

**LAND ADJACENT TO THE
ONCE BREWED YOUTH
HOSTEL AND NATIONAL
PARK CENTRE,
NORTHUMBERLAND**

**ARCHAEOLOGICAL
EVALUATION REPORT
CP. No: CP10696
30/04/2014**



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Quality Assurance

This report covers works as outlined in the brief for the above-named project as issued by the relevant authority, and as outlined in the agreed programme of works. Any deviation to the programme of works has been agreed by all parties. The works have been carried out according to the guidelines set out in the Institute for Archaeologists (IfA) Standards, Policy Statements and Codes of Conduct. The report has been prepared in keeping with the guidance set out by Wardell Armstrong Archaeology on the preparation of reports.

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SUMMARY

Wardell Armstrong Archaeology was commissioned by Laura Sole, Sill Project Co-ordinator for the provision of archaeological services for Northumberland National Park Authority (NNPA) and the Youth Hostel Association (YHA), to undertake a desk-based assessment and archaeological evaluation at Land adjacent to the Once Brewed Youth Hostel and National Park Centre, Northumberland (NGR NY 75242 66904). The work is needed to support a planning application for the construction of a Landscape Discovery Centre. Northumberland county council and Northumberland National Parks Authority granted planning consent for the development, on the condition an archaeological evaluation be undertaken. The work is required as the site lies within an area of high archaeological significance; within the Frontiers of the Roman Empire World Heritage Site (Hadrian's Wall) and adjacent to a number of listed buildings and Scheduled Ancient Monuments. At the north of the site boundary are the remains of the vallum (SAM 26063) associated with the composite defences of Hadrian's Wall. Two Roman marching/ temporary camps (SAM 26017 & 26008) are located to the south and south-west.

The first of two phases of archaeological evaluation (Phase 1) was undertaken over three days between the 5th and 7th November 2013. The evaluation involved the excavation of five trenches, totalling 46m in length, 69m² in total area. Trenches 1-3 confirmed the southern limit of the southern bank of the Vallum associated with the defensive line Hadrian's Wall. A probable early 2nd century palaeosoil horizon was sealed by the construction of an early bank of stacked turf which seemed to form the earliest phase of the construction of the Vallum bank. Trenches 4 & 5 confirmed that the area of the car park to the south of the visitors centre had previously been heavily terraced and disturbed.

The second phase of archaeological evaluation (Phase 2) was undertaken over four consecutive days between the 14th April and the 17th April 2014, and involved the excavation of 14 trenches within a field immediately south of the visitors centre and youth hostel. The location of the trenches were determined based on both geophysical and LIDAR data. Eleven of the trenches measured 30m in length and 1.6m in width, with a further three trenches measuring 24m in length and 1.6m in width, covering 643.2m² of the 1.9ha investigation area. All were excavated to the level of the natural substrate. No finds, features or deposits of archaeological significance were revealed during Phase 2 of the archaeological investigation.

ACKNOWLEDGEMENTS

Wardell Armstrong Archaeology would like to thank Laura Sole, Sill Project Co-ordinator for the provision of archaeological services for Northumberland National Park Authority (NNPA) and the Youth Hostel Association (YHA), for commissioning the project, and for all assistance throughout the work. Wardell Armstrong Archaeology would also like to thank, Chris Jones, Historic Environment Officer (NNPA), and Mike Collins, Inspector of Ancient Monuments (Hadrian's Wall) at English Heritage for their assistance and advice throughout the project. Wardell Armstrong Archaeology would also like to extend their thanks to the Northumberland National Park Authority Rangers, for their help and access to facilities offered during this project.

Wardell Armstrong Archaeology also extend their thanks to Potts Plant Hire, for their help during this project.

The Project Proposal was written by Frank Giocco. Phase 1 of the archaeological evaluation was undertaken by Adam Slater and Cat Peters. Phase 2 of the evaluation was undertaken by David Jackson, Kevin Mounsey and Kevin Horsley. The report was written by Adam Slater and David Jackson, and the drawings were produced by Adrian Bailey. The project was managed by Frank Giocco, Technical Director for Wardell Armstrong Archaeology.

1 INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 Wardell Armstrong Archaeology was invited by Laura Sole, Sill Project coordinator for the provision of archaeological services for Northumberland National Park Authority (NNPA) and the Youth Hostel Association (YHA), to undertake a archaeological evaluation at land adjacent to the Youth Hostel and Northumberland National Parks Authority visitors centre, Once Brewed, Northumberland (NGR; NY 75242 66904, Figure 1). The proposed works lie within the immediate vicinity of the Roman Frontiers World Heritage Site (Hadrian's wall) with the southern Vallum of the frontier defences running through the north of the site (SAM 26063). As a result, Chris Jones, archaeologist for Northumberland National Park Authority requested a programme of archaeological investigation, prior to the development taking place. This is in line with government advice as set out in Section 12 of the National Planning Policy Framework (NPPF 2012).
- 1.1.2 This archaeological evaluation formed Phase 1 of the archaeological works within the proposed development area, with Phase 2 involving the excavation of further trenches within a field to the south of the current buildings.
- 1.1.3 The archaeological evaluation was undertaken following approved standards and guidance (IfA 2008), and was consistent with the specification provided by Giocco (2013) and generally accepted best practice.
- 1.1.4 This report outlines the evaluation works undertaken on-site, the subsequent programme of post-fieldwork analysis, and the results of this scheme of archaeological works.

2 METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 A Project Proposal/ Project Design was submitted by Wardell Armstrong Archaeology in response to a request by Laura Sole, Sill Project Co-ordinator for the provision of archaeological services for Northumberland National Park Authority (NNPA) for an archaeological evaluation of the study area. Following acceptance of the project design by Chris Jones, Historic Environment Officer, Northumberland National Parks Authority, Mike Collins, Inspector of Ancient Monuments (Hadrian's Wall) at English Heritage and Mark Newman at The National Trust; Wardell Armstrong 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 for Archaeologists (IfA), and generally accepted best practice.

2.2 THE FIELD EVALUATION

2.2.1 The Phase 1 evaluation consisted of the excavation of 5 trenches covering 69m² of the proposed development area. Phase 2 of the evaluation involved the excavation of 14 trenches covering 643.2m² of the 1.9ha investigation area. The purpose of the evaluation was to establish the nature and extent of below ground archaeological remains within the vicinity. All work was conducted according to the recommendations of the Institute for Archaeologists (2008).

2.2.2 In summary, the main objectives of the field evaluation were:

- to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record these where they were observed;
- to establish the character of those features in terms of cuts, soil matrices and interfaces;
- to record the nature, date and extent of any features associated with the Frontier zone of Hadrian's Wall;
- to recover artefactual material, especially that useful for dating purposes;
- to recover palaeoenvironmental material where it survives in order to understand site and landscape formation processes.

- 2.2.3 Turf and topsoil was removed by mechanical excavator under close archaeological supervision. The trial trenches were subsequently cleaned by hand and all features were investigated and recording according to the Wardell Armstrong Archaeology standard procedure as set out in the Excavation Manual (Giecco 2013).
- 2.2.4 The fieldwork programme was followed by an assessment of the data as set out in the Management of Archaeological Projects (2nd Edition, 1991).

2.3 THE ARCHIVE

- 2.3.1 A full professional archive has been compiled in accordance with the specification, and according to the Archaeological Archives Forum recommendations (Brown 2011). The archive will be deposited within Northumberland Archives, with copies of the report sent to the Northumberland Historic Environment Record at Morpeth, available upon request. The archive can be accessed under the unique project identifier **WAA13, OBV-A/OBV-B, CP 10696**.
- 2.3.2 Wardell Armstrong Archaeology, Northumberland National Park Authority and English Heritage, support the **Online Access to the Index of Archaeological Investigations (OASIS)** project. This project aims to provide an on-line index and access to the extensive and expanding body of grey literature, created as a result of developer-funded archaeological work. As a result, details of the results of this project will be made available by Wardell Armstrong Archaeology, as a part of this national project.

3 BACKGROUND

3.1 LOCATION AND GEOLOGICAL CONTEXT

- 3.1.1 The Once Brewed Youth Hostel and visitors lies to the immediate south of the B6318. The land slopes from north to south and is highly undulating and crossed by stream gullies to the south of the development area. The site lies at between a height of approximately 200m and 226m AOD.
- 3.1.2 The underlying geology is part of the Yoredale group, comprising limestone with subordinate sandstones and argillaceous rocks (British Geological Survey 2013). No drift geology is recorded in the evaluation area, but surrounding areas include glacial till and peat deposits accumulated in stream gullies.

3.2 HISTORICAL CONTEXT

- 3.2.1 *Prehistoric*: the earliest evidence of activity comprise of possible Bronze Age field boundaries located 1km north-east of the evaluation area at Sycamore Gap (HER 6676); Bronze Age funerary monuments in the form of a round cairn (HER 6586, located 1.5km east of the evaluation area) and a ring cairn with evidence for funerary use (HER 6955, located 3.5km north of the evaluation).
- 3.2.2 Iron Age activity in the wider environs of the current evaluation include two sub-rectangular enclosures 2km south at Shawhead Hill (HER 15329), and 3km south at Henshaw (HER 15336). Suggestions of Iron Age cultivation in the form of spade dug corded rig have been identified at Greenlee Lough, 3km north of the evaluation (HER 12318, 12319, 12320, 12322, 12346, 12371, 12396, 12397 & 12398).
- 3.2.3 *Roman*: The environs of the area of evaluation were very heavily affected by Roman occupation, the most prominent being that of the complex of boundaries associated with Hadrian's Wall. However, the earliest system of Roman military control was the *Stanegate*, a series of forts and fortlets built along the Roman road between Carlisle and Corbridge during the Flavian period (AD 69-96) to consolidate the rapid military occupation of Britain since initial invasion in AD 43. It is probable that the two large temporary camps (SAM 26017 & 26008) located immediately to the south-west and south of the current evaluation were associated with increase in military activity building up to this period of consolidation.
- 3.2.4 The early second century saw unrest in the region, with many forts and fortlets north of the Tyne-Solway line being destroyed by a hostile

- population (Daniels 1978). This led to the decision by Imperial authorities to build a definite, continuous and permanent frontier from the Tyne to the Solway, known as Hadrian's Wall; the primary phase of which was constructed in the AD 120s and was in the course of its use, frequently re-modeled and expanded.
- 3.2.5 The wall itself is located approximately 500m to the north of the current evaluation area following the geological ridge; but the stone barrier formed only part of the final frontier boundary. To the south of the wall there was a military road and to the south of this was a deep, wide, flat bottomed ditch bounded on each side by an upcast bank (Vallum), creating a wide gap bounding the south of the militarised zone of the wall, only being crossed at the wall forts.
- 3.2.6 *Medieval*: The current area of evaluation lies within the medieval manorial lands of Henshaw, first recorded in the twelfth century (Hodgeson 1840). It is likely from the presence of several *sheilings* in the wider landscape that sheep and cattle formed a strong element of the medieval economy. Ridge and furrow is identified to the immediate west and south of the evaluation area, possibly utilising the flat land of earlier Roman forts and a probable Medieval Farmhouse was excavated 500m to the north (OAN 2013).
- 3.2.7 *Post-medieval*: The most dramatic post-medieval feature of the immediate landscape is the Newcastle to Carlisle Military Road, constructed between 1751 and 1759 following the suppression of the Jacobite uprising of 1745/6. Much of the masonry of Hadrian's wall was used in the construction of the road and occasionally runs along the line of the wall itself. In the central section, the road follows the line of the Vallum, and at Once Brewed, the Military Road was built directly on top of the Vallum ditch. The 18th century road is still in use as the current B6318. A heavy degree of quarrying, exploiting the stone within the boulder clay adjacent to the road was carried out during the 19th century, with large quarries still visible directly opposite the current evaluation area.
- 3.2.8 *Modern*; The current buildings of the Youth Hostel, Northumbrian National Park Authority visitors centre and car parking areas were constructed in the mid to late 20th century, following the demolition of the first hostel building and a farmhouse first recorded in 1859-62 and located to the immediate east of the modern buildings, fronting directly onto the road and likely truncating the Vallum bank. The southern Vallum bank within the evaluation area is heavily planted with trees and it is known that at least one modern infrastructural service was located along the crown of the bank.

3.3 PREVIOUS WORK

3.3.1 An Archaeological Desk Based Assessment identified the high archaeological potential within and around the proposed development area (OAN 2013). A geophysical survey was undertaken by Oxford Archaeology North in early 2013 within the immediate vicinity of the evaluation area. This identified several curvilinear features and possible post lines potentially associated with or respecting the alignment of the vallum, as well as several probable palaeochannels (Taylor 2013).

4 ARCHAEOLOGICAL EVALUATION RESULTS

4.1 INTRODUCTION

4.1.1 The Phase 1 evaluation was undertaken between the 5th November and 7th November 2013 (Figure 2). Trenches 1-3 were excavated on the Scheduled Ancient Monument of the Southern bank of the Vallum (SAM 26063) under Scheduled Monument Consent (SMC). Trenches 4 & 5 were positioned to the rear of the visitors centre, within flat tarmac and gravel car parking.

4.1.2 Phase 2 of the evaluation was undertaken over four consecutive days between the 14th April and the 17th April 2014, and involved the excavation of 14 trenches within a field immediately south of the visitors centre and youth hostel (Figure 8). The location of the trenches were determined based on both geophysical and LIDAR data. Eleven of the trenches measured 30m in length and 1.6m in width, with a further three trenches measuring 24m in length and 1.6m in width, covering 643.2m² of the 1.9ha investigation area.

4.2 PHASE 1

4.2.1 *Trench 1:* Trench 1 was located toward the north-western corner of the evaluation area, was 5m in length and was aligned roughly north to south, located to investigate the preservation and extent of the southern side of the Vallum bank (Figure 2). The topsoil was stripped by a mini-digger with a back-hoe and 1.2m wide toothless ditching bucket.

4.2.2 The trench was excavated to a maximum depth of 1.5m revealing boulder-clay with large rounded stone inclusions (101). Immediately overlying the geological natural was a thin horizon of probable pre-Hadrianic buried soil (106), a maximum of 0.07m in thickness, demonstrating the gentle southward slope of the ground prior to the vallum construction. Overlying the buried soil was a primary bank deposit (105) comprising light grey silty sand with numerous dark lenses likely representing stacked turfs a maximum of 0.36m in height and 1.9m in excavated width. Environmental samples were taken from (105) and (106). Very low amounts of charcoal recovered from (105) constituted the only evidence of possible human activity from these samples. A full report is presented in section 5 below. Two deposits of firmly compacted redeposited natural (104) & (103) upcast from the vallum ditch overlie the turf bank and form the main body of the bank, to a maximum height of 0.85m and excavated width of 2.2m. A deposit of sandy clay subsoil (102) overlay the bank, 0.04m in thickness at the crown of the vallum and 0.46m at the base, likely being in part formed

from slumping of the bank, homogenized by heavy rooting. A thick, densely rooted dark grey-brown silty topsoil (100) overlay the subsoil and it is likely that the planting of the trees present along the vallum bank is demonstrated by cut [107]. (Plate 1, Figure 3).



Plate 1: Trench 1 bank and turf deposit (mid ex) – Facing East, 2x2m scale.

- 4.2.3 **Trench 2:** Trench 2 was located at the northern boundary of the evaluation area, was 4.9m in length and was aligned roughly north to south, located to investigate the preservation and extent of the southern side of the Vallum bank (Figure 2). The topsoil was stripped by a mini-digger with a back-hoe and 1.2m wide toothless ditching bucket.
- 4.2.4 The trench was excavated to a maximum depth of 1.2m revealing boulder-clay with large rounded stone inclusions (201). Immediately overlying the geological natural was a thin horizon of probable 2nd century palaeosoil (208), a maximum of 0.1m in thickness, demonstrating the gentle southward slope of the ground prior to the vallum construction. Overlying the buried soil was a primary bank deposit (207) comprising light grey silty sand with numerous dark lenses likely representing stacked turfs a maximum of 0.46m in height and 2.15m in excavated width. A thick deposit of firmly compacted redeposited natural (206) upcast from the vallum ditch and forming the main body of the bank overlay the northern side of the turf bank to a maximum height of 0.9m and a slumping deposit (205) was present overlying turf bank (207). A deposit of sandy clay subsoil (202) overlay the

bank, and slump deposit, 0.07m in thickness at the crown of the vallum and 0.16m at the base, likely being in part formed from slumping of the bank, homogenized by heavy rooting. Thick, densely rooted dark grey-brown silty topsoil (200) overlay the subsoil and it is likely that the planting of the trees present along the vallum bank was again demonstrated by cut [203]. (Plate 2, Figure 4).



Plate 2: Trench 2 with bank, turf and palaeosoil – Facing east, 2x2m scale

4.2.5 **Trench 3;** Trench 3 was located toward the north-eastern corner of the evaluation area, was 13.5m in length and was aligned roughly north to south, located to investigate the preservation and extent of the southern side of the Vallum bank as well as to determine the form and preservation of any structural elements associated with the farmhouse/ original hostel located in the north-east of the evaluation area within a late 20th century car park. (Figure 2). The topsoil and car park deposits were stripped by a mini-digger with a back-hoe and 1.2m wide toothless ditching bucket.

4.2.6 The trench was excavated to a maximum depth of 0.9m revealing boulder-clay with large rounded stone inclusions (301). The majority of the trench showed a very high degree of truncation, associated with either the construction or demolition of the previous farm and hostel buildings in the area; A thick deposit of angular stone rubble and occasional brick within a dark grey silty clay matrix (308) a maximum of 0.5m in thickness immediately overlay the geological natural, and was sealed by a compacted layer of sand and thin layer of tarmac forming the current car park surface. The only surviving Vallum bank was located in the northern end of the

trench, truncated both in its upper deposits, not visible as an upstanding earthwork and to the south by the insertion of a concrete foundation for the present car-park kerb. A thin deposit of compacted, grey palaeosoil (303) overlay the geological natural, 0.16m in thickness and 1.2m in excavated width. This was overlain by a deposit of compacted sandy clay bank material or slumping (302) a maximum of 0.47m in thickness. No remnants of a turf mound was present. Truncated bank material was overlain by a dark grey, silty topsoil (300). (Plate 3). (Figure 5).



Plate 3: Trench 3 with Surviving bank deposits – Facing west, 2x2m scales

- 4.2.7 **Trench 4;** Trench 4 was located in the car park immediately to the south of the current Northumberland National Park Authority visitors centre. Aligned roughly north-south, the trench was 9m in length and a maximum of 0.6m in depth. The current car park deposits were stripped by a mini-digger with a back-hoe and 1.2m wide toothless ditching bucket.
- 4.2.8 A geological natural of boulder-clay with large rounded stone inclusions (401) was present throughout the trench; a complete lack of sub or top-soils demonstrated a high degree of truncation associated with the present car parks. A single straight sided, east-west aligned field drain [402] was present centrally within the trench. Immediately overlying natural were four compacted deposits of sandy gravels forming accumulative layers of late 20th century car park surface (404), (405), (406), (407).



Plate 4: Trench 4 – Facing south-east, 2x1m scales



Plate 5: Trench 5 – Facing west, 2x1m scales

- 4.2.9 **Trench 5;** Trench 5 was located in the car park immediately to the south west of the current Northumberland National Park Authority visitors centre. Aligned roughly east west, the trench was 18m in length and a maximum of 0.72m in depth. The current car park deposits were stripped by a mini-digger with a back-hoe and 1.2m wide toothless ditching bucket.
- 4.2.10 A geological natural of boulder-clay with large rounded stone inclusions (**501**) was present throughout the trench; again a complete lack of sub or top-soils demonstrated a high degree of truncation associated with the present car parks. Immediately overlying natural were five compacted deposits of sandy gravels forming accumulative layers of late 20th century car park surface (**502**), (**503**), (**504**), (**505**), (**506**).
- 4.2.11 No archaeological finds were recovered during the Phase 1 evaluation. Bulk environmental samples were taken from the palaeosoil (**106**) and turf bank (**105**), the results of which have been presented in Section 5 below.

4.3 PHASE 2

- 4.3.1 **Trenches 7-10:** Trenches 7-10 formed two east-northeast to west-southwest/north-northwest to south-southeast aligned L-shaped areas of excavation toward the northern end of the investigation area, each trench measuring 30m in length and 1.6m in width (Figure 8). The trenches were excavated at an average depth of 0.4m, revealing the natural mottled yellow/grey clay (**101**), below c.0.2m of mid-brown silty clay subsoil (**102**) and c.0.2m of dark brown clayey silt topsoil (**100**) (Plates 6 & 7). Trench 8 revealed a northwest to southeast aligned shallow gully, possibly associated with a former water course whilst Trench 9 and Trench 10 revealed north to south and east to west aligned linear features respectively, likely relating to natural water courses.
- 4.3.2 **Trenches 11-17:** Trenches 11-17 formed a series of east-northeast to west-southwest and north-northwest to south-southeast aligned trenches (Figure 8), which were located centrally within the investigation area and distributed across a flat plateau and a south facing slope. All trenches measured 30m in length, 1.6m in width and were excavated to an average depth of 0.4m, revealing the natural mottled yellow/grey clay (**101**), below c.0.2m of mid-brown silty clay subsoil (**102**) and c.0.2m of dark brown clayey silt topsoil (**100**) (Plates 8-10). Trench 13 revealed a modern service pipe, Trench 14 revealed an east-northeast to west-southwest aligned 'French style' land drain and Trench 16 revealed further evidence of the modern service pipe, as well as a northeast to southwest aligned water course.



Plate 6: Trench 8 – Facing north-northwest



Plate 7: Trench 10 – Facing north-northwest



Plate 8: Trench 12 – Facing west-southwest



Plate 9: Trench 13 – Facing north-northwest



Plate 10: Trench 17 – Facing west-southwest

- 4.3.3 **Trenches 18-20:** Trenches 18-20 were located at the southern end of the investigation area, on a flood plain immediately north of a small water course known as Brackie's Burn (Figure 8). Trench 18, which measured 24m in length and 1.6m in width, was aligned north-northwest to south-southeast and extended from the base of a south facing slope, extending southwards towards Brackie's Burn. Trench 18 was excavated to the level of the natural mottled yellow/grey clay (**101**) at a depth of 0.25m at the northern end of the trench, which graded down to a depth of 0.95m at the southern end. The southern end of the trench revealed several fluvial deposits above the natural substrate, which was further sealed by c.0.2m of mid-brown silty clay subsoil (**102**) and c.0.2m of dark brown clayey silt topsoil (**100**) (Plate 11).
- 4.3.4 Trench 19 was aligned east-northeast to west-southwest and measured 30m in length and 1.6m in width. The trench was excavated at an average depth of 0.45m, revealing the natural mottled yellow/grey clay (**101**) sealed below c.0.2m of mid-brown silty clay subsoil (**102**) and c.0.2m of dark brown clayey silt topsoil (**100**). Trench 20, which had a total length of 24m and a width of 1.6m, was aligned north-northwest to south-southeast and was excavated to the level of the natural mottled yellow/grey clay (**101**) at a depth of 0.5m at the northern end of the trench. The natural substrate continued to significantly grade downwards as the trench extended southwards towards Brackie's Burn. An investigation slot excavated at the southern end of

Trench 20 revealed the natural mottled yellow/grey clay (101) at a depth of 1.5m, below c.1.1m of fluvial deposits. The fluvial deposits were sealed by c.0.2m of mid-brown silty clay subsoil (102) and c.0.2m of dark brown clayey silt topsoil (100) (Plate 12).



Plate 11: Trench 18 – Facing south-southeast



Plate 12: South end of Trench 20 – Facing southeast

4.3.5 No archaeological finds were recovered during the Phase 2 evaluation and all deposits were deemed unsuitable for environmental sampling.

5 ENVIRONMENTAL

5.1 INTRODUCTION

- 5.1.1 During the course of the excavation 2 soil samples were collected by the excavation team. This consisted of *c.*50 litres of sediment. It was hoped that anthropogenic evidence could be collected from these samples, or evidence from the buried soil which might provide evidence of human activity during the period of the construction of Hadrian's Wall.
- 5.1.2 The methodology employed required that the whole earth samples be broken down and split into their various different components: the flot, the residue, the clay-silt and the sand-silt. The sample was soaked in water, then manually flotted and sieved through a 'Siraf' style flotation tank. In this case the residue and the flot are retained while the sand-silt-clay components are filtered out. The sample was flotted into a 250-micron geological sieve, while the heavy residue was retained within a 1mm plastic mesh. The heavy residue was then air-dried and sorted by eye for any material that may aid our understanding of the deposit; in particular artefactual and ecofactual material. During the course of the project the heavy residue was examined for material of archaeological interest; though no such material was forthcoming. The residue samples were also scanned with a hand magnet to retrieve forms of magnetic material. This was done to retrieve residues of metallurgical activity, in particular hammer scale, spheroid hammer scale. Processing procedures and nomenclature follows the conventions set out by the Archaeological Datasheets of the Historical Metallurgical Society (1995) and the English Heritage Centre for Archaeological Guidelines publication (2001).
- 5.1.3 The washover flot was dried slowly and scanned at x40 magnification for charred and uncharred botanical remains. Identification of these was undertaken by comparison with modern reference material held in the Environmental Laboratory at Wardell-Armstrong Archaeology and by reference to relevant literature (Cappers et al. 2010), (Berggren 1981) and (Jacomet 2006).
- 5.1.4 For the purposes of clarity the references to 'seeds' identified here refer to the seed or fruit structures unless otherwise stated; that is to say the propagule or disseminule structures. Cereal grain was recovered in a charred condition and where mentioned refers to the charred caryopsis.

5.2 DISCUSSION OF THE PLANT REMAINS

- 5.2.1 The samples were taken from a turf bank (105) and a palaeosoil (106).
- 5.2.2 No plant remains were recovered which pertain to archaeological activity, or the palaeoenvironment of the area. The only human activity was present in the small volumes of charcoal recovered from (105). This was present in quite small volumes, though enough material may be present form charred herbaceous material to allow for a single radiocarbon date, should this be needed.

5.3 CONCLUSIONS

- 5.3.1 The remains from this site show low frequencies of archaeological plant remains, though not of specific processes or activity. Though other studies of buried soils were considered when examining this site the specific modes of preservation were not present here which allowed comparisons with analogous studies (Carruthers and Straker 1996; Hall 2003)

6 CONCLUSIONS

6.1 CONCLUSIONS

- 6.1.1 During Phase 1 of the archaeological field evaluation on land adjacent to Once Brewed Youth Hostel trenches were excavated in two separate areas. The purpose of the evaluation was to establish the nature and extent of below ground archaeological remains within the vicinity; three of the evaluation trenches being located to assess the preservation, form and extent of the southern Vallum bank whilst two trenches were excavated to examine the possibility of archaeological preservation under the car parks to the south of the present buildings which were not included in the previous geophysical survey. All trenches were excavated down to the top of the natural substrate.
- 6.1.2 Trenches 4 and 5 were devoid of any features or deposits of archaeological significance and demonstrated a high degree of truncation associated with the construction of the car parks to the rear of the visitors centre in the late 20th century. The depth of the field drain present within trench 4 [402] and the presence of gravel similar to that of the car park deposits within its fill (403) suggest it to be contemporary with terracing of the land for the car park construction.
- 6.1.3 Trenches 1-2 identified the preservation, formation and extent of the southern Vallum bank; surviving to a maximum height of 0.9m above a pre-Hadrianic buried soil horizon. A primary low mound of stacked turf a maximum of 0.46m in height was present and 2.25m in width. It is unlikely that this represents a turf 'core' of the larger bank; the original base of the bank being 20 Roman feet (approx 6.6m) in width (Divine 1969 p149) and it is more likely to be a deliberately placed turf 'kerb' delineating the southern side of the bank and minimising downhill slumping of the more substantial boulder clay upcast from the Vallum ditch. Estimates of an original height of the bank suggest it was approximately five Roman feet (1.7m) and it is probable that the excavated deposits overlying the turf in trenches 1 and 2 represent the inevitable collapse of the mound.
- 6.1.4 Trench 3 showed a high degree of truncation of the bank associated with the road frontage and later demolition of the 19th century farmhouse and early hostel buildings. The probable pre-Hadrianic buried soil survives to a maximum thickness of 0.1m and was sealed by a 0.47m thick deposit of probable bank slump, although no bank survives above the current ground level, and is completely truncated to the south of the kerb of the modern car park.

- 6.1.5 The second phase of archaeological evaluation (Phase 2) was undertaken over four consecutive days between the 14th April and the 17th April 2014, and involved the excavation of 14 trenches within a field immediately south of the visitors centre and youth hostel. The location of the trenches were determined based on both geophysical and LIDAR data. Eleven of the trenches measured 30m in length and 1.6m in width, with a further three trenches measuring 24m in length and 1.6m in width, covering 643.2m² of the 1.9ha investigation area.
- 6.1.6 All trenches were excavated to the level of the natural substrate. Eleven of the fourteen trenches were located on an area of elevated ground, revealing the natural substrate at an average depth 0.4m below subsoil and topsoil. A further three trenches were located on a flood plain immediately north of Brackie's Burn, revealing the natural substrate at depths of up to 1.5m below several fluvial deposits, subsoil and topsoil. All features of potential archaeological interest were investigated fully and were revealed to relate to natural water channels or modern water management.
- 6.1.7 No finds, features or deposits of archaeological significance were revealed during Phase 2 of the archaeological investigation.

7 BIBLIOGRAPHY

- Beijerinck, W. (1947) *Zadenatlas der Nederlandsche Flora*, Wageningen (Facsimile Edition 1976, Amsterdam: Backhuys en Meesters)
- Berggren, G. (1981) *Atlas of seeds and small fruits of Northwest-European plant species with morphological descriptions*, Part 3, Salicaceae-Cruciferae, Swedish Museum Natural History, Stockholm
- Breeze, D & Dobson, B. (2000) *Hadrians Wall* (Fourth Edition), Penguin
- Brown, D.H. (2011) *Archaeological Archives: A Guide to Best Practice in Creation, Compilation, Transfer and Curation*. Archaeological Archives Forum
- Cappers, R.T.J. Bekker, R.M. and Jans, J.E.A. (2010) *Digitale Zaden Atlas van Nederlands*, Barkhuis Publishing and Groningen Library, Groningen
- Carruthers, W. and Straker, V. (1996) Seed flora studies of the buried soil, bank, ditch fills and modern soil pits, p134-8 In: Bell, M., Fowler, P.J., and Hillson, S.W. (eds) *The experimental earthwork project 1960-92*, Council for British Archaeology Research Report 100, York: CBA
- Countryside Commission (1998) *Countryside Character Volume 2: North-west - The character of England's natural and man-made landscape*. Cheltenham.
- Divine, D. (1969) *The north-west Frontier of Rome; A Military History of Hadrian's Wall*, Mcdonald Publishing
- English Heritage (1991) *Management of Archaeological Projects (MAP2)*. London: English Heritage.
- English Heritage (2001) *Archaeometallurgy*, Swindon: English Heritage
- English Heritage (2002) *Environmental Archaeology: A Guide to the Theory and Practice of Methods from Sampling and Recording to Post-Excavation*. London: English Heritage.
- English Heritage (2006) *Management of Research Projects in the Historic Environment*. London: English Heritage.
- Hall, A. (2003) *Recognition and characterisation of turves in archaeological occupation deposits by means of macrofossil plant remains*. Centre for Archaeology Report 16/2003.
- IfA (2008) *Standards and Guidance for Archaeological Watching Briefs*. Reading: Institute for Archaeologists.
- Jacomet, S. (2006) *Identification of cereal remains from archaeological sites*. 2nd edition. IPAS, Basal University.
- NPPF (2012) *National Planning Policy Framework: Archaeology and Planning*. Department for Communities and Local Government

Oxford Archaeology North (2013) *The Sill Project, Once Brewed, Northumberland: Interim Desk Based assessment and Field Survey*. Oxford Archaeology North, Unpublished Report.

SSEW (1984) *Soils and their use in Northern England*. Soil Survey of England and Wales.

Taylor, K (2013) *The sill Project, Once Brewed, Northumberland: Geophysical Survey*. Oxford Archaeology north, Unpublished Report.

APPENDIX 1: CONTEXT TABLE

Context Number	Context Type	Description
100	Deposit	Topsoil. Very dark grey, loosely compacted silty clay. High degree of rooting.
101	Geological	Natural; Light yellowy brown sandy clay with occasional rounded boulders.
102	Deposit	Subsoil; Mid yellowy brown, moderate to firmly compacted sandy clay with occasional angular and sub-angular stones.
103	Deposit	Bank/ slumping deposit; Mid yellowy-brown, firmly compacted sandy clay with frequent angular and sub-angular stones.
104	Deposit	Bank deposit; Light to mid yellowy-brown, very firmly compacted sandy clay with frequent angular and sub-angular stones.
105	Deposit	Turf Bank; Mid to light grey-brown, moderately compacted silty sand with frequent thin, dark grey to black silty sandy silt lenses representing preserved turves.
106	Deposit	Palaeosoil; mid to light grey, moderately compacted silty sand.
107	Cut	Concave in section, rounded base. Modern root bowl?
108	Deposit	Dark grey, loosely compacted silty clay with very high degree of rooting.
109	Deposit	Modern concrete path.
110	Deposit	Gravel bedding for (109).
111	Deposit	Foundation cut for (109) and (110).
200	Deposit	Topsoil. Very dark grey loosely compacted silty clay. High degree of rooting.
201	Deposit	Natural; Light yellowy brown sandy clay with occasional rounded boulders.
202	Deposit	Subsoil; Mid yellowy brown, moderate to firmly compacted sandy clay with occasional angular and sub-angular stones.
203	Deposit	Concave in section, rounded base. Modern root bowl?
204	Deposit	Dark grey, loosely compacted silty clay with very high degree of rooting.
205	Deposit	Bank deposit; Light to mid yellowy-brown, very firmly compacted sandy clay with frequent angular and sub-angular stones.
206	Deposit	Bank deposit; mid brown, firmly compacted sandy clay with frequent rounded and sub-rounded stones.
207	Deposit	Turf Bank; Mid to light grey-brown, moderately compacted silty sand with frequent thin, dark grey to black silty sandy silt lenses representing preserved turves.
208	Deposit	Palaeosoil; mid to light grey, moderately compacted silty sand..
300	Deposit	Topsoil. Very dark grey loosely compact silty clay. High degree of rooting.
301		Natural; Light yellowy brown sandy clay with occasional rounded boulders.
302	Deposit	Bank/ slumping deposit; Mid yellowy-brown, firmly compacted sandy clay with frequent angular and sub-angular stones.
303	Deposit	Palaeosoil; mid to light grey, moderately compacted silty sand.
304	Cut	Foundation cut for modern concrete and rubble kerb (305)
305	Deposit	Concrete and rubble foundation for modern kerb.
306	Deposit	Modern carpark deposit- tarmac
307	Deposit	Modern carpark deposit- compacted sandy gravel
308	Deposit	Consolidation/ demolition deposit; Angular and sub-angular

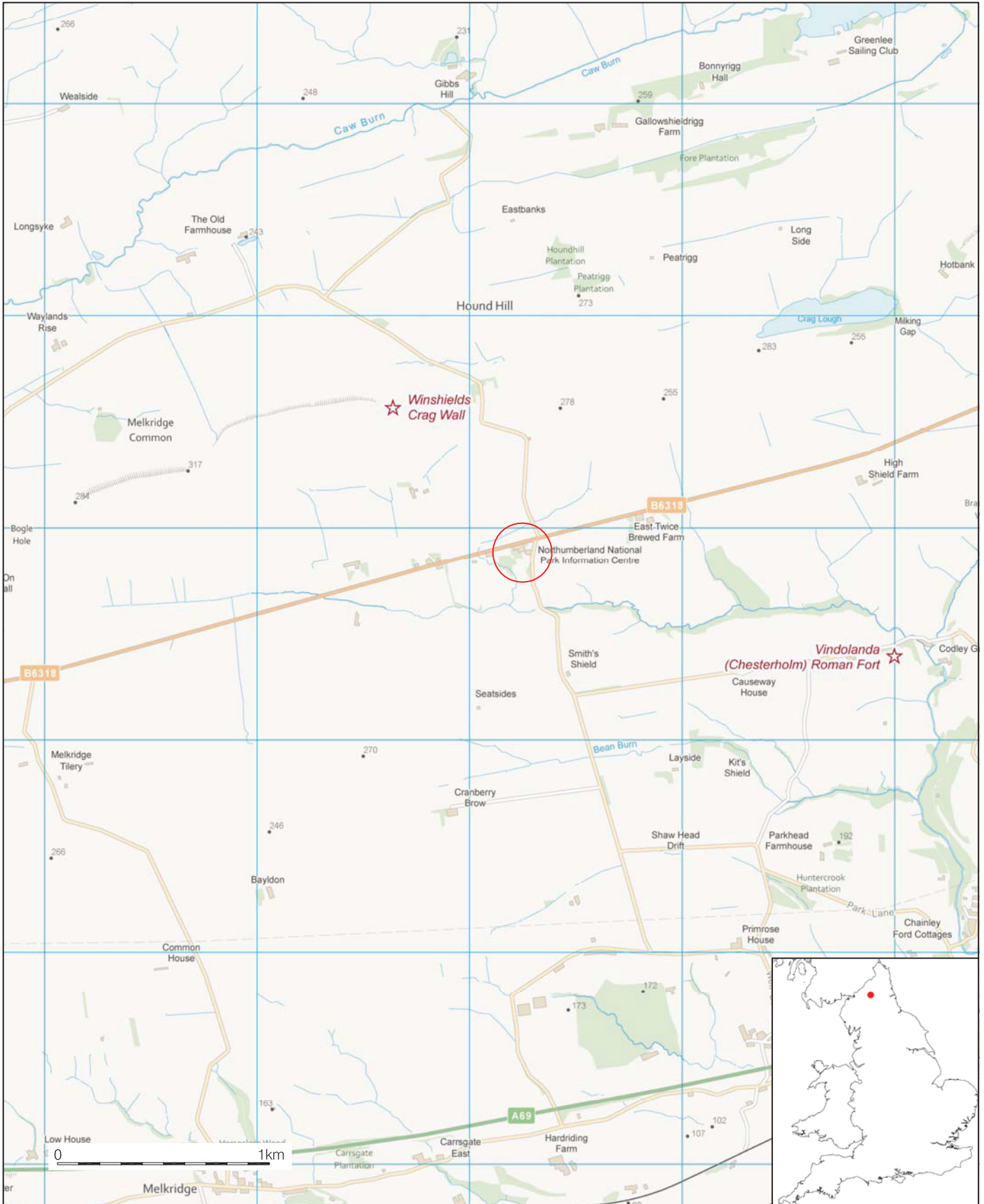
		rubble and brick within a matrix of dark grey-brown silty clay.
401	Deposit	Natural; Light yellowy brown sandy clay with occasional rounded boulders.
402	Cut	East-west aligned straight linear in plan with straight, near vertical sides to irregular, flat base.
403	Deposit	Fill of [402]; mid to dark grey-brown, firmly compacted silty clay
404	Deposit	Modern Carpark deposit; firmly compacted angular sandy gravel.
405	Deposit	Modern Carpark deposit; firmly compacted angular sandy gravel.
406	Deposit	Modern Carpark deposit; firmly compacted angular sandy gravel.
407	Deposit	Modern Carpark deposit; firmly compacted angular sandy gravel.
501	Deposit	Natural; Light yellowy brown sandy clay with occasional rounded boulders.
502	Deposit	Modern Carpark deposit; firmly compacted angular sandy gravel.
503	Deposit	Modern Carpark deposit; firmly compacted angular sandy gravel.
504	Deposit	Modern Carpark deposit; firmly compacted angular sandy gravel.
505	Deposit	Modern Carpark deposit; firmly compacted angular sandy gravel.
506	Deposit	Modern Carpark deposit; firmly compacted angular sandy gravel.

Table 1: List of Contexts issued during Phase 1 evaluation.

Context Number	Context Type	Description
100	Deposit	Topsoil. Very dark brown, moderately compacted clayey silt.
101	Geological	Natural; Mottled yellow grey clay with occasional gravel patches and rounded boulders.
102	Deposit	Subsoil; Mid brown, moderately compacted silty clay with occasional angular and sub-angular stones.

Table 2: List of Contexts issued during Phase 2 evaluation.

APPENDIX 2: FIGURES






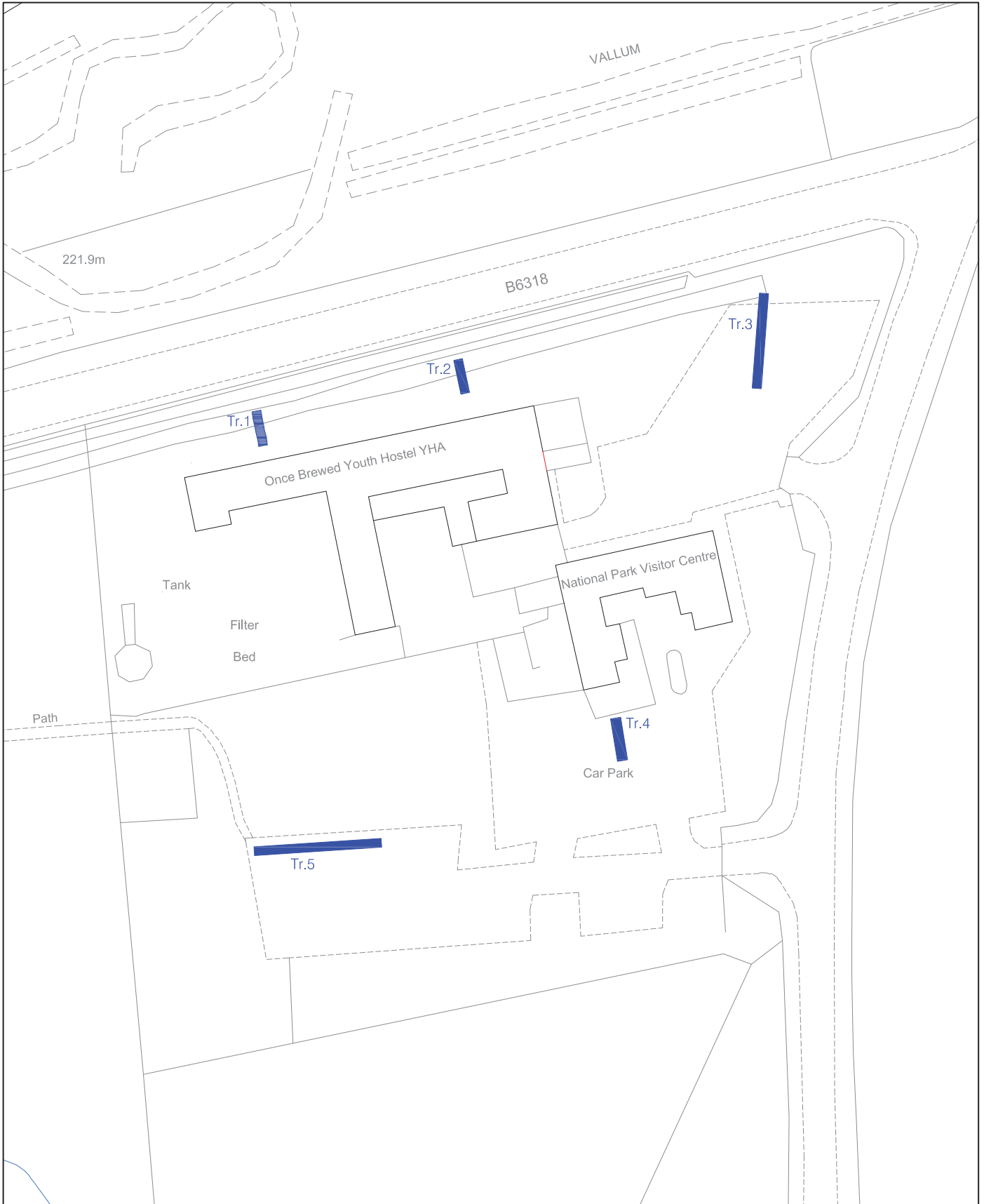
 <p>Wardell Armstrong Archaeology 2013</p>	<p>PROJECT: Land Adjacent to The Once Brewed Youth Hostel and National Park Centre, Northumberland</p> <p>SCALE: 1:25,000 at A4</p> <p>REPORT No: CP10696</p> <p>CLIENT: Northumberland National Park Authority</p> <p>DRAWN BY: AB</p> <p>DATE: November 2013</p> <p>FIGURE: 1</p>	<p>KEY:</p>  Site location	 <p>Reproduced by permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright. All rights reserved. Licence number 100019512</p>
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Figure 1: Site location.






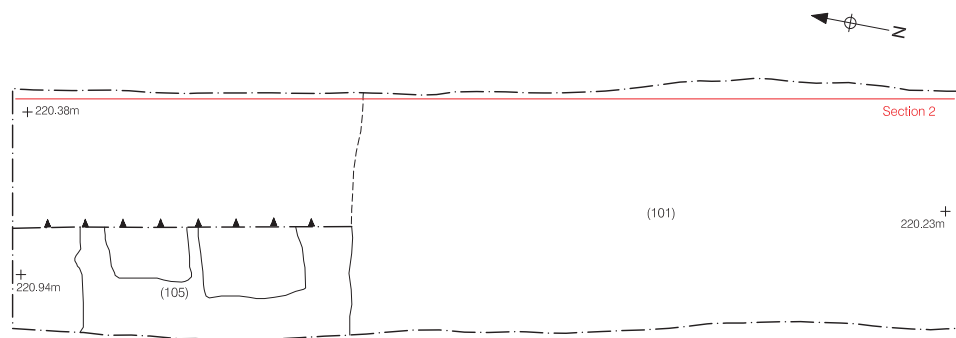
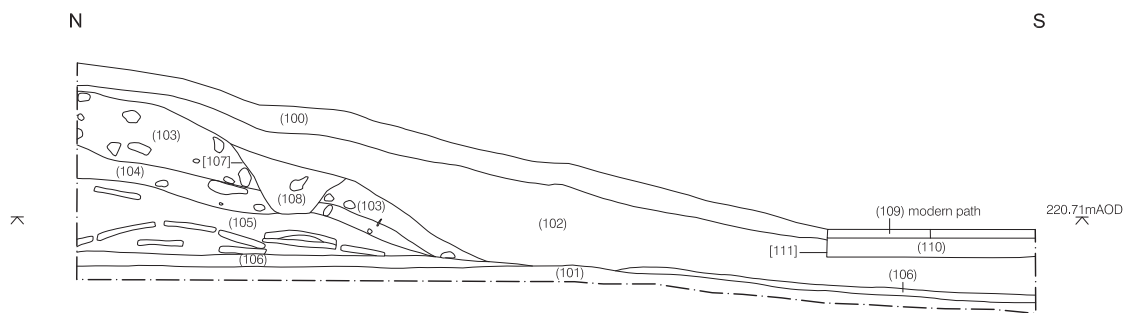
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Figure 2: Location of Trenches 1-5.



Trench 1. Plan.



Section 2. West facing section, Trench 1.



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2013

PROJECT: Land Adjacent to The Once Brewed Youth Hostel
and National Park Centre, Northumberland
SCALE: 1:40 at A4
REPORT No: CP10696
CLIENT: Northumberland National Park Authority
DRAWN BY: AB/CP
DATE: November 2013
FIGURE: 3

KEY:

- [101] Context numbers
- Height mAO
- Section location
- Limit of excavation

Figure 3: Trench 1; plan and section.

PROJECT:
Land Adjacent to
The Once Brewed Youth Hostel
and National Park Centre,
Northumberland

CLIENT:
Northumberland National
Park Authority

SCALE: 1:40 at A4

DRAWN BY: AB

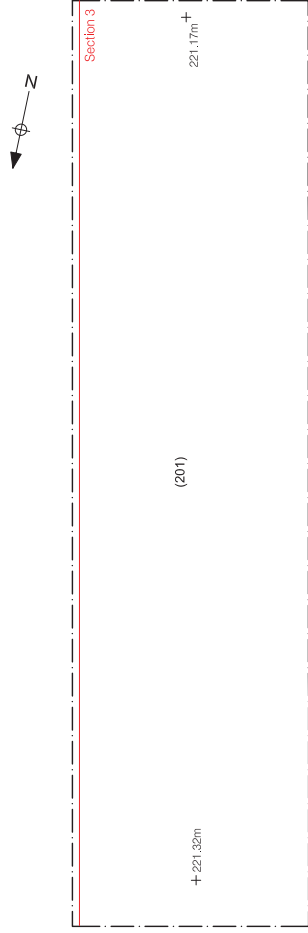
DATE: November 2013

KEY:

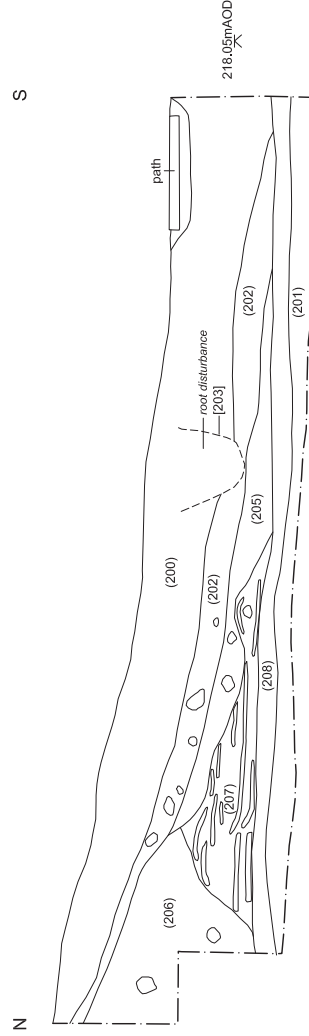
- [101] Context numbers
-  Height mAOD
-  Section location
-  Limit of excavation

REPORT No:
CP106%6

FIGURE:
4



Trench 2, plan.



Section 3. West facing section, Trench 2.



Figure 4: Trench 2; plan and section.

PROJECT:
Land Adjacent to
The Once Brewed Youth Hostel
and National Park Centre,
Northumberland

CLIENT:
Northumberland National
Park Authority

SCALE: 1:50 at A3

DRAWN BY: AB/CP

DATE: November 2013

KEY:

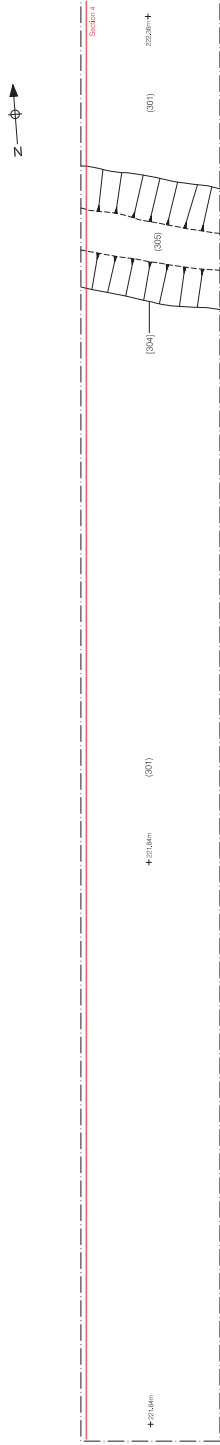
- [101] Context numbers
- ↗ Height m/AOD
- Section location
- - - Limit of excavation
- ▨ Modern kerb

REPORT No:

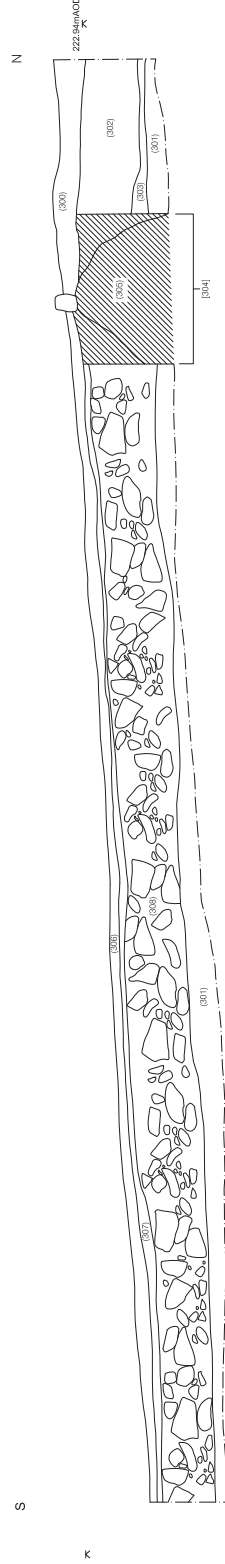
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FIGURE:

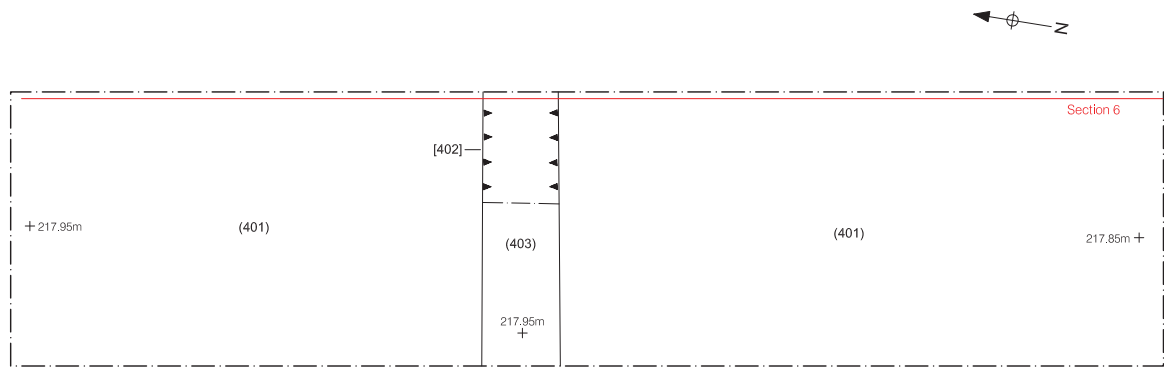
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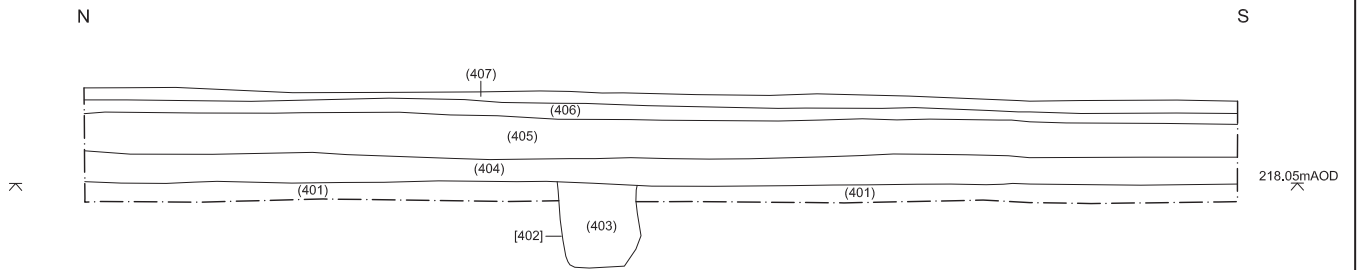
Trench 3, plan.



Section 4, East facing section, Trench 3.



Trench 4. Plan.



Section 6. West facing section, Trench 4.



Wardell Armstrong
Archaeology
2013

PROJECT: Land Adjacent to The Once Brewed Youth Hostel
and National Park Centre, Northumberland
SCALE: 1:40 at A4
REPORT No: CP10696
CLIENT: Northumberland National Park Authority
DRAWN BY: AB/CP
DATE: November 2013
FIGURE: 6

KEY:

- [101] Context numbers
- ∧ Height mAOD
- Section location
- - - Limit of excavation

Figure 6: Trench 4; plan and section.

PROJECT:
Land Adjacent to
The Once Brewed Youth Hostel
and National Park Centre,
Northumberland

CLIENT:
Northumberland National
Park Authority

SCALE: 1:75 at A3

DRAWN BY: AB/CP

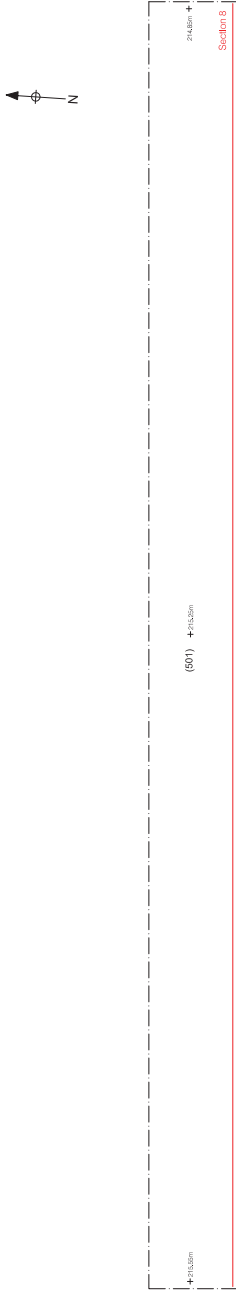
DATE: November 2013

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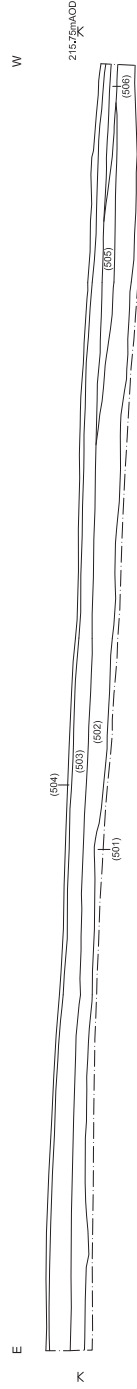
- [101] Context numbers
- [X] Height mAOB
- [] Section location
- [] Limit of excavation

REPORT No:
CPI0696

FIGURE:
7



Trench 5, plan.



Section 8, North facing section, Trench 5.

Figure 7: Trench 5; plan and section.






 <p>Wardell Armstrong Archaeology 2014</p>	<p>PROJECT: Land Adjacent to The Once Brewed Youth Hostel and National Park Centre, Northumberland</p> <p>SCALE: 1:1,000 at A4</p> <p>REPORT No: CP10696</p> <p>CLIENT: Northumberland National Park Authority</p> <p>DRAWN BY: AB</p> <p>DATE: April 2014</p> <p>FIGURE: 8</p>	<p>KEY:</p>  Evaluation trenches	 <p>Reproduced by permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationery Office. © Crown copyright. All rights reserved. Licence number 100019512</p>
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Figure 8: Location of Trenches 7-20.