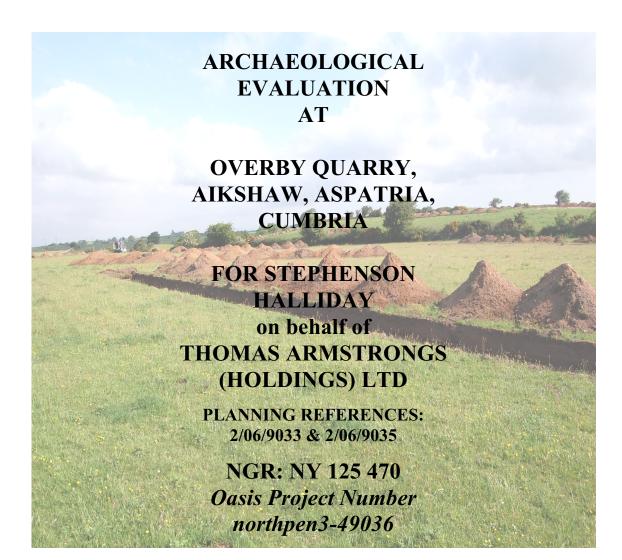
NORTH PENNINES ARCHAEOLOGY LTD

Client Report No. CP/665/08



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TECHNICAL SUMMARY

In May and June 2008, North Pennines Archaeology Ltd undertook an archaeological field evaluation on land at Overby Quarry, Aspatria, Cumbria (NGR NY 125 470). The work was commissioned by Stephenson Halliday, on behalf of their client Thomas Armstrongs (Holdings) Ltd, in order to fulfil an archaeological brief issued by Cumbria County Council's Historic Environment Service (CCCHES). The archaeological evaluation was required as a condition of a planning consent requested by CCCHES, in response to the submitted planning application by the landowner, for the extension of the existing quarry at Overby. It was felt by CCCHES that any ground works would have the potential to directly impinge on any remaining features of an archaeological nature.

Previous works at the site, undertaken by North Pennines Archaeology Ltd in 2006, comprised a desk-based assessment and accompanying geophysical survey (Davies 2006a; Terra Nova 2005). The results of the desk-based assessment found a high potential for the survival of subsurface archaeological remains, dating to the prehistoric period. Aerial photographs, which identified cropmarks within this area, were first taken in 1975 (Higham and Jones 1975), and were consulted during this stage of the investigation. They appeared to indicate the existence of prehistoric settlements, as well as agricultural and ritual practices, at the site. A Neolithic/Bronze Age worked flint was also recovered from within the site during the North West Wetland Survey (Hodgkinson et al 2000). The excavation at New Cowper Farm, a kilometre to the south-west of Overby Quarry, also found extensive evidence of Neolithic and Bronze Age occupation, and suggested that cropmarks within this area could represent only a tiny fraction of extensive remains below ground.

Subsequently, and as a result of the findings from this assessment, a limited field evaluation was conducted in March 2006 by North Pennines Archaeology Ltd (Davies 2006b), which aimed to investigate the areas identified by aerial photography as being of particular archaeological interest. The targeted evaluation successfully located four archaeological features and two possible archaeological features. The fill of a single pit within one of the trenches produced a calibrated radiocarbon date of 1900-1650 BC (Early-Mid Bronze Age) confirming that archaeological features of an earlier prehistoric date were present on the site. The area was therefore considered to have a high potential for below ground remains associated with prehistoric settlement and land use.

The proposed extension to the extraction area covers some 19.8 hectares, due to be excavated in six phases. As a result of the known potential, Cumbria County Council's Historic Environment Service (CCCHES) advised that an archaeological evaluation of the site would be necessary as a condition of consent. This would comprise a programme of trial trenching, covering 5% of the proposed development area, and the investigation and recording of deposits and features of archaeological interest identified within those trenches. 159 trial trenches are due to be excavated; the first and second phases, with which this report is concerned, comprise forty-eight trenches, which were excavated to provide a predictive model of surviving archaeological remains detailing zones of relevant importance against known development proposals. The principal objective of this evaluation was to establish the presence/absence, nature, extent and state of preservation of any archaeological remains and to record these where they were observed.

Area A yielded no archaeological features, and anecdotal evidence from the workers at the quarry indicated that this area had at one time been bull-dozed. Areas B and C were also notably

TECHNICAL SUMMARY

truncated, but despite the truncation, archaeological features were noted on the south-western sides of the hill. Within Area B, in Trench 13, a series of five well preserved *in situ* probable cremations were noted: four in pits and one contained within a Bronze Age Collared Urn (1750 - 1500 cal BC). Archaeology was also noted within Area C, in the form of small linear gullies and pits. This area went immediately to excavation, and resulted in the discovery of approximately thirty cremations, eight of which were within urns (mostly Collared Urns, though one has been tentatively identified as a Food Vessel, dated 2000-1700 cal BC). The number of cremations is tentative, as some pits were also excavated which contained only small amounts of bone, and which may not be 'true' cremations, but could represent ritual activity associated with the cremation rites. The excavation will form the basis of a future report (Town *forthcoming*).

However, despite the discovery of the cremations, the archaeology within the remainder of the excavation area, the pits and ditches noted above, proved to be of little interest and appeared demonstrably modern in some cases (though full analysis of the results has not at present been undertaken). This appeared to be mirrored by the results from Areas D through to F. During the evaluation, a number of linear features were noted within trenches in all three areas, and as these were undated, they were believed to be of prehistoric date, and related to the cremation cemetery. However, analysis of the 19th century tithe map indicates that most of the archaeological remains may be of fairly recent date, and corresponding to known field boundaries.

The evaluation at Overby Quarry successfully investigated a series of fields to the south-west of the current quarry site, but, beyond the cremation cemetery which was investigated as an open area excavation, no archaeological finds were recovered to indicate that this site was being used for any other purposes than agricultural, and no identifiable evidence of further settlement or ritual activity was noted, though stray prehistoric finds were recovered. The lack of secure dating for the features found during this evaluation means that features must be dated using morphological characteristics.

The proliferation of other sites within a 10km radius, such as the recent find of a possible Bronze Age field system at High House Quarry (1.5km from the site), which has similar soil conditions to that at Overby, as well as the archaeological finds at New Cowper (2km from the site), mean that this site is part of a wider network across the region and so should not be viewed in isolation.

ACKNOWLEDGEMENTS

North Pennines Archaeology Ltd would like to thank Nick Edwards and Peter Stephenson of Stephenson Halliday and Frank Harkness of Thomas Armstrongs (Holdings) Ltd for commissioning the project, and for their assistance throughout the fieldwork.

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Nicola Gaskell, Claire Gerson, Sean Johnson, and Claire Mason undertook the evaluation under the supervision of Martin Sowerby. The report and the drawings were produced by Matthew Town, with trench summaries written by Martin Sowerby. The environmental samples were analysed by Patricia Shaw, NPA Environmental Supervisor. The finds quantification was undertaken by Patricia Shaw, with lithic analysis by David Jackson. The project was managed by Matthew Town, Project Manager for NPA Ltd. The report was edited by Martin Railton, Project Manager for NPA Ltd.

1. INTRODUCTION

1.1 CIRCUMSTANCES OF THE PROJECT

- 1.1.1 During May and June 2008, North Pennines Archaeology Ltd was commissioned by Stephenson Halliday, acting on behalf of Thomas Armstrong (Holdings) Ltd, to undertake an archaeological excavation in advance of mineral extraction at Overby Quarry, Aikshaw, Aspatria, Cumbria, (Figure 1). The plot of land is currently in use as arable and pastoral land. The quarry falls within the North Cumbrian Plain; a relatively low lying area (below c. 200m AOD) located to the north and west of the Lake District Massif. The assessment area is within a landscape zone known as the Abbeytown Ridge, which forms a significant topographic feature, defining the southern boundary of the Solway Plain (Hodgkinson *et al* 2000).
- 1.1.2 A desk-based assessment with accompanying geophysical survey has previously been undertaken, which emphasizes the high archaeological potential of the site and the surrounding area (Davies 2006a). The report found that the potential for sub-surface archaeological remains dating to the prehistoric period was extremely high. Existing evidence within the proposed extraction areas included a single findspot of Neolithic/Bronze Age worked flint recovered during the North West Wetland Survey (Hodgkinson *et al* 2000). Numerous cropmark complexes indicative of prehistoric settlement, ritual and agricultural practices were also located on, and surrounding, the site. These undated cropmarks seemed to represent the multi-phase remains of fields, settlement foci and possibly ritual sites. The morphology of recently excavated features at New Cowper Farm, a kilometre to the west of Overby quarry, suggests that some of the cropmark features may be as early as Neolithic or Bronze Age in date and shows that such cropmarks represent only a tiny fraction of the extensive archaeological remains below ground.
- 1.1.3 As a result of this potential, a limited field evaluation was undertaken, with trenches positioned in order to adequately sample areas of features identified by aerial photography, deemed to be features of '*particular archaeological interest*' (Davies 2006b). The main aim was to provide a predictive model of surviving archaeological remains detailing their *character, condition,* and *significance,* which would enable the Overby quarry extension planning application to proceed in a highly informed way. The targeted evaluation successfully located four archaeological features and two possible archaeological features. The fill of a single pit within one of the trenches produced a calibrated radiocarbon date of 1900-1650 BC (Early-Mid Bronze Age) confirming that archaeological features of an earlier prehistoric date were present on the site. The area is therefore considered to have a high potential for below ground remains associated with prehistoric settlement and land use.
- 1.1.4 The proposed extension to the extraction area covers some 19.8 hectares, due to be excavated in six phases. As a result of the known potential, Cumbria County Council's Historic Environment Service (CCCHES) were consulted by the County's Minerals and Waste local planning authority, regarding two planning applications for the extension of the existing quarry. In accordance with guidance given in Planning Policy Guidance note 16 (Archaeology and Planning) and with local planning policy,

CCCHES advised that an archaeological evaluation of the site would be necessary as a condition of consent. This would comprise a programme of trial trenching, covering 5% of the proposed development area, and the investigation and recording of deposits and features of archaeological interest identified within those trenches. 159 trial trenches are due to be excavated; the first and second phases, with which this report is concerned, comprise forty-eight trenches, which were excavated to provide a predictive model of surviving archaeological remains detailing zones of relevant importance against known development proposals. The principal objective of this evaluation was to establish the presence/absence, nature, extent and state of preservation of any archaeological remains and to record these where they were observed.

1.1.5 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 Stephenson Halliday for an archaeological field evaluation at Overby Quarry (Town 2008). This design was in accordance with a brief prepared by Jeremy Parsons, Archaeology Officer for Cumbria County Council.
- 2.1.2 Following acceptance of the project design, North Pennines Archaeology Ltd was commissioned by the client to undertake the work. The project design was adhered to in full, and the work was consistent with the relevant standards and procedures of the Institute of Field Archaeologists (IFA), and generally accepted best practice.

2.2 ARCHAEOLOGICAL EVALUATION

- 2.2.1 The field evaluation consisted of the excavation of forty-eight trial trenches; forty-six measuring 30m in length and 2m in width, one which measured 27m in length by 2m in width; and one which measured 50m in length and 2m in width. The trenches were excavated in order to produce a predictive model of surviving archaeological remains detailing zones of relevant importance against known development proposals.
- 2.2.2 The size of the trial trenches was defined by the requirement that 2914m² of the total area planned for extraction should be evaluated. No cropmarks had been located in the area covered by the Phases 1 and 2 evaluation, in the previous desk-based assessment (Davies 2006a).
- 2.2.3 The locations of the trenches were surveyed using known Ordnance Survey points, through the use of a combination of a Trimble 3605DR Geodimeter total station with datalogger and a survey-quality GPS, which will provide a single point fix for the baselines. Any captured data was transferred into a computer software programme for manipulation.
- 2.2.4 The trenches were then excavated by a 360° mechanical excavator equipped with a toothless ditching bucket, under archaeological supervision, to the natural substrate. Each trench was manually cleaned and any putative archaeological features investigated and recorded according to the North Pennines Archaeology Ltd standard procedure, as set out in the Excavation manual (Giecco 2003).
- 2.2.5 Photography was undertaken using Canon EOS 500v Single Lens Reflex (SLR) cameras. A photographic record was made using digital photography, 400 ISO Black and White Print and 200 ISO Colour Slide film.
- 2.2.6 All work was undertaken in accordance with the Institute of Field Archaeologists Standards and Guidance for Archaeological Field Evaluations (IFA 2002).

2.3 AIMS AND OBJECTIVES

- 2.3.1 In summary, the main objectives of the evaluation were:
 - to establish the presence/absence, nature, extent and state of preservation of archaeological remains and to record these where they are observed;
 - to establish the character of those features in terms of cuts, soil matrices and interfaces;
 - to recover artefactual material, especially where useful for dating purposes;
 - to recover palaeoenvironmental material where it survives in order to understand site and landscape formation processes.
- 2.3.2 The main site-specific aims of the evaluation were defined as follows:
 - to preserve by record the archaeological evidence contained within the site and to attempt a reconstruction of the history and use of the site;
 - to contribute to an understanding of prehistoric settlement, subsistence and agricultural practices, and environmental conditions on the west coast of Cumbria;
 - to inform wider regional, national and period based research frameworks.

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), and Brown, DH, 2007, *Archaeological Archives A Guide to Best Practice in Creation, Compilation, Transfer and Curation.* The archive will be deposited within an appropriate repository and a copy of the report given to Cumbria County Council Historic Environment Record, where viewing will be available on request. The archive can be accessed under the unique project identifier NPA 08 OQA-A.
- 2.4.2 North Pennines Archaeology supports the Online Access to the Index of Archaeological Investigations (OASIS) project. This project aims to provide an online index and access to the extensive and expanding body of grey literature created as a result of developer-funded archaeological fieldwork. As a result, details of the results of this evaluation will be made available by North Pennines Archaeology, as a part of this national project. The site has been given the unique identification number, northpen3-49036 as part of the OASIS Project.

3. BACKGROUND

3.1 LOCATION AND TOPOGRAPHY

- 3.1.1 Overby Quarry lies within the modern civil parish of Holme St Cuthbert, east of Silloth, and falls within the North Cumbrian Plain: a relatively low lying area (below 200m AOD) located to the north and the west of the Lake District Massif (Figure 1). The site is located within the landscape zone known as the Abbeytown Ridge, which is a relatively narrow tract of land stretching from Salta Moss at the western extent of the northwest Cumbrian coastal plain, to Wedholme Flow, some 20km to the northeast. The ridge forms a significant topographic feature, roughly 40m AOD high, and defines the southern boundary of the Solway Plain (Hodgkinson *et al* 2000). The Solway Plain is underlain by mudstones and sandstones of Permo-Triassic age to the south. To the west, Jurassic mudstones and limestones overlie these Permo-Triassic rocks, erosion of which created the low lying area of the Solway basin (Countryside Commission 1998). The predominating Clifton soil type is seasonally waterlogged (Hodgkinson *et al* 2000, 85).
- 3.1.2 Overby Quarry is bound by Overby Farm to the west and Hards Farm to the south (NY 123 467 and NY 127 473; Figure 2). The proposed extraction area covers approximately 19.8ha in area, with Phases 1 and 2 (5.8ha) lying to the south-west of the current permitted extraction zone, and Phases 3 to 6 (14ha) lying to the north-east. The proposed extraction area is an undulating area of low ridges. As is typical for the Abbeytown Ridge, the land-use is dominated by pasture but includes significant elements of arable. The land-use has not changed since 1997 when much of the assessment area was surveyed as part of the English Heritage-funded North West Wetlands Survey (Hodgkinson *et al* 2000, 85).

3.2 PREVIOUS ARCHAEOLOGICAL WORK

- 3.2.1 The previous works undertaken on the site include a desk-based assessment carried out by North Pennines Archaeology Ltd in 2006 (Davies 2006a), which indicated that the potential for sub-surface archaeological remains dating to the prehistoric period was extremely high (Figure 2).
- 3.2.2 The desk-based assessment found evidence of findspots of prehistoric worked flint in the vicinity of the proposed extraction areas recovered during the North West Wetland Survey (Hodgkinson *et al* 2000), which included, within the proposed extraction area, a single findspot of Neolithic/Bronze Age worked flint. In addition, extensive cropmark evidence was visible within the aerial photography of the area, to the north-east of the permitted extraction zone, though not within the area dealt with in this report. The aerial photography, undertaken by Higham and Jones in 1975, identified numerous cropmark complexes indicative of prehistoric settlement, ritual and agricultural practices. These undated cropmarks seemed to represent the multi-phase remains of fields, settlement foci and possibly ritual sites. The morphology of recently excavated features at New Cowper Farm (section 3.2.4), a kilometre to the south-west of Overby quarry, suggests that some of the cropmark features may be as early as Neolithic or

Bronze Age in date and shows that such cropmarks represent only a tiny fraction of the extensive archaeological remains below ground. In 2005 a geophysical survey conducted by Terra Nova Ltd, on behalf of NPA Ltd, concluded that weak geophysical anomalies existed within the area, which correlated approximately with the features identified by the aerial photography (Terra Nova 2005).

- 3.2.3 Subsequently, and as a result of the findings of the 2006 desk-based assessment, a targeted field evaluation was undertaken by North Pennines Archaeology Ltd (Davies 2006b), in the area north-east of the permitted extraction zone. The targeted evaluation successfully located four archaeological features and two possible archaeological features. The fill of a single pit within one of the trenches produced a calibrated radiocarbon date of 1900-1650 BC (Early-Centre Bronze Age) confirming that archaeological features of an earlier prehistoric date were present on the site.
- 3.2.4 Between 2005-2007, phased excavations at New Cowper Quarry (1 km from Overby Quarry), uncovered Mesolithic/early Neolithic flint debitage, pits containing early Neolithic pottery, an Early Bronze Age cist burial containing a charcoal rich fill that was radiocarbon dated to 2400-2380 cal BC and 2360-2140, and a number of undated ditched boundary features (Railton 2007).
- 3.2.5 More recently, an archaeological evaluation undertaken at High House Quarry (Noakes 2008) has confirmed that features which were previously seen as cropmarks in the vicinity do indeed survive as the extensive ditches of field systems, suspected as being of Bronze Age date.

4. EVALUATION RESULTS

4.1 INTRODUCTION

4.1.1 The evaluation was undertaken over a three-week period between 27th May and 6th June 2008. In total, forty-eight trenches were excavated, and for the purpose of the report, the site has been divided up into six separate areas (A-F). The machine stripping of the trenches, which were subsequently excavated by hand down to the natural subsoil, permitted an examination of the archaeological remains within the development site. Where no features of archaeological interest were located, a trench record sheet was compiled, and context numbers were not issued. All context numbers issued are reproduced in Appendix 1. The trench locations, plans and sections are shown on Figures 3-19.

4.2 AREA A

4.2.1 Area A was located at the north-western area of the proposed extraction area (see Figure 3). The field was rectangular in shape; its north-eastern boundary corresponding with the extent of the existing quarry, whilst its north-western boundary slopes down to the quarry access road. Area A also forms the lowest part of the site and contains Trenches 1-9. No archaeological features or layers were observed within any of these trenches, but trench descriptions are provided below.



Plate 1: Area A, facing south

4.2.2 *Trench 1:* the trench was aligned broadly northwest by southeast. The natural substrate, consisting of yellowish orange sand, was observed at the base of the trench at a depth of 0.88m, approximately 36.79 to 38.24m AOD. This was overlain by a subsoil, consisting of a light to mid-grey / orangey-brown, loose sand layer that reached a

maximum thickness of approximately 0.24m. The topsoil which covered this consisted of a mid grey loose to moderately compacted clayey silt, the maximum depth of which reached 0.20m.

- 4.2.3 *Trench 2:* the trench was aligned northeast by southwest and was located towards the north-western boundary of the site, parallel with the main quarry access road. The natural soil horizon was exposed at a maximum depth of 0.52m, consisting of loose orange sand with 5% small gravel inclusions (37.38 to 41.06m AOD). Approximately 0.30m of loose brown sand topsoil, made up the remaining depth of the trench.
- 4.2.4 No archaeological features or layers were observed within the trench.
- 4.2.5 **Trench 3:** the trench was aligned northwest by southeast and was located along the north-eastern extent of the site, adjacent to the existing quarry workings. The minimum depth of the trench was 0.28m and the maximum was 0.60m (37.91 to 40.96 AOD). The natural material seen on the base of the trench was yellowish orange sand. The natural was overlain by brownish grey moderately compacted silty sand subsoil that had a variable depth across the trench, its maximum depth being 0.12m. The topsoil consisted of mid-greyish brown loose to moderately compact sandy-silt also had a variable depth, but the maximum observed was 0.22m.
- 4.2.6 **Trench 4:** the trench was aligned east west and was situated in the centre of Area A. The minimum depth of the trench was 0.38m and the maximum was 0.78m (33.83m to 34.55m AOD). The natural sub-strata consisted of yellowish orange sand. The natural layer was overlain by 0.26m of loose mid-brown silty sand subsoil. Approximately 0.27m of topsoil, which consisted of moderately compacted silty sand, made up the remaining depth of the trench.
- 4.2.7 **Trench 5:** the trench was aligned northeast by southwest and was situated along the western boundary to Area A, running parallel with the entrance to the proposed extraction area. The minimum depth of the trench was 0.17m and the maximum was 0.35m (35.19m to 38.79m AOD). The natural soil horizon consisted of loose light orange sand. The natural was overlain by a light brown sandy silt topsoil, approximately 0.19m deep.
- 4.2.8 **Trench 6:** the trench was located at towards the south-western boundary for Area A and was aligned north south. The minimum depth of the trench was 0.15m and its maximum depth was 1.58m (32.72m to 35.29m AOD). The natural soil horizon varied in colour from mid orange to mid greyish blue silty sand at the northern extent of the trench. The area on which the trench was positioned appears to have suffered from drainage problems and the variations of colour within the natural can be explained by leeching from the topsoil. Overlying the natural was 0.80m of subsoil, which consisted of loose, dark brown silty sand, which contained 40% small to medium sized subrounded to sub-rectangular sandstone inclusions. Approximately 0.33m of very loose light brown topsoil made up the remaining depth of the trench.
- 4.2.9 *Trench 7:* the trench was situated within the eastern extent of Area A and was aligned broadly northwest by southeast. The minimum depth of the trench was 0.27m falling to 0.85m (33.17m to 33.66m AOD). The natural soil horizon consisted of loose light orange sand with no inclusions. This was overlain by 0.32m of loose dark brown silty

sand subsoil. Approximately 0.30m of loose light brown topsoil made up the remaining depth of the trench.

- 4.2.10 **Trench 8:** the trench was located towards to southern boundary of Area A and was aligned northeast by southwest. The minimum depth of the trench was 0.20m whilst the maximum was 0.45m (34.77 to 35.65m AOD). Loose orange natural occurring sand, with up to 20% small stone inclusions, formed the base of the trench. The natural was overlain by up to 0.25 of light brown sand topsoil.
- 4.2.11 *Trench 9:* the trench was broadly east west, and was positioned at the southern edge of Area A. The minimum depth of the trench was 0.20m and the maximum 0.70m, reached towards the western end of the trench (34.46m to 35.24m AOD). The natural consisted of loosely compacted orange sand with 10% small stone inclusions. The subsoil layer was light reddish-brown moderately compacted silty sand that reached a maximum depth of 0.23m. The topsoil layer was mid-brown moderately compacted silty sand up to 0.36m deep in section.

4.3 AREA B

- 4.3.1 Area B consisted of square-shaped field under permanent pasture. It was bounded on north-eastern side by the existing sand quarry. From this boundary, the land sloped considerably to the southwest, falling some 10.5m overall across two thirds of the field, with a more level area towards Area C, which in turn has a slight downward slope to the southeast. A disused quarry formed the north-western boundary. Its south-western boundary coincided with the edge of the plateau. Area B contains Trenches 10-14 (see Figure 4 and 5; Plate 2). No archaeological features or layers were observed in Trenches 1-12.
- 4.3.2 **Trench 10:** the trench was situated at the base of the plateau and was aligned northeast by southwest, with the minimum depth of the trench being 0.25m and the maximum 0.90m (36.54m to 39.25 AOD). The natural comprised very loose orange sand with patches of compacted cobbles and gravel, with patches grey in colour and moderately well sorted. This was overlain by a subsoil layer of loose mid-darkish brown silty sand that reached a maximum thickness of 0.20m, when viewed in section. The topsoil was made up of mid brown moderately compacted sandy silt that had occasional small stone inclusions, to a depth of 0.25m.



Plate 2: Area B, from Area D, facing north

- 4.3.3 **Trench 11:** the trench was positioned on the western side of Area B, running parallel with a field boundary that separates Areas B and D. The trench was aligned northwest by southeast. The trench had a minimum depth of 0.46m dropping down to 0.72m at the south-eastern extent of the trench (35.01m to 38.71m AOD). The natural subsoil was exposed at the base of the trench and consisted of very loose yellowish orange fine-grained sands. The natural was overlain by a very loose light brown silty sand topsoil approximately 0.22m deep.
- 4.3.4 *Trench 12:* the trench was located within the central section of Area A and lies at the base of the plateau. The trench was aligned north-south, with a minimum depth within the trench of 0.32m and a maximum depth of 0.84m (39.40m to 42.07m AOD). At the base of the trench the natural soil horizon was exposed, which comprised light yellowish orange coarse grained sands that contained very occasional small to medium sized water worn cobbles. This layer was seen in section at approximately 0.10m in depth. The overlying layer was mid brown, loosely compacted silty sand, that reached a maximum depth of 0.26m. This in turn was overlain by the topsoil layer which consisted of light to mid brown loosely compacted sandy silt that reached a maximum thickness in the section of 0.32m.
- 4.3.5 *Trench 13:* the trench was located at the base of the plateau and runs parallel with a relict earthwork field boundary, separating Areas B and C. The trench was broadly aligned northeast by southwest, and was mechanically excavated to a maximum depth of 0.45m, exposing the natural soil horizon (41.55 to 44.46 AOD).
- 4.3.6 At the base of the trench the natural soil horizon was exposed, which comprised light yellowish orange coarse grained sands that contained very occasional small to medium sized water worn cobbles. A number of features were observed cutting the natural deposits. They comprise a series of sub-circular and oval shaped pits, containing substantial amounts of burnt bone and charcoal. Upon excavation of the features they were tentatively identified as prehistoric human cremations. The majority of the features were located within the south-western section of Trench 13 (Plates 3-18).

4.3.7 The cremation pits 146, 148, 150, 152 and 154, containing burnt bone and pottery, represent the earliest datable phase of prehistoric activity within the proposed quarry extension. Cremation 1, comprises an oval-shaped cremation pit with a rounded profile 146, measuring 0.42m by 0.51m by 0.19m deep, was situated in the south-western extent of the trench. Its single homogenous fill, a loose blackish brown silty sand 147, contained burnt bone, charcoal and a small piece of burnt flint (Plate 3).



Plate 3: Trench 13, Cremation 1, 146, facing northeast

- 4.3.8 Cremation 2, *148*, located to the southwest of cremation1 *146*, measured 0.21m wide by 0.22m by 0.21m deep. It had steep sloping sides and a rounded base. Its primary deposit was a dark brown to black silty sand mixed with re-deposited natural material, *149*, which contained a large amount of charcoal fragments. Interestingly, no burnt bone was observed within this deposit, suggesting it may not be a cremation but rather some other form of ritual deposit.
- 4.3.9 An oval cremation pit (Cremation 3), 150, was located to the southwest of cremation 2 148, measuring 0.60m by 0.35m and up to 0.16m deep. It had rounded sides and a rounded base, and was filled with dark brown to black, soft silty sand 151 with occasional very small sub-rounded stones, burnt bone and charcoal fragments. It was evident that the feature had been partly disturbed by animals as a small burrow was observed within the section.
- 4.3.10 An isolated sub-oval cremation pit (Cremation 4) 152, measuring 0.42m by 0.28m by 0.16m deep was located towards the north-eastern extent of the trench. The feature continued partly beyond the limit of the evaluation trench. It had gently sloping sides and a rounded/concave base, and was filled by loose dark brown to black silty sand 153, with numerous charcoal fragments. The fill also contained four sherds of prehistoric pottery, which appeared to be Bronze Age in origin.



Plate 4: Trench 13, Cremation 2, 148



Plate 5: Trench 13, Cremation 3, 150



Plate 6: Trench 13, Cremation 4, 152

4.3.11 The cut (Cremation 5), of an oval cremation pit **154** measuring 0.67m by 0.45m and up to 0.29m deep was located approximately 0.27m to the southeast of **146**. The feature had vertical sides with a rounded base and was filled by disturbed, loose, dark brown to

black silty sands, containing burnt bone and charcoal fragments, *155* and *172*. An almost complete early Bronze Age Collared Urn (Small Find Nos 3 and 4), containing cremated bone and charcoal, had been placed on the eastern side of the feature. The side of the urn had been damaged by a rabbit burrow, running through the cremation pit, which resulted in the displacement of a number of sherds, however most of the contents of the pot remained in position (Plate 7 and 8).



Plate 7: Trench 13, Cremation 5, 154



Plate 8: Trench 13, Cremation 5, 154, showing early Bronze Age Collared Urn

4.3.12 Situated towards the north-eastern extent of the trench, an irregular sub-circular shaped cut *158* was observed. It measured 0.95m long by 1m wide by 0.23m deep, containing a single fill, *159*, comprising loose, light greyish brown sand. The nature of the fill and the irregular shape to the feature both strongly suggest a naturally occurring tree bole rather than a human intervention. A further probable tree bole *144* was also noted adjacent.

- 4.3.13 The overlying subsoil layer was mid brown, loosely compacted silty sand, that reached a maximum depth of 0.10m. This in turn was overlain by the topsoil layer which consisted of light to mid brown loosely compacted sandy silt that reached a maximum thickness in the section of 0.12m.
- 4.3.14 *Trench 14:* the trench was positioned at the top of the plateau and lay towards the north-eastern extent of the working quarry and approximately 5m to the northwest of the relict earthwork fence boundary that separates Area B and C. The maximum depth of the trench was 0.47m rising to 0.35m (45.19m to 45.39m AOD).
- 4.3.15 The earliest layer observed was the natural soil horizon, which consisted of bands of loose yellow fine and coarse sands. Approximately 0.40m of mid greyish brown silty sand topsoil made up the remaining depth of the trench.
- 4.3.16 No archaeological features or layers were observed within this trench.

4.4 AREA C

- 4.4.1 Area C was located towards to south-eastern extent of the proposed quarry extension. The land is currently in use as permanent pasture and the landscape topography is similar to Area B, both of which contained a steep incline leading to the highest point of the site. Area C was bounded to the northeast by the quarry; to the southeast by a modern hedge line that led to steep wooded gully and to the southwest by a large mature hedge line which incorporates a large earthwork bank. Area C contained Trenches 15 to 22, and is illustrated in Figures 6 and 7, and Plates 9 and 10.
- 4.4.2 *Trench 15:* the trench was located on the top of incline, adjacent to the quarry workings, and was aligned broadly northeast by southwest. The minimum depth of the trench was 0.30m and maximum depth was 0.44m (45.07m to 45.60m AOD).
- 4.4.3 The natural soil horizon consisted of loose, yellow coarse sand with 60% small rounded to sub angular stone inclusions. Overlying the natural was a thin band of subsoil, which consisted of mid brown silty sand approximately 0.10m deep. The topsoil, a dark brown loose sandy soil measuring 0.44m deep in section, made up the remaining depth of the trench.
- 4.4.4 No archaeological features or layers were observed within this trench.
- 4.4.5 **Trench 16:** the trench was located on the brow of the plateau and was aligned northwest by southeast. Its minimum depth was 0.31m, dropping to 0.52m in the southeastern section of the trench (44.49m to 45.00m AOD). The natural, a yellowish orange loose sand, was exposed at the base of the trench, which was overlain by 0.19m of loose mid brown sandy silt. Approximately 0.24m of light brown topsoil made up the remaining depth of the trench.
- 4.4.6 No archaeological features or layers were observed within this trench.
- 4.4.7 **Trench 17:** the trench was positioned towards the north-eastern extent of the area and ran parallel with Trench 15. The trench was aligned northeast by southwest. Its minimum depth was 0.36m and its maximum depth was 0.56m at the south-western extent of the trench (45.05m to 45.75m AOD). The natural subsoil was exposed at the base of the trench and consisted of loose yellow sand with 20% small to medium sized

sub angular sandstone inclusions. The natural was overlain by 0.28m of loose light brown topsoil.

- 4.4.8 No archaeological features or layers were observed within this trench.
- 4.4.9 *Trench 18:* the trench was located within the southern section of Area C, on a flat parcel of land running parallel with a freestanding hedge line. The trench was aligned broadly north-northwest by south-southeast. Its maximum depth was 0.62m; the yellow sand natural soil horizon, was exposed at the base of the trench.
- 4.4.10 At the north-western extent of the trench a linear feature was exposed. This was a ditch **169**, which measured 0.83m wide and had an average depth of 0.16m with a wide U-shaped profile giving way to a flat base. It was orientated east west and was filled with a compacted greyish brown sand with small pea grit type inclusions **168**. The base of the ditch showed clear evidence for tooth marks from a mechanical excavator bucket, indicating a relatively modern date for the feature (Plate 9).

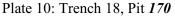


Plate 9: Trench 18, Ditch 169

- 4.4.11 An oval shaped pit or treebole, *177*, located in the centre section of Trench 18, measured 0.70m wide by 0.66m in length by 0.31m deep, and contained a single fill comprising mottled greyish orange sandy silt *178*. The silty nature of this fill is indicative of standing water and suggests that it was open for a long period of time, and gradually silted up rather than being deliberately backfilled.
- 4.4.12 The cut 170, of an irregular shaped feature, located approximately 0.60m to west of pit 177, was also interpreted as a possible pit, though more probably a tree bole. It measured 1m wide by 0.13m deep and continued beyond the limits of excavation; therefore its full extent is unknown. It was filled by loose mottled orange sand 171, similar to that seen in 177. Overlying the natural was a thin band of subsoil, which consisted of mid brown silty sand approximately 0.20m deep. The topsoil, a mid brownish grey silty sand layer measuring 0.32m deep in section, made up the remaining depth of the trench.

- 4.4.13 **Trench 19:** the trench was positioned towards the centre of the area and was aligned north-south; its minimum depth was 0.28m and its maximum depth was 0.49m at the southern extent of the trench (44.86m to 45.69m AOD). The natural subsoil was exposed at the base of the trench and consisted of loose orangeish brown sand with 20% small to medium sized sub angular sandstone inclusions. The natural was overlain by 0.18m of loose mid brown silty sand subsoil. This in turn was overlain by a loose light brownish grey sandy topsoil, to a depth of 0.25m.
- 4.4.14 No archaeological features or layers were observed within this trench.





- 4.4.15 **Trench 20:** the trench was positioned towards the eastern extent of the site and ran parallel with Trench 17. The trench was aligned northeast by southwest; its minimum depth was 0.35m and its maximum depth was 0.53m at the south-western extent of the trench (44.43m to 45.31m AOD). The natural subsoil was exposed at the base of the trench and consisted of loose orangeish yellow sand with 20% small to medium sized sub angular sandstone inclusions. The natural was overlain by 0.32m of loose light brown sandy topsoil.
- 4.4.16 No archaeological features or layers were observed within this trench.
- 4.4.17 **Trench 21:** the trench was positioned towards the southern extent of the area and was aligned east-west. Its minimum depth was 0.25m and its maximum depth was 0.40m at the western extent of the trench (42.59m to 44.50m AOD). The natural subsoil was exposed at the base of the trench and consisted of loose light yellowish orange sand with 20% small to medium sized sub angular sandstone inclusions. Overlying the natural was a thin band of subsoil, which consisted of mid orangeish brown loose silty sand approximately 0.15m deep. The topsoil, a mid brown silty sand layer measuring 0.20m deep in section, made up the remaining depth of the trench.
- 4.4.18 No archaeological features or layers were observed within this trench.
- 4.4.19 *Trench 22:* the trench was situated in the north-western extent of Area C and was broadly aligned north south. Its minimum depth was 0.40m and its maximum depth

was 0.60m (41.20m to 43.62m AOD). The natural soil horizon, consisting of yellowish orange sand, was exposed at the base of the trench.

- 4.4.20 Two parallel curvilinear linear features were evident at the southern extent of the trench, aligned northeast by southwest. One linear feature 179 measured 0.30m in width and had an average depth of 0.04m with a single fill 180, consisting of loose mid brown silty sand. Feature 181, was almost identical to 179, however the feature was slightly deeper at 0.10m. Its single fill consisted of a loose mid brown silty sand 182. No dating material was recovered from these features, though a small section of food wrapping was uncovered from the fill 180, perhaps suggesting a modern date (though the excavators noted animal disturbance which could have brought the material into the context).
- 4.4.21 Overlying the natural was the topsoil, a light brown silty sand layer measuring 0.43m deep in section, which made up the remaining depth of the trench.

4.5 AREA D

- 4.5.1 Area D was located in the central portion of the proposed quarry extension. The land is currently in use as pasture and the landscape topography contains a steep incline facing northwest. Area D is bounded to the northeast by Areas B and C; to the northwest by a modern post-and-wire fence and to the south and southwest by a large mature hedge line, incorporating a large earthwork bank and several large mature trees. Area D contained Trenches 23-31 and 48, and is illustrated in Figures 8 to 12, and Plates 11 and 12.
- 4.5.2 **Trench 23:** the trench was positioned towards the western extent of Area D and lay adjacent the entrance of Area F. The trench was aligned east-west. Its minimum depth was 0.45m, with its maximum depth being 0.67m at the north-western extent of the trench (34.54m to 36.58m AOD). The natural was exposed at the base of the trench and consisted of loose orange sand with 25% small sub angular sandstone inclusions. The natural was overlain by 0.11m of loose light brownish orange silty sand subsoil, which in turn was overlain by approximately 0.31m of light greyish brown sandy topsoil.
- 4.5.3 No archaeological features or layers were observed within this trench.
- 4.5.4 **Trench 24:** the trench was positioned towards the south-western boundary of Area D and lay approximately 27m to the south of Trench 23. The trench was aligned northeast by southeast. Its minimum depth was 0.16m, with its maximum depth was 0.56m at the south-western extent of the trench (38.74m to 39.57m AOD). The natural subsoil was exposed at the base of the trench and consisted of loose yellowish orange sand with 10% very small sub angular sandstone inclusions.
- 4.5.5 A spread of burnt material, *100*, was noted within the centre of the trench extending 0.34m from the south facing section, comprising a loose dark greyish silty sand with a high percentage of charcoal within its matrix. As the deposit was only 0.03m deep and no clear edges for the feature was observed, this deposit was presumed to be the result of material which has washed down from above, and of modern origin.
- 4.5.6 The natural and burnt spread were overlain by 0.28m of loose, very soft brownish orange topsoil.

- 4.5.7 **Trench 25:** the trench was positioned towards the north-western boundary of Area D. The trench was aligned north south and had a minimum depth of 0.20m and a maximum depth of 0.35m (41.09m to 42.15m AOD). The natural comprised a loose light brownish orange sand. A number of archaeological features were observed cutting the natural soil horizon all of which appear to represent land management in the form of either trackways and/or field boundaries.
- 4.5.8 At the southern end of the trench, a ditch 101 was encountered, running in a broadly north-west south-east direction. The ditch measured 0.53m in width and 0.05m in depth, and was filled with a loose mid brown silty sand 102, which contained a large fragment of charcoal. Moving north up the trench, a further ditch, 164, was uncovered, measuring 0.50m in width and excavated to 0.02m in depth. The ditch was aligned broadly north south and contained a single fill comprising mottled greyish orange sandy silt 165. Another ditch 156, just north of ditch 164, measured 0.67m in width by 0.16m in depth and was aligned northeast by southwest. It contained a compacted greyish brown fill 157; the fill produced a single sherd of 19th century pottery. Another ditch 160, lying north of ditch 164, measured 1.05m in width by 0.23m in depth and was orientated east-west. Its single fill consisted of loose to friable mid to dark brown sandy silt, 161. All the ditches were very shallow, with very gradually sloping sides and flat bases.
- 4.5.9 A curvilinear ditch *162*, lying north of ditch *160*, was better defined at 0.23m in depth, and had a steeper break of slope with a rounded base. The ditch measured 0.80m in width and was broadly aligned northeast by southwest. It was filled by a loose mid to dark brown sandy silt *163*, which produced no dating evidence. A ditch *166*, lying immediately north of ditch *162*, measured 0.42m in width by 0.10m in depth and was filled by *167*, comprising loose dark greyish brown sandy silt. The feature was broadly aligned northeast by southwest and had a very shallow profile.
- 4.5.10 Overlying the natural was the topsoil, a mid to dark greyish brown sandy silt layer measuring 0.25m deep in section, which made up the remaining depth of the trench.



Plate 11: Trench 25, Ditches 160 and 162

- 4.5.11 **Trench 26:** the trench was positioned towards the northern extent of Area D and ran parallel with the field boundary separating Areas B and D. The trench was aligned northwest by southeast; its minimum depth was 0.40m whilst its maximum depth was 0.67m at the north-western extent of the trench (39.66m to 41.22m AOD). The natural subsoil was exposed at the base of the trench and consisted of loose light orangeish yellow sand with 20% small to medium sized sub angular sandstone inclusions. Two features were exposed and excavated within the trench and are discussed below.
- 4.5.12 A pit 174, located at the centre of the trench, was broadly oval, measuring 0.90m wide and up to 0.38m deep. It had gradually sloping sides and a concave base, and was filled with compacted dark greyish brown sandy silt, 173, with occasional gravel patches. Another pit 175, located approximately 1m south of pit 174, was a sub-oval feature with irregular sides and base approximately 1.04m wide by 0.40m deep. The feature was filled by a compacted mid to dark greyish brown sandy silt 176, with occasional sub-rounded pebbles. The excavator considered both pits could be of natural origin, possibly tree boles, though the edges were fairly well-defined.
- 4.5.13 The natural was overlain by 0.20m of loose mid brown silty sand subsoil, which in turn was overlain by approximately 0.36m of light greyish brown sandy topsoil.
- 4.5.14 *Trench 27:* the trench was positioned towards the central section of Area D. The trench was aligned northeast by southwest. Its minimum depth was 0.37m and its maximum depth was 0.67m at the north-eastern extent of the trench (40.86m to 42.53m AOD). The natural subsoil was exposed at the base of the trench and consisted of loose brownish orange sand with 20% small sub angular sandstone inclusions. Two probable archaeological features cutting the natural were exposed within the trench and are discussed below.
- 4.5.15 A linear/ditch feature 140/142, situated towards the furthermost south-western extent of the trench has been tentively identified as a post-medieval field boundary. The feature survives as an upstanding but shallow earthwork in the field, and as the ground has been severely disturbed, possibly when the field boundary was removed, the feature was excavated as two distinct components of what is likely to be the same feature. One section 140 measured 0.86m wide and had an average depth of 0.32m whilst the other 142 measured 1.02m wide and had a depth of 0.34m. The ditches were aligned northwest by southeast; the fills of ditches 140 and 142 (141 and 143) consisted of mid to dark yellowish brown sandy silt, fairly loosely compacted. Situated immediately to the northeast of these, was a linear/ditch 138. The feature was 0.92m wide, with a depth of 0.15m, and aligned northwest by southeast. It was filled with a loose mid brownish grey sandy silt, 139, and contained 10% very small sub-angular stone inclusions.
- 4.5.16 Approximately 0.37m of loose greyish brown topsoil, made up the remaining depth of the trench.
- 4.5.17 **Trench 28:** the trench was positioned towards the south-eastern extent of Area D. The trench was aligned east-west, with its minimum depth being 0.50m and its maximum depth being 0.56m at the western extent of the trench (41.90m to 43.04m AOD). The natural subsoil was exposed at the base of the trench and consisted of loose light yellowish orange sand with 25% small sub angular sandstone inclusions. The natural was overlain by 0.40m of loose light brown sandy topsoil.

- 4.5.18 No archaeological features or layers were observed within this trench.
- 4.5.19 **Trench 29:** the trench was positioned towards the south-western extent of Area D. The trench is aligned northwest by southeast and its minimum depth was 0.42m and its maximum depth was 0.60m at the north-western extent of the trench (42.46m to 43.10m AOD). The natural subsoil was exposed at the base of the trench and consisted of loose greyish brown sand with 15% small sub-angular sandstone inclusions. The natural was overlain by 0.10m of loose brownish orange silty sand subsoil, which in turn was overlain by approximately 0.21m of light brown sandy topsoil.
- 4.5.20 No archaeological features or layers were observed within this trench.
- 4.5.21 **Trench 30:** the trench was positioned towards the south-eastern extent of Area D. The trench was aligned northwest by southeast, with its minimum depth being 0.32m and its maximum depth being 0.56m at the north-eastern extent of the trench (41.53m to 42.16m AOD). The natural subsoil was exposed at the base of the trench and consisted of loose mid brownish orange sand with occasional small sub angular sandstone inclusions. The natural was overlain by 0.21m of loose mid orangeish brown silty sand subsoil, which in turn was overlain by approximately 0.26m of greyish brown sandy topsoil.
- 4.5.22 No archaeological features or layers were observed within this trench.
- 4.5.23 *Trench 31:* the trench was positioned towards the northern extent of Area D. The trench was aligned northwest by southeast. Its minimum depth was 0.29m and its maximum depth was 0.68m at the south-eastern extent of the trench (35.16m to 37.68m AOD). The natural subsoil was exposed at the base of the trench and consisted of very loose orangey brown sand. The natural was overlain by 0.22m of loose brown silty sand subsoil, which in turn was overlain by approximately 0.26m of loose greyish brown sandy topsoil.
- 4.5.24 No archaeological features or layers were observed within this trench.
- 4.5.25 **Trench 48:** the trench was positioned towards the south-western extent of Area D. The trench was aligned north south; its minimum depth was 0.23m dropping down to its maximum depth 0.41m (42.18m to 42.69m AOD). Four linear features that may represent a trackway were exposed towards the southern extent of the evaluation trench cutting the natural soil horizon, a light orangeish brown sand. All four of the linear features **128**, **130**, **132** and **134** were similar in plan and depth (Plate 12).
- 4.5.26 Linear feature 134, situated towards the northern extent of the trench, measured 0.36m wide with an average depth of 0.11m and was aligned east west. Its single fill 135 comprised loose dark brown orange silty sand. Located approximately 0.60m to the north and broadly aligned with 134 was linear feature 132, which measured 0.39m wide by 0.10m in depth. The fill 133 consisted of loose dark brown silty sand.
- 4.5.27 Linears *128* and *130* situated 2.90m to the north of *132* and *134* measured 0.44m wide and both were on average 0.09m to 0.10m deep. The fills of both features *129* and *131* comprised soft brownish orange silty sand. A single sherd of 19th century pottery was recovered from fill *129*.
- 4.5.28 The natural was overlain by 0.23m of loose greyish brown sandy topsoil.



Plate 12: Trench 48, Ditches *128* and *130*

4.6 AREA E

- 4.6.1 Area E consisted of a broadly rectangular shaped field under permanent pasture. It was bounded on north-western side by the boundary separating Areas E and F, and on the north-eastern side by the boundary between Areas E and D. The land slopes considerably to the southwest, falling some 15.2m overall across two thirds of the field to a more level area towards the modern road. A modern post-and-wire fence forms the north-eastern boundary whilst its south-eastern boundary coincided with the edge of a plateau. Area E contains Trenches 41-47 (see Figures 13-16).
- 4.6.2 *Trench 41:* the trench was situated at the base of the plateau and was aligned east-west, with the minimum depth of the trench being 0.22m and the maximum 0.47m (40.66m to 43.11m AOD). The natural comprised very loose orange sand with patches of compacted gravels, mostly grey in colour and moderately well sorted.
- 4.6.3 A linear ditch/gully **108** was situated at the north-eastern extent of the trench. The ditch/gully **108** had a width of 0.69m and an average depth of 0.31m, with gently sloping sides that led to a concave base. The fill, comprised a compact dark blackish-brown silty sand **107**, with occasional rounded pebble inclusions. No finds were recovered from the fill to ascertain a date. The topsoil, comprising light grey moderately compacted silty sand, made up the remaining depth of the trench.
- 4.6.4 **Trench 42:** the trench was positioned towards the north-western extent of Area E, running parallel with a field boundary that separates Areas E and F. The trench was aligned northeast by southwest. The trench had a minimum depth of 0.20m dropping down to 0.48m at the south-western extent of the trench (43.94m to 44.04m AOD). The natural subsoil was exposed at the base of the trench and consisted of very loose mid orange fine-grained sands. The natural was overlain by a very loose light grey silty sand topsoil approximately 0.30m in depth.
- 4.6.5 No archaeological features or layers were observed within this trench.

- 4.6.6 **Trench 43:** the trench was positioned in the north-western side of Area E, towards the field boundaries that separate Areas D, E and F. The trench was aligned north-south. The trench had a minimum depth of 0.24m dropping down to 0.46m at the northern extent of the trench (43.56m to 43.95m AOD). The natural subsoil was exposed at the base of the trench and consisted of loose orangey-red coarse-grained sand. The natural was overlain by a very loose light grey silty sand topsoil to approximately 0.46m in depth.
- 4.6.7 No archaeological features or layers were observed within this trench.
- 4.6.8 **Trench 44:** the trench was situated towards the centre of Area F and was aligned broadly north-south, with the minimum depth of the trench being 0.29m and the maximum 0.42m (41.50m to 43.39m AOD). The natural comprised very loose orange and yellow sand with patches of compacted cobbles and gravel. This was overlain by a subsoil layer of loose mid brownish grey silty sand that reached a maximum thickness of 0.16m, when viewed in section. The topsoil consisted of loose light brown sandy silt that had occasional small stone inclusions; this extended to a depth of 0.20m.
- 4.6.9 No archaeological features or layers were observed within this trench.
- 4.6.10 **Trench 45:** the trench w as situated towards the north-eastern extent of Area E and was aligned broadly northeast by southwest, with the minimum depth of the trench being 0.20m and the maximum 0.60m (41.87m to 42.62m AOD). The natural comprised very loose orange sand with patches of compacted cobbles and gravel, mostly grey in colour and moderately well sorted. Two parallel linear gullies, **103** and **105**, were noted towards the north-eastern end of the trench. Gully **103** measured 0.40m in width by 0.06m in depth, and steeply sloping sides and a flat base. It was filled by loose dark brownish-orange sandy silt **104**; no finds were recovered from its fill. Running parallel and slightly north of was **105**, a similar gully with steep sides and a flat base. The gully was 0.29m in width, and was excavated to 0.15m in depth. The gully was filled by soft loosely compacted dark brownish orange sandy-silt, **106**. The fill also returned no finds.
- 4.6.11 The features were overlain by a subsoil layer of loose mid-darkish brown silty sand that reached a maximum thickness of 0.15m, when viewed in section. The subsoil in turn was sealed by the topsoil, which consisted of a light greyish brown sandy silt, to a depth of 0.30m.
- 4.6.12 **Trench 46:** the trench was situated towards the eastern extent of Area E and was aligned broadly east west, with the minimum depth of the trench being 0.18m and the maximum depth being 0.64m (45.03m to 45.58m AOD). The natural comprised very loose mid orange silty sand. The natural was overlain by a layer of dark brown silty sand subsoil to a depth of 0.50m. This in turn was overlain by the topsoil, which consisted of loose light grey sandy silt. A prehistoric flint arrowhead (SF1) was recovered from the interface between the natural soil horizon and the subsoil.
- 4.6.13 No archaeological features or layers were observed within this trench.
- 4.6.14 **Trench 47:** the trench was situated towards the southern extent of Area E and was aligned broadly north south, with the minimum depth of the trench being 0.21m and the maximum 0.52m (41.03m to 41.23m AOD). The natural uncovered at the base of the trench comprised very loose light orange sand. Cutting the natural, a shallow linear

ditch *109* was exposed towards the southern extent of the evaluation trench, measuring 1.53m in width with an average depth of 0.33m. It had gradually sloping sides, and a rounded concave base, and was filled moderately compacted dark greyish brown sandy silt *110*. No finds were recovered from the fill.

4.6.15 The natural was overlain by the topsoil, consisting loose mid greyish brown sandy silt, to a depth of 0.37m.

4.7 AREA F

- 4.7.1 Area F was located towards the south-western extent of the proposed quarry extension. The land is currently in use as permanent pasture and incorporates a steep incline leading to the highest point of the new quarry site. Area F is bounded to the southwest by a modern road; to the northwest by a modern hedge line that leads to steep wooded gully; to the northeast by a large mature hedge line which incorporates a large earthwork bank, and forms the boundary with Area D. The south-eastern extent of Area F coincides with a boundary separating Areas E and F. Area F contains nine evaluation trenches (Trenches 32 to 40) and is illustrated in Figures 17 to 19, Plate 13. All trenches measured 30m in length, apart from Trench 37, which measured approximately 50m in length. No archaeological features were observed in Trenches 32-38.
- 4.7.2 **Trench 32:** the trench was positioned towards the north-western boundary of Area F. The trench was aligned north-south; its minimum depth was 0.30m and its maximum depth was 0.60m at the north-eastern extent of the trench (34.98m to 37.94m AOD). The natural subsoil was exposed at the base of the trench and consisted of loose mid orange sand with 5% small to medium sized sub angular sandstone inclusions. The natural was overlain by 0.28m of topsoil, a loose light brown sandy silt.
- 4.7.3 *Trench 33:* the trench was aligned east-west and was situated towards the northwestern boundary of Area F. The minimum depth of the trench was 0.30m and the maximum was 0.57m (35.04m to 39.52m AOD). The natural sub-strata consisted of loose yellowish orange sand. The natural layer was overlain by 0.24m of loose mid brownish orange sand. Approximately 0.30m of topsoil, which consisted of moderately compacted light brownish grey silty sand, made up the remaining depth of the trench.
- 4.7.4 **Trench 34:** the trench was aligned broadly northwest by southeast and was situated towards the central section of Area F. The minimum depth of the trench was 0.24m and the maximum depth was 0.30m (42.89m to 43.82m AOD). The natural sub-strata consisted of light yellowish orange sand. The natural layer was overlain by 0.19m of loose mid-brown silty sand subsoil. Approximately 0.19m of topsoil, which consisted of moderately compacted light brown silty sand, made up the remaining depth of the trench.
- 4.7.5 **Trench 35:** the trench was broadly aligned northwest by southeast and was situated towards the south-western boundary of Area F. The minimum depth of the trench was 0.30m and the maximum depth was 0.63m (38.25m to 40.60m AOD). The natural substrata consisted of loose orangey yellow sand with occasional small sub-rounded inclusions. The natural was sealed by a subsoil, comprising 0.24m of mid brownish-

orange soft silty sand. Approximately 0.20m of topsoil, which consisted of moderately compacted light brown silty sand, made up the remaining depth of the trench.

- 4.7.6 **Trench 36:** the trench was aligned east by west and was situated towards the centre of Area F. The minimum depth of the trench was 0.30m and the maximum depth was 0.46m (42.04 to 43.05m AOD). The natural soil horizon consisted of very loose light orange sand. The natural was overlain by light brownish grey sandy silt topsoil, approximately 0.30m deep.
- 4.7.7 **Trench 37:** the trench was aligned north-west by south-east, with the minimum depth of the trench being 0.20 and the maximum 0.40m (40.95m to 44.19m AOD). The natural comprised very loose light orange sand with patches of compacted cobbles and gravel, mostly grey in colour and moderately well sorted. This was overlain by a subsoil layer of loose light brown loose silty sand that reached a maximum thickness of 0.09m, when viewed in section. The topsoil was made up of light brown moderately compacted sandy silt that had occasional small stone inclusions, to a depth of 0.20m.
- 4.7.8 **Trench 38:** the trench was aligned east-west and was situated towards the south-eastern boundary separating Areas E and F; the trench also ran parallel with this boundary. The minimum depth of the trench was 0.40m and the maximum was 0.70m (43.21m to 40.40m AOD). The natural sub-strata consisted of loose light orange soft sand. Approximately 0.20m of topsoil, which consisted of loose light brown silty sand, made up the remaining depth of the trench.
- 4.7.9 **Trench 39:** the trench was aligned northwest by southeast. Its minimum depth was 0.23m dropping to 0.40m in the south-western section of the trench (44.41m to 44.58m AOD). The natural drift geology was exposed at the base of the trench consisting loose light orangey yellow sand. A number of archaeological features were observed cutting the natural soil horizon.
- 4.7.10 A pit, *115*, located at the south-eastern extent of the trench, measured 1.40m in length by 0.66m in width and up to 0.16m in depth. The cut was largely irregular, with an uneven base. It contained a single fill, comprising loose dark brown silty sand with no visible inclusions *116*. The fill contained large amounts of root activity, suggesting that it may have been a treebole or possibly a small pit; a worked whetstone was recovered from the fill (SF 2).
- 4.7.11 Towards the centre of the evaluation trench, two parallel linear ditch features, 111 and 113 may represent the truncated remnants of a field boundary, as they tie in with a boundary shown on the tithe map. One ditch 111, measured 0.50m wide and had an average depth of 0.12m 0.16m. The profile consisted of a wide U-shaped profile giving way to a concave base and was orientated broadly north-east south-west. It was filled with dark brown silty sand, 112, with no visible inclusions.
- 4.7.12 Another ditch *113* was located approximately 2.03m to the northwest of the first ditch *111*. The ditch measured 0.36m in width by 0.09m in depth with gradual sides leading to a concave base. Its single fill comprised a loose mid brown silty sand *114*, which is similar to context *112*. Approximately 0.26m of light brown sandy silt topsoil made up the remaining depth of the trench.
- 4.7.13 *Trench 40:* the trench was aligned east by west and was situated towards the eastern extent of Area F. Its minimum depth was 0.27m dropping to 0.45m in the western

section of the trench (44.35m to 44.49m AOD). The natural substrate was exposed at the base of the trench consisting of loose light orange sand. A number of archaeological features were observed cutting this natural soil horizon.

- 4.7.14 A ditch, *118*, located towards the western extent of the evaluation trench, measured 1.38m in width and had an average depth of 0.31m, with a shallow U-shaped profile giving way to a flat base. The ditch was orientated broadly northeast by southwest and was filled with very dark greyish brown silty sand, *117*, with the occasional small sandstone inclusions. This feature may represent a field boundary, probably the same ditch as context *113* in Trench 39.
- 4.7.15 Situated towards the eastern extent of the evaluation trench, two distinct postholes *119* and *124*, and one possible posthole *126*, were observed. These have been tentatively identified as structural components that may form part of a fence-line. Posthole *119* comprised a semi-circular cut measuring 0.30m in diameter and 0.32m in depth, and had steep near vertical sides and a concave base. It was filled by, mid greyish-brown sand *120*. Posthole *124* comprised a circular cut measuring 0.27m in diameter and 0.06m in depth, and had gradually sloping sides and a concave base. It was filled by mid greyish-brown sand *125*. Posthole *126* comprised a semi-circular cut measuring 0.44m in length and 0.26m in width, and was excavated to 0.15m in depth. The cut had gradually sloping sides and a concave base. It was filled by mid greyish-brown sand *127*.
- 4.7.16 Two tree-boles *123* and *136* were also excavated at the eastern extent of the trench that may indicate land clearance. Tree-bole *123* comprised an irregular/sub ovoid pit measuring 1m by 0.63m and was excavated to 0.52m in depth; it was noted to cut the fill of tree bole *136*, *137*. Its profile comprised gently sloping sides giving way to an irregular base. Its single fill comprised compacted, friable dark greyish brown silty sand *122*, which yielded a small fragment of unidentified prehistoric pottery. Tree bole *136* was almost identical in plan and profile to tree bole *123* with a single fill which consisted of compacted dark greyish brown silty sand *137*. Approximately 0.27m of mid greyish brown sandy silt topsoil made up the remaining depth of the trench.



Plate 13: Trench 40, posthole [119]

5. FINDS ANALYSIS

5.1 **BULK FINDS**

- 5.1.1 The finds were cleaned and packaged according to standard guidelines, and recorded under the supervision of F. Giecco (NPA Ltd Technical Director).
- 5.1.2 Excluding the finds from Trench 13, the cremations and associated remains, only three sherds of pottery were retrieved from the whole site (see Table 1).
- 5.1.3 The cremation vessels will be fully assessed for a future report (Town *forthcoming*), and are briefly discussed below. A small sherd of prehistoric (possibly Bronze Age) pottery was also found within the fill of a treebole, *122*, but was too small to be given an accurate date; the find will be assessed by a specialist with the excavation finds in a future report (Town *forthcoming*).
- 5.1.4 One sherd of black-glazed earthenware pottery, known as Heavy Duty Table Ware, was recovered from *128* in Trench 48. One sherd of plain unglazed red earthenware was uncovered from *157* in Trench 25. This type of ceramic pottery dates these contexts to a generic date of the 19th century.

Context	Trench	Material	Quantity	Weight (Kg)	Period
157	25	Glazed Earthenware	1	0.03kg	19 th Century
128	48	Plain Earthenware	1	0.01kg	19 th

Table 1: List of artefacts recovered during the evaluation.

5.1.5 None of the finds, other than the prehistoric pottery, were considered to have archaeological significance and were discarded.

5.2 SMALL FINDS

- 5.2.1 There were only four small finds recovered from the evaluation at Overby. They are listed below in Table 1.
- 5.2.2 *Small Find 1:* a prehistoric flint arrowhead was recovered from the interface between the natural soil horizon and the subsoil in Trench 46. No archaeological features or layers were observed within this trench. The arrowhead measured approximately 4 cm long by 2cm wide at the widest point.
- 5.2.3 The flint comprised a projectile point made from transparent black flint. It was triangular shaped in plan (which conforms to Green's (1980) Ogival classification), plano-concave in section. It had a prominent bulb of percussion with clear ripple marks and plain striking platform. Three previous removals from dorsal surface were visible prior to unifacial retouch along the length of both lateral margins, culminating in a

point at distal end. Retouch was absent from proximal end and confined to dorsal surface only. Whilst the Ogival type arrowhead classification places this example firmly in the earlier Neolithic, it was difficult to assess fully as it may represent an unfinished piece. This is suggested by the presence of the striking platform, bulb of percussion and minimal unifacial retouch. Whilst arrowheads of this type occasionally occur in the earlier Neolithic with these features still present, it is generally assumed that these examples are 'roughouts' or 'unfinished' (Butler, 2005: 123). However, it would appear that the decision to minimise invasive retouch and not to remove the bulb of percussion or striking platform was a necessary one as this would have compromised the piece due to the large concave scar on the dorsal surface left by a previous flake removal from the core. This problem would have been clear to the knapper as soon as the piece was removed from the core. However, the decision was still taken to retouch the piece suggesting that it could still have been used for its intended purpose. Alternatively, it could represent a fortuitously struck flake which was utilised for a specific purpose, in which case accurately dating the piece becomes more difficult. However, this seems unlikely at it would appear, based on the dimensions of the large dorsal scar and its associated striations, that a flake of similar shape and size was previously struck from the core suggesting that the knapper had attained a relatively high degree of control over the flaking surface. The flake was probably struck from the core via the hard-hammer technique, attested to by the pronounced percussion features before pressure-flaking was most likely employed to retouch the edges.

- 5.2.4 *Small Find 2:* a whetstone was recovered from Trench 39. The whetstone was an oblong shaped stone measuring about 11.5cm in length and 3.5cm wide at the widest point. One side was very worn. This forms a dip along the longest side where successive blades have worn the surface down due to pressure on it when being sharpened. It was found in a feature interpreted as a tree bole or small pit that contained a single fill. The whetstone was recovered from the bottom of the feature.
- 5.2.5 Small Finds 3 and 4: in Trench 13, several cremation pits were observed, denoted by their high burnt bone and charcoal inclusions, some also containing pottery. In Cremation 5 an almost complete early Bronze Age Collared Urn was found. It contained cremated bone and charcoal and was found on the eastern side of the feature. The side of the urn had been damaged by a rabbit burrow. This resulted in the displacement of a number of sherds from the main body of the pot. Most of the contents of the pot remained in position though (Plates 7 and 8). The bulk of the pot from context 155 was given Small Find No 3 and the displaced sherds from context 172 were given the Small Find No 4. The urn was intact enough to be excavated in the lab and is discussed in the environmental results section. The urn and associated sherds will be discussed more fully in a future report (Town forthcoming).

6. ENVIRONMENTAL ANALYSIS

6.1 INTRODUCTION – THE ENVIRONMENTAL REMAINS

- 6.1.1 North Pennines Archaeology Ltd (NPAL) undertook an excavation in advance of mineral extraction at Overby Quarry, Aikshaw, Aspatria, Cumbria, to assess the archaeological potential of the area. The assessment area is within a landscape zone known as the Abbeytown Ridge, which forms a significant topographic feature, defining the southern boundary of the Solway Plain (Hodgkinson *et al* 2000). Previous archaeological assessment of the Abbeytown Ridge is known to have archaeological features. The objective of the environmental analysis was to establish the presence/absence, nature, extent and state of preservation of any ecofactual remains recovered and to determine their origins.
- 6.1.2 From the 48 trial trenches excavated 24 contexts were considered worth sampling due to the presence of archaeological features with potential for the recovery of ecofacts leading to the interpretation of these features. A cremation urn was also recovered from Trench 13, Small Find Number 3 and 4. This was excavated in spits in the lab as sample 30 and is discussed separately below.
- 6.1.3 The site provided conditions of dry to waterlogged loosely compacted soil. Preservation of the organic remains and bone was then expected to be reasonable, depending on the acidity of the soil.
- 6.1.4 The samples came from various deposits and fills from archaeological features (see Table 2 for details). These are discussed below.

6.2 METHODOLOGY

- 6.2.1 All the whole earth samples were selected for processing in order to assess the environmental potential of the material recovered. This will help provide further information as to the depositional processes involved in the formation of the material. The methodology employed required that the whole earth samples be broken down and split into the various different components. This was achieved by a combination of water washing and flotation. The recovered remains were then assessed for content.
- 6.2.2 Flotation separates the organic, floating fraction of the sample from the heavier mineral and finds content of sands, silts, clays, stones, artefacts and waterlogged material. Heavy soil and sediment content measuring less than the mesh size falls through the retentive mesh to settle on the bottom of the tank. Flotation produces a 'flot' and a 'residue' for examination, whilst the heavier sediment retained in the tank is discarded. The method relies purely on the variation in density of the recovered material to separate it from the soil matrix, allowing for the recovery of ecofacts and artefacts from the whole earth sample.
- 6.2.3 The retent, like the residue from wet sieving, will contain any larger items of bone, or artefacts. The flot or floating fraction will generally contain organic material such as plant matter, fine bones, cloth, leather and insect remains. A rapid scan at this stage

will allow further recommendations to be made as to the potential for further study by entomologists or palaeobotanists, with a view to retrieving vital economic information from the samples. Favourable preservation conditions can lead to the retrieval of organic remains that may produce a valuable suite of information in respect of the depositional environment of the material, which may include anthropogenic activity, seasonality and climate and elements of the economy. Nomenclature follows Stace (1997). The contents of the samples are listed below in Table 3.

6.2.4 The following report discusses the samples by trench, starting with the lowest number and continuing numerically.

6.3 TRENCH 13: SAMPLE 16 (CONTEXT 151)

6.3.1 A soft loose black/dark brown mix of silty sand with inclusions of charcoal had occasional fragments of burnt bone within the matrix of the context. The feature was interpreted as a cremation pit and context (151) was the fill of it. A total of 6 grammes of burnt bone were recovered from the retent. The retent had a fragment of Bronze Age pottery in it. There was also an amount of charcoal present. The flot consisted of charcoal and a small amount of root material.

6.4 TRENCH 13: SAMPLE 17 (CONTEXT 149)

6.4.1 This very dark brown/black silty sand was also interpreted as the fill of a cremation pit. The retent was made up of stones and mainly small gravel with burnt bone charcoal and a fragment of Bronze Age pottery in it. The flot contained some root material and charcoal with a small fragment of burnt bone, probably turbated from another area.

6.5 TRENCH 13: SAMPLE 18 (CONTEXT 147)

6.5.1 This soft loose black/dark brown silty sand with inclusions of charcoal and burnt bone was from another cremation pit. It also had a fragment of Bronze Age pottery in it. The matrix from the retent was mainly gravel and stones as well with inclusions of burnt bone, burnt clay charred plant material and charcoal with a few uncharred seeds. The weight of burnt bone recovered from the retent was 290 grammes. The flot consisted of roots with charcoal was present in small amounts.

6.6 TRENCH 13: SAMPLE 19 (CONTEXT 153)

6.6.1 This organic deposit of soft, loose dark brown to black silty sand contained fragments of charcoal and also from a cremation pit, although no burnt bone was recovered in the retent matrix. There was however a fragment of Bronze Age pottery and some charcoal present. The retent was made up of stones and mainly small gravel. The flot was root material and charcoal but the fragments were too small to be useful.

6.7 TRENCH 13: SAMPLE 20 (CONTEXT 155)

6.7.1 This soft loose dark brown/black silty sand had inclusions of burnt bone and charcoal flecks. The matrix from the retent was mainly gravel with a few stones as well. There was a total of 123 grammes of burnt bone recovered from the retent. There was also some charcoal and a small amount of Bronze Age pottery and nutshell. The flot again consisted of some roots with charcoal also present in small amounts.

6.8 TRENCH 13: SAMPLE 22 (CONTEXT 159)

6.8.1 This soft loose light brown grey sand had no inclusions. The matrix from the retent was mainly gravel with some stones as well. Small amounts of charred plant, charcoal and some seeds were also recovered in the retent. There was also a small amount of root material and charcoal. The flot consisted of some roots and a small amount of charcoal.

6.9 TRENCH 13: SAMPLE 23 (CONTEXT 172)

6.9.1 This soft almost black silty sand had frequent inclusions of charcoal and burnt bone. This matrix seems to be the spill out from the vessel that was recovered from feature *154*. Mainly gravel and some stones were recovered from the retent. A fair amount of charcoal was recovered, with burnt bone and burnt clay, charred organics and some fragments of nutshell. There were 36 grammes of burnt bone recovered from the retent. The flot contained small fragments of nutshell, probably hazelnut, but they were quite small so a definite identification could not be made.

6.10 TRENCH 24: SAMPLE 1 (CONTEXT 100)

6.10.1 This loose dark grey/black deposit with frequent charcoal inclusions was a probably washed down from above, and has modern origins. The retent was made up of mainly small gravel with an amount of charcoal. The flot contained some root material and a small amount of charcoal but the fragments were too small to be useful.

6.11 TRENCH 25: SAMPLE 2 (CONTEXT 102)

6.10.1 This ditch fill was a mid brown silty sand that contained a large fragment of charcoal. A small amount of charred plant material was present in the retent and a fragment of modern pottery. The matrix from the retent was mainly gravel with some stones as well. There was also a small amount of root material and charcoal. The flot consisted of some roots and a small amount of charcoal.

6.12 TRENCH 25: SAMPLE 21 (CONTEXT 157)

6.12.1 This fairly compacted, single ditch fill of greyish brown sandy silt contained a single sherd of post medieval pottery. The retent was made up of stones and mainly small gravel. There was a small amount of charcoal also present. The flot was mainly root material and contained no seeds. Again there was a small amount of charcoal but the fragments were too small to be useful.

6.13 TRENCH 25: SAMPLE 24 (CONTEXT 161)

6.13.1 This loose friable mid to dark greyish brown silty sand had very frequent inclusions of pebbles/stones and gravel. The matrix from the retent was mainly gravel and stones. The flot consisted of roots and charcoal was also present in small amounts

6.14 **TRENCH 39: SAMPLE 7 (CONTEXT 114)**

6.14.1 This deposit a possible fill of a truncated field boundary was a loose mid brown silty sand with moderate inclusions of small roots. A few seeds were present in the retent but it was mainly gravel and stones with a few uncharred twigs. There was a small amount of charcoal but the fragments were too small to be useful. There were a number of seeds of the *Rubus* species but they were too fragmentary to determine what taxon they were.

6.15 TRENCH 40: SAMPLE 8 (CONTEXT 117)

6.15.1 This compact/friable very dark greyish brown silty sand contained inclusions of small stones. From this possible field boundary, the retent consisted mainly of gravel and stones with a small amount of charcoal. The flot consisted of roots with some charcoal also present in small amounts but not enough for dating purposes.

6.16 **TRENCH 40: SAMPLE 9 (CONTEXT 120)**

6.16.1 This moderately compacted mid greyish brown sand was the fill of a post hole. The retent was made up of angular stones and mainly small gravel. The flot contained root material and again there was a small amount of charcoal but the fragments were too small to be useful.

6.17 TRENCH 40: SAMPLE 10 (CONTEXT 125)

6.17.1 The fill of another posthole was a loose mid greyish brown sand. The matrix from the retent was mainly gravel with angular stones as well. There was also a small amount of charred organic material and charcoal. The flot consisted of some root material. Charcoal was also present in very small amounts.

6.18 TRENCH 40: SAMPLE 11 (CONTEXT 127)

6.18.1 This mid greyish brown silty sand was moderately compacted with no visible inclusions. The fill of a possible posthole the matrix from the retent contained mainly gravel with some stones and a small amount of charcoal. The flot had a small amount of root material in it and also contained a small amount of charcoal but the fragments were too small to be useful.

6.19 TRENCH 45: SAMPLE 3 (CONTEXT 104)

6.19.1 This dark brownish orange sandy soil was a fill but on examination did not appear to be archaeological. There were no significant plant or other remains within it.

6.20 TRENCH 45: SAMPLE 4 (CONTEXT 106)

6.20.1 This fill of dark brownish orange sandy soil as context *104*, on examination did not appear to be archaeological. There were no significant plant or other remains from it.

6.21 TRENCH 47: SAMPLE 5 (CONTEXT 110)

6.21.1 This moderately compacted dark greyish brown sandy silt was the fill of a ditch. It may be an old field boundary. The retent was made up of stones and mainly small gravel. There was a small amount of charcoal as well as some fragments of charred plant material. The flot contained mainly root material and uncharred seeds of dock and *Brassica* species. There was a small amount of charcoal but the fragments were too small to be useful.

6.22 TRENCH 48: SAMPLE 12 (CONTEXT 129)

6.22.1 This very loose soft orangey brown silty sand had frequent inclusions of stones and some gravel. This was the fill of 4 linear features that may represent a track way. The matrix from the retent was mainly gravel with angular stones as well. There were dock and fat-hen seeds recovered from the flot and a small amount of root material. Charcoal was also present in small amounts.

6.23 TRENCH 48: SAMPLE 13 (CONTEXT 131)

6.23.1 This soft, very loose orange silty sand with inclusions of gravel and occasional stones may be another section of the track way exposed as context *129*. There were mainly stones and gravel in the retent matrix. The flot was root material and charcoal with a few seeds of dock species and also fat-hen. Again there was a small amount of charcoal but the fragments were too small to be useful.

6.24 TRENCH 48: SAMPLE 14 (CONTEXT 133)

6.24.1 Again this context was a soft, loose dark orange brown silty sand with gravel inclusions similar to *129* and *131*, from possible remains of a track way. The matrix from the retent was mainly gravel and stones as well with a small amount of charcoal. There was also a small amount of root material and charcoal. The flot consisted of some roots and charcoal was also present in small amounts.

6.25 TRENCH 48: SAMPLE 15 (CONTEXT 135)

6.25.1 This context was very similar to *129*, *131* and *133* in matrix and has possible origins as a track way. Mostly gravel and stones the retent matrix also contained a small amount of charcoal. The flot was mainly root material and contained no seeds only a small amount of charcoal but the fragments were too small to be useful.

6.26 TRENCH 13: SAMPLE 30 (SMALL FIND 3) CREMATION URN

- 6.26.1 A Bronze Age vessel was recovered from feature *154*. The feature had vertical sides with a rounded base. An almost complete early Bronze Age Collared Urn (Small Find Numbers 3 and 4), containing cremated bone and charcoal, had been placed on the eastern side of the feature. A rabbit burrow, running through the cremation pit, which resulted in the displacement of a number of sherds, originally thought to be a separate vessel, had damaged the side of the urn.
- 6.26.2 The urn was removed almost intact from the feature but broke up on moving it back to the lab. The matrix that formed the fill was dark brown with inclusions of highly calcined bone, the largest fragment of which measured approximately 3x2cm.

SPIT DEPTH		BURNT BONE	RETENT	FLC	от со	NTE	NTS
SPIT NUMBER FROM TOP	SPIT DEPTH REMOVED	WEIGHT OF BONE	DETAILS OF RETENT CONTENTS				
	Itelino (EB		contractor				
					AL	seeds	
				TS	RCO	ica s	otia
				ROOTS	CHARCOAL	Brassica	Sclerotia
SPIT 1	0-2 cm	3g	Ch, G, BB	1	3	0	0
SPIT 2	2-4 cm	3g	Ch, G, BB	1	3	0	0
SPIT 3	4-6 cm	4g	Ch, G, BB	1	3	1	0
SPIT 4	6-8 cm	11g	Ch, G, BB	1	3	0	1
SPIT 5	8-10 cm	5g	Ch, G, BB	1	3	1	1
SPIT 6	10-12 cm	3g	Ch, G, BB	1	3	0	1
SPIT 7	12-14 cm	1g	Ch, G, BB	1	3	0	0
SPIT 8	14-16 cm	1g	Ch, G, BB	1	3	0	0

Table 2. Details of samples and weights of calcined bone from cremation contexts. **Key:** G = gravel, Ch = charcoal, BB = burnt bone. Flot contents are analysed on a 'richness' basis as 0 = absent, 1 = present, 2 = frequent, 3 = abundant.

A-A	6
TION OQA	8
UATIC	7
EVALI	9
NRRY E	5
QUA	4
Y	

	•		n	4	2	9	-	×	`	IU	11	12	13	14	15	16	17	18	19 20		21 22	2 23	24	25
Context	100	102	104	. 106	110	112	114	117	120	125	127	129	131	133	135	151	149	147 1	153 155		157 15	159 172	2 161	122
Volume processed (litres)	10	10	5	s	10	9	10	10	10	5	5	10	10	10	10	20	9	20 1	10 20		10 1	10 20	10	10
Volume of retent(ml)	500	2000	100	360	400	650	550	1500	009	250	150 2	2000 1	1250	1500	1500 1	1200	500 2	2500 10	1000 2000		800 10	1050 600	0 1000	1000
Volume of flot (ml)	70	20	10	15	80	150	100	150	120	25	100	20	20	25	30	300	20	250 3	30 300		20 10	100 400	0 20	100
Samples suitable for radiocarbon dating	1		ı	•	•		ı	ı	ı		1	1	1	1	ı			1	-				'	'
<u>Residue contents (relative abundance)</u>																								
Burnt bone	ı	ı	ı	ı	ı	1	ı	ı	ı	ı	ı	1	1	ı	ı	1	1	1	- 2			. 1	ı	'
Burnt clay	,	ı	•	1	ı	ı	ı	ı	,	ı	1	,	,	,	1	1	1	1	•		•	-	'	1
Charcoal	ŝ	1	1	1	1	•		1	•	1	1			,	1	1	1	1	1 3		1 1	1 2	1	'
Charred plant	'	1	•	•	1	•			•									1	'			'	'	'
Flint/chert	,	ı	1	1	1		ı	ı	1		ı	1	1	,	1	1	1	1	•			•	1	'
Magnetic residue	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		1 1		1	1
Nutshell	,	ı	1	ı	ı	ı	ı	-	ı		ı	ı	1	,	ı	ı	ı	1	-			- 1	'	1
Organics charred	ı	ı	ı	ı	ı	ı	ı	-	ı	1	ı	ı	1	ı	ı	ı	ı	ı	- 1	·	•	•	ı	'
Pottery	,	1	ı	ı	ı		ı	ı	1		ı	1	1	1	ı	1	1	1	1 1		•	•	1	'
Seeds (various species))	,	ı	•	,	1	1	1	1	,		1	,	,	,	,	,	1	1	•		-	'	'	'
Small twigs uncharred	1	ı	ı	ı	ı	ı	1	-	ı	ı	ı	ı	ı	ı	ı	ı	ı	ı	-		•	•	ı	'
Stones / gravel	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3 3		3 3	3 3	3	3
Woody plant parts	1	ı	1	1	1	ı	ı	1	ı	1	ı	1	1	ı	I	ı		1	-		-	-	I	'
Flot matrix (relative abundance)												·							·					
Bark	'	ı	1	ı	ı	1	2	-	ı	1	ı	ı	ı	ı	ı	ı	ı	ı	'		•	י ו	ı	1
Bone (calcined)			'	-	-	•	1	1		1	-			-	-	-	-		-	-	-	-	'	'
Charcoal	2	1	2	1	3	•	1	-	1	1	1	1	-	1	1	3	3	3	1 2		2 3	3 3	1	'
Charred plant material	•	ı	•	ı	ı	ı	ı	-	ı	1		ı			ı	ı						-	•	1
Grass/cereal stalks		1	•	1	ı	1	I	1	1	1	1		1		ı	ı		1	-	-	1	•	1	1
Leaf mould	ı	ı	ı	ı	I	1	I	2	1	<u> </u>	2	1	1	ı	I	ı	ı	ı				1	I	1
Roots, modern	2	3	3	3	2	3	3	3	3	3	2	3	3	3	3	1	2	2	3 3		3 3	3 1	3	3
Sclerotia	'	1		-	ı	•	ı	ı	,					1	,		1		-		' '	'	'	'
Woody plant parts	,	ı	1	,	ı	·	1	ı	,		,	,	,	,		,	,	,	'			'	'	'
Uncharred small twigs	'	1	'	'	T	'				1	-	1		-		-	-				-	-	'	'
<u>Plant remains (relative abundance)</u>																								
(c) Cerealia charred all	,	ı	1	,	ı	ı	ı	ı	,		,	,	,	,		,	ı	,				'	'	1
(t) Sambucus sp.	-	-	'	-	-	•	-	1	1	1	1	1	-	-	-	-	-	-	-	-	-	-	'	'
(w) Persicaria lapathfolia	•	ı	•	1	ı		1	•	•		1		1		ı	1			-		-	•	1	'
(x) Brassica sp.	-		1	-	1	•	-		•		-		-	-	1	-	1	-	- 1		-	- 1	'	'
(x) <i>Chenopodium</i> sp (Goosefoot)	1	1	'	1	-	•	-	-	-		-	-	1	-	1	-	1	-			-		1	'
(x) Rubus sp.			•		1	1	1		•	1	1	1	1	1	1	-	-	-	-	-	-		'	1
(x) Rumex sp (Dock)	-	1	'	ı	1	ı	ı	,	ı	1	ı	ı	1	,	1	,	,	ı	'			'	'	1
(x) Spergula arvensis	'	ı	'	ı	ı	•	ı	ı	ı		ı	ı	1	ı	ı	ı	ı	ı				•	ı	'
(x) Taraxacum	1	1	1	1	1	ı	ı		ı	•		1	1		1	ı	-		-		-	·	1	ı

(r)= ruderal species; (t)= trees/shrub species; (w)= wetland species; (x): wide niche species. Relative abundance is based on a scale from 1 (lowest) to 3 (highest) where 0 is not present.

6.27 **DISCUSSION**

- 6.27.1 No charred grain or seeds were recovered from any of the flot material from these samples. A few uncharred seeds were recovered but they appear to be modern intruders, as they show no signs of fossilisation.
- 6.27.2 The root material recovered from samples was probably from the upper layers of topsoil, turf and subsoil, the organic material within the matrices providing a rich source of nutrients for the plants. Fragments of Bronze Age pottery were recovered from samples <16> 155, <17> 149, <18> 147, <19> 153 and <20> 155.
- 6.27.3 Very small flots were recovered from each sample and these were mainly root material and small amounts of charcoal. They produced little diagnostic evidence to determine the origins of the organic material recovered. The seeds of *Rubus* species and fat-hen are weed species, the *Rubus* seeds probably from hedgerows or woodland areas close by and the fat-hen species may indicate the presence of nearby arable farming. None of them were fossilised or charred
- 6.27.4 No charred grain was recovered from any of the samples. None of the other seed types was charred but they seemed to be well preserved and on the whole were complete. No other organic remains were recovered from the samples though except modern root material. There is no evidence then of ritual inclusions associated with the cremations.

6.28 CONCLUSION AND RECOMMENDATIONS

- 6.28.1 Charred grain was not recovered in the flots from these samples or from the cremation urn. This indicates there was no activity associated with the cremations in close proximity to the site in which this material was deposited that included the charring of grain, probably then indicating no grain drying or cooking in the areas from which the samples came as charred material usually preserves very well.
- 6.28.2 Very few seeds were recovered from any of the flots from this material. The data recovered from the flots adds very little information to the taphonomic processes involved in the deposition of the material and the features from which they came.
- 6.28.3 The potential for further information being gained from the examination of this material is limited and so it is recommended that no further work be done. The cremated bone will be assessed in a future report (Town, *forthcoming*)

6.29 VERTEBRATE REMAINS

6.29.1 The only bone fragments recovered from the site were highly calcined and associated with cremations. These were recovered from the relevant contexts listed in Table 3. The lack of vertebrate remains may be due to the lack of deposition or to the soil conditions being too acidic and so eroding the material after its deposition.

6.30 RADIOCARBON DATING AND OTHER SCIENTIFIC DATING METHODS

- 6.30.1 The finds were easily dateable by typology. Contexts were secure and there did not seem to be any mixing. The need for scientific dating methods is therefore unnecessary, following English Heritage Guidelines. The typological dating could however be enhanced by carrying out dating by radiocarbon methods.
- 6.30.2 The charred organic material recovered from the samples is not really suitable for carbon dating as it is charcoal from wood of unknown date so the result could potentially add approximately 400 years to the actual date as some of the wood could be as old as 4 or 500 years.

7. CONCLUSIONS

7.1 ARCHAEOLOGICAL POTENTIAL

- 7.1.1 Overby Quarry is situated in an area associated strongly with ritual and domestic practices of Neolithic and Bronze Age communities, such as shown by the excavations at the New Cowper and High House Quarries. During 2006, a desk-based assessment (Davies 2006a) interpreted aerial photographs which showed significant cropmarks, towards the north-east of the current quarry, an area which was highlighted by the 2006 Targeted Field Evaluation carried out by North Pennines Archaeology Ltd as having potential for archaeological remains (Davies 2006b). However, no photographs identifying cropmark features were noted for the current area of extension. The evaluation at Overby has allowed a further analysis of the extension area to be undertaken.
- 7.1.2 A series of forty-eight linear trial trenches were excavated in order to assess the first two phases of the proposed extraction. The trenches were spread across six fields, labelled as Areas A to F, and were distributed in order to provide maximum potential coverage of the extension site.
- 7.1.3 Area A yielded no archaeological features, and anecdotal evidence from the workers at the quarry indicated that this area had at one time been bull-dozed, which would explain the apparent barrenness of the site. Similarly, the upper, north-eastern edges of Areas B and C were also notably truncated, as the topography rises to the north-east before changing gradient rapidly to a flat area, indicating some measure of truncation in the past, presumably from either plough-damage or further bull-dozing of the fields.
- 7.1.4 However, despite the truncation, archaeological features were noted on the southwestern sides of the hill. Within Area B, in Trench 13, a series of five well preserved *in situ* probable cremations were noted: four in pits and one contained within a Bronze Age Collared Urn (1750 - 1500 cal BC). Archaeology was also noted within Area C, in the form of small linear gullies and pits. As the sand extraction in the area of the trenching where the cremations were uncovered was due to start imminently, a decision was made, in conjunction with the Historic Environment Service at Cumbria County Council, Stephenson Halliday and Thomas Armstrong Ltd, to go ahead and excavate an area around the cremations, in order to identify the extent of the archaeology in the area and recover as many of the cremations as possible prior to sand extraction. An area of 40m by 120m was opened under archaeological observation. The following summarises the findings of the excavation.
- 7.1.5 Approximately thirty cremations were uncovered, eight of which were within urns (mostly Collared Urns, though one has been tentatively identified as a Food Vessel, dated 2000-1700 cal BC). The number of cremations is tentative, as some pits were also excavated which contained only small amounts of bone, and which may not be 'true' cremations, but could represent ritual activity associated with the cremation rites. In addition, one of the vessels, Cremation 5, was a very small Collared Urn only around 20cm in height. This may have been used as a votive cup rather than as a cremation vessel, though it was associated with cremated material; it is known that

smaller vessels have previously been associated with infant cremations. A second similar vessel may also have been uncovered, though this was lifted in a soil block, and is still encased and has yet to be examined.

7.1.6 The cremations were arranged in two concentric circles; the outer ring, broadly 12m in diameter (which had been partly uncovered by the evaluation trench), with a central ring broadly 5m in diameter, arranged around a central agglomeration of cremated deposit into which several cremations had been cut, which may have represented the remains of a barrow or low mound. The unurned and urned cremations showed no spatial arrangement, suggesting the decision to have urned or unurned cremations probably did not relate to chronology but to other factors. The arrangement must have been around a central focal point, perhaps a natural feature such as a tree or stone, which could fit with the proposition that the cemeteries generally had associations with natural objects. Alternatively, the central point may have been the mound itself; Middle Bronze Age cremations, which could be the case here. The urned cremations were lifted intact, and the urned and unurned cremations are currently awaiting analysis. The excavation will form the basis of a future report (Town *forthcoming*).

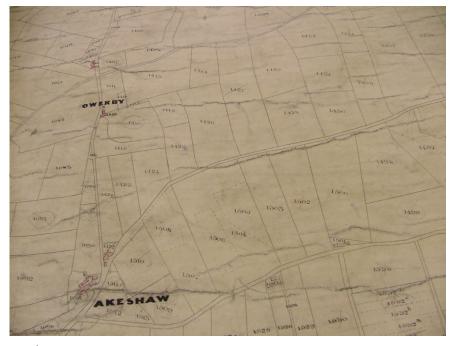


Plate 14: 19th century tithe map; the extension site forms the block of fields south-east of 'Owerby'

7.1.7 However, despite the discovery of the cremations, the archaeology within the remainder of the excavation area, the pits and ditches noted above, proved to be of little interest and appeared demonstrably modern in some cases (though full analysis of the results has not at present been undertaken). This appeared to be mirrored by the results from Areas D through to F. During the evaluation, a number of linear features were noted within trenches in all three areas, and as these were undated, they were believed to be of prehistoric date, and related to the cremation cemetery. However, analysis of the 19th century tithe map indicates that most of the archaeological remains

may be of fairly recent date. In Area D, a series of ditches were uncovered in Trenches 25, 27 and 48, with possible pits uncovered in Trench 26. Modern pottery was uncovered from the fill of the ditches in Trench 48, so these are presumed to be of modern date, probably ditches flanking a track way, perhaps each side of a hedge line. A series of ditches uncovered in Trench 25 must also relate to a field boundary of similar date, as they correspond exactly with a field boundary ditch shown on the tithe map. The ditches uncovered in Trench 27 are also thought to relate to agricultural divisions, as they were still visible as an earthwork on the ground. The pits in Trench 26 could be of an earlier origin, as they do lie fairly close to the cremation cemetery trench, but the excavators felt fairly confident they were of natural origin, probably treeboles.

- 7.1.8 Similarly, Area E uncovered linear features in Trenches 41, 45 and 47, all of which appear to correspond very closely to field boundaries shown on the 19th century tithe map; the ditches in Trench 45 probably relate to the former hedged field boundary, which has since been straightened and replaced to the north by a post and wire fence. Area F uncovered ditches and pits in Trenches 39 and 40. The ditches and posthole alignment correspond exactly to a boundary shown on the 19th century tithe map, and are presumed therefore of modern date, despite the recovery of a small fragment of possible prehistoric pottery from one of the postholes. The pits were again described as being 'treeboles' by the excavators, and this area is in fact shown as wooded on the 19th century map.
- 7.1.9 Environmental sampling provided no further information regarding the formation of deposits at Overby. However, the findings support the evidence that intensive ploughing, as the result of intensive farming on the site, has occurred.
- 7.1.10 The evaluation at Overby Quarry successfully investigated a series of fields to the south-west of the current quarry site, but, beyond the cremation cemetery which was investigated as an open area excavation, no archaeological finds were recovered to indicate that this site was being used for any other purposes than agricultural, and no identifiable evidence of further settlement or ritual activity was noted, though stray prehistoric finds were recovered.
- 7.1.11 In contrast to the results here, the discoveries at both New Cowper Quarry and High House Quarry, which are within a short distance of Overby Quarry, and have the same soil conditions, where substantial archaeological remains have been found, suggest that the potential for substantial archaeological remains at Overby Quarry is still high, especially to the north east of the current quarry where archaeological remains have been noted. Therefore, archaeological mitigation should be sought prior to any heavy groundwork in those areas.

8. BIBLIOGRAPHY

8.1 **BIBLIOGRAPHY**

Brown DH, 2007. Archaeological Archives A Guide to Best Practice in Creation, Compilation, Transfer and Curation. Archaeological Archives Forum.

Butler, C., 2005. Prehistoric Flintwork. Tempus: Stroud.

Countryside Commission, 1998. Countryside Character, Volume 2: North West. The Countryside Commission.

Davies G, 2006a. Archaeological Desk-Based Assessment, Walkover and Geophysical Survey for a Proposed Quarry Extension at Overby Quarry, Westnewton, Cumbria, North Pennines Archaeology Ltd, unpublished report.

Davies G, 2006b. *Report on a Targeted Archaeological Field Evaluation at Overby Quarry, Westnewton, Cumbria*, North Pennines Archaeology Ltd, unpublished report.

DoE 1990. *Planning Policy Guidance Note 15: Planning and the Historic Environment*. Department of the Environment.

DoE 1990. *Planning Policy Guidance Note No.16: Archaeology and Planning*. Department of the Environment.

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

Giecco F, 2003. North Pennines Heritage Trust Excavation Manual

Green, H. S., 1980. *The Flint Arrowheads of the British Isles*. BAR British Series 75, Oxford.

Higham NJ and Jones GDB 1975. Frontiers, forts and farmers, Cumbrian aerial survey, 1974-5' in Archaeological Journal, 132, 16-53.

Hodgkinson D, Huckerby E, Centreton R and Wells C E, 2000. *The Lowland Wetlands of Cumbria*. Lancaster Imprints 8, Lancaster.

Hudson, J. H. 1986. Fungal Biology. London: Edward Arnold.

Jones S, Taylor J & Ash F. 2004. Seed Identification Handbook: Agriculture, Horticulture and Weeds. Cambridge: NIAB.

Noakes, H, 2008, Archaeological Evaluation at High House Quarry, Aldoth, Wigton, Cumbria, North Pennines Archaeology Ltd unpublished report

Parsons, J 2008 Brief for an Archaeological Evaluation at Overby Quarry, Aikshaw, Aspatria, Cumbria.

Railton M, 2007. Assessment Report on an Archaeological Excavation at New Cowper Quarry Northern Extension (Phase 1) Aspatria, Cumbria. North Pennines Archaeology Ltd, unpublished report. Stace, C. 1997 New Flora of the British Isles. 2nd Edition, Cambridge

Town, M, 2008 Project Design for an Archaeological Field Evaluation at Overby Quarry, Aikshaw, Aspatria, Cumbria, (Phases 1 and 2). North Pennines Archaeology Ltd, unpublished report.

Town, M forthcoming, An Archaeological Excavation at Overby Quarry, Aikshaw, Cumbria. North Pennines Archaeology Ltd, unpublished report.

Terra Nova Ltd, 2005, *The reliability of geophysical survey techniques in the evaluation of the archaeological potential of land at Overby, Cumbria*, Terra Nova, unpublished report

Context	Trench	Category	Interpretation	
Number (100)	24	Deposit	Charcoal deposit	
[101]	24	Cut	Cut of possible shallow ditch	
(102)	25	Fill	Fill of ditch [101]	
[103]	45	Cut	Cut of gully	
(104)	45	Fill	Fill of gully [103]	
. ,	43	Cut	Cut of linear feature	
[105]				
(106)	45	Fill	Fill of linear feature [105]	
(107)	41	Fill	Fill of ditch/gulley [108]	
[108]	41	Cut	Small ditch/gulley	
[109]	47	Cut	Linear ditch	
(110)	47	Fill	Fill of linear ditch [109]	
[111]	39	Cut	Linear feature, possible trackway	
(112)	39	Fill	Fill of linear feature [111]	
[113]	39	Cut	Cut of ditch	
(114)	39	Deposit	Fill of ditch [113]	
[115]	39	Cut	Cut of irregular feature, probable tree bole	
(116)	39	Fill	Fill of tree bole [115]	
(117)	40	Fill	Fill of ditch/ gulley [118]	
[118]	40	Cut	Cut of small ditch or gulley	
[119]	40	Cut	Sub-circular posthole associated with [124]	
(120)	40	Fill	Fill of posthole [119]	
(121)			VOID	
(122)	40	Fill	Fill of tree bole [123]	
[123]	40	Cut	Tree bole	
[124]	40	Cut	Cut of truncated posthole	
(125)	40	Fill	Fill of posthole [124]	
[126]	40	Cut	Cut of pit	
(127)	40	Fill	Fill of pit [126]	
[128]	48	Cut	Cut of linear feature	
(129)	48	Fill	Fill of linear feature [128]	
[130]	48	Cut	Cut of linear feature	
(131)	48	Fill	Fill of linear feature [130], similar to (129)	
[132]	48	Cut	Cut of linear feature	
(133)	48	Fill	Fill of linear feature [132], similar to (129), (131)	
[134]	48	Cut	Cut for a linear feature	
(135)	48	Deposit	Fill for linear feature [134]	

APPENDIX 1: CONTEXT LIST

Context Number	Trench	Category	Interpretation	
[136]	40	Cut	Cut for a tree bole	
(137)	40	Fill	Fill of tree bole [136]	
[138]	27	Cut	Cut for shallow linear ditch	
(139)	27	Fill	Single fill of ditch [138]	
[140]	27	Cut	Linear field boundary	
(141)	27	Fill	Fill of field boundary [140]	
[142]	27	Cut	Cut of field boundary	
(143)	27	Fill	Fill of field boundary [142]	
[144]	13	Cut	Cut of irregular feature	
(145)	13	Fill	Fill of irregular feature [144]	
[146]	13	Cut	Cut for possible cremation pit	
(147)	13	Fill	Fill of cremation pit [146]	
[148]	13	Cut	Cut for cremation pit	
(149)	13	Fill	Fill of cremation pit [148]	
[150]	13	Cut	Cut for a cremation pit	
(151)	13	Fill	Fill of cremation pit [150]	
[152]	13	Cut	Cut of pit similar to cremation pits [146], [148]	
(153)	13	Fill	Fill of cremation pit [152]	
[154]	13	Cut	Cut of possible cremation pit	
(155)	13	Fill	Fill of possible cremation pit [154]	
[156]	25	Cut	Cut of NW-SE aligned ditch, possible field boundary	
(157)	25	Fill	Single fill of ditch [154]	
[158]	13	Cut	Cut of tree bole	
(159)	13	Fill	Fill of tree bole [158]	
[160]	25	Cut	Cut of curvilinear ditch, possible field boundary	
(161)	25	Fill	Fill of ditch [160]	
[162]	25	Cut	Cut of curvilinear ditch, possible field boundary	
(163)	25	Fill	Fill of ditch [162]	
[164]	25	Cut	Cut of shallow linear ditch	
(165)	25	Fill	Fill of ditch [164]	
[166]	25	Cut	NE-SW aligned ditch	
(167)	25	Fill	Single fill of ditch [166]	
[168]	18	Cut	Cut of ditch	
(169)	18	Fill	Fill of ditch [169]	
[170]	18	Cut	Tree bole	
(171)	18	Fill `	Fill of tree bole [170]	
(172)	13	Cut	Fill of [154] containing cremation material	

Context Number	Trench	Category	Interpretation
(173)	26	Fill	Fill of tree bole [174]
[174]	26	Cut	Cut of tree bole
[175]	26	Cut	Cut of tree bole
(176)	26	Fill	Fill of tree bole [175]
[177]	18	Cut	Cut of irregular sub-oval feature
(178)	18	Fill	Fill of sub-oval feature [177]
[179]	22	Cut	Shallow linear feature
(180)	22	Deposit	Fill of linear feature [179]
[181]	22	Cut	Linear feature
(182)	22	Fill	Fill of linear feature
(183)	All		Natural
(184)	All		Subsoil
(185)	All		Topsoil

APPENDIX 2: FIGURES

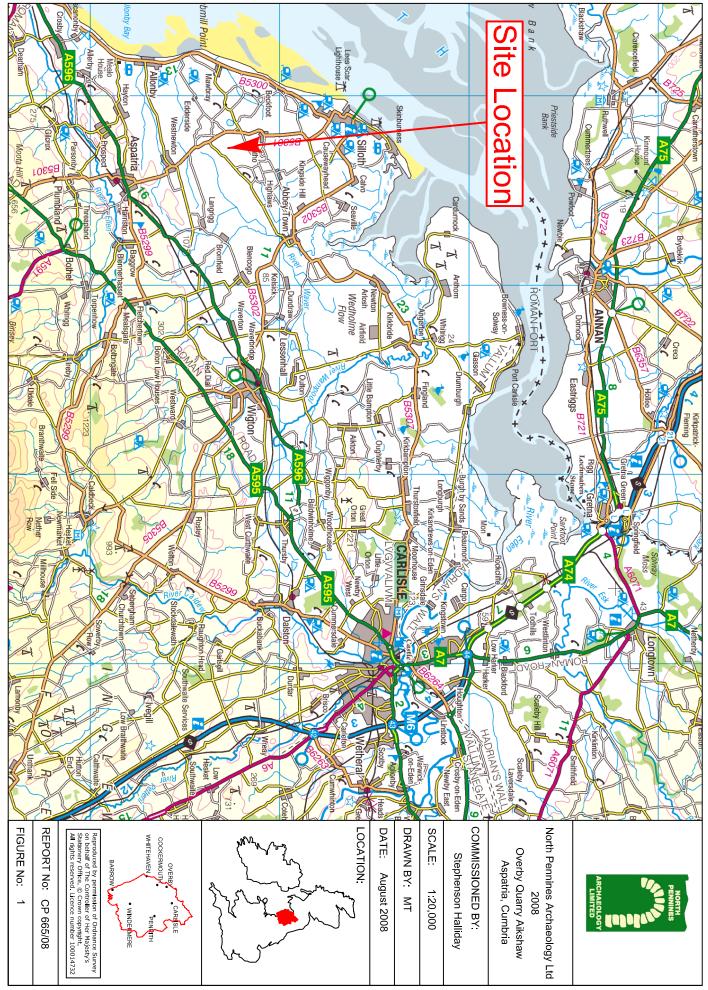
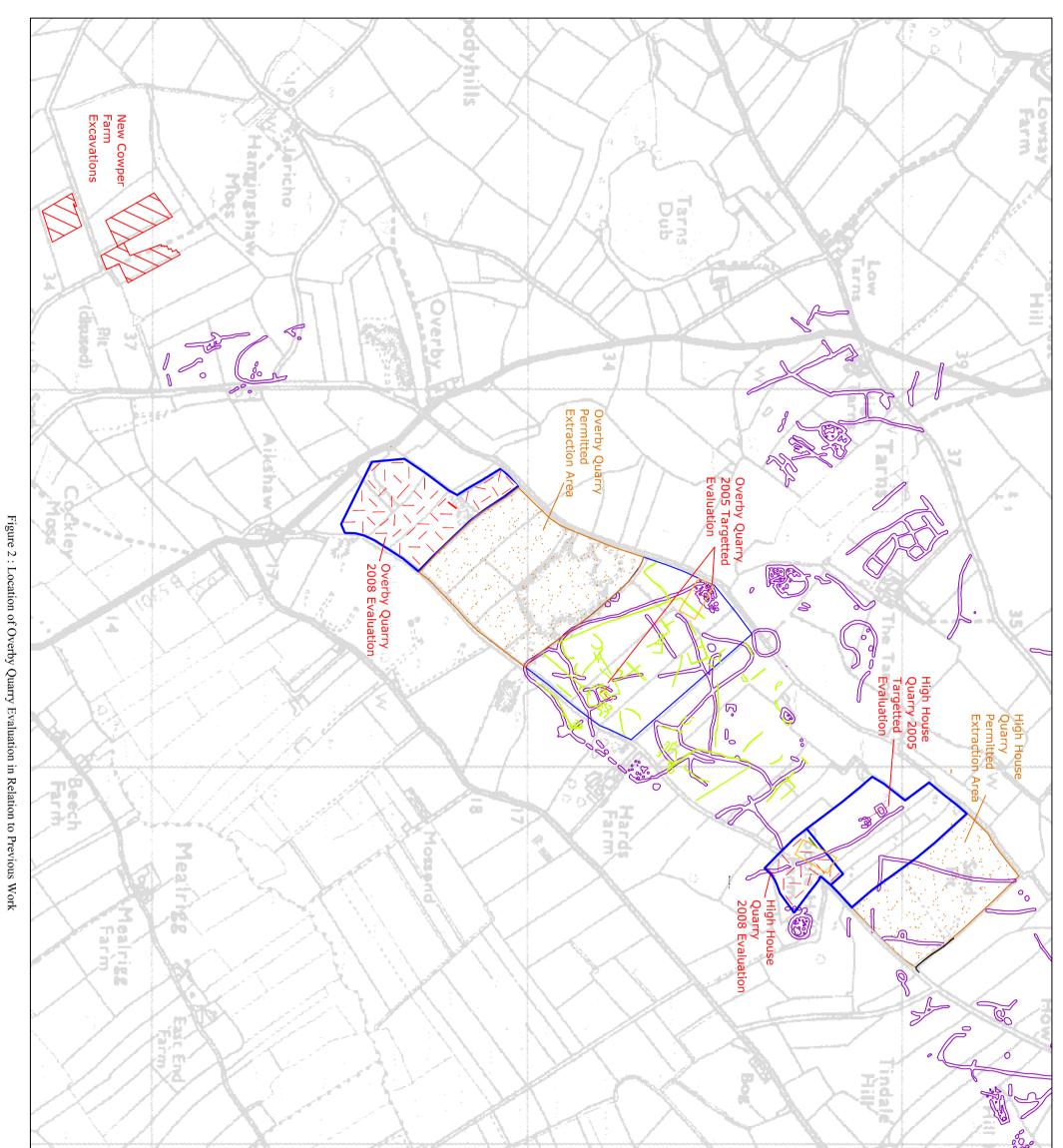


Figure 1 : Site Location



1.1.1			0		H Baa
commissioned by: Stephenson Halliday	REPORT No: CP 665/08	Interpreted Cropmarks - Higham and Jones 1975 NPA Interpreted Cropmarks - Davies 2006 Pilot Geophysical Surveys Trenches Reproduced by permission of Ordnance Survey on behalf of The Controller of Her Majestry's Stationery Office. © Crown copyright. All rights reserved. Licence number 100014732.	RFY	North Pennines Archaeology Ltd 2008 Overby Quarry Archaeological Evaluation _{Scale} 1:10,000	PENNINES

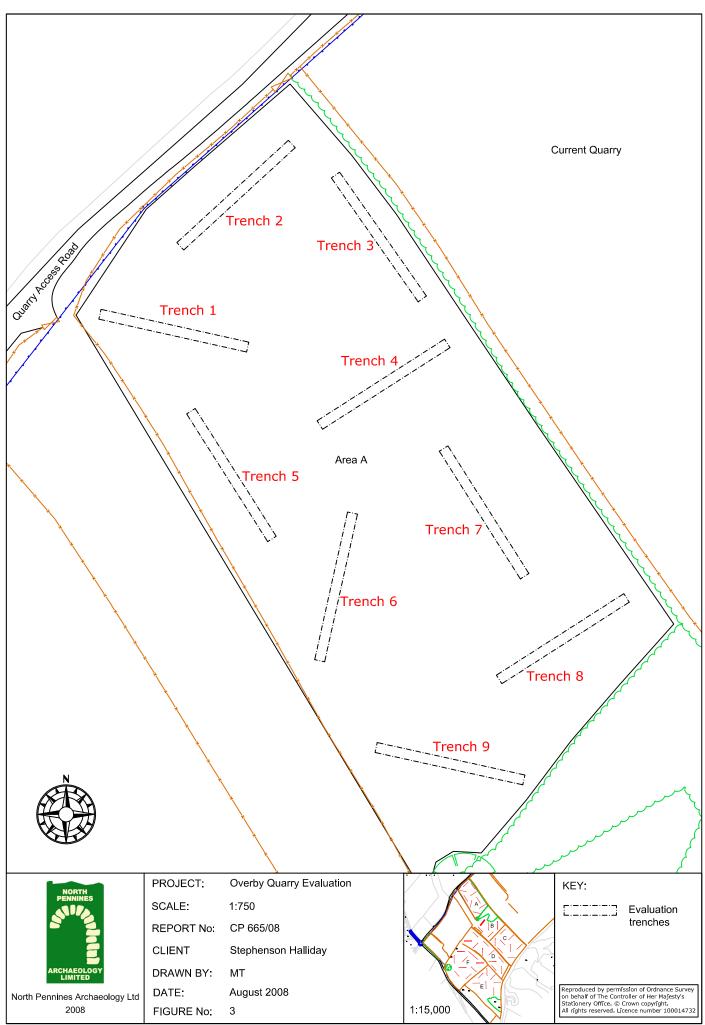


Figure 3 : Area A

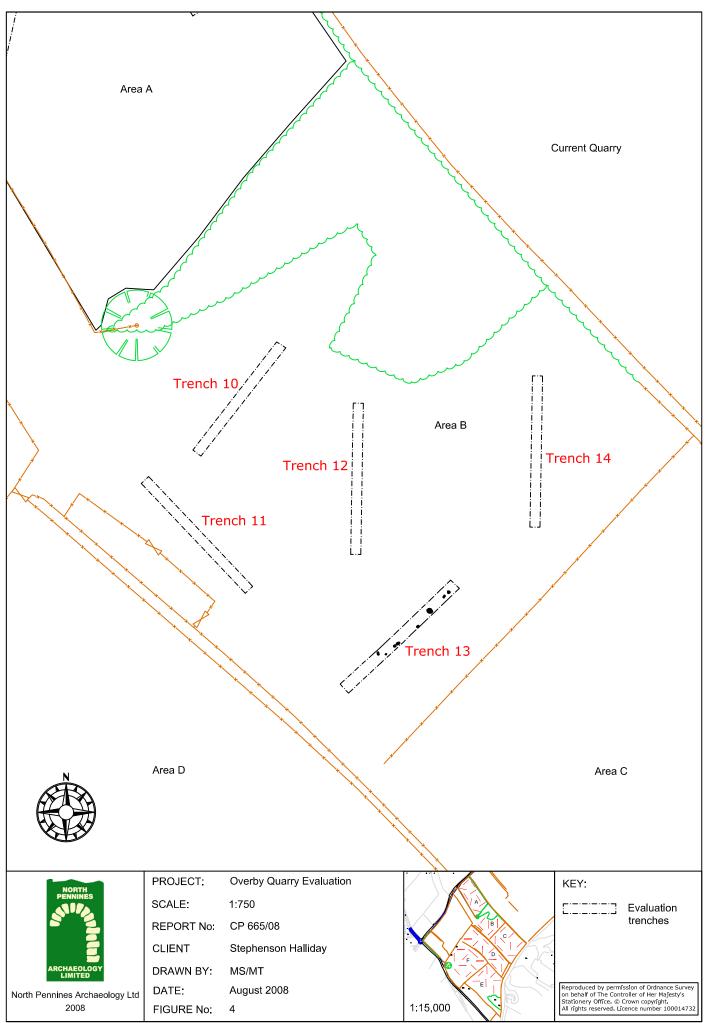


Figure 4: Area B

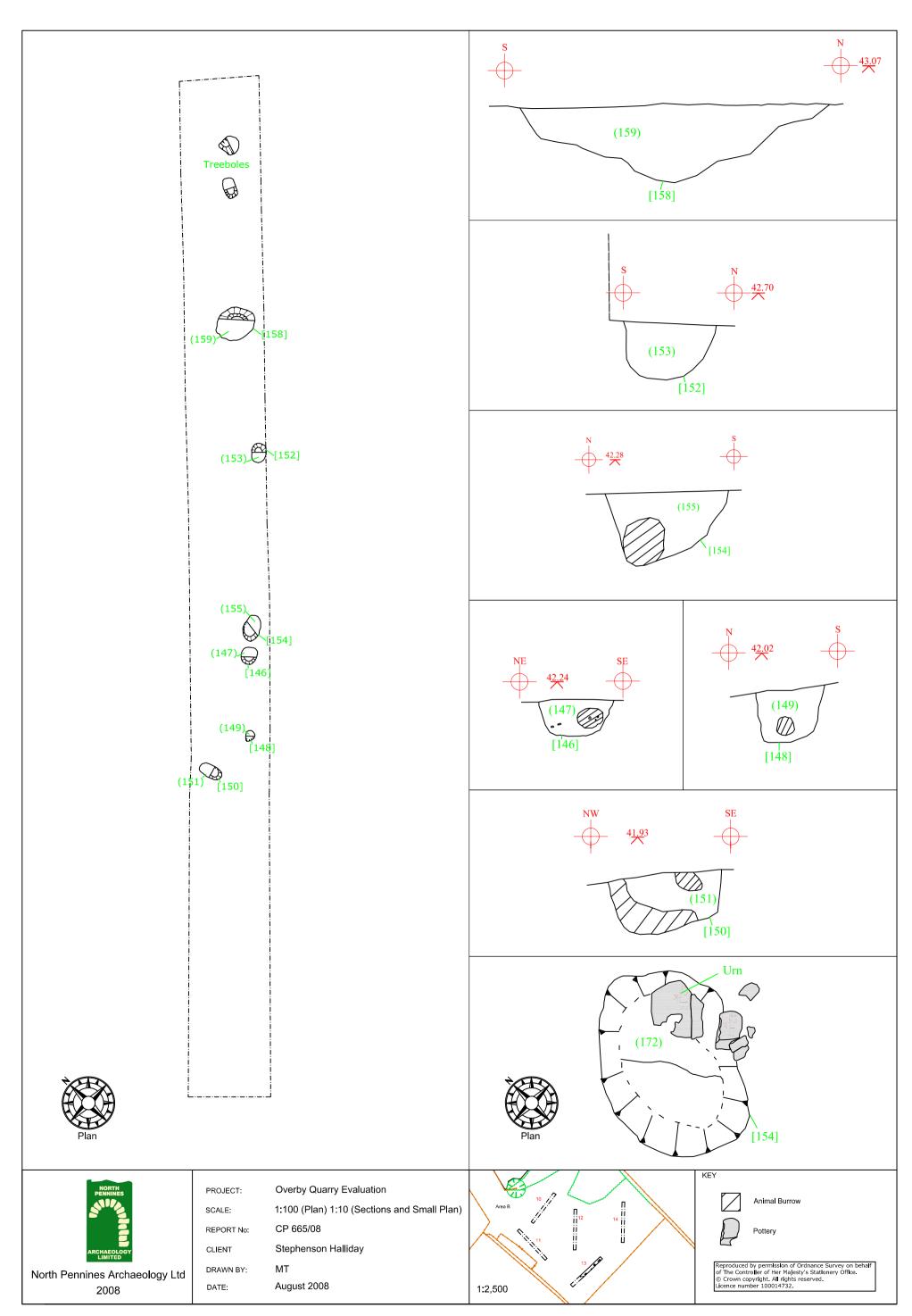
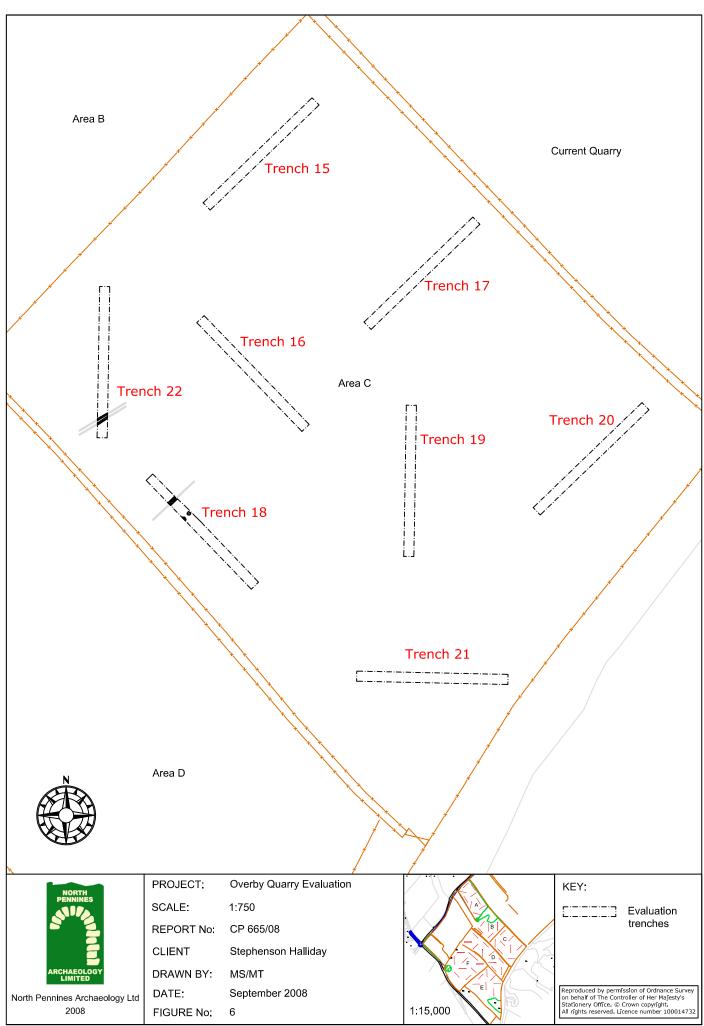


Figure 5: Trench 13, Area B - Plans and Sections



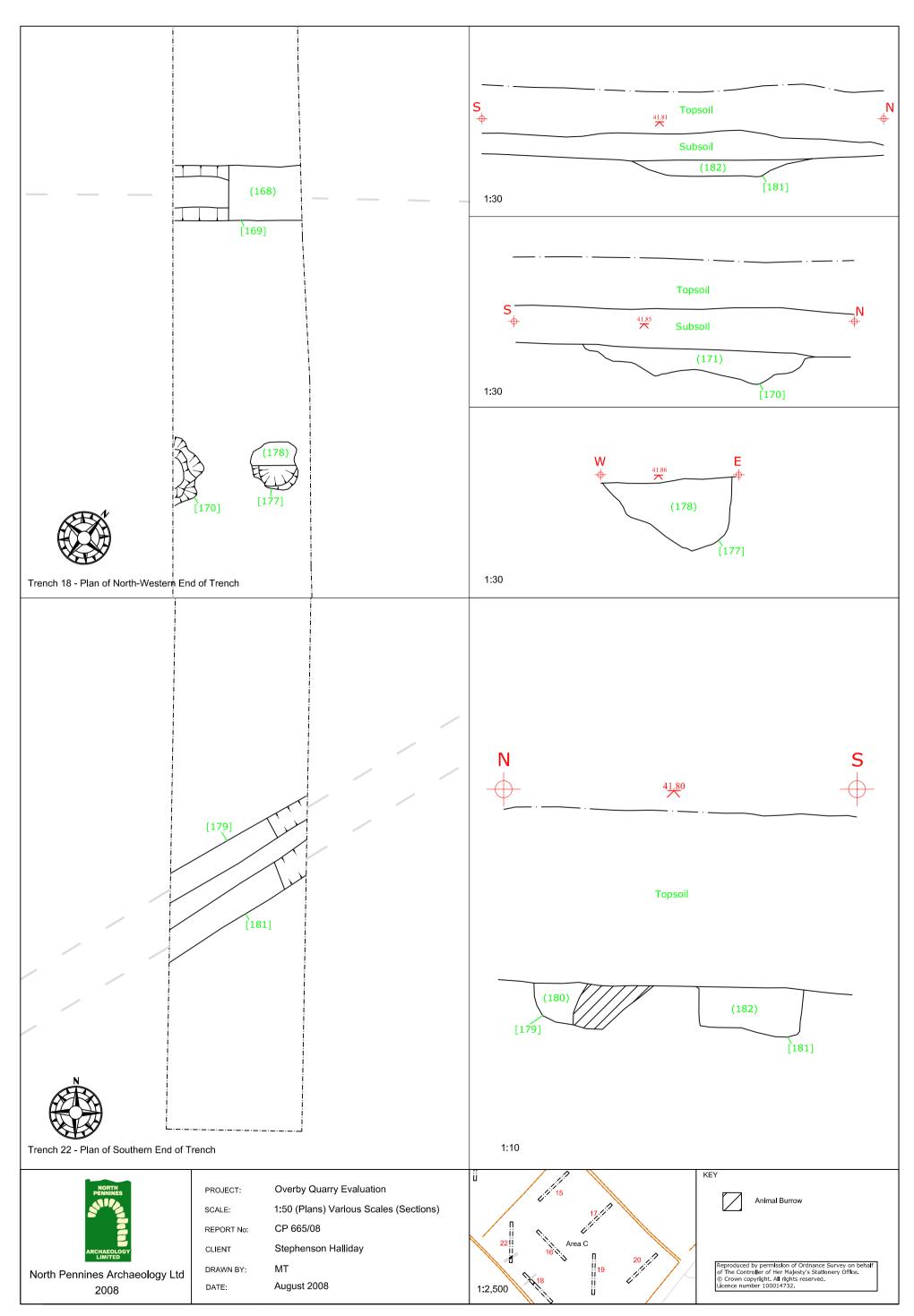
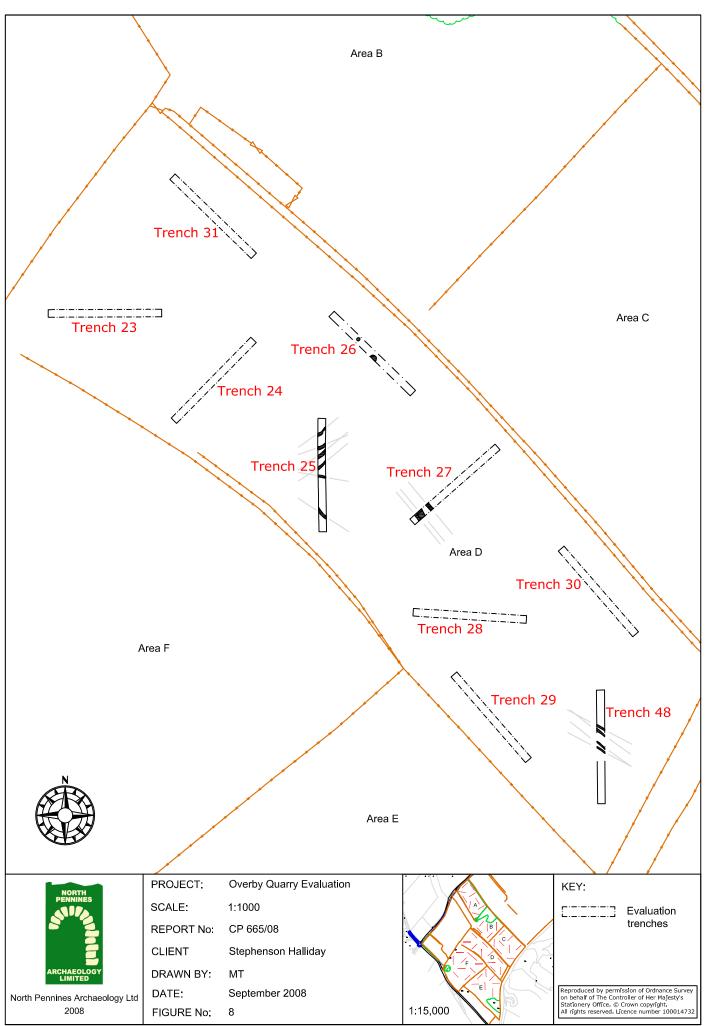
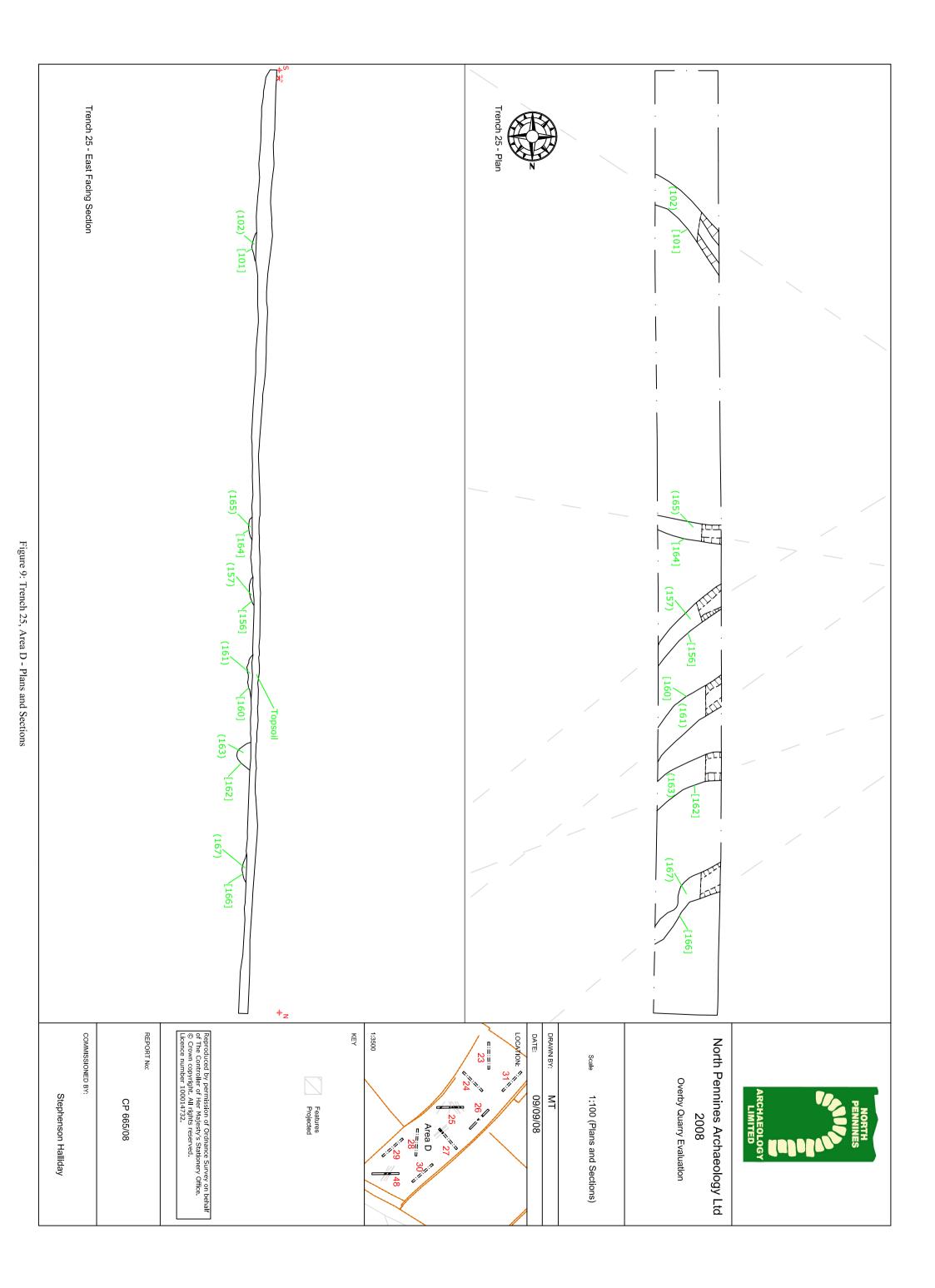
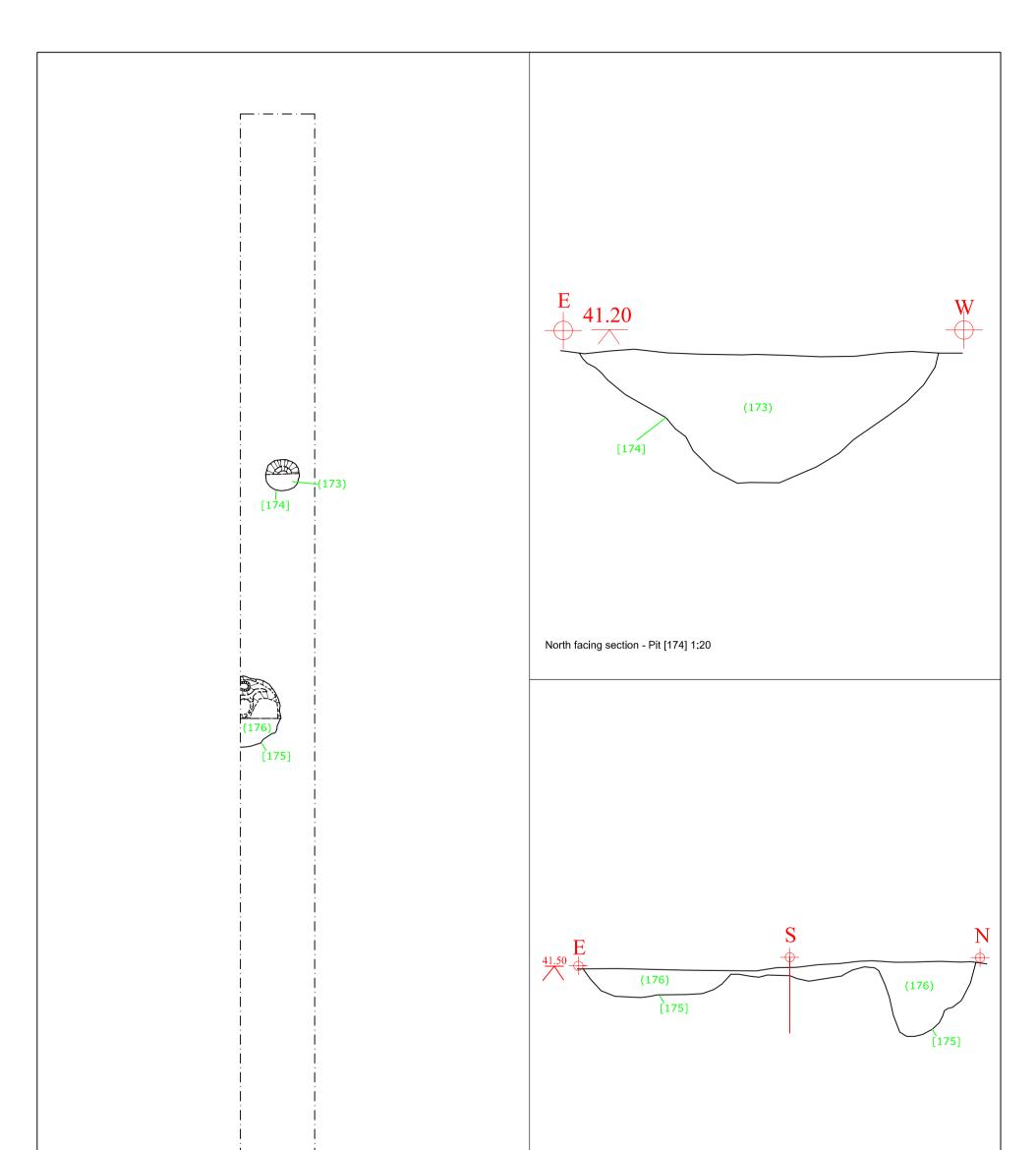


Figure 7: Trenches 18 and 22 Area C - Plans and Sections







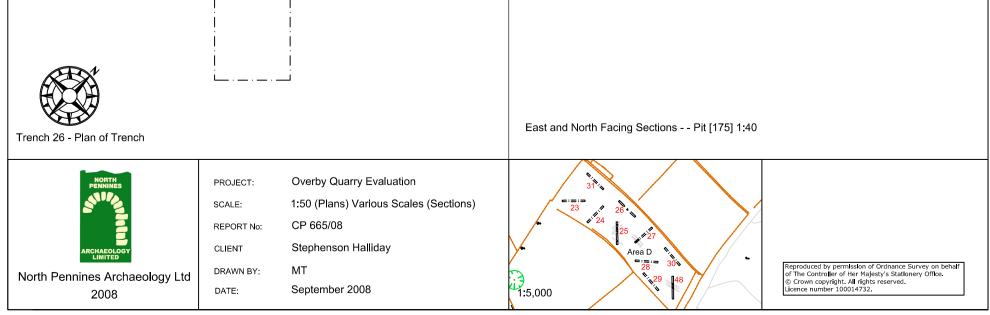
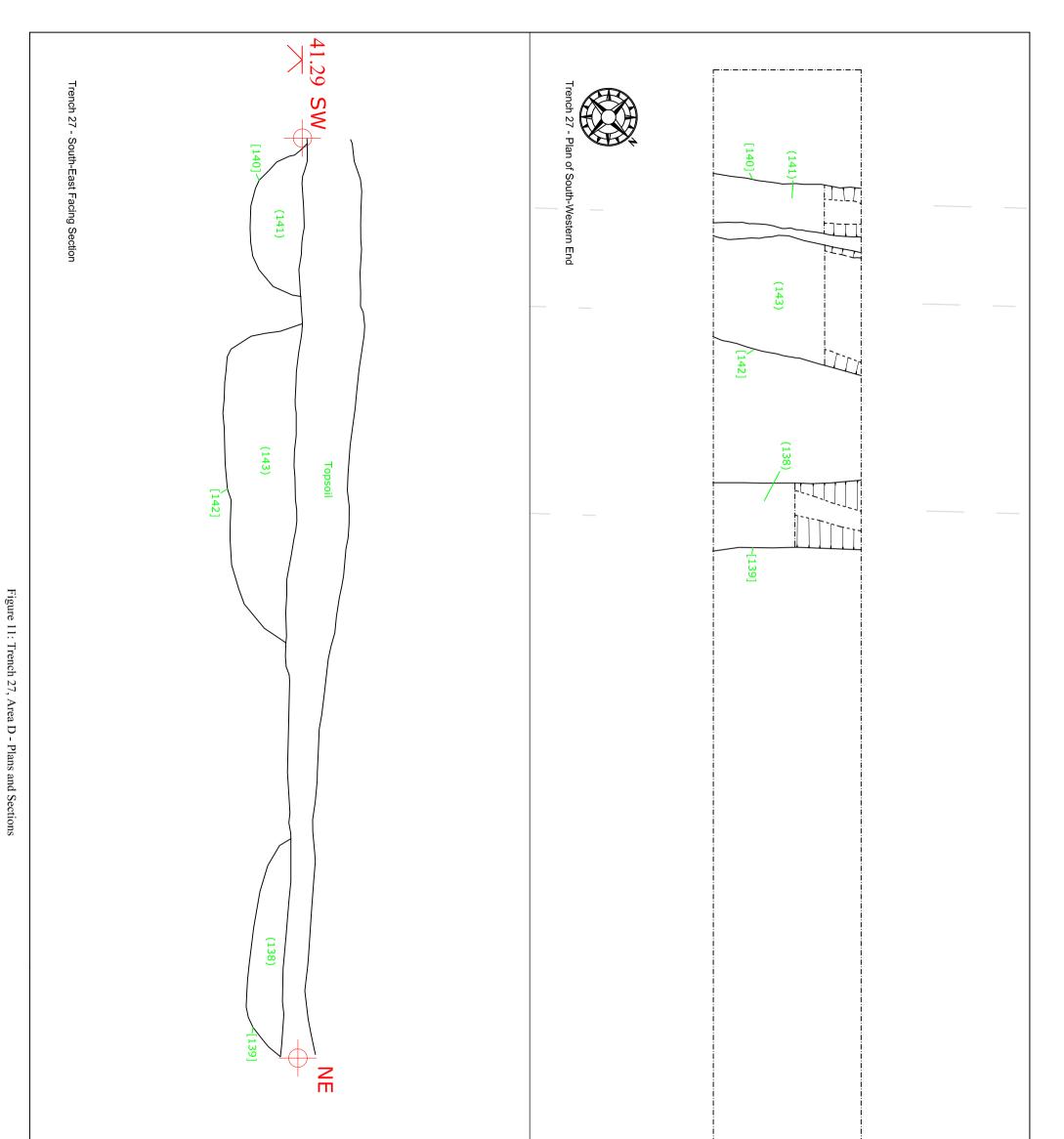
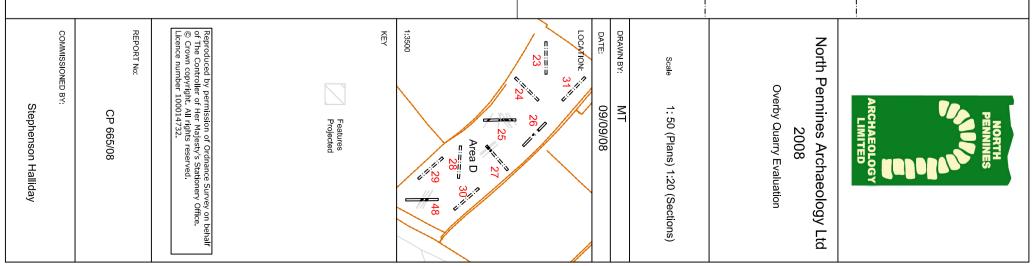
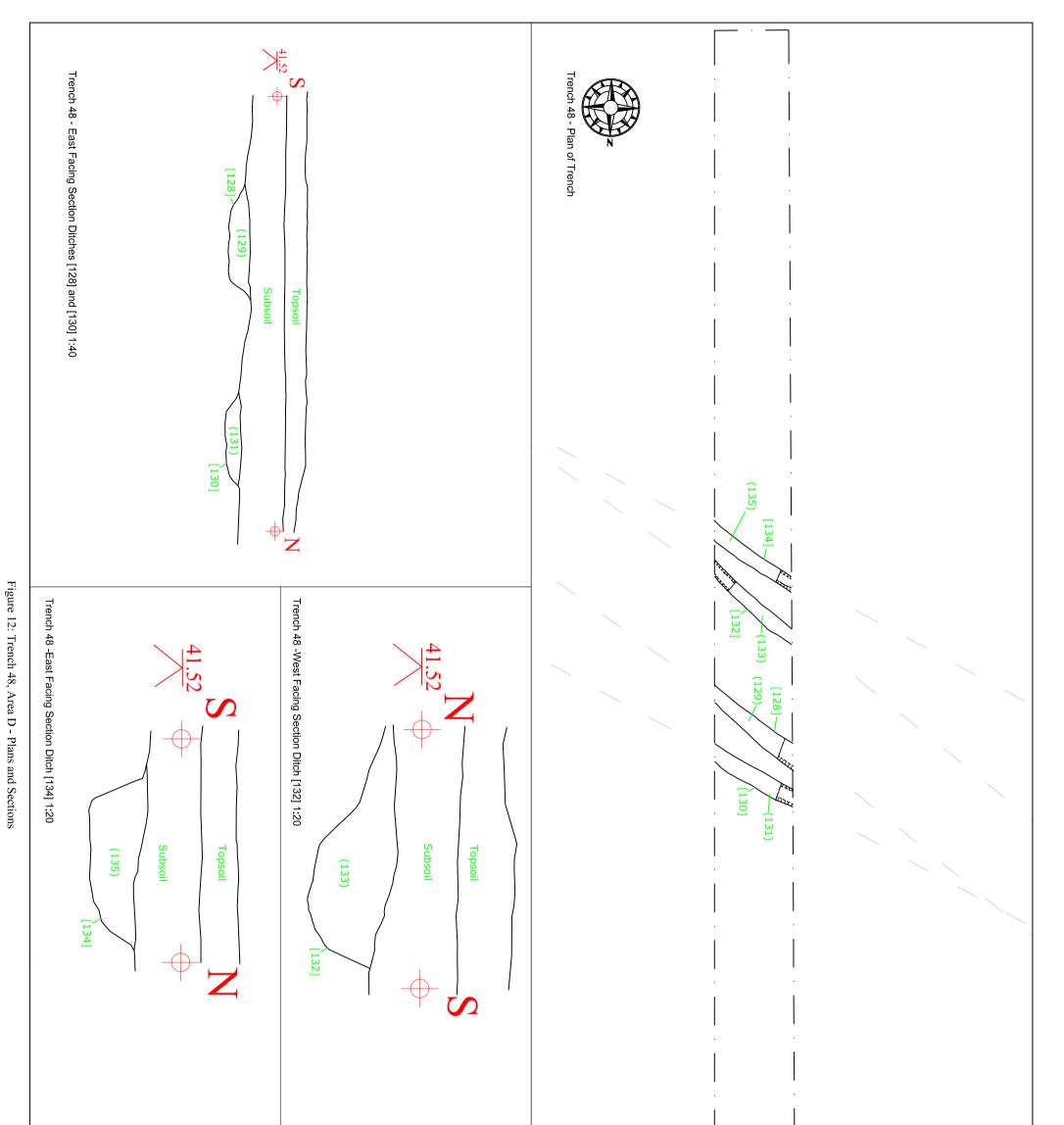
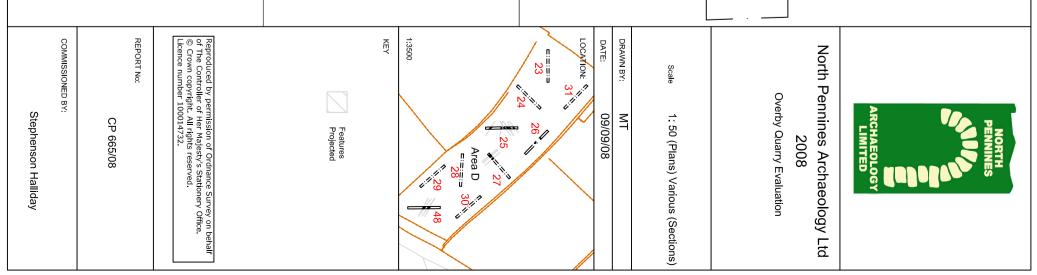


Figure 10: Trench 26 Area D - Plans and Sections









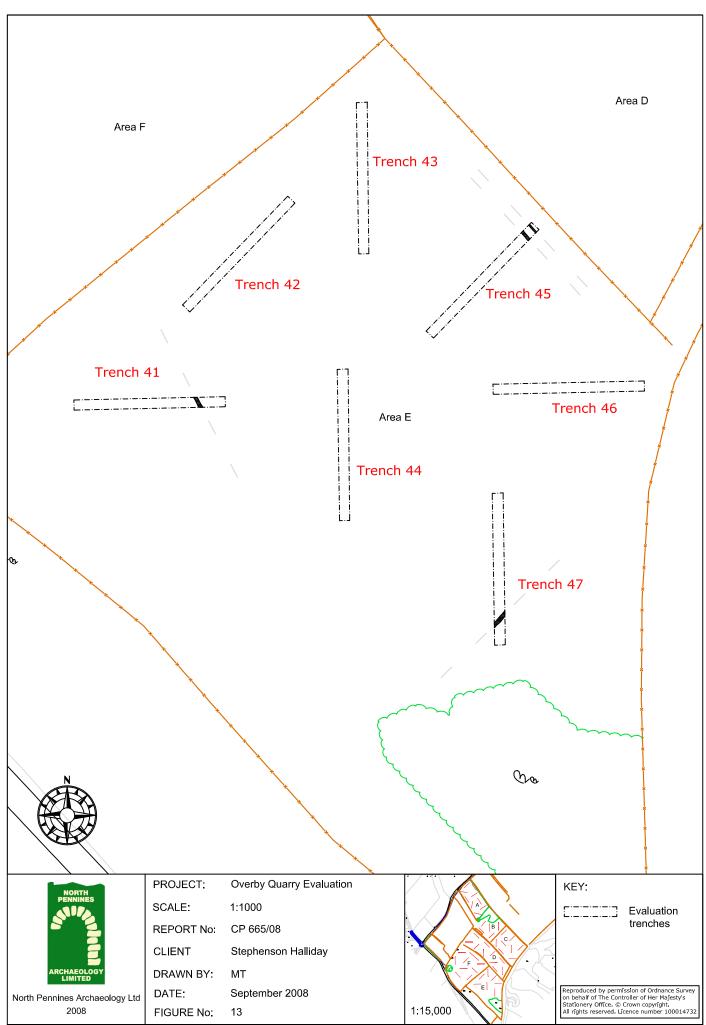
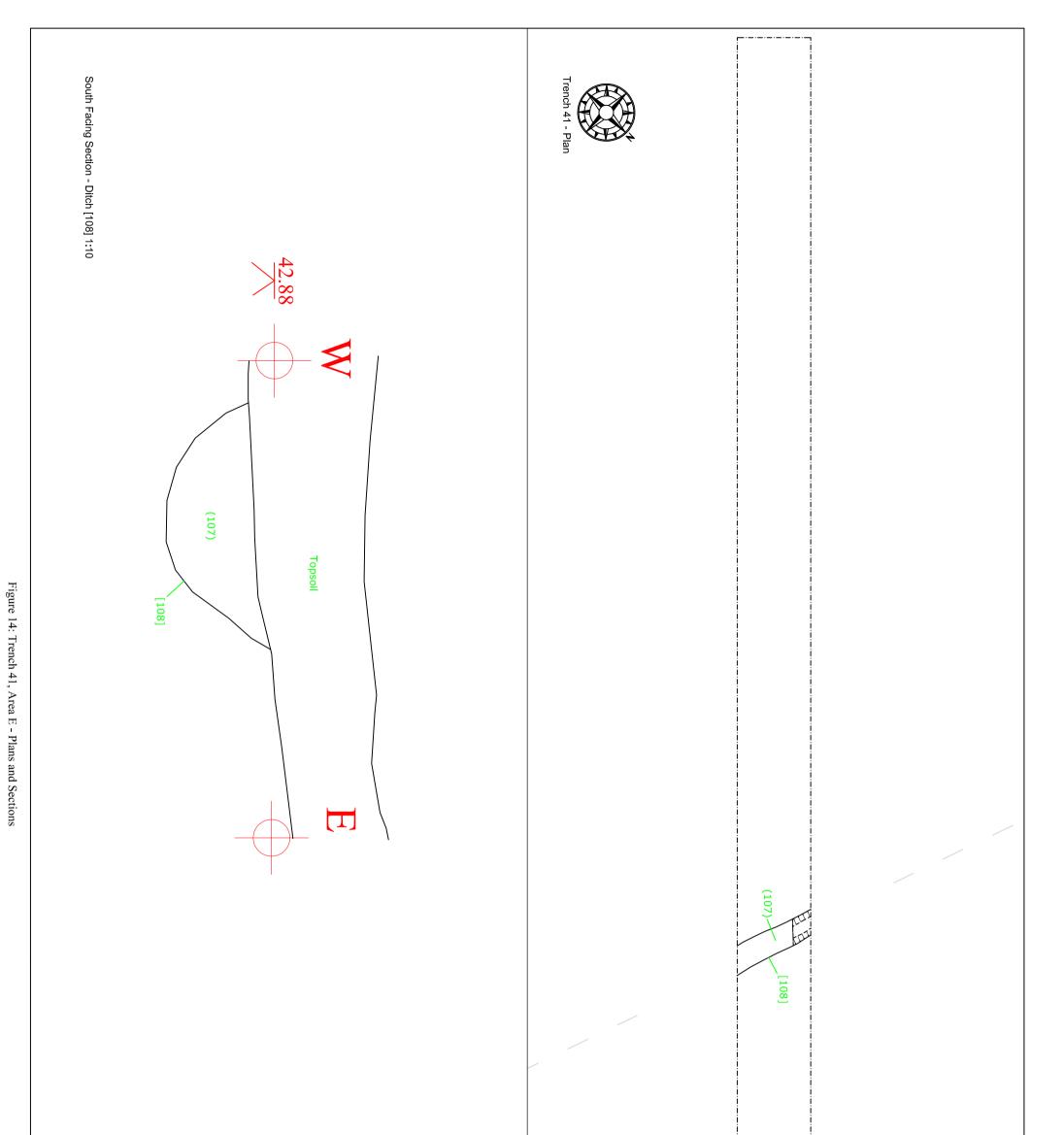
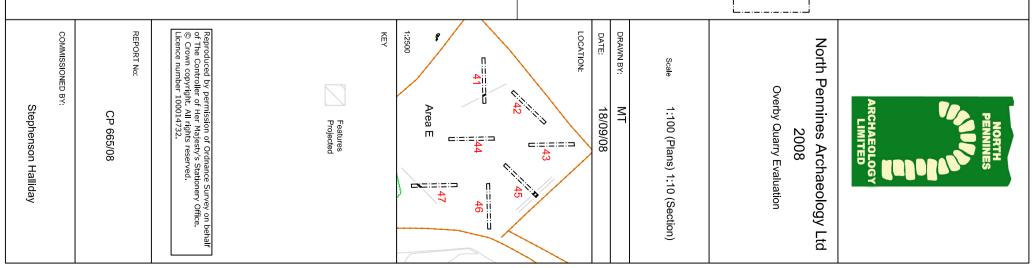
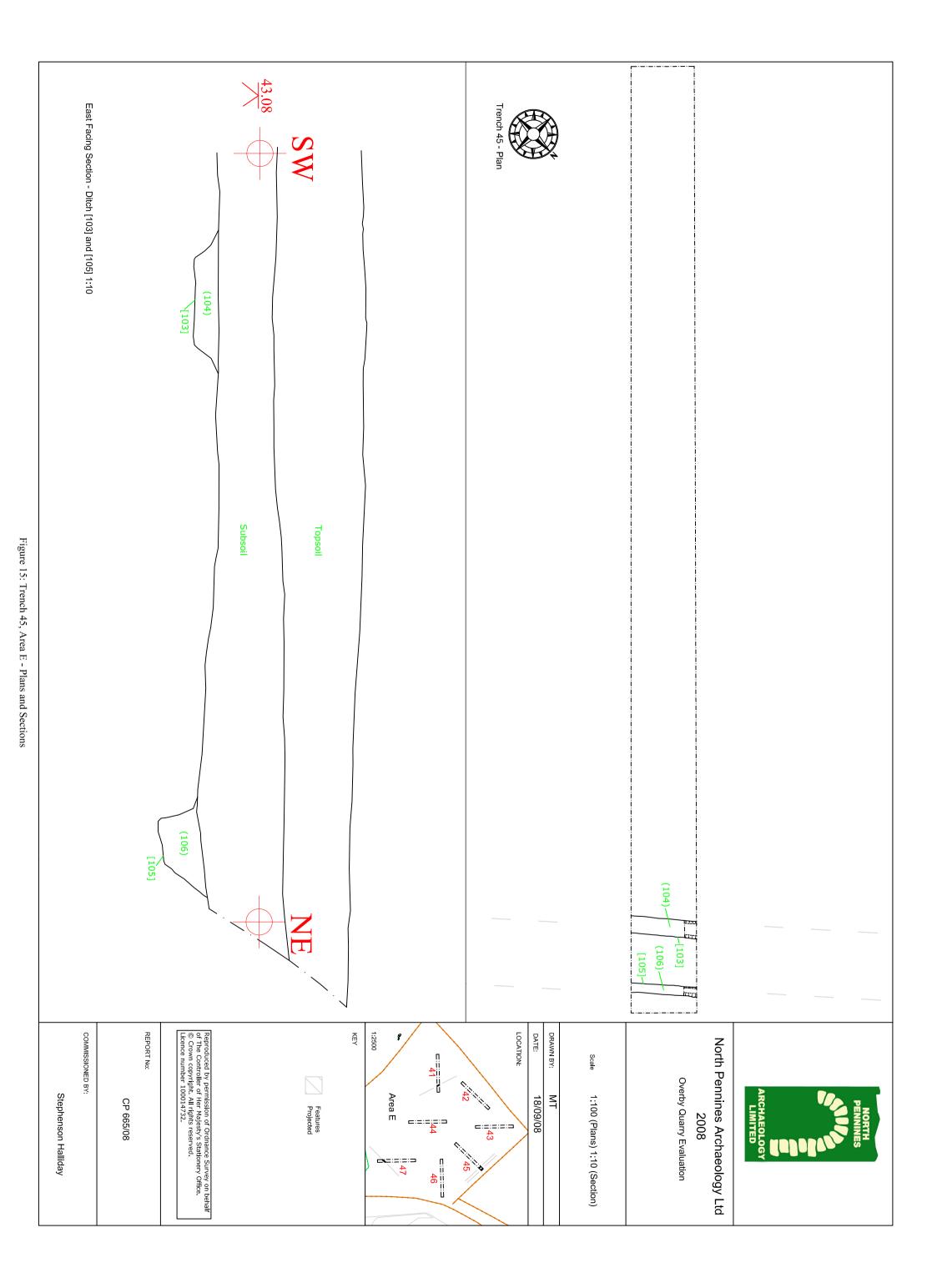
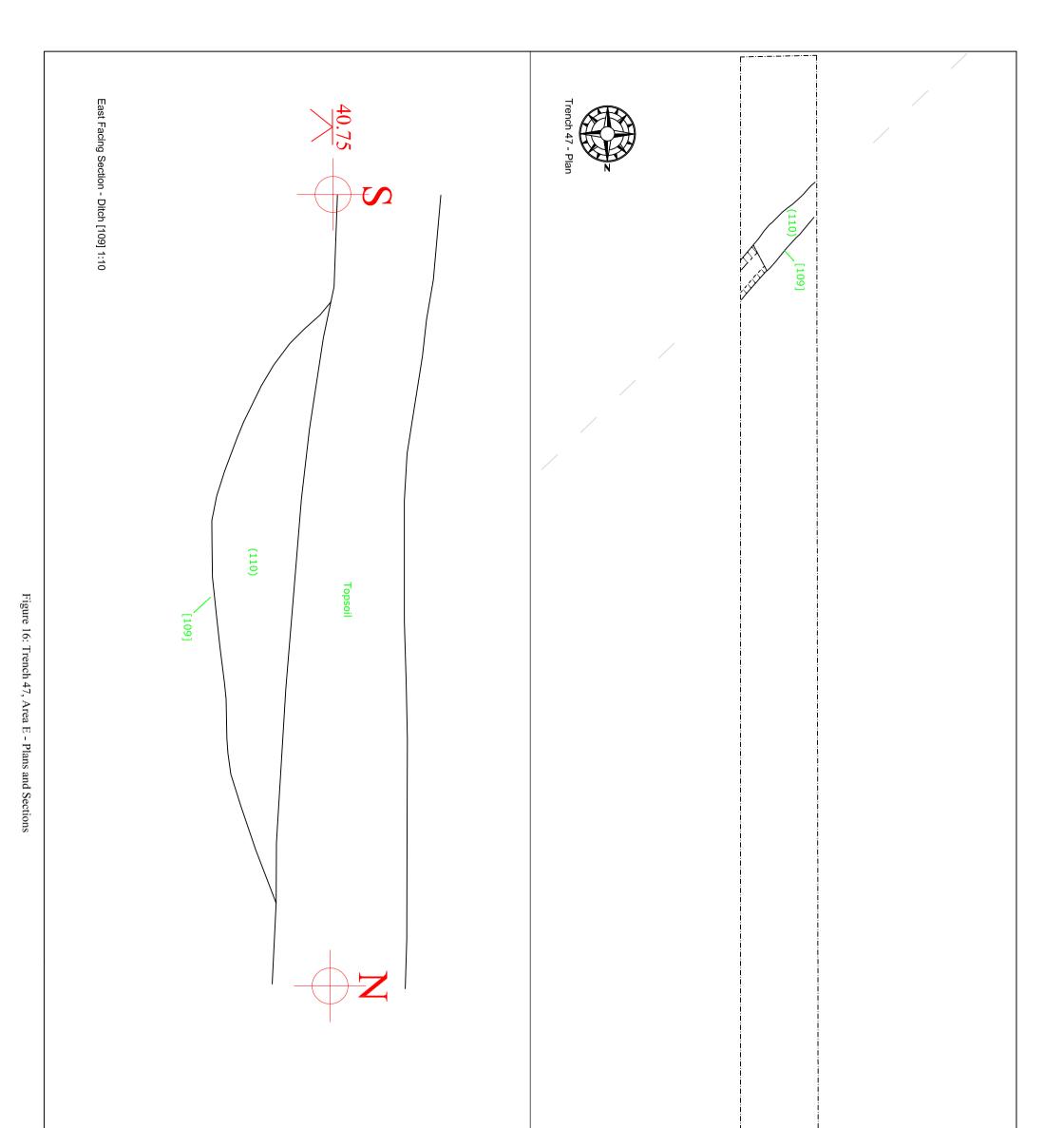


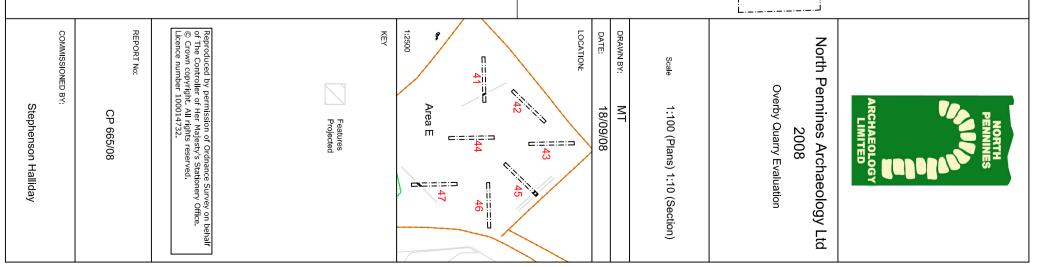
Figure 13: Area E











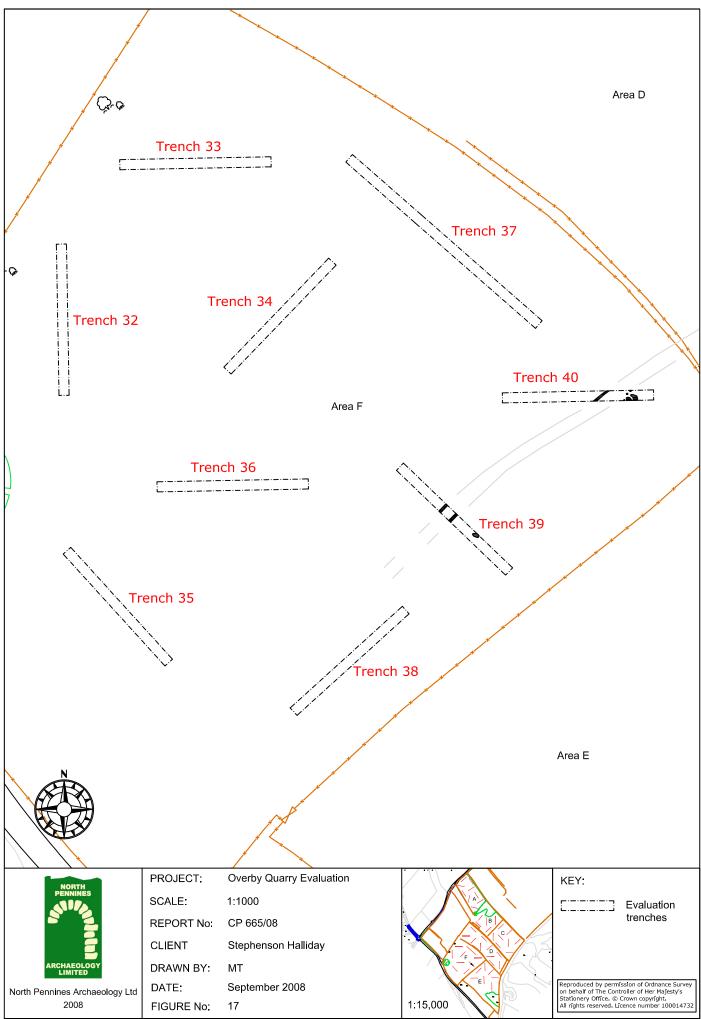
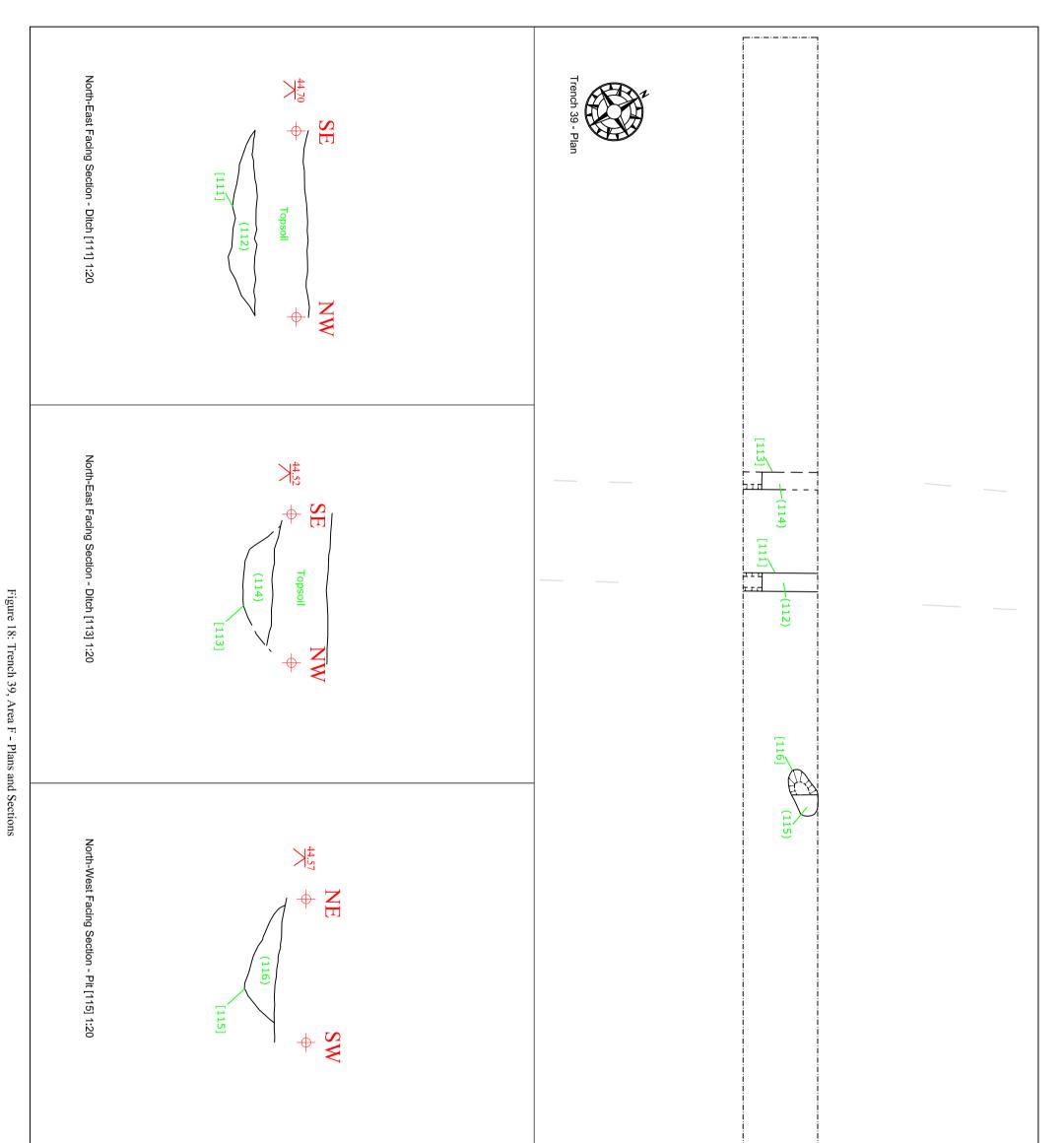
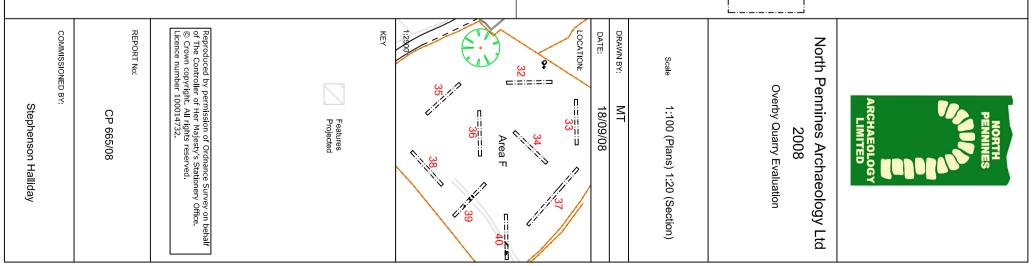
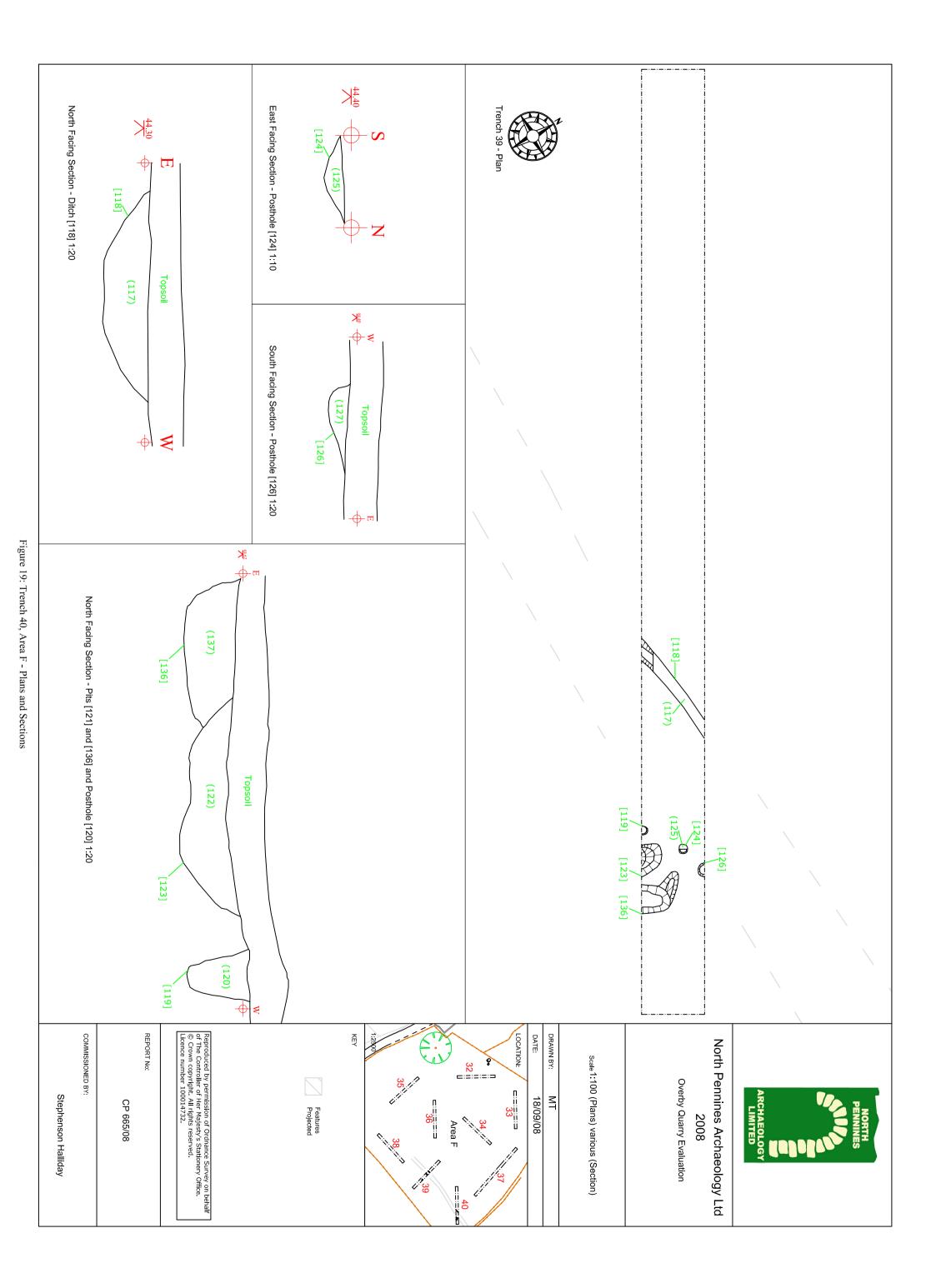
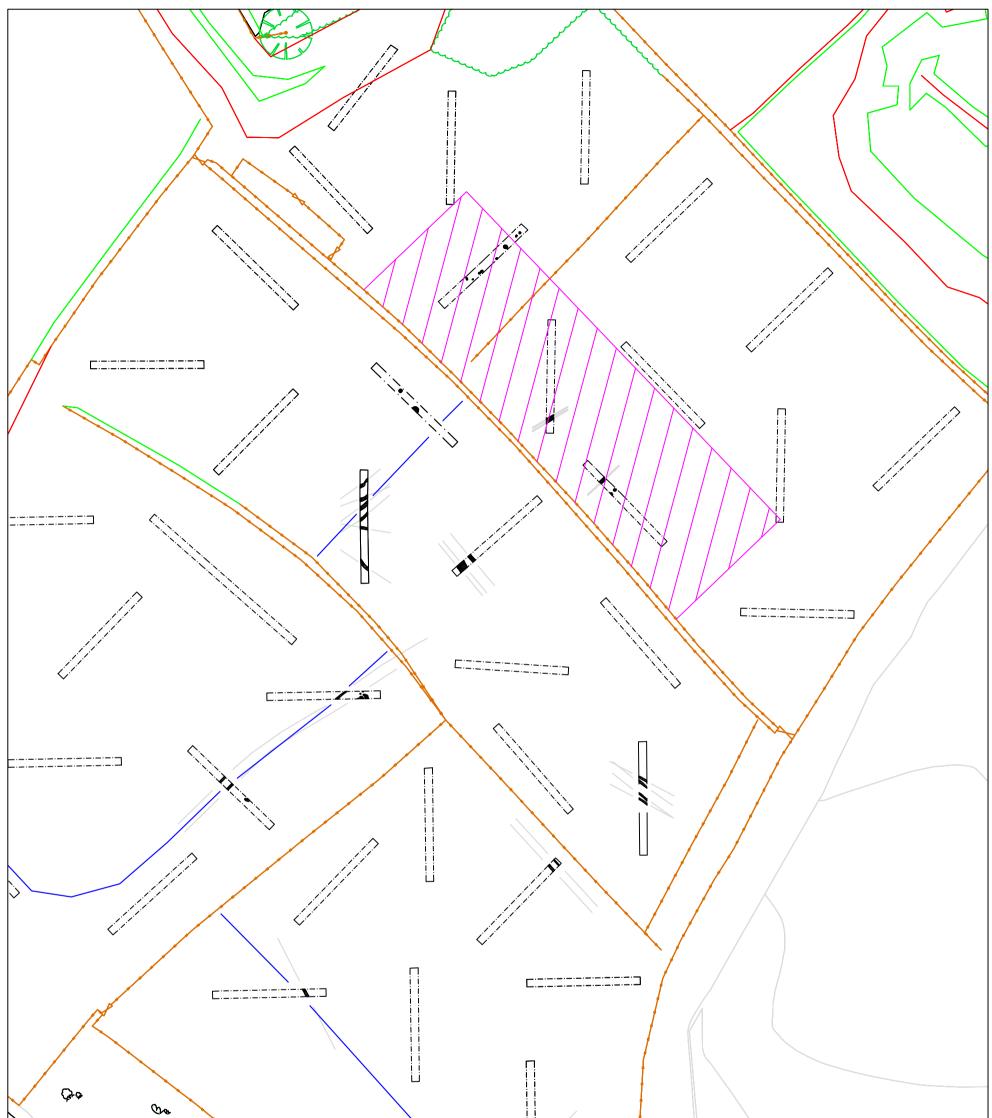


Figure 17: Area F









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North Pennines Archaeology Ltd 2008	PROJECT:Overby Quarry EvaluationSCALE:1:1000REPORT No:CP 665/08CLIENTStephenson HallidaDRAWN BY:MTDATE:29/09/08		© Crov	Features Projected Excavation Area OQA-B Boundaries shown on Tithe Map uced by permission of Ordnance Survey on behalf Controller of Her Majesty's Stationery Office. Yn copyright. All rights reserved.

Figure 20: Location of Features and Extrapolated Lines