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Summary

The intervention monitored during the watching brief did not encounter any archaeological deposits.

1 INTRODUCTION

1.1 The contractor

Gerry Martin is an independent free-lance archaeological contractor with nearly 30 years experience of commercial archaeology in Britain, Norway and Germany. Gerry Martin Associates Ltd specialises in the expedition of fieldwork projects. These include the field management and direction of large capital projects to execution of smaller watching briefs, evaluations, building surveys and excavations.

All projects are carried out in accordance with PPS 5 (2010) and the guidelines and recommendations issued by the Institute of Field Archaeologists and English Heritage. Gerry Martin has achieved the accreditation level of MIFA (Member) with the Institute of Archaeologists (IfA).

1.2 The Commission

Gerry Martin has been commissioned by Mr M.Charlton representing Openreach PLC (the client) to prepare a Specification of Works for a Programme of Archaeological Watching Brief Action relating to the insertion of telephone cables between 1) the east end of Davidson's Bank & Road to Grinsdale & Vallum and Davidson's Bank & dismantled railway in Wall Miles 67 & 68, Beaumont, Carlisle and 2) Hadrian's Wall Vallum between the dismantled railway south of Boomby Gill and the field boundary south east of Mill Beck in Wall Mile 68, Beaumont, Carlisle.

The watching brief action has been requested by English Heritage as part of the SMC conditions for S6227 and S6229, as potential and significant archaeological remains may be encountered and impact upon the Vallum, part of a Scheduled Ancient Monument No. 26088. The study area involves the shallow burial of a telephone cable.

The development of the study area involves the disturbance of topsoil and other extraneous material overlying the Vallum and Wall in order to bury the relevant telephone cable.

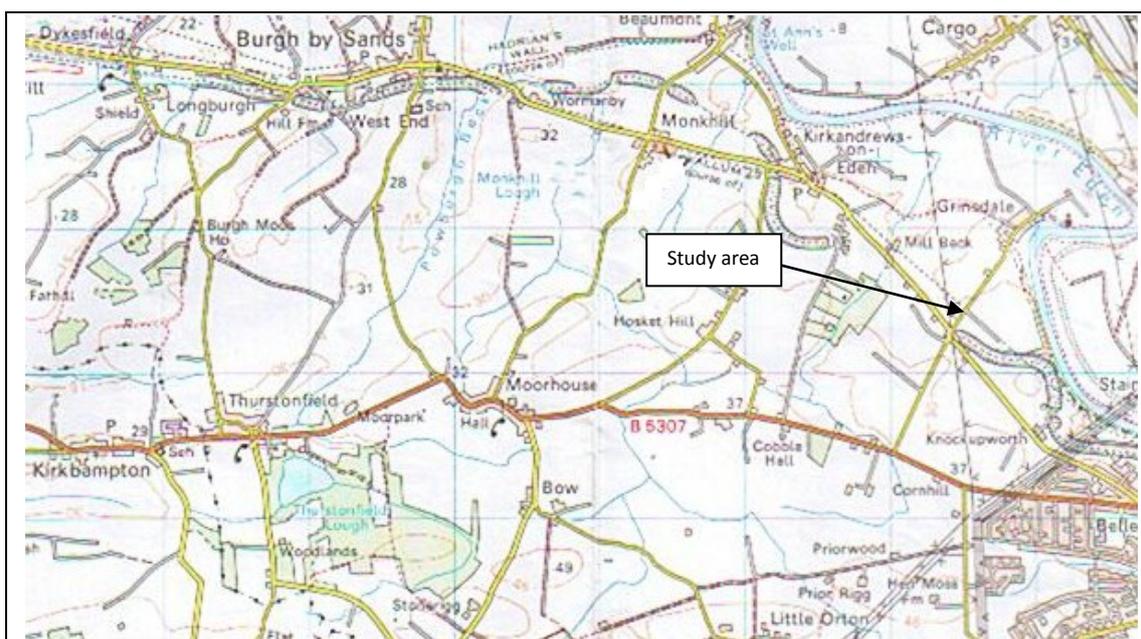


Figure 1. Site location, Grinsdale, Carlisle (OS Copyright, Licence no. 100044205)

1.3 In connection with the commission

Because of the archaeological significance and sensitivity of this location, the curatorial planning authority has stated that permission is subject to the “contractor” securing the implementation of a formal programme of archaeological observation and investigation during the forthcoming development.

A scheme of investigation (WSI) was been produced by the archaeological contractor that details the methods and procedures to be employed during the watching brief action. It was submitted to the curatorial authority (English Heritage) and was subsequently approved.

2. METHODOLOGY

2.1 Project Design

Gerry Martin Associates Ltd were commissioned to undertake the archaeological fieldwork by Openreach PLC following approval by the curatorial body English Heritage.

The following report has been assembled to the relevant standards and protocols of the Institute of Field Archaeologists (Standard and Guidance for Archaeological Field Evaluation, 2008), combined with accepted best practice and in accordance with the brief prepared by the curatorial authority.

The following fieldwork aims to adhere and pursue the goals set out in the Hadrian’s Wall Research Framework (Symonds and Mason volume 2 2009, 39-40), the likeliest attainments within the limitations of the watching brief being

- Understanding the width of the wall (point 4.1.2)
- Observing the transition from a turf to a stone wall (point 4.1.3)

Fieldwork took place between February 1st-3rd 2011.

2.2 Archive

The archive has been compiled in accordance with the project design and the guidelines set out by English Heritage (1991) and the Institute of Field Archaeologists (2008).

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.

3 BACKGROUND

3.1 Location, topography and geology

Grinsdale lies beside the river Eden near Carlisle. Four Roman military marching camps were present in the area. The rich loamy soil encouraged farming around Grinsdale. Linen manufacture and weaving once provided employment in the hamlet.

Grinsdale church, St Kentigern, was built in 1740 outside the village and just above the river on the site where a 12th century church once stood. It has a small west tower, a three bay nave, and a two bay chancel with arched windows. The church was restored in 1895.

The drift geology comprises of alluvial sand and clay resting above Boulder Clay that overlies red sandstone solid geology.

Within the parish of Beaumont at approximately 16m OD, the study area (NY 36450 57300 to NY 36700 57900) runs alongside a narrow no-through road (figure 2), just off the Burgh road, that leads to the hamlet of Grinsdale. The study area remains flat with the cable lain into a furrow created by a cable plough within the glass verge on the eastern side of the lane (U1123).



Figure 2. Location of the study area (cable trench in green outline)

4. HISTORICAL CONTEXT

4.1 Desk-based assessment

The study area lies approximately 3km east of the Roman fort at Carlisle between milecastles 67 and 68.

Towards the east, the Wall and Vallum are close together but diverge close to Knockupworth Gill; the Wall following the bank of the River Eden and then inland through Grinsdale, the Vallum maintaining a straight course heading or Mill Beck.

Two scheduled elements required particular attention; the Wall that clips the southern part of the hamlet of Grinsdale and the Vallum that lies just to the north of Burgh road.

The Wall initially comprised a flat turf base normally six metres in width surmounted by three or four courses of turf blocks with a vertical north face and a sloping southern at a 75 degree angle of repose estimated to be 3.70m in height (Wilmot 2009, 41).

The turf wall was replaced by a stone wall in the second century AD normally built directly upon the turf wall as at Burgh-by-Sands (Ibid 43).

The Vallum classically comprises a steep-sided ditch usually 6m in width and 3m in depth with a flat base flanked by two mounds north and south, set back approximately 9m from the ditch edge and probably constructed to deny multiple crossings up to the Wall or to delimit a prohibited zone close to the Wall.

Within this stretch of the Wall and Vallum, there have been few archaeological interventions although two Roman marching camps have been identified by aerial photography near Knockupworth, the closest being identified as a crop-mark (Camp 1) at Nowtler Hill (SM 10593).

The Historic Environment Record describes a Medieval enclosure SMR 17934 at Eden Holme Farm.

This location corresponds to an evaluation undertaken in 2000 that discovered an undated single ditch <http://archaeologydataservice.ac.uk/archsearch/record.jsf?titleId=1827338> conducted by Lancaster Archaeology Unit and a watching brief conducted in 2002 by Headland Archaeology that recorded no significant archaeological deposits prior to a new development <http://archaeologydataservice.ac.uk/archsearch/record.jsf?titleId=1829793>.

5. RESULTS

5.1 Development proposals

In order to improve telecommunications services to the village, a new cable trench was required traversing the Roman Vallum and Wall.

Some open area machine excavation was required (28m in length) but principally the cable was lain within a machine tilled trench (744m in length) created by a cable plough affording little disturbance to any putative archaeological remains.

5.2 Methodology

The objective of the watching brief investigation was 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 would be made consisting of detailed context records on individual pro-forma sheets and field drawings, according to the protocols set out in the GMA manual.

The ground-works were undertaken primarily by cable plough under archaeological supervision. This action consisted of observation of the spoil removal and monitoring the displaced soil. Revealed sections were checked for any past cultural activity where open cut trenching was undertaken and if archaeologically significant recorded according to the protocols of the GMA manual.

5.3 Results

The watching brief programme monitored the reduction of extraneous material within a 772m length of trench.

The insertion of the cable was undertaken from the Burgh road junction where a junction box for the cable existed.

The cable plough produced a shallow cut penetrating no deeper than 0.30m and approximately 0.15m in width, the cable lain simultaneously as the plough proceeded.

The course of the Vallum was crossed on 1st February 2011. The monitored action did not uncover any evidence or deposits associated with the Vallum (figure 3). Indeed, the adjacent field ditch that is periodically cleaned was significantly deeper than the depth of the newly lain cable.

Proceeding towards the hamlet of Grinsdale, where the intervention crossed field entrances boulders were found, providing hard standing for traffic entering in and out.

Opposite Grinsdale village hall, a spread of clay approximately 7.00m in length was visible followed by a spread of brick debris (figure 7, yellow outline). No structure was visible.

From approximately this location, ground conditions became stonier as a result of natural deposition necessitating the blade belonging to the cable plough to be raised producing a trench between 0.10m and 0.20m in depth.

The cable plough continued on the eastern grass verge (figure 4) until it met a new estate road on the southern periphery of Grinsdale. This location marked the position where Hadrian's Wall is believed to exist.

Here the new cable trench diverted onto the road and required a hand dug open cut (figure 7, green outline) between 0.15m and 0.25m in depth (figure 5). The new trench within the road partially utilised an earlier cable trench continuing onwards to an existing junction box (figure 6) opposite the gateway to Croft View (figure 7, red dot).



Figure 3. Trench crossing the Vallum



Figure 4. Trench leading to Grinsdale village

The open cut trench produced only clay and modern debris probably associated with the modern housing development located to the east, formerly Eden Holme Farm (figure 7). No evidence for the alignment or footprint of the Wall was encountered.



Figure 5. Machine cut trench through road



Figure 6. Connection to Grinsdale junction box

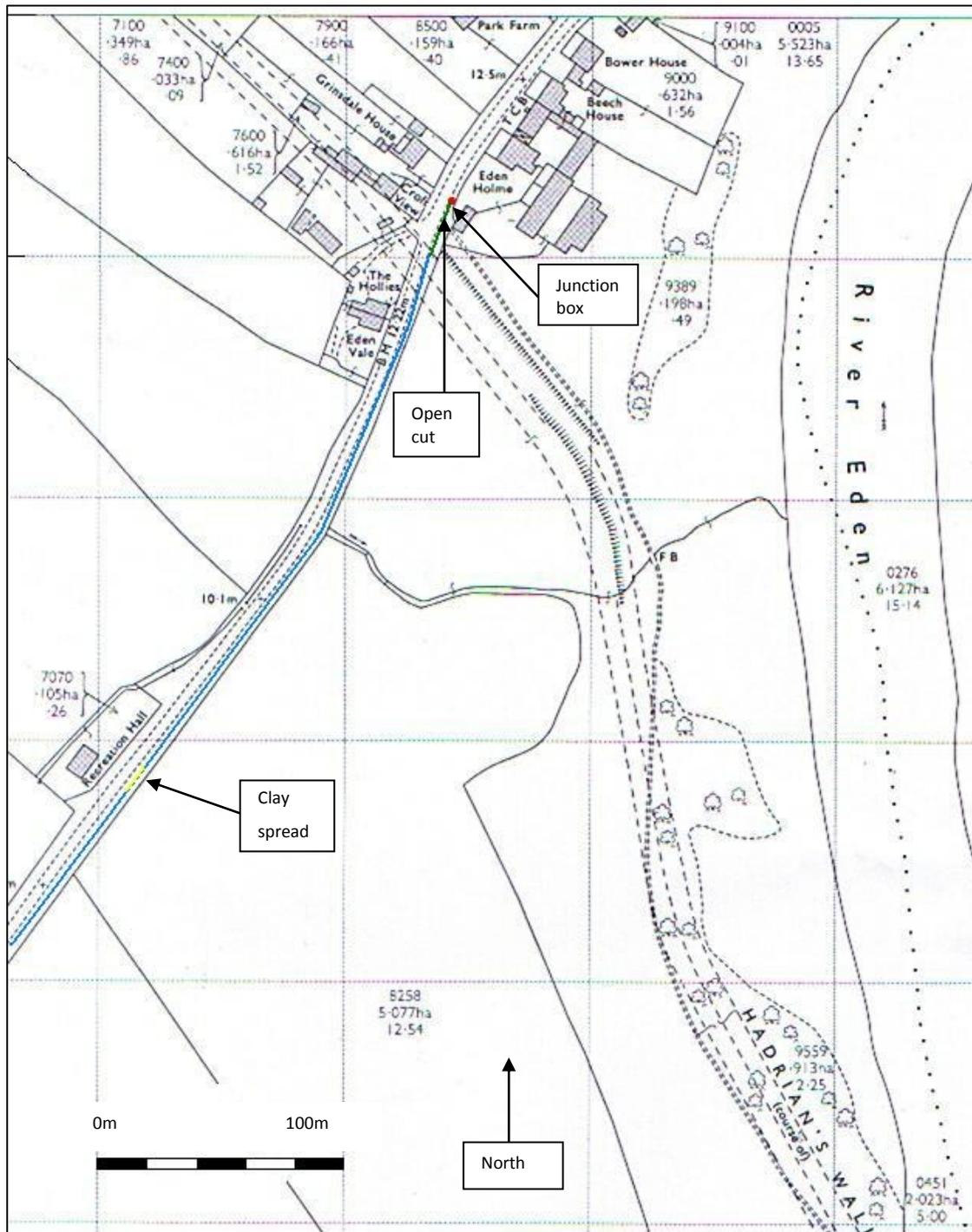


Figure 7. Location of junction box (red), open cut (green) and clay spread (yellow)
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No finds or archaeological deposits were seen or recovered during the entire period of the fieldwork.

No environmental samples merited recovery.

5.4 Discussion

The watching brief recovered no archaeological material and the development did not impact upon any putative archaeological remains.

Where the cable trench traversed the Vallum and the Wall, the monument was not compromised.

The fieldwork produced wholly negative evidence for the Wall and the Vallum and adds little if anything to our knowledge of the monument.

The intervention that targeted the vallum was undertaken by a cable plough that self-sealed the inserted cable. However, the depth of the cable trench was so slight that it remained within topsoil. Indeed, the adjacent field ditch (figure 3) was considerably deeper; inspection of this feature following cleaning would provide superior empirical evidence.

Where the trench crossed the course of the Wall (almost opposite the Hollies figure 7), modern development has created a new estate road serving the Eden Holme development, an action that would have truncated the upper part of any putative monument. Here, the new cable trench utilised an existing cable trench within the modern road make-up, a horizon that was archaeologically sterile.

It was observed that modern development continued to the west almost certainly above the course of the Wall. No account for this development appears to be in the public domain.

6. ARCHIVE

The archive has been compiled in accordance with the project design and the guidelines set out by English Heritage (1991) and the Institute of Field Archaeologists (1994, 2001 and 2007).

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

7. ACKNOWLEDGMENTS

I am grateful to Mr Malcolm Cooper, the client for his collaboration on this project and to the ground workers in particular Tony Swinderbank for their co-operation.

I would also like to thank Mike Collins (English Heritage) for his guidance, the staff of Carlisle Library with my research into the local history of the area and the staff of Cumbria Record Office, Carlisle with the map regression and other documentary research.

Finally, I would like to thank Jo Beaty for undertaking the watching brief stoically under dreadful weather conditions.

8. BIBLIOGRAPHY

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APPENDIX A

SPECIFICATIONS FOR A PROGRAMME OF WATCHING BRIEF INVESTIGATION TO FULFILL THE SMC CONDITIONS REGARDING S6227 & S6229 HADRIAN'S WALL AND VALLUM BETWEEN THE DISMANTLED RAILWAY SOUTH OF BOOMBY GILL AND THE FIELD BOUNDARY SOUTH EAST OF MILL BECK IN WALL MILE 68, BEAUMONT, CARLISLE, CUMBRIA AND BETWEEN THE EAST END OF DAVIDSON'S BANKS & ROAD TO GRINSDALE & VALLUM BETWEEN DAVIDSON'S BANKS & DISMANTLED RAILWAY IN WALL MILES 67 & 68, BEAUMONT, CARLISLE, CUMBRIA

NATIONAL MONUMENT NO 26088

INSERTION OF TELEPHONE CABLE,

GRINSDALE

CARLISLE,

CUMBRIA

ON BEHALF OF

Mr M.Charlton, Openreach PLC

By

G.M.T.MARTIN, BA MA MIFA

GERRY MARTIN ASSOCIATES LTD

Specifications for presentation to the Curatorial Authority, English Heritage

13th November 2010

Carlisle

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1.0 INTRODUCTION

1.1 The contractor

Gerry Martin is an independent free-lance archaeological contractor with over 25 years experience of commercial archaeology in Britain, Norway and Germany. Gerry Martin Associates Ltd specialises in the expedition of fieldwork projects. These include the field management and direction of large capital projects to execution of smaller watching briefs and evaluations.

All projects are carried out in accordance with PPS 5 (2010) and the guidelines and recommendations issued by the Institute of Field Archaeologists and English Heritage. Gerry Martin has achieved the accreditation level of MIfA (Member) with the Institute of Archaeologists (IfA).

The work will also accord with the Hadrian's Wall Research Strategy (Symonds & Mason 2009) and will seek to address the issues discussed therein.

1.2 The Commission

Gerry Martin has been commissioned by Mr M.Charlton representing Outreach PLC (the client) to prepare a Specification of Works for a Programme of Archaeological Watching Brief Action relating to the insertion of telephone cables between 1) the east end of Davidson's Bank & Road to Grinsdale & Vallum and Davidson's Bank & dismantled railway in Wall Miles 67 & 68, Beaumont, Carlisle and 2) Hadrian's Wall Vallum between the dismantled railway south of Boomby Gill and the field boundary south east of Mill Beck in Wall Mile 68, Beaumont, Carlisle.

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The development of the study area involves the clearance of topsoil and other extraneous material overlying the Vallum in order to bury the relevant telephone cable.

1.3 In connection with the commission

Because of the archaeological significance and sensitivity of this location, the curatorial planning authority has stated that planning permission is subject to the "developer" securing the implementation of a formal programme of archaeological observation and investigation during the forthcoming development.

This written scheme of investigation (WSI) has been produced by the archaeological contractor and details the methods and procedures to be employed during the watching brief action. It is submitted to the curatorial authority (English Heritage) for their approval.

1.4 Historical background

The study area lies approximately 3km east of the Roman fort at Carlisle between milecastles 67 and 68.

Towards the east, the Wall and Vallum are close together but diverge close to Knockupworth Gill; the Wall following the bank of the River Eden, the Vallum maintaining a straight course for Mill Beck.

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Within this stretch of the Wall and Vallum, there have been few archaeological interventions although two Roman marching camps have been identified by aerial photography near Knockupworth.

2.0 ARCHAEOLOGICAL WATCHING BRIEF

2.1 Objectives

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

2.2 Methodology

In order to achieve these objectives, a record of all archaeological informative deposits encountered during the ground operations shall be made consisting of detailed context records on individual pro-forma sheets, according to the protocols set out in the GMA manual.

Each layer, fill and cut will be individually numbered and described in terms of soil detail, stratigraphic position, dimensions, artefact content, environmental samples and interpretation. The context system will be cross-referenced to other records. Registers will be maintained for all photographs, levels, plans, section, finds and samples taken, made or gathered in the field.

Any plans drawn will be at scale and related to a base plan to the OS grid. All levels will be calculated to Ordnance Datum. Photographs will be numbered and labelled with subjects, orientation and scale and cross-referenced to film and digital numbers. General shots of the site will also be taken.

All finds from stratified deposits (with the exception of bulk ceramic building material) will be collected, processed and recorded as expressed in the GMA Manual, forming an individual section within the final report.

Sealed and anaerobic deposits will be environmentally sampled as appropriate and according to the GMA manual, in order to examine past environmental conditions. This element will form an individual section within the final report.

The watching brief will aim to provide an opportunity, if needed, to recover any exceptional archaeological find that has not been adequately resourced. Any “unexpected” discoveries will be made known to the Hadrian’s Wall Archaeological Officer, English Heritage.

2.3 Rapid desk-based assessment

If requested, a summary of previous interventions and research within the study area will be undertaken as part of the client report. This will include published excavation reports and relevant articles from academic journals and books with reference to the Historic Environment Record.

2.4 Finds and environmental samples

All finds (other than modern material) will be recovered from the watching brief action and form a section within the main text of the client report.

As the programme of works is unlikely to disturb sealed deposits, it is unlikely that any environmental material of merit will be encountered. However, if this presumption is incorrect, environmental samples will be taken and processed by North Pennines Archaeological Trust.

3.0 PUBLICATION AND ARCHIVE

3.1 The report

Should the reconnaissance prove negative, it is understood that a letter detailing the findings and a location plan of the observations may be sufficient for the purposes of English Heritage.

If a formal report is required, it will contain a written interpretation of features observed and detail the project circumstances. The main body of the report would be preceded by a non-technical summary containing the essential elements of the survey’s results.

A copy of the report will be presented to the client and copies submitted to the English Heritage. An additional copy will reside with the archive. The report will be presented within two months of leaving the field.

3.2 The archive

The report will state the location of the archive and acknowledge the role played by the curatorial authority and information derived from the County’s Sites and Monuments Record.

4.0 TIMETABLE AND RESOURCES

4.1 Timetable

The commission to undertake this project anticipates a single archaeologist will be on site during all phases of ground disturbance. If considered necessary, provision has been made for further personnel to aid with the archaeological recording.

The archaeological strategy to be implemented represents a recording mitigation scheme. It is anticipated that the site works will impact upon heavily truncated, archaeologically sterile ground and that the requirement for complex archaeological analysis will be minimal.

The fieldwork is likely to take several days, whilst the report stage should it adhere to the anticipated model will take a maximum of one week.

A start date of Monday 17th January 2010 is the provisional date for beginning this work with the possibility that it may start at a later time.

4.2 Resources and monitoring

The project would be under the direction of Gerry Martin BA, MA, MIfA and the fieldwork and report will be undertaken by him

Should the watching brief encounter significant archaeological remains whether Hadrian's Wall itself or any associated past cultural activity, then the archaeologist conducting the watching brief will inform Outreach PLC and the Hadrian's Wall Archaeological Officer (Mike Collins English Heritage) in order to formulate a mitigation strategy that will protect any archaeological deposits *in situ* or by preservation by paper record through formal archaeological excavation.

English Heritage will monitor progress and standards throughout the project.

4.3 Staffing

The following personnel are allocated on this project.

- Gerry Martin, fieldwork and report, Project Manager
- Carl Savage, additional fieldworker
- Dave Underwood, lithics
- Kerry Tyler, prehistoric ceramics
- Louise Hird, Roman ceramics
- Duncan.H.Brown, Medieval and Post-Medieval ceramics
- Patricia Crompton, North Pennine Archaeological Trust, environmental samples
- Dr Andy Towle, Glass
- Kate Griffiths, human remains

4.4 Safety aspects

The safety of the archaeologists working on site is of the utmost importance and the requirements of the current Health and Safety legislation must be strictly adhered to.

All work will adhere to the archaeological contractors Health and Safety Manual and will be carried out according to the relevant Health and Safety legislation. This includes in particular, the following regulations

- Health and Safety at Work 1974
- Construction (Design and Management) Regulations 1994
- The Management of Health and Safety at work Regulations 1992
- Personal Protective Equipment at Work Regulations 1992
- Manual Handling Operations Regulations 1992
- Workplace (Health, Safety and Welfare) Regulations 1992

APPENDIX B

DRAFT SMC CONDITIONS FOR S6227 & S6229 HADRIAN'S WALL AND VALLUM BETWEEN THE DISMANTLED RAILWAY SOUTH OF BOOMBY GILL AND THE FIELD BOUNDARY SOUTH EAST OF MILL BECK IN WALL MILE 68, BEAUMONT, CARLISLE, CUMBRIA AND BETWEEN THE EAST END OF DAVIDSON'S BANKS & ROAD TO GRINSDALE & VALLUM BETWEEN DAVIDSON'S BANKS & DISMANTLED RAILWAY IN WALL MILES 67 & 68, BEAUMONT, CARLISLE, CUMBRIA NATIONAL MONUMENT NO 26088

- (a) The works to which this consent relates shall be carried out to the satisfaction of the Secretary of State, who will be advised by English Heritage. 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, English Heritage, Bessie Surtees House, 41-44 Sandhill, Newcastle upon Tyne, NE1 3JF, 0191 2691212, mike.collins@english-heritage.org.uk, in order that an English Heritage representative can inspect and advise on the works and their effect in compliance with this consent.
- (b) No works shall take place until the applicant has confirmed in writing the commissioning of a programme of archaeological work during the development in accordance with a written scheme of investigation which has been submitted to and approved by the Secretary of State advised by English Heritage.
- (c) All those involved in the implementation of the works granted by this consent must be informed by the owner, occupier and/or developer 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.
- (d) Equipment and machinery shall not be used or operated in the scheduled area in conditions or in a manner likely to result in damage to the monument or ground disturbance other than that which is expressly authorised in this consent.