

NORTH PENNINES ARCHAEOLOGY LTD

Client Reports No. CP/632/08



Kevin Mounsey BA (Hons)
North Pennines Archaeology Ltd
Nenthead Mines Heritage Centre
Nenthead
Alston
Cumbria CA9 3PD
Tel: (01434) 382045
Fax: (01434) 382043

20/10/2008



CONTENTS

	<i>Page</i>
LIST OF ILLUSTRATIONS	III
EXECUTIVE SUMMARY	IV
ACKNOWLEDGEMENTS.....	V
1 INTRODUCTION	6
1.1 CIRCUMSTANCES OF THE PROJECT.....	6
2 METHODOLOGY.....	7
2.1 PROJECT DESIGN	7
2.2 ARCHAEOLOGICAL WATCHING BRIEF	7
2.3 ARCHIVE.....	7
3 BACKGROUND	9
3.1 LOCATION, TOPOGRAPHY AND GEOLOGY	9
3.2 HISTORICAL BACKGROUND	9
4 WATCHING BRIEF RESULTS	12
4.1 INTRODUCTION.....	12
4.2 HAIG COLLIERY (AREA A) NGR NX 9670 1760.....	12
4.3 HOWGILL INCLINE (AREA B) NGR NX 9677 1825	13
4.4 WELLINGTON PIT (AREA C) NGR NX 9678 1825	14
4.5 FINDS	17
5 CONCLUSIONS AND RECOMMENDATIONS	18
5.1 CONCLUSIONS.....	18
5.2 RECOMMENDATIONS	18
6 BIBLIOGRAPHY	19
6.1 SECONDARY SOURCES	19
6.2 INTERNET SOURCES.....	19
APPENDIX 1: FIGURES	20

LIST OF ILLUSTRATIONS

FIGURE 1: SITE LOCATION.....	APPENDIX 1
FIGURE 2: AREAS SUBJECT TO ARCAEOLOGICAL WATCHING BRIEF	APPENDIX 1
FIGURE 3: PLAN OF WELLINGTON PIT ARCAEOLOGY	APPENDIX 1
FIGURE 4: PLAN OF ARCAEOLOGICAL REMAINS IN AREA C.....	APPENDIX 1
FIGURE 5: SECTION ACROSS ARCAEOLOGY IN AREA C.....	APPENDIX 1
PLATE 1: HAIG COLLIERY ACCESS IMPROVEMENT WORKS. NOTE CONCRETE LAYER SEALING RED BRICKS	PAGE 12
PLATE 2: EXCAVATION OF PATHWAY IN POSSIBLE AREA OF BRAKE HOUSE.....	PAGE 13
PLATE 3: PATHWAY EXCAVATION ON THE HOWGILL INCLINE.....	PAGE 14
PLATE 4: THE SOUTH WALL	PAGE 15
PLATE 5: TOOLED NORTH FACE OF NORTH WALL (112). ALSO SHOWN IS BRICK WALL (113) AND CULVERTS (115) AND (117).	PAGE 16
PLATE 6: OVERVIEW OF THE ARCAEOLOGICAL FEATURES.....	PAGE 16

EXECUTIVE SUMMARY

In February 2008, North Pennines Archaeology Ltd was commissioned by Entec UK Limited to undertake a programme of archaeological works on land associated with Haig Colliery (NGR: NX 9670 1760; SM no.27800), Whitehaven, Cumbria, and its immediate surroundings (Figure 1). The site is located within an area of high archaeological potential. Notable historical monuments and features within the environs of Haig Colliery are Saltom Pit, remains of the Wellington Pit, the Howgill Incline and Jonathan Swift's House. As a result, all works associated with the environmental improvements to the sections of the Whitehaven Coast associated with Haig Colliery required a programme of archaeological work to be undertaken. This was in the form of a watching brief, undertaken on all groundworks, in designated archaeologically sensitive areas (Figure 2).

Three main locations were subject to watching brief conditions:

- A. Improvement works to the Haig Colliery access. These may encroach on the location of possible former colliery outbuildings.
- B. Path works on the Howgill Incline (NGR: NX 9677 1825) and in the vicinity of the former Howgill Incline brake house.
- C. Path construction in the vicinity of the former Wellington Colliery (NX: 9678 1825). Change of use of a small pond feature associated with the Wellington Colliery.

The works involved excavation using mechanical excavators. No archaeological features were found in areas A. and B. In Area C, post medieval archaeological features in the form of stone walls and cobbled floor surfaces were uncovered. It is probable that these belonged to part of the Wellington Colliery complex. Post-medieval pottery and ironwork along with some fragments of clay pipe were recovered. This is consistent with material associated with late 19th century, early 20th century coal mine workings.

As this report comprises the recommendations for archaeological recording in the Haig Colliery environs, no further work is necessary. However, due to the continuing high archaeological potential of the area, and the fact that it contains a Scheduled Monument, any further development in the area should be subjected to a programme of archaeological investigation.

ACKNOWLEDGEMENTS

North Pennines Archaeology Ltd would like to thank Simon Atkinson, Entec UK Limited, for commissioning the project. Thanks are also due to John Siddell, Entec UK Limited Site Manager for his help.

The archaeological watching brief was undertaken by Fiona Wooler and Kevin Mounsey. Kevin Mounsey wrote the report. The drawings were produced by Tony Liddell. The project was managed by Matt Town, Project Manager for NPA Ltd. Director for The report was edited by Matt Town.

1 INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 In February 2008, North Pennines Archaeology Ltd was commissioned by Simon Atkinson, Entec UK Limited, to undertake an archaeological watching brief during environmental improvements to sections of the Whitehaven Coast associated with the Haig Colliery, Whitehaven, Cumbria and its immediate environs. Haig Colliery is a Scheduled Ancient Monument (SM 27800). Part of the proposed works was at the colliery entrance, outside the scheduled area, while other works were carried out at the Howgill Incline and on the site of the former Wellington Colliery. There was a strong possibility that deposits of archaeological significance may have existed in all these areas of the works. As a result, a condition of the planning permission was that, before the development commenced, a programme of archaeological work be undertaken. This is in line with government advice as set out in the DoE Planning Policy Guidance on Archaeology and Planning (PPG 16).
- 1.1.2 As discussed above, three areas, Area A, (Haig Colliery entrance), Area B, (Howgill Incline and Engine House) and Area C, (Wellington Colliery) were required to be excavated under full archaeological conditions. The objective of the watching brief was to obtain an adequate record of any archaeological deposits or finds, which were disturbed or exposed by work associated with the development. All stages of the archaeological work were undertaken following approved statutory guidelines (IFA 2002).
- 1.1.3 This report comprises the results of the archaeological work, namely: the archaeological recording of the groundworks associated with the development, and post fieldwork analysis of the archaeological deposits recovered during the groundworks.

2 METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 A project design was submitted by Entec UK Limited for an archaeological watching brief of the study area (Entec, 2008). Following acceptance of the project design, North Pennines Archaeology Ltd was commissioned by the client to undertake the work. The project design was adhered to in full, and the work was consistent with the relevant standards and procedures of the Institute of Field Archaeologists (IFA), and generally accepted best practice.

2.2 ARCHAEOLOGICAL WATCHING BRIEF

2.2.1 The watching brief comprised a formal programme of observation and investigation conducted during groundworks at the site, followed by the systematic examination and accurate recording of all archaeological features, horizons and artefacts identified.

2.2.2 The aims and principal methodology of the watching brief can be summarised as follows:

- to determine the presence/absence, nature, extent and state of preservation of archaeological remains;
- to produce a photographic record of all contexts using colour digital, 35mm colour slide and monochrome formats as applicable, each photograph including a graduated metric scale;
- to recover artefactual material, especially that useful for dating purposes;
- to sample any environmental deposits encountered according to the NPA standard sampling procedure and in consultation with appropriate specialists;
- to prepare a site archive in accordance with MAP2 (English Heritage, 1991) and MoRPHE standards (English Heritage 2006);
- to prepare a report for the client setting out the salient conclusions;
- depending upon the results of the work, to prepare a report for publication.

2.3 ARCHIVE

2.3.1 A full professional archive has been compiled in accordance with the project design, and in accordance with current UKIC (1990) and English Heritage guidelines (1991). The paper and digital archive will be deposited in the Haig Colliery Museum.

- 2.3.2 North Pennines Archaeology Ltd supports the Online Access to the Index of Archaeological Investigations (OASIS) project. This project aims to provide an online index and access to the extensive and expanding body of grey literature created as a result of developer-funded archaeological fieldwork. Details of the results of this project will be made available by North Pennines Archaeology, as a part of this national project.

3 BACKGROUND

3.1 LOCATION, TOPOGRAPHY AND GEOLOGY

- 3.1.1 The town of Whitehaven lies 39 miles southwest of Carlisle on the west Cumbria plain. It is situated on the western section of the A595 which runs south towards Barrow-in-Furness and northeast towards Carlisle. The route to Carlisle closely follows the line of the Papcastle to Carlisle Roman road. Whitehaven is also on the coastal railway line. As with the main road route, this runs to Carlisle in the northeast and Barrow-in-Furness in the south.
- 3.1.2 Whitehaven is located outside the Lake District National Park and is part of the borough of Copeland. A coastal town, fronting the Irish Sea, it is situated three miles north of the St. Bees promontory. The town grew up around a small coastal inlet, the Pow Beck, expanding into the harbour and marina of today. On the landward side the town occupies a low basin, surrounded by abruptly rising ground on all sides (<http://www.genuki.org.uk/big/eng/CUL/Whitehaven/>). The town's suburbs now occupy this high ground. Whitehaven's growth during the 18th, 19th and early 20th centuries was mainly due to shipping and coal extraction. In 300 years over 70 coal pits were sunk in the Whitehaven and district area (English Heritage undated, 9). It was against this background of industrial expansion that the Haig and Wellington collieries were sunk. An associated network of wagonways, railways and inclines grew up around these and the many other pits. Heavy industry has now largely disappeared from Whitehaven, the last pit (Haig Colliery) closing in 1986 and the harbour now mainly used by pleasure craft. The town today retains much of its Georgian, post-renaissance charm and has been significantly developed, in recent years, as a centre for tourism.
- 3.1.3 The underlying geology of the coastal area around Whitehaven consists of Carboniferous Westphalian Coal Measures with some pockets of Namurian millstone grit. The outcrops of Westphalian rocks formed the west Cumbrian coalfield situated between Whitehaven and Maryport to the north. On the coast, a gentle dip lowers the beds seawards beneath the offshore outcrop of the Permian (Moseley 1978).

3.2 HISTORICAL BACKGROUND

- 3.2.1 Haig Colliery is situated 0.75km south of Whitehaven harbour (NGR NX 9670 1760) on a plateau between the town and the seashore. Its name honoured General Sir Douglas Haig, Commander-in-Chief of British forces at the time of its sinking (<http://www.haigpit.com/page1.html>). The pit was sunk to a depth of 1200 feet in 1916-18, with 2 shafts, for the Whitehaven Colliery Company Limited. A third shaft was added on the former Thwaite Pit site in 1933 when Haig pit was taken over by Priestman Whitehaven Collieries Limited. Most of the Haig workings were entirely undersea being accessed by long haulage roads and airways. Methane gas was always a

problem in the Whitehaven pits and Haig Colliery had its share of disasters. Explosions underground killed 39 miners in 1922, 4 in 1927, 13 in 1928, and 27 in 1931. Modernisation of Haig Colliery took place in 1933 with the construction of new workshops, extensions to the coal-screening plant and the installation of a supplementary fan. In 1937 pithead baths and a new power-house were constructed. Air photos from the mid and later 20th century suggest that the mine and its associated buildings occupied a large proportion of the plateau area. During the 1970's a coal washery was built at Haig Colliery and the Haig Incline was replaced by a conveyor belt to the harbour, re-using the same line (Cranstone and Roper 2007, 38-40).

- 3.2.2 In 1983 a large fault was encountered in the mine. This combined with the political situation at the time and the consequences of the miners strike, caused a run down at the colliery. On March 31st 1986 the colliery finally closed. Listed Building status was granted in 1987 with scheduling of the site granted in 1998 (<http://www.haigpit.com/page6.html>).
- 3.2.3 The Howgill Incline (NGR NX 9677 1825) was constructed sometime in the 1810's. It replaced an earlier wagonway feeding the coal staithes on the south side of Whitehaven harbour. The function of the incline was to lower loaded coal wagons arriving from the Howgill pits, down to the harbour staithes, whilst returning empty wagons back to the top.
- 3.2.4 Double tracked, the incline was capable of taking strings of 3 wagons at a time. Although the incline was self-acting, it was too steep for the weight of the returning empty wagons to control the speed of the down-running full wagons, and it was therefore fitted with a remarkable 'air brake', the rope from the full wagons operating a piston to pump air into a large receiver or compressor. While self-acting inclines were common technology by this date, the 'air brake' appears to be innovative. It was rebuilt in 1822, at which point its design was fundamentally similar to a vertical-winder engine in reverse; the modified engine was clearly both reliable and efficient, since it remained in use until the 1920s (Cranstone and Roper 2007, 45-46). The incline was partly destroyed during the 1970's when the Haig conveyor was constructed. This ran from the Haig Colliery to Whitehaven harbour along the original line of the incline (ibid. 2007, 38).
- 3.2.5 The site of Wellington Pit is immediately south of Whitehaven Harbour on the sea front (NGR: NX 9678 1825). Sunk in 1838 it was a remarkable example of early-Victorian industrial architecture. It was designed by Robert Smirke and notable for its medieval styled crenellated buildings. The most striking feature of the mine was its 'Candlestick' chimney which still stands and is a local landmark for the area. Constructed on a hilltop overlooking the harbour, the chimney was actually a vent for the mine workings below it. The mine finally ceased working in 1932. A 'fiery' pit, it was the scene of numerous accidents the most notable being the disaster of May 1910 when 132 lives were lost (<http://www.serve.com/scmc/whitehav.html>).
- 3.2.6 The Wellington Pit was a major colliery, initially with two shafts but with a third added later. The pithead complex included headgear, engine houses, coke yards, coal screens and later, a compound engine driving an

underground haulage system and a Walker indestructible fan. Surviving remains include the 'Candlestick' chimney, the gate lodge (now a coastguard station), and a small water pond currently used as an ornamental shrub bed (*op cit.* 41).

- 3.2.7 No known previous archaeological work has been carried out in the three areas subject to archaeological restraints.

4 WATCHING BRIEF RESULTS

4.1 INTRODUCTION

4.1.1 Summary results of the watching brief are presented below, and are illustrated in Figure 1 to 3 (Appendix 1) and Plates 1 to 6. The watching brief took place over eight non consecutive days commencing on 18th February and ceasing on 14th March 2008. The areas subject to archaeological constraints were divided into three areas designated A, B and C (Figure 2). Excavation was carried out by mechanical excavator and hand cleaned when archaeological deposits were encountered.

4.2 HAIG COLLIERY (AREA A) NGR NX 9670 1760

- 4.2.1 Groundworks in this area had already commenced prior to the presence of an archaeologist on site. They were carried out predominantly by mechanical excavator and designed to improve vehicular access to the Haig Colliery building complex. A drainage channel was excavated on the southern edge of the road to a depth of 0.60m below ground level.
- 4.2.2 During the watching brief it was observed that a layer of topsoil up to 0.17m thick sealed a layer of mixed building rubble. This contained examples of Whitehaven brick, a variety of scrap metal and pieces of concrete. Elsewhere a layer of concrete 0.15m thick was observed. In places this was just below the topsoil. In other areas it was sealed by 0.17m of topsoil. On the south and west sides of the excavation works a layer of concrete was observed at a depth a depth of 0.35m. A layer of red bricks was, in places, sealed by the concrete.
- 4.2.3 It is probable that the red brick and concrete layers represent some of the later phases of the colliery construction. No finds of archaeological significance were recovered.



Plate 1: Haig Colliery access improvement works. Note concrete layer sealing red bricks

4.3 HOWGILL INCLINE (AREA B) NGR NX 9677 1825

- 4.3.1 The groundworks in this area were related to the construction of a new cycle/pathway as part of the environmental improvements around Whitehaven. It commenced at the sea front, immediately south of Whitehaven harbour, climbed the hillside past the 'Candlestick' vent and headed south along the cliff top toward the Haig Colliery. The archaeological watching brief covered two areas of the incline route (Figure 2). The northern part was over the route of the incline itself, whilst the southern part was on the possible site of the incline brake house.



Plate 2: Excavation of pathway in possible area of brake house.

- 4.3.2 The area under archaeological constraints on the incline measured 30.0m long and 2.40m wide. Groundworks were carried out by a tracked mechanical excavator using a ditching bucket. The depth of excavation did not exceed 0.20m. A soft, brown topsoil (121) measuring 0.10m deep was observed. This sealed a moderately compact layer of dark brown, industrial rubble (122) which was excavated to a depth of 0.10m. No significant archaeological features were observed or finds recovered from the incline area.
- 4.3.3 The area under archaeological constraints in the vicinity of the incline brake house measured 10.0m by 2.40m. Groundworks were carried out by a tracked mechanical excavator using a ditching bucket. The depth of excavation did not exceed 0.20m. A soft, brown topsoil (121) measuring 0.05m deep was observed. This sealed the natural substrate of orange clay (101) to a depth of 0.15m. No significant archaeological features were observed or finds recovered in the brake house area.



Plate 3: Pathway excavation on the Howgill Incline.

4.4 WELLINGTON PIT (AREA C) NGR NX 9678 1825

- 4.4.1 Ground works in this area were again related to the construction of a cycle/pedestrian pathway but also to the removal of an ornamental shrub bed which had been constructed in a circular pond feature, once part of the infrastructure of the Wellington pit (Figure 2). The pit area lies close to the south side of Whitehaven harbour and survives in part as the ‘Candlestick’ vent, the crenellated gate house and a small pond feature. The archaeological watching brief covered two areas within the Wellington pit vicinity. The western feature was a circular construction, possibly a pond, associated with the pit workings. At some time this had been planted up as a shrub bed. It was proposed to remove the shrub bed and replace it with a mosaic.
- 4.4.2 The presence of an archaeologist was not requested during the excavation of the shrub bed within the pond.



Plate 4: Interior of pond feature showing the head of an outlet pipe.

- 4.4.3 The eastern area of development, the cycleway/pedestrian pathway site, was excavated by mechanical excavator using both a ditching and toothed bucket. It was on a hill side with a steep north-facing incline. Two lengths of wall constructed of yellow sandstone were uncovered, a brick built wall, several culverts, a cobbled surface and a cast iron pipe (Figure 3).

- 4.4.4 The southern wall (105) measured 6.80m long, 0.72m wide and was exposed to depth of 0.40m. It was uncovered at a depth of 1.40m below ground level and ran in an east-west direction. Constructed of faced yellow sandstone blocks on the northern edge it had a rubble and mortar core. At the eastern end of the wall was a C shaped construction (106), possibly the remains of a buttress. Adjacent to the north side of wall (105) ran a line of squared cobblestones (107), the remains of a pathway. This had been laid on a layer of dark brown gravel (110). Above the cobbled surface, running parallel to the wall was a cast iron pipe. This measured 0.10m in diameter and was exposed for a length of 4.35m. The eastern end terminated over a cast iron drain grill (Plate 4).
- 4.4.5 The south wall (105) was constructed on the natural substrate (101). A cut [111], for the wall could be seen in section. The incline of the north-facing slope had been excavated away in order to provide level ground for the wall footings. The cobbled surface (107) was sealed by a 0.20m thick layer of black industrial waste. This encompassed the cast iron pipe (109). Above this was a 0.45m thick layer of dark brown industrial waste (103). This also sealed the top of the south wall (105). Sealing context (103) was a 0.50m layer of hard, grey/green slag (102). This covered the whole site and had been spread over the hillside at an unknown date in order to stabilise it. Above this was a 0.60m thick layer of brown rubble/waste (104), which in turn was sealed by 0.20m of brown topsoil (100).



Plate 4: The south wall.

- 4.4.6 At a distance of 3.60m to the north of the wall (105), parallel to it, ran another wall (112). It too ran east west with 4.40m of it being exposed. Measuring 0.70m thick the northern edge was finely constructed of tooled yellow sandstone blocks. These were exposed to depth of 1.10m (Plate 5). The superior quality of the workmanship on the northern edges of both walls may suggest that they had a retaining function.



Plate 5: Tooled north face of north wall (112). Also shown is brick wall (113) and culverts (115) and (117).

On the south side of the north wall (112) were the remains of a cobbled area (116). It seems likely that this is the same cobbled surface (107) uncovered below the cast iron pipe (109) and that once the two were joined.

- 4.4.7 Between the north and south walls running north south from the cast iron drain was a culvert (114) constructed of sandstone slabs. It measured 3.10m long and 0.70m wide. It was bisected by a modern electricity cable trench. Two more culverts (115) and (117), constructed in the same style, were revealed north of the northern wall (112) (Figure 3). These abutted a red brick wall (113). This measured 1.80m long and 0.50m wide and was two courses (0.16m) high. It ran perpendicular from the north wall (112).
- 4.4.8 The red brick wall (113) was constructed on the orange clay substrate. It was sealed by a 0.55m thick layer of black industrial waste (119) which in turn was sealed by a 0.05m thick layer of grey clay. Above this was in turn sealed by 0.45m of dark brown industrial waste (103), sealed by 0.12m of brown topsoil (100).



Plate 6: Overview of the archaeological features.

4.5 FINDS

- 4.5.1 The archaeological material recovered was all post-medieval. It consisted of 13 fragments of iron which included a door hinge and several squared spikes with bolt heads. 32 sherds of pottery were recovered including both red earthenware and fine transfer ware. Some of the earthenware included sherds of black-coated heavy duty ware along with yellow slipware. All were indicative of domestic use. 10 pieces of green and brown bottle glass were recovered. One near complete bottle was marked 'Tower Brewery, Whitehaven'. 4 fragments of clay pipe, 2 fragments of reinforced window glass, 1 piece of ceramic building material, 1 piece of plastic/rubber piping and 1 copper alloy plaque were also recovered. The finds are all typical of a 19th, early 20th century industrial site.
- 4.5.2 A small assemblage of bone was also recovered during the excavation. A bird femur, probably chicken, was recovered as well as the head of a horse fibula, and a butchered mid-portion of a vertebra, too fragmentary to identify to species. A single shell from a limpet measuring 3cm in diameter was also found. Nothing meaningful can be said about any of this material.
- 4.5.3 None of the finds were of archaeological significance and were discarded.

5 CONCLUSIONS AND RECOMMENDATIONS

5.1 CONCLUSIONS

- 5.1.1 The archaeological watching brief recorded works associated with the Haig Colliery, the Howgill incline and the Wellington pit. Improvements to road access to Haig Colliery and the construction of a coastal cycle/ pathway took place in archaeologically sensitive areas over eight working days. Archaeological finds were recovered from the eastern site of area C only.
- 5.1.2 The two walls (105) and (112) uncovered in Area C lie between the pond feature to the west and the gate house to the east. They are marked as two parallel features on the 1st Edition Ordnance Survey map. The worked stone on only the northern edges of both walls suggests some kind of retaining use, perhaps in the form of a terrace.

5.2 RECOMMENDATIONS

- 5.2.1 As this report comprises the recommendations for archaeological recording of the developments relating to sections of the Whitehaven coast associated with Haig Colliery and its immediate surroundings, no further work is necessary. However, due to the continuing high archaeological potential of the area, and the status of the Haig pit as a Scheduled Ancient Monument, any further development in the area should be subjected to a programme of archaeological investigation.

6 BIBLIOGRAPHY

6.1 SECONDARY SOURCES

Cranstone, D and Roper, S 2007 *Whitehaven Coast Archaeological Survey: Report*

English Heritage 1991 *Management of Archaeological Projects (MAP2)*. London: English Heritage.

English Heritage (Undated) *Extensive Urban Survey: Archaeological Assessment Report: Whitehaven*

English Heritage 2006 *Management of Research Projects in the Historic Environment*. London: English Heritage.

Entec 2008, *Haig Colliery: Written Scheme of Investigation for Archaeological Mitigation Works*.

IFA 2002, *Standards and Guidance for Archaeological Watching Briefs*

Moseley, F 1978 *The Geology of the Lake District, Yorkshire* Geological Society, Occasional Papers 3, Leeds.

UKIC 1990, *Guidelines for the preparation of excavation archives for long-term storage*.

6.2 INTERNET SOURCES

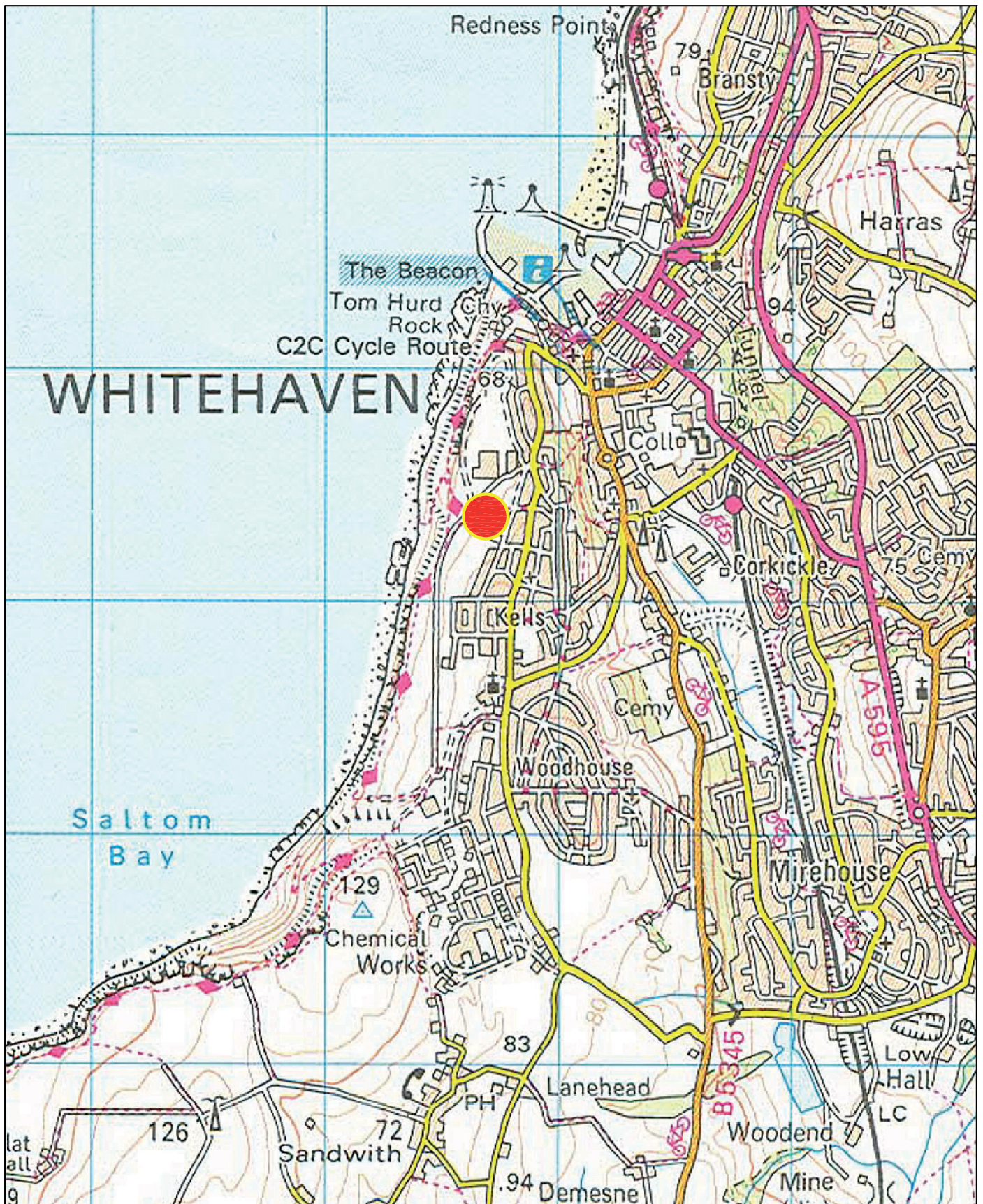
Haig Colliery Mining Museum, <http://www.haigpit.com/page1.html>

Haig Pit, <http://www.haigpit.com/page6.html>

Shropshire Caving and Mining Club (UK) Whitehaven Pits, Cumbria, <http://www.serve.com/scmc/whitehav.html>

Whitehaven.org.uk, <http://www.genuki.org.uk/big/eng/CUL/Whitehaven>

APPENDIX 1: FIGURES



North Pennines Archaeology Ltd
2008

PROJECT: Haig Colliery Watching Brief
SCALE: 1:10000
REPORT No: CP 632/08
CLIENT: Entec UK Limited
DRAWN BY: TL
DATE: November 2008

LOCATION:



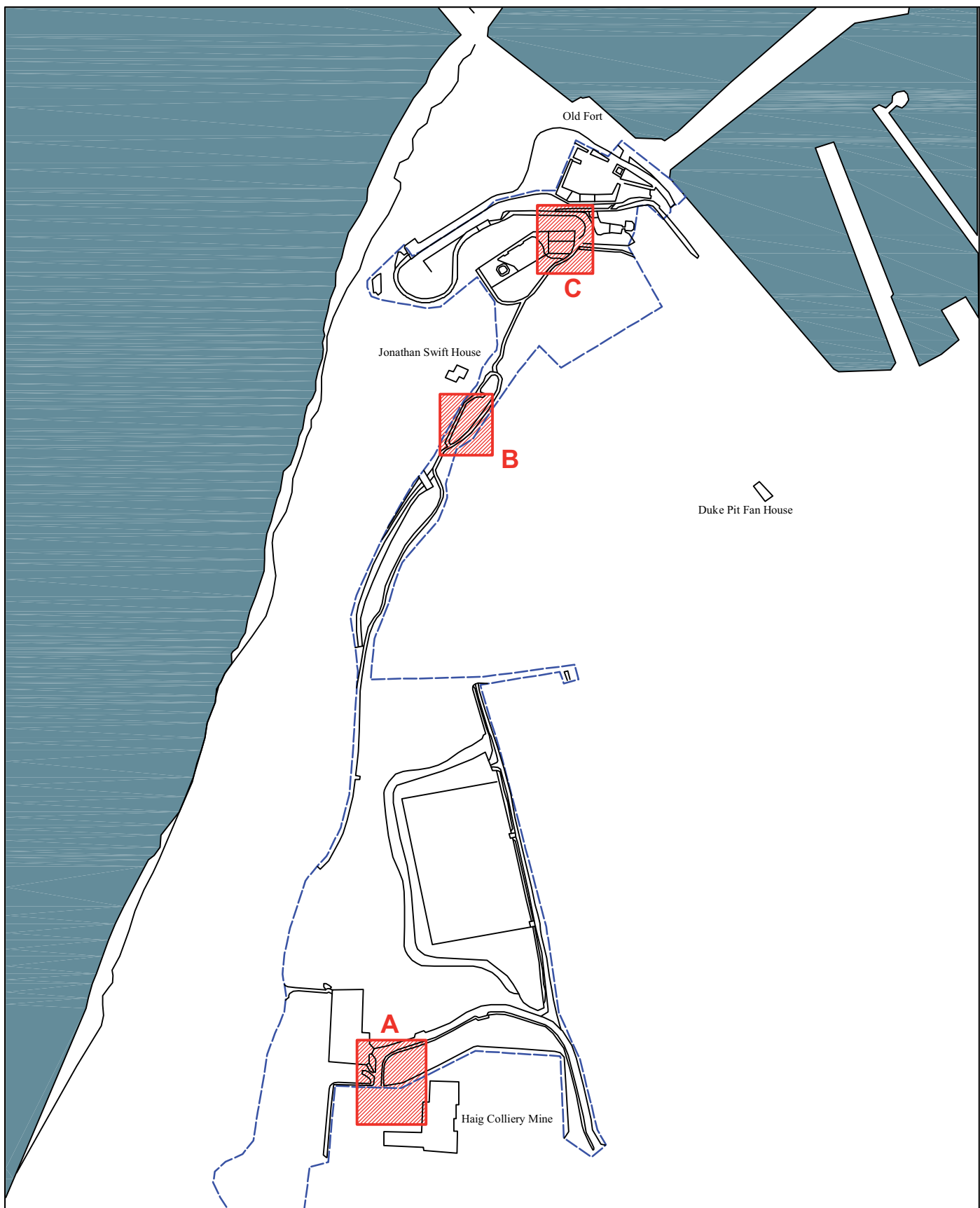
KEY:



Site Location

Reproduced by permission of Ordnance Survey on behalf of The Controller of Her Majesty's Stationary Office. © Crown copyright. All rights reserved. Licence number 100014732

Figure 1: Site Location



North Pennines Archaeology Ltd
2008

PROJECT: Haig Colliery Watching Brief
SCALE: 1:4000 (at A4)
REPORT No: CP 632/08
CLIENT: Entec UK Limited
DRAWN BY: TL
DATE: November 2008

ORIENTATION:



KEY:



Watching Brief Area



Site Boundary

Figure 2: Watching Brief Location Areas

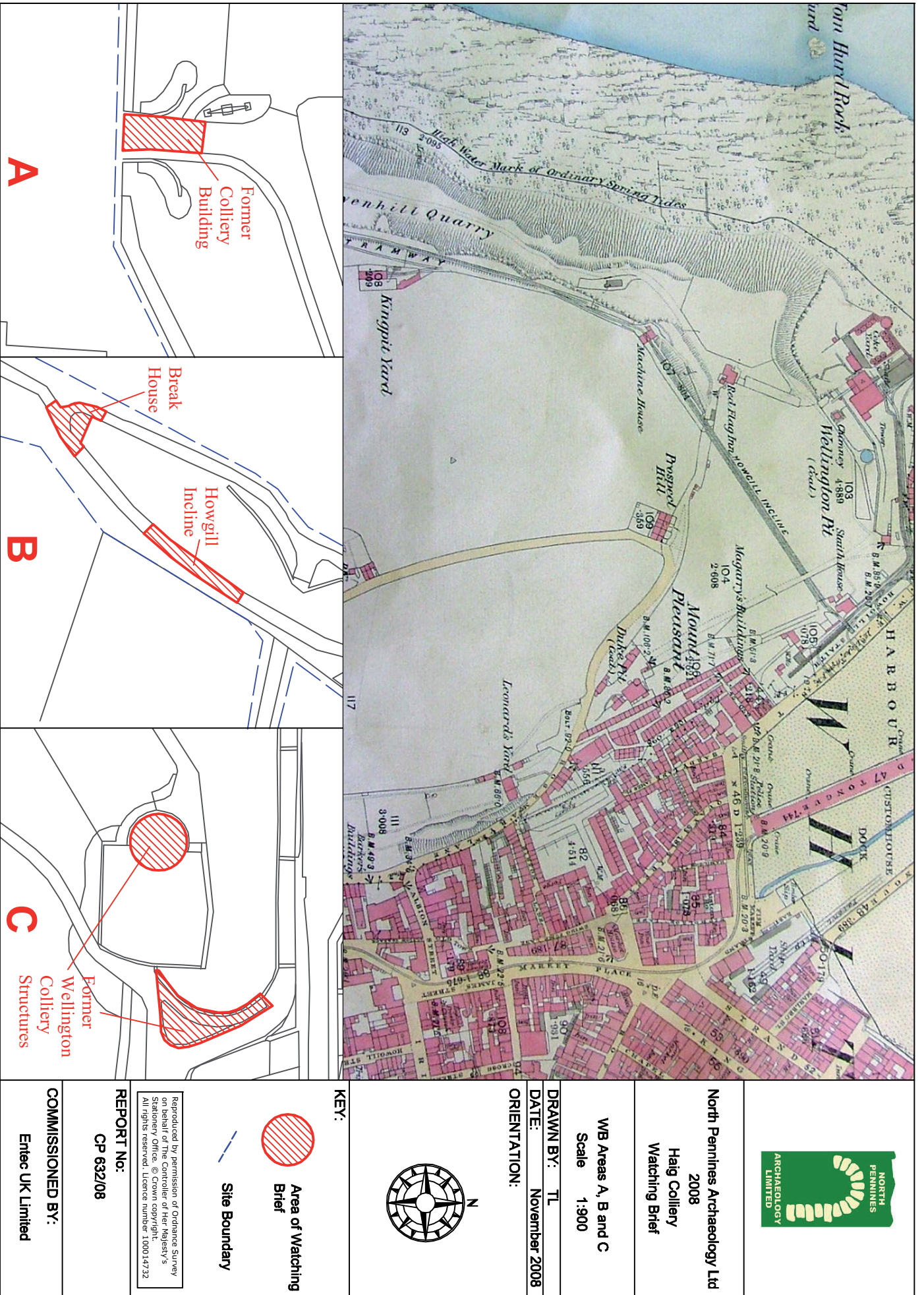
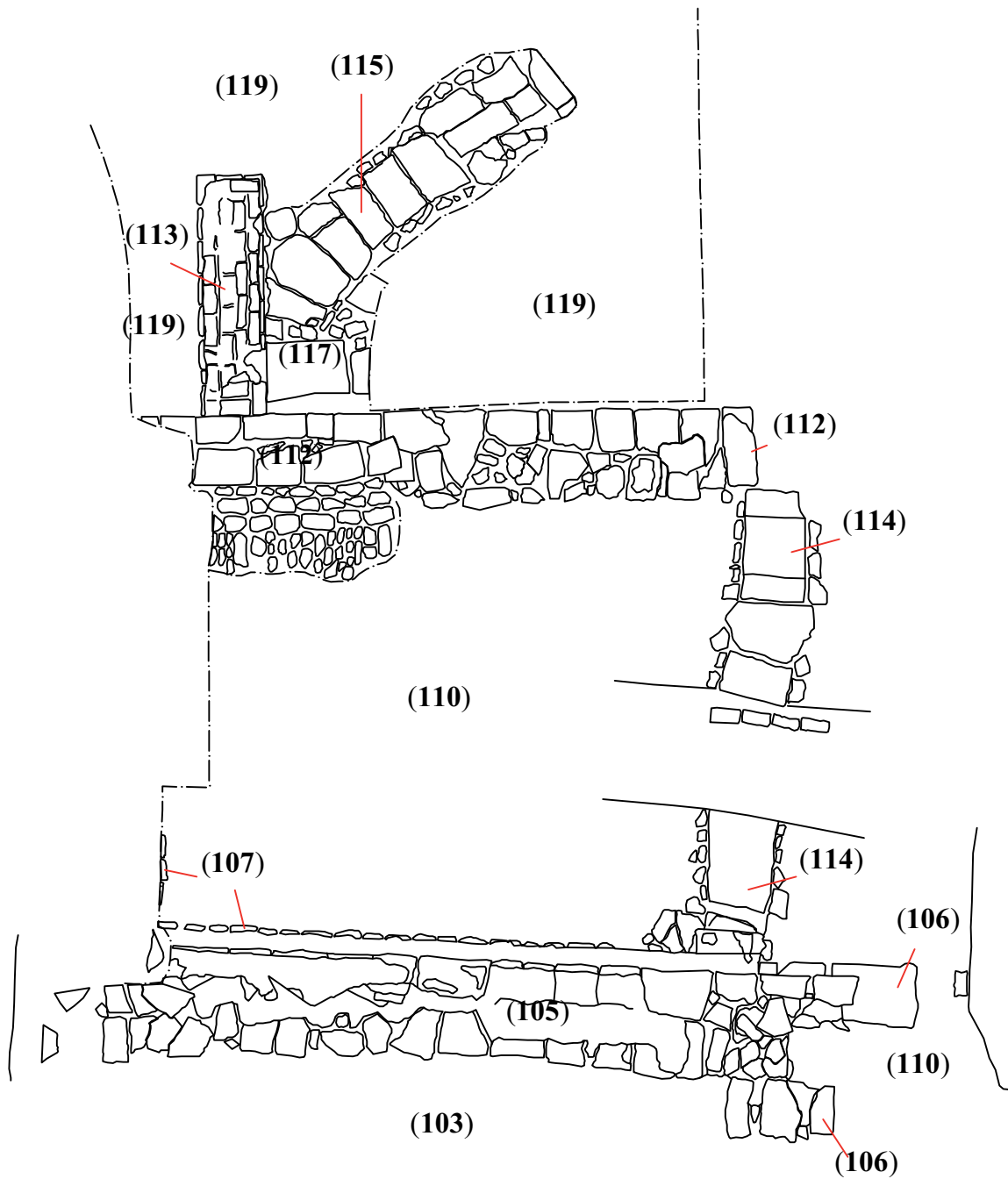


Figure 3: 1st Edition OS and detailed Watching Brief Areas



North Pennines Archaeology Ltd
2008

PROJECT: Haig Colliery Watching Brief
SCALE: 1:50
REPORT No: CP 632/08
CLIENT: Entec UK Limited
DRAWN BY: KM/TL
DATE: November 2008

LOCATION:



ORIENTATION:



Figure 4: Plan of archaeological remains within Area C

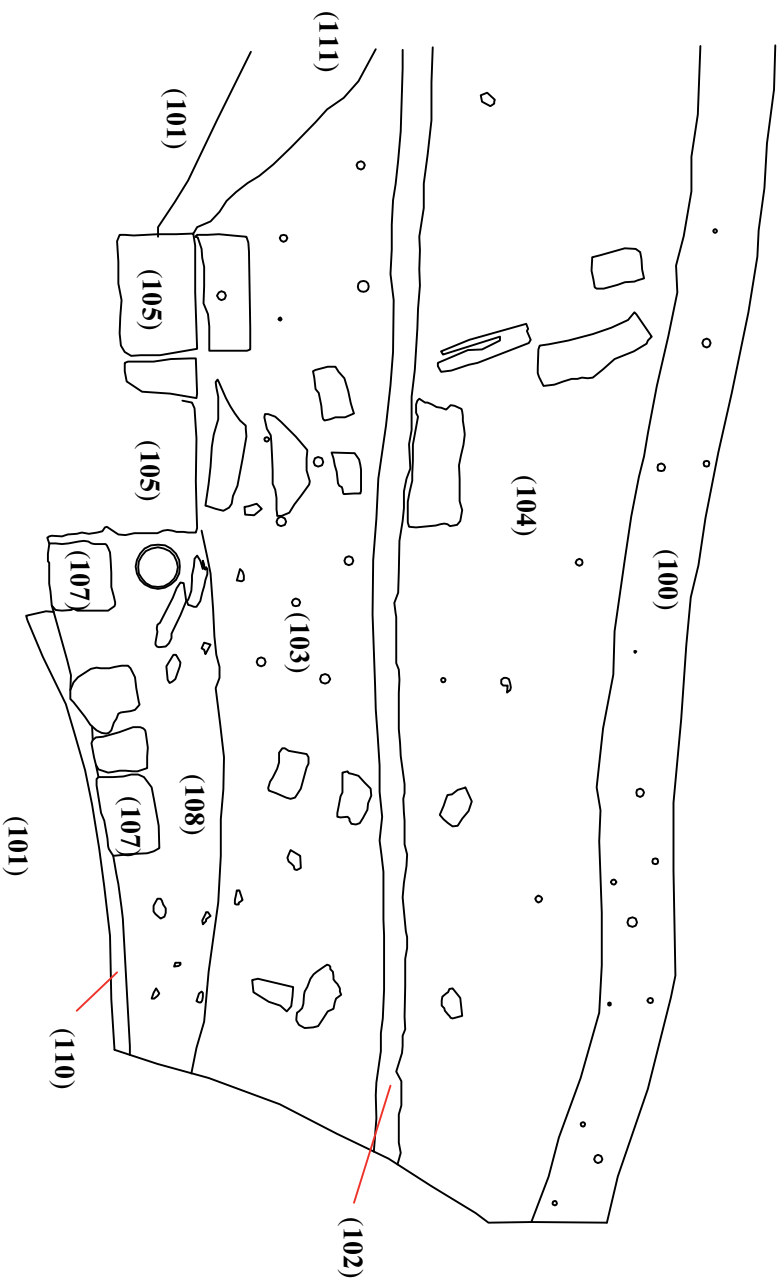


North Pennines Archaeology Ltd
2008
Haig Colliery
Watching Brief

Scale 1:40

DRAWN BY: KM/TL

DATE: November 2008



REPORT No:

CP 632/08

COMMISSIONED BY:

Entec UK Limited

Figure 5: Section across archaeology in Area C