



Area of Phase 2 Extraction, Peel Place Quarry, Holmrook, Cumbria

Archaeological Evaluation Report



Oxford Archaeology North

May 2008

**Tarmac Ltd and Tendley
Quarries Ltd**

Issue No: 2008-09/816

OA North Job No: L10002

NGR: NY 06640 01228 (centred)

Planning Application No:

4/04/9011

Document Title: AREA OF PHASE 2 EXTRACTION, PEEL PLACE QUARRY,
HOLMROOK, CUMBRIA

Document Type: Archaeological Evaluation Report

Client Name: Tarmac Ltd and Tendley Quarries Ltd

Issue Number: 2008-09/816

OA Job Number: L10002

Site Code: PP08

National Grid Reference: NY 06640 01228 (centred)


Planning Application No: 4/04/9071

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SUMMARY

Tarmac Ltd and Tendley Quarries Ltd have been given planning consent to undertake the next phase of extraction works, Phase 2, on the western extension at Peel Place Quarry, Holmrook, Cumbria (centred NGR NY 06640 01228), following the submission of an Environmental Impact Assessment (EIA) (planning application reference 4/04/9011). Previous archaeological investigations that have been undertaken include a magnetometer survey, a desk-based assessment, a walkover survey and two phases of evaluation trenching. These have shown that, whilst the soils are not responsive to a magnetometer survey and that there has been little of archaeological significance identified in the limited excavation to date, there is still archaeological potential across the site due to the number of prehistoric spot finds that were identified in the desk-based assessment. As a result, Cumbria County Council's Historic Environment Service (CCCHES) advised the mineral planning service that a condition should be imposed on the planning consent to undertake an archaeological evaluation prior to the commencement of any groundworks for each phase of extraction. Consequently, Oxford Archaeology North (OA North) were commissioned to undertake the required archaeological work in March 2008 and carried out the works in April 2008.

Seventeen evaluation trenches were mechanically excavated to the top of the natural geology, which consisted of a mixture of sands and gravels. The trenches were generally 15-30m long and 2.3m wide and the maximum excavated depth was 1.17m

The majority of the trenches were positioned to randomly sample the outlined area of Phase 2 extraction. However, Trenches 2, 5 and 6 had been positioned to target possible medieval strip field system, but there was no evidence identified within the trenches. Within Trench 9 a small ditch feature, **106**, was identified and is likely to relate to a relict strip field boundary that can be seen on the 1st Edition Ordnance Survey 1865 map (OA North 2004a). Trenches 10 and 17 targeted the holloway that was identified by the walkover survey (*ibid*). Trenches 1, 11, 13 and 15 all revealed linear features; Trench 1 produced a modern ditch, **103**, with a water pipe *in situ*; 11 had a small undulating gully, **108** and **110**, through the centre of the trench, which is undateable due to the lack of any finds; Trench 13 uncovered a ditch, **111**, that was infilled with material of similar composition to topsoil, **100**, and would therefore indicate that it was a relatively modern feature; in Trench 15 a possible furrow, **129**, was identified.

The results of this phase of evaluation trenching appears to demonstrate a low potential for archaeological remains, despite finds from the immediate vicinity suggesting a potential for prehistoric activity in the region. It is considered, therefore, that the groundworks for the extraction will have no impact on any significant archaeological remains, and no further archaeological investigation is recommended prior to development of this area of the site.

ACKNOWLEDGEMENTS

Oxford Archaeology North would like to thank Tarmac Ltd and Tendley Quarries Ltd for commissioning the project, and the on-site quarry staff, especially for their co-operation during the work.

The evaluation was undertaken by Christina Robinson, Dave Maron and Nate Jepson. The report and drawings were undertaken by Christina Robinson. The project was managed by Emily Mercer, who also edited the report.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF PROJECT

1.1.1 Tarmac Ltd and Tendley Quarries Ltd have been given planning consent to undertake the next phase of extraction works on the western extension at Peel Place Quarry, Holmrook, Cumbria (centred NGR NY 06640 01228; Fig 1), following the submission of an Environmental Impact Assessment in 2004 (planning application reference 4/04/9011). Previous archaeological investigations undertaken for the purpose of the Environmental Impact Assessment, including adesk-based assessment, geophysical survey and trial trenching (OA North 2003, 2004a; 2004b; 2005) have shown that, whilst the soils are not responsive to a magnetometer survey and that there has been little of archaeological significance identified in the excavation to date, there is still archaeological potential across the site due to the numerous prehistoric find spots (OA North 2004a) within the vicinity of the site. As a result, Cumbria County Council's Historic Environment Service (CCCHES) advised the mineral planning service that a condition should be imposed on the planning consent to undertake an archaeological evaluation of each proposed phase of extraction prior to the commencement of any groundworks. Consequently, Oxford Archaeology North (OA North) was commissioned to undertake the archaeological work, these were prepared in accordance with the brief issued by CCCHES, required for the second phase of extraction within the western quarry extension (*Appendix 1*).

1.1.2 The evaluation was carried out in April 2008. This report sets out the background to the evaluation, including relevant historical information and any previous archaeological interventions, together with the methodology employed during the fieldwork. The results of the evaluation are discussed and the impact of the proposed development on the known archaeological remains is considered.

1.2 SITE LOCATION, TOPOGRAPHY AND GEOLOGY

1.2.1 The site of the proposed Phase 2 extension to Peel Place Quarry incorporates current pasture land immediately to the north and west of the existing sand and gravel quarry. The outlined Phase 2 Extraction area is positioned within the north-west of the proposed extension and encompasses approximately 1.7ha.

1.2.2 The quarry is located approximately 2km north of the village of Holmrook on the west coast of Cumbria, with Seascale to the north and Ravenglass to the south, and between the main river valleys of the Calder and the Irt (Fig 1). The area around the site is defined as part of the 'West Cumbria Coastal Plain' by the Countryside Commission (1998). This is a region consisting predominantly of lowland river valleys, and the land use comprises 'gently undulating or flat improved pasture' (*op cit*, 25). The site itself sloped gently to the south, and consisted of fields currently under pasture. A Site of Special Scientific Interest (SSSI), in the form of the surviving raised mire of Hallsenna Moor, is located to the immediate south of the previous Phase 1 extraction area, which is located to the south of Phase 2 (*ibid*).

- 1.2.3 The solid geology of the area consists of Permo-Triassic rocks, mainly Steeton Bees Sandstone (*op cit*, 27) and is overlain by glacial deposits, predominantly sand and gravel in the area of the site. The overlying soils in this area are defined by the Ordnance Survey (1983) as part of the Wick 1 series, a typical brown earth.

2. METHODOLOGY

2.1 PROJECT DESIGN

- 2.1.1 At the request of the client, OA North submitted a project design (*Appendix 2*) for an archaeological evaluation, prepared in accordance with a written brief from CCCHES (*Appendix 1*). Following approval of the project design by CCCHES, and acceptance by the client, OA North was commissioned to undertake the work. The project design was later revised due to the occurrence of a water main crossing the site, which required a 15m stand-off area either side. This reduced the size of the area from 1.7ha to 1.44ha. This amendment was agreed to by CCCHES.
- 2.1.2 The work complied with the project design and with current legislation and accepted best practice, including the Code of Conduct and the relevant professional standards of the Institute of Field Archaeologists (IFA).

2.2 EVALUATION TRENCHING

- 2.2.1 The programme of trial trenching was undertaken to establish the presence or absence of any previously known (i.e. possible medieval strip fields and a holloway (*Section 2.3*, above)) and unknown archaeological deposits within the outlined Phase 2 extraction area. Any archaeological deposits were to be then investigated to determine their date, nature, depth and quality of preservation, and from this it would be possible to assess whether any further work will be required on site prior to commencement of the extraction works. The evaluation needed to examine a minimum of 5% of the total available area. With the reduction in available area to 1.44ha (*see 2.1.1*, above), this equated to 17 trenches measuring 15-30m in length, with the width of 2.3 m determined by size of the available ditching bucket available. Trenches 2, 5, 6, 10 and 17 targeted the potential archaeological features, but the remaining trenches were randomly positioned in order to adequately assess the outlined area.
- 2.2.2 The topsoil was removed by machine (fitted with a toothless ditching bucket) under archaeological supervision to either the surface of the first significant archaeological deposit or the interface with the underlying geology, whichever was encountered first. The eventual depth of the trenches did not exceed 1.17m, which was within health and safety constraints. All trenches were excavated in a stratigraphical manner, whether by machine or manually. Investigation of deposits was exclusively manual, undertaken with a view to avoiding damage to any archaeological features that appeared worthy of preservation *in situ*. Trenches were located by the use of a Leica 1200, GPS (Global Positioning System). The equipment is accurate to ± 0.01 m, altitude information was referenced with respect to Ordnance Survey Datum. This information was plotted onto an updated digital plan (Fig 2) of the extraction area.
- 2.2.3 All information identified in the course of the site works was recorded stratigraphically, using a system, adapted from that used by Centre for

Archaeology Service of English Heritage, with sufficient pictorial record (plans, sections and both black and white and colour photographs) to identify and illustrate individual features. Primary records were available for inspection at all times.

- 2.2.4 Results of all field investigations were recorded on *pro forma* context sheets. The site archive includes both a photographic record and accurate large scale plans and sections at an appropriate scale (1:50, 1:20 and 1:10). All artefacts and ecofacts were recorded using the same system, and will be handled and stored according to standard practice (following current Institute of Field Archaeologists guidelines) in order to minimise deterioration.

2.3 ENVIRONMENTAL ASSESSMENT

- 2.3.1 One environmental bulk sample was taken from a secure context (**117**), the primary fill of a hollow way, **119**, in Trench 10. From this, a six litre bulk sample was taken and processed for the assessment of charred and waterlogged plant remains.

- 2.3.2 The sample was hand-floated, the flot was collected on a 250 micron mesh and air dried. The flot was scanned with a Leica MZ6 stereo microscope and the plant material was recorded and provisionally identified. The data are shown on Table 1 (*Section 4.3*). Botanical nomenclature follows Stace (1997). Plant remains were scored on a scale of abundance of 1-4, where 1 is rare (up to 5 items) and 4 is abundant (>100 items). The components of the matrix were also noted.

2.4 ARCHIVE

- 2.4.1 A full professional archive has been compiled in accordance with the project design (*Appendix 2*), and in accordance with current English Heritage guidelines (English Heritage 1991). The paper and digital archive will be deposited in the County Record Office in Whitehaven, and copies of the report will be forwarded to the HER in Kendal, on completion of the project.

3. HISTORICAL BACKGROUND

3.1 INTRODUCTION

- 3.1.1 **Introduction:** the historical and archaeological background is principally compiled through secondary sources and previous phases of archaeological investigation, and is an overview of the information detailed in the desk-based assessment (OA North 2004a).
- 3.1.2 **Mesolithic Period:** previous investigations on the West Cumbrian Coastal Plain have shown that this area was a focus of late Mesolithic and early Neolithic activity. The landscape characteristic of low sandhills suggests a potential for prehistoric activity, as typified by other sites in the North West. Evidence for Mesolithic settlement is well represented from St Bees to Walney Island. Extensive fieldwalking at Drigg (Cherry and Cherry 1985), to the south-west of the study area, produced evidence of early prehistoric lithic assemblages.
- 3.1.3 **Neolithic Period:** there appears to be a degree of continuity between the end of the Mesolithic period and the start of the Neolithic period, with the flint artefacts being indistinguishable (Cherry and Cherry 2002). The Neolithic period was, however, a time of significant social change, with the introduction of ceramics, large funerary and ritual monuments, such as the reconstructed stone circle at Grey Croft near Seascale (Fletcher 1957, 1), more intensive agricultural practices, and the large-scale production of polished stone axes. These axes are found throughout Cumbria and were traded across Britain and into Europe (Rollinson 1967). In the general area, much of the early Neolithic activity is defined through the presence of casual findspots of polished stone axes, such as the Halsenna axe found to the west of the site (Crawford and George 1983). The presence of these tools suggests intensification of activities including hunting and tree clearance, although some of the axes were apparently never used and may have been treated as prestige items. Flintwork continued to be dominated by beach pebbles, resulting in small artefacts such as the leaf-shaped arrowheads from the sandhill sites at Drigg (Hodgkinson *et al* 2000, 75). Within the localised area, in the parish of Gosforth, a small but significant assemblage of lithic scatters has been found. These have a less dense distribution than those from the prominent raised beaches to the west (Cherry 1967, 5), and probably reflect the exploitation of the resources of the basin mires to supplement the exploitation of the coast (Hodgkinson *et al* 2000, 69).
- 3.1.4 **Bronze Age Period:** the evidence of clearance activity and burial cairns on the upland margins of the West Cumbrian Plain suggests an expansion of settlement during the Bronze Age (Quartermaine and Leech forthcoming). However, the large amount of lithic materials recovered through extensive field walking in the area suggests that much of the lowland settlement pattern was similar to the Mesolithic. The Drigg dunes in particular have produced large quantities of flint, predominantly beach pebbles, including barbed and tanged arrowheads, from an organic layer revealed by sea erosion

(Hodgkinson *et al* 2000, 77). Also eroding out of the cliff was evidence for a prehistoric structure (possibly a burnt mound), which has been radiocarbon-dated to the late Neolithic or early Bronze Age (LUAU 2001, 7). Further to the east, and inland at Holmrook, a middle Bronze Age funerary urn and cremation were discovered, and there was also a central burial cairn with cremation and Bronze Age artefacts recovered at Grey Croft stone circle (Fletcher 1957).

- 3.1.5 **Iron Age Period:** evidence for Iron Age activity on the West Cumbrian Coastal Plain is fairly scarce. Eskmeals, to the west of the site, has produced artefacts of a possible Iron Age date consisting of a pair of blue beads found together with an earlier flint assemblage (Hodgkinson *et al* 2000). There is some antiquarian evidence for the recovery of a bog body from within Seascale Moss in the nineteenth century, which could have been typologically dated to the Iron Age or Romano-British periods (Turner 1989, 21). This limited evidence is not sufficient to prove habitation on the sandhills during this period (Hodgkinson *et al* 2000, 77).
- 3.1.6 **Romano-British Period:** Roman activity in this area was concentrated at Ravenglass (Potter 1979) where a Roman fort and baths were constructed in the mid-Hadrianic period and used for some considerable time. Further evidence of activity in this area is generally limited to scattered finds, consisting of coins and small artefacts, such as the single coin of Nerva (AD 96-98) discovered immediately north of the site (Collingwood 1923). There is evidence of a possible local iron manufacturing industry and associated pottery at Eskmeals, and possible small-scale encampments within the sandhills at Drigg (Hodgkinson *et al* 2000, 78).
- 3.1.7 **Early Medieval Period:** due to the lack of surviving records there is no documentary evidence of activity within the study area between the end of the Roman period and the twelfth century. The main evidence lies with place-names; Seascales is rooted in Old Norse *skali* and *erg*, implying sheilings or shelters by the sea (Parker 1904, 38). At Devoke Water to the south-east, however, pollen evidence indicated episodes of clearance extending into the eighth and ninth centuries (Pennington 1970: Quartermaine and Leech forthcoming).
- 3.1.8 The West Cumbrian Coastal Plain is significant for the large number of pre-Conquest stone crosses, especially to the north at Gosforth (Rollinson 1996). The Northumbrian cross at Iton is regarded as 'one of the finest examples of ninth century sculpture in the country', together with the greatest of the Anglo-Scandinavian crosses at Gosforth (Bailey 1980; Bailey and Cramp 1988).
- 3.1.9 **Later Medieval Period:** monastic records are the first documented evidence of the population in the area, and show the progressing expansion of settlements into the upland areas. Evidence of peat extraction can be shown from these sources, and from later manorial records (Hodgkinson *et al* 2000, 79).
- 3.1.10 Halsenna, to the west of the proposed extraction site, is first recorded in 1225 and the assize rolls of 1278 as 'Sevenhoues'. It is also recorded variously as 'Sewenhauis' in 1285, and 'Sevenhoghes' in 1292. By the seventeenth century

it is known as ‘*Halseonhouse*’ (1662) and ‘*Hall Senhouse*’ (1668) (Armstrong *et al* 1950, 394). Peel Place was also first named in a deed of 1365 as ‘*Pyel*’ (*ibid*), which would normally indicate the presence of a medieval manor in the area; however, there is no other evidence of such a manor. The hamlet and the now disappeared medieval hall at Hallsenna are thought to have been the ancestral home of the notable Senhouse family. For a time they also owned the manor of Low Bolton in which the study area is found, and had a 500 year association with the manor of Seascale further to the west (Parker 1904, 39).

- 3.1.11 From within the nearby vicinity, the site of the Hallsenna/Percy cross is known. It was found re-used as masonry in a shed within the hamlet of Hallsenna and was a boundary cross that demarcated the boundaries between land owned by the Percy family, Barons of Egremont, and land owned by Furness Abbey, some time between 1414 and 1537 (Parker 1909, 91). There is a long tradition of boundary disputes in the area, with the place-name *Threapland Gate* to the west of the study area meaning ‘the road to the disputed lands’ (Parker 1902, 98), although this may not refer to the boundary mentioned above.

3.2 ARCHAEOLOGICAL INTERVENTIONS

- 3.2.1 The site lies immediately to the west of an area previously investigated in four distinct phases, prior to the extension to the quarry detailed in the EIA in 2004. The first three phases comprised evaluation (from 1997-99) by OA North, in their former guise as Lancaster University Archaeological Unit (LUAU), in which 24 trenches were excavated. No significant archaeological deposits or features were revealed, although sieving retrieved an iron nail and a number of post-medieval and modern ceramic artefacts. The fourth phase comprised a low level desk-based assessment and evaluation (OA North 2003), which revealed three modern gullies and two tree throws, evidence of a post-medieval agricultural landscape. Several pieces of modern pottery and a fragment of clay pipe were also retrieved from the topsoil. No flint was recovered and no features deemed to be of archaeological significance were revealed.
- 3.2.2 During 2004, OA North carried out an archaeological investigation to inform the EIA for the proposed western extension, which includes the Phase 2 extraction area. This consisted initially of an enhanced and updated desk-based assessment and geophysical survey, and trial trenching targeting geophysical anomalies (OA North 2004a; 2004b).
- 3.2.3 The desk-based assessment (OA North 2004a) for the Phase 1 extraction area immediately to the south identified 19 sites of archaeological interest within the study area. None of the sites were to be affected by the proposed development, but the area was considered to have a high archaeological potential due to the significant quantities of prehistoric worked flint recovered from an extensive programme of fieldwalking in the vicinity and known findspots (*Section 2.2*, above). The assessment provided evidence of occupation during the Roman, medieval and post-medieval periods; in particular, the Roman coin located to the immediate north of the development

(Site **06**; *ibid*); the medieval cross fragment (Site **16**; *ibid*); and the relict strip fields associated with the settlement of Hallsenna, some of which lie within the Phase 2 extraction area targeted during the evaluation (Trenches 2, 5 and 6).

- 3.2.4 The walkover survey (OA North 2004a) identified four previously unrecorded sites, consisting of the remains of landscape features, including the remains of the relict medieval strip-field system, a trackway, two gate posts and a disused holloway. The holloway was targeted by the Phase 2 extraction evaluation trenches (Trenches 10 and 17).
- 3.2.5 The geophysical survey showed a relatively low magnetic response in general (Stratascan Ltd 2004). However, a number of faint linear anomalies seen in the magnetometer results were considered to be of archaeological potential, particularly given the prehistoric potential of the area, and were investigated with evaluation trenching. Only one archaeological feature, a ditch, was identified during trenching that had not been identified in the geophysical survey results, containing pottery evidence dated to between the late seventeenth and early twentieth centuries. It was interpreted as a relict field boundary, and correlated with a field boundary recorded on the Ordnance Survey first edition map of 1865 (OA North 2004a; 2004b).
- 3.2.6 The remaining geophysical anomalies were not observed during trenching, although a land drain may account for one of them (OA North 2004b), and it is likely that the variable geological conditions across the site may account for this. The results of the evaluation trenching showed that the low magnetic properties of the overlying soils limited the usefulness of magnetometry.
- 3.2.7 During 2005 a series of 10 evaluation trenches (OA North 2005) were investigated to the south-west of the outlined Phase 2 extraction, for the purposes of the Phase 1 extraction. No archaeological remains were uncovered. A composite of finds of pottery, glass, flint and metal were retrieved from the topsoil. The two potential waste flint chunks recovered only suggested small-scale knapping within the area, but it is impossible to date this activity closely. The rest of the finds were post-medieval in date and appeared to be entirely domestic. These finds are likely to be a result of manuring practice across the site (*ibid*).

4. FIELDWORK RESULTS

4.1 INTRODUCTION

- 4.1.1 Seventeen trenches were excavated and recorded using OA North *pro forma* sheets. Three of the trenches targeted the possible medieval relict strip-field system (Trenches 2, 5 and 6) and a further two (Trenches 10 and 17) targeted the holloway that had been identified in the walkover survey (OA North 2004a).
- 4.1.2 The geology of the trenches varied slightly across the site. The underlying geology was a highly mixed deposit of interleaved sands and gravels. There were sub-rounded pebbles and cobbles throughout and numerous stone types were evident, including quartz pebbles. A complete list of the contexts is given in *Appendix 3*. No finds were retrieved from any of the archaeological features and the finds from the topsoil were discarded as they provided no contrary evidence to the evaluation undertaken prior to the Phase 1 extraction of post-medieval manuring (OA North 2005).

4.2 TRENCH DESCRIPTIONS

- 4.2.1 **Trench 1:** was aligned north-west/south-east and measured 30m by 2.3m. It was excavated to a maximum depth of 0.48m. The general stratigraphy comprised 0.34m-0.48m of topsoil, **100**, over natural sands and gravels, **101**. No archaeology was identified but the north-west edge of a ditch, **103**, was exposed at the south-east end of the trench. A modern blue water pipe was found *in situ* within its fill, **102** (Fig 2).
- 4.2.2 **Trench 2:** was aligned north-north-east/south-south-west and measured 30m by 2.3m. It was excavated to a maximum depth of 0.4m. The general stratigraphy comprised 0.25m-0.4m of topsoil, **100**, over natural sands and gravels, **101**. No archaeological deposits or features were revealed. This trench was aimed at locating any evidence of possible medieval strip-fields, but no evidence was found for them.
- 4.2.3 **Trench 3:** was aligned north-west/south-east and measured 30m by 2.3m. It was excavated to a maximum depth of 0.45m. The general stratigraphy comprised 0.43m-0.45m of topsoil, **100**, over natural sands and gravels, **101**. No archaeological deposits or features were revealed.
- 4.2.4 **Trench 4:** was aligned north-north-east/south-south-west and measured 15m by 2.3m. It was excavated to a depth of 0.37m. The general stratigraphy comprised 0.37m of topsoil, **100**, over natural sands and gravels, **101**. No archaeological deposits or features were revealed.
- 4.2.5 **Trench 5:** was aligned north-north-east/south-south-west and measured 15m by 2.3m. It was excavated to a depth of 0.4m. The general stratigraphy comprised 0.4m of topsoil, **100**, over natural sands and gravels, **101**. No archaeological deposits or features were revealed. As with Trench 2 this trench

was targeting possible medieval strip-fields, but no evidence was found for them.

- 4.2.6 **Trench 6:** was aligned north-north-east/south-south-west and measured 15m by 2.3m. It was excavated to a maximum depth of 0.39m. The general stratigraphy comprised 0.32m-0.39m of topsoil, **100**, over natural sands and gravels, **101**. No archaeological deposits or features were revealed. This trench was targeting possible medieval strip-fields, as in Trenches 2 and 5, but no evidence was found for them.
- 4.2.7 **Trench 7:** was aligned north-north-east/south-south-west and measured 15m by 2.3m. It was excavated to a depth of 0.38m. The general stratigraphy comprised 0.38m of topsoil, **100**, over natural sands and gravels, **101**. No archaeological deposits or features were revealed.
- 4.2.8 **Trench 8:** was aligned north-west/south-east and measured 30m by 2.3m. It was excavated to a maximum depth of 0.32m. The general stratigraphy comprised 0.32m of topsoil, **100**, over natural sands and gravels, **101**. No archaeological deposits or features were revealed (see Plate 1).
- 4.2.9 **Trench 9:** was aligned north-north-west/south-south-east and measured 15m by 2.3m. It was excavated to a maximum depth of 0.35m. The general stratigraphy comprised 0.3m-0.35m of topsoil, **100**, over natural sands and gravels, **101**. A single linear ditch, **106**, (Plate 2 and Fig 6) was revealed at the south-south-east end of the trench measuring 1.44m wide and 0.65m deep and ran north-west/south-east with two fills (**104** and **105**). The location of this feature would indicate that it was a relict boundary from the strip-field system seen on the 1st Edition Ordnance Survey map 1865 (Fig 3).
- 4.2.10 **Trench 10:** was aligned north-west/south-east and measured 23.4m by 2.3m. It was excavated to a maximum depth of 1.17m and was positioned to investigate the surviving earthworks of the holloway, **119** (Plate 3 and Fig 2). The majority of the trenches stratigraphy comprised 0.35m-0.68m of topsoil, **100**, over natural sands and gravels, **101**. The holloway, **119**, was located at the south-east end of the trench and measured 5.1m wide, from the external limits of the bounding embankments, and 1.17m deep. The holloway was seen to have two definite phases; the first was the cut for the holloway, **119**, with a subsequent natural build up of water-lain deposits, **117**, that measured 0.12m deep. These were sampled to assess the potential for environmental evidence (Section 4.3, below). These deposits appear to be localised and may have been a boggy patch within the holloway. Overlying **117** was a deposit of stones, **116**, laid to form a hard surface, that measured 0.4m deep. This was then followed by another build up of a deposit, **115**, that appears to be an in-wash of materials from the surrounding area, measuring 0.12m deep. The south-east corner (**118**) of this first phase has been heavily disturbed by roots, so distinction between the fills and the bank (**112**) are non-existent and have been extrapolated. However, due to the positioning of the cut (**119**) it would suggest that the embankments, **112** and **113**, were part of a second phase. This comprised two banks (**112** and **113** east and west respectively) constructed with a single deposit. These varied in height from 0.62m for bank **112** and 0.92m for bank **113**. Once the banks had been constructed, a cobbled surface

with kerb stones, **114**, was laid in-between them. These kerb stones may have been to prevent the erosion of the bank material into the holloway. The topsoil (**100**) overlay all of these deposits (Fig 4).

- 4.2.11 **Trench 11:** was aligned north-west/south-east and measured 30m by 2.3m. It was excavated to a depth of 0.3m. The general stratigraphy comprised 0.3m of topsoil, **100**, over natural sands and gravels, **101**. A single linear gully feature, **108**, that runs the entire length of the trench, running north-west/south-east, measured 0.3m wide and 0.01m-0.1m in depth with an undulating base (Fig 2). Towards the north of the trench the feature becomes so shallow so as to become a stain in **101**. The varying depth and the shallowness of the feature towards the north-west end indicates that truncation has occurred through ploughing.
- 4.2.12 **Trench 12:** was aligned north-west/south-east and measured 30m by 2.3m. It was excavated to a maximum depth of 0.4m. The general stratigraphy comprised 0.28m-0.4m of topsoil, **100**, over natural sands and gravels, **101**. No archaeological deposits or features were revealed.
- 4.2.13 **Trench 13:** was aligned north-east/south-west and measured 30m by 2.3m. It was excavated to a maximum depth of 0.66m. The general stratigraphy comprised 0.4m-0.66m of topsoil, **100**, over natural sands and gravels, **101**. A single linear ditch, **111**, was located at the north-eastern end of the trench at a depth of 0.56m, running north-west/south-east and measured 0.83m wide and 0.12m deep. This feature was filled with deposit, **130**, very similar in composition to topsoil (**100**), suggesting that it is a relatively modern feature (Fig 2).
- 4.2.14 **Trench 14:** was aligned north-east/south-west and measured 30m by 2.3m. It was excavated to a maximum depth of 0.4m. The general stratigraphy comprised 0.3m-0.4m of topsoil, **100**, over natural sands and gravels, **101**. No archaeological deposits or features were revealed.
- 4.2.15 **Trench 15:** was aligned north-north-west/south-south-east and measured 30m by 2.3m. It was excavated to a depth of 0.35m. The general stratigraphy comprised 0.35m of topsoil, **100**, over natural sands and gravels, **101**. At the southern end of the trench a furrow, **129**, was identified, which measured 0.65m wide and 0.09m deep, was aligned north-west/south-east, and was filled by **128** (Fig 2). This furrow may relate to the medieval strip-field system which had been identified in the desk-based assessment and walkover survey (OA North 2004a).
- 4.2.16 **Trench 16:** was aligned north-north-east/south-south-west and measured 15m by 2.3m. It was excavated to a maximum depth of 0.3m. The general stratigraphy comprised 0.26m-0.3m of topsoil, **100**, over natural sands and gravel, **101**. No archaeological deposits or features were revealed.
- 4.2.17 **Trench 17:** was aligned north-west/south-east and measured 30m on plan by 2.3m. It was excavated to a maximum depth of 1.11m. The majority of the general stratigraphy comprised 0.3m-0.5m of topsoil, **100**, over natural sands and gravels, **101**. This trench was positioned to investigate the surviving

remains of the holloway, **127** (Plate 4 Fig 2). The holloway, **127**, was located at the south-east end of the trench and measured 5.49m wide, from the external limits of the banks, **121** and **122** and 1.11m deep. The holloway in this section concurs with that in Trench 10, in that there were two phases; similarly, there is a cut for the holloway, **127**, but this appears to have two depressions indicating that the holloway had been used for vehicle access and wheel ruts had formed (see Fig 5). These depressions were then deliberately backfilled with a stony layer, **126**, that would have made a hard compact surface, measuring 0.2m deep and 2.5m wide. The holloway subsequently silted up naturally, and two deposits, **124** and **125**, formed at the outer edges and measured to a maximum of 0.16m deep and 1.2m apart. The second phase, as with Trench 10, has the banks, **121** and **122**, overlying the cut (**127**) of the first phase of the holloway. Both of the banks (**121** and **122**) have been constructed from a single deposition of material and vary in height from 0.94m for bank **121** and 1.05m for bank **122**. In Trench 10, a cobbled surface with kerb stones (**114**) were revealed, but in Trench 17 only the kerb stones were found and partially embedded into bank **121**. The holloway then evidently started to silt up and fill with vegetation to form fill **123**. The topsoil (**100**) overlay all of these deposits.

4.3 ENVIRONMENTAL RESULTS

4.3.1 The results of the assessment are shown in Table 1, below. No charred or waterlogged plant remains were recorded in the sample. The matrix consisted of modern roots and leaf fragments, and a few coal fragments. Consequently, there is no potential for further analysis.

CTXT	FEATURE	FLOT VOL. (ML)	FLOT DESCRIPTION	PLANT REMAINS
117	Primary fill of holloway 119	300	Modern roots (2), coal (2), modern leaf fragments (2), quartz grains (4)	None

Table 1: Assessment of charred and waterlogged plant remains. *Plants scored on a scale of 1-4, where 1 is rare (up to 5 items) and 4 is abundant (>100 items).*

5. CONCLUSION

5.1 DISCUSSION

- 5.1.1 The majority of the trenches in this programme of evaluation for the Phase 2 extraction area revealed no archaeological deposits or features. Five of the trenches (1, 9, 11, 13 and 15), however, contained varying linear features. The ditch, **103**, in Trench 1 was modern in date due to the *in situ* water pipe. In Trench 9, the ditch, **106**, appeared to be a removed relict field boundary that was evident on the 1st Edition Ordnance Survey map, 1865 (Fig 3). The undulating gully, **108** and **110**, in Trench 11 is unknown in date and use. Within Trench 13, a linear ditch, **111**, filled with deposit, **130**, very similar to the topsoil, suggests that it is a modern feature and has no correlation with the relict strip-field system. The probable furrow, **129**, identified in Trench 15 is likely to be related to the relict strip-field system and could possibly date to the medieval period.
- 5.1.2 The holloway, identified by the walkover survey (OA North 2004a), and bounding the south-east side of the site, was investigated with two trenches, Trenches 10 and 17. This revealed that it was constructed in two main phases, although there are some slight variations between the two trenches. The first phase consisted of the 'cut' of the holloway, **119** and **127**, but in Trench 17 the cut (**127**) had evidence of vehicle usage in the form of wheel ruts. The holloway then started to infill; in Trench 10 there were a series of water-lain deposits, **117**, which is likely to be an area of localised puddling. This was not evident in Trench 17. Deposit **117** was subsequently covered with a layer of stones, making a compact and dry surface (**116**) and (**126**) over this was a build up of silts, **115**, **124** and **125**, that have in-washed from the surrounding area. The second phase shows that banks (**112**, **113**, **121** and **122**) have been constructed on top of the edges of the original 'cut' for the holloway and thus decreasing the width of the holloway. There is evidence in both trenches that another surface was then laid of rough cobbles and kerb stones, **114**, but in Trench 17 only one of the kerb stones survived. Also in Trench 17, a large build up of humic matter, **123**, had accumulated in the centre of the holloway with topsoil, **100**, covering both of the banks (**121** and **122**), although in Trench 10 both the banks (**112** and **113**) and the actual holloway have been overlain by topsoil, **100**. With no datable evidence it is hard to date the origin of this feature precisely, but evidence from the desk-based assessment and walkover survey (OA North 2004a) would suggest that it was contemporary with the medieval relict strip-field system.
- 5.1.3 The evidence collected would suggest that the landscape today is largely similar to that in the medieval period, showing evidence of the original agricultural layout of the land with relict strip-field system and associated features, such as the holloway.

5.2 IMPACT

- 5.2.1 The results of the programme of evaluation trenching appears to demonstrate the low potential for archaeological remains, despite finds from the immediate vicinity suggesting a potential for prehistoric activity in the region. However, within the outlined Phase 2 extraction area little evidence was recovered. It is considered, therefore, that the groundworks for the extraction will have no significant impact.

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7. ILLUSTRATIONS

7.1 FIGURES

Figure 1: Location Map and western extension to quarry (ref 4/04/9011)

Figure 2: Plan of evaluation trenches

Figure 3: 1st Edition Ordnance Survey map 1865 with trench and feature locations

Figure 4: Section of holloway **119**

Figure 5: Section of holloway **127**

Figure 6: Section of removed boundary **106**

7.2 PLATES

Plate 1: Trench 8, general shot of an empty trench

Plate 2: Trench 9, section of removed strip field boundary **106**

Plate 3: Trench 10, section of holloway **119**

Plate 4: Trench 17, section of holloway **127**

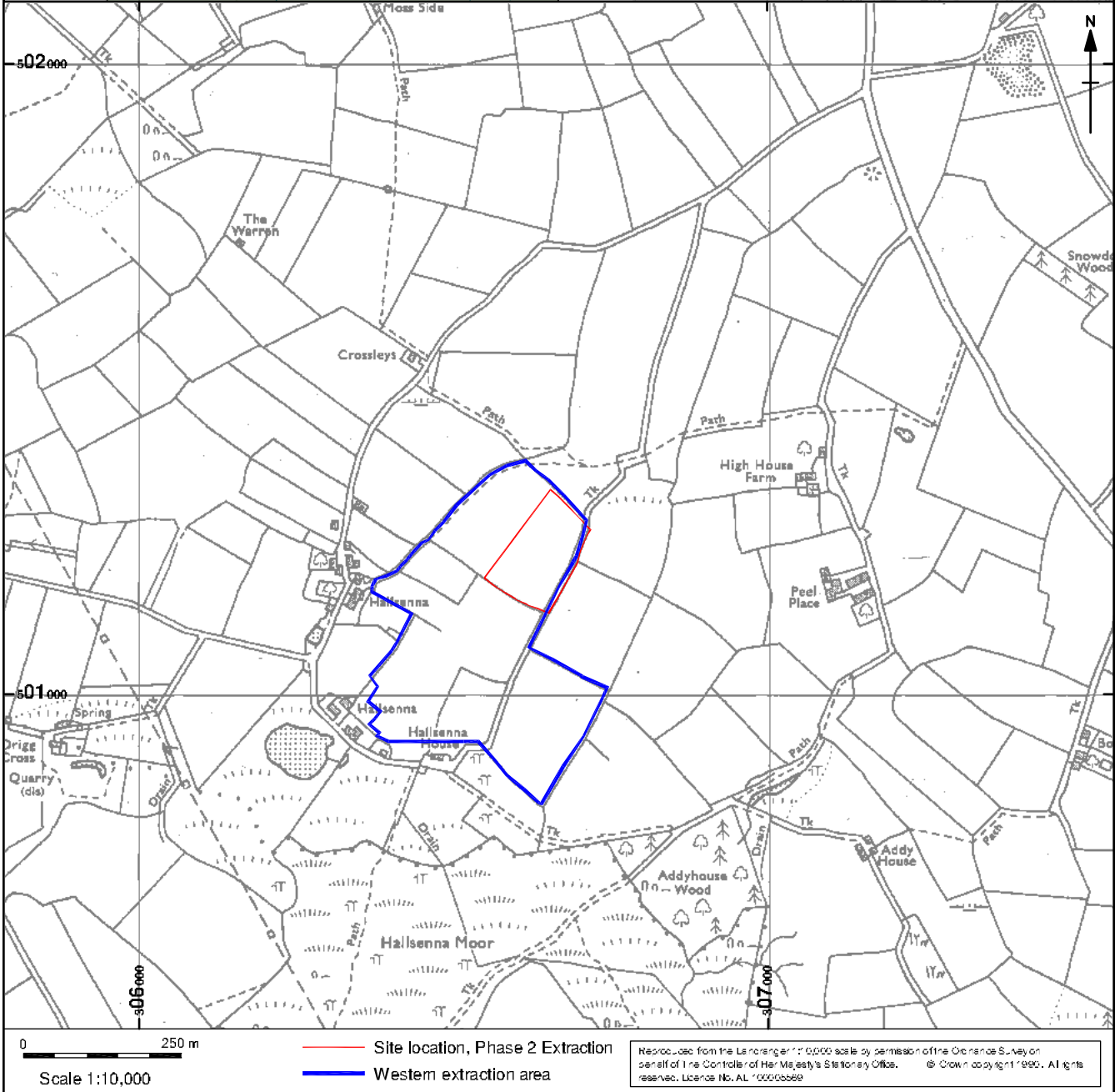
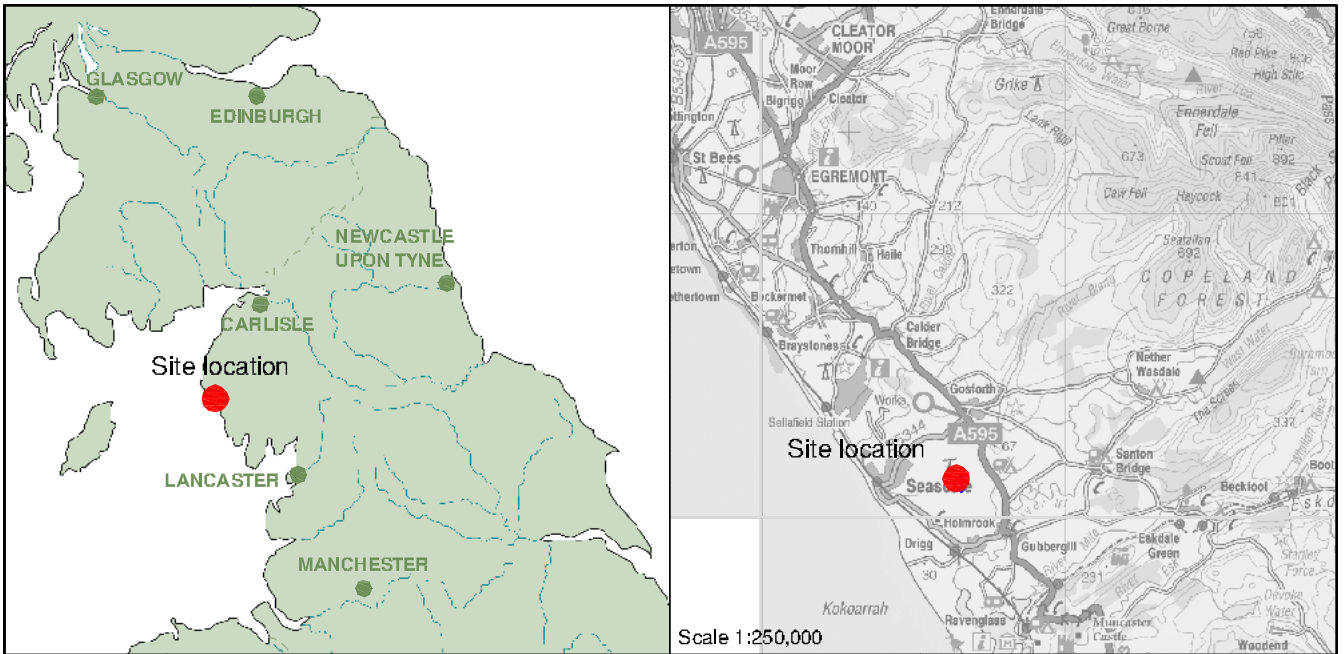


Figure 1: Site location

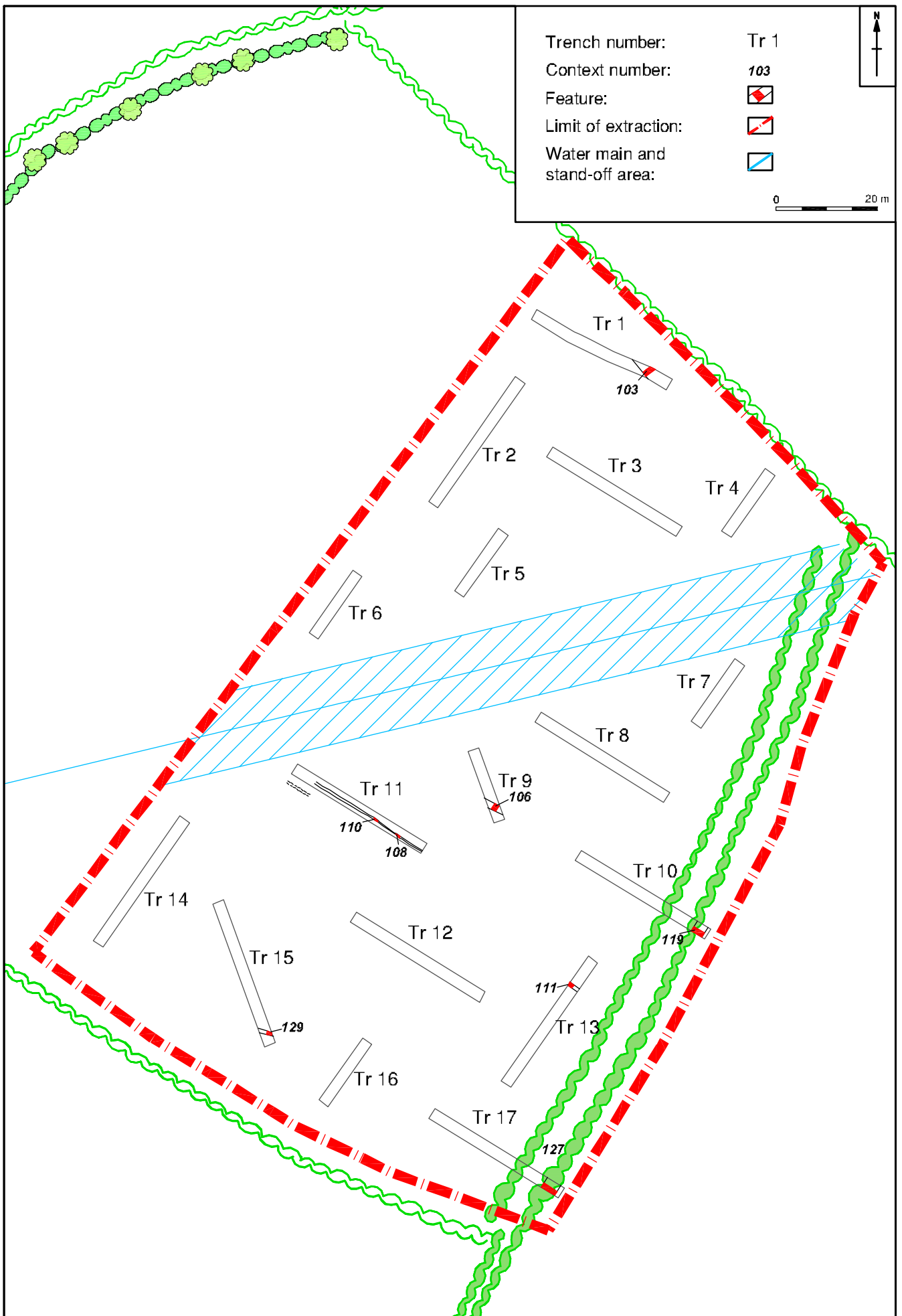


Figure 2: Plan of evaluation trenches and feature location

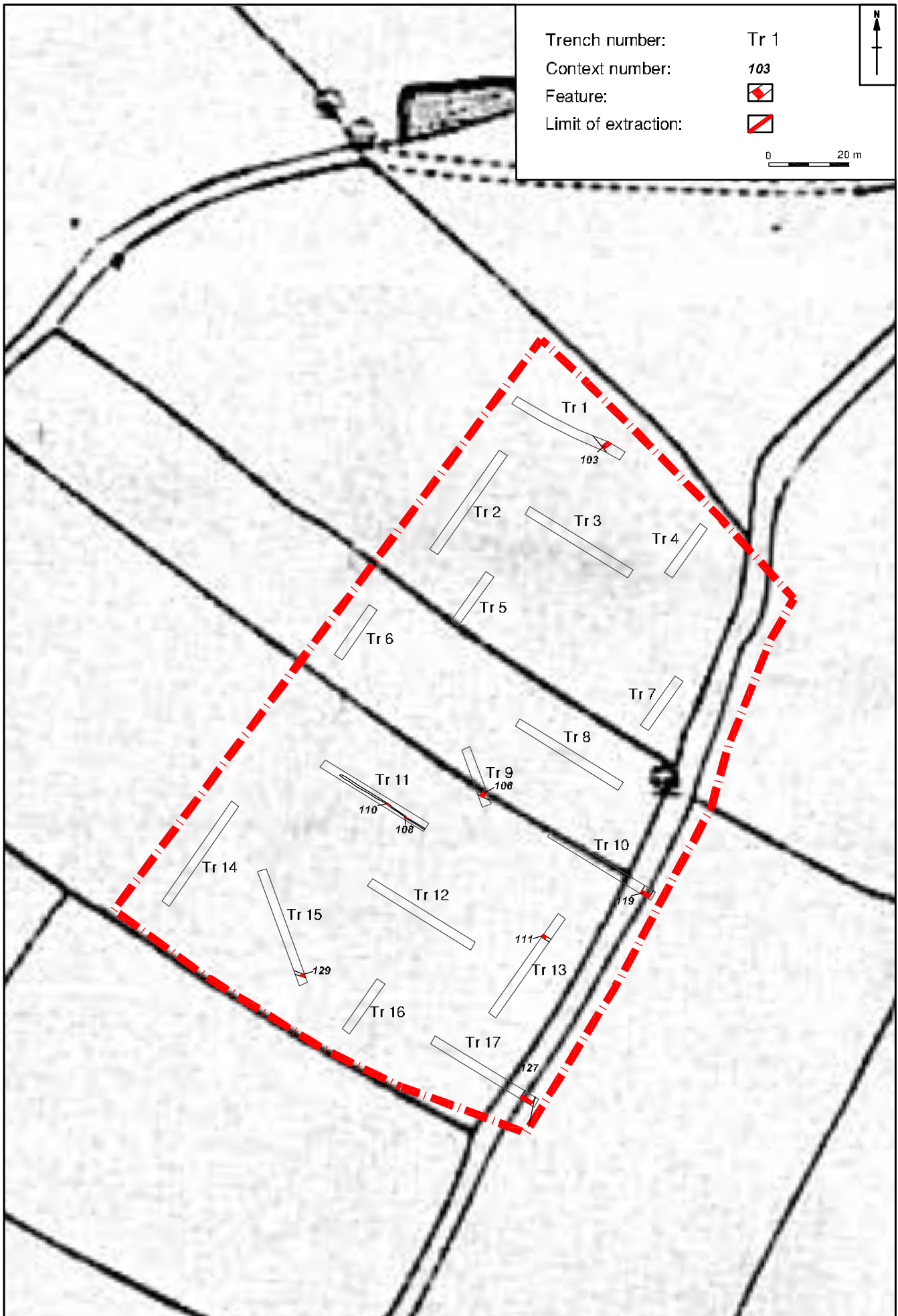


Figure 3: 1st Edition Ordnance Survey map, 1865, with trench and feature locations

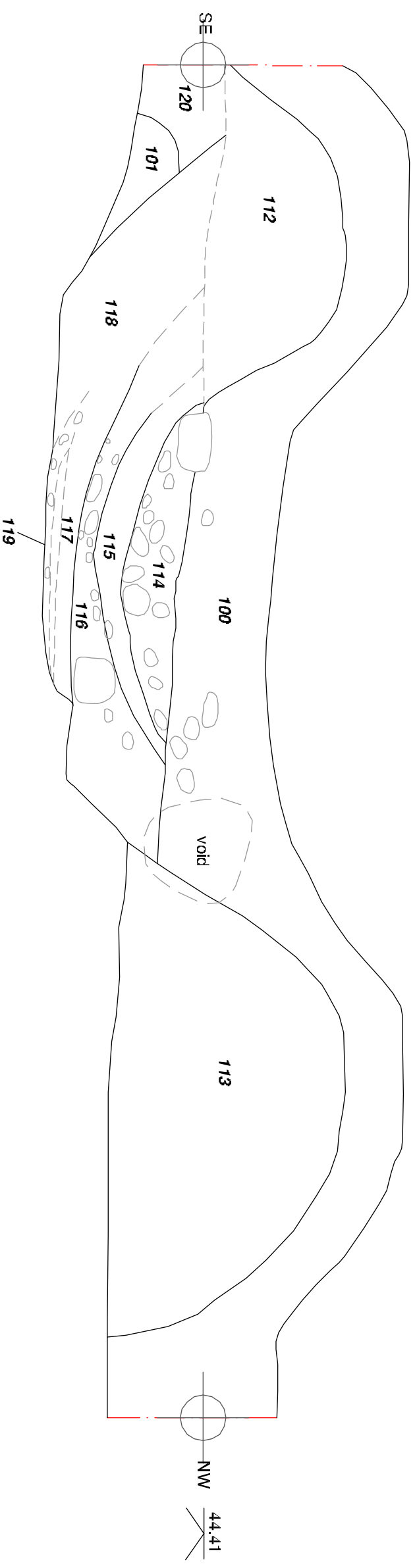
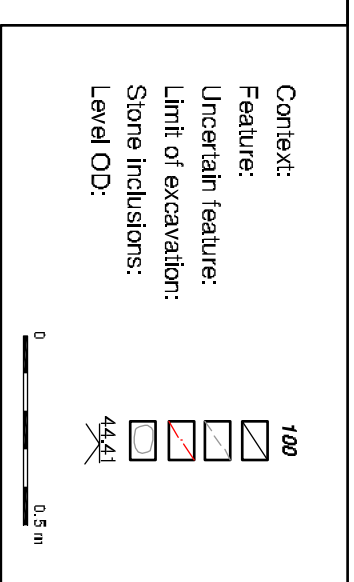
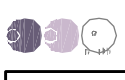


Figure 4: North-east facing section of holloway 119, Trench 10



Context:	100
Feature:	
Projected edge:	
Limit of excavation:	
Stone inclusions:	
Level OD:	44.41

0 0.5 m

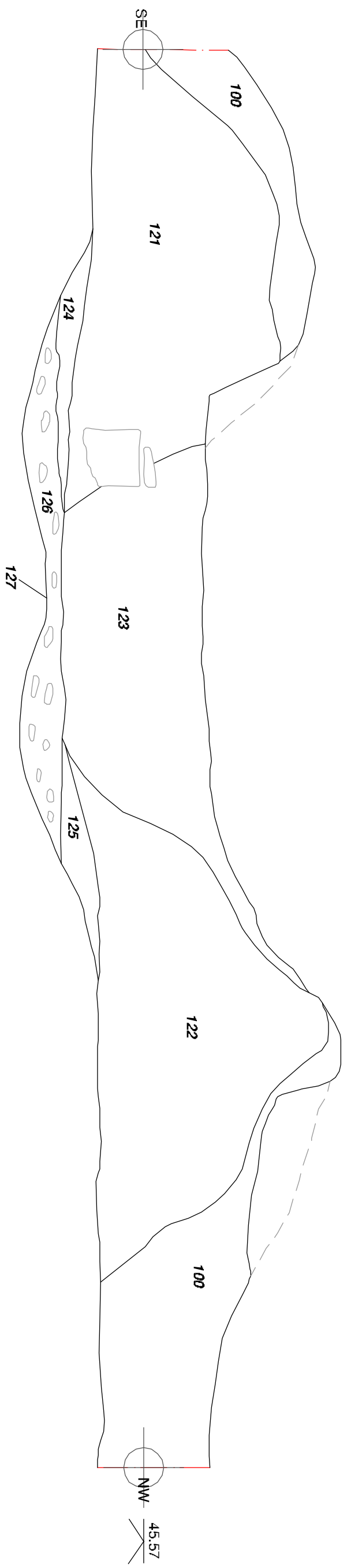


Figure 5: North-east facing section of holloway 127, Trench 17

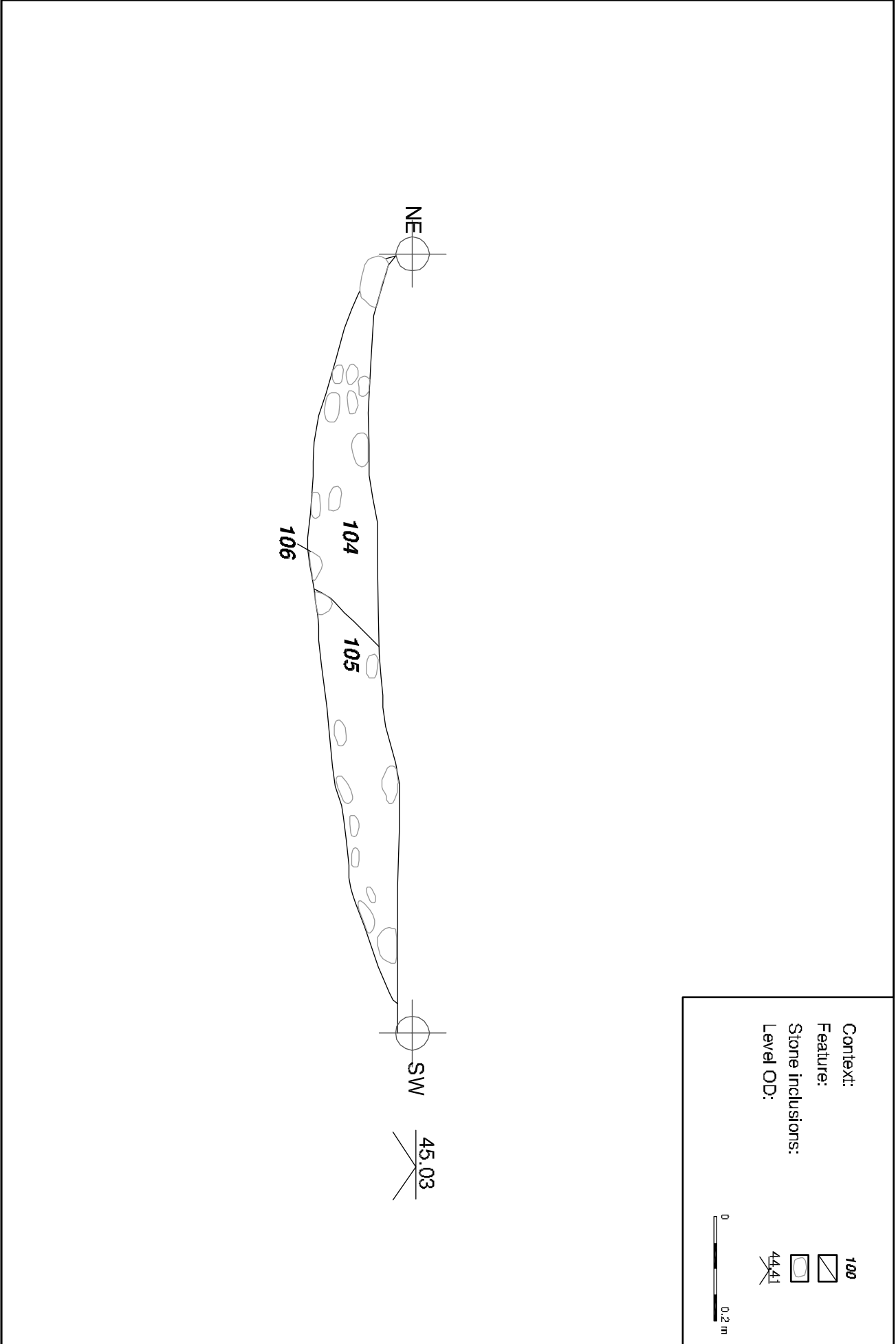


Figure 6: North-west facing section of removed boundary **106**, Trench 9



Plate 1: General shot of Trench 8



Plate 2: Trench 9, section of removed strip field boundary *106*



Plate 3: Trench 10, section of holloway *119*



Plate 4: Trench 17, section of holloway *127*

APPENDIX 1: PROJECT BRIEF

1. SITE DESCRIPTION AND SUMMARY

Site: Peel Place, Gosforth

Grid Reference: NY 066 012

Planning Application No.: 4/04/9011

Area of Evaluation: approximately 1.7 hectares

Detailed proposals and tenders are invited from appropriately resourced, qualified and experienced archaeological contractors to undertake the archaeological project outlined by this Brief and to produce a report on that work. The work should be under the direct management of either an Associate or Member of the Institute of Field Archaeologists, or equivalent. Any response to this Brief should follow IFA Standard and Guidance for Archaeological Field Evaluations, 2001. No fieldwork may commence until approval of a specification has been issued by the County Historic Environment Service.

2. PLANNING BACKGROUND

- 2.1 Cumbria County Council's Historic Environment Service (CCCHES) has been consulted by the County's mineral planning service regarding a planning application for the extension to an existing quarry at Peel Place, Gosforth.
- 2.2 The site has been the subject of an Environmental Impact Assessment (Stephenson Hallway 2004) which included the results from an archaeological desk-based assessment, a walkover survey, a geophysical survey and a programme of limited targeted trial trenching. The results of this work indicate that it is unlikely any archaeological remains of national importance survive on the site, which are worthy of preservation *in situ*. However, the results also indicate that the soils were not particularly receptive to the geophysical survey and, because the trial trenching was only very limited in scope, there is a high potential for archaeological remains to extend across the site that have not been revealed by the surveys. Because of this, a condition has been placed on planning consent requiring a scheme of archaeological work to be undertaken at the site. Initially, this work will comprise an archaeological evaluation to assess the nature and potential of the whole site threatened by extraction. The evaluation will be undertaken in advance of each phase of mineral extraction and the first phase of evaluation was undertaken in 2005. The results of this evaluation revealed no archaeological remains in a one hectare area. This brief deals solely with the second phase of extraction, as shown on Figure 4a (P114/3c), which approximately 1.7 hectares in extent.

3. ARCHAEOLOGICAL BACKGROUND

- 3.1 The site has been the subject of a desk-based assessment, a walkover survey, a geophysical survey and two phases trial trenching (see bibliography) and this brief should be read in conjunction with these reports. A considerable number of prehistoric implements have been found in the immediate vicinity of the site through systematic fieldwalking and by chance (Historic Environment record ons. 1273, 1309, 3556, 6462, 6463 etc.). Two cropmark enclosures of possible prehistoric origin lie to the east (HER nos. 13542 & 13545). A walkover survey revealed relict field boundaries likely to be of medieval origin, a hollow way and a trackway surviving on the site.

4. SCOPE OF THE PROJECT

4.1 Objectives

- 4.1.1 The evaluation should aim to determine, the location, extent, date, character, condition, significance and quality of any surviving archaeological remains liable to be threatened by the proposed development within the area shown on the attached plan (Figure 4a (P114/3c)). An adequate representative sample of all areas where archaeological remains are potentially threatened should be studied.

4.2 Work Required

- 4.2.1 The excavation of a series of linear trial trenches to adequately sample the threatened available area, and the investigation and recording of deposits and features of archaeological interest identified within those trenches. All features must be investigated and recorded unless otherwise agreed with the County Historic Environment Service. Initial topsoil removal can be undertaken by machine, but subsequent cleaning and investigation must be by hand. A minimum sample of 5% of the total site area should be investigated.
- 4.2.2 The evaluation should provide a predictive model of surviving archaeological remains detailing zones of relative importance against known development proposals. An impact assessment should also be provided, wherever possible.
- 4.2.3 The following analyses should form part of the evaluation, as appropriate. If any of these areas of analysis are not considered viable or appropriate, their exclusion should be justified in the subsequent report.
- A suitably qualified specialist should assess the environmental potential of the site through the examination of suitable deposits, including: (1) soil pollen analysis and the retrieval of charred plant macrofossils and land molluscs from former dry-land palaeosols and cut features, and; (2) the retrieval of plant macrofossils, insect, molluscs and pollen from waterlogged deposits.
 - Advice is to be sought from a suitably qualified specialist in faunal remains on the potential of sites for producing bones of fish and small mammals. If there is potential, a sieving programme should be undertaken. Faunal remains, collected by hand and sieved, are to be assessed and analysed, if appropriate.
 - The advice from a suitably qualified soil scientist should be sought on whether a soil micromorphological study or any other analytical techniques will enhance understanding site formation processes of the site, including the amount of truncation to buried deposits and the preservation of deposits within negative features. If so, analysis should be undertaken.

5. SPECIFICATION

- 5.1 Before the project commences a project proposal must be submitted to, and approved by, the County Historic Environment Service.
- 5.2 Proposals to meet this Brief should take the form of a detailed specification prepared in accordance with the recommendations of *The Management of Archaeological Projects*, 2nd ed. 1991, and must include:
- ❖ A description of the excavation sampling strategy and recording system to be used
 - ❖ A description of the finds and environmental sampling strategies to be used
 - ❖ A description of the post excavation and reporting work that will be undertaken
 - ❖ Details of key project staff, including the names of the project manager, site supervisor, finds and environmental specialists and any other specialist sub-contractors to be employed
 - ❖ Details of on site staffing, expressed in terms of person days

- ❖ A projected timetable for all site work and post excavation work
- ❖ The proposed locations of the trial trenches

5.3 Any significant variations to the proposal must be agreed by the County Historic Environment Service in advance.

6. REPORTING AND PUBLICATION

6.1 The archaeological work should result in a report, this should include as a minimum:

- ❖ A site location plan, related to the national grid
- ❖ A front cover/frontispiece which includes the planning application number and the national grid reference of the site
- ❖ The dates on which the fieldwork was undertaken
- ❖ A concise, non-technical summary of the results
- ❖ An explanation of any agreed variations to the brief, including justification for any analyses not undertaken (see 4.2.3)
- ❖ A description of the methodology employed, work undertaken and the results obtained
- ❖ Plans and sections at an appropriate scale showing the location and position of deposits and finds located
- ❖ A list of, and dates for, any finds recovered and a description and interpretation of the deposits identified
- ❖ A description of any environmental or other specialist work undertaken and the results obtained

6.2 Three copies of the report should be deposited with the County Historic Environment Record within two months of completion of fieldwork. This will be on the understanding that the report will be made available as a public document through the County Historic Environment Record.

6.3 The results of the evaluation will need to be made available for inclusion in a summary report to a suitable regional or national archaeological publication if further archaeological fieldwork is expected.

6.4 Recommendations concerning any subsequent mitigation strategies and/or further archaeological work following the results of the field evaluation should **not** be included in the report. Such recommendations are welcomed by the County Historic Environment Service, and may be outlined in a separate communication.

6.5 Cumbria HER is taking part in the Online Access to Index of Archaeological Investigations (OASIS) project. The online OASIS form at <http://ads.ahds.ac.uk/project/oasis> must therefore also be completed as part of the project. Information on projects undertaken in Cumbria will be made available through the above website, unless otherwise agreed.

7. THE ARCHIVE

7.1 An archive must be prepared in accordance with the recommendations in Brown, DH, 2007, *Archaeological Archives A Guide To Best Practice In Creation, Compilation, Transfer and Curation*, Archaeological Archives Forum. Arrangements must be made for its long term storage and deposition with an appropriate repository. A copy shall also be offered to the National Monuments Record.

7.2 The landowner should be encouraged to transfer the ownership of finds to a local or relevant specialist museum. The museum's requirements for the transfer and storage of finds should be discussed before the project commences.

7.3 The County Historic Environment Service must be notified of the arrangements made.

8. PROJECT MONITORING

- 8.1 One weeks notice must be given to the County Historic Environment Service prior to the commencement of fieldwork.
- 8.2 Fieldwork will be monitored by the Historic Environment Officer on behalf of the local planning authority.

9. FURTHER REQUIREMENTS

- 9.1 It is the archaeological contractor's responsibility to establish safe working practices in terms of current health and safety legislation, to ensure site access and to obtain notification of hazards (eg. services, contaminated ground, etc.). **The County Historic Environment Service bears no responsibility for the inclusion or exclusion of such information within this Brief or subsequent specification.**
- 9.2 All aspects of the evaluation shall be conducted in accordance with the Institute of Field Archaeologist's *Code of Conduct* and the IFA's *Standard and Guidance for Archaeological Field Evaluations*.
- 9.3 Human remains must be left *in situ*, covered and protected when discovered. No further investigation should normally be permitted beyond that necessary to establish the date and character of the burial, and the County Historic Environment Service and the local Coroner must be informed immediately. If removal is essential, it can only take place under appropriate Department for Constitutional Affairs and environmental health regulations.
- 9.4 The involvement of the County Historic Environment Service should be acknowledged in any report or publication generated by this project.

10. FURTHER INFORMATION

For further information regarding this brief, contact

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11. BIBLIOGRAPHY

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Oxford Archaeology North, 2005, *Area of Phase Extraction, Peel Place Quarry, Holmrook, Cumbria, Archaeological Evaluation*, unpublished document

APPENDIX 2: PROJECT DESIGN

1. INTRODUCTION

1.1 PROJECT BACKGROUND

1.1.1 Tarmac Ltd (hereafter the 'client') have commissioned Oxford Archaeology North (OA North) to undertake an archaeological evaluation of land outlined for the next phase of mineral extraction, Phase 2 (Fig 1), at Peel Place Quarry, Gosforth, Cumbria (centred NY 06640 01228). An Environmental Impact Assessment for a mainly westward extension to the existing quarry was submitted in 2004, and included the results of a desk-based assessment, walkover survey, geophysical survey and an area of targeted trial trenching. On the basis of the results of the archaeological investigations, Cumbria County Council's Historic Environment Service (CCCHES) requested that a scheme of archaeological work be undertaken as a condition to the planning consent (Planning Application Number 4/04/9011) in advance of each phase of extraction; Phase 1 was undertaken in 2005.

1.1.2 A brief has been issued by CCCHES regarding the second outlined phase of extraction, recommending a programme of evaluation trenching as the first stage of work. However, since the CCCHES brief was issued it has come to light that a water main crosses the site. Therefore, a 15m wide stand-off corridor centred over the position of the pipeline needs to be removed from the area requiring evaluation. This has reduced the area stated in the brief from 1.7ha to a revised 1.44ha. The following project design has been prepared in accordance with the brief, but has taken into account the reduced area.

1.2 ARCHAEOLOGICAL BACKGROUND

1.2.1 During 2004, OA North carried out an archaeological investigation to inform the Environmental Impact Assessment for the proposed western extension. This consisted initially of a desk-based assessment, walkover survey and geophysical survey, and was followed by four evaluation trenches targeting areas of geophysical anomalies (OA North 2004a; 2004b).

1.2.2 The desk-based assessment identified 19 sites of archaeological interest within the surrounding area, none of which were positioned within the outlined application boundary. Nevertheless, the site was considered to have archaeological potential due to the significant quantities of prehistoric worked flint previously recovered from an extensive programme of field walking in the area, including four findspots of flint artefacts, a polished stone axe, and a hand axe roughout. Research also found there to be evidence of occupation during the Roman, medieval and post-medieval periods; in particular a Roman coin located to the north of the proposed extraction site, a medieval cross fragment, and a relict strip field system associated with the settlement of Hallsenna (OA North 2004a).

1.2.3 The walkover survey located an additional three sites of archaeological significance to those identified during the desk-based assessment (*ibid*). The field boundary along the southern edge of the outlined area of Phase 2 was identified as the likely remains of a medieval strip-field system, evidence of which was also seen from the Ordnance Survey first edition map of 1865 extending across the Phase 2 area. Furthermore, incorporated in the east side of the Phase 2 area a deep hollow way was noted, bound by embankments either side. The date is unknown but it was identifiable on the Ordnance Survey map of 1865 (*ibid*).

1.2.4 The geophysical survey showed a relatively low magnetic response in general (Stratascan Ltd 2004). However, a number of faint linear anomalies were seen in the magnetometer results of archaeological potential, particularly given the prehistoric potential of the area. Some of these anomalies were further investigated by evaluation trenching (OA North 2004b). Only one archaeological feature, a ditch, was identified during trenching that had not been identified in the geophysical survey results, containing pottery evidence dated to between the late seventeenth and early twentieth centuries. It was interpreted as a relict field boundary, and correlated with a field boundary recorded on the Ordnance Survey first

edition map of 1865 (OA North 2004a; 2004b). The field system was believed to be the remains of medieval strip fields, and the ditch would therefore be of medieval origin and likely to have been still in use in the post-medieval period.

- 1.2.5 The remaining geophysical anomalies were not observed during trenching, and it is likely that the variable geological conditions across the site may have accounted for this. The results of the evaluation trenching showed that the low magnetic properties of the overlying soils limited the usefulness of magnetometry.
- 1.2.6 During trial trenching undertaken prior to the Phase 1 extraction (OA North 2005) no archaeological features were uncovered. The presence of two potential waste flint chunks recovered suggests small-scale knapping had been taking place in the area, but it is impossible to date this activity closely. The fragments of pottery, glass, and metal recovered from the topsoil were all post-medieval in date, and are likely to be a result of manuring practice across the site (*ibid*).

1.3 OXFORD ARCHAEOLOGY NORTH

- 1.3.1 OA North has considerable experience of the assessment of sites of all periods, having undertaken a great number of small and large-scale projects. Such projects have taken place within the planning process, to fulfil the requirements of clients and planning authorities, to very rigorous timetables. In recent years OA North also has extensive experience of archaeological work at Peel Place Quarry, as well as under its former guise as Lancaster University Archaeological Unit (LUAU).
- 1.3.2 OA North has the professional expertise and resources to undertake the project detailed below to a high level of quality and efficiency. OA North is an Institute of Field Archaeologists (IFA) **registered organisation, registration number 17**, and all its members of staff operate subject to the IFA Code of Conduct (1994).

2. AIMS AND OBJECTIVES

- 2.1 The main aim of the investigation will be to characterise the level of preservation and significance of any buried archaeological remains surviving *in situ* within the site. The work will evaluate the archaeological resource and potential for further archaeological deposits, in order to determine their extent and nature of the remains that may be threatened by the proposed development. The results will provide information as to whether further investigation or mitigation work is necessary prior to the development taking place. To this end, the following programme has been designed.
- 2.2 **Evaluation trenching:** to undertake evaluation trenching sampling a minimum of 5% of the area within the Phase 2 extraction, to determine the quality, extent and importance of any archaeological remains on the site (in accordance with the IFA standards (1999b)).
- 2.3 **Report and Archive:** a written report will assess the significance of the data generated by this programme within a local and regional context. It will present the results of the evaluation in accordance with the CCHES brief. The report will be produced for the client within eight weeks, unless a report submission deadline is agreed with the client at the time of commission. An archive will be produced to English Heritage guidelines (MAP 2 (1991)).

3. METHOD STATEMENT

3.1 EVALUATION TRENCHING

- 3.1.1 **Introduction:** the programme of trial trenching will establish the presence or absence of any previously unsuspected archaeological deposits and, if established, will then test their date, nature, depth and quality of preservation. In this way, it will adequately sample the Phase 2 outlined area and assess whether any further work will be required on site prior to extraction.

- 3.1.2 The results of all archaeological work carried out will form the basis for a full archive to professional standards, in accordance with current English Heritage guidelines (*Management of Archaeological Projects*, 2nd edition, 1991) and the IFA's code of conduct.
- 3.1.3 **Trenching Strategy:** the evaluation is required to examine 5% of the outlined Phase 2 area, which is approximately 1.44ha in total, taking into account the stand-off area for the water mains. The sample equates to around 719m². Therefore, due to the configuration of available area for evaluation the programme of trenching will involve 11 trenches measuring 30m in length and six 15m long trenches, all 1.7m wide (the average width of a ditching bucket). The majority of the trenches have been randomly positioned within the outlined area in order that it can be adequately assessed. However, trenches (Tr 2, 5 and 6; Fig 1) have been positioned to investigate the possible medieval strip field system identified from the OS 1865 map (OA North 2004a), and two trenches will investigate the hollow way (Tr 10 and 17; Fig 1).
- 3.1.4 **Methodology:** the topsoil will be removed by machine (fitted with a toothless ditching bucket). All such work will be undertaken under archaeological supervision to the surface of the first significant archaeological deposit. This deposit will be cleaned by hand, using either hoes, shovel scraping, and/or trowels depending on the subsoil conditions, and inspected for archaeological features. All trenches will be excavated in a stratigraphical manner, whether by machine or by hand.
- 3.1.5 The trenches will not be excavated deeper than 1.2m to accommodate health and safety constraints, without shoring or stepping out of the trench sides. Should this be required, this may be costed as a variation should additional days on site be necessary.
- 3.1.6 All features of archaeological interest will be investigated and recorded unless otherwise agreed by CCCHEs. Any investigation of intact archaeological deposits will be exclusively manual. Selected pits and postholes will normally only be half-sectioned, linear features will be subject to no more than a 10% sample, and extensive layers will, where possible, be sampled by partial rather than complete removal. It is hoped that in terms of the vertical stratigraphy, maximum information retrieval will be achieved through the examination of sections of cut features. All excavation, whether by machine or by hand, will be undertaken with a view to avoiding damage to any archaeological features, which appear worthy of preservation *in situ*.
- 3.1.7 All information identified in the course of the site works will be recorded stratigraphically, using a system, adapted from that used by Centre for Archaeology Service of English Heritage, with sufficient pictorial record (plans, sections, colour slides and monochrome contacts) to identify and illustrate individual features. Primary records will be available for inspection at all times.
- 3.1.8 Results of all field investigations will be recorded on *pro forma* context sheets. The site archive will include both a photographic record and accurate large scale plans and sections at an appropriate scale (1:50, 1:20 and 1:10). All artefacts and ecofacts will be recorded using the same system, and will be handled and stored according to standard practice (following current Institute of Field Archaeologists guidelines) in order to minimise deterioration.
- 3.1.9 Trenches will be located by use of GPS equipment which is accurate to +/- 0.25m, altitude information will be established with respect to Ordnance Survey Datum. This information will be plotted onto an **updated digital plan (dwg) of the extraction area provided by the client.**
- 3.1.10 **Access:** liaison for basic site access will be undertaken through the client and it is understood that there will be access for both pedestrian and vehicular traffic to the site. Should there be any unforeseen delays resulting from access difficulties beyond the control of OA North a stand down rate will be charged.
- 3.1.11 **Reinstatement:** it is understood that there will be no requirement for reinstatement of the ground beyond backfilling. The ground will be backfilled so that the topsoil is laid on the

top, and the ground will be roughly graded with the machine. Should there be a requirement by the client other than that stated this will involve recosting.

- 3.1.12 **Fencing requirements:** the trenches will be protected during the course of the evaluation using barrier tape. However, if the client deems this as not suitable OA North must be informed prior to commencement of site works. Consequently, should heras fencing or similar be required this will be costed as a variation.
- 3.1.13 **Environmental Sampling:** environmental samples (bulk samples of 40 litres volume, to be sub-sampled at a later stage) will be collected from stratified undisturbed deposits and will particularly target negative features (gullies, pits and ditches). An assessment of the environmental potential of the site will be undertaken through the examination of suitable deposits by the in-house palaeoecological specialist, who will examine the potential for further analysis. The assessment would include soil pollen analysis and the retrieval of charred plant macrofossils and land molluscs from former dry-land palaeosols and cut features. In addition, the samples would be assessed for plant macrofossils, insect, molluscs and pollen from waterlogged deposits. The costs for the palaeoecological assessment are defined as a contingency and will only be called into effect if good deposits are identified.
- 3.1.14 Advice will also be sought as to whether a soil micromorphological study or any other analytical techniques will enhance the understanding of the site formation processes, including the amount of truncation to buried deposits and the preservation of deposits within negative features. Should this be required the costs for analysis will be provided as a variation.
- 3.1.15 **Faunal remains:** if there is found to be the potential for discovery of bones of fish and small mammals a sieving programme will be carried out. These will be assessed as appropriate by OA north's specialist in faunal remains, and subject to the results, there may be a requirement for more detailed analysis. A contingency has been included for the assessment of such faunal remains for analysis.
- 3.1.16 **Human Remains:** any human remains uncovered will be left *in situ*, covered and protected. No further investigation will continue beyond that required to establish the date and character of the burial. CCCHES and the local Coroner will be informed immediately. If removal is essential the exhumation of any funerary remains will require the provision of a Home Office license, under section 25 of the Burial Act of 1857. An application will be made by OA North for the study area on discovery of any such remains and the removal will be carried out with due care and sensitivity under the environmental health regulations. Such removal may also require costing as a variation, the amount of which will be made in agreement with the client.
- 3.1.17 **Treatment of finds:** all finds will be exposed, lifted, cleaned, conserved, marked, bagged and boxed in accordance with the United Kingdom Institute for Conservation (UKIC) *First Aid For Finds*, 1998 (new edition) and the recipient museum's guidelines.
- 3.1.18 **Treasure:** any gold and silver artefacts recovered during the course of the excavation will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act, 1996. Where removal cannot take place on the same working day as discovery, suitable security will be employed to protect the finds from theft.
- 3.1.19 All identified finds and artefacts will be retained, although certain classes of building material can sometimes be discarded after recording if an appropriate sample is retained on advice from the recipient museum's archive curator.
- 3.1.20 **Contingency plan:** a contingency costing may also be employed for unseen delays caused by prolonged periods of bad weather, vandalism, discovery of unforeseen complex deposits and/or artefacts which require specialist removal, use of shoring to excavate important features close to the excavation sections etc. This has been included in the Costings document and would be in agreement with the client.

3.1.21 The evaluation will provide a predictive model of surviving archaeological remains detailing zones of relative importance against known development proposals. In this way, an impact assessment will also be provided.

3.2 REPORT

3.2.1 Initially, a pdf version of the draft report will be submitted to the client for approval within eight weeks of completion. Upon client agreement, one bound and one unbound copy of the finalised report will be submitted to the client, and a further three copies submitted to the Cumbria HER. Any additional draft submissions and amendments may require recosting as a variation.

3.2.2 The report will be in accordance with the CCCHES brief and will include;

- a site location plan related to the national grid
- a front cover to include the planning application number and the NGR
- the dates on which the fieldwork was undertaken
- a concise, non-technical summary of the results
- an explanation to any agreed variations to the brief, including any justification for any analyses not undertaken
- a description of the methodology employed, work undertaken and results obtained
- plans and sections at an appropriate scale showing the location and position of deposits and finds located
- a list of and dates for any finds recovered and a description and interpretation of the deposits identified
- a description of any environmental or other specialist work undertaken and the results obtained
- a copy of this project design, and indications of any agreed departure from that design
- the report will also include a complete bibliography of sources from which data has been derived.

3.2.3 It must be noted that as per the CCCHES brief, recommendations concerning any subsequent mitigation strategies and/or further archaeological work following the results of the field evaluation will **not** be included, although this may be outlined to the client and CCCHES in a separate communication.

3.2.4 This report will be in the same basic format as this project design; a copy of the report can be provided on CD, if required.

3.2.5 The Arts and Humanities Data Service (AHDS) online database project *Online Access to index of Archaeological Investigations* (OASIS) will be completed as part of the archiving phase of the project.

3.2.6 **Confidentiality:** all internal reports to the client are designed as documents for the specific use of the Client, for the particular purpose as defined in the project brief and project design, and should be treated as such. They are not suitable for publication as academic documents or otherwise without amendment or revision.

3.3 ARCHIVE

- 3.3.1 The archive will be provided in the English Heritage Centre for Archaeology format and a synthesis will be submitted to the Cumbria HER (the index to the archive and a copy of the report). OA North will deposit the original record archive of projects with the Whitehaven Record Office.
- 3.3.2 All artefacts will be processed to MAP2 standards and will be assessed by our in-house finds specialists.
- 3.3.3 The deposition and disposal of any artefacts recovered in the evaluation will be agreed with the legal owner and an appropriate recipient museum. CCCHES will be notified of the arrangements made.

4. OTHER MATTERS

4.1 HEALTH AND SAFETY

- 4.1.1 OA North provides a Health and Safety Statement for all projects and maintains a Unit Safety policy. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Archaeological Unit Managers (1997). A written risk assessment will be undertaken in advance of project commencement and copies will be made available on request to all interested parties.
- 4.1.2 Full regard will, of course, be given to all constraints (services etc) during the watching brief as well as to all Health and Safety considerations. As a matter of course the Unit uses a Cable Avoidance Tool (CAT) prior to any excavation to test for services. However, this is not fool-proof and **it is assumed that the client will provide any available information regarding services within the study area.**
- 4.1.3 A portable toilet with hand washing facilities, and a messing facility/laying out space will be required during the archaeological works. Should the client wish for OA North to arrange for these facilities they will be charged as a variation.

4.2 PROJECT MONITORING

- 4.2.1 Whilst the work is undertaken for the client, the Historic Environment Officer, working on behalf of the Local Planning Authority, will be kept fully informed of the work and its results and will be notified a week in advance of the commencement of the fieldwork. Any proposed changes to the project design will be agreed with CCCHES in consultation with the client.

4.3 WORK TIMETABLE

- 4.3.1 **Evaluation Trenching:** approximately six days will be required to complete this element with a team of three people.
- 4.3.2 **Report:** the report will be produced following the completion of all the fieldwork. A draft report will be submitted within eight weeks of completion of the fieldwork for approval by the client. A final version will be submitted within two weeks of receipt of detail of amendments.
- 4.3.3 **Archive:** the archive will be deposited within six months.
- 4.3.4 OA North requires a formal written agreement or order, subsequent to which the work can be scheduled. Due to present commitments at least two weeks notice is necessary.

4.4 STAFFING

- 4.4.1 The project will be under the direct management of **Emily Mercer BA (Hons) MSc AIFA** (OA North senior project manager) to whom all correspondence should be addressed.

- 4.4.2 All elements of the assessment will be supervised by either an OA North project officer or supervisor experienced in this type of project, and assisted by two OA North project assistants. Due to scheduling requirements it is not possible to provide these details at the present time. All OA North project officers and supervisors are experienced field archaeologists capable of carrying out projects of all sizes.
- 4.4.3 Assessment of the finds from the evaluation will be undertaken under the auspices of OA North's in-house finds specialist **Christine Howard-Davis** (OA North finds manager). Christine has extensive knowledge of finds from many periods.
- 4.4.4 Assessment of any palaeoenvironmental samples will be undertaken by or under the auspices of **Elizabeth Huckerby MSc** (OA North environmental manager). Elizabeth has extensive knowledge of the palaeoecology of the North West through her work on the English Heritage-funded North West Wetlands Survey.
- 4.5 INSURANCE
- 4.5.1 OA North has a professional indemnity cover to a value of £2,000,000; proof of which can be supplied as required.

5. REFERENCES

English Heritage, 1991 *Management of Archaeological Projects*, second edition, London

OA North, 2004a *Peel Place Quarry Proposed Western Extension, Holmrook, Cumbria: Archaeological Desk-Based Assessment, Geophysical Survey and Walkover Survey*, unpubl report

OA North, 2004b *Peel Place Quarry Proposed Western Extension, Holmrook, Cumbria: Archaeological Evaluation*, unpubl report

OA North, 2005 *Area of Phase 1 Extraction, Peel Place Quarry, Holmrook, Cumbria: Archaeological Evaluation*, unpubl report

SCAUM (Standing Conference of Archaeological Unit Managers), 1991 *Health and Safety Manual*, Poole

Stratascan Ltd, 2004 *Geophysical Survey Report: Peel Place, Holmrook, Cumbria*, unpubl report

UKIC, 1990 *Guidelines for the Preparation of Archives for Long-Term Storage* London

UKIC, 1998 *First Aid For Finds*, London

APPENDIX 3: CONTEXT REGISTER

Context	Trench	Interpretation	Description
100	All	Topsoil	Dark greyish-brown, sandy-silt, 10% small pebbles, unsorted
101	All	Geology	Mixed orangey-brown/orange/red, sand and gravel, 50% gravel of varying sizes, unsorted
102	1	Fill of modern ditch, 103	Dark greyish brown, silty-sand, less than 1% small pebbles, unsorted
103	1	Cut of modern ditch	U-shaped linear, aligned N-S
104	9	Fill of field boundary, 106	Dark grey, sandy silt, 50% small rounded stones, unsorted
105	9	Fill of field boundary, 106	Dark brownish-grey, sandy silt, 50% small rounded stones, unsorted
106	9	Cut of removed field boundary	Shallow U-shaped linear, aligned NW-SE
107	11	Fill of gully, 108	Mid greyish brown, silty-sand, less than 1% small pebbles, unsorted and very rare inclusions of charcoal
108	11	Cut of gully	Small U-shaped linear, aligned NW-SE
109	11	Fill of gully, 110	Mid greyish-brown, silty-sand, less than 1% small pebbles, unsorted and very rare inclusions of charcoal
110	11	Cut of gully	Small U-shaped linear, aligned NW-SE
111	13	Cut of possible modern boundary	Shallow U-shaped linear, aligned NW-SE
112	10	Embankment (south-east bank)	Mid orangey brown, silt sand, less than 1% of sub-angular small pebbles, poorly sorted
113	10	Embankment (north-west bank)	Mid orangey-brown, silty-sand, less than 1% of sub-angular small pebbles, poorly sorted
114	10	Rough cobbled surface with kerb stones of holloway, 119	Dark greyish-brown, silty-sand, 60% of sub-rounded cobbles/pebbles, well sorted
115	10	Silting up of holloway, 119	Light to mid greyish-brown, silty-sand, no inclusions
116	10	Rough stoned surface of holloway,	Mid greyish-brown with white bands

		119	running through it, silty-sand, 40% of sub rounded small well sorted pebbles
117	10	Primary fill of holloway, 119	Mid greyish-brown with orange banding, silty-sand, 2% of sub-rounded, small, well sorted pebbles
118	10	Disturbed fill of holloway, 119	Mid orangey-brown, homogeneous and disturbed by tree roots
119	10	Cut of holloway	Flat U-shaped linear, aligned NE-SW
120	10	Possible buried soil	Mid orangey-brown, homogeneous and disturbed by tree roots
121	17	Embankment (south-east bank)	Dark reddish-brown, silty-sand, less than 1% of small sub-rounded pebbles
122	17	Embankment (north-west bank)	Dark reddish-brown, silty-sand, less than 1% of small sub-rounded pebbles
123	17	Silting up of holloway, 127	Dark greyish-black, silt with lots of humic matter, less than 1% of small sub-rounded pebbles
124	17	Silting up of holloway, 127	Dark reddish-brown, silty-sand, less than 1% of small sub-rounded pebbles
125	17	Silting up of holloway, 127	Dark reddish-brown, silty-sand, less than 1% of small sub-rounded pebbles
126	17	Rough stone surface for holloway, 127	Dark brown, silty-sand, 50% of small sub-rounded pebbles
127	17	Cut for holloway	A wheel rutted linear cut, aligned NE-SW
128	15	Fill of furrow	Mid reddish-brown, silty-sand, occasional sub-rounded pebbles
129	15	Cut of furrow	Shallow cut of furrow, north-east/south-west
130	13	Fill of Ditch	Dark greyish-brown, sandy-silt, 10% small pebbles, unsorted