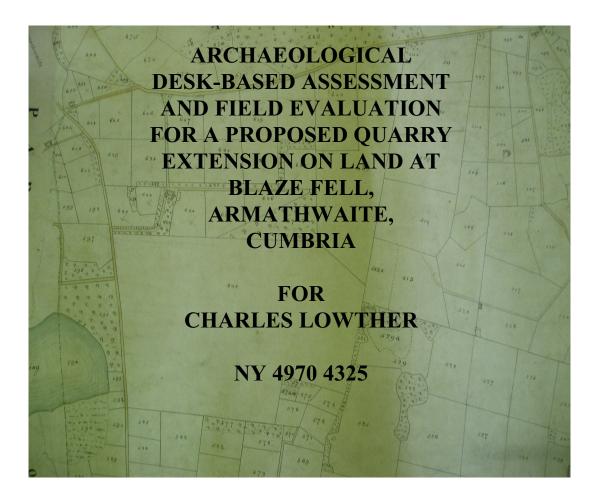
NORTH PENNINES ARCHAEOLOGY LTD

Client Report No. CP/377/06



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CONTENTS

T. COCHI C.	Page
List Of Illustrations. Executive Summary. Acknowledgements	v
1. INTRODUCTION	7
1.1 CIRCUMSTANCES OF THE PROJECT	7
2. METHODOLOGY	8
2.1 Project Design	8
2.2 DESK-BASED ASSESSMENT	8
2.3 ARCHAEOLOGICAL EVALUATION	8
2.4 Archive	9
3. BACKGROUND	10
3.1 LOCATION, TOPOGRAPHY AND GEOLOGY	10
3.2 HISTORICAL BACKGROUND	10
4. ASSESSMENT RESULTS	17
4.1 Introduction	17
4.2 HISTORIC ENVIRONMENT RECORD (HER)	17
4.3 CUMBRIA RECORD OFFICE (CARLISLE)	17
4.4 CARTOGRAPHIC SOURCES	17
4.5 AERIAL PHOTOGRAPHY	18
4.6 ARCHAEOLOGICAL INVESTIGATIONS	18
5. EVALUATION RESULTS	19
5.1 Introduction	19
5.2 TRENCH 1	19

CONTENTS

5.3 TRENCH 2	19
5.4 Trench 3	20
6. CONCLUSIONS AND RECOMMENDATIONS	21
6.1 ARCHAEOLOGICAL POTENTIAL	21
6.2 RECOMMENDATIONS	21
7.BIBLIOGRAPHY	22
7.1 PRIMARY SOURCES	22
7.2 SECONDARY SOURCES	22
7.3 Websites	24
APPENDIX 1 – TABLE OF HER SITES	25
APPENDIX 2 - FIGURES	26
ADDENDIY 2 _ DI ATES	27

LIST OF ILLUSTRATIONS

TABLE 1 LIST OF HER SITES WITHIN STUDY AREA	Appendix 1	
Figure 1 Site Location	Appendix 2	
FIGURE 2 LOCATION OF HER SITES	APPENDIX 2	
FIGURE 3 TITHE MAP FOR LAZONBY PARISH, 1845	APPENDIX 2	
FIGURE 4 FIRST EDITION ORDNANCE SURVEY MAP, 25" TO 1 MILE, 1861	APPENDIX 2	
FIGURE 5 SECOND EDITION ORDNANCE SURVEY MAP, 25" TO 1 MILE, 1898	APPENDIX 2	
FIGURE 6 TRENCH LOCATION PLAN	APPENDIX 2	
PLATE 1 AERIAL PHOTO OF SITE 1 BLAZE FELL SETTLEMENT	Appendix 3	
PLATE 2 BLAZE FELL SHOWING UNEVEN TERRAIN AND WASTE MOUNDS	APPENDIX 3	
PLATE 3 VIEW ALONG TRENCH 1 AFTER CLEANING, LOOKING SOUTH-WEST	APPENDIX 3	
PLATE 4 VIEW ALONG TRENCH 2 AFTER CLEANING, LOOKING WEST	APPENDIX 3	
PLATE 5 VIEW ALONG TRENCH 3 AFTER CLEANING, LOOKING NORTH	APPENDIX 3	
PLATE 6 A 1m STRETCH OF SOUTH-EAST FACING SECTION IN TRENCH 1	APPENDIX 3	
PLATE 7 A 1m STRETCH OF SOUTH FACING SECTION IN TRENCH 2	APPENDIX 3	
PLATE 8 WEST FACING SECTION IN TRENCH 3	APPENDIX 3	
PLATE 9 BARLEY MILLSTONE ROUGH-OUTS ABANDONED IN OUARRY	Appendix 3	

EXECUTIVE SUMMARY

In May 2006, North Pennines Archaeology Ltd was commissioned by Charles Lowther to undertake an archaeological desk based assessment and field evaluation in advance of a proposed quarry extension on land at Blaze Fell, Armathwaite, Cumbria (NGR NY 4970 4325).

The study involved the examination of all pertinent documents and cartographic sources held in the County Records Office in Carlisle, and the consultation of the Historic Environment Record (HER) of Cumbria County Council based in Kendal. The HER includes the locations and settings of Scheduled Ancient Monuments, Listed Buildings, Parks and Gardens and other, non-designated archaeological remains; the aerial photographic archive held in Kendal was also consulted. In addition, a number of published sources were consulted to provide background information, including the Transactions of the Cumberland and Westmorland Antiquarian and Archaeological Society and several relevant web sites, including Access to Archives and Archaeological Data Service.

The desk-based assessment located 5 sites from the HER and within a 1km radius of Blaze Fell. These include two quarry sites (Sites 4 and 5), both of which are on or around Blaze Fell, two round earthwork features of possible late prehistoric origin (Sites 1 and 2) and one example of a dyke system (Site 3).

The results of the desk-based assessment indicate a fairly typical spread of sites for the area. The main portion of the search area covered what is primarily marginal upland that has been mostly used for grazing and sandstone extraction that is represented by the Blaze Fell quarry itself. These quarry sites probably relate to Post-Medieval industrial expansion in the area, the stone being not only utilized for millstones and channelling (as described in the trade directories), but possibly also housing and dry-stone walling.

The two sites that have the potential to be prehistoric settlement sites (Sites 1 and 2) are in a poor state of preservation; they have never been examined by excavation nor has much attention been paid to them historically. The Lazonby dyke system listed as Site 3 is similarly not well known, and it remains undated and un-investigated.

The proposed scheme of quarry extension will cause significant changes to the state of the area, and will probably destroy any sub-surface remains that may be present. In view of this, a threetrench evaluation was conducted which produced no evidence whatsoever of human activity on the site, marking it as sterile of archaeological remains. Each trench measured 21m x 1.7m and was excavated down onto the natural substrate, this constituted 5% coverage of the area to be quarried. They were strategically positioned over the areas thought to have the greatest depth of soil coverage, thereby affording the greatest opportunity to observe any remains or features of archaeological interest. As nothing was noted from within the trenches, it has been concluded that there will be no impact from the proposed quarrying and it is therefore recommended that further archaeological should no work required on this site.

ACKNOWLEDGEMENTS

North Pennines Archaeology Ltd would like to thank Charles Lowther for commissioning the project, and for his assistance throughout the evaluation stage.

North Pennines Archaeology Ltd would also like to extend their thanks to Jo Mackintosh of the Cumbria Historic Environment Record (HER), Jeremy Parsons, Assistant Archaeologist, Cumbria County Council, Thomas Robson, County Archivist and all the staff at the Cumbria County Record Office in Carlisle for their help during this project.

The desk-based assessment was compiled by Nicola Gaskell. The field evaluation was undertaken by Nicola Gaskell and Martin Sowerby. The report was written and the drawings produced by Nicola Gaskell. The project was managed by Frank Giecco, Technical Director for NPA and the report was edited by Matthew Town.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 Cumbria County Council's Historic Environment Service (CCCHES) were consulted by Charles Lowther, regarding a planning application submitted for a proposed scheme of quarry site extension. The site is located on land at Blaze Fell, Armathwaite, Cumbria (NGR NY 4970 4325) (Fig 1). The development will involve the extension of a sandstone quarry site by 0.50ha. The proposed work would destroy any archaeological remains that may be present within the extension area. Consequently, CCCHES advised that a programme of archaeological works would be necessary prior to the proposed extension. North Pennines Archaeology Ltd (NPAL) was commissioned by Charles Lowther to undertake the required archaeological desk-based assessment of the general area around Blaze Fell to assess the extent of the archaeological potential of the area and to conduct an archaeological field evaluation within the extension area.
- 1.1.2 The desk-based assessment comprised a search of both published and unpublished records held by the Historic Environment Record (HER) in Kendal, the Cumbria County Record Offices in Carlisle (CRO(C)), and the archives and library held by North Pennines Archaeology Ltd. The principal objective of this assessment is to undertake sufficient work in order to identify and characterise the archaeological constraints associated with the development area, in order to assess the archaeological and historical potential of the development site.
- 1.1.3 The field evaluation phase of the project was designed to assess the presence or absence of any archaeological features, and their nature, state of preservation and content.
- 1.1.4 This report sets out the results of the work in the form of a short document outlining the findings, followed by a statement of the archaeological potential of the area, an assessment of the impact of the proposed development, and recommendations for further work.

2. METHODOLOGY

2.1 PROJECT DESIGN

2.1.1 A project design was submitted by North Pennines Archaeology Ltd in response to a request by Charles Lowther for an archaeological desk-based assessment of the study area, with an associated field evaluation, in accordance with a brief prepared by CCCHES. 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, 1994a), and generally accepted best practice.

2.2 DESK-BASED ASSESSMENT

- 2.2.1 Several sources of information were consulted, in accordance with the project brief and project design. The study area consisted of a 1km radius centred on the proposed extension area. The principal sources of information were the Historic Environment Record (HER), maps and secondary sources.
- 2.2.2 *Historic Environment Record (HER):* the HER in Kendal, a database of archaeological sites within the county, was accessed. This was in order to obtain information on the location of all designated sites and areas of historic interest and any other, non-designated sites within the study area, which included monuments, findspots, Listed Buildings and Conservation Areas. A brief record including grid reference and description was obtained for the various sites within the study area, and was examined in depth. Aerial photographs of the area were also studied.
- 2.2.3 *County Record Office (Carlisle):* the County Record Office in Carlisle (CRO(C)) was visited to consult documents specific to the study area. Historic maps of the study area, including surveys, Tithe and Enclosure Maps, Acts of Parliament and early Ordnance Survey maps, were examined. A search was made for any relevant historical documentation, particularly regarding the use of the area, drawing on the knowledge of the archivists. Several relevant secondary sources were also consulted.
- 2.2.4 North Pennines Archaeology Ltd (NPAL): various publications and unpublished reports on excavations and other work in the region are held within the North Pennines Archaeology library and any undeposited archives of the sites themselves were examined. An electronic enquiry was also made of English Heritage's National Monuments Record and the website of the Archaeology Data Service. This was in order to enhance and augment the data obtained from a search of the appropriate repositories.

2.3 ARCHAEOLOGICAL EVALUATION

2.3.1 The archaeological evaluation consisted of the excavation of three linear trial trenches measuring 21m x 1.7m, which provided a 5% sample of an area of 0.2 hectares (Figure

- 6). This was in order to produce a predictive model of surviving archaeological remains detailing zones of relevant importance against known development proposals. In summary, the main objectives of the excavation were:
- to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record these were they are observed;
- to establish the character of those features in terms of cuts, soil matrices and interfaces;
- to recover artefactual material, especially that useful for dating purposes;
- to recover palaeoenvironmental material where it survives in order to understand site and landscape formation processes.
- 2.3.2 Each trench was mechanically excavated by a 7.5 tonne tracked 360 degree excavator equipped with a toothless ditching bucket, under archaeological supervision, to the natural substrate. Each trench was then manually cleaned where possible and any putative archaeological features investigated.
- 2.3.3 Photography was undertaken using Canon EOS 100 and EOS 300V Single Lens Reflex (SLR) cameras. A photographic record was made using digital photography, 200 ISO Black and White Print and Colour Slide film.
- 2.3.4 All work was undertaken in accordance with the Institute of Field Archaeologists Standards and Guidance for Archaeological Field Evaluations (IFA 1994b).

2.4 ARCHIVE

2.4.1 A full professional archive has been compiled in accordance with the project design, and in accordance with current English Heritage guidelines (1991). The paper and digital archive will be deposited in the Cumbria Record Office, Carlisle.

3. BACKGROUND

3.1 LOCATION, TOPOGRAPHY AND GEOLOGY

- 3.1.1 Blaze Fell, and its associated quarries, lie approximately 1.5km southwest of Armathwiate and 2km southeast of High Hesket, Cumbria, and is located within the parish of Lazonby. The proposed quarrying area is situated on a plateau of land, at a height of around 240m above Ordnance Datum (OD).
- 3.1.2 Blaze Fell holds a position as one of the foothills of the Pennine Chain proper. It is part of a sandstone ridge that helps to demark the course of the Eden Valley. To the northwest lies Solway Plain and to the east is the Lakeland massif. Land-use around Blaze fell consists predominantly of both pasture and arable land.
- 3.1.3 The solid geology of the area comprises mainly of Permo-Triassic Sandstone, known locally as Lazonby Sandstone and in the study area this is covered with wild grasses and short scrub type vegetation with mounds of dumped sandstone rubble and further natural outcrops of sandstone creating an uneven ground surface (British Geological Society Website).

3.2 HISTORICAL BACKGROUND

- 3.2.1 *Introduction:* this historical background is compiled mostly from secondary sources, and is intended only as a brief summary of historical developments around the study area.
- 3.2.2 **Prehistoric:** the earliest defined prehistoric period is the Palaeolithic and it represents a time span covering almost the last half million years. Early material from the Lower and Middle Palaeolithic is uncommon on a national scale, and there are no known sites from the northwest region, (Hodgson and Brennand 2004). For over 99 per cent of the Palaeolithic period, human communities in Britain were hunting and gathering, activities that were the mainstay of a subsistence economy. Naturally, such a lifestyle involved a high degree of mobility and the minimum of equipment and possessions, which in turn leaves behind very little trace in the archaeological record (Darvill 1987). Some time after 13,000 BP, Late Upper Palaeolithic societies returned to Britain after the retreating ice sheets. Evidence of occupation in the north-west at this date is extremely scarce, but the discovery of Late Upper Palaeolithic blades at Lindale Low cave, near Grange-over-Sands, and at Bart's Cave, Aldingham, on the Furness peninsula, mean that the existence of a Cumbrian Palaeolithic can no longer be entirely dismissed (Chamberlain & Williams 2001). No Palaeolithic material has yet to be located within a 1 km radius of Blaze Fell, Armathwaite, Cumbria.
- 3.2.3 Around 8,000 BP, the last of the major ice sheets covering northern Britain had retreated. Rising sea levels then submerged the land bridge between Britain and continental Europe, this event traditionally denotes the beginning of the Mesolithic, or middle stone age period. Mesolithic populations were active on the Cumbrian coast, for example at Eskmeals, and St Bees, and it is likely that the Kent valley was occupied at this time. Earlier and Later Mesolithic material has been identified from cave sites

- on the southern Cumbrian limestone (Salisbury 1997; Young 1992) and Mesolithic flints have also been collected from the limestone uplands around the area of Shap (Cherry and Cherry 1987), but again, as yet, no Mesolithic material has been located within a 1 km radius of Blaze Fell, Armathwaite, Cumbria.
- 3.2.4 The Neolithic period has been traditionally associated with the adoption of farming in Britain. New types of sites appear, including permanent settlements and large ceremonial monuments. Civil engineering projects and communal works became a part of everyday life, and time and energy were invested in dividing and utilizing landscape resources on an unprecedented scale. The archaeological evidence currently available suggests considerable technological and sociological changes too (Darvill 1987). The location of monuments from this period within Cumbria appears to suggest a shift in the emphasis of activity away from the coastal plain to the edge of the Lake District hills and the Eden Valley (Hodgkinson *et al* 2000). Polished Stone axes from the mines of the Langdale valley in the Cumbrian Mountains to the west of Blaze Fell were possibly first utilized in the late Mesolithic and were traded extensively throughout the British Isles. It is likely that by the 3rd millennium BC, Neolithic inhabitants of Cumbria were part of an extensive trans-European trading network (Hodgson and Brennand 2004).
- 3.2.5 The later Neolithic and earlier Bronze ages are also characterised by increasing social sophistication best reflected by the construction of large monuments, like the stone circles of Glassonby, 10km southeast of Blaze Fell, King Arthur's Round Table and Mayburgh Henges 18km to the southwest, and Leacet Hill 23km to the south (Burl, 1995). The function or purpose of these monuments is still under continuing analysis and debate, and are probably best viewed as large-scale achievements of group endeavours central to social, religious or spiritual practices. In Cumbria, both circles and henges were often situated at the confluence of valleys or near important breaks in the Pennines, like Long Meg and her Daughters stone circle at Little Salkeld, 10km to the southeast of Blaze Fell (Edmonds, 1999).
- Into the Bronze Age, human society continued to change, possibly due in part to 3.2.6 settlers arriving from mainland Europe bringing with them new and different cultural traditions. This can be seen through the material remains (changes to pottery styles and shapes), bronze made artefacts and even burial practices. Early metalwork finds are rare in Northern England, and metal production and ownership may have been the sole province of a privileged few. Settlement sites dating to the Bronze Age are seldom identified, although aerial photography of the coastal plain has identified a number of sites that are yet to be tested by excavation (Bewley 1986). Environmental studies have identified cereal pollen dating from c2000 BC, which demonstrates the presence of agriculture in the North Cumbrian Plain during the Bronze Age (Hodgkinson et al, 2000). Although Bronze Age material has been uncovered within the county, no artefacts or sites ascribable to the Bronze Age have been located on Blaze Fell, however, 5km to the south of Blaze Fell lies Low Plains sand quarry, where excavations undertaken by Oxford Archaeology North in 2004 uncovered Bronze Age human cremations with a collared urn, conclusive evidence that this area was inhabited and ritualised over 3000 years ago (OAN 2004).
- 3.2.7 During the Iron Age, the impression nationwide is of a major expansion in population as evidenced by an abundance of settlement sites. There is also clear evidence for a

growing social complexity and hierarchy, as demonstrated by high status burials and contrasting types of settlements, for example hillforts compared to small farmsteads. In Cumbria, however, settlement sites and burials attributable to the Iron Age are hard to identify. There may have been certain elements of the pre-Roman native population that were encouraged to settle in the vicinity of roads and forts built by the Romans in order to supply food, including cereals, for the garrisons (Blake 1959), thereby showing a change in settlement patterns. A number of unexcavated settlement sites identified by aerial photography may date to this period (Bewley 1994) and two hillforts are known at the southern end of the northern coastal plain at Carrock Fell and Swarthy Hill (Hodgkinson *et al* 2000). Possible Iron Age crouched burials have been excavated at Crosby Garrett (Hodgson and Brennand 2004). Although settlements are hard to locate, environmental studies for lowland Cumbria have shown a dramatic drop in tree pollen during the Iron Age, suggesting that large tracts of forest were cleared for agricultural activity.

- 3.2.8 Through the use of aerial photography, two settlement sites have been identified in the vicinity of Blaze Fell that possibly date to the Iron Age. The first is known as Blaze Fell Settlement, [SMR 728], discovered on cleared woodland in 1972. It is approximately 78m in diameter and although it has been greatly reduced by ploughing, the best preserved areas of the site show a slight earthen bank approximately 3m wide and 0.20m high with an external ditch up to 6m wide and 0.60m deep. The internal area has also been affected by ploughing but there remains the suggestion on the ground of possible hut circles. This site lies approximately 400m south of the quarry. The second site, which could also be considered as either Iron Age proper or within the succeeding Romano-British period, is Lazonby Enclosure [SMR 5993]. This site falls just outside of the 1km radial search around Blaze Fell so its existence is worthy of note as an example of possible prehistoric activity in the area. However, it is commonly described as a moated feature, intimating that it may be of medieval origin. The fact that no documentary evidence exists for a castle or moated house on that location may hint at a greater antiquity for the site, however.
- 3.2.9 Romano-British: the Roman advance on the northwest during the 70s and 80s AD may have been launched from bases in the northwest Midlands such as Wroxeter and Little Chester, proceeding north via the valleys of the Eden and Lune. By 72 AD the earliest timber fort was constructed at Carlisle (Philpott 2004), and the campaigns of Agricola, governor of Britain AD 78-84 consolidated the Roman hold on the North. During the Roman period there was certainly a heavy military presence in Cumbria. Hadrian's Wall, perhaps begun in 122 AD, was built to define the northern limit of the Roman Empire and a network of military roads, forts and settlements soon sprung up around this focus (Breeze and Dobson 1976). Until recent decades, the Roman military sites of Cumbria were those that received the most attention from archaeologists and as a result the nature of rural settlement during the Roman period is poorly understood (Philpott 2004). Although this is the case, environmental studies suggest that woodland clearances begun in the Iron Age continued apace, implying large-scale cultivation of land (ibid). Where rural sites have been excavated, the traditional Iron Age building form of the roundhouse continues in use into the Roman period, for example at Silloth Farm (Higham and Jones 1985). By the late 3rd century roundhouses were being superseded by rectangular timber buildings, for example at Crosshill (Higham and Jones 1983).

- 3.2.10 The nearest evidence of Roman activity to Blaze Fell comes in the form of a fort and a road. Almost 2km to the south west of the quarry is the fort of *Voreda*, or Old Penrith, formerly known as Plumpton Wall, on account of its proximity to the village of Plumpton. The fort today is visible as a distinct rectangular platform, 150m by 100m, sitting on the edge of a natural terrace above a fairly steep scarp down to the river Petteril. Using the artefacts found at the fort as dating evidence an approximate time for the construction of the fort can be surmised. It is probable that it was built *c*. AD 90, after the withdrawal and abandonment of Scotland (Austen 1991).
- 3.2.11 The road from Penrith to Carlisle runs past the fort of *Voreda* as described by Margary as Road 7e, from Penrith to Carlisle (Margary 1967). He notes that this road was recorded in both the Second and Fifth *Antonine Itineries*, which were a register of stations and distances along the various roads of the Roman Empire that contained directions of how to get from one Roman settlement to another. The modern A6 road now respects this line all the way from Penrith at the southern end to Carlisle in the north.
- Medieval: in the immediate period after the Roman withdrawal from Britain in AD 3.2.12 410, Cumbria was within the British kingdom of Rheged, the kings of which claimed descendency from King Coel Hen, presumably one of the last Duces Britanniorum (Dukes of Britain) from the Roman government system within Britain. Coel died on campaign in Tarbolton, Ayrshire in approximately AD 420 and part of his northern kingdom fell to his son Ceneu who ruled in the early to mid fifth century (Britannia website). His son, Gwrast Lledlwm and his descendants succeeded Ceneu until Rheged, by marriage, came under the peaceful control of the Anglian Kingdom of Northumbria in approximately AD 638 (Wikipedia website). Despite the Anglian rule of what is now Cumbria, the local inhabitants retained some of their 'Britishness' by the continued use of the Cumbric language, spoken in southern Scotland and northern England (Lapidge 1999). Place-names with Cumbric elements occur all over northern Cumbria and they tend to cluster. It has been ventured that Cumbric as a language itself 'can scarcely have outlasted the eleventh or the early twelfth century at the latest' (Todd 2005).
- 3.2.13 Evidence for Early Medieval activity in North Cumbria is extremely limited, the end of the Roman economy depriving the archaeologist of diagnostic artefactual evidence on all but a small minority of sites (Higham 1986). Work in recent decades has shown that the 'Romans' did not leave behind them a cultural vacuum, and archaeology has begun to fill the gap between the 'Dark Ages' and the Early Medieval, with such examples of histories as the Northumbrian monk, The Venerable Bede's, *Historia Ecclesiastica* written in the early 8th century.
- 3.2.14 The discovery of early medieval settlement sites in the region is rare, but a number of putative Romano-British rural sites excavated more than forty years ago may have had late phases that could have been observed with the use of radiocarbon dating. Recent excavations at Stainmore in Cumbria have produced evidence for rectangular post-built buildings and sunken-feature buildings perhaps dating to the 7th or 8th centuries AD (Newman 2004). In addition environmental studies focussing on pollen remains have indicated a continuing arable economy in Cumbria during the Early Medieval period (Hodgkinson *et al* 2000).

- 3.2.15 The first 'Viking' or Scandinavian raiders appeared on the eastern shoreline of northern England in the late 8th century. The first appearance of Vikings in the northwest can be traced to the early 10th century. Although Carlisle has been a centre of activity since the Roman period, to date it has revealed very little evidence of Viking remains despite Norse sculpture and burials found at Stanwix and Hesket-in-the-Forest (3km northwest of Blaze Fell). It has been alleged that Carlisle was sacked in the last quarter of the 9th century by Halfdan, King at York, and this may explain the apparent lack of 10th and early 11th century occupation within the city (Edwards 1998).
- 3.2.16 The evidence found at Hesket-in-the-Forest included a burial covered with large stones, the removal of which revealed a layer of charcoal, bones and ashes about fourteen feet in diameter. Noted at the time of discovery and reinforced by recent inspection was that some of the objects found had 'passed through considerable heat' implying that this site was a cremation. Finds included a sword, a horse-bit, an axe head and other items relating to horse riding (op cit). Recent excavations of a Viking were conducted at the village of Cumwhitton by Oxford Archaeology North in 2004. Six burials were discovered believed to be of a 10th century date and apparently Pagan in their layout and grave contents, the central grave also containing artefacts of an equestrian nature (OAN 2004).
- 3.2.17 In the post-Conquest (1066) period what is now modern day Cumbria remained outside of Norman control until Cumberland was added as a province to the English Kingdom in 1092 by William II, the second son of the Conqueror, after forcing King Malcolm III of Scotland to pay homage to him in 1091. In 1093 William began construction of Carlisle Castle in timber and this stood until 1122 when Henry I (William's younger brother), ordered a stone castle to be erected (Britainexpress website). Henry also granted a site within the city of Carlisle for the purpose of founding a religious establishment. The priory church of St. Mary Magdalene became the seat of the bishopric founded in 1133 and gave unity and force to the ecclesiastical life of the district (Wilson 1905).
- 3.2.18 Both Lazonby (which covers Blaze Fell) and Hesket parishes (Armathwaite being within Hesket parish) lay within the once Royal Forest of Inglewood. This was created soon after the Norman Conquest and covered a significant part of Cumberland from Carlisle to Penrith although the exact borders would be subject to change. The Forest ultimately belonged to the English Crown and was governed by strict Forest law exercised by wardens. In the reign of Henry VIII the forest laws were repealed and Inglewood ceased to be Royal (Wikipedia website).
- 3.2.19 There are many examples of the graves of the medieval populace within Cumbria. At St Nicholas' Church in Lazonby were three cross slab grave covers that dated to the 14th or 15th centuries, one is still visible whilst the other two may now be beneath the wooden floor of the church itself (Ryder 2005). Although the present church is a relatively modern building of 1863, designed by Anthony Salvin (Pevsner 1967), the original church was reputed to have been built in *c*.1157 (Jackson 1990), establishing the village as being in existence within the first century post-Conquest. The church at Armathwaite meanwhile was repaired before 1668 by Richard Skelton of Aarmathwaite Castle (Pevsner 1967), thereby also showing a date of initial construction in the medieval.

- The earliest recorded mention of Blaze Fell derives from Gaol Delivery Roles of 1358 3.2.20 and was written as 'Blesfel'. In 1619 the Exchequer Kings Remembrancer had it noted as 'Bleze Fell', but in 1650 the Parliamentary Survey had it reverted to 'Blees Fell'. In 1722, documents that are in the possession of the Duke of Devonshire, had the name written as 'Bleasfell'. It is probable that the first element of the name is the Norwegian word *Bles*, meaning 'white spot', this may relate to some feature of the hill (Armstrong et al 1950). The Norwegian element to the name coupled with the nearby burial at Hesket lends strength to the belief that Scandinavian settlers were present in this area, perhaps mixing with the indigenous populace and the earlier Anglian settlers. Indeed, the name Lazonby, first recorded in 1165 as 'Leisingebi' derives from the Old Scandinavian for either the farmstead of the freedmen or the individuals name of 'Leisingr' coupled with 'bi' and Armathwaite first seen as 'Ermitethwait' in 1212 is a combination of the Middle English 'ermite' and Old Scandinavian 'thveit' to create 'the clearing of the hermit' (Mills 1991), further evidence of the combining of the separate cultures within Cumbria at this time.
- 3.2.21 Later in the Medieval period moor burning was recorded (in presentments for illegal burning) in the Lake District, South West Scotland and the North and Central Pennines. Its purpose was to improve the pasture, Thomas Denton, describing Cumberland in 1687 commented on the burning of heather on Blaze Fell 'every spring to make the grass spring better' (Winchester 2000).
- 3.2.22 **Post Medieval and Modern:** Cumbria experienced its agricultural revolution later than most regions, but even so there was a noticeable and notable quickening in the pace of land and stock improvement in the late 18th century and above all in the decades between 1800-1840, when the pioneers like Howard of Corby and Curwen of Workington were innovating so extensively (Burgess 1989). Enclosure was required before most improvements could be put into effect, and Lazonby was covered by an Enclosure Act in 1845 (CRO(C)). A report into agriculture in the north of England in the 1790's showed the county to be backwards: people took a long time in generally improving land by manuring, introducing new root and clover crops, getting better strains of livestock and above all investing in land drainage (Burgess 1989).
- 3.2.23 Up until the mid nineteenth century Blaze Fell does not appear to have gained much attention. The nearest dwelling to Blaze Fell is Nord Vue farm and through a combination of documentary and cartographic evidence, it can be established that in 1828-9 the farmhouse at Nord Vue was owned by Thomas Dixon esq. His name is listed under the heading 'Gentry and Clergy' and not as a stone worker or farmer (Pigot 1829). This building achieved Grade II Listed Status in 1987 and is described as being early 19th century. It is possible that Mr. Dixon was responsible for its construction and was the initial owner.
- 3.2.24 The Tithe Apportion Award and Map that covers the Parish of Lazonby was completed in 1845. The plots listed as 638 and 639 were labelled as Far and Near Blazefell respectively. These parcels of land were owned by Sir George Musgrave and occupied by William Scott. It shows that at this time Nord Vue was under the ownership of 'John Dixon's Heirs' and occupied by Joseph Tomlinson. Only two years later, in 1847, Nord Vue is either merely owned by, or occupied by as well, Mrs. Mary Ann Dixon (Mannix and Whellan 1847). In 1858 possibly the same Mrs. Ann Dixon is listed as being one of the principle land owners in Lazonby Parish, residing now at

- Low Plains, but also being the owner of The Joiners Arms public house in Lazonby village. It is also the year that a Quarry Owner is listed, James McKay, although the name of the quarry is not given (Kelly 1858).
- 3.2.25 The 1879 Cumberland Directory comments about Lazonby Parish: 'many persons are employed in the quarries here which produce freestone and slates proper for millstones' (Slater 1879), and in 1884 The Directory of East Cumberland goes further: 'red freestone of excellent quality is abundant and is extensively quarried on Lazonby Fell and Lowther's Lot. A quarry on Bleesfell supplies barley millstones'. Also in the same directory, Joseph Jameson is listed as being resident at Nord Vue (Bulmer 1884).
- 3.2.26 In the directory for 1897 is the mention of Blaze Fell Quarry in conjunction with an owner, Mrs. Mary Ann James of the Joiners Arms Public House. She is noted as being both a quarry owner and stone merchant for Lazonby and Blaze Fell Quarries which were makers of millstones, flags, edging, channelling etc. It seems probable that Mrs. Mary Ann Dixon remarried. In the same year Joseph Jameson is still registered as being at Nord Vue Farm (Kelly 1897). In the early 20th century Mrs. M A James is still registered as a quarry owner but only of Lazonby Fell quarries, which may have included Blaze Fell and a Mrs. Elizabeth Hodgson is farming at Nord Vue (Bulmer 1901). By 1906 Thomas Christopher James is listed as owner and stone merchant for Lazonby quarries, citing the manufacture of those same items as described in the 1897 directory, a supposition is that the business may have passed from mother to son (Kelly 1906). The tenancy or ownership of Nord Vue had also changed again with Oswald Lewis Wigram farming and residing there, and this situation continues into the 1910 directory, after which point the James family are no longer listed as quarry owners and no further direct reference to Blaze Fell quarry is made.

4. ASSESSMENT RESULTS

4.1 Introduction

4.1.1 The assessment results are based on primary documents, most notably maps, and on the secondary sources used in *Section 3.2*. The results are presented according to the archive from which they were consulted. The quarry area is a registered HER, with the number 10458. Extra information was gathered for 4 HER records located in an immediate study area, defined as a 1km radius centred on the site. A full list of the sites identified by the assessment is presented in Appendix 1. A list of 9 Listed Buildings is also provided in that section. The website ADS was also consulted, the nearest listed site was 1km away.

4.2 HISTORIC ENVIRONMENT RECORD (HER)

- 4.2.1 **HER:** There were **5** HER records within the study area, which is defined as a 1km radius around the site (Fig 2). Only one site will be affected by the extension, and this is the quarry itself (Site 4). The sites are summarised in Table 1.
- 4.2.2 *Listed Buildings:* the listed building records shows one building that lies just outside the 1km radius of the site, but it is relevant to the study area, as it is Nord Vue farmhouse, the grounds through which the quarry is now accessed.
- 4.2.3 *Archaeological Data Service Web Site:* ADS listed 1 site within a 1km radius of Blaze Fell Quarry, which was a repeat of a site provided by the county HER information.

4.3 CUMBRIA RECORD OFFICES (CARLISLE AND KENDAL)

4.3.1 The Cumbria Record Office in Carlisle (CRO(C)) was consulted to collate maps for regression analysis of the study area. Information from primary and secondary sources, including archaeological or historical journals, has been incorporated into the historic background (Section 3.2).

4.4 CARTOGRAPHIC SOURCES

- 4.4.1 As part of the documentary search at the Cumbria Record Office in Carlisle (CRO(C)), an in-depth scan of the early maps for Blaze Fell was undertaken. A cartographic date range of between 1845 and 1925 was obtained. The quarry extension area will now be discussed with reference to these early sources, noting any changes to the development area within this period.
- 4.4.2 *Tithe Apportionment Map for Lazonby, c1845 (CRO(C)):* the earliest available source is the Tithe Apportionment Map of 1845 (Fig 3), which illustrates a similar field layout to that seen today. It is immediately apparent that no quarrying seems to have taken place on the plots numbered 638 and 639, recorded on the Tithe Award as Far Blazefell and Near Blazefell respectively and that they were owned by Sir George Musgrave, Baronet.
- 4.4.3 *First Edition Ordnance Survey Map, 1861 25" to 1 mile:* the First Edition Ordnance Survey map (Fig 4) is the second map that shows the quarry area in detail. It highlights

the fact that access has now been made available from the northern road and it notes the position of a well next to the farmhouse. The development site has been split by the edges of two map sheets but still shows the farm building that is under investigation as a long and narrow barn running parallel to the farmhouse in a northwest southeast direction.

- 4.4.4 **Second Edition Ordnance Survey Map, 1898 25" to 1 mile:** the Second Edition Ordnance Survey map (Fig 5) also shows the development site over more than two sheets, and what was observed on the first edition map remains the same on the second, but with the actual quarried areas in more detail.
- 4.4.5 **Third Edition Ordnance Survey Map, 1925 25" to 1 mile:** the Third Edition Ordnance Survey map was not available from the Carlisle Records office at the time of research, however, when the second OS map is compared to the modern version, not too many changes have occurred in the vicinity of Blaze Fell in the intervening period.

4.5 **AERIAL PHOTOGRAPHY**

- 4.5.1 Aerial photographs directly relating to the quarry site have been taken, although they bear little relevance to the proposed extension and do not highlight anything or site that has been previously overlooked. Around Blaze Fell however, a number of archaeological sites have also been catalogued through the examination of aerial photography. These comprise:
 - SMR 728: Blaze Fell Settlement, Lazonby
 - SMR 3801: Lazonby Unclassified Cropmark
 - SMR 5991: Ewan Close Dykes, Lazonby
 - SMR 10547: Blaze Fell Quarry (east), Lazonby
- 4.5.2 These sites lie at a maximum of 1km from the quarry area and will not be impinged upon by the extended quarrying of the site.

4.6 ARCHAEOLOGICAL INVESTIGATIONS

4.6.1 In 2003 and 2004, Oxford Archaeology North undertook archaeological field evaluations on land at Low Plains Sand Quarry, Lazonby approximately 2km to the southwest of Blaze Fell. The work was undertaken prior to the extended area of sand extraction within the quarry. Although the 2003 evaluation aimed to locate the position of a circular cropmark observed on aerial photographs, no evidence of any archaeological features were uncovered. The 2004 evaluation was in response to a request from the quarry owners (Tarmac Ltd) who observed circular patches of burnt material when beginning to quarry a new area. Their immediate cessation of the work and the invitation to OAN to return to the site allowed the recovery of a Bronze Age collared urn, complete with human cremation as well as the excavation of what were potentially several other cremation features (OAN 2004).

5. EVALUATION RESULTS

5.1 Introduction

5.1.1 The evaluation consisted of the excavation of three 21m x 1.7m trenches which were machine stripped of the topsoil and subsoil under archaeological supervision, down to the natural substrate. The trenches were subsequently cleaned by hand in order to see any features of archaeological interest that may have been cut into the sandstone substrate. All trenches locations are depicted in Figure 6. Where no features of archaeological interest were located, a trench record sheet was compiled, and context numbers were not issued.

5.2 TRENCH 1

- 5.2.1 Trench 1 was 21m long by 1.70m wide and was orientated in an east-west direction. The trench was positioned towards the north-eastern extent of the proposed extension area. The maximum depth of the trench was approximately 0.50m; the depth did vary throughout the trench due to the undulating bedrock.
- 5.2.2 The substrate encountered at the bottom of the trench varied in colour from pale greys to the more recognisable oranges associated with Lazonby sandstone. This was overlaid by a deposit of greyish brown, loose silty sand, approximately 0.20m in depth, mostly likely formed as a result of the basal sandstone degrading. The machine stripping removed 0.15m of topsoil, the uppermost layer, consisting of dark greyish brown sandy peat. This layer was heavily affected by root action from the heather and grass vegetation above and contained no other inclusions.
- 5.2.3 No finds were recovered from the trench, and there were no archaeological features observed in the sections or base of the trench.

5.3 TRENCH 2

- 5.3.1 Trench 2 was 21m long and 1.70m wide, and orientated in a northwest-southeast direction. It was machine excavated to a maximum depth of 0.32m. The trench was located to the south of Trench 1 in the proposed quarry extension area.
- 5.3.2 The lowest deposit in this trench was again the natural sandstone, visible in the section for up to 0.10m and again variable in colour from greys to reddish oranges. This lay beneath a layer of pale greyish orange very loose sand, most likely the same degraded sandstone deposit noted in Trench 1. The machine stripping removed approximately 0.15m of topsoil, consisting of soft and friable dark brown peat, smooth to touch and moderately compacted, containing no inclusions.
- 5.3.3 No evidence of any archaeological features was found in the base or sections of Trench 2, and no artefacts were recovered during the excavation.

5.4 TRENCH 3

- 5.4.1 Trench 3 was 21m in length by 1.70m wide, orientated in a north-south direction. It was machine excavated to a maximum depth of 0.50m. The trench was located towards the western extent of the proposed development area.
- 5.4.2 The presence of the natural geology again determined the depth of the trench as its solid nature prevented any deeper excavation. Its composition was the same as in the previous two trenches, varying in colour from grey to pinkish red. The subsoil was again, pale grey sand that was loose and friable and contained no inclusions. This is most likely to be the result of the degrading sandstone beneath. The trench was machine stripped of topsoil, which consisted of loose, soft and friable dark grey peaty material that reached a depth of 0.13m.
- 5.4.3 As with the other two trenches, no evidence of any archaeological features or datable artefacts were seen or recovered from this trench.

6. CONCLUSIONS AND RECOMMENDATIONS

6.1 ARCHAEOLOGICAL POTENTIAL

- 6.1.1 In light of the results from the field evaluation the considered potential for prehistoric archaeology should be viewed, at best, as very low. There was certainly prehistoric activity in the area, though there is no definitive evidence for it immediately on Blaze Fell, but the nearest examples are less than a kilometre away and the discovery of Bronze Age cremation urns at Low Plains, Lazonby should serve to confirm that Blaze Fell forms part of a prehistoric landscape.
- 6.1.2 The potential for Roman archaeology is even lower than that for prehistoric remains, despite the close proximity of a Roman road (SMR 4676) to the quarry area. The nearest evidence for concentrated Roman activity is the Roman Fort of *Voreda*, which survives as an earthwork in a pastoral field adjoining the Roman Road only 2km away from Blaze Fell.
- 6.1.3 The early and later medieval remains are entirely represented by the medieval villages of Armathwaite and Lazonby. The villages, though now fairly modern in terms of housing, appear to have been in existence soon after the Norman Conquest judging by place-name evidence. Any evidence of medieval activity at Blaze Fell quarry would be difficult to distinguish or ascertain, and as this is an area that is not suitable for ploughing it is likely that the only activities that occurred on the site would be pastoral grazing which would leave no obvious mark. Within the evaluation trenches, nothing was observed to indicate otherwise.
- 6.1.4 There was also the considered potential for post-medieval archaeology to remain within the quarry extension area, in the form of 19th century explorative quarrying holes. Any waste mounds of stone and any visible prior interventions were avoided during the evaluation in an attempt to cover the lesser or undisturbed ground, however, no information of any date that could be ascribed to human activity in any form was observed or recovered from any of the three trenches.

6.2 RECOMMENDATIONS

- 6.2.1 On the evidence presented above, there is minimal potential for the survival of archaeological deposits, features or stray finds within the area of the proposed quarry extension on Blaze Fell, as highlighted by the results of the fieldwork.
- 6.2.2 In light of this, it is recommended that no further works of an archaeological nature need to be undertaken within the extension area.

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APPENDIX 1 – TABLE OF SITES

Site No.	Source	Name	Туре	Period	NGR
1	SMR 728 NMR_NATINV 11356	Blaze Fell Settlement, Lazonby	Settlement	Prehistoric	NY 49720 42830
2	SMR 3801	Lazonby Unclassified Cropmark	Earthworks	Unknown	NY 49100 42300
3	SMR 5991	Ewan Close Dykes, Lazonby	Dyke	Unknown	NY 50500 43000
4	SMR 10458	Blaze Fell Quarries	Quarry	Post Medieval	NY 49200 43100
5	SMR 10547	Blaze Fell Quarry	Quarry	Post Medieval	NY 50260 43320

APPENDIX 2 - FIGURES

APPENDIX 3 - PLATES



Plate 1: Blaze Fell Settlement (Site 1). Photo Courtesy of CCCHES (Kendal)



Plate 2: Blaze Fell, showing the uneven terrain and waste mounds. Looking north-west.



Plate 3: View along Trench 1 after cleaning, looking southwest.



Plate 4: View along Trench 2 after cleaning, looking west.



Plate 5: View along Trench 3 after cleaning, looking north.



Plate 6: A 1m stretch of the south-east facing section in Trench 1, showing the peaty topsoil and sandstone natural.



Plate 7: A 1m stretch of the south facing section in Trench 2, again showing the stratigraphic sequence of layers.



Plate 8: West facing section in Trench 3, showing shallow topsoil and the broken up sandstone.



Plate 9: Barley millstone roughouts abandoned in quarry.

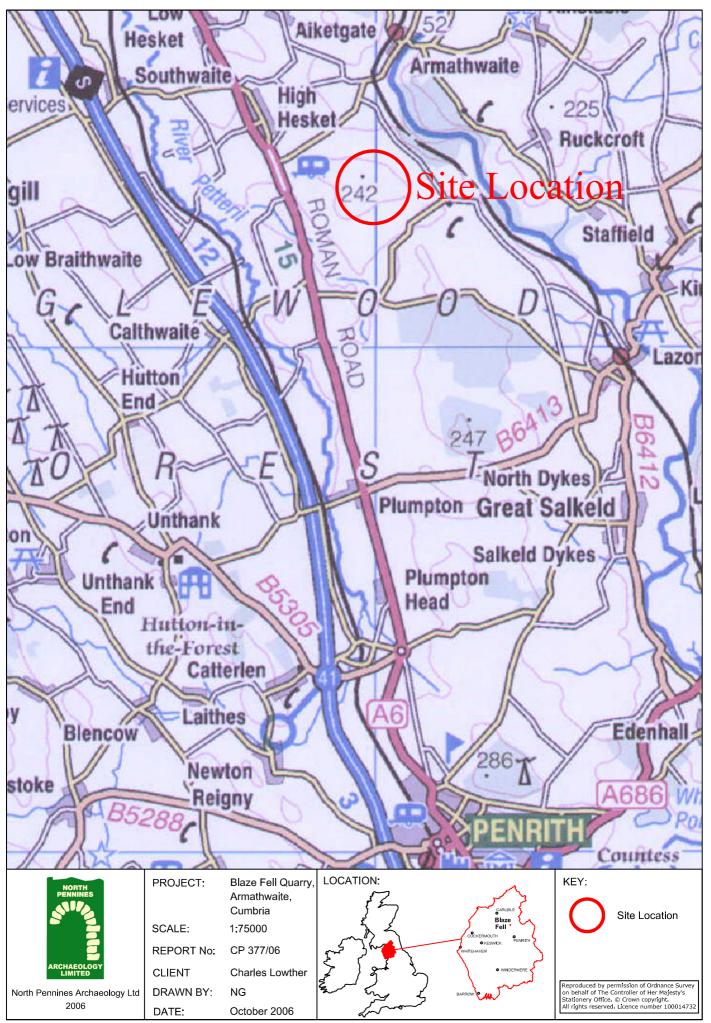


Figure 1 : Site Location

Figure 2: HER Sites Within 1km of Blaze Fell Quarry

Figure 3: Tithe Map for Lazonby Parish 1845, Showing Blaze Fell

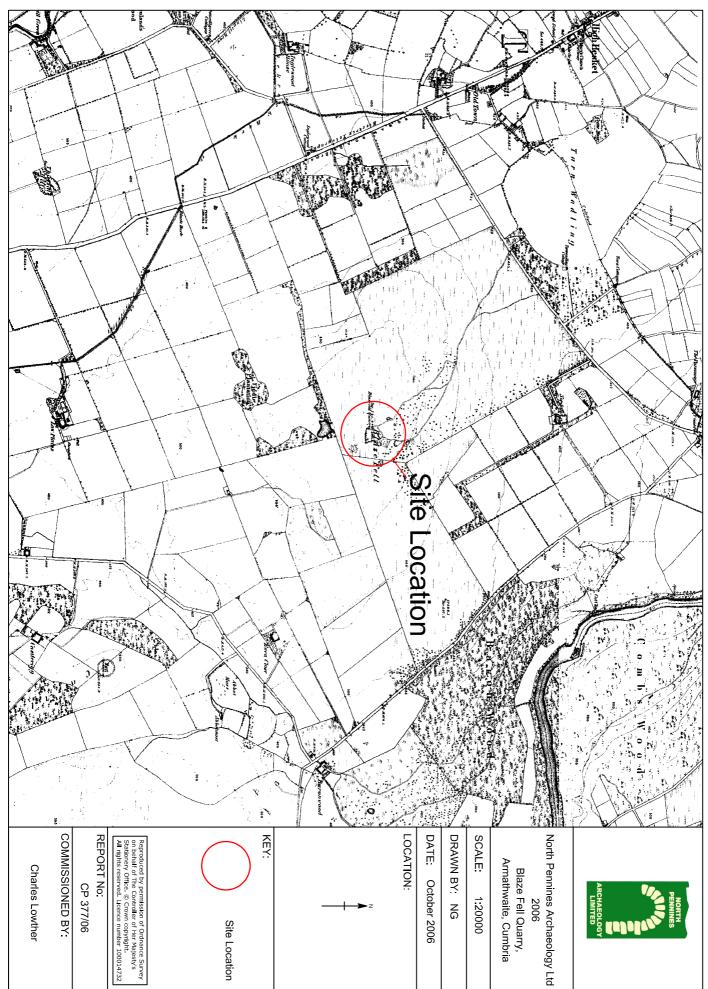


Figure 4: First Edition OS Map for Blaze Fell, 1861

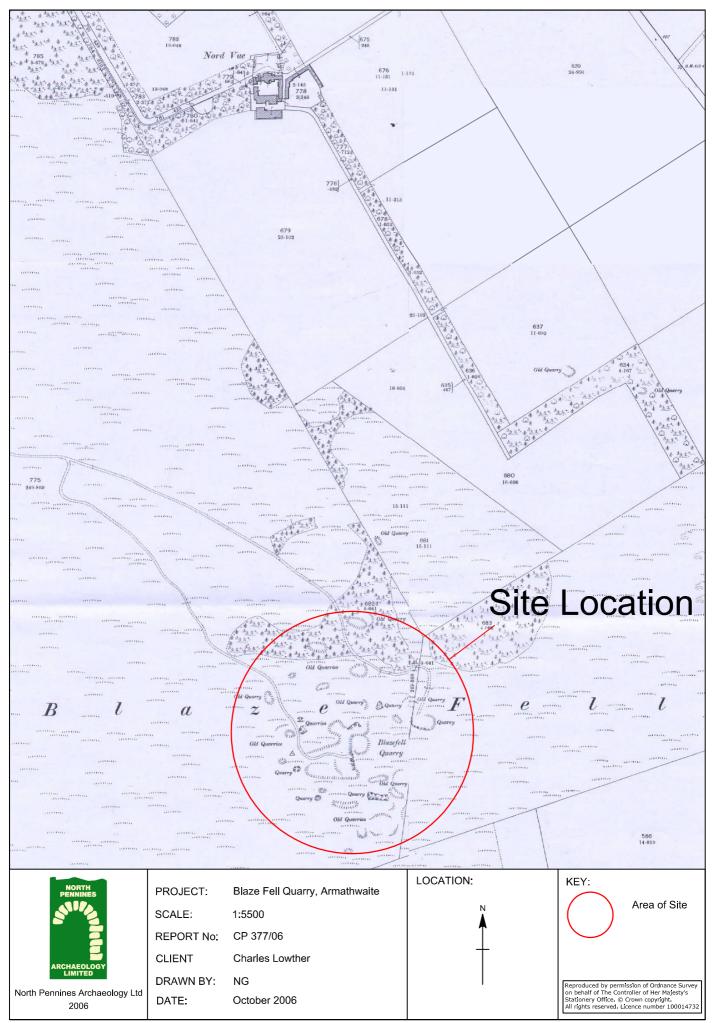


Figure 5 : 2nd Edition OS Map of Blaze Fell, 1898

Figure 6: Trench Locations