

GUARD ARCHAEOLOGY



Kirtlebridge Marquiss SPS Pipeline Data Structure Report Project 3449

www.guard-archaeology.co.uk

Kirtlebridge Marquiss SPS Pipeline

Data Structure Report

On behalf of: Scottish Water

NGR: NY 2247446

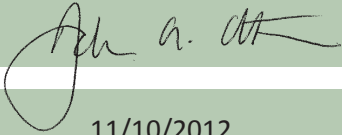
Project Number: 3449

Report by: Rowena Thomson

Illustrations: Gillian McSwan

Project Manager: John Atkinson

Approved by:


11/10/2012

Date:

*This document has been prepared in accordance
with GUARD Archaeology Limited standard operating procedures.*

GUARD Archaeology Limited
52 Elderpark Workspace
100 Elderpark Street
Glasgow
G51 3TR

Tel: 0141 445 8800
Fax: 0141 445 3222
email: info@guard-archaeology.co.uk



www.guard-archaeology.co.uk

Contents

Executive Summary	5
Introduction	5
Site Location, Topography and Geology	5
Archaeological Background	5
Aims and Objectives	6
Methodology	6
Results	6
Discussion	7
Recommendations	7
Acknowledgements	7
Appendices	9
Appendix A: Bibliography	9
Appendix B: List of Contexts	10
Appendix C: List of Samples	11
Appendix D: List of Drawings	11
Appendix E: List of Photographs	11
Appendix F: DES	13
Appendix G: Project Design/WSI	14

List of Figures

Figure 1: Pit location and section through pit 016/019	4
--	---

List of Plates

Plate 1: West facing section of trench, showing frame	6
Plate 2: Working shot – piles, frame and fibre optic cables	6

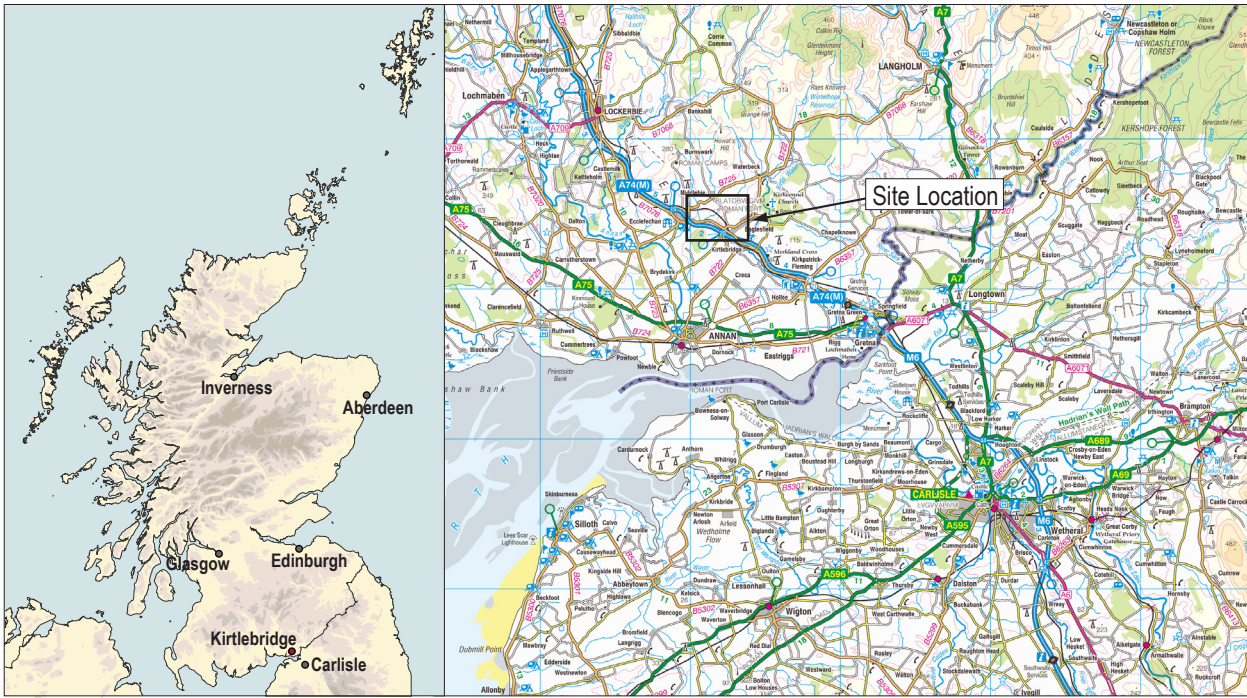


Figure 1: Pit location & section through pit 016/019.

Executive Summary

- 1.1 GUARD Archaeology Limited were commissioned by Scottish Water to undertake an archaeological watching brief during the insertion of a new sewage pipe at Kirtlebridge. This work was undertaken between 19 March and 4 September 2012 and revealed a single feature of potential archaeological significance.

Introduction

- 2.1 This report sets out the results of an archaeological watching brief undertaken by GUARD Archaeology, on behalf of Scottish Water on a site proposed for the excavation of a pipe trench for Kirtlebridge Pumping Station near Broadlea Cottages. During the course of the watching brief a single feature of potential archaeological significance was identified. GUARD Archaeology undertook this programme of work between 19 March and 4 September 2012.

Site Location, Topography and Geology

- 3.1 The proposed development location lies to the north of Kirtlebridge (NGR 22467446) along the line of an unnamed road running between the B722 at Eaglesfield and the B725 at Middlebie. The development area covers approximately 1km and sits between 54m and 59m AOD.
- 3.2 The site is bounded by agricultural fields to the east and west and the continuation of the road to the north and south and currently consists of a single lane road (Figure 1).
- 3.3 The underlying drift geology consists of glacial sand and gravel while the solid geology consists of Yoredale group rocks - interbedded limestone, argillaceous rocks and subordinate sandstone (British Geological Survey 1:625,00 Geology Viewer).

Archaeological Background

- 4.1 A review of desk-based sources undertaken in advance of the watching brief revealed a total of nineteen known cultural heritage sites within a kilometre of the centre of the proposed development. To the north lie Roman camps at Johnstonehall (NY27NW 5) as well as an old road (NY27NW 29) and an unknown, possibly listed, building (NY27NW 83). To the north-east lies an area from Birrens Hill to Broadlea Farm containing numerous sites: the area around Birrens having been excavated in 1936-37. Of these, six are pre-Roman in date with a cluster comprising cord-rig cultivation with enclosures and rig and furrow cultivation (NY28SW 31), as well as remains of cord-rig cultivation (NY28SW 73) and a ring enclosure (NY28SW 33). Find sites of a bronze axe head (NY27 NW 41), a saddle quern (NY28SW 53) and a stone axe head (NY27NW 11) also occurred in this area. These sites are clustered around Birrens Hill. South of Birrens Hill and north-east of the watching brief area lies a prehistoric henge (NY27SW 19).
- 4.2 Distributed throughout the same area are a number of Roman sites and small find sites. The fort of Blatobulgium (NY27NW 4) can be found further to the north-east. Three stone 'Celtic' heads (NY28SW 4.02) are listed as being found at a Roman fort at Birrens though their exact provenance is uncertain. An altar stone (NY17SE 45) now located at Hoddom castle is also believed to have originated at the Birrens fort or in its immediate vicinity. A Roman arm-purse (NY17SE 16) is listed as being donated from Hoddom, but is now suspected to have been originally found at Birrens. The earthworks of a Roman or medieval farm and settlement (NY28SW 9) have also been identified in the vicinity as has undated rig and furrow cultivation (NY28SW 35). A towerhouse (NY27NW 4.01) was occupied within the boundaries of the Birrens fort between the fifteenth and sixteenth centuries with occupation recorded as extending into the eighteenth century. A bronze ewer (NY27NW 12) dating from between the fourteenth and seventeenth centuries has been identified as coming from a similar vicinity.
- 4.3 To the south near the village of Eaglesfield appear lime workings and quarrying activity that began in the late eighteenth century. The village first appeared in the early nineteenth century and appears to have little relationship with the development area.

- 4.4 Two sites are located near or within the boundary of the development site, one is the location of pits and cropmarks found on the west of the road (NY27SW 37; NY27SW 38). The other is a possible Roman fortlet (NY27SW 4), this site is a Scheduled Ancient Monument (SAM 2613) identified from aerial photography taken on the 12 July 1947 (housed in Cambridge University Committee for Aerial Photography - T 49).

Aims and Objectives

- 5.1 The general aim of the watching brief was to identify any archaeological features encountered and record them fully. The specific objectives were:
- Establish the presence or absence of any archaeological remains within the development area,
 - Determine the character, extent and significance of any archaeological deposits encountered,
 - Fully excavate and salvage any information possible from any significant features encountered.

Methodology (Figure 1)

- 6.1 Topsoil was stripped using a mechanical excavator, fitted with a flat-bladed ditching bucket, under close archaeological supervision. The topsoil was removed in spits to the surface of the subsoil or the first significant archaeological horizon. All on-site recording, written, drawn and photographic, was to the standards normally pertaining in archaeological fieldwork. All features of note were surveyed and located within the National Grid using a hand-held GPS
- 6.2 Conditions for the watching brief were variable, ranging between sunny and heavy rain.

Results (Figure 1)



Plate 1: West facing section of trench, showing frame



Plate 2: Working shot – piles, frame and fibre optic cables

- 7.1 A total area of 500 linear metres was stripped of road surfacing to reveal orange/brown silty clay with frequent cobbles overlaying pink and grey weathered boulder clay. Over the majority of the area road layers were 0.45 m to 0.7 m thick. The trench was excavated to a maximum depth of 6 m. The subsoil began at a depth of 1.78 m at the north of the area and began immediately under the modern road surface at the south, see plate 1. During the course of the watching brief one feature of archaeological significance was encountered. This comprised of a single oval pit (context 016) containing three fills. These were a mixed grey clay (017) overlaying a charcoal rich layer (019) with a mid-grey clay in the base (018).
- 7.2 Near Broadlea Cottages, several service trenches and cables were observed. These included water mains and fibre optic cables, see plate 2.

- 7.3 During the watching brief a background scatter of artefacts were recovered from topsoil deposits across the area, including a small quantity of modern pottery. No artefacts of particular note were recovered.

Discussion

- 8.1 The watching brief identified little evidence relating to the use of the site during the Roman period. One feature of archaeological significance was encountered and fully excavated and may be related to the two pits identified previously to the west of the watching brief area. Few modern artefacts were observed apart from modern service trenches. Beneath the modern road there was little other disturbance apart from land and field drains. These were concentrated south of the cottages and relate to modern farming practices. No concrete evidence of the possible Roman fortlet was identified; the features identified through aerial photography either do not extend to the modern road or do not survive underneath it.

Recommendations

- 9.1 The watching brief work has proved that few archaeologically sensitive deposits or features exist within the development area. However the existence of the single pit may imply the presence of prehistoric or Roman activity within the pipe trench. In consequence, it is recommended that the contents of the pit are processed for ecofacts and artefacts and that a suitable sample of charcoal is dated to provide an absolute date for this feature. If the sample proves to be significant a short note should be produced for inclusion in the Transactions of the Dumfries and Galloway Natural History and Antiquarian Society.
- 9.2 GUARD Archaeology would stress that these recommendations are intended for guidance only. Given that the site is a scheduled ancient monument we would recommend that the proposed mitigation strategy is discussed with Historic Scotland and the Dumfries and Galloway Council archaeologist, as final decisions on the nature and extent of any future archaeological work rest with both organisations.

Acknowledgements

- 10.1 GUARD Archaeology would like to thank Scottish Water for their assistance. Plant and drivers were supplied by Grant Civil Engineering. Technical support was A. Maule. The illustrations were produced by Gillain McSwan. The report was desk top published by Gillan McSwan. The project was managed for GUARD Archaeology Limited by John Atkinson.

**Kirtlebridge Marquiss SPS Pipeline
Data Structure Report**

Section 2: Appendices



www.guard-archaeology.co.uk

Appendices

Appendix A: Bibliography

Anderson, J (1896c) 'The pottery, bronze, etc. found at Birrens', in PSAS 'Account of the excavation of Birrens, a Roman station in Annandale, undertaken by the Society of Antiquaries of Scotland, in 1895', *Proc Soc Antiq Scot*, vol.30. Page(s): 198

Armit, I (1998i) *Scotland's hidden history*, Stroud, Gloucestershire. Page(s): 118

Barbour, J (1896) 'The interior buildings at Birrens', in PSAS 'Account of the excavation of Birrens, a Roman station in Annandale, under taken by the Society of Antiquaries of Scotland, in 1895', *Proc Soc Antiq Scot*, vol.30. Page(s): 109-20

Birley, E (1963) 'Roman bronze arm-purses', *Archaeol Aeliana*, 4th, vol.41. Page(s): 15, 16, no. 8

Birley, E (1938) 'Excavations at Birrens, 1936-1937', *Proc Soc Antiq Scot*, vol.72. Page(s): 340

Black, G F (1893c) 'Notice of various antiquities found in Dumfriesshire, and now preserved in the National Museum in Edinburgh', *Trans Dumfriesshire Galloway Natur Hist Antiq Soc*, 2nd, vol.8. Page(s): 99

Clough and Cummins, T H McK and W A (1988) 'Lists of identifications', in Clough, T H McK and Cummins, W A *Stone axe studies, volume 2: the petrology of prehistoric stone implements from the British Isles* Council for British Archaeology research report no. 67 London. Page(s): 234, no. DMF 16

Coles, J M (1966a) 'Scottish Middle Bronze Age metalwork', *Proc Soc Antiq Scot*, vol.97. Page(s): 134

Collingwood and Wright, R G and R P (1995) *The Roman inscriptions of Britain: Vol 1: inscriptions on stone*, Stroud, Gloucestershire. Page(s): 642

Coventry, M (2001) *The castles of Scotland Musselburgh*. Page(s): 86

Dodds, W (1972) 'Celtic stone heads from Dumfriesshire', *Trans Dumfriesshire Galloway Natur Hist Antiq Soc*, 3rd, vol.49. Page(s): 33, 36

Gifford, J (1996) *Dumfries and Galloway, The Buildings of Scotland series*. London

Jones, B (1979) 'Aerial reconnaissance, Solway survey; Dumfries and Galloway 1977 to 1979', *Discovery Excav Scot*

Keppie and Arnold, L J F and B J (1984) *Corpus Imperii Romani: (Corpus of Roman Sculpture) Great Britain, fasc. iv (Scotland)*, London. Page(s): 12

Keppie, L (1994a) 'Roman inscriptions and sculpture from Birrens: a review', *Trans Dumfriesshire Galloway Natur Hist Antiq Soc*, 3rd, vol.69 Birrens Centenary Volume. Page(s): 40, 42-3

Livens, R G (1961) 'Petrology of Scottish stone implements', *Proc Soc Antiq Scot*, vol.92. Page(s): 61-3, 70

Lockett, N (1996) 'Birrens (Middlebie parish), Roman extra-mural occupation', *Discovery Excav Scot*. Page(s): 31-32

Maxwell-Irving, A M T (1988) 'Hoddum Castle: a reappraisal of its architecture and place in history', *Proc Soc Antiq Scot*, vol.117. Page(s): 185, 213

Prevost, W A J (1961) 'Sir John Clerks journey to Carlisle and Penrith, August 1731', *Trans Dumfriesshire Galloway Natur Hist Antiq Soc*, 3rd, vol.38. Page(s): 132-3

RCAHMS (1920) *The Royal Commission on the Ancient and Historical Monuments and Constructions of*

Scotland. Seventh report with inventory of monuments and constructions in the county of Dumfries, Edinburgh. Page(s): 101-102, 166-167

RCAHMS (1997a) Eastern Dumfriesshire: an archaeological landscape, Edinburgh. Page(s): 44, 149, 151, 155, 183, 287, 289, 305, 307, 309, 310, 313, 316, 325, 327

Robertson, A S (1975) Birrens (Blatobulgium), Edinburgh. Page(s): 9, 227

Robertson, A S (1974) 'Roman coins found in Scotland, 1961-70', *Proc Soc Antiq Scot*, vol.103. Page(s): 114

Schmidt and Burgess, P K and C B (1981) 'The axes of Scotland and Northern England', *Praehistorische Bronzefunde*, vol.9, 7 Munchen, Germany. Page(s): 95, no. 548

St Joseph, J K (1951) 'Air reconnaissance of North Britain', *J Roman Stud*, vol.41. Page(s): 58

TDGNHAS (1949) 'Presentations and exhibits', *Trans Dumfriesshire Galloway Natur Hist Antiq Soc*, 3rd, vol.26. Page(s): 201

Toynbee, J M C (1953) 'A stone head in the Burgh Museum, Dumfries', *Trans Dumfriesshire Galloway Natur Hist Antiq Soc*, 3rd, vol.30. Page(s): 156-8

Truckell, A E (1974j) 'Middlebie, Birrens Hill fort, Carruthers', *Discovery Excav Scot*. Page(s): 29

Williams, J (1970a) 'Neolithic axes in Dumfries and Galloway', *Trans Dumfriesshire Galloway Natur Hist Antiq Soc*, 3rd, vol.47. Page(s): 115

Appendix B: List of Contexts

Context No.	Area	Description	Interpretation
001	MH 16 – 12	Tarmac	Tarmac surfacing for modern road
002	MH 16 – 12	Angular type 1 stone bedding	Bedding for modern road surface
003	MH 16 – 15	Black and grey ashy clay	Bedding for modern road surface
004	MH 16 – 15	Angular type 1 stone bedding. Similar to 002	Bedding for modern road surface
005	MH 16 - 15	Reddish brown silty clay. Possibly redeposited	Redeposited subsoil – possible bedding
006	MH14A	Grey silt, organic	Possible old ground surface
007	MH 14A – 13	Loose grey/brown sand with cobbles	Possible hillwash
008	MH 14A	Mottled orange/brown sand	Natural subsoil, possibly alluvial
009	MH14A	Soft pink and grey clay	Glacial/alluvial boulder clay
010	Mh 14A	Firm grey boulder clay	Glacial/alluvial boulder clay
011	MH 14 – 13	Grey/brown sand (=007)	Possible old ground surface
012	MH14 -13	Pink/grey silt and clay with pebbles and cobbles (=009)	Weathered glacial/alluvial boulder clay
013	Mh 14 – 13	Grey clay with pebbles and cobbles (=010)	Glacial/alluvial boulder clay
014	MH 14 – 13	Yellow and grey silty clay (=009)	Glacial/alluvial clay
015	M14 – 13	Sandstone culvert with 19th + 20th century pottery. 2.4x0.6x0.6m. Capstones max. 0.85x0.6x0.2m.	Land drainage
016	MH 14 – 13	Cut – slightly oval E-W 0.9x0.8m. Sharp break of slope at top and steep sides with a rounded base. Filled by (017), (018) and (019). GPS NY 22351: BNG 74486 – acc. 7M	Cut of possible fire pit.
017	MH 14 – 13	Mid grey silty clay and gravel	Fill of pit [016]
018	MH 14 – 13	Light grey silty clay	Fill of pit [016]
019	Mh 14 – 13	Black sandy clay with charcoal	Fill of pit [016]
020	MH 12	Dark grey and black sandy gravel (=002)	Bedding for modern road surface
021	MH 12	Brown clay (=005)	Redeposited subsoil – possible bedding
022	MH 12	Dark brown clay and sandy gravel (=009)	Glacial/alluvial boulder clay

Appendix C: List of Samples

Sample No.	Area	Context No.	Size	Reason for Sampling				Application/Comments
				Pot	Bone	Lithics	Botanics	
1	MH 14 -13	17	1 x L	-	-	-	Y	Top context/last fill of possible fire pit [016]
2	MH 14 -13	19	1 x L	-	-	-	Y	C.v. rich context. Middle fill of [016]
3	MH 14 -13	18	1 x L	-	-	-	Y	Lowest context/first fill of [016]. clay lining?

Appendix D: List of Drawings

Drawing No.	Area	Sheet No.	Subject	Scale
1	MH 14 -13	-	Plan of possible fire pit	1;20
2	Mh 14 -13	-	W facing section of possible fire pit	1;10

Appendix E: List of Photographs

Frame	Area	Context No.	Subject	Taken from
1	-	-	Working Shot	W
2	-	-	Working Shot	W
3	MH 16	(001) – (005)	Section of machine cut	N
4	MH 16	-	Working Shot	N
5	MH 15	-	Working Shot	W
6	-	-	Location of Roman fortlet – east side	NW
7	-	-	Location of Roman fortlet – east side	N
8	-	-	View towards Birrens to Broadlee, roman camps	SE
9	-	-	View towards Johnstonehall Roman camps	SW
10	-	-	Location of roman fortlet on road	N
11	-	-	Location of roman fortlet on road – west side	N
12	MH 14A	(001) – (006)	West facing section of manhole trench	W
13	MH 14A	(001) – (006)	West facing section of manhole trench	W
14	MH 14A	(001) – (007)	Post ex before shoring box inserted	S
15	MH 14A	(001) – (007)	East facing section of manhole trench	E
16	MH 14	(00)1, (003), (005), (011)	W facing section of manhole 14	W
17	MH 14	-	Location shot for MH 14 showing cottages	W
18	MH 14	-	Location shot for MH 14 showing rise to the east	W
19	MH 14	(014) + (015)	N facing side of culvert – pre-ex	N
20	MH 14	(014) + (015)	S facing side of culvert – pre-ex	S
21	MH 14	(014) + (015)	Post – ex. N facing side	N
22	MH 14	(014) + (015)	Post – ex.S facing side	S
23	MH 14	(014) + (015)	Capstones of culvert	W
24	MH 14	(014) + (015)	Beneath capstones – Victorian + modern pottery	W
25	MH 14	(001), (003), (014)	W facing section of trench	W
26	MH 14	-	Working shot – piles and frames	SW
27	MH 14	-	Working shot – piles, frames and fibre optic cables	W
28	MH 14	(001), (003), (014)	W faing section	W
29	MH 14	-	Working shot – piles and laying pipes	N
30	MH 14	(001), (005), (007), (014)	W facing section	W
31	MH 14	(017), (018), (019)	Pre-ex of fire pit	W
32	MH 14	(017), (018), (019)	W facing section of fire pit	W
33	MH 14	(017), (018), (019)	Post-ex of fire pit	W
34	MH 14	(001), (003), (014), (015)	W facing section – north half	W
35	MH 14	(001), (003), (014), (015)	W facing section – south half	W
36	MH 14	-	Working Shot – W facing section and frame	W
37	MH 14	(001), (005), (007), (009)	Working Shot – W facing section and frame	W

Frame	Area	Context No.	Subject	Taken from
38	MH 14	(001), (005), (007), (009)	E facing section	E
39	MH 14	(001), (005), (007), (009)	W facing section	W
40	MH 14	(001), (005), (007), (009)	W facing section	W
41	MH 14	(001), (005), (007), (009)	E facing section	E
42	MH 14	(001), (005), (007), (009)	W facing section	W
43	MH 14	(001), (005), (007), (009)	E facing section	E
44	MH 13	(001), (005), (007), (009)	W facing section	W
45	MH 13	-	Working Shot	W
46	MH 13	(001), (005), (007)	W facing section	W
47	MH 13	-	Working Shot	W
48	MH 13	(001), (005), (007), (009)	W facing section	W
49	MH 13	(001), (005), (007), (009)	W facing section	W
50	MH 13	(001), (005), (007), (009)	W facing section	W
-	MH 13	-	Workgng shot – field/land drains and flooding	W
-	MH 13	(001), (005), (009)	N facing section	N
-	MH 13	(001), (005), (009)	Working shot – section + piles + box	W
-	MH 13	(001), (005), (009)	Working shot – section + piles + box	W
-	MH 13	(001), (005), (009)	E facing section	E
-	MH 12	(021), (022), (023)	W facing section	W
-	MH 12	(021), (022), (023)	W facing section	W
-	MH 12	(021), (022), (023)	W facing section	W
-	MH 12	(021), (022), (023)	N facing	N
-	MH 12	(021), (022), (023)	N facing	N
-	MH 12	(021), (022), (023)	E facing	E
-	MH 12	(021), (022), (023)	E facing	E
-	MH 12	(021), (022), (023)	Working shot	W
-	MH 12	(021), (022), (023)	Working shot	W
-	MH 12	(021), (022), (023)	Working shot	W

Appendix F: DES

LOCAL AUTHORITY:	Dumfries and Galloway Council
PROJECT TITLE/SITE NAME:	Kirtlebridge Pumping Station
PROJECT CODE:	3449
PARISH:	Middlebie
NAME OF CONTRIBUTOR(S):	Rowena Thomson
NAME OF ORGANISATION:	Guard Archaeology Ltd.
TYPE(S) OF PROJECT:	Watching Brief
NMRS NO(S):	SAM 2613
SITE/MONUMENT TYPE(S):	Roman fortlet; Pits
SIGNIFICANT FINDS:	--
NGR (2 letters, 6 figures)	NY 224744
START DATE (this season)	19/3/2012
END DATE (this season)	4/9/2012
PREVIOUS WORK (incl. DES ref.)	--
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	A watching brief was carried out to the west of a possible Roman fortlet (SAM 2613) and east of pits (NY27SW 37; NY27SW 38). One further pit was found filled by clay and charcoal rich layers. No other features or artefacts of archaeological significance were encountered.
PROPOSED FUTURE WORK:	Limited post-excavation
SPONSOR OR FUNDING BODY:	Scottish Water
CAPTION(S) FOR ILLUSTRS:	--
ADDRESS OF MAIN CONTRIBUTOR:	Guard Archaeology Ltd., 52 Elderpark Workspace, 100 Elderpark St, Glasgow. G51 3TR
EMAIL ADDRESS:	info@guard-archaeology.co.uk
ARCHIVE LOCATION (intended/deposited)	Archive will be deposited with the NMRS

Appendix G: Project Design/WSI

GUARD 3449: Kirtlebridge, Dumfries - Watching Brief Method Statement

1.0 *Introduction*

This document sets out GUARD Archaeology's watching brief methodology. The watching brief strategy includes monitoring of all overburden removal and machine dug trenches undertaken during ground breaking works associated with work at Kirtlebridge, Dumfries and hand excavation and recording of any archaeological remains encountered.

On completion of all excavation works a report to data structures level and an accompanying post-excavation research design (PERD) and costing (if required) will be submitted for agreement with Scottish Water and the Dumfries and Galloway archaeological adviser. The PERD will also outline arrangements for final publication of the project should this prove necessary.

2.0 *Aims and Objectives*

The aims and objectives of the archaeological watching brief are as follows:

- establish the presence or absence of any archaeological remains during ground breaking works;
- determine the character, extent and significance of any archaeological deposits encountered;
- excavate and salvage any information possible from any significant features/sites encountered.

3.0 *Methodology*

The strategy to be employed during the watching brief will consist of the following:

- All ground disturbances will be monitored by an archaeologist assisted, where necessary, by further archaeologists under the overall guidance of an archaeological project manager.
- The number of archaeologists required during the works will be dependent on the number of areas being trenched simultaneously and the number of mechanical excavators being deployed.
- All plant will be fitted with a toothless ditching bucket for removal of any previously undisturbed overburden layers to ensure the subsoil interface is not disturbed and any archaeological features can be clearly identified. A toothed bucket may be used for previously disturbed layers.
- Overburden will be removed in spits to the first archaeological horizon or, where none is found, to the natural subsoil. Any archaeological features encountered will be cleaned by hand to determine the date of the deposits, their character and extent. Such features will be recorded by written description on *pro forma* recording sheets, by photograph and by measured drawing.
- Any significant archaeological features encountered will be dealt with by the on-site archaeologist(s). Should negative-cut features be encountered they will be 50% excavated in order to determine their significance, date and function. In the event that they are deemed to be important discoveries, they will be fully excavated. Recording will include *pro forma* sheets, drawings and photographs.

- Suitable down time, up to a maximum of two hours per significant small feature, will be provided to the on-site archaeologists in order to fully recover any archaeological evidence encountered.
- Should more substantial remains be encountered, downtime may be required in excess of two hours per feature. This will be agreed in writing with Scottish Water and the Dumfries and Galloway Council archaeological adviser prior to proceeding.
- In the event that particularly significant features, special finds or complex groups of features are encountered Scottish Water and the Dumfries and Galloway Council archaeological adviser will be alerted, so that a mitigation strategy can be agreed to deal with them.
- All archaeological finds will be dealt with by the on-site archaeological team. The general practice will be to bulk recover all artefacts by context which are recovered from the overburden or from nineteenth century or later layers or deposits. Should finds be encountered that are securely stratified from earlier occupation phases they will be three-dimensionally recorded prior to up-lifting.
- All excavated feature fills and horizons will be sampled for palaeo-environmental evidence. This may also include micromorphological sampling in order to address key issues on soil development.
- A representative section will be recorded for each section of trench denoting depth of overburden, any stratigraphy present and the nature of the soil. This information will be logged in the day book together with a sketch drawn to scale and a photographic record of deposits.

On completion of the watching brief phase of work, a report suitable for submission to the Planning Authority and the National Monuments Record for Scotland (NMRS) will be produced. This report will be accompanied by the post-excavation research design and costing in order to bring the results forward for analysis and publication should this be required.

4.0 **Products**

The products of a programme of work can be:

- a preliminary data structure report, after completion of all fieldwork suitable for submission to the client, Planning Authority, the NMRS and the local Sites and Monuments Record;
- a brief summary of results of the fieldwork will be submitted to *Discovery and Excavation in Scotland* ;
- a brief summary of results of the fieldwork will also be added to the OASIS online database;
- Post-excavation and publication of the results of the watching brief within an academic journal should this be necessary;
- Preparation and disposal of the site archive and finds.

5.0 **Archive Arrangements**

Once all fieldwork is completed, all materials from the programme of work will be prepared to the appropriate archive standard. GUARD Archaeology will undertake to deposit the resultant archive to the NMRS on completion of the report for publication.

All finds will be reported to the Treasure Trove Advisory Panel, and GUARD Archaeology will undertake to ensure their safe deposition within the designated museum at the appropriate time.

6.0 ***Timetable***

The phase of work is proposed to commence in April/May 2012. A fixed start date will be provided in advance of works commencing.

7.0 ***Staffing***

The watching brief will be conducted by one of GUARD Archaeology's experienced Project Officers. A CV for the individual can be provided on request.

8.0 ***Health and Safety and Insurance***

8.1

All archaeological working practices will be subject to a risk assessment prior to commencement of the work where likely health and safety issues associated with the site can be highlighted.

8.2

GUARD adheres to all standard Health and Safety regulations governing fieldwork projects. GUARD also possess appropriate third party/public liability insurance cover, proof of which may be supplied upon request.

9.0 ***Monitoring Procedures***

All work on site will be internally monitored by John Atkinson, GUARD Archaeology's Managing Director.

GUARD Archaeology Limited
52 Elderpark Workspace
100 Elderpark Street
Glasgow
G51 3TR

Tel: 0141 445 8800

Fax: 0141 445 3222

email: info@guard-archaeology.co.uk



www.guard-archaeology.co.uk