

**DRAINAGE IMPROVEMENT, MILITARY  
ROAD B6318, HEDDON-ON-THE-WALL,  
NORTHUMBERLAND**

**EVALUATION REPORT**

**FEBURARY 2019**

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**Drainage Improvement, Military Road B6318, Heddon-on-the-wall, Northumberland**

**Archaeological Evaluation**

***Commissioning Client:***

**Northumberland County Council  
North Pennine Link Group  
Tyne Mills Industrial Estate  
Hexham  
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**DRAINAGE IMPROVEMENT ON THE MILITARY ROAD B6318, HEDDON-ON-THE-**  
**WALL, NORTHUMBERLAND**

**EVALUATION REPORT**

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## **1. NON-TECHNICAL SUMMARY**

- 1.1 An archaeological evaluation was undertaken by Pre-Construct Archaeology Limited ahead of a scheme to improve drainage along a section of the Military Road (B6318), East of Rudchester Farm, Northumberland (central National Grid Reference NZ 12218 67307). The work was commissioned by Northumberland County Council.
- 1.2 The overall scheme involved the installation of a new drainage system across the Military Road (B6138) carriageway. This phase of archaeological work comprised the evaluation of two trenches along the line of the proposed drainage that lies within the Scheduled Monument of Hadrian's Wall and Vallum (Historic England Ref. 1017533: Rudchester Roman fort, associated civil settlement and a section of Hadrian's Wall and Vallum from the A69 to the March Burn in wall mile 13). At this location the Wall and Vallum survive as buried features. Scheduled Monument Consent (SMC Ref. S00207472) was granted for this work on the advice of Historic England to the department of Culture, Media and Sport on 10th December 2018.
- 1.3 The archaeological work initially comprised the excavation, cleaning, assessment and recording of five trenches along the line of the new proposed drainage system. However due to a change of the scheme of works only two of the proposed trenches were undertaken. All changes to the scheme of works were undertaken with the approval of Mike Collins, Inspector of Ancient Monuments at Historic England. The proposed trenches (Trenches 1 and 2) were 0.70m wide and effectively extended across the full width of Military Road (B6318), excavated to a maximum depth of 0.75m.
- 1.4 Two phases of activity were encountered within the trenches investigated: Phase 1: Post-medieval and Phase 2: Modern.
- 1.5 Post-medieval activity (Phase 1) is represented by ground consolidation layers and surfaces encountered in Trenches 1 and 2.
- 1.6 Modern activity (Phase 2) is represented by ground consolidation layers, road bedding materials, service trenches and road surfaces encountered in Trenches 1 and 2.
- 1.7 Trenches 1 and 2 were excavated to a maximum depth of 0.75m below present ground level. Although no archaeological deposits of significance were encountered within the trenches, remains of Roman period archaeological could potentially survive at greater depths.

## **2. INTRODUCTION**

### **2.1 Project Background**

- 2.1.1 This report details the results of an archaeological evaluation undertaken 5th-7th and 11th February 2019 at the Military Road B6318, Heddon-on-the-Wall, Northumberland (Figures 1 & 2). The archaeological investigation was commissioned by Northumberland County Council and was undertaken by Pre-Construct Archaeology Limited (PCA) in association with drainage improvement work.
- 2.1.2 The archaeological evaluation was undertaken within part of Harian's Wall World Heritage Site core area (Ref. 1000098) and lies within the area of a Scheduled Monument (Historic England Ref. 1017533; *Rudchester Roman fort, associated civil settlement and a section of Hadrian's Wall and Vallum from the A69 to the March Burn in wall mile 13*). In this area the Wall and Vallum survive as buried features. Prior to the undertaking of the archaeological work Scheduled Monument Consent was granted on the advice of Historic England to the Department of Culture Media and Sport on 10 December 2018 (SMC Ref. S00207472).
- 2.1.3 The scheme of archaeological works was devised in consultation with Mike Collins, Historic England Inspector of Ancient Monuments: Hadrian's Wall to determine the likely impact on potential archaeological deposits by the proposed drainage improvement work on the Military Road (B6318) carriageway. A Written Scheme of Investigation (WSI) was prepared by PCA and approved by Historic England prior to the work commencing (PCA 2019).
- 2.1.4 The evaluation comprised two trenches (Trenches 1 & 2) with proposed dimensions of c. 0.70m wide and 0.75m deep.
- 2.1.5 The Online Access to the Index of Archaeological Investigation (OASIS) reference number of the project is: preconst1-343060.

### **2.2 Site Location and Description**

- 2.2.1 The site lies approximately 1.1km west of Heddon-on-the-wall, Northumberland. The trenches were situated across the Military Road B6318 carriageway, Heddon-on-the-Wall, Northumberland (central National Grid Reference NZ 12218 67307) (Figures 1 & 2).
- 2.2.2 This section of wall corridor runs up the west side of the valley of the Rudchester Burn to the slight rise occupied by the fort before descending the slight depression to the March Burn. Throughout this section there are limited views to the north where the ground slopes gently away. In contrast there are wide views to the south over the Tyne Valley, while to the east and west the views are more restricted. Hadrian's Wall at this location survives as a buried feature beneath the B6318. The wall ditch survives as a buried feature for most of this section except for a slight scarp on the east bank of the March Burn.

- 2.2.3 All the groundworks associated with the scheme will be undertaken within the Military Road (B6318) carriageway and will involve archaeological evaluation at the proposed locations (Trenches 1-2) (Figure 1 & 2).

## **2.3 Geology and Topography**

- 2.3.1 Within the context of the *Natural England National Character Areas*, the site lies in National Character Area 11: Tyne Gap and Hadrian's Wall (Natural England Website). The area is summarised thus:

*This narrow, distinctive corridor centred on the River Tyne separates the uplands of the North Pennines National Character Area (NCA) from the Border Moors and Forests NCA. Westwards are views of pastoral landscapes of the Solway Basin and Eden Valley NCAs and eastwards a more urban character prevails with views of the conurbation of Newcastle in the Tyne and Wear Lowlands NCA. The Tyne valley is underlain by sedimentary Carboniferous rocks comprising a repetitive succession of limestones, sandstones, shales and intrusion of horizontal, igneous rock dolerite. Also, the prominent, intruded igneous Whin Sill formation forms a dramatic escarpment on which Hadrian's Wall is built.*

- 2.3.2 The solid geology of this part of Northumberland broadly comprises mudstone, sandstone and limestone of the Stainmore Formation formed in the Carboniferous Period. The superficial geology of the area is composed of Devensian-Diamicton till formed 2 million years ago in the Quaternary Period (information from the British Geological Survey website).

## **2.4 Planning Background**

- 2.4.1 The site of this programme of works is primarily of archaeological interest because it lies within the Hadrian's Wall World Heritage Site core area (Ref. 1000098) and Scheduled Monument of Hadrian's Wall (Historic England Ref. 1017533: Rudchester Roman fort, associated civil settlement and a section of Hadrian's Wall and vallum from the A69 to the March Burn in wall mile 13).

- 2.4.2 Because the site has Scheduled Monument status, and thus has statutory protection under The Ancient Monuments and Archaeological Areas Act 1979, any intrusive groundworks for the installation require SMC from DCMS prior to their undertaking. In accordance with the 1979 Act, the Secretary of State for Digital, Culture, Media and Sport consulted with Historic England before deciding whether or not to grant SMC after an application for the work was submitted by Northumberland County Council 21st November 2018. Historic England considered '*...the effect of the proposed works upon the monument to be archaeological evaluation necessary to assess the extent, depth and nature of archaeological deposits in order to provide information to underpin decisions on the management of the monument, changes in its land use, or development proposals.*'

- 2.4.3 Accordingly, SMC was granted for the archaeological evaluation by the Secretary of State, advised by Historic England, subject to a series of conditions set out in a letter dated 10th

December 2018 to Mr Michael Banks (Northumberland County Council). Condition b) of SMC states 'No works shall take place except in accordance with a written scheme of investigation which has been submitted to and approved by the Secretary of State advised by Historic England'. Condition e) of SMC requires A report on the archaeological recording shall be sent to the County Historic Environment Record and to Mike Collins at Historic England within 3 months of the completion of the works (or such other period as may be mutually agreed).

- 2.4.4 As part of a Scheduled Monument, any archaeological remains affected by this scheme fall within the category of 'designated heritage assets' as defined within current guidance on the historic environment set out within Chapter 16 of the National Planning Policy Framework (NPPF) (Department for Communities and Local Government 2012 (revised 2018)).
- 2.4.5 Heritage assets - those parts of the historic environment that have significance because of their historic, archaeological, architectural or artistic interest - remain a key concept of the NPPF.
- 2.4.6 The project aims to fulfil the specific requirements of SMC by undertaking an appropriately specified scheme of archaeological investigation, in this case archaeological evaluation comprising two trenches (Trenches 1 & 2), in association with the proposed drainage.
- 2.4.7 All archaeological work was undertaken in compliance with the codes and practice of the Chartered Institute for Archaeologists and the relevant ClfA standard and guidance document (ClfA 2014 a, b & c). PCA is a ClfA Registered Organisation. All fieldwork and post-excavation was carried out in accordance with the Yorkshire, the Humber & The North East: Regional Statement of Good Practice (SYAS 2011).
- 2.4.8 Historic England has responsibility for archaeological development control in relation to the Scheduled Monument. No specification for the archaeological work was produced by Historic England or the local planning authority. A Written Scheme of Investigation (WSI) was submitted and approved by Historic England prior to work commencing (PCA 2019).

## **2.5 Historical Background**

*The archaeological List Entries compiled by Historic England has been used as the basis of the following summary, the research and writing of those responsible is gratefully acknowledged. Information in this section is largely extracted from the 2019 Written Scheme of Investigation (Pre-Construct Archaeology Limited) and the research and writing of those responsible is acknowledged.*

- 2.5.1 Hadrian's Wall marks one of the frontiers of the Roman Empire and has been designated as a World Heritage Site due to its international importance. The route across the Pennines was recognised by the Romans for its military importance during their early campaigns through northern England and into Scotland in the second half of the first century AD. Within this period a military road known as the Stanegate was constructed along with a series of forts.



- 2.5.2 At the start of the second century the frontier of the Tyne-Solway route was being reorganised as the Romans withdrew from Scotland. The position was consolidated by the construction of Hadrian's Wall, under the orders of the Emperor Hadrian. The Wall acted as a frontier of the Roman Empire until c.AD 400 when the Roman armies withdrew from Britain.
- 2.5.3 Stretching over 70 miles from coast to coast, Hadrian's Wall was a continuous barrier built of stone in the east and, initially, of turf in the west. The stone wall was originally designed to be ten Roman feet wide and sections of this width are termed broad wall.
- 2.5.4 A change of plan shortly after construction began led to a reduction in the width of the wall to eight Roman feet, such sections being termed narrow wall. Stretches of both wall types survive, including some sections of narrow wall built on broad wall foundations. For most of its length a substantial ditch on the northern side provided additional defence.
- 2.5.5 Further defensive positions were added to the Wall in the form of small walled fortlets known as milecastles. These were attached to the southern side of the Wall with the majority having a gateway to the north. Between the milecastles were two equally spaced towers known as turrets. Together the milecastles and turrets provided bases from which the curtain wall could be watched and patrolled. Both the turrets and milecastles are thought to have been higher than the wall itself to provide suitable observation points. These smaller defensive positions were originally manned from forts located along the Stanegate, however, at some point forts were constructed along the length of the Wall itself. There are 16 forts attached to Hadrian's Wall or in close proximity with some overlying earlier features such as turrets or milecastles.
- 2.5.6 When the forts were placed along the wall line no provision was made for a road to link them. This situation was clearly found impracticable and a metalled track was therefore provided in places along the vallum between the north mound and the ditch.
- 2.5.7 The Vallum is a massive earthwork monument comprising a broad ditch with flanking mounds, one to the north, and one, sometimes two (the marginal mound) to the south, associated with Hadrian's Wall. It runs to the south of the wall, although not at a consistent distance from it and is a unique feature not encountered on any other frontier of the Roman Empire. It extends from Newcastle (but is not known east of Pons Aelius) to the Solway and was probably intended to represent a continuous feature interrupted only by gaps in its line corresponding to the positions of the forts of the wall, of which there were originally nineteen. For much of its course it was laid out in straight lengths of about 3km, approximately 60m south of the wall except where geological or other constraints dictated otherwise (Todd 2007, p.124-5).
- 2.5.8 The earliest surviving mention of the earthwork is made by Bede who refers to a vallum, or earthen rampart, as distinct from a wall, murus; and it is this term which persists as the

name for the monument even though the essential component of the monument is the fossa (ditch).

- 2.5.9 Generally the Vallum comprises a steep-sided ditch, 6m wide and 3m deep, with a flat bottom, flanked by two mounds, north and south, each set back some 9m from the ditch edges. For a great deal of its length a third mound, the so-called marginal mound occupies the south berm, right on the southern lip of the ditch. While excavation has shown that the depth and profile of the Vallum ditch can vary, the 6m width seems to be reasonably constant (Wilmott 2008, 51). The distance of the Vallum from the Wall varies. In general there was a preference for the earthwork to run close to the rear of the Wall where topography allowed. The marginal mound occupies part of the south berm. It has often been stated that the marginal mound comprises mixed material which has been cleared out from the ditch. However at Black Carts there is a substantial marginal mound 4.2m wide and 0.8m in surviving height built of clean material, clay and shale, like the south mound itself. Observations from Appletree and Cawfields also suggest that for some of its length the marginal mound may be primary, or at least near-primary. This idea is supplemented by the fact that often, as in the stretch from Denton westwards to Halton Chesters, the south berm is wider than the north. The phenomenon has also been noted at Wallhouses and at Heddon-on-the-Wall. It seems possible that in these areas provision was made for a marginal mound, which was never actually built (Willmott 2009, 52).
- 2.5.10 It was often considered that that the vallum predated the stone wall and was built in several phases, and there are numerous antiquarian references supporting this notion (Wilmott 2008 119). It was proved as early as 1893 that the bulk of the Vallum was constructed as a single episode, and since its course deviates around wall-forts such as Haltonchesters, Rudchester, and excavated evidence from elsewhere, strongly support the hypothesis that it is a later feature.
- 2.5.11 The intended purpose of the vallum is not known, and there are probably as many views to its function as there are commentators, but a function related to the control of the hinterland of the wall, and the restriction of access to and through it, seems plausible as an original intent. Such a function may have been difficult to maintain, or eventually became obsolete as the monument was slighted by the construction of many new causeways across the ditch, and breaches made in the banks (not all of which correspond to the positions of new causeways) in the Antonine period. The ditch of the Vallum was subsequently refurbished once the Antonine Wall was abandoned and the frontier re-established along the line of Hadrian's Wall.
- 2.5.12 Whilst all the forts added to the Wall are broadly similar in size, no two are exactly alike and there is no standard internal layout. However, when originally built, all forts enclosed a fairly standard range of buildings including a headquarters building, commandant's house, hospital, barracks, stables, granaries and workshops. The size and number of barracks blocks has, in the past, been used to determine the size and type of military unit stationed

there. This is a difficult exercise which remains the subject of much debate. The area outside the fort was put to a variety of uses. There was usually a bath house and normally a number of temples, burial grounds and other official establishments such as lodging houses for official visitors. Over time sprawling external settlements known as vici grew up around many forts. These housed a range of people and activities attracted by the military presence. Some of the inhabitants may have been families of troops stationed on the Wall, although it was not until the third century that soldiers on active duty were officially permitted to marry. Others may have been retired soldiers and their families. Traders and merchants are also thought to have set up workshops and shops in the vici. The most common type of building found here, as well as in other areas around forts, was the long narrow strip building. These appear to have been used for both domestic and commercial purposes.

2.5.13 Hadrian's Wall survives in various states of preservation along its length. In places, especially in the central section, the Wall remains several courses high and the attached forts, turrets and milecastles are also clearly identifiable. Elsewhere the Wall has been virtually robbed out and only its foundations survive beneath the present ground surface. Although some sections of the frontier system no longer survive visibly, sufficient evidence does exist for its position to be fairly accurately identified throughout most of its length.

2.5.14 The Historic England list entry for this section of wall (Ref. 1017533) are detailed below:

*National Monument No. 26039*

*Rudchester Roman fort associated civil settlement and a section of Hadrian's Wall and vallum from the A69 to the March Burn in wall mile 13.*

*The monument includes the wall fort at Rudchester, the associated civil settlement and the stretch of Hadrian's Wall and vallum between the A69 in the east and the March Burn in the west. This section of wall corridor runs up the west side of the valley of the Rudchester Burn to the slight rise occupied by the fort before descending the slight depression to the March Burn. Throughout this section there are limited views to the north where the ground slopes gently away. In contrast there are wide views to the south over the Tyne Valley, while to the east and west the views are more restricted.*

*In this section the Wall survives as a buried feature, lying below the course of the B6318 road. Excavations of milecastle 13 in 1930 demonstrated that the Wall was of broad type throughout this section. The wall ditch has entirely silted up throughout this section except for a slight scarp on the east bank of the March Burn.*

*Milecastle 13, east of the Rudchester Burn, survives as a low mound 0.2m to 0.4m high. This milecastle measures 16.5m north to south by about 19m east to west. A large hoard of gold and silver coins was found here in 1776, the latest coins dating to AD 168. This milecastle was partly excavated in 1930 by Simpson.*

*Turret 13a, east of Rudchester fort, survives as a buried feature beneath the B6318 road. Part excavation by Simpson in 1930 revealed the turret walls which were built to a thickness*

of about 1.25m. Turret 13b, which lies about 75m to the west of Rudchester fort, also survives as a buried feature beneath the B6318.

The vallum survives as an upstanding earthwork throughout this section. However, to the west of the fort there are no upstanding remains of the vallum, although it survives as a series of buried features, which were located in 1987 during a seismic survey. It was revealed that the vallum makes a dog-leg to avoid the western and southern sides of the fort. On the east side the north and south mounds of the vallum reach a maximum height of 1m, while the vallum ditch has a maximum depth of 1.4m.

The course of the Roman road known as the Military Way, which ran along the corridor between the Wall and the vallum linking the turrets, milecastles and forts, is not yet confirmed in this section of the corridor.

The Roman fort at Rudchester, known to the Romans as 'Vindovala', survives as a turf-covered platform, up to 1.6m high, to the north of Rudchester Farm. It covers an area of 1.8ha and would have accommodated a part mounted cohort, 500 strong. The site was very well preserved until the 18th century when it was reduced by stone robbing. This was followed by ploughing and cultivation of the area, which accounts for the ridge and furrow overlying the southern part of the fort. It has been partly excavated on several occasions since 1897. Buildings identified as the Commanding Officer's house, the Headquarters Building and a granary, were located. Finds from the site include a life-size statue of Hercules, five altars dedicated to Mithras and pottery. The east and west gateways were positioned to the north of where Hadrian's Wall adjoined the fort.

The outlying civil settlement, or 'vicus', is located to the south and south west of the fort partly below the Rudchester Farm buildings. Post-medieval quarrying to the south east of the fort has probably destroyed some of the remains. The terraces which stretch to the west of Rudchester Farm are identified as evidence of the attached Roman civil settlement. They include some probable building platforms. Although mostly between 0.3m and 1.5m high, these terraces reach a maximum height of 3.2m in places and contain considerable quantities of stone. A rock-cut cistern known as the 'Giants Grave' measures 3.9m by 1.5m internally and is at least 0.5m deep. It is located in the area of woodland to the west of Rudchester Farm and probably supplied part of the vicus with water, as indicated by the presence of a drainage hole in its north west corner.

A Roman temple dedicated to the Persian god Mithras is located to the south west of the fort in the vicus area. It has been partly overlain by a lynchet and bank. The temple is almost rectangular in shape with a small apse at the north west end and an entrance hall at the south east end. The maximum internal dimensions of the building are approximately 7.3m by 16.4m. The surviving lower courses of the walls are made of stone. The building was excavated in 1953 by Gillam and MacIvor who were able to determine the plan of the temple, except for its south west corner which had been lost in a land slip.

*All road surfaces, road signs, field boundaries, buildings and overhead power line poles are excluded from the scheduling, but the ground beneath all these features is included.*

- 2.5.15 Previous archaeological work undertaken within the near vicinity of the site includes evaluations and watching briefs.
- 2.5.16 An archaeological watching was undertaken in association with a road maintenance coring survey along the length of the B6318, between Throckley in the east and Gilsland in the west (PCA 2006). A total of 162 cores were taken with the excavation and removal of all cores, up to 500mm in depth, conducted under archaeological supervision. Deposits of archaeological significance were encountered in 39 of the cores and in each case the remains lay directly below the road construction. Five cores situated within the near vicinity of the site encounter archaeological remains of significance. Core 006 located c. 0.9km ESE of the site recorded sandy silt with frequent sandstone fragments c. 300mm below the road surface interpreted as a possible bonding structural deposit associated with Hadrian's Wall. Cores 0.13 and 0.14 located c. 0.8km and c. 1.2km, respectively, to the WNW of the site both also recorded sandstone rubble deposits interpreted as structural bonding material associated with Hadrian's Wall at 400mm and 310mm below the road surface, respectively.
- 2.5.17 Archaeological evaluation associated with replacement of street lighting columns along Hexham Road, Heddon-on-the-Wall, involved the excavation of five trial pits for street light column locations (PCA 2017) that lay within the World Heritage site (Ref. 1000098) and Scheduled Monument of Hadrian's Wall and Vallum (Historic England Ref. 1010617: Hadrian's Wall and Vallum from East Town House, Heddon-on-the-Wall to the A69 trunk road in wall mile 12). At this location remains of the rubble core of Hadrian's Wall was encountered at c. 0.50m below the present ground level within Trial Pit 14HK.
- 2.5.18 Also of note was archaeological work undertaken on behalf of the MOD along Military road on the south-eastern side of the A69. At this location elements of Hadrian's Wall was encountered at c. 300mm below the road surface (Mike Collins, pers. Comm., 21 January 2019).

### **3. PROJECT AIMS AND RESEARCH OBJECTIVES**

#### **3.1 Project Aims**

3.1.1 The project aimed to fulfil the specific requirements of SMC by undertaking an appropriate specified scheme of archaeological evaluation in association with the proposed drainage improvement line within the course of Hadrian's Wall and the Vallum.

3.1.2 The broad aim of the project was to ensure that globally important archaeological remains were not damaged and were adequately recorded. The main objective of the evaluation was to provide information about the potential impact along the line of proposed drainage within the area of the Scheduled Monument. Additional aims of the project were:

- to compile a Site archive consisting of all site and project documentary and photographic records, as well as all artefactual and paleoenvironmental material recovered;
- to compile a report that contains an assessment of the nature and significance of all data categories, stratigraphic, artefactual, *etc.*

3.1.3 Historic England considered it necessary, based upon the effect of the proposed works upon the monument, to conduct an archaeological evaluation to assess the extent, depth and nature of archaeological deposits in order to provide information to underpin decisions on the management of the monument, changes in its land use, or development proposals (Historic England Ref: S00207472).

3.1.4 Accordingly Scheduled Monument Consent for the archaeological evaluation was granted under section 2 of the 1979 Act subject to the following conditions:

- The works to which this consent relates shall be carried out to the satisfaction of the Secretary of State, who will be advised by Historic England. At least 4 weeks' notice (or such shorter period as may be mutually agreed) in writing of the commencement of work shall be given to Mike Collins, Historic England, Bessie Surtees House, 41-44 Sandhill, Newcastle upon Tyne, NE1 3JF, 0191 2691212, [mike.collins@historicengland.org.uk](mailto:mike.collins@historicengland.org.uk), in order that an Historic England representative can inspect and advise on the works and their effect in compliance with this consent.
- No works shall take place except in accordance with a written scheme of investigation which has been submitted to and approved by the Secretary of State advised by Historic England.
- All those involved in the implementation of the works granted by this consent must be informed by the applicant that the land is designated as a scheduled monument under the Ancient Monuments and Archaeological Areas Act 1979 (as amended); the extent of the scheduled monument as set out in both the scheduled monument description and map; and that the implications of this designation include the requirement to obtain

Scheduled Monument Consent for any works to a scheduled monument from the Secretary of State prior to them being undertaken.

- Equipment and machinery shall not be used or operated in the scheduled area in conditions or in a manner likely to result in ground disturbance other than that which is expressly authorised in this consent.
- A report on the archaeological recording shall be sent to the County Historic Environment Record and to Mike Collins at Historic England within 3 months of the completion of the works (or such other period as may be mutually agreed).
- The contractor shall complete and submit an entry on OASIS (On-line Access to the Index of Archaeological Investigations - <http://oasis.ac.uk/england/>) prior to project completion, and shall deposit any digital project report with the Archaeology Data Service, via the OASIS form, upon completion

### **3.2 Research Objectives**

3.2.1 The basic layout of the Roman road network in the region is well understood, although there are still gaps where the precise route is conjectural. In addition to the major roads, there would have been minor routeways, about which relatively little is known (NERRF, Petts & Gerrard 2006).

3.2.2 Specific research objectives to be addressed by the project were formulated with reference to the main existing archaeological research framework, Shared Visions: The North-East Regional Research Framework for the Historic Environment (NERRF, Petts & Gerrard 2006) which highlights the importance of research as a vital element of development led archaeological work.

3.2.3 *Frontiers of Knowledge: A Research Framework for Hadrian's Wall* (Symonds & Mason Eds.) has identified a series of specific queries in relation to the monument which are relevant to the work at Heddon-on-the-Wall. These include:

#### **A.3 The Wall**

- **3.1 - Locating the Resource;** the precise course and distribution of the frontier installations and infrastructure remain uncertain.
- **3.2 - Existing Data;** the challenges that arise with utilising existing data.
- **3.3 - Chronology;** establishing the chronological relationship between the key Wall elements.
- **3.4 - Materials;** the precise source of structural material.
- **3.5 - Structures (Function, Curtain, Ditch, Obstacles, Milecastles, Turrets, Vallum);** the precise manner in which the Wall structures interacted and the resulting frontier system.

3.2.4 Moreover, the investigations were to be carried out with reference to *Shared Visions: the North East Regional Research Framework for the Historic Environment* (NERRF) (Petts and

Gerrard 2006), specifically the following research priorities for the Roman period, as set out in the NERRF Research Agenda:

- **Riii** Roman Military Presence
- **Riv** Native and Civilian Life
- **Rv** Material Culture
- **Rx** Roman to Early Medieval Transition

3.2.5 An appropriate level of reporting on the work was required, including, if necessary, full analysis and publication of any notable archaeological findings upon completion of the project. Thus, the results of the work will constitute the preservation by record of any archaeological remains encountered and subsequently removed during the course of works. The full scheme of archaeological work required is described in the following section.



## 4. ARCHAEOLOGICAL METHODOLOGY

### 4.1 Fieldwork

- 4.1.1 The fieldwork was undertaken in compliance with the codes and practice of the Chartered Institute for Archaeologists and the relevant ClfA standard and guidance document (ClfA 2014 a & b). PCA is a CIFA 'Registered Organisation'. All fieldwork and post-excavation work was carried out in accordance with the Yorkshire, the Humber & The North East: Regional Statement of Good Practice (SYAS 2011).
- 4.1.2 The project was managed in line with principles set out in Historic England's *'Management of Research Projects in the Historic Environment'* (MoRPHE) published in 2006.
- 4.1.3 All archaeological staff involved in the project were suitably qualified and experienced for their project roles. The project was overseen for PCA by the Regional Manager of the Durham Office, Jennifer Proctor.
- 4.1.4 All relevant Health and Safety legislation, regulations and codes of practice were respected. PCA's Health and Safety (H&S) Policy is the starting point for managing H&S at all locations where PCA carries out its operations.
- 4.1.5 As detailed in the WSI the evaluation comprised two trenches (Trenches 1 & 2) that effectively extended across the carriageway of Military Road (B6318) had dimensions of 0.70m wide by up to 0.75m deep.
- 4.1.6 The dimensions of the Trenches are provided in the table below:

Trench No.	Measurements (m)		
	Length	Width	Depth
Trench 1	6.69	0.78	0.75
Trench 2	4.10	0.77	0.75

- 4.1.7 The initial removal of all modern surface treatments and modern overburden was undertaken by Northumberland County Council's team using a 9.5 tonne 360° back-acting JCB utilising a toothless ditching bucket under continuous archaeological supervision. Excavation was carried out by hand using shovels, picks and mattocks. Excavation continued in 100mm spits until the top of the archaeological sequence or natural geology was encountered.
- 4.1.8 Upon the removal of modern overburden the excavation work was undertaken by archaeologists. Investigations within the trenches followed the normal principles of stratigraphic excavation and were conducted in accordance with the methodology set out in the WSI (PCA 2019), the field manual of PCA (PCA 2009) and the Museum of London Site Manual (Museum of London 1994).

- 4.1.9 Deposits and cut features were individually recorded on the *pro-forma* 'Trench Recording Sheet' and 'Context Recording Sheet'. All site records were marked with the unique-number MRH 19 (site code). All archaeological features were excavated by hand tools and recorded in plan at 1:20 or in section at 1:10 using standard 'single context recording' methods. The height of all principal strata and features was calculated in metres above Ordnance Datum (m AOD) and indicated on appropriate plans and sections. Trenches were located with a hand-held GPS and tied into the Ordnance Survey Grid.
- 4.1.10 A detailed photographic record of the evaluation was prepared using SLR cameras (35mm film black and white prints for archive purposes) and by digital SLR photography. All detailed photographs included a legible graduated metric scale. The photographic record illustrated both in detail and general context archaeological exposures and specific features in all trenches.
- 4.1.11 Once recorded, all trenches were backfilled by the Northumberland County Council's groundworks team.

## **4.2 Post-excavation**

- 4.2.1 The stratigraphic data for the project comprises written and photographic records. A total of 18 archaeological contexts were defined during the archaeological evaluation (Appendix 2). Post-excavation work involved checking and collating site records, grouping contexts and phasing the stratigraphic data. A written summary of the archaeological sequence was then compiled, as described in Section 5.
- 4.2.2 No artefactual material was recovered from the investigations.
- 4.2.3 The complete Site Archive, in this case comprising only the written, drawn and photographic records (including all material generated electronically during post-excavation) will be packaged for long term curation. In preparing the Site Archive for deposition, all relevant standards and guidelines documents referenced in the Archaeological Archives Forum guidelines document (Brown 2007) will be adhered to, in particular a well-established United Kingdom Institute for Conservation (UKIC) document (Walker, UKIC 1990) and the most recent ClfA publication relating to archiving (ClfA 2014c).
- 4.2.4 At the time of writing, the Site Archive was housed at the Durham Office of PCA, Unit 19a Tursdale Business Park, Durham, DH6 5PG. When complete, the Site Archive will be deposited at the appropriate repository under the site code MRH 19. The Site Archive will be organised so as to be compatible with the other archaeological archives produced in the county. A completed transfer of title deed will accompany the archive on deposition.

## 5. RESULTS: THE ARCHAEOLOGICAL SEQUENCE

*During the archaeological investigation, separate stratigraphic entities were assigned unique and individual context numbers, which are indicated in the following text as, for example [123]. The context numbers have been assigned per trench, contexts from Trench 1 are in the 300s and contexts from Trench 2 are in the 400s. The archaeological sequence is described by placing stratigraphic sequences within broad phases, assigned on a site-wide basis in this case. An attempt has been made to add interpretation to the data and correlate these phases with recognised historical and geological periods. The figures can be found in Appendix 1 with the context index and stratigraphic matrix located in Appendix 2 and 3 respectively. A selection of plates can be found within Appendix 4.*

### 5.1 Phase 1: Post-medieval

- 5.1.1 Phase 1 represents post-medieval period activity encountered in Trenches 1 & 2 (Figure 3: Sections 1-3, Plates 1-6).
- 5.1.2 The earliest deposit identified in Trench 1 comprised compact black sandy silt [311] with frequent small angular stone inclusions and was encountered at c. 0.80m below the existing ground level at a maximum height of 107.93 AOD. This deposit likely represents a 19th-century ground consolidation layer.
- 5.1.3 Consolidation layer [311] was overlain by c. 0.28m thick compact light yellowish brown sandstone and sand [303], encountered c. 0.50m below the existing ground level at a maximum height of 108.24 AOD. This deposit continued into Trench 2, recorded as context [403], and was at least 0.22m thick, encountered at a maximum height of 108.19m AOD. Deposits [303] and [403] were exposed for a maximum combined distance of 6.20m NE-SW and probably represents a consolidation deposit or alternatively a road surface of 19th century date. The composition of these deposits comprised sandstone and sand that may have been derived from Hadrian's Wall itself, however this could not be definitively proven.
- 5.1.4 Deposits [303] and [403] were directly overlain by c. 0.44m thick compact light brownish grey stone that was recorded in Trench 1 as context [302] and in Trench 2 as context [402]. These deposits were encountered between 0.20m and 0.40m below existing ground level at a maximum height of 108.29m AOD. These deposits are interpreted as a 19th-century ground consolidation layer.
- 5.1.5 At the northern extent of Trench 1 stiff mid yellowish brown clay [309] at least 0.42m thick was encountered c. 0.32m below existing ground level at a maximum height of 107.91m AOD. This deposit is interpreted as a 19th-century levelling deposit.

### 5.2 Phase 2: Modern

- 5.2.1 Phase 2 represents modern activity encountered in Trenches 1 & 2 (Figure 3, Plates 1-6).

- 5.2.2 At the north-eastern extent of Trench 1 a c. 0.20m thick soft mid brown silty sand modern levelling deposit [306] was encountered c. 0.60m below the present ground level at a maximum height of 108.44m AOD. Levelling deposit [306] in turn was truncated by a WNW-ESE aligned service trench [308] that contained a BT cable and ceramic drainage pipes and firm mid brown sandy clay backfill [307].
- 5.2.3 The construction cut for the existing roadside curb [310] truncated the modern services [308] and contained prefabricated concrete curb edging set into concrete bedding [304] up 0.55m thick.
- 5.2.4 The concrete bedding [304] was in turn overlain by topsoil [305] at the northern extent of Trench 1 and by a tarmac bedding layer [301] at the south extent of Trench 1.
- 5.2.5 The existing road surface was formed by c. 0.12m thick asphalt, recorded as context [300] in Trench 1 and context [400] in Trench 2, and a stone and asphalt sub-base up to 0.27m thick, recorded as context [301] in Trench 1 and context [401] in Trench 2. At the location of the archaeological work the road surface occurred at a height of c. 108.79m AOD.
- 5.2.6 AT the southern extent of Trench 2 a modern surface drain [405], built within a narrow construction cut [404], was recorded truncating the asphalt bedding layer [401].

## **6. CONCLUSIONS AND RECOMMENDATIONS**

### **6.1 Conclusions**

6.1.1 The archaeological investigations comprised the excavation of two trenches that effectively extended across the carriageway of Military Road (B6318), Heddon-on-the-Wall, Northumberland. The aim of the archaeological evaluation was to determine the likely impact on potential archaeological remains of Hadrian's Wall and Vallum by proposed works associated with the improved drainage system within the Scheduled Monument Area.

6.1.2 Remains of post-medieval and modern deposits were encountered in Trenches 1 and 2. This activity was assigned two phases of activity:

- Phase 1: Post-medieval comprising ground consolidation layers and possible road surfaces within Trenches 1 and 2.
- Phase 2: Modern remains comprising service trenches, manhole drains and road surfaces within Trenches 1 and 2.

6.1.3 The evaluation determined that the Trenches 1 and 2 contained only post-medieval and modern consolidation deposits and surfaces, with no significant archaeological deposits identified.

6.1.4 The aim of the archaeological evaluation was to provide information about the potential impact the proposed drainage improvement works would have on locations within the area of the Scheduled Monument. To this end, no significant archaeological remains associated with Hadrian's Wall and the Vallum were impacted on by the installation of improved drainage systems up to a maximum depth of 0.75m within the trenches investigated. As superficial geology or archaeological remains pre-dating 19th century activity was not encountered within the trenches, it is possible that Roman period activity could survive at greater depths.

### **6.2 Recommendations**

6.2.1 No further work is required on the information recovered during the evaluation, with the Site Archive (including this report), forming the permanent record of the strata encountered.

6.2.2 No further archaeological mitigation is required prior to development.

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## 7.2 Online Sources

*The British Geological Survey* website: [www.bgs.ac.uk](http://www.bgs.ac.uk).

*MAGIC* website: <http://magic.defra.gov.uk/>

## 8. ACKNOWLEDGEMENTS AND CREDITS

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### **PCA Credits**

*Fieldwork:* Danni-louise Floyd (Supervisor) and James Hopper

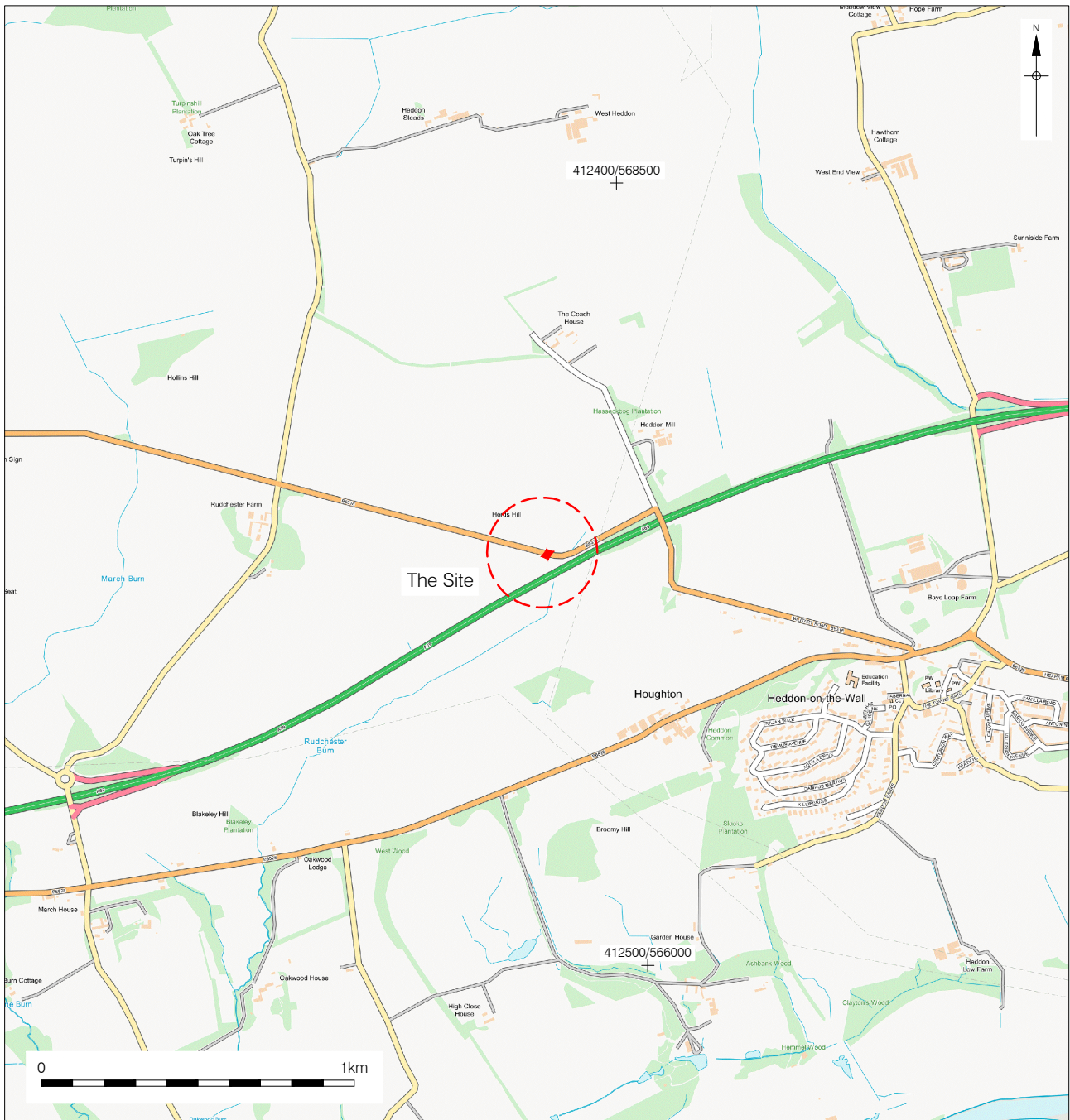
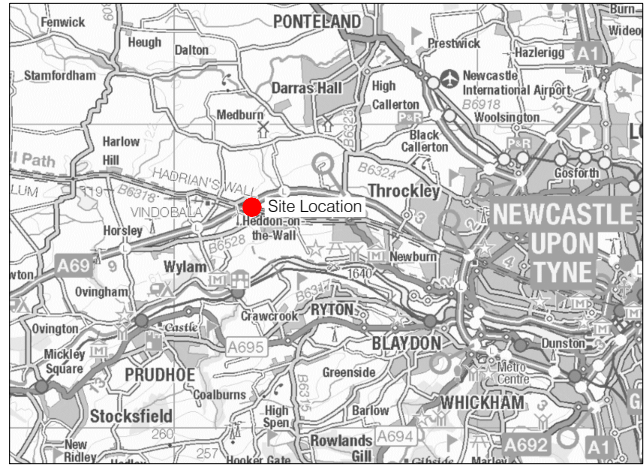
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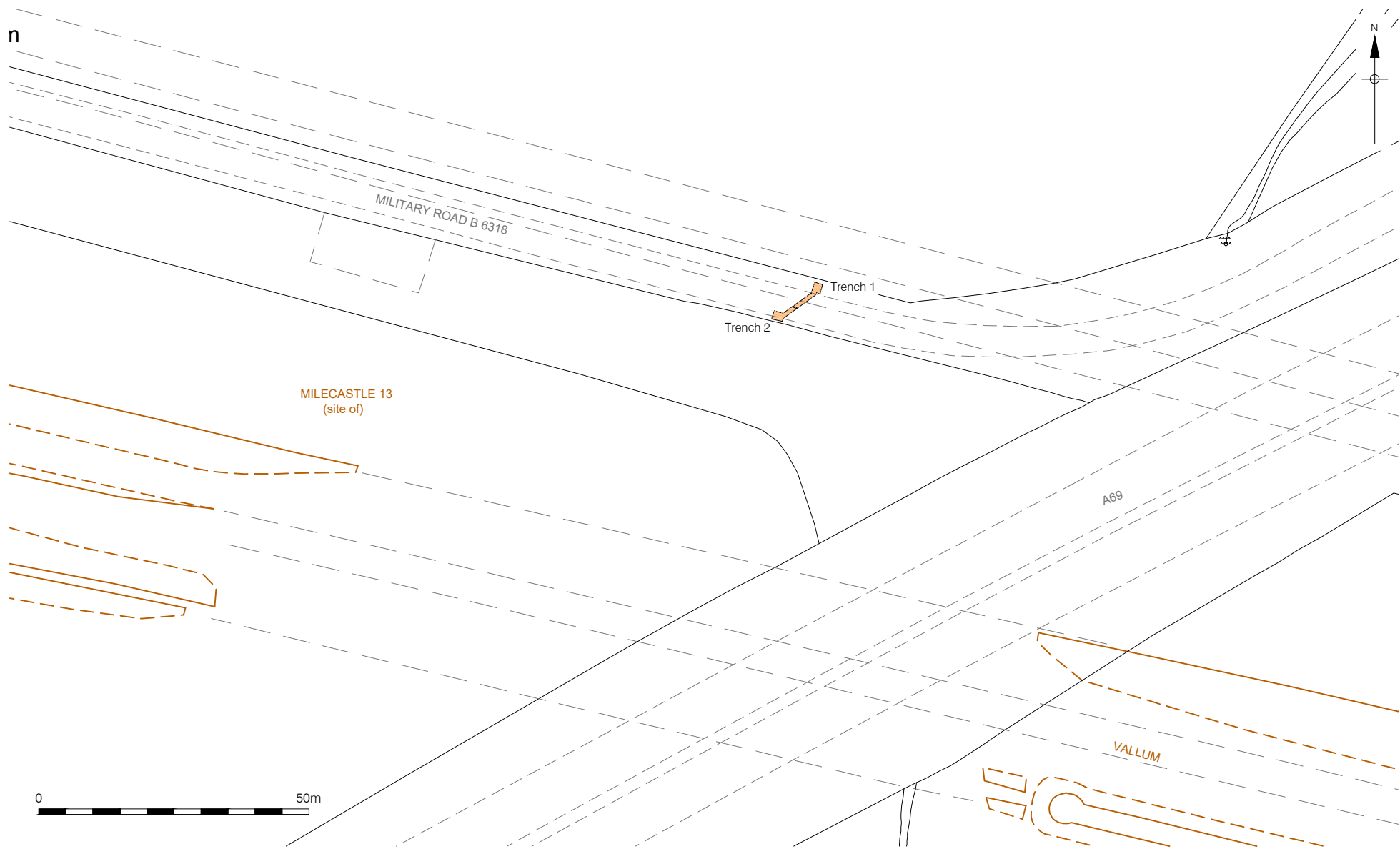
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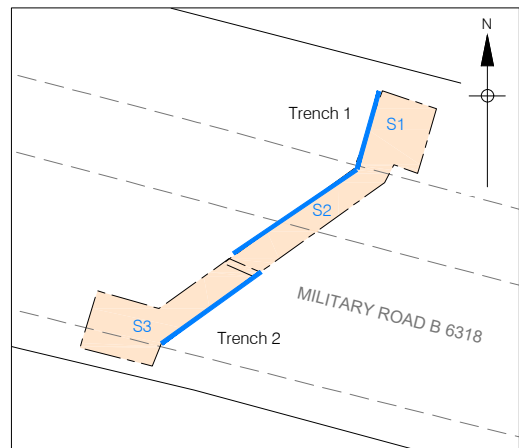
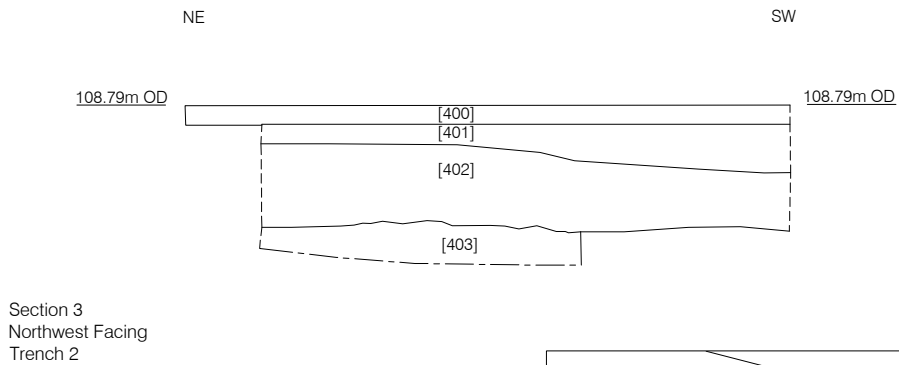
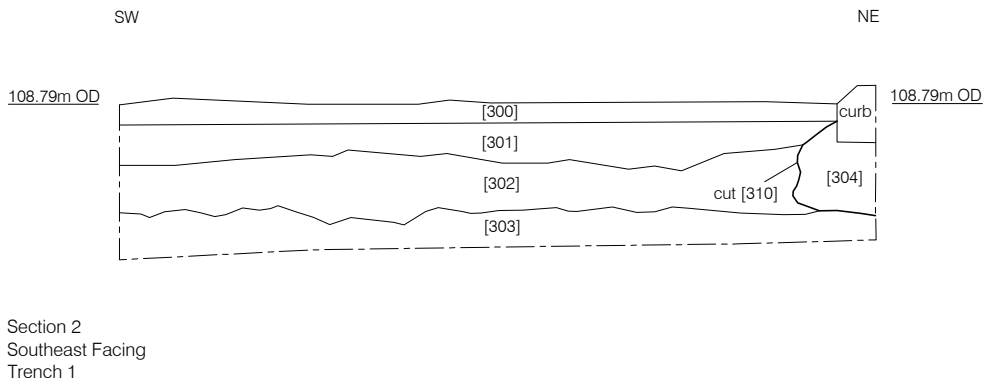
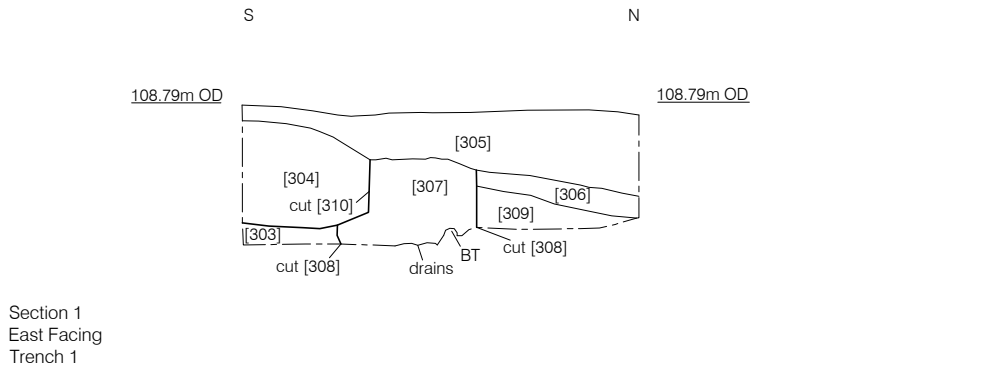
*CAD:* Diana Valk



## **APPENDIX 1: FIGURES**



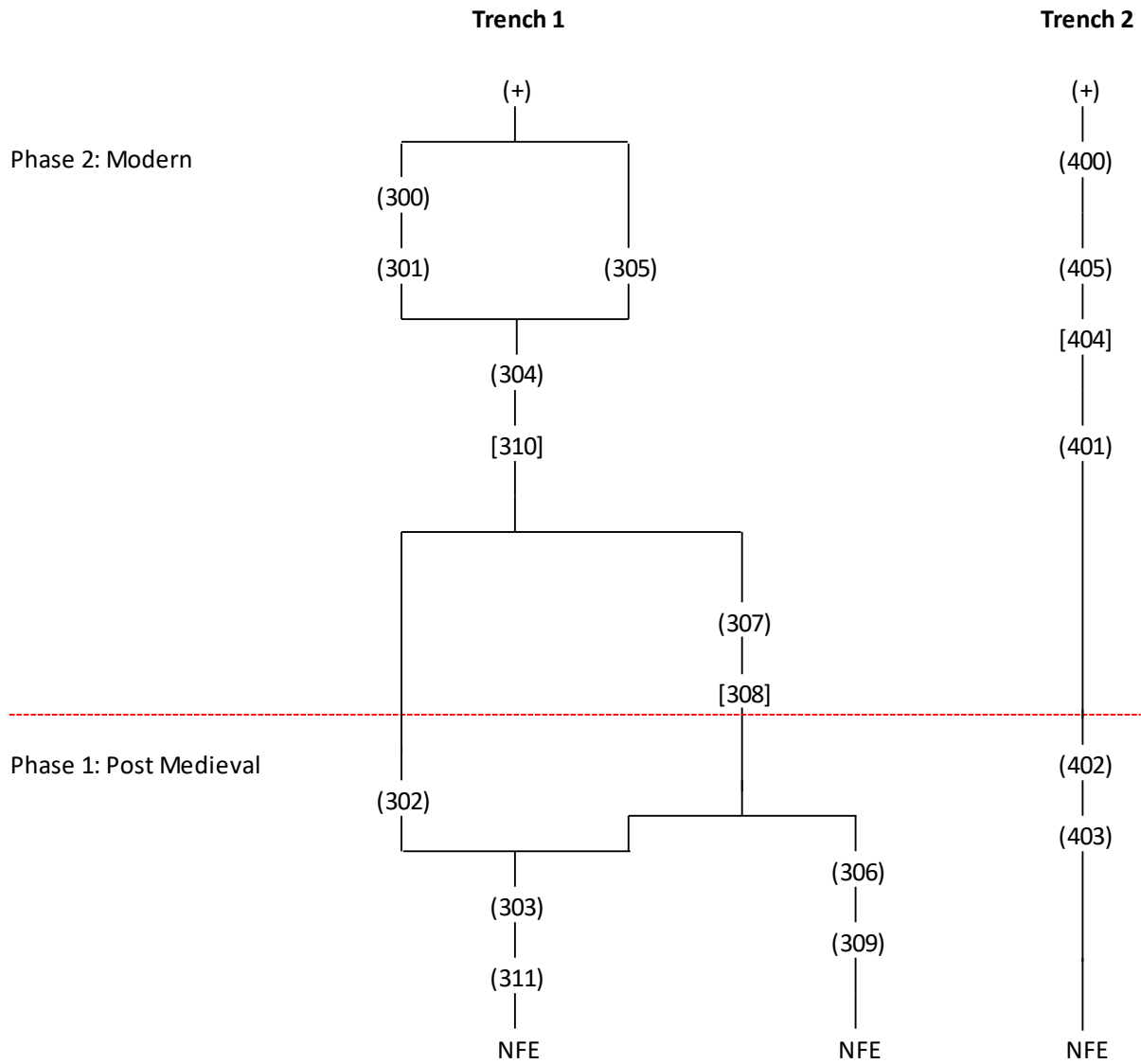




## APPENDIX 2: CONTEXT INDEX

<b>Context</b>	<b>Phase</b>	<b>Type 1</b>	<b>Type 2</b>	<b>Fill of</b>	<b>Interpretation</b>
<b>Trench 1</b>					
300	2	Deposit	Layer	-	Tarmac surface
301	2	Deposit	Layer	-	Tarmac bedding layer
302	1	Deposit	Layer	-	Ground consolidation layer
303	1	Deposit	Layer	-	Consolidated road surface
304	2	Deposit	Fill	[310]	Concrete backfill
305	2	Deposit	Layer	-	Topsoil
306	2	Deposit	Layer	-	Sub-soil
307	2	Deposit	Fill	[308]	Backfill of modern service trench
308	2	Cut	Cut	-	Construction cut of services
309	1	Deposit	Layer	-	Made-ground levelling deposit
310	2	Cut	Cut	-	Construction cut for road side curb
311	1	Deposit	Layer	-	Possible ground consolidation layer
<b>Trench 2</b>					
400	2	Deposit	Layer	-	Tarmac surface
401	2	Deposit	Layer	-	Tarmac bedding layer
402	1	Deposit	Layer	-	Ground consolidation layer
403	1	Deposit	Layer	-	Consolidated road surface
404	2	Cut	Cut	-	Cut of modern manhole
405	2	Masonry	Structure	[404]	Modern manhole drain

### APPENDIX 3: STRATIGRAPHIC MATRIX



## APPENDIX 4: PHOTOGRAPHIC PLATES

*Plate 1: Overview of Trench 1 (SW-facing direction of view)*



*Plate 2: E-facing section of Trench 1 showing service trench (W-facing direction of view)*



*Plate 3: Oblique view of Trench 1 (N-facing direction of view)*



*Plate 4: Oblique view of Trench 2 (NE-facing direction of view)*





*Plate 5: Oblique view of NW-facing section of Trench 2 (E-facing direction of view)*



*Plate 6: General view of Trenches 1 & 2 (NE-facing direction of view)*



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