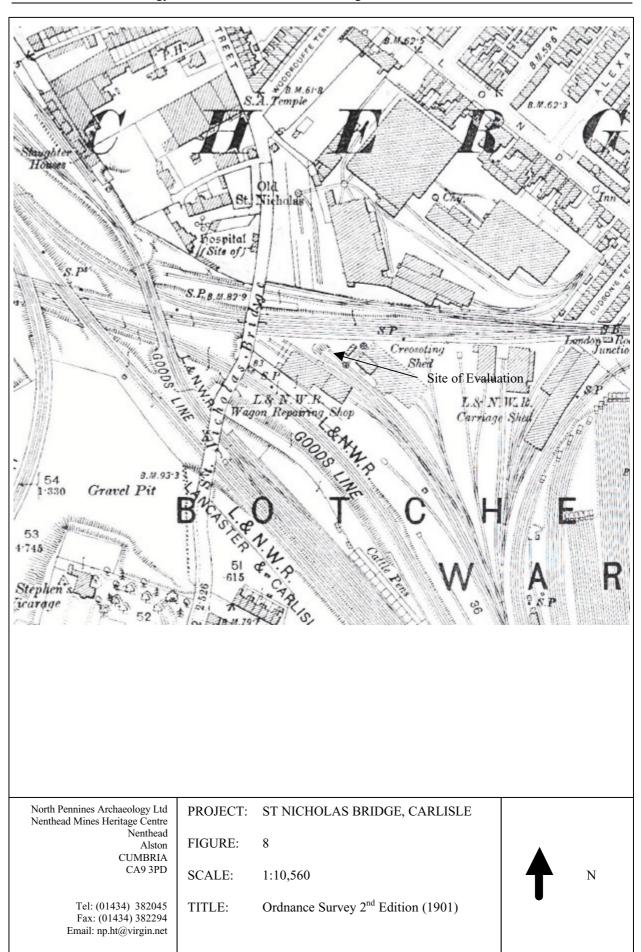


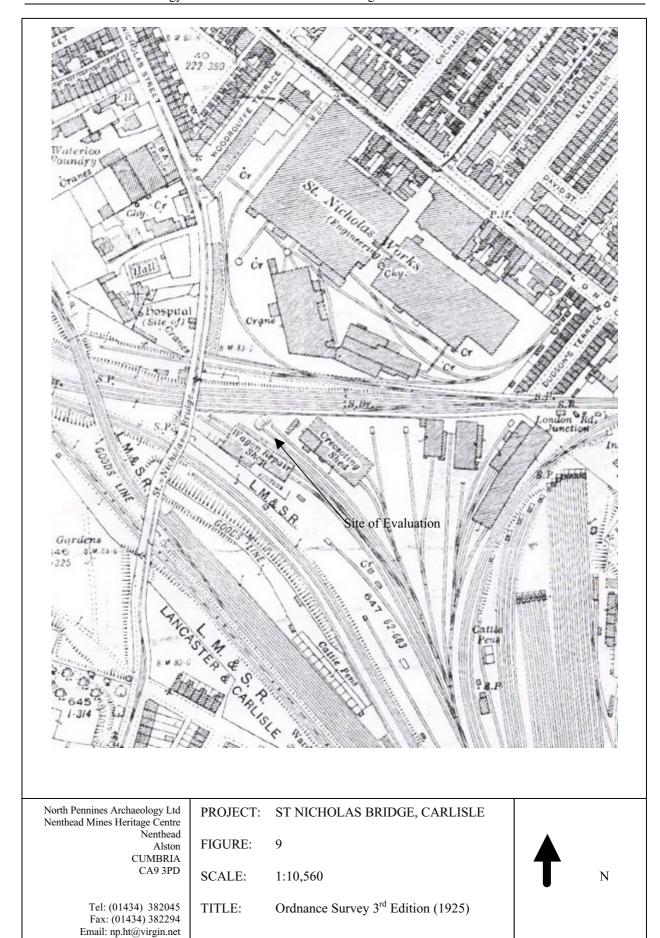


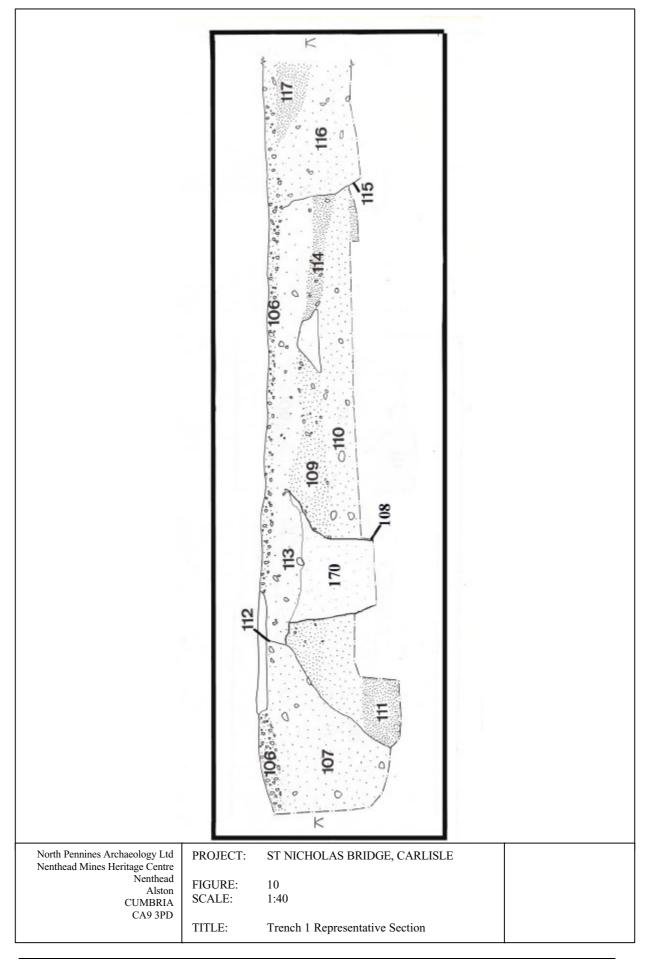


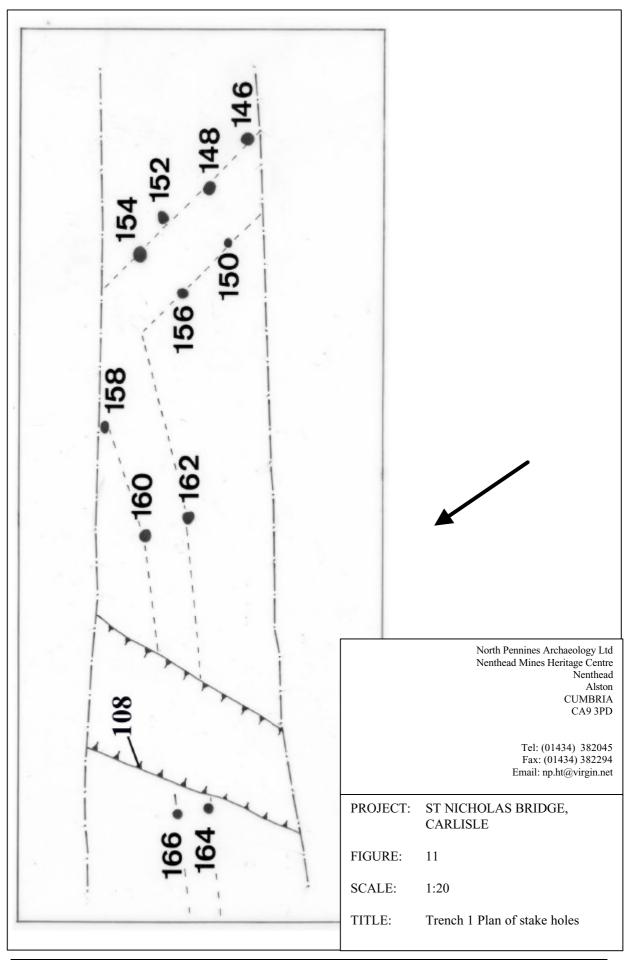












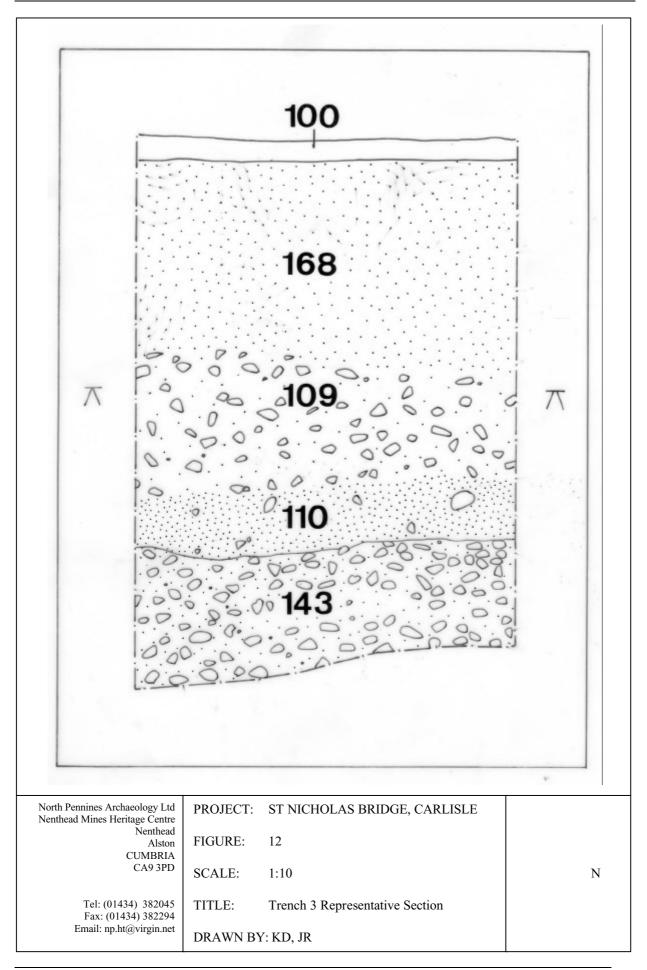




Plate 1: Trench 1. Series of Stake holes forming the north-west corner of a possible rectangular building of probable medieval origin. (Photo: C.Jones)



Plate 2: Trench 4 Victorian brick lined clinker pit. (Photo: C.Jones)

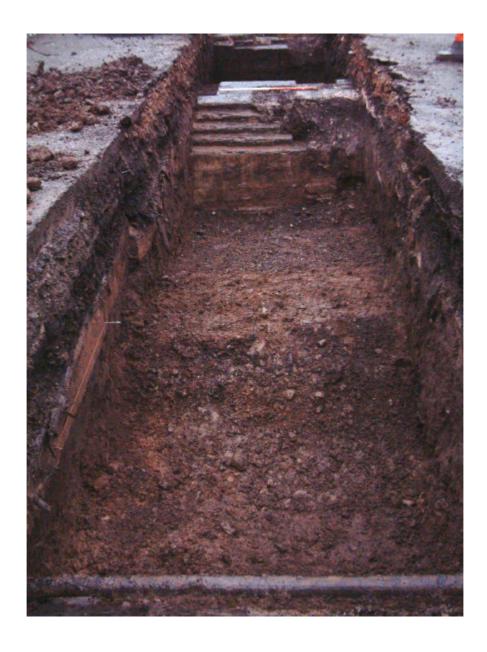


Plate 3: Trench 4 General shot of trench 4 illustrating extensive 19th and 20th century disturbance in trench. (Photo: C.Jones)