

AN ARCHAEOLOGICAL WATCHING BRIEF AT ST. CUTHBERT'S RC HIGH SCHOOL, GRETNA ROAD, BENWELL, NEWCASTLE-UPON-TYNE, TYNE AND WEAR





PRE-CONSTRUCT ARCHAEOLOGY

An Archaeological Watching Brief at St. Cuthbert's RC High School, Gretna Road, Benwell, Newcastle-upon-Tyne, Tyne and Wear

Central National Grid Reference: NZ 209 650 Site Code: SCB 09

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1. NON-TECHNICAL SUMMARY

- 1.1 A programme of archaeological monitoring and recording was undertaken by Pre-Construct Archaeology at St. Cuthbert's RC High School in Benwell, Newcastle. The central National Grid Reference of the site is NZ 209 650.
- 1.2 The school was being re-developed as an element of Phase 2 of Newcastle's 'Building Schools for the Future' programme. A phased programme of archaeological work was undertaken in association with the scheme and the monitoring and recording, undertaken intermittently between November 2009 and May 2011, comprised the final element of archaeological fieldwork. It was commissioned by the Principal Contractor, Sir Robert McAlpine.
- 1.3 St. Cuthbert's High School is located in an area of considerable archaeological sensitivity since it lies immediately to the south of and adjacent to the assumed line of Hadrian's Wall as it runs westwards out of Newcastle below West Road. Furthermore, a corridor of land that has statutory protection as a Scheduled Ancient Monument – the route of the Vallum, the southern defensive element of the Roman frontier - runs through the school grounds. Invasive groundworks within the scheduled area required monitoring as a condition of Scheduled Monument Consent and works undertaken adjacent to the scheduled area required monitoring due to the likelihood of remains of the Roman frontier being encountered.
- 1.4 Archaeological monitoring was undertaken in association with groundworks for several elements of the re-development scheme. To the south of and immediately adjacent to the scheduled area, a foundation trench was excavated for a retaining wall for the main new build element of the scheme. To the north of the scheduled area, topsoil was stripped across the footprint of a new multi-use games area. To the west of this, an associated drainage trench was excavated and the route of a new footpath was stripped of topsoil, this extending southwestwards from the games area footprint across the scheduled area. East of the games area, the footprint of a new electricity sub-station was excavated, along with a series of associated trenches for drainage and a new electricity supply. The electricity supply trenches preceded by the excavation of a series of investigative test pits extended both southwards into the scheduled area, northwards to join the electricity main running below West Road and westwards to the games area. Finally, several tree pits were excavated long the frontage of West Road, as part of the landscaping element of the scheme.
- 1.5 The broad aim of the archaeological monitoring was to identify and record archaeological remains at the site, with particular emphasis on evidence of Roman military activity associated with the Hadrian Wall frontier.
- 1.6 No archaeological remains of definite importance were recorded during the work. A total of thirty-one archaeological contexts were recorded, three of certain natural origin and three others of possible natural origin. All remaining features and deposits were attributed to the modern era and were interpreted as relating to previous landscaping and development of the site.

2. INTRODUCTION

2.1 General Background

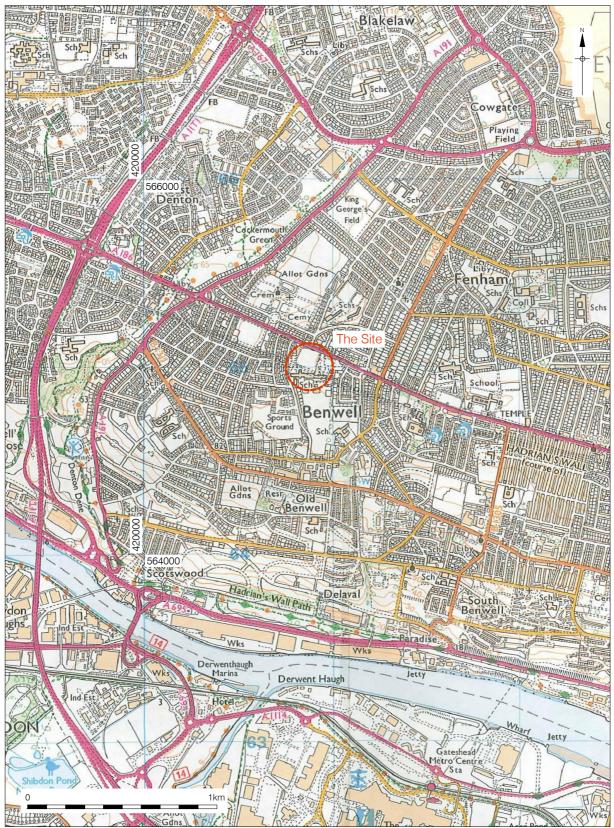
- 2.1.1 This report details the results of a programme of archaeological monitoring and recording ('watching brief') undertaken by Pre-Construct Archaeology Limited (PCA), intermittently between November 2009 and May 2011 at St. Cuthbert's RC High School on Gretna Road, Benwell, Newcastle-upon-Tyne. The central National Grid Reference of the site is NZ 209 650 (Figure 1).
- 2.1.2 The school has been re-developed as an element of Phase 2 of Newcastle's 'Building Schools for the Future' (BSF) programme and the watching brief herein described comprised the final element of a programme of archaeological work undertaken since 2008 in association with the scheme A previous report details the findings of previous work, comprising archaeological monitoring of geotechnical site investigations and an archaeological evaluation.¹
- 2.1.3 The school site is archaeologically sensitive since it lies immediately to the south of the assumed line of Hadrian's Wall as it runs westwards out of Newcastle below the modern West Road. Furthermore, a strip of land that has statutory protection as a Scheduled Ancient Monument the route of the Vallum, the southern defensive element of the Roman frontier runs north-westwards through the northern part of the school grounds.
- 2.1.4 The watching brief was commissioned by the Principal Contractor for Newcastle's BSF programme, Sir Robert McAlpine Limited (SRM). Invasive groundworks within the scheduled area required monitoring as a condition of Scheduled Monument Consent and works undertaken on adjacent land required monitoring due to the likelihood of remains of the Roman frontier being encountered. The main works monitored comprised excavation of the line of a new retaining wall, preparation of the footprint of a new multi-use games area (MUGA) and an associated footpath, excavation of the footprint of a new electricity sub-station and associated service trenches and excavation of a series of tree pits on the West Road frontage (Figure 2).
- 2.1.5 No archaeological desk-based assessment of the site was undertaken ahead of the redevelopment scheme, although previous development at the school, in 2003, was preceded by such an assessment, which highlighted the archaeological potential of the site.² The watching brief was undertaken according to a Project Design prepared in advance of the work by PCA.³ In addition, a Method Statement was prepared by SRM detailing the works to be carried out within and immediately adjacent to the scheduled area.⁴
- 2.1.6 The broad aim of the project was to identify and record archaeological remains at the site, with particular emphasis on evidence of Roman military activity associated with the Hadrian's Wall frontier.

¹ PCA 2009a.

² Tyne and Wear Museums 2003a.

³ PCA 2009b.

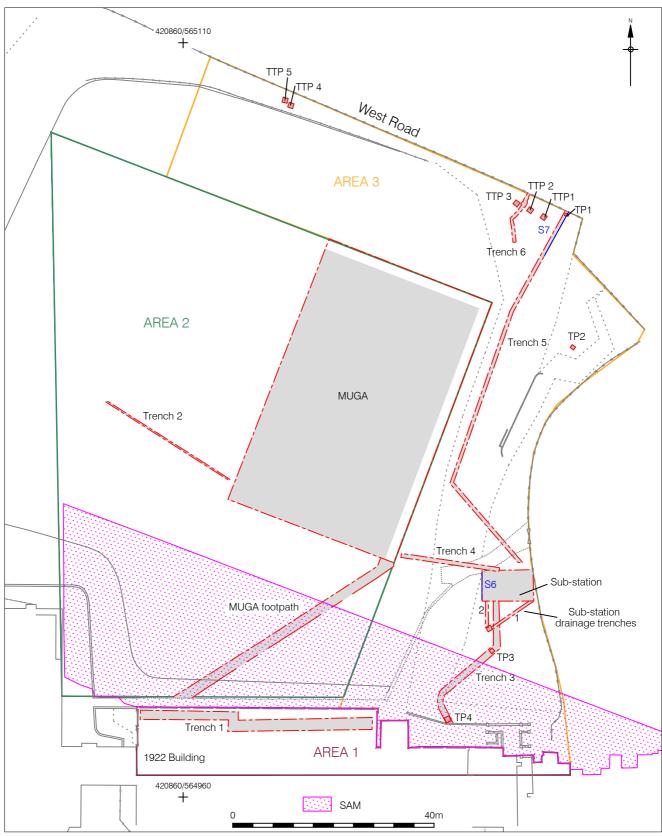
⁴ SRM 2009.



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Figure 1 Site Location 1:20,000 at A4



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Figure 2 Location of Interventions 1:750 at A4 2.1.7 The complete Site Archive, comprising written, drawn, and photographic records, will be deposited at Tyne and Wear Museums and Archives, Arbeia, South Shields, under the site code SCB 09. The Online Access to the Index of Archaeological Investigations (OASIS) reference number for the project is: preconst1-105578.

2.2 Site Location and Description

- 2.2.1 The school site is situated within the north-western portion of the Benwell area of Newcastle, *c*.4km west of the city centre. It lies immediately adjacent to and on the south side of West Road, the A186. Access to the school is from Gretna Road, which joins West Road (Figure 1).
- 2.2.2 The area of investigation covered by this report forms the northernmost portion of the school grounds. It is an irregular shaped area covering *c*. 1.25 hectares, with central National Grid Reference NZ 209 650, but the overall area of investigation was divided into three areas (Areas 1-3) to take into account the phased nature of the watching brief, as described in due course (Figure 2).
- 2.2.3 At the time of the work herein described, the majority of the area of investigation comprised the easternmost part of a grassed cricket field, skirted to the east and north-east by a sloping grassed area of ground with some shrubbery and tree cover. To the south was an area previously occupied by the '1922 Building' of the school, with the ground surface formed by demolition rubble derived from the building.

2.3 Geology and Topography

- 2.3.1 The site lies on the western side of 'Benwell Hill', a strong geological feature formed by the High Main Post, a distinct sandstone stratum between the High Main Coal and the High Main Marine Band.⁵ These strata are part of the Upper Carboniferous Pennine Middle Coal Measures Formation.⁶ The western side of Benwell Hill, known as 'Benwell Bank', forms the eastern valley side of Denton Burn. The 'drift' geology of this area is characterised by glacial Till, with other glacial and fluvioglacial deposits intermittently present.
- 2.3.2 East of the site, on West Road, ground level lies at *c*. 120m OD, with a general fall away to the River Tyne, which lies *c*. 1.4km to the south. In general terms, the overall school site has a gently sloping, south-facing aspect, above the more pronounced sloping valley side of the Tyne. However, in terms of micro topography, the site appears to have been extensively landscaped, particularly in the northern portion, and this probably dates from the time of construction of the 1922 Building and during more recent developments. This is particularly evident within the area of investigation herein described, where across the cricket pitch the ground is roughly level, at 110-1110Dm OD, while the land along its western side is landscaped to fall sharply to *c*. 106m OD and the bank forming its eastern margin rises sharply to 113-114m OD. It is noteworthy that where West Road passes the site to the north, it appears to be 'in-cutting' on its south side.

⁵ Johnson 1997.

⁶ Information from the *British Geological Survey* website.

2.4 Planning Background

- 2.4.1 Re-development of St. Cuthbert's School is an element of Phase 2 of the Newcastle BSF project, which is being delivered and partly funded by Newcastle City Council's private sector partner, Aura. SRM is Principal Contractor for the Newcastle BSF programme.
- 2.4.2 Statutory protection for archaeological remains is principally enshrined in the 1979 Ancient Monuments and Archaeological Areas Act, as amended by the National Heritage Acts of 1983 and 2002. Nationally important sites are listed in a schedule of monuments maintained by the Department for Culture, Media and Sport (DCMS) and are accorded statutory protection as Scheduled Ancient Monuments (SAMs).
- 2.4.3 The importance of the archaeological resource at the school site stems from its location directly adjacent to the line of Hadrian's Wall. The Hadrian's Wall Military Zone was designated a UNESCO World Heritage Site (WHS) in 1987, although the urban areas of Newcastle were excluded from the WHS. A management plan, produced by English Heritage in 1996,⁷ identified three distinct areas: the 'archaeological core' of the Wall and Vallum (the WHS), the surrounding 'buffer zone' and the outer 'visual envelope'. In 1997 the portions of the Wall afforded statutory protection as SAMs in the urban areas of Newcastle were included in the WHS. In 2005, UNESCO amalgamated the Hadrian's Wall and the German Limes World Heritage Sites into the transnational WHS 'Frontiers of the Roman Empire'.
- 2.4.4 Although the portion of Hadrian's Wall immediately to the north of the site does not have SAM status, a strip of land taking in the route of the Vallum defences that ran south of and parallel to Hadrian's Wall *is* scheduled as it runs north-westwards through the northern part of the school grounds. This is SAM 28(11), with full title 'Hadrian's Wall Vallum in Wall Mile 6 Benwell, Length of Vallum of Hadrian's Wall in Grounds of St. Cuthbert's School, Newcastle-upon-Tyne'. The scheduled area runs roughly NW-SE across the southern part of the cricket field, with part of its southern boundary formerly delimited, *i.e.* prior to demolition, by the northern elevation of the 1922 Building (the scheduled area is shown on Figure 2).
- 2.4.5 English Heritage advises DCMS on all development proposals within the vicinity of scheduled portions of Hadrian's Wall through its Historic Environment Advisor, Archaeology (Hadrian's Wall) and all intrusive groundworks in scheduled areas require SMC prior to their undertaking. Thus construction groundworks undertaken within the scheduled area at the site required SMC, for which SRM duly applied.
- 2.4.6 In accordance with the 1979 Act, the Secretary of State for Culture, Media and Sport consulted with English Heritage before deciding whether or not to grant SMC. English Heritage considered the effect of the proposed works upon the monument to be works that would not significantly diminish the visual amenity of the monument but could cause significant damage to the monument's archaeological deposits or evidence. However, English Heritage considered that this could be acceptably mitigated by conditions or safeguards to ensure archaeological supervision and recording.

⁷ English Heritage 1996.

- 2.4.7 Accordingly, SMC was granted (letter from DCMS dated 9 July 2009) subject to a condition (3i) stipulating that 'No works shall take place until implementation of programme of archaeological work has been secured in accordance with a written scheme of investigation [(WSI)] submitted to and approved by the Secretary of State, advised by English Heritage. This scheme will cover an archaeological watching brief on all excavations within the scheduled area'. The Project Design compiled by PCA prior to the commencement of work described the WSI required by SMC.
- 2.4.8 During the set-up for this project, UK Government guidance on archaeology and heritage conservation was set out in *Planning Policy Guidance Note 16: 'Archaeology and Planning'* (PPG16),⁸ which was under review as part of a consultation paper (July-October 2009) on a new national Planning Policy Statement (PPS) on the historic environment. *PPS5: Planning for the Historic Environment* was published in March 2010.⁹
- 2.4.9 At a local level, the Local Planning Authority (LPA), Newcastle City Council, has various policies within its Unitary Development Plan (UDP) concerning archaeology and cultural heritage. Of particular relevance are:

POLICY C04. DEVELOPMENT THAT WOULD HARM SITES OR AREAS OF ARCHAEOLOGICAL INTEREST AND THEIR SETTINGS WILL NOT BE ALLOWED.

and

POLICY C04.1. THE FOLLOWING SITES AND AREAS OF ARCHAEOLOGICAL INTEREST IDENTIFIED FOR THE PURPOSE OF POLICY C04 INCLUDE:

Scheduled ancient monuments

7. Hadrian's Wall, Vallum and associated works

Other sites and areas of archaeological interest, as defined on the Proposals Map

18. Unscheduled areas of the known and presumed line of Hadrian's Wall, Vallum, Ditch and fortifications.

2.4.10 Therefore, the UDP policies described above allow the planning system at a local level adequate provision for the preservation of archaeological remains associated with Hadrian's Wall and its buffer zone, irrespective of whether or not they lie within scheduled areas. In this instance, the County Archaeologist, part of the Tyne and Wear Specialist Conservation Team attached to the Historic Environment Section of Newcastle City Council, advised on the scheme, in conjunction with the Historic Environment Advisor, Archaeology (Hadrian's Wall) at English Heritage.

⁸ Department of the Environment 1990.

⁹ Department for Communities and Local Government, English Heritage and Department for Culture, Media and Sport, 2010.

2.5 Archaeological and Historical Background

A desk-based assessment was undertaken prior to a previous phase of development at the school, in 2003. A summary of this information is included below, and the research and writing of those responsible is gratefully acknowledged. The summary focuses on the Roman and post-medieval periods and greater detail of other archaeological eras can be found in the aforementioned desk-based assessment and the Tyne and Wear Historic Environment Record (HER). Entry numbers for the HER are included, as appropriate.

Prehistoric

- 2.5.1 A perforated axe-hammer of probable Neolithic or Early Bronze Age date (HER 1376) was found in the vicinity of *Condercum* fort. However, a single object cannot be considered as evidence of significant prehistoric activity in the area.
- 2.5.2 Slightly further afield, along the River Tyne, there have been numerous discoveries many recorded by antiquarians of prehistoric burials and artefacts, including flint tools, bronze spear and axe-heads as well as logboats, all giving a broad picture of utilisation of the river valley during the prehistoric eras.¹⁰

Roman

- 2.5.3 The main archaeological potential for the site relates to the Roman period due to its proximity to Hadrian's Wall. The significance of the Wall corridor in archaeological terms lies both in its complexity and the degree of survival of the Roman military and civilian remains. As previously described, its significance was recognised by the designation of the Hadrian's Wall Military Zone as a WHS in 1987 and the amalgamation, in 2005, of the Hadrian's Wall WHS and the German Limes WHS into the transnational WHS known as 'Frontiers of the Roman Empire'.
- 2.5.4 The site lies *c*. 300m to the west of the assumed western limit of the civilian settlement (*vicus*) (HER 5262) associated with *Condercum* fort (HER 208), while the fort itself lay *c*. 700m to the ESE of the site, atop Benwell Hill and astride Hadrian's Wall. The line of the southern earthwork defences of the frontier, the Vallum, is thought to have crossed the school site. As previously mentioned, much of the corridor likely to have been occupied by the Vallum within the school grounds has statutory protection as SAM 28(11).
- 2.5.5 The construction of Hadrian's Wall was undertaken on the order of Emperor Hadrian from AD 122 to consolidate the northern border of the Roman Empire. The Wall was built in stone between Newcastle and the River Irthing, the eastern 45 miles, with the remaining 31 miles constructed in turf. Benwell lies in a stretch of the frontier between Newcastle and the River North Tyne, where the Wall was of typical 'broad Wall' stone construction, *c*. 3m wide on a broad foundation of similar width and *c*. 5m high. The line of the Wall is closely reflected in the line of West Road through Benwell and remains of the Wall are visible along the south side of the road to the north-west of the study site. In 2002, monitoring of groundworks, *c*. 160m to the north of the study site, located the foundations of the Wall under the southern carriageway of West Road.¹¹

¹⁰ Miket 1984.

¹¹ Tyne and Wear Museums 2002.

- 2.5.6 From its inception, the Wall was planned with regularly spaced fortlets ('milecastles') at intervals of about one mile and the original design also planned for two equally spaced towers ('turrets') between each milecastle. At some point, a fundamental change of plan occurred and more substantial forts were constructed. Sixteen such forts are now known either attached to the Wall or in close association with it. *Condercum*, meaning 'place with the fine view', was a cavalry fort sited astride the Wall on the summit of Benwell Hill, the highest ground in the west end of Newcastle.
- 2.5.7 To the north of the Wall, at a distance of *c*. 6m, ran a substantial V-shaped ditch which varied from 8-12m in width and was around 3m deep.¹² The berm was generally about 6m in width, although was much reduced in areas adjacent to the turrets.¹³ The material dug out from the ditch was mounded on the north side, known as the *glacis* mound, to heighten the outer scarp.
- 2.5.8 A further defensive element the aforementioned Vallum was added to the Wall after the decision had been taken to construct the forts. It comprised a broad flat-bottomed ditch flanked by a pair of linear banks, formed from the upcast from the excavation of the ditch. The ditch was *c*. 6.5m wide, up to *c*. 3m deep, with banks *c*. 6m across by 2m high. The standard width of the Vallum including all the above elements is 36.60m (this distance is the equivalent of 120 feet, the Roman surveying unit known as an *actus*). The commonly accepted interpretation for the function of the Vallum is that it represented a demarcation of the militarised zone from civilian land to the south. The Vallum was constructed at a variable distance to the south of the Wall, sometimes adjacent to it, and in some places up to 1km to its south. At many locations the Vallum is now buried below post-medieval and modern development. At this site, the postulated WNW-ESE course of the Vallum runs through the school grounds, across the southern part of the cricket field and this is scheduled, as described.
- 2.5.9 A road, known as the Military Way, was built to link all elements of the Wall defence; it ran from fort to fort across the corridor between the Wall and Vallum. An archaeological evaluation in 2003, in the grounds of Pendower Hall *c*. 550m ESE of the site, encountered the Military Way, the work revealing a well-preserved road surface, running *c*. 30m south of West Road.¹⁴
- 2.5.10 *Condercum* fort covered 5.64 acres and was garrisoned during the reign of Hadrian by a cavalry regiment of 500 troops. It was occupied from the mid-late 2nd century by a 1,000 strong cavalry unit from the upper Rhineland. Known features within the fort include the Commanding Officer's house, the headquarters building, granaries, workshops, barracks and possibly stable blocks and a hospital. A reservoir was constructed over the northernmost third of the fort in 1858 and has since been enlarged, while much of the remainder is covered by West Road and, to the south, the Denhill Park housing estate.

¹² Breeze and Dobson 2000, 30.

¹³ Bidwell 2009.

¹⁴ Tyne and Wear Museums 2003b.

- 2.5.11 In the area of *Condercum* fort, both the Vallum and Wall ditch were once visible as earthworks either side of a toll road, which has now been widened to form the modern West Road through Benwell. Various antiquarian records, including those of Horsley in 1732, Bruce in 1851 and MacLauchlan in 1852, give descriptions of the earthworks visible at the time. Excavations to the west of Condercum Road in 1928 located the Vallum and traced the line of its diversion around the southern boundary of the fort.
- 2.5.12 Recent investigations targeting the Vallum ditch or the *vicus* in Benwell have met with relatively little success. An archaeological evaluation in 2003 on land within the school grounds immediately west of the site found no evidence of the *vicus*.¹⁵ Archaeological monitoring in 2004 on Springhill Gardens and Broomridge Avenue, did, however, identify the north side of the Vallum ditch.¹⁶ Another programme of archaeological monitoring in 2005, on Weidner Road and Oakfield Gardens, found no evidence of the Vallum or the *vicus*.¹⁷ An evaluation in 2004 at Bowland Lodge, Benwell, *c*. 1.6km east of the site, tested the postulated line of the Vallum, but found no evidence of any Wall related features or any other Roman activity.¹⁸
- 2.5.13 Beyond the fort area of *Condercum*, significant Roman period structures have been discovered, including: a bath-house (HER 5263), *c*. 400m to the south-west of the fort; a mansio (lodgings for visitors to the fort) (HER 5265), *c*. 170m to the south-west; a building foundation (HER 5269), *c*. 200m to the south-west. In addition, there have been numerous single finds in the wider area, including pottery and coins (HERs 5267, 5268, 5272) in the area to the south-west of the fort.

Anglo-Saxon

2.5.14 There is no documentary evidence to suggest settlement or exploitation of the land in the vicinity of the site during this era.

Medieval

- 2.5.15 Benwell, originally a small village (HER 140) in its own right prior to absorption into the urban west end of Newcastle, lay further down the side of the Tyne valley, *c*. 0.5km SSE of the school site. The earliest reference to the village of 'Bynnewalle' (referring to its position on Hadrian's Wall) comes from *c*. AD 1050, the time immediately before the Norman Conquest.
- 2.5.16 There are relatively detailed documentary records of the ownership of Benwell estate up to the Dissolution, when it passed to the Crown, before it was bought by Robert Shafto in 1625.
- 2.5.17 The course of the ancient roadway (HER 3945) from Newcastle to Carlisle lies beyond the northern limit of the site, effectively following the course of Hadrian's Wall. The earliest reference to 'Westgate' is 1163-80 and by the late 13th century, following construction of the Newcastle town wall, the West Gate provided access to this main route. In 1751, a toll road the Military Road was constructed on roughly the same alignment as the ancient roadway.

¹⁵ Tyne and Wear Museums 2003c.

¹⁶ Tyne and Wear Museums 2004.

¹⁷ Tyne and Wear Museums 2005.

¹⁸ PCA 2004.

Post-medieval and Modern

- 2.5.18 A post-medieval or early industrial era quarry (HER 1359), lay *c*. 200m north-east of the site. It was mentioned in a survey of Benwell *c*. 1578 and its location is probably reflected in an area of quarrying shown on an estate map of Benwell *c*. 1677. It was likely subsumed into the extensive Bank Top Quarry (HER 4067) which developed either side of West Road in the late 18th or early 19th century. Extensive workings are depicted, as 'Quarry Hole', south of the toll road on an estate map of 1834.
- 2.5.19 The general area is most likely to have been utilised primarily as agricultural land during the post-medieval period and it is possible that the earthworks of the Vallum were levelled at an early date, possibly because of the proximity to Benwell village which would mean that farmland here would have been at a premium. A map of Benwell dated 1637 clearly depicts the agricultural nature of the area in which the site lies, with defined fields and meadows set out south of the Wall. The line of the Vallum may be depicted on this map in the form of field boundaries, but this is not certain. A similar arrangement of land parcels appears, in rather less detail, on the aforementioned estate map from *c.* 1677.
- 2.5.20 A composite plan showing the Benwell estates c. 1800 shows the northern part of the school grounds probably lying within two land parcels, 'North King's Chambers' and 'Middle King's Chambers'. Immediately to the west, 'Cottage Plantation' ran to the SSE from the line of the Wall down to Benwell village. The aforementioned map of 1834 shows the northern part of the school grounds lying within a single extensive field, 'North King's Chambers', with the aforementioned quarry shown in some detail immediately to the north-east, on the south side of the toll road.
- 2.5.21 In terms of the position of the Hadrian's Wall frontier, much mapping from the late 16th century to the late 18th century, such as the plans of Saxton (1576), Speed (1610), Horsley (1732), Kitchen (1767) and Armstrong (1769), shows only the general line of Hadrian's Wall and Vallum in Benwell. Subsequent maps, such as that of Greenwood (1828) and MacLauchlan (*c.* 1858), are at scales sufficient only to show significant features, such as the Newcastle to Carlisle road. However, the cartographic evidence of the early-mid 19th century is of note in that it continues to convey what was still despite increasing industrialisation along the Tyne generally an agricultural landscape south of the line of the Wall in Benwell.
- 2.5.22 The Ordnance Survey 1st edition map of 1858 shows the current school grounds still within what remained an essentially rural landscape on the south side of the portion of the toll road running down 'Benwell Bank', the eastern valley side of Denton Burn. Benwell Lodge and its associated grounds are shown in detail, alongside a road, later Gretna Road, and the extensive workings of Bank Top Quarry are depicted either side of the toll road. The postulated course of the Vallum is depicted running through Benwell Lodge, *c*. 120m south of the toll road, which, as previously mentioned, closely follows the line of Hadrian's Wall.

- 2.5.23 The Ordnance Survey 2nd edition map from 1897 shows substantial development across the wider area of the site, annotated as 'Benwell Hill'. Much of the current school grounds remained open fields, with the substantial Benwell Hill House (HER 6367) (now St. Cuthbert's House) and its grounds in place to the east, although the building is not annotated in any way.
- 2.5.24 By the time of the 4th edition map in 1936, 'St. Cuthbert's Grammar School' (the 1922 Building) was in place at the site, abutting the western end of St. Cuthbert's House, which became incorporated into the school in the 1920s. The area around the site is shown as far more urbanised than on previous editions with residential dwellings along the north side of West Road, the former toll road, and along both sides of Gretna Road, although Benwell Lodge remains in place. The probable course of the Vallum is depicted in the location generally accepted today.
- 2.5.25 Since the Second World War, the school grounds have been developed in piecemeal fashion, with Benwell Lodge giving way to new buildings along Gretna Road, including the existing main school building, and other buildings and facilities added, including a playground south of the 1922 Building, the Sports Hall and, in 2003, the Science and Technology Building.

2.6 **Project Aims and Research Objectives**

- 2.6.1 The project is threat-led with potential to disturb or destroy important sub-surface archaeological remains of the Roman period in particular. The broad aim of the project therefore was to identify and record archaeological remains at the site, with particular emphasis on evidence of Roman military activity associated with the Hadrian Wall frontier.
- 2.6.2 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 palaeoenvironmental material recovered.
 - to compile a report that contains an assessment of the nature and significance of all data categories, stratigraphic, artefactual, etc.
- 2.6.3 The project had the potential to make a significant contribution to archaeological knowledge of the area. *Shared Visions: The North-East Regional Research Framework for the Historic Environment* (NERRF)¹⁹ identifies the following key priority within the research agenda for the Roman period which is of direct relevance to the project:
 - Riii The Roman military presence.
- 2.6.4 Given that the scheduled area runs roughly NW-SE across the southern part of the cricket field, the specific objective of the archaeological work was to assess whether any sub-surface archaeological remains were present that could provide evidence of the position of the Vallum in this area.
- 2.6.5 The Research Framework for Hadrian's Wall was also taken into account.²⁰

¹⁹ Petts and Gerrard 2006.

²⁰ When the work was planned, draft sections of the Research Framework were available online only, although it has since been published, Symonds and Mason 2009.

3. ARCHAEOLOGICAL METHODOLOGY

3.1 Fieldwork

- 3.1.1 The watching brief fieldwork was undertaken in accordance with the PCA's Project Design and the relevant standard and guidance document of the Institute for Archaeologists (IfA).²¹ PCA is an IfA Registered Organisation.
- 3.1.2 The watching brief was undertaken intermittently between 2 November 2009 and 23 May 2011. Both machine- and hand-excavated groundworks were monitored. Three areas of investigation (Areas 1, 2 and 3) have been designated, to take into account the sequence of monitoring over the course of the work (Figure 2).
- 3.1.3 Area 1 was the southernmost area monitored, located within the footprint of the recently demolished 1922 Building and adjacent to the scheduled area. A single trench (Trench 1) was machine-excavated from west to east across this area, *c*. 46m in length, with its longer (*c*. 28m) easternmost portion stepped to the south by 2m. The trench, 2m wide along its entire length, was to house the foundation for a retaining wall in the new build and was up to *c*. 2m deep in its western portion and *c*. 1m deep in its eastern portion. For the most part, it was excavated through demolition rubble (Plate 1).
- 3.1.4 Area 2 was the largest area monitored, covering *c*. 7,000m² to the north of the 1922 Building and taking in the western part of the scheduled area. Its north-easternmost portion was the site of the new MUGA, the rectangular footprint of which covered *c*. 1,940m² and across which topsoil was machine-stripped to an average depth of 0.15m and never below a maximum of 0.20m (Plate 2). Also machine-stripped of topsoil was a corridor *c*. 50m long and 2m wide for an associated access footpath, this extending south-westwards from the south-eastern corner of the MUGA footprint across the scheduled area to meet the footprint of the 1922 Building (Plate 3). Also in this area was a machine-excavated drainage trench (Trench 2) extending north-westwards for *c*. 50m from the south-western edge of the MUGA. It was excavated to a maximum depth of 0.60m below ground level and was generally 0.30m wide.
- 3.1.5 Area 3 was easternmost area monitored, covering *c*. 4,500m² mostly occupied by the sloping northern and eastern margins of the cricket field and taking in the eastern part of the scheduled area. In the southern half of this area the rectangular footprint, covering *c*. 53m², for a new electricity sub-station was machine-excavated to a depth of *c*. 1.80m below existing ground level (Plate 8). Two drainage trenches for the sub-station, both 0.55m wide and 0.40m deep, were machine-excavated on its south side, converging at a 1m³ 'soak-away' pit. Four other machine- and hand-excavated trenches for electricity supply (Trenches 3-7), four hand-excavated exploratory test pits (TPs 1-4) and five machine-excavated pits for tree planting (TPPs 1-5) were also monitored within this area:
 - Trench 3 was *c*. 30m long and extended southwards in zig-zag fashion from the footprint of the Sub-station into the scheduled area to the north of the 1922 Building to end at TP4; it was 0.60m wide and 0.80m deep and was machine-excavated.

²¹ IfA 2008a.

- Trench 4 was 19.70m long, extending westwards from the Sub-station footprint to the south-eastern corner of the MUGA footprint; 0.80m wide and 0.60m deep, it was machine-excavated.
- Trench 5 was *c*. 78m long, extending northwards in zig-zag fashion from the Substation footprint to the northern site boundary, it was generally 0.90m wide and had an average depth of *c*. 1m, but reached a maximum depth of 2.90m in its northernmost portion where it cut across the rising ground forming the northern margin of the site (Plate 6). It was partly machine-excavated and partly hand-excavated.
- Trench 6 was c. 11m long, c. 0.60m wide and had a maximum depth of 0.75m; it was an exploratory hand-excavated trench proposed as an alternative route for the northernmost portion of Trench 5, but abandoned after excavation proved as difficult as along the original route (Plate 4).
- TP 1 measured 0.78m x 0.55m with a depth of 0.40m; it was hand-excavated at the northernmost end of the route of Trench 5 and was subsequently incorporated into that trench.
- TP 2 measured 0.85m x 0.70m with a depth of 0.50m; it was hand-excavated to the east of the route of Trench 5 and was designed to check the viability of running a trench along the sloping eastern margin of the site
- TP 3 measured 0.80m x 0.80m with a depth of 0.80m; it was hand-excavated to the south of the sub-station footprint to test the route of Trench 3 and was subsequently incorporated into that trench.
- TP 4 measured 1.10m x 1m with a depth of 0.75m; it was hand-excavated at the southern end of the route of Trench 3, and was subsequently incorporated into that trench.
- TPP 1, to the west of Trench 5 at the northern extent of the site, had dimensions of 1.60m x 1.10m x 0.95m.
- TPP 2, to the west of TPP 1, measured 1.50m x 1.30m x 0.80m.
- TPP 3, to the west of Trench 6, measured 1.60m x 1.10m x 0.80m.
- TPP 4, within the north-western part of Area 3, measured 1.20m x 0.90m x 0.60m.
- TPP 5, to the west of TPP 4, measured 1.35m x 0.90m x 0.60m.
- 3.1.6 Machine-excavation was undertaken by tracked excavators of varying sizes over the course of the work. Hand-excavation was undertaken by personnel from various sub-contractors of SRM. All work was subject to continuous monitoring by PCA staff.
- 3.1.7 All archaeological features and deposits were recorded on the PCA *pro forma* 'Context Recording Sheet' with the TPs and TPPs recorded on the PCA 'Trial/Test/Foundation Pit Recording Sheet'. Relevant scale drawings were made, as appropriate. A photographic record of the investigations was compiled using digital photography.

3.2 Post-excavation

- 3.2.1 The stratigraphic data for the project is represented by the written, drawn and photographic records. A total of 31 contexts were identified during the fieldwork (Appendices A and B). Post-excavation work involved checking and collating site records. A written summary of the archaeological sequence was then compiled, as described below in Section 4.
- 3.2.2 No artefactual or organic material was recovered and no bulk samples for palaeoenvironmental remains were collected during the watching brief.
- 3.2.3 In preparing the Site Archive for ultimate deposition, all relevant standards and guidelines documents referenced in the Archaeological Archives Forum guidelines document *Archaeological Archives. A guide to best practice in creation, compilation, transfer and curation*²² will be adhered to, in particular *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives*²³ and *Guidelines for the preparation of excavation archives for long term storage.*²⁴
- 3.2.4 The complete Site Archive, in this case comprising only written, drawn and photographic records (including all material generated electronically during post-excavation), will be packaged for long-term curation. The depositional requirements of the receiving body, in this case Tyne and Wear Museums and Archives, Arbeia, South Shields, will be met in full.

²² Brown 2007.

²³ IfA 2008b.

²⁴ Walker 1990.

4. RESULTS: THE ARCHAEOLOGICAL SEQUENCE

During the watching brief, separate stratigraphic entities were assigned unique and individual 'context' numbers, which are indicated in the following text as, for example [1]. The archaeological sequence has been assigned to broad phases on a site-wide basis. Interpretation has been added to the data, where possible, and the phases have been correlated with recognised historical and geological periods, again where possible.

4.1 Phase 1: Natural Sub-strata

- 4.1.1 Phase 1 represents natural geological material, exposed within all areas of investigation. Within Areas 1 and 2, drift deposits of glacial origin were exposed, while deposits seen in Area 3 were representative of both the drift and solid geology.
- 4.1.2 The natural sub-stratum in Areas 1 and 2 comprised a layer, [3], of patchy orange brown clay with fragmented mudstone throughout. Along the base of Trench 1, the foundation trench for the new build retaining wall within the footprint of the 1922 Building, this was exposed at a depth of between *c*. 1-2m below ground level, as demolition rubble was excavated (Plate 1). Across the MUGA footprint, the same material was exposed at a depth of *c*. 0.15m below ground level, as the grassed surface and topsoil of the cricket field were excavated (Plates 2 and 3). The deposit is interpreted as the glacially-derived Till of the area, probably horizontally truncated in both Trench 1 and across the MUGA footprint.
- 4.1.3 In Trenches 3 and 4 and across the Sub-station footprint all in the southern part of Area 3 the basal layer, [18], comprising fragmented mid yellowish brown sandstone and mudstone. In the Sub-station footprint it was exposed at a depth of *c*. 0.50m below ground level and continued to a depth of *c*. 1.80m below ground level, this the maximum depth of excavation (Plates 7 and 8).
- 4.1.4 In the northern part of Trench 5 and throughout Trench 6 in the northern part of Area 3 the basal deposit, [9], was sandstone bedrock (Plates 4-6). It was exposed at a depth of *c*. 0.40m below ground level at the northern site boundary but sloped downwards to the south, where it lay *c*. 1.0m below ground level (Figure 3, Section 7), before disappearing below the basal limit of excavation further south where the trench ran alongside the MUGA.

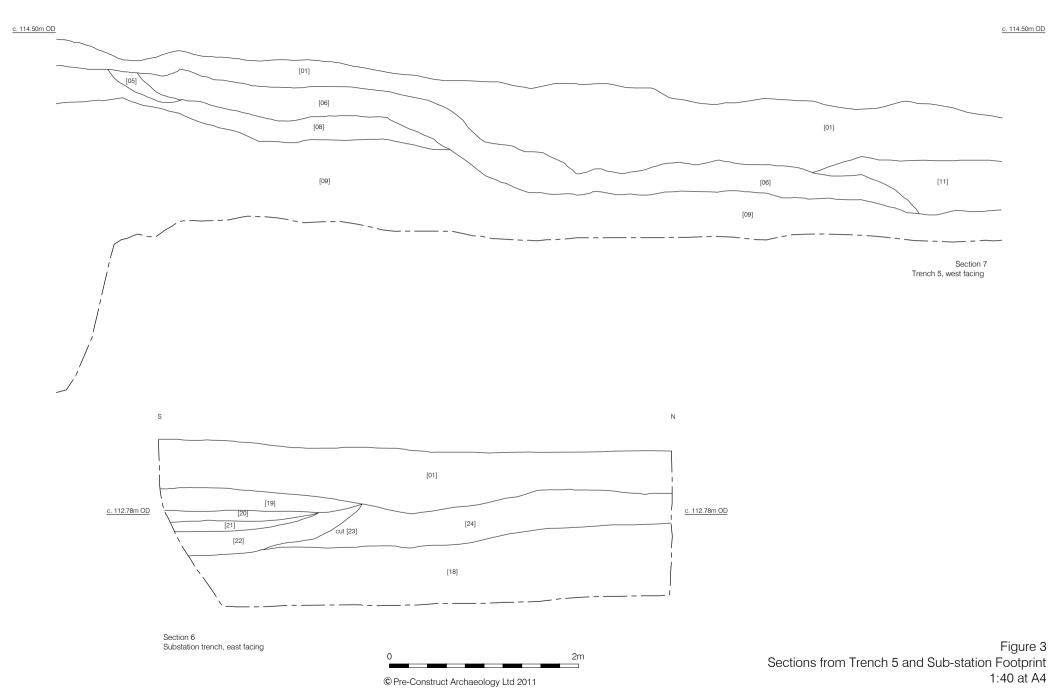
4.2 Phase 2: Undated

- 4.2.1 Phase 2 represents deposits of possible natural origin, potentially glacial material other than Till - or fluvioglacial material. All deposits allocated to this phase were recorded within the northern part of Area 3.
- 4.2.2 Overlying sandstone bedrock in both Trenches 5 and 6 was a layer, [8], comprising firm, light bluish grey silty clay, seen in section for *c*. 4m and continuing to the northern site boundary (Figure 3, Section 7). It had a maximum thickness of 0.40m and was exposed at a depth of *c*. 0.20m below the ground surface. Overlying this deposit in Trench 5, but first observed during the excavation of TP 1, was a lens, [5], of mid yellowish brown fragmented sandstone in a clay matrix. In Trench 5 it was exposed in section for 0.75m north-south and had a maximum thickness of 0.35m. A layer, [7], in Trench 6 and TPPs 1-3 was considered equivalent to this, although more substantial at these locations, extending up to *c*. 1.50m north-south and with a maximum thickness of 0.53m.

4.3 Phase 3: Modern

- 4.3.1 Phase 3 represents modern activity at the site, the majority of this probably derived from landscaping and demolition activity associated with earlier phases of construction and development of the school.
- 4.3.2 Within Area 1 a single context assigned to Phase 3 was observed within and throughout Trench 1. This was overlying the probably truncated natural sub-stratum at the base of the trench and comprised a layer, [26], of compact mid pinkish brown building rubble and silty clay, assumed to derive from demolition of the 1922 Building. It had a maximum thickness of *c*. 2.0m, towards the west (Plate 1).
- 4.3.3 Overlying the probably truncated natural sub-stratum in Area 2, two probable levelling deposits, [2] and [4], were recorded. The first, layer [2], was exposed across the western half of the MUGA footprint and comprised friable, dark grey to black clayey silt; this was also observed within the eastern half of Trench 2, where it had a maximum thickness of 0.40m before running below the basal limit of excavation at a depth of 0.60m below ground level. The second, layer [4], was recorded within the western half of Trench 2 and comprised compact, mid greyish brown silty clay with fragmented stone and tile throughout, this also having a maximum recorded thickness of 0.40m before running below the basal limit of excavation at a depth of below the basal limit of excavation. These deposits are interpreted as being derived from landscaping at the time of the creation of the cricket field in the 20th century.
- 4.3.4 Towards the northern extent of Trenches 5 and 6 in Area 3, an extensive spread, [6], comprising compact, pinkish grey sandstone and sandy silt was exposed in section for a length of more than 8.60m north-south, with a maximum thickness of 0.36m (Figure 3, Section 7). This contained glass and pottery of late 19th or 20th century date, again indicating that it was derived from landscaping at the time of the creation of the cricket field and its rising northern margin in the 20th century.
- 4.3.5 In Area 3, excavation of the Sub-station footprint exposed a layer, [24], comprising firm, mid reddish brown sandy clayey silt, overlying basal layer [18] (Figure 3, Section 6; Plate 7). It had a maximum thickness of 0.43m and was first visible at a depth of 0.30m below ground level. What was probably the same material was recorded, as layer [11], in Trenches 3, 4 and 5 (Figure 3, Section 7) and TPs 3 and 4. Although interpreted as deriving from 20th century landscaping at the time of the creation of the cricket field, it could, given its composition, potentially represent re-deposition of a former sub-soil.
- 4.3.6 Two other deposits recorded in Area 3 also likely derived from modern landscaping activity. The first, layer [10], was recorded during the excavation of TP 2 in the north-eastern corner of the site. It consisted of compact, dark reddish brown sandy silt and fragmented sandstone and had a thickness of over 0.40m, continuing below the basal limit of excavation. The second, layer [27], was recorded during the excavation of TPPs 4 and 5 and comprised firm, mid pinkish brown sandy silt with moderate fragments of sandstone, again this was in excess of 0.40m thick.

- 4.3.7 A probable ditch observed during the excavation of the footprint of the sub-station has also been attributed to Phase 3 (Figure 3, Section 6). Recorded as features [17] and [23] in the west- and east- facing sections of the sub-station footprint, respectively, it ran on an east-west alignment and had a concave northern side and flattish base. It was in excess of c. 2.80m wide, continuing beyond the northern limit of excavation and had a maximum recorded depth of 1.32m (where recorded as ditch [17]). In the west-facing section of the sub-station footprint, two fills were recorded, the earliest, fill [16], comprising dark brownish grey sandy clay silt, overlain by fill [15], comprising mid orange brown fragmented sandstone and sandy silt, In the eastfacing section four fills were recorded (Figure 3, Section 6), the earliest, fill [22], comprising mid reddish brown sandy silty clay, overlain by fill [21], this dark reddish brown - with a lens of black towards its base - sandy clayey silt. The uppermost fills were fill [20], comprising mid brownish grey silty clay with frequent stone and coal fragments throughout, and an overlying deposit, fill [19], this light brownish grey clayey silt. None of the fills of the feature produced any artefactual material. The feature is assumed to be of modern origin, based on its stratigraphic position *i.e.* cutting layer [24] and sealed by the existing topsoil, along with its east-west alignment. It may relate to the existing electricity sub-station which occupied this location.
- 4.3.8 Truncating ditch [17] in the north-eastern corner of the sub-station footprint was a service trench, [14]. It was exposed for *c*. 2.95m in length, running into the limit of excavation to the north on a probable NW-SE alignment. Its coarse gravel primary fill, [13], formed the bedding for a plastic water pipe, this overlain by a sandy silty clay backfill, [12]. Where the southern end of Trench 5 met the sub-station footprint, a 0.10m thick deposit, [25], was recorded, and this likely equates to fill [13] of service trench [14], although the feature itself was not recognised in Trench 5.
- 4.3.9 Another service trench, [30], was recorded in TP 4, this running on an east-west alignment. It contained three fills, the earliest a sand deposit, [28], upon which lay a probable electricity cable, then a sandy clay fill, [29], and finally a backfill, [31], which was essentially re-deposited layer [11]. The service trench was at least 0.90m wide and at least 0.40m deep.
- 4.3.10 A layer, [1], comprising soft, dark grey clayey silt with vegetated upper part, formed the topsoil, this the current ground surface, across Areas 2 and 3. Its thickness varied between 50mm and 0.67m.



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5. CONCLUSIONS

- 5.1 In accordance with the condition of Scheduled Monument Consent, invasive groundworks within the scheduled area at St. Cuthbert's School were subject to continuous archaeological monitoring and, in line with a planning requirement, groundworks undertaken adjacent to the scheduled area were monitored due to the likelihood of remains of the Hadrian's Wall Roman frontier being encountered. Specifically, those elements of re-development groundworks subject to archaeological monitoring were:
 - excavation of a foundation trench for the new build retaining wall along the northern edge of the footprint of the 1922 Building;
 - topsoil stripping across the entire footprint of a new MUGA and an access footpath extending across the scheduled area and excavation of an associated drainage trench;
 - excavation of the footprint for a new electricity sub-station and associated drainage;
 - enabling works and excavation of a cable trench for a new high voltage supply to the Sub-station;
 - excavation of trenches for distribution of the electricity supply away from the Substation, including one extending southwards into the scheduled area.
- 5.2 Archaeological deposits and features encountered during the watching brief have been assigned to three phases of activity:
 - Phase 1 was the natural sub-stratum, with both sandstone or sandstone and mudstone bedrock and glacial Till exposed.
 - Phase 2 represented a small number of undated deposits recorded in the northern part of Area 3, these being of possible natural origin, potentially glacial material other than Till or fluvioglacial material.
 - Phase 3 represented modern activity, mostly comprising extensive deposits related to landscaping work, along with a single possible ditch of uncertain function and existing service trenches.
- 5.3 In sum, therefore, the work recorded no evidence for Roman occupation and, specifically, there was no evidence pertaining to military activity associated with the Hadrian's Wall frontier.
- 5.4 No further work is recommended for the site data. The Site Archive, including this report, will form the permanent record of the archaeological remains encountered.

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Online Sources

The following websites were consulted:

The British Geological Survey website at: www.bgs.ac.uk

Sitelines, the Tyne and Wear Historic Environment Record, at www.twsitelines.info/

7. ACKNOWLEDGEMENTS AND CREDITS

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PCA Credits

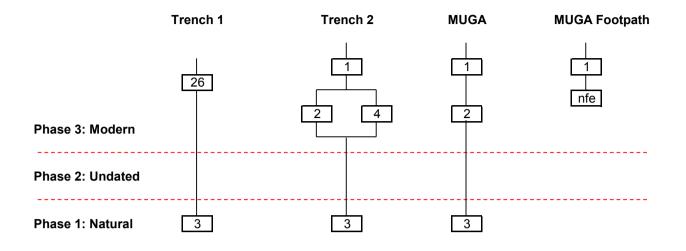
Fieldwork: Amy Roberts (Areas 1, 2 and 3), Sophie Ladler (Area 3) and Robin Taylor-Wilson (Areas 1 and 2)

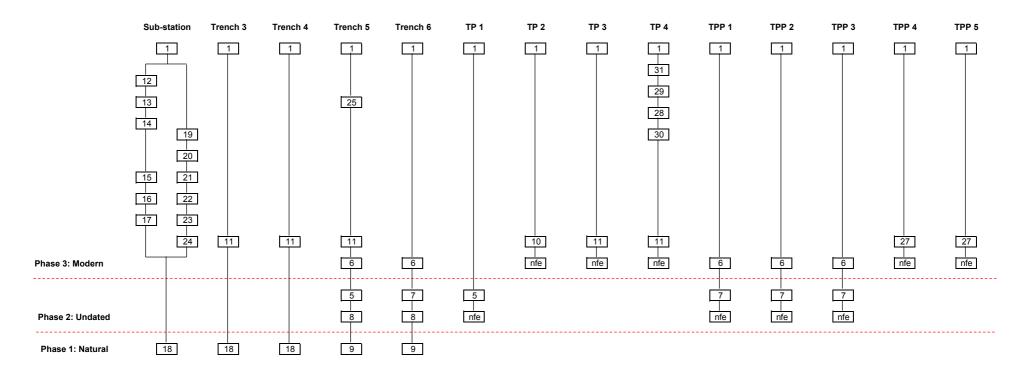
Report: Amy Roberts

Project Management: Robin Taylor-Wilson

CAD: Jennifer Simonson

APPENDIX A STRATIGRAPHIC MATRICES





APPENDIX B CONTEXT INDEX

SCB 09: Context Index

Context	Area	Phase	Type 1	Type 2	Interpretation
1	2, 3	3	Deposit	Layer	Topsoil
2	2	3	Deposit	Layer	Levelling deposit
3	1, 2	1	Deposit	Layer	Natural Till sub-stratum
4	2	3	Deposit	Layer	Levelling deposit
5	3	2	Deposit	Layer	Dump layer
6	3	3	Deposit	Layer	Dump layer
7	3	2	Deposit	Layer	Dump layer
8	3	2	Deposit	Layer	Dump layer
9	3	1	Deposit	Layer	Natural bedrock
10	3	3	Deposit	Layer	Dump layer
11	3	3	Deposit	Layer	Dump layer
12	3	3	Deposit	Fill	Fill of service trench [14]
13	3	3	Deposit	Fill	Fill of service trench [14]
14	3	3	Cut	Linear	Service trench; filled by [12] & [13]
15	3	3	Deposit	Fill	Fill of feature [17]
16	3	3	Deposit	Fill	Fill of feature [17]
17	3	3	Cut	Linear	Probable ditch; filled by [15] & [16]
18	3	1	Deposit	Layer	Natural bedrock
19	3	3	Deposit	Fill	Fill of feature [23]
20	3	3	Deposit	Fill	Fill of feature [23]
21	3	3	Deposit	Fill	Fill of feature [23]
22	3	3	Deposit	Fill	Fill of feature [23]
23	3	3	Cut	Linear?	Probable ditch; filled by [19] - [22]
24	3	3	Deposit	Layer	Dump layer
25	3	3	Deposit	Layer	Probably equates with fill [13]
26	1	3	Deposit	Layer	Demolition rubble infill
27	3	3	Deposit	Layer	Dump layer
28	3	3	Deposit	Fill	Fill of service trench [30]
29	3	3	Deposit	Fill	Fill of service trench [30]
30	3	3	Cut	Linear	Service trench; filled by [28], [29] & [31]
31	3	3	Deposit	Fill	Fill of service trench [30]

APPENDIX C PLATES



Plate 1: Overview of Trench 1, looking east



Plate 2: Overview of MUGA during topsoil strip, looking north



Plate 3: Overview of MUGA footpath during topsoil strip, looking south-west



Plate 4: Preliminary excavation of Trench 6, showing layers [7] and [8], looking north-east *(scale 0.5m)*





Plate 8: Overview of Sub-station footprint, looking north-east (scale 0.5m)

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