BAMBURGH RESEARCH PROJECT

SWARLAND BRICK COMPANY
EXTRACTION SITE,
ALNWICK,
NORTHUMBERLAND

DESK BASED ASSESSMENT

Compiled for AMS Associates by The Bamburgh Research Project: Commercial Projects Section

BRP 10/03b April 2010

Contents:

SUMMARY

This document has been compiled by The Bamburgh Research Project for AMS Associates during March and April 2010 and comprises a desk based assessment of the buildings on land surrounding the Swarland Brick Company, Alnwick, Northumberland. The development area lies immediately to the west of the A697, some 1km to the south of Thrunton, Northumberland and 3.5km to the north of the junction of the A697 and B6341, Alnwick to Rothbury road (NGR NU 093 097) (Figure 1)).

This work was commissioned in advance of proposals to undertake an expansion of the facility on to the contiguous fields and summarise the archaeological evidence that is known from the region and assess the potential of the fields for providing cultural remains. A total of seventeen sites are known with a radius of 1.5 km from the present facility, most of these deriving from the Iron Age and post-medieval periods. Indeed, the site itself is registered as being of historical interest by dint of its post-medieval quarrying structures which date to ca. *AD 1860. Most of the archaeological evidence is otherwise situated on the uplands surrounding the quarry and are salient features identified through aerial photographic survey or upstanding features that have been registered on maps or discovered during field surveys that did not involve any invasive investigations.*

The fields surrounding the facility are overlain by ridge-and-furrow plough features, which are from the medieval or early post-medieval era. At least one section is potentially medieval, given the width between the ridges and the curving of the furrows. This attests to the land being largely untouched by the intensive agricultural exploitation of the modern era, and thus there is a good likelihood that any archaeological lying beneath them will be well preserved. It is impossible to assess the nature of the material beneath the ridge-and-furrow—the soil is nutritious, being of clay, but also given to wetness and may not have been attractive for settlement when alternative drier locations were available further up the slopes of the surrounding hills. Nonetheless, these features do afford the potential for investigating medieval occupation and perhaps mask older material which is otherwise not known nor visible in the immediate vicinity.

SWARLAND BRICK COMPANY, ALNWICK, NORTHUMBERLAND DESK-BASED ASSESSMENT

1.0 INTRODUCTION

1.0.1 This document has been compiled by The Bamburgh Research Project for AMS Associates during March and April 2010 and comprises a desk based assessment of the buildings and land surrounding the Swarland Brick Company, Alnwick, Northumberland.

1.0.2 The work has been undertaken in accordance with a Written Scheme of Investigation compiled by the BRP in March 2010. The OASIS reference number is bamburgh1-75618.

1.0.3 This report provides an assessment of the archaeological sites in the vicinity of the Swarland Brick Company facility at Thrunton in Northumberland and considers the potential for encountering further cultural remains that might result from the proposed expansion of this facility on to the surrounding fields. The study commences with an overview of the geological history of the region, considering the attributes of the solid formations and the soils; this provides the basis for appraisal of the natural processes that contributed to the burial and survival of the archaeological material. An overview of the land-use history of the region is presented in the context of this discussion, followed by a discussion of the evidence that is known from the region and a consideration of its representativeness. It is necessary to state at the outset that the available evidence is biased in favour of salient features, mainly from the late prehistoric, Medieval and post-medieval periods; these were identified principally through aerial photographic surveys and field surveys. More ephemeral features and unknown, and only a single stray find has hitherto been encountered.

1.1 Location

1.1.1 The development area lies immediately to the west of the A697, some 1km to the south of Thrunton, Northumberland and 3.5km to the north of the junction of the A697 and B6341, Alnwick to Rothbury road (NGR NU 093 097) (Figures 1 and 2).

2.0 THE SITE

2.1 Geology

2.1.1 An essential prerequisite for a judicious appraisal of the archaeological record is an understanding of the landscape and the changes which it has undergone since the onset

of human occupation. The landscape provided the economic resources that made occupation possible, but it also afforded materials for exchange that formed the basis of social relationships. Moreover, the topographic features were significant in determining the situation of sites: these may have been placed along main arteries of communication, on fertile soils or at locations where different ecological niches could easily be reached, or in defensive positions that offered good visibility. The decisions underpinning where settlements and other sites were situated were partly dependent on prevailing economic and social priorities, but partly also on tradition. Once the sites were abandoned, the properties of the soils and the processes of erosion either contributed to their preservation through rapid burial and the creation of favourable conditions for the survival of organic material, or conversely hastened the destruction of organic material and structural features. The social and economic aspects of settlement cannot be discussed in this report, given the paucity of archaeological evidence and its inherently unrepresentative nature; the following discussion therefore merely endeavours to present an assessment of the potential for the survival of archaeological evidence inferred from the geological and land-use history of the region.

2.1.2 The solid geological features of the region belong to the Fell Sandstone Group, which formed in the Lower Carboniferous period. This consists of coarse and interbedded sandstone separated by bands of finer rocks such as mudstones and shales (Taylor *et al*. 1971, 53). The formation can approximate a thickness of *ca*. 350 metres and has been observed in quarries from Coquetdale in the vicinity of Great Tosson, Mount Healey, Cragside and also in the Thrum Gorge (Fowler 1936, 13). A sinuous band defines the course of this formation; it runs in a narrow strip along the northern margin of Coquetdale before turning northward, constituting the upland ridge that separates the Northumberland Coastal Plain from the interior of the county. The Fell Sandstone provides some of the more spectacular scenery of the county, constituting the rugged crags and cliff faces in Coquetdale and along the ridges of the Kyloe Hills. As this material is soft, it was favoured for the production of rock-art in the Neolithic, but this softness also rendered the rock susceptible to accelerated weathering. In the uplands, the rock eroded by glacial agency and further broken down by weathering produced a thin and acidic soil of only marginal fertility. This soil sustains only heather vegetation in the uplands but it probably hosted alder, upland oak and birch as suggested by the existence of relic populations of these species in the valleys (Lawrence *et al*. 2007, 34 - 35).

2.1.3 The advance and recession of the glacial ice-sheets in the Pleistocene profoundly transformed the appearance of the landscape. Nevertheless, it was the final glacial cycle of the Devensian that has left the most significant legacy for us inasmuch that it moulded the landscape and concurrently effaced almost all evidence of previous glacial episodes. Little research has been accorded to the glacial history of the region around Thrunton, but it is possible to make a series of reliable inferences based on the studies that have been undertaken in contiguous districts. A glacial ice-sheet lay atop the Cheviot Hills; however, this advanced only modestly, being a 'cold' glacier

(Lawrence *et al*. 2007, 68). Studies of glacial erratics in the till has indicated that this region was subject to periodic advances of the Cheviot ice-sheet, but was also overlain by larger and faster moving ice-sheets advancing eastward from Coquetdale which ultimately emanated from the Solway (Clapperton 1971, 68). The ice-sheets scoured the uplands, ploughing away the soil and exposing bedrock; however, the weight of the ice and the friction caused by its movement crushed the rock into a clay with fragments of rock and gravel, forming till. In places where no further sediment deposition occurred, this till formed the basis of later soil development.

2.1.4 n the valleys, the advancing ice-sheets also scoured the landscape and formed till, but here there was also deposition of copious quantities of sediment during the annual melting cycle and when the ice-sheets began their recession in earnest. As the ice wasted, the water carried copious quantities of sand, silt, clay and gravel and deposited them in lakes or as terrace formations along the margins of fossil rivers. In some instances, the flow of water was impeded by ice-sheets and pro-glacial lakes formed. It is probable that Thrunton Quarry, the site of the Swarland Brick Company's clay extraction site, was the bed of such a lake. The fine clay sediment washing into the lake from the streams sunk to the bottom in the deeper water and accumulated in thick beds. Soils forming on these sediments are typically much more fertile and thicker than those forming on the till of the uplands and thus hosted a more diverse and luxuriant floral community.

2.1.5 The thin soils on the uplands tended to be unstable, becoming waterlogged and slumping down inclines. This material therefore often suffered from considerable erosion and was washed away in rivers or down the hills as colluvium. In both instances, some of this sediment contributed to the thickening of the material at lower elevations and thus helped to bury archaeological deposits. The uplands are distinguished by the opposite trend: erosion exposed or destroyed features. We must be wary of over-stating this tendency, though, as much of the uplands are used for pasture and relatively stable by dint of the floral cover. Its function as pasture, however, renders it unlikely that any archaeological features are encountered here apart from upstanding monuments or defensive sites. No ploughing is undertaken, so more ephemeral features and scatters of artefacts are not brought to the surface. This probably accounts for the overall paucity of evidence and the bias towards more salient features from the later prehistoric and medieval eras.

2.1.6 On the lower ground, more fields are exploited for cereal cultivation, but even here much of the land is given over to pasture. This is seen quite clearly in the expanse of ridge-and-furrow plough marks, which were formed in the medieval or early post-medieval periods. Any subsequent cultivation would have destroyed this, thus attesting to the land's use as pasture rather than arable. On such land, it is also unlikely to find evidence of occupation that does not consist of salient features or upstanding monuments that can easily be detected by aerial photographic assays or field survey. As these field systems were not tilled since the medieval period, and thus have not been exposed to the destructive affects of intensive modern agriculture, there is a good

chance that any archaeological features buried beneath them will be well preserved. The nature of the archaeological material that may lie below these relic field systems form the subject of the following section.

2.2 Description

2.2.1 The site is broadly triangular in shape, with the point of the triangle to the south and the base to the north (Figure 2). It measures 280 metres north to south and 172 metres east to west and is some 30,000 square metres in area. It is an undulating landscape varying in height broadly from 80 metres OD in the south east up to 120 metres OD in the north west. The site area is drained by a series of north west to south east aligned ditches to a small stream, the Coe Burn a tributary of the Aln, which passes the eastern boundary of the site on a north east to south west alignment. The present brickwork site and quarry area occupies the north eastern part of the development area (Figure 2) with the area proposed for expansion to the west and south. These areas are presently open fields and are grass covered.

3.0 METHODOLOGY

3.0.1 The evaluation will comprise a desk-based assessment of the land and buildings within the development area. The site itself will be studied in detail and the surrounding 1.5km area assessed for archaeological potential.

3.0.2 All work will be carried out in compliance with the codes of practice of the Institute of Field Archaeologists (IFA 2009) and will follow the IFA Standard and Guidance for Archaeological Desk-based Assessment (IFA 2008) and for the archaeological investigation and recording of standing buildings or structures (IFA 2008).

3.1 Issues to be addressed by the Assessment

- The importance of standing buildings on the site, individually and as a group.
- The location of known archaeological sites and landscapes within the proposed development area
- The potential for palaeo-environmental samples within the proposed development area
- The density of archaeological sites in the surrounding area and the potential that comparable sites may continue into the site
- Previous disturbance on the site, which may have affected archaeological remains, including any significant change in levels from those indicated on old Ordnance Survey maps, and truncation by existing services on or adjacent to the site.
- Where the information is available, the physical impact of the proposed development including:

1. Building foundations
2. Services
3. Access roads
4. Ground reduction
5. Increased vibration
6. Change in ground conditions on waterlogged or environmentally rich sites.

- If possible, the impact of the proposed development on the visual setting of the following sites within the wider study area:
- Scheduled Ancient Monuments
- Listed Buildings
- Unscheduled archaeological sites of national or regional importance

3.2 Desk-based assessment

3.2.1 The desk-based assessment will undertake the evaluation of the archaeological potential for the development area based on information derived from:

1. A site visit and field inspection of the landscape, structures and any associated groundworks and features.
2. Study of the development area and the surrounding 1.5km radius beyond the site boundary based on the Historic Environment Record, cartographic evidence, aerial photographic evidence and study of records held at the County Records Office and other sources.
3. As far as possible the potential for preservation of palaeoenvironmental material within any potential archaeological deposits will be assessed.
4. The potential for sites of archaeological interest within the vicinity to extend into the development area will be assessed.
5. The potential for previous disturbance on the site, which may have affected archaeological remains, including any significant changes in levels from those indicated on old ordnance survey maps, and truncation by existing services on or adjacent to the site.
6. As far as can be defined at present the potential impact of the proposed development on the archaeology will be defined.
7. The potential for the proposed development to impact on the visual setting of the site and wider study area will be assessed with regard to Scheduled Ancient Monuments, Listed Buildings and unscheduled archaeological sites of national or regional importance.

3.3 Written account

3.3.1 A written account of features and structures of interest will be compiled on site during the site visit on pro-forma sheets.

3.4 Photographic record

3.4.1 The photographic record compiled will include:

- General views of the study area
- General views of the exterior of the building, from all angles
- Record of any significant features identified during field inspection

3.5 Report compilation

3.5.1 The report will be compiled in accordance with English Heritage MoRPHE guidelines (English Heritage 2008).

3.5.2 The report will include:

- Northumberland County Council Conservation Team reference, OASIS reference number and an 8 figure grid reference
- A description of the geology of the site
- Period-based discussion of the known and potential archaeological sites within the proposed development area
- An assessment of the importance of any standing buildings, individually, and as a group of buildings
- Discussion of the physical impact of the proposed development on known and potential archaeological sites
- Where possible an assessment of the impact on the visual setting of Scheduled Monuments, Listed buildings, Historic Parks and Gardens and Historic battlefields and unscheduled archaeological sites of national or regional importance
- Appendices listing:
    1 All archaeological sites, Scheduled Monuments, Listed Buildings, Historic Parks and Gardens and Historic battlefields in the proposed development area and the wider study
    2 All aerial photographs within the detailed study area and immediate environs, quoting the reference number and date (cross-referenced to the gazetteer where appropriate
    3 A copy of the specification

3.6 Illustrations

- A location plan of the site at an appropriate scale of at least 1:10 000 will be included
- A location plan of the extent of the proposed development area at a recognisable planning scale, and located with reference to the national grid

- Copies of all maps described in the text with the extent of the proposed development area marked on each map. Where copyright prevents the inclusion of a map in the report, a hand-drawn copy will be provided. Where possible historic maps will be transcribed either by hand or digitally, as an overlay on to the 1st Edition Ordnance Survey to allow details to be assessed in relation to recent features.
- A plan with the extent of the proposed development area and showing the location of all archaeological sites, Scheduled Monuments, Listed buildings, Historic Parks and Gardens and Historic battlefields in the proposed development area and the wider study area will be included
- Photographs appropriate to the assessment of the site

3.7 Site archive

3.7.1 An archive containing a copy of the report and original illustrations and tracings that are not included in the report and digital copies of the report and illustrations will be deposited in the appropriate local museum within 6 months of the completion of the post excavation work.

3.7.2 An online OASIS form will be completed for the project as part of the post-excavation assessment process.

3.7.3 The site archive will be deposited with the appropriate museum within six months of the completion of the report.

3.7.4 A summary of the assessment report will be submitted to the County Council Conservation Team for inclusion in 'Archaeology in Northumberland' by December 2010.

4.0 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

4.0.1 The region surrounding the site is replete with both archaeological and architectural features, but only seventeen are recorded within a radius of 1.5 km from the Swarland Brick Company facility at Thrunton (Figure 5). All of these, with the exception of a single find of a Bronze Age axe, represent upstanding or salient features that were identified through aerial photographic assays or in the field without the benefit of invasive investigations. A bias in favour of substantial features from the late prehistoric era and medieval period is therefore evident in the *Historic Environment Register* (HER) for this part ofNorthumberland. In the adjacent Whittingham Vale, where there has been more agricultural exploitation and a series of small excavations resulting from the discovery of features, substantially more is known of the earlier prehistoric occupation (Dixon 1899, 2- 10). A preliminary conclusion must, therefore, be that evidence of more ephemeral settlement and activity is under-represented. Against this, however, must be the recognition that the land surrounding the facility is

dominated by thick clay. Although most certainly a fertile soil, it may not have attracted much settlement given its propensity to wetness.

4.0.2 The table below summarises the evidence entered on the Northumberland HER. Seven of the seventeen entries are of Iron Age structures and features (three are from the Romano-British period, AD 43 – 410). It is curious to note that there are only three entries for the medieval period; this excludes the evidence for extensive ridge-and-furrow plough remains that occur on the land where the extension of the Swarland Brick Company facilities are proposed. A single Neolithic find is recorded, which is a cup and ring marked stone at Roughley Wood. The post-medieval period is represented by five entries, two of these pertaining to structures at the current site of the Swarland Brick Company facility.

Table 1: HER Sites

HER No.	Site Name	Description	Period	NGR
2757	Rough Castle Iron Age Site	An encampment defended by earthworks, presumably from the Iron Age, lying *ca*. 800 metres NNW of Rough Castle	Iron Age	NU08770816
2759	Edlingham Iron Age Settlement	An Iron Age enclosure (A), affording evidence of earthworks (B) and hut circles (C)	Iron Age	NU09420864 (A) NU09310843 (B) NU09330817 (C)
2808	Newton Tower and Village	The deserted medieval village at Newton and its tower	medieval	NU0908
2813	Roughley Wood Cup and Ring	A cup and ring marked stone	Neolithic	NU090190808
3234	Learchild medieval Village	The deserted medieval village at Learchild, with possible post-medieval occupation	medieval	NU095105
3264	Thrunton medieval Village	The deserted medieval village at Thrunton, and its associated ridge-and-furrow system	medieval	NU089108
4218	Edlingham Roman Camp	A rectilinear, but much destroyed, settlement that is putatively Roman	Romano-British Iron Age	NU10240866
4243	Newtown Farm Axe	A traditional flat-axe of the Early Bronze Age found at Newtown Farm	Bronze Age	NU1009
4244	Edlingham Glebe Roman Camp	A sub-rectangular encampment situated along the course of the Devil's Causeway	Romano-British Iron Age	NU10400950
4245	Edlingham Palisaded Hilltop Enclosure	A circular twin palisaded site identified through aerial photographs	Iron Age	NU10560913
4246	Palisade Inside Edlingham Glebe	A circular palisade identified through aerial photographs inside the	Iron Age	NU10450950

	Roman Camp	Edlingham Glebe Roman Camp		
12394	Devil's Causeway Roman Road	The Roman road known locally as the Devil's Causeway	Romano-British Iron Age	NZ10358915
16813	Milepost at Learchild	The milepost between Learchild Moor House and High Learchild on the A697	Post-medieval	NU0941410265
20833	Thrunton Tile Works	The site of Thrunton Tile Works, first established *ca*. AD 1860, and consisting of an 'L'-shaped building (A) and a clay pit (B)	Post-medieval	NU0906309545 (A) NU0906109539 (B)
20834	Thrunton Brickworks	The brickwork facility at Thrunton, now the Swarland Brick Company	Post-medieval	NU0932509672
22402	Well at Whittingham and Callaly	A well recorded on the 1st Edition Ordnance Survey map	Post-medieval	NU0881409486
22407	Ravensworth Arms Public House	A public house recorded on the 1st Edition Ordnance Survey map	Post-medieval	NU0941409953

4.1 Neolithic and Bronze Age

4.1.1 The Bronze Age occupation of the region immediately surrounding the Swarland Brick Company facility is represented by only a single find of a traditional flat-axe found by a farmer at Newtown Farm (HER No. 4243). Inasmuch that the region has not been subject to any fieldwalking survey or excavation programmes, and that the adjacent Whittingham Vale affords a large quantity of evidence for Bronze Age occupation (Dixon 1899, 3 - 6), there is likely more material from this period dispersed throughout the landscape. As the sites in Whittingham also afford evidence from the Late Neolithic, which merges almost imperceptibly into the Bronze Age, there is also the possibility of material from this period being present. A suggestion of Neolithic occupation in the vicinity is afforded by the single find of a cup and ring stone in Roughley Wood (HER No. 2813). Little is known of the relationship between such features and settlements, but presumably they were situated near sites.

4.2 Iron Age and Romano-British period

4.2.1 The Iron Age is the best represented period within the development site, by dint of the even site recorded. Three of these (HER No. 4218, 4244, 12394), however, derive from the Romano-British period and may therefore have been constructed by Roman troops or engineers. It is apposite to begin the consideration of this period with the earliest evidence—this must remain speculative, though, as none of these sites have been subject to excavation. All of these are situated on higher ground and consist of earthworks or palisades (HER No. 2757, 2759, 4245, 4246), the encampment at Edlingham (HER No. 2759) also affording hut circles. The other sites are distinguished only by their ostensibly defensive features. As the uplands seemed to have been largely abandoned in the Iron Age for agricultural purposes, except as

pasture land, these sites must be peripheral to the arable fields that presumably were located in the lowlands. No evidence of such field systems, nor any sites accompanying them, have been encountered in this region but there is a possibility that they existed given the recognition of such structures recently at places in the Milfield Basin (Waddington, personal communication).

4.2.2 Sites from the Romano-British Iron Age seem to be largely clustered around the course of the Devil's Causeway (HER No. 12394), one of the Roman roads that led northward. This route may, however, have originated as an Iron Age road or perhapsbe of even greater antiquity, but these possibilities have not been comprehensively investigated. The two sites that have been ascribed to this period lie close to the road: the rectilinear structure at Edlingham (HER No. 4218) and that a Edlingham Glebe (HER No. 4244). Along the course of Roman roads elsewhere in the British Isles there have often been encountered many small buildings or features that represent market stalls, drinking facilities, and sometimes also grave markers. As much of this activity is concentrated immediately beside the road, there is only a modest likelihood that such structures and features would occur further down in the valleys.

4.3 Medieval

4.3.1 The medieval period is represented by two deserted villages: that at Learchild (HER No. 3234), and the other at Thrunton (HER No. 3264). Both are surrounded by ridge-and-furrow plough marks, which renders it somewhat puzzling that the extensive tracts of ridge-and-furrow surrounding the facility at the Swarland Brick Company were not recorded. This is clearly evident on the single aerial photograph of the region held at the NCCT offices in Morpeth (Plate 5). Some of this is potentially of medieval date, given the curvature of the furrows and their width; this opens up the prospect of structures or features associated with farming, if not farmsteads themselves being present in the immediately vicinity.

4.4 Post-medieval

4.4.1 Much of the post-medieval evidence of occupation remains salient. The first feature is the milepost that stands between Learchild Moor and High Learchild on the A697 (HER No. 16813). This is followed by the well at Whittingham and Callaly (HER No. 22402) and the Ravensworth Arms Public House (HER No. 22407) which was indicated on the 1st Edition Ordnance Survey Map (Figure 3). Of particular interest to this report is, however, the entries concerning the Thrunton Tile Works (HER No. 20833) and the Brickworks (HER No. 20834) both of which occupy the site of the present Swarland Brick Company facility. Remains of this original facility are visible in places, the older brickwork being incorporated into the more recent structures. It is noteworthy that none of this post-medieval industrial facility impinges onto the contiguous fields where expansion of the current site is proposed.

4.5 Site walkover

4.5.1 The site was examined on the 8th March 2010 during which a brief assessment of the standing buildings was also undertaken. The site showed little indication of the presence of archaeological features. Elements of what is likely to be the earlier brick works and tile works appear to be included within the buildings of the present brick company. Extensive ridge and furrow was noted in the fields to the west and south of the present site in the area into which the site is proposed to expand.

4.6 Standing buildings assessment

4.6.1 The Swarland Brick Company facility comprises numerous small buildings, some of which possess elements of older structures from the initial founding of the site in *ca.* AD 1860. Most salient is the chimney, which is constructed in red brick and is likely to have been erected sometime around the turn of the last century or perhaps even earlier (Plate 1). On the 1st Edition of the Ordnance Survey map (1866) the site is named as the 'Thrunton Tile Works' and reveals a series of three rectangular buildings within the 'clay pit'. All of these are placed at right angles to one another but it is not possible to determine whether the chimney was in existence from this map. This layout has, however, been largely preserved in the current structure of the facility: the lower brickwork of the rectangular series of buildings likely derive, in part, from the early phases of the site's existence. Atop the brickwork is sheet metal, and the roof is composed of this material, supported by iron pillars.

4.6.2 The rectangular building arrangement that is orientated North-South contains a series of kilns (Plate 2). This is nonetheless not depicted on the Revised 1st Edition Ordnance Survey map, which only records a single rectangular structure orientated East-West; this map also states that the tile works were disused. It is possibly at this time that the buildings fell into disrepair and the roof was neglected. The Second Revision of this map (*ca.* 1900) shows none of these buildings—this should, however, not necessarily imply that they had been completely demolished. It would be likely that the chimney would be indicated on the map if it were standing, and therefore the inference must be that this structure post-dates this map.

4.6.3 Only the lowest levels of the North-South orientated rectangular line of buildings is therefore representative of the earliest history of this site. As it was not possible to inspect the interior of most of the buildings because of the ongoing industrial activities and heavy machinery, the remnants of brick work within the central portions of the structure could not be studied.

4.8 Other monuments

4.8.1 There are no registered parks, gardens or battlefields within the study area. A defended settlement (HER 2757), of probably Iron Age derivation, is a scheduled ancient monument and is discussed above in the section pertaining to the evidence known

from the region.

5.0 IMPORTANCE OF THE ARCHAEOLOGY

5.0.1 The evidence of occupation in the region is inherently biased and therefore likely to be incomplete, inasmuch that most of the evidence derives from aerial photographic survey chiefly concerning the higher ground and field surveys of the region near the course of the Roman road. Little evidence of prehistoric settlement has therefore been encountered and there is also little to indicate any medieval occupation apart from the deserted villages at Learchild and Thrunton. The reliance on only a small corpus of aerial photographs and historic documentation is indicated by the complete lack of mention of the rather extensive evidence of ridge-and-furrow plough marks on the fields immediately surrounding the Swarland Brickwork facility. This must be considered concurrently with the lack of any field survey: there is probably a large body of archaeological evidence that remains unrecognised in the region, particularly the floor of the valley.

5.0.2 The study of the industrial archaeological heritage of this part of Northumberland is poorly developed, and has been recognised as an important direction of study in the North East Regional Research Framework (Petts & Gerrard 2006, 223 – 224). Although there is no explicit mention of the importance of tile and brick production in this document, there is little doubt that this is an important aspect of the local economy that requires further investigation.

6.0 PREDICTED IMPACT OF THE NEW DEVELOPMENT

6.0.1 The proposed layout of the new development is shown on Figure 2. The areas into which the site is proposed to expand lie to the west and south of the current brickworks and quarry area. This area comprises an additional area of some 22,200 square metres.

7.0 CONCLUSIONS

7.0.1 The upstanding remains afford some indication of the earliest history of the industrial facility at Thrunton, but most of this evidence consists of sporadic occurrences of brick work at the lowest levels of the buildings. It is difficult to determine, with any certainty, whether these brick walls derive from the earliest phases of the facility's construction or instead belong to the expansion of the facility at a later period. A possibility also exists that some of the older bricks were used again after the original structures underwent modification, but this can only remain conjecture at this point.

7.0.2 The earliest elements present within the site area are the ridge and furrow agricultural features, which are extensive over the fields to the west and south of the brickworks. The presence of sites of archaeological interest within the general area may indicate that features could be present within the proposed development area masked by the ridge and furrow. Only further fieldwork could elucidate this situation further.

Text: Kristian Pedersen
Illustrations: Graeme Young
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Warburton's map of 1716

Horesly and Cay's map of 1753
Armstrong's map of 1769
Fryer's map of 1820
Greenwood's map of 1828
1st Edition Ordnance Survey, 25 inch to the mile
2nd Edition Ordnance Survey, 25 inch to the mile

APPENDIX I

**SWARLAND BRICKWORKS EXTRACTION SITE,
THRUNTON, ALNWICK, NORTHUMBERLAND**

**WRITTEN SCHEME OF INVESTIGATION FOR A
DESK-BASED ASSESSMENT**

1.0 INTRODUCTION

1.0.1 This document has been compiled by The Bamburgh Research Project for AMS Associates during March 2010. The document sets out the written scheme of investigation for the desk-based assessment of the site of the brickworks and its proposed extension at Swarland, near Thrunton, Alnwick, Northumberland.

1.0.2 The outlined work will be undertaken by The Bamburgh Research Project (BRP) in March 2010. The written scheme of investigation details the proposed scheme of work to be undertaken as the initial phase of the archaeological component of the Environmental Impact Assessment currently in preparation as part of a periodic review of the site.

1.1 Location

1.1.1 The development area lies immediately to the west of the A697, some 1km to the south of Thrunton, Northumberland and 3.5km to the north of the junction of the A697 and B6341, Alnwick to Rothbury road (NGR NU 093 097) (Figure 1).

2.0 METHODOLOGY

2.0.1 The evaluation will comprise a desk-based assessment of the land and buildings within the development area. The site itself will be studied in detail and the surrounding 1.5km area assessed for archaeological potential.

2.0.2 All work will be carried out in compliance with the codes of practice of the Institute of Field Archaeologists (IFA 2000) and will follow the IFA Standard and Guidance for Archaeological Desk-based Assessment (IFA 2008) and for the archaeological investigation and recording of standing buildings or structures (IFA 2008).

2.1 Issues to be addressed by the Assessment

The importance of standing buildings on the site, individually and as a group.
The location of known archaeological sites and landscapes within the proposed development area
The potential for palaeo-environmental samples within the proposed development area
The density of archaeological sites in the surrounding area and the potential that comparable sites may continue into the site
Previous disturbance on the site, which may have affected archaeological remains, including any significant change in levels from those indicated on old Ordnance Survey maps, and truncation by existing services on or adjacent to the site.
Where the information is available, the physical impact of the proposed development including:
Building foundations
Services

Access roads
Ground reduction
Increased vibration
Change in ground conditions on waterlogged or environmentally rich sites.
If possible, the impact of the proposed development on the visual setting of the following sites within the wider study area:
Scheduled Ancient Monuments
Listed Buildings
Unscheduled archaeological sites of national or regional importance

2.2 Desk-based assessment

2.2.1 The desk-based assessment will undertake the evaluation of the archaeological potential for the development area based on information derived from:

A site visit and field inspection of the landscape, structures and any associated groundworks and features.
Study of the development area and the surrounding 1.5km radius beyond the site boundary based on the Historic Environment Record, cartographic evidence, aerial photographic evidence and study of records held at the County Records Office and other sources.
As far as possible the potential for preservation of palaeoenvironmental material within any potential archaeological deposits will be assessed.
The potential for sites of archaeological interest within the vicinity to extend into the development area will be assessed.
The potential for previous disturbance on the site, which may have affected archaeological remains, including any significant changes in levels from those indicated on old ordnance survey maps, and truncation by existing services on or adjacent to the site.
As far as can be defined at present the potential impact of the proposed development on the archaeology will be defined.
The potential for the proposed development to impact on the visual setting of the site and wider study area will be assessed with regard to Scheduled Ancient Monuments, Listed Buildings and unscheduled archaeological sites of national or regional importance.

2.3 Written account

2.3.1 A written account of features and structures of interest will be compiled on site during the site visit on pro-forma sheets.

2.4 Photographic record

The photographic record compiled will include:

- General views of the study area
- General views of the exterior of the building, from all angles
- Record of any significant features identified during field inspection

3.0 REPORT COMPILATION

3.0.1 The report will be compiled in accordance with English Heritage MoRPHE guidelines (English Heritage 2008).

3.0.2 The report will include:

- Northumberland County Council Conservation Team reference, OASIS reference number and an 8 figure grid reference
- A description of the geology of the site
- Period-based discussion of the known and potential archaeological sites within the proposed development area
- An assessment of the importance of any standing buildings, individually, and as a group of buildings
- Discussion of the physical impact of the proposed development on known and potential archaeological sites
- Where possible an assessment of the impact on the visual setting of Scheduled Monuments, Listed buildings, Historic Parks and Gardens and Historic battlefields and unscheduled archaeological sites of national or regional importance
- Appendices listing:
    1 All archaeological sites, Scheduled Monuments, Listed Buildings, Historic Parks and Gardens and Historic battlefields in the proposed development area and the wider study
    2 All aerial photographs within the detailed study area and immediate environs, quoting the reference number and date (cross-referenced to the gazetteer where appropriate
    3 A copy of the specification

3.1 Illustrations

- A location plan of the site at an appropriate scale of at least 1:10 000 will be included
- A location plan of the extent of the proposed development area at a recognisable planning scale, and located with reference to the national grid
- Copies of all maps described in the text with the extent of the proposed development area marked on each map. Where copyright prevents the inclusion of a map in the report, a hand-drawn copy will be provided. Where possible historic maps will be transcribed either by hand or digitally, as an overlay on to the 1st Edition Ordnance Survey to allow details to be assessed in relation to recent features.
- A plan with the extent of the proposed development area and showing the location of all archaeological sites, Scheduled Monuments, Listed buildings, Historic Parks and Gardens and Historic battlefields in the proposed development area and the wider study area will be included
- Photographs appropriate to the assessment of the site

3.2 Site archive

3.2.1 An archive containing a copy of the report and original illustrations and tracings that are not included in the report and digital copies of the report and illustrations will be deposited in the appropriate local museum within 6 months of the completion of the post excavation work.

3.2.2 An online OASIS form will be completed for the project as part of the post-excavation assessment process.

3.2.3 The site archive will be deposited with the appropriate museum within six months of the completion of the report.

3.2.4 A summary of the assessment report will be submitted to the County Council Conservation Team for inclusion in 'Archaeology in Northumberland' by December 2010.

4.0 PERSONNEL

4.0.1 The designated project manger Graeme Young, is one of the four directors of the Bamburgh Research Project. A graduate of Newcastle University, with 22 years of experience in field archaeology including directing a number of excavations of urban medieval sites in Newcastle and Durham. He is an Associate Member of the Institute of Field Archaeologists.

4.0.3 Additional field staff, with appropriate archaeological experience, will be engaged as required.

5.0 HEALTH AND SAFETY

5.0.1 The Bamburgh Research Project complies with the 1974 Health and Safety Act and its subsequent amendments in all its operations. The SCAUM manual and the Bamburgh Research Project Health and Safety Policy Document is followed for all site works. A designated and appropriately trained first aider is present at all times during working hours. A First Aid kit, Accident Book and telephone are provided for each project. Safety footwear is mandatory on all excavation sites. Where required safety helmets and reflective jackets are provided.

5.0.2 All staff undergo a safety induction prior to commencing work on site. A written risk assessment is undertaken specific for each site. The safety assessment is reviewed on a daily basis and changes to the working conditions monitored continually during adverse weather conditions.

Text: Graeme Young
BRP 10/03

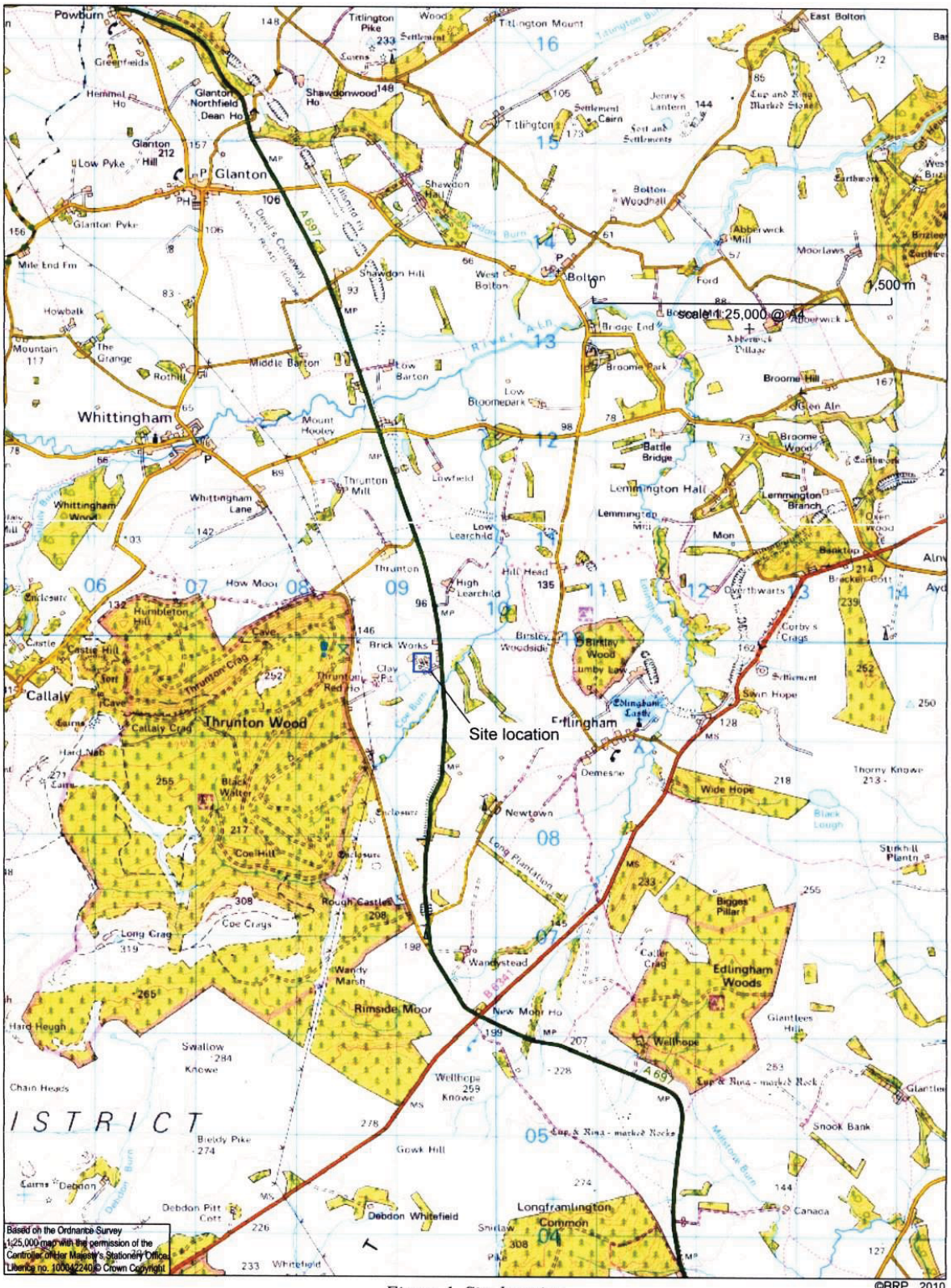

Figure 1 Site location

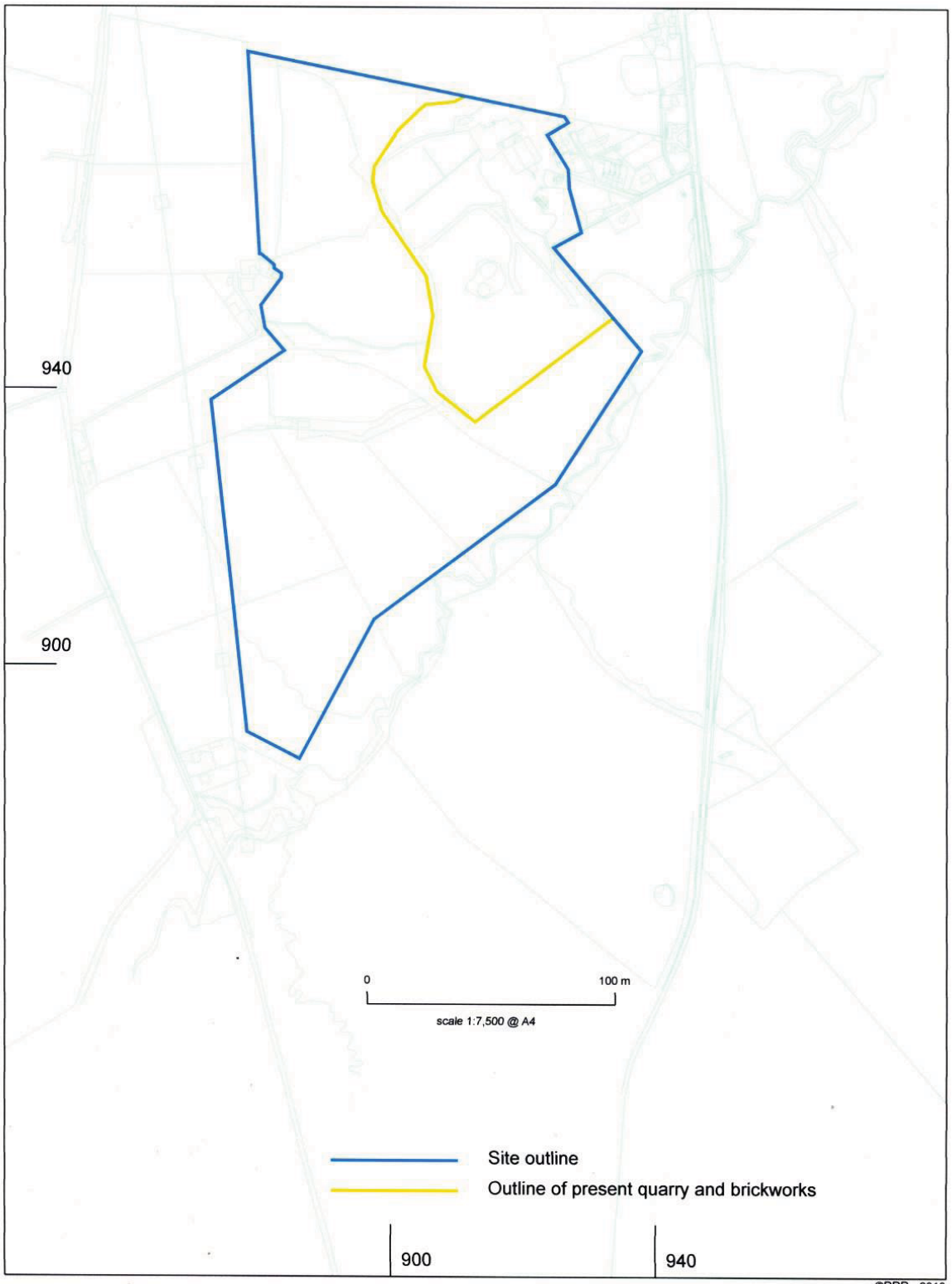

Figure 2 Site outline as supplied by the client

Figure 3 First Edition Ordnnace Surevy

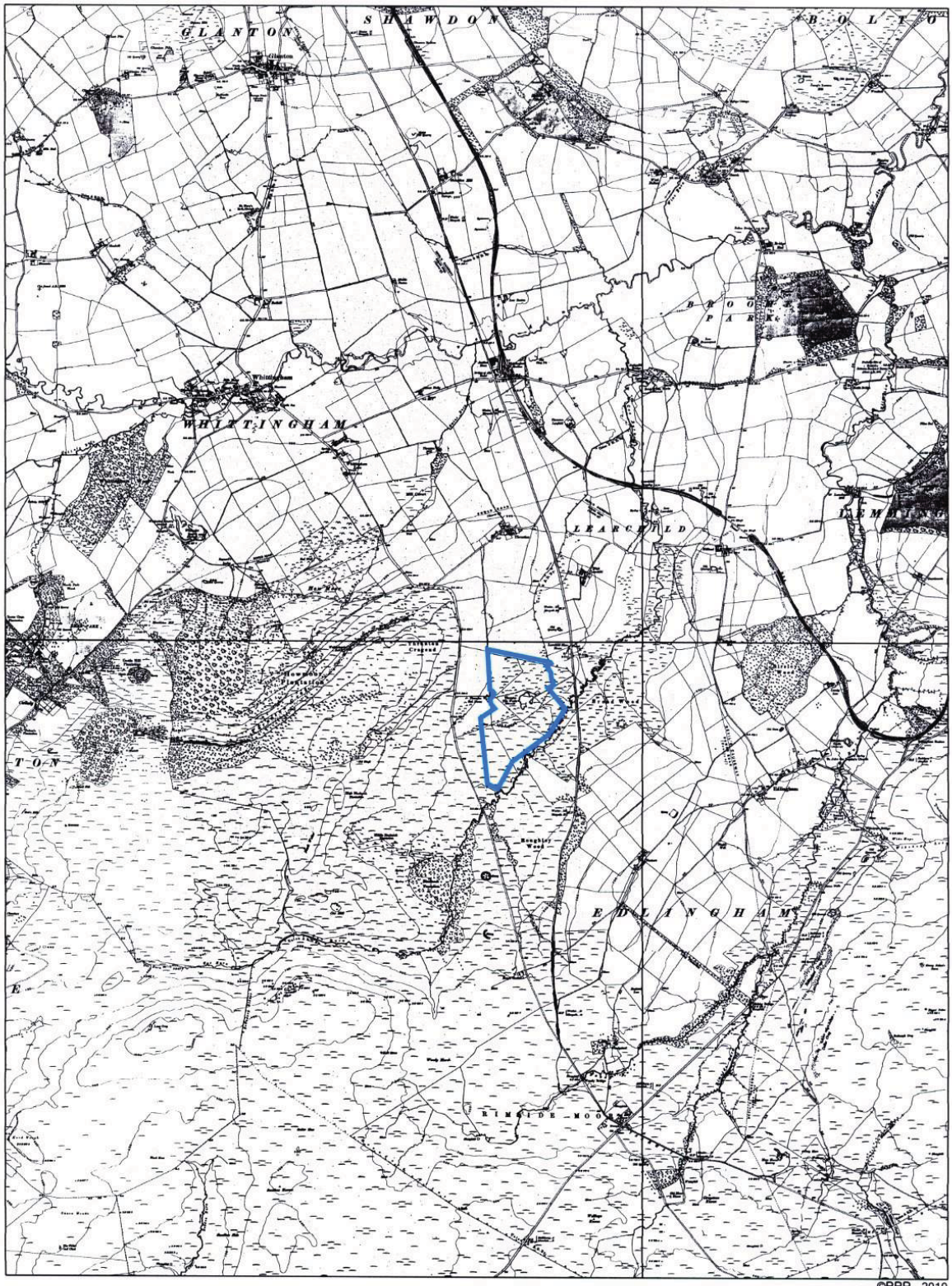

Figure 4 Second Edition Ordnance Survey

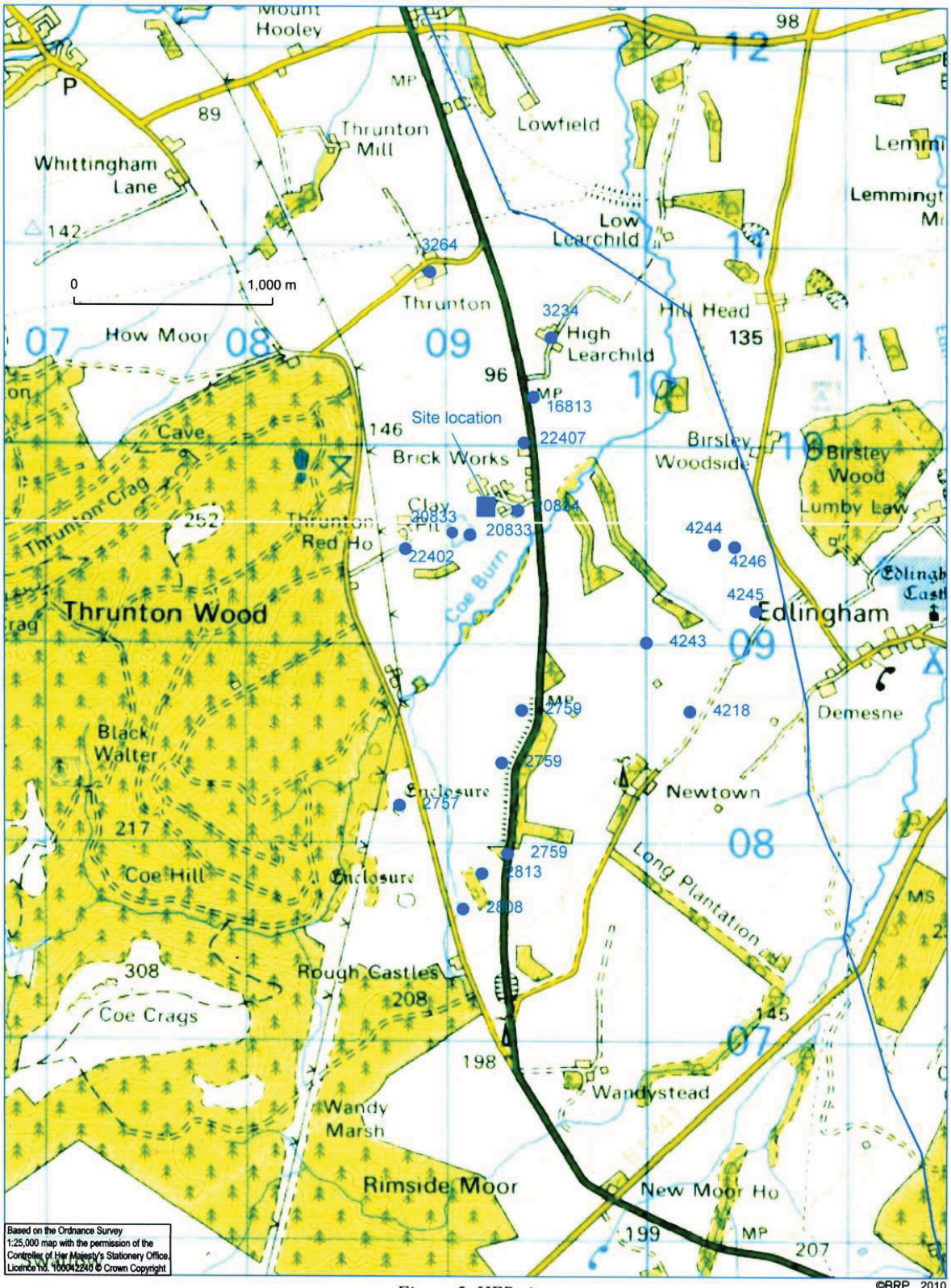

Figure 5 HER sites

Plate 1: View of brickworks buildings, facing south west

Plate 2: 19th century kilns

Plate 3: The present brickworks site and quarry, facing north.

Plate 4: Broad ridge and furrow in the field to the south of the site, facing south.

Plate 5: The site in 1980, facing west.