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SUMMARY

The watching brief confirmed that the course of Hadrian's Wall did not pass into the contact area with the retaining wall.

The observation also confirmed that the formal Wall Ditch that is clearly extant just to the north of the study area did not transgress upon the course of the modern retaining wall.

Within the berm between the Wall ditch and the Wall, a shallow east-west aligned undated ditch was present. Later management of the road appears to have incorporated the alignment of this feature. Whether the feature possesses antiquity dating to the Roman period is uncertain, but the lack of cultural material and the homogenous nature of the fill does suggest that this ditch has not been open in relatively recent time.

1. INTRODUCTION

1.1 Project Origins

Gerry Martin was commissioned by Mr John Banks (the client; Cumbria County Council Highways) to prepare a Specification of Works for a Programme of Archaeological Watching Brief Action relating to the repair of a retaining wall in close proximity to the Roman turret at Pike Hill (figure 1). The archaeological watching brief action was requested by English Heritage as potential and significant archaeological remains may be encountered.

Because of the archaeological significance of this location, the curatorial authority (English Heritage) stated that Scheduled Monument Consent Application was subject to the “developer” securing the implementation of a formal programme of archaeological observation and investigation during the forthcoming repairs.

The condition (S00028637) concerns Scheduled Monument No. 26075; Hadrian’s Wall and Vallum between the Field Boundary West of Coombe Crag and Banks Green Cottage and the road to Lanercost at Banks in Wall Miles 51 and 52, issued on 6th February 2012.

Should significant archaeological deposits or features been encountered, the archaeological contractor would advise the client (Cumbria County Council Highways) and possessed the authority by proxy, to close the watching brief exercise.

The written scheme of investigation (WSI) was produced by the archaeological contractor and detailed the methods and procedures to be employed during the watching brief action. It was approved by the curatorial authority (English Heritage), prior to any fieldwork being undertaken.

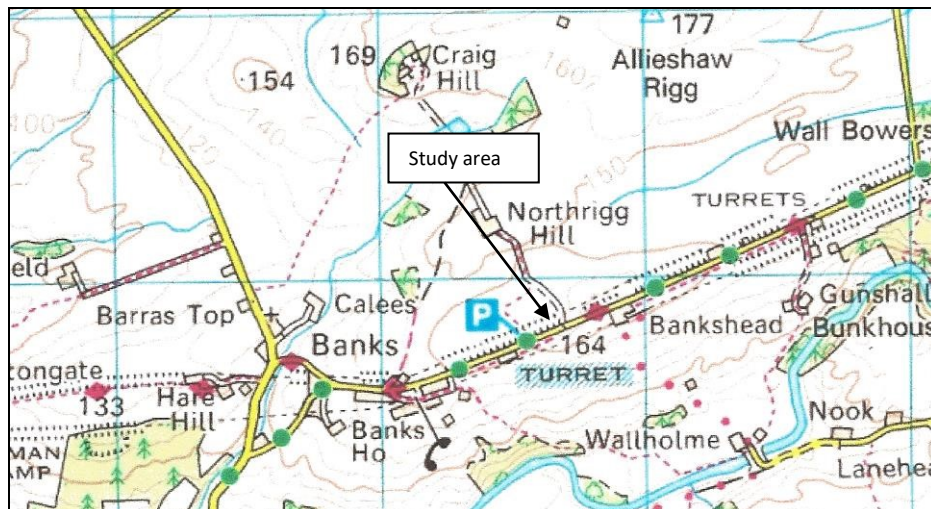


Figure 1. Site location (OS Copyright, Licence no. 100044205)

1.2 Project outline

A written scheme of investigation (WSI) was produced by the archaeological contractor and detailed the methods and procedures to be employed during the archaeological watching brief.

It was submitted to the curatorial authority (English Heritage) for approval and accepted.

A visit to the study area prior to commencement of the evaluation was undertaken on 28th November 2013.

Assessing the situation, it was quite obvious that insufficient margin existed between the retaining wall that needed to be repaired and the carriageway for a) the trenches to be inserted, b) for the archaeological contractor to safely work from passing traffic and c) to store spoil.

After discussion between English Heritage, Cumbria Highways and the archaeological contractor, it was agreed that the benefits of an archaeological evaluation were outweighed by serious health and safety concerns.

A field survey report was compiled by the author assessing the condition of the retaining wall and its implication vis-à-vis the underlying Scheduled Ancient Monument.

A programme of archaeological watching brief was the preferred course of action to be undertaken in February 2014.

The following document is presented as a summary of the watching brief undertaken during repairs to the retaining wall.

The report has been assembled to the relevant standards and protocols of the Institute of Field Archaeologists, combined with accepted best practice and in accordance with the brief prepared by the curatorial authority.

1.3 Archive

The archive has been compiled in accordance with the project design and the guidelines set out by Management of Archaeological Projects (English Heritage, 1991) and the Institute of Field Archaeologists (1994 and 2007).

The archive will be deposited with an appropriate repository, Tullie House Carlisle and a copy of the report donated to the County Sites and Monuments Record, as requested by the curatorial authority, English Heritage.

1.4 Scheduled Ancient Monument status

The condition (S00028637) concerns Scheduled Monument No. 26075; Hadrian's Wall and Vallum between the Field Boundary West of Coombe Crag and Banks Green Cottage and the road to Lanercost at Banks in Wall Miles 51 and 52, issued on 6th February 2012.

The current works are covered by the above Scheduled Monument Consent.

2. BACKGROUND

2.1 Location, topography and geology

The solid geology comprises Carboniferous Dinantian rocks in the form of a succession of mudstone, siltstone sandstone and limestone.

The bedrock has been draped by a series of drift geology deposits comprising Boulder Clay, sand and gravel lain during the last phase of glacial activity and creating the current drainage patterns, illustrating water-borne erosion and alluvial deposition producing the Irthing Valley below Banks.

The study area lies on the northern side of the road east of Banks. Bounded to the north by a dry-stone wall, the road rises to the east leading away from the principal core of the settlement.

The Wall at this location is probably beneath the current road, although the Wall Ditch is clearly visible adjacent and north of the road.

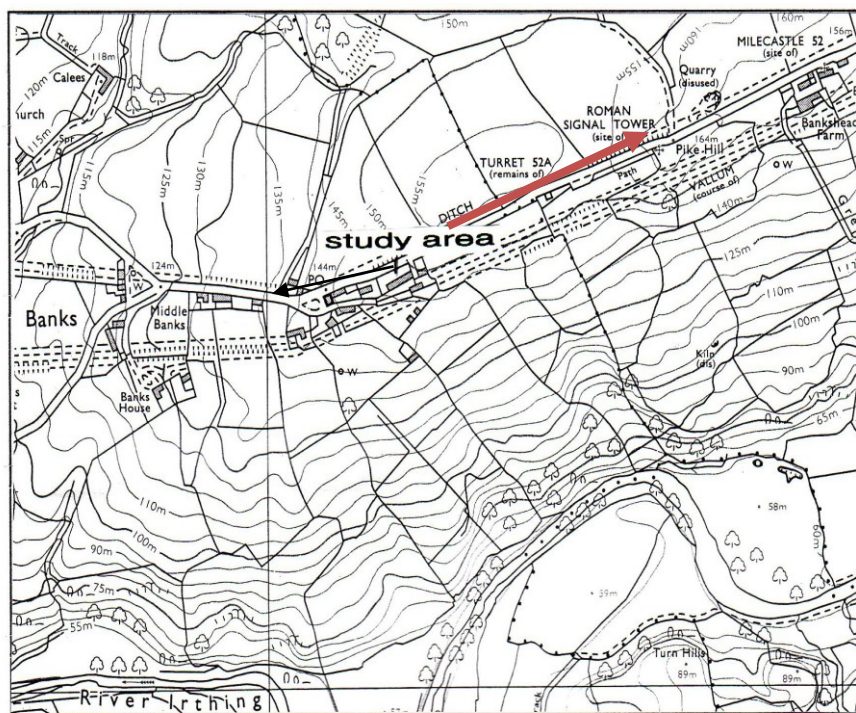


Figure 2. Study area showing location of repairs and its association with other heritage assets

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3. HISTORICAL BACKGROUND

3.1 Historical background

The study area lies to the east of Turret 52A (figure 2) that was in turn west of the signal tower and Milecastle 52, the largest such fortification on the Wall with an internal area of 644 square metres

and rebuilt in the late third or early fourth centuries (Symonds 2009, 45-47). Originally, the Milecastles probably maintained the bulk of the Wall garrison but with the advent of the Wall forts, this relationship was fundamentally altered (Ibid 45).

The signal tower was found, and partly destroyed, in 1870 when the road over it was lowered. The remains were examined in 1927, 1931 and 1932 (Birley 1961, 140). The signal tower was taken into State guardianship in 1971. The stone wall on the southside of the road was taken down and replaced on a slightly different alignment and a public footpath created to allow visitors safe access from the turret to the signal tower.

Pike Hill Signal Tower was one of a number of signal stations that were built along the Roman Stanegate in northern Britannia during the early 2nd century. It later became incorporated into Hadrian's Wall. Its remains, a 2-metre (6.6 ft) long fragment of the south-east wall lie south of the modern road.

Signalling towers and a number of forts were built along the line of the Roman road that connected significant military forts at Corbridge and Carlisle. This followed the withdrawal of the Roman army from Scotland around 100 AD and was prior to the construction of Hadrian's Wall. The station at Pike Hill signalled to two nearby stations; Gillalees Beacon and Barrock Fell.

As Hadrian's Wall was extended through the area, the signal tower came to be incorporated alongside the newly constructed wall. The tower's location places it about 200 metres (660 ft) east of Turret 52A (Banks East) and west of Turret 51B (Leahill Turret).

Possibly, the signal tower was manned by part of Milecastle 52's garrison. The extra size of Milecastle 52 (20% larger than any other milecastle) has been cited as evidence for this.

Archaeological investigation in 1931 has shown that the tower was built prior to either the turf or stone walls that exist nearby. The tower was offset from the wall and stood at an angle of 45° to the line of the wall. The purpose of this was to improve the visibility of the signal. A ditch lies to the north of the tower, following the same course as the tower resulting in a zig-zag line (Simpson and McIntyre 1932, 271-275).

The signal tower was a square structure measuring around 6 metres (20 ft) on each side. The tower was built on a platform of mortared rubble and deep foundations have been found which indicate an upper structure of some extra height. The masonry was finished to a higher standard than the turrets found on the wall.

The presence of Huntcliff Ware indicated occupation as late as the latter half of the fourth century (Ibid 272).

Within this stretch of the Wall and Vallum, there have been few archaeological interventions although a watching brief was conducted in 2000 by the former Lancaster Archaeological Unit and in 2005 a stony surface was encountered that may have represented an undated *ad hoc* adjunct to the Wall within the property of Allergarth (Martin 2005, Reports 5 and 6).

Investigations of the County Sites and Monuments Record (SMR) reveal a 19th Century lime kiln (10017), part of the Vallum ditch (13651) and a Roman bead and seven Roman pot sherds (19221).

4. METHODOLOGY

4.1 Methodology

A Working Scheme of Investigation was presented by the archaeological contractor for approval by the curatorial authority English Heritage to monitor the excavation work. The WSI was approved by English Heritage prior to the fieldwork commencing.

The objective of the watching brief investigation is to carry out a formal programme of archaeological observations and investigations during any operations on site that may disturb or destroy archaeological or architecturally informative deposits or remains. The specific aims of the work are to:

- Provide a record of those works associated with the removal of the topsoil
- Provide a record of any significant archaeological or architectural features encountered by intrusive activities

In order to achieve these objectives, a record of all archaeological informative deposits encountered during the ground operations were made consisting of detailed context records on individual proforma sheets and field drawings, according to the protocols set out in the GMA manual.

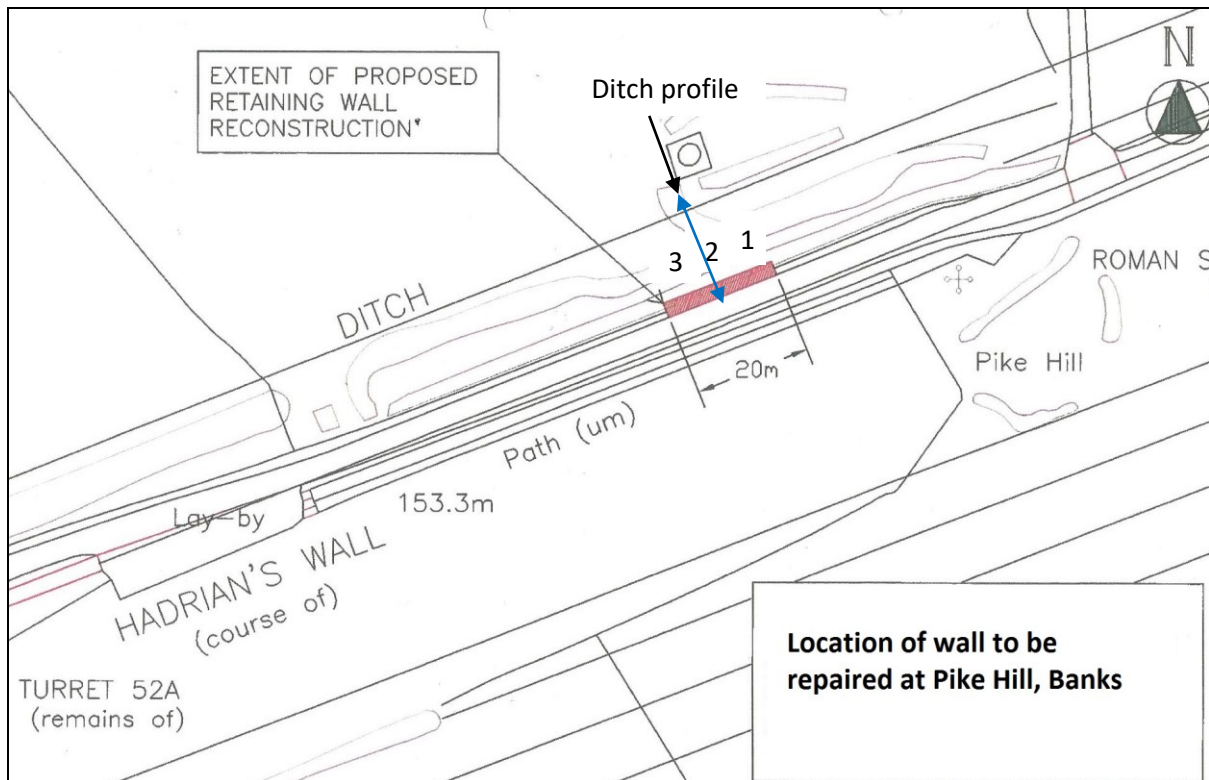


Figure 3. Location of study area with the three interventions

The ground-works were undertaken by hand under archaeological supervision. This action consisted of observation of the dismantling of the extant retaining wall and monitoring the displaced soil and stone. Revealed sections were checked for any past cultural activity and if necessary recorded according to the protocols of the GMA manual.

The earlier field survey (Martin 2014) identified three locations within the retaining wall that required repairs (figure 3). The same nomenclature has been adopted for the archaeological watching brief for each intervention.

The ground-works were undertaken by hand under archaeological supervision. This action consisted of observation of the dismantling of the extant retaining wall and monitoring the displaced soil and stone. Revealed sections were checked for any past cultural activity and if necessary recorded according to the protocols of the GMA manual.

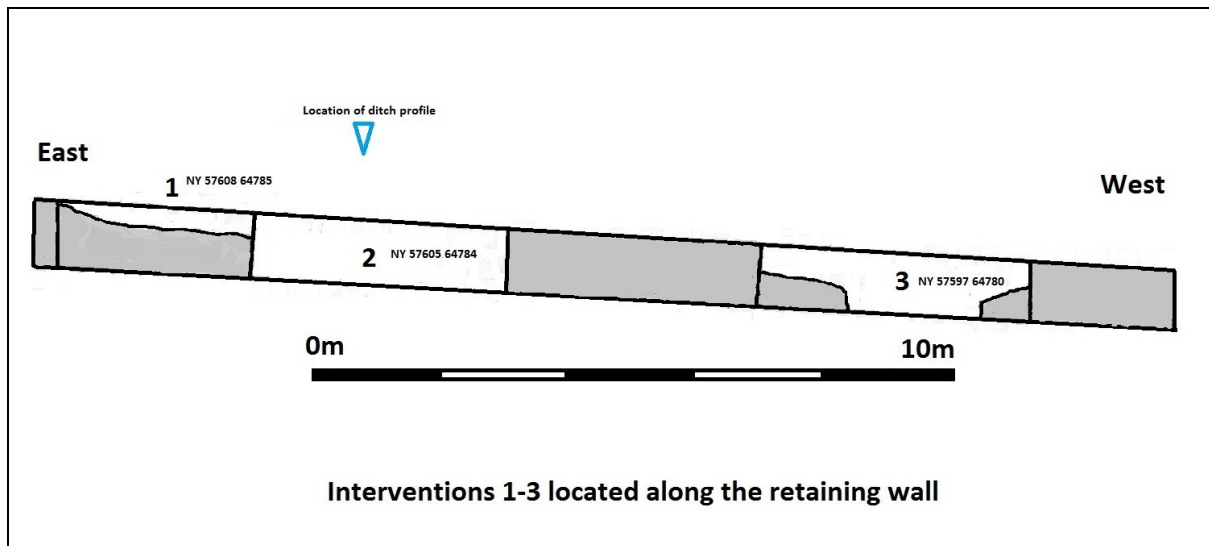


Figure 4. The three interventions in relation to each other

Field observations took place between February 10th and February 14th 2014 and involved monitoring of the site whilst the retaining wall was dismantled. In order to provide an archaeologically sterile area prior to the reconstruction of the retaining wall, fill from a ditch beneath the retaining wall was excavated.

5. RESULTS

5.1 The Interventions

Intervention 1

The retaining wall at Intervention 1 (NY 57608 64785) was found to be in relatively good condition and that only the upper masonry required removal.

The retaining wall was reduced by approximately 0.60m in depth from road height over a 1.50m length (figure 5). The remains of the Scheduled Monument was not exposed at this location.



Figure 5. Intervention 1 following removal of loose and extraneous masonry



Figure 6. Intervention 2 following removal of the retaining wall

Intervention 2

The retaining wall at Intervention 2 (NY 57605 64784) was found to be in poor condition and the masonry required removal down to foundation level. The intervention measured 4.00m in length with a stretch measuring 1.50m in length and 1.20m in width reduced to a depth of 1.25m examined in detail.

The footing for the retaining wall comprised of a 0.80m wide base formed from two large stones. Above the foundation was a rear southern wall built against the side of the construction trench respecting the road (figure 11). The narrow gap within the construction trench was backfilled with light brown silty clay sealed by 0.45m of topsoil (figure 6).

The northern face was formed from rough-hewn stones laid in roughly concordant courses. The wall core comprised of angular rubble stone, smaller in size and haphazardly lain.

Respecting and directly beneath the northern face of the retaining wall was an east-west aligned linear cut (figures 7, 8 and 13).



Figure 7. Western section showing linear cut



Figure 8. Eastern section showing linear cut

The sequence observed was as follows:

- A linear cut comprising of a near vertical southern side to a flat base with a slightly rounded break of slope at the base. The base of the ditch appeared to cut pink sandy clay that just rested above, light greenish grey stiff clay that was unquestionably natural drift geology (figure 9). The upper part of the southern side was angled at approximately a 45° angle. The ditch was 0.55m in depth and at least 1.00m in width.
- This linear cut was filled by slightly pink, yellow-brown sandy clay silt 5 with occasional pink sandy clay and occasional angular stone (figures 11 and 12).
- A further deposit of fine yellow brown clayey silt 4 sealed fill 5 and represented a tertiary fill within the linear cut (figures 11 and 12).
- The side of the road and fill 4 was truncated by the insertion of the construction cut for the retaining wall 1 that appeared to rest upon yellow brown clayey silt 2 (figures 11 and 12).
- Humic soil and silt 3 accumulated against the retaining wall since 1870 and physically rested above fill 4 (figures 11 and 12).

Root action and burrowing were prevalent within fills 4 and 5 compromising the environmental integrity of these deposits.



Figure 9. Natural clay at base of linear cut



Figure 10. Linear cut forming ditch

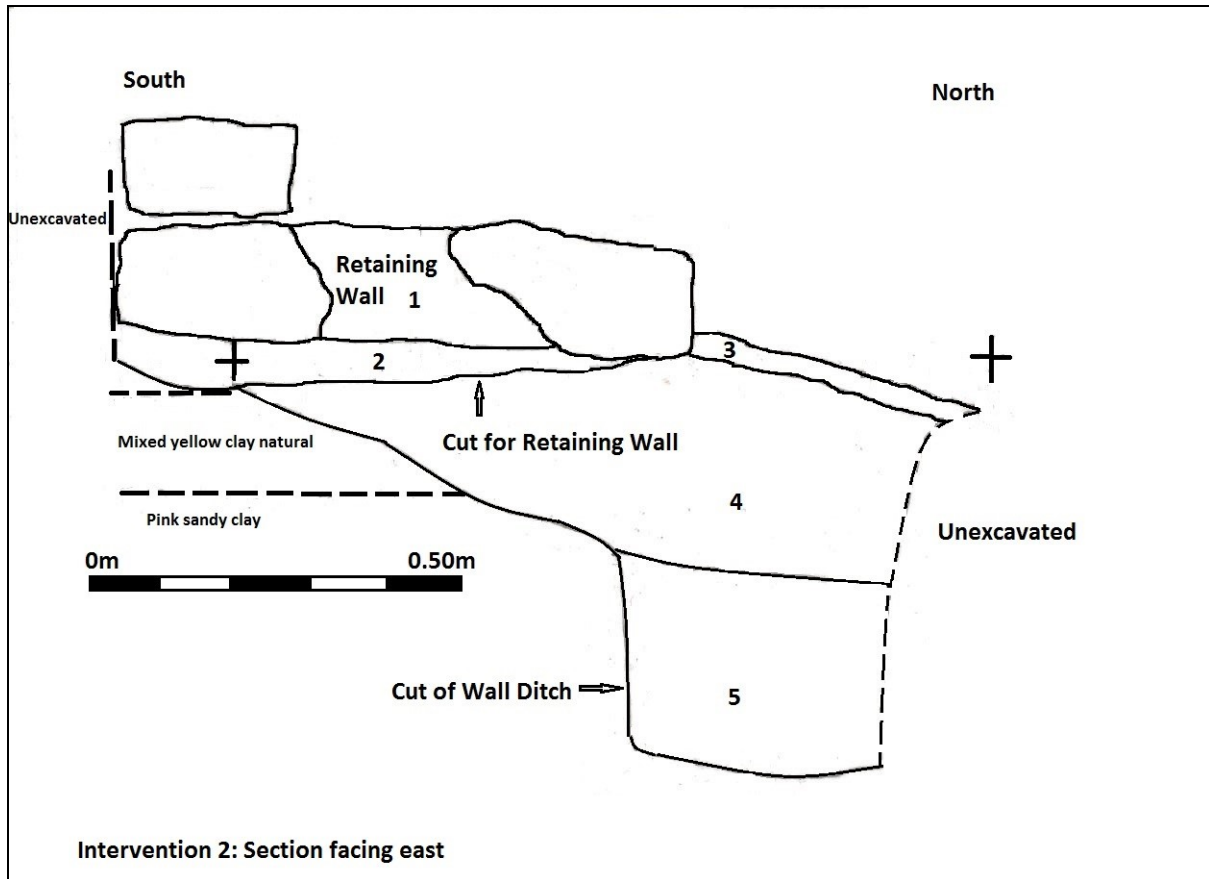


Figure 11. East facing section within Intervention 2

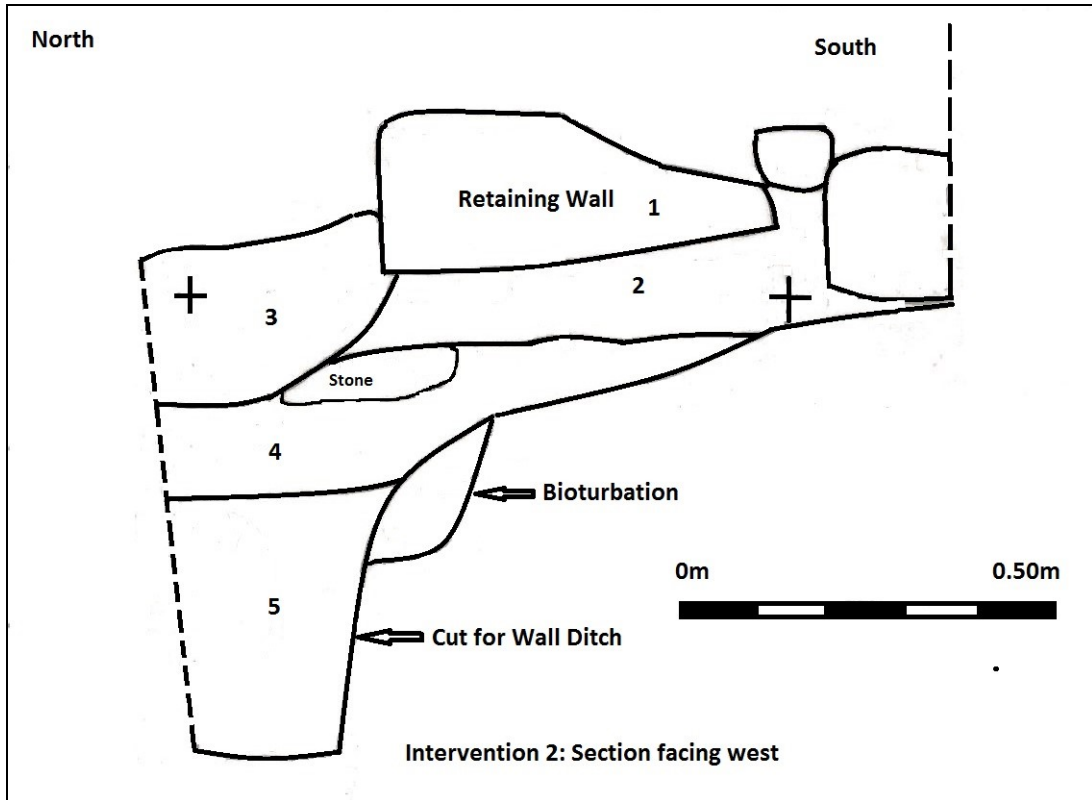


Figure 12. West facing section within Intervention 2

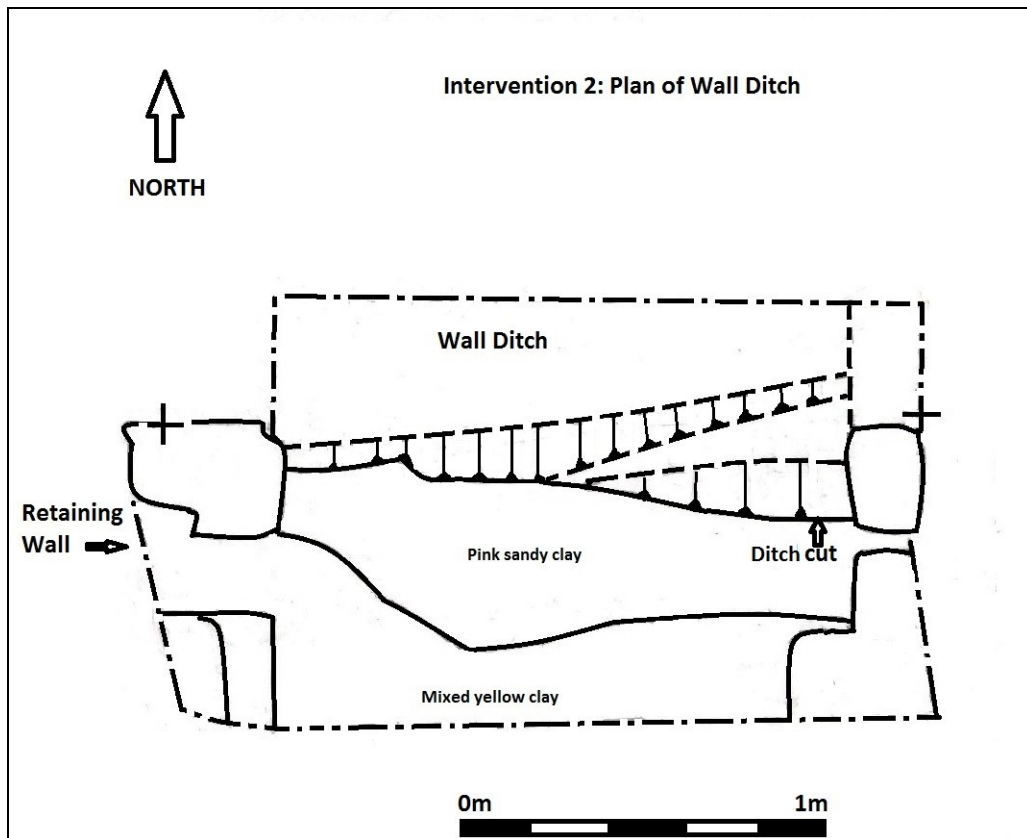


Figure 13. Plan of Intervention 2

Intervention 3

The retaining wall at Intervention 3 (NY 57597 64780) was found to be in poor condition and the masonry required removal down to foundation level. The intervention measured 4.30m in length and 1.20m in width reduced to a depth of 1.20m.

The footing comprised of a 0.80m wide base formed from sets of two large stones. Above the foundation was a rear southern wall built against the side of the construction trench respecting the road. The narrow gap within the construction trench was backfilled with light brown silty clay sealed by 0.45m of topsoil (figure 14).



Figure 14. Intervention 3 following removal of the retaining wall

The northern face was formed from rough-hewn stones laid in roughly concordant courses. The wall core comprised of angular rubble stone, smaller in size and haphazardly lain.

Respecting and just forward of the northern face of the retaining wall was an east-west aligned linear cut (figures 15 and 16) that penetrated pink sandy clay drift geology.

The sequence observed was as follows:

- A linear east-west aligned cut (figure 15) comprising of a 45° angle southern slope to an unseen base (figure 16). The ditch was 0.50m in depth and at least 0.80m in width.
- This linear cut was filled by basal fill yellow silty clay 8 (figure 17).

- A further deposit of light yellow brown silty clay 7 sealed fill 8 and represented a tertiary fill within the linear cut (figure 17).
- The side of the road and fill 7 was truncated by the insertion of the construction cut for the retaining wall 1 (figure 17).
- Mid to dark brown humic silt 6 accumulated beneath the retaining wall and physically rested above fill 7 (figure 17).



Figure 15. West facing section of linear cut



Figure 16. Linear cut looking west

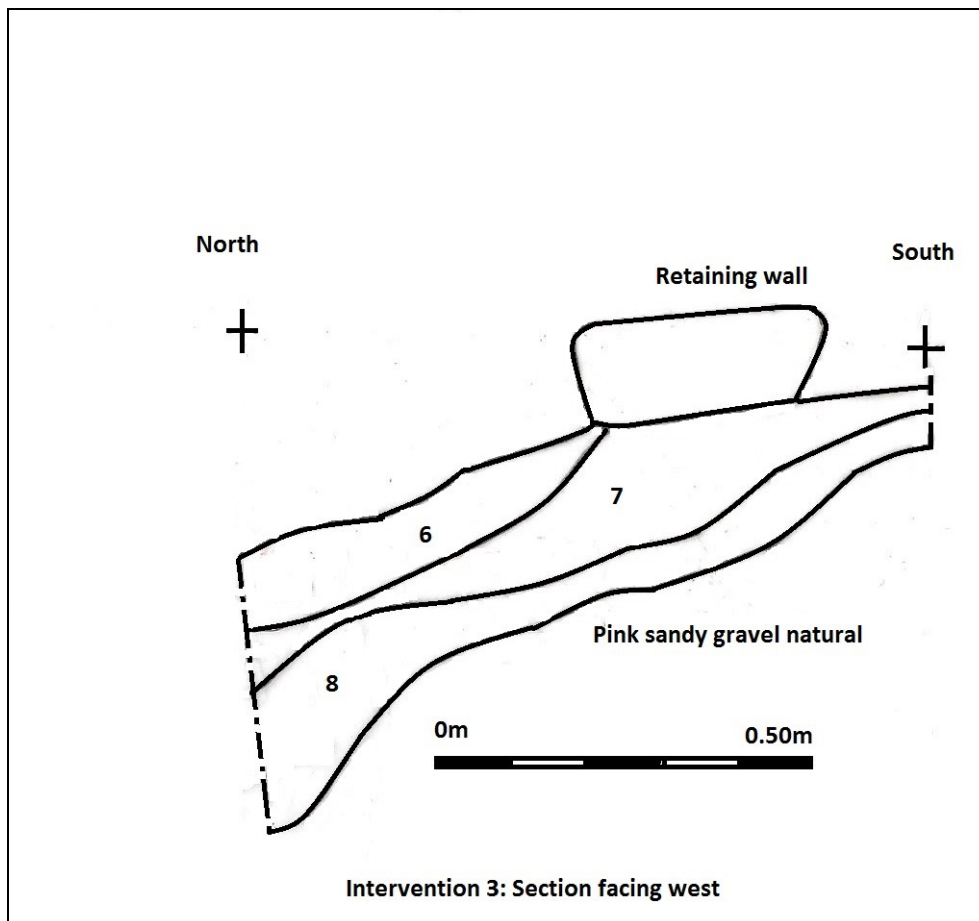


Figure 17. Section facing west within Intervention 3

Root action and burrowing were prevalent within fills 7 and 8 compromising the environmental integrity of these deposits.

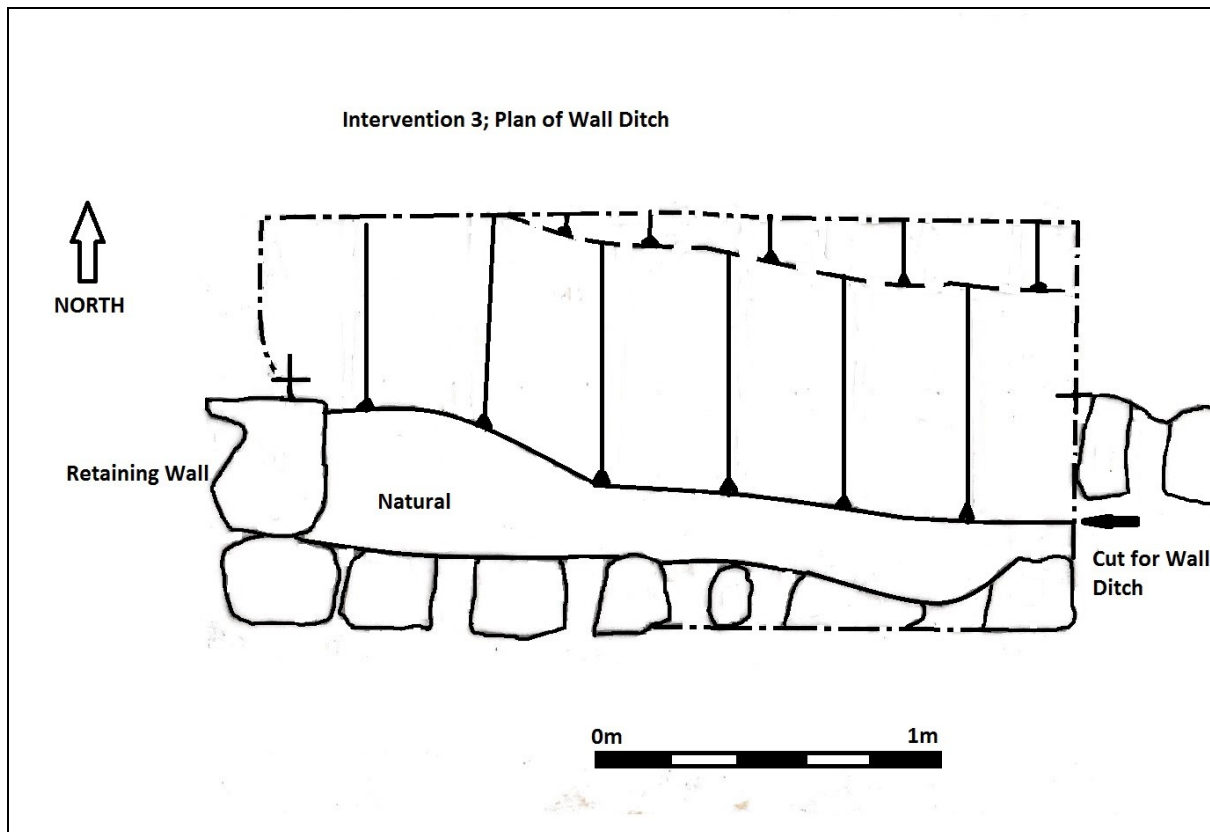


Figure 18. Plan of ditch within Intervention 3

5.2 Finds and ecofacts

No finds were present during the watching brief programme.

Due to the constricted nature of the trench and the lack of environmentally informative deposits, no environmental samples merited recovery. Moreover, heavily intrusive bioturbation caused by root activity and animal burrowing further compromised any putative environmental sampling.

5.3 Discussion

The watching brief action confirmed the results of the earlier field survey which suggest that the course of Hadrian's Wall did not project further than the northern part of the road and that the upper reaches of the Wall Ditch would be either truncated or missed by the insertion of the 19th Century retaining wall.

A possible archaeological feature was encountered consisting of an east-west aligned linear cut that appeared to be a shallow ditch at least 0.55m in depth and at least 1.00m in width.

The undated ditch clearly pre-dated the retaining wall and probably articulated a roadside ditch or property boundary prior to road improvements in 1870.

Whether the shallow ditch was part of a Roman double-ditch forward defence forming the Wall Ditch remains unproven.

A profile was surveyed across the known Wall Ditch up to the retaining wall that noted that the base of the shallow ditch was approximately 0.10m above the surface of the upper fill of the Wall Ditch (figure 19).

Possibly, the Wall Ditch had a slight shelf on its southern side or a second ditch that had subsequently become truncated or collapsed into the deeper Wall Ditch which clearly had silted to a great degree (figure 20)..

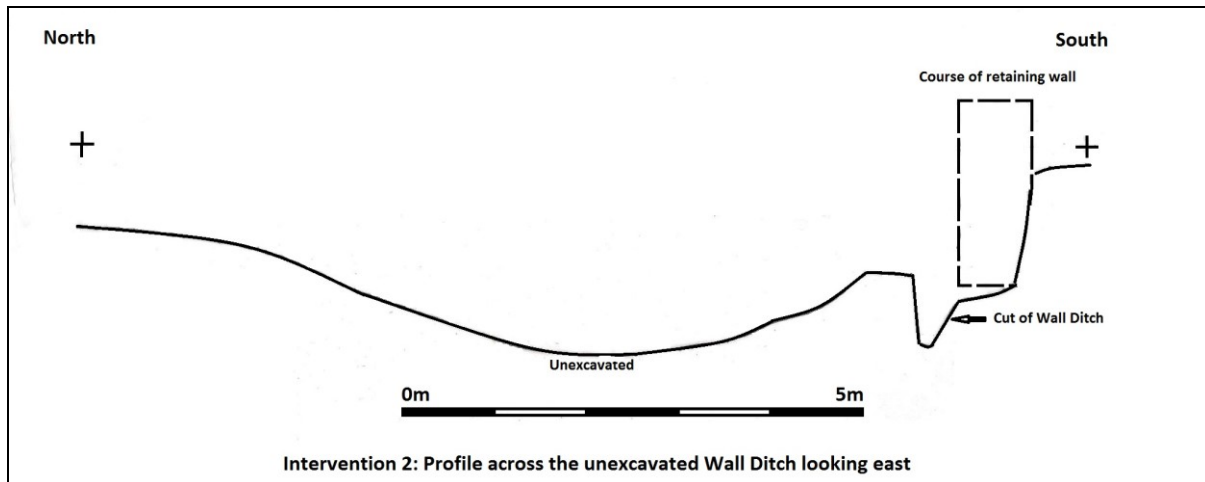


Figure 19. Profile across the wall Ditch



Figure 20. Wall Ditch as at present with the retaining wall

The observed ditch was very tight to the line of the current retaining wall, an observation that suggested a conservative use of space alongside the road margin.

From the Roman period onwards and until the present, Hadrian's Wall conditioned the organisation of space; properties and farms encroaching up to the remains of the monument. The monument also served as a communications link, connecting the influential Medieval settlement of Lanercost Priory with the Barony of Gilsland.

It would appear possible that in immediate proximity to the road facilities were maintained, whilst further away from the road, the Wall served as a quarry and the defensive qualities of the Wall Ditch were neglected.

Based on such a small sample size it is not possible to extrapolate a definitive interpretation for the observed ditch beneath the retaining wall or to determine its age and character.

6. ACKNOWLEDGMENTS

I am grateful to Mr John Banks for commissioning the project and for his assistance with the plans and development details that have undergone considerable change.

Mr Ewan Salton from Cumbria Highways Department undertook the renovation of the retaining wall and provided very willing co-operation in fulfilling the terms of the watching brief.

I would like to thank the staff of Carlisle Library with my research into the local history of the area and David Bowcock and his staff at Cumbria Record Office, Carlisle with the map regression and documentary material.

Mike Collins, Hadrian's Wall Officer, English Heritage provided constructive input when discussing the requirements of preservation of the monument and how to resolve the fieldwork limitations.

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