

NORTH PENNINES ARCHAEOLOGY LTD

Project Report No. CP 1245/11

ARCHAEOLOGICAL EVALUATION OF A BRONZE AGE CREMATION CEMETERY ON BRACKENBER MOOR, APPLEBY-IN-WESTMORLAND, CUMBRIA



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September 2011



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SUMMARY

In 2011 North Pennines Archaeology Ltd were invited by Paul Frodsham, Historic Environment Officer, North Pennines AONB (NPAONB) Partnership, to supervise an archaeological evaluation of an earthwork enclosure at Brackenber Moor, Appleby-in-Westmorland, Cumbria, as part of the Altogether Archaeology Project (Fieldwork Module 5) run by the NPAONB Partnership. The fieldwork was undertaken jointly by North Pennines Archaeology Ltd (NPA), volunteers of the Altogether Archaeology Project, and members of Appleby Archaeology Group, under the supervision of NPA staff.

One of the primary objectives of the archaeological evaluation was to establish the date and function of the earthwork, which was believed to potentially date to the Roman Period. The project consisted of an archaeological evaluation, comprising a topographic survey and the excavation of a series of archaeological trial trenches, in order to investigate the nature and date of the site. Three trenches were excavated in total, in order to investigate the nature and extent of the identified earthworks. Trench A was positioned to investigate the earthwork enclosure, including a complete section across the outer bank and ditch, sample part of the central platform and investigate part of a possible southern entrance. Trench B was positioned to investigate the east side of the earthwork which appeared to have been removed by later activity. Trench C was positioned over a ditched feature to the west of the earthwork enclosure. The nature of this feature was unknown, but it was visible as an elongated circular ditched enclosure, which had been interpreted as a possible stack stand or WWII feature.

The evaluation revealed that the earthwork enclosure was the focus of prehistoric funerary activity and would appear to have been constructed in the Early Bronze Age as an embanked cremation cemetery. Trench A revealed quantities of burnt bone and charcoal, which were deposited in a series of small pits, clustered towards the centre of the monument, with a further pit near the southern entrance. Two of the excavated pits contained funerary vessels including an Early Bronze Age collared urn and two accessory vessels which are believed to date to 1900-1750 cal BC. The surface of the monument was also subjected to intense heat, probably as a result of a funerary pyre, after which it was covered by a stone cairn.

Later activity at the site included medieval or post-medieval ridge and furrow cultivation, which appears to have removed the outer bank on the east side of the monument. The monument has also been truncated, possibly as a result of antiquarian investigation. Some later disturbance of the earthwork may also be due to activity associated with the Appleby Golf Course, which was established in 1903.

The ditched feature to the west of the earthwork enclosure may also be prehistoric. The trench across this feature revealed shallow banks and ditches, enclosing an oval interior. Although no dating evidence was recovered from this feature, similar structures have recently been revealed on Fylingdales Moor in North Yorkshire, where they were associated with Iron Age round houses.

The earthwork enclosure appears to belong to a tradition of circular monuments, incorporating burials and later sealed by funerary or ring cairns, which appear to have been a relatively common form in the North during the Later Neolithic and Early Bronze Age, although very few of these sites have been excavated and radiocarbon dated in Cumbria. Further excavation is recommended at the site, along with an assessment of the human bone recovered, and a programme of radio carbon dating. This work has the potential to contribute to research themes identified in the Archaeological Research Framework for North West England.

ACKNOWLEDGEMENTS

North Pennines Archaeology would like to thank Paul Frodsham, Historic Environment Officer at the North Pennines AONB Partnership for commissioning the work and for all his assistance during the project. Thanks are also due to Appleby Golf Club for granting permission for the excavation, and to Steve Campbell, Head Green Keeper and Alan James for their help during the fieldwork.

North Pennines Archaeology are also grateful to all the Altogether Archaeology volunteers and members of Appleby Archaeology Group who took part in the project. The fieldwork was conducted by Jennifer Abbott, Michelle Arthy, Anne Bowyer, Phil Bowyer, Marjorie Campion, Martin Clark, Liz Cook, Dot Coe, Carol Dougherty, Claire Finn, Cian Finn, Jennie Garrod, Martin Green, Kevin Greve, Michael Hall, Annie Hamilton-Gibney, Liz Kerry, Jennifer Lucas, Maureen Moore, Carol Mitchell, Phyllis Rouston, Patricia Shaw, Andy Smith, Ewan Thomlinson, Ray Wager, Ian Walker, Stephen Walker, Derek Watson, Chris Wilson, Chris Wilkinson, and Mick Yates under the direction of Martin Railton, with the assistance of Kevin Mounsey of North Pennines Archaeology.

This report was prepared and illustrated by Martin Railton, Project Manager, North Pennines Archaeology. The flint was assessed by David Jackson, North Pennines Archaeology and the environmental samples were assessed by Don O'Meara, North Pennines Archaeology Environmental Assistant. The pottery was assessed by Blaise Vyner.

1 INTRODUCTION AND LOCATION

- 1.1 In 2011 North Pennines Archaeology Ltd were invited by Paul Frodsham, Historic Environment Officer, North Pennines AONB (NPAONB) Partnership, to supervise an archaeological evaluation on land at Brackenber Moor, Appleby-in-Westmorland, Cumbria, as part of the Altogether Archaeology Project (Fieldwork Module 5) run by the NPAONB Partnership. The fieldwork was undertaken jointly by North Pennines Archaeology Ltd (NPA), volunteers of the Altogether Archaeology Project, and members of Appleby Archaeology Group, under the supervision of NPA staff.
- 1.2 Brackenber Moor is situated c.3km to the east of Appleby-in-Westmorland, between the settlements of Hilton and Coupland Beck. It comprises 11ha of unenclosed moorland, bounded by the Hilton Beck to the north, enclosed fields to the east and west, and the A66 road to the south (Figure 1). Brackenber Moor is an open common, with a number of local farmers exercising grazing rights. Parts of the moor are used as a golf course, and are managed by Appleby Golf Club. The Brackenber Moor evaluation site, comprises a circular earthwork enclosure on the east side of Brackenber Moor, within a loop of the Hilton Beck (centred on Ordnance Survey grid reference NY 7083 1982).
- 1.3 The site is recorded in the Cumbria County Council Historic Environment Record (HER) as the site of a possible Roman signal station (HER 3473), although this interpretation is based purely on morphological comparisons with other sites. A geophysical survey was undertaken to investigate the site in 2009 by members of Appleby Archaeology Group with the assistance of staff from North Pennines Archaeology. The survey seemed to provide evidence in support of this interpretation, although the east side of the earthwork appeared to have been disturbed by a possible later track and WWII fox holes (Railton 2009a). The site has also been interpreted as a prehistoric enclosure, as the form of the monument is also consistent with the morphology of other prehistoric ritual enclosures (Clare 2007). A primary aim of the evaluation was therefore to confirm the nature and date of the Brackenber Moor site.
- 1.4 The solid geology of the area comprises New Red Sandstone, overlain by glacial deposits of boulder clay. George Gill, on the south side of Brackenber Moor is a Site of Special scientific Interest (SSSI), and is well known because of a series of rocky crags, exhibiting rock formations which were laid down in the Permian Period. The topography of the area is of undulating character with elevations ranging between c.150m and c.230m OD. Flodders Tarn, situated toward the centre of the moor, is the most significant body of water in the vicinity.

2 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

2.1 Brackenber Moor

- 2.1.1 There are 20 known archaeological sites in the immediate vicinity of Brackenber Moor recorded in the Cumbria County Historic Environment Record (HER). There is good evidence that Brackenber Moor has been occupied since at least the Bronze Age, and a number of burial monuments survive from this period, including a number of possible Bronze Age burial cairns. Three of these are Scheduled Ancient Monuments (HER 1820-1823), but have been disturbed both in antiquity, and in more recent times by illicit metal detecting. Another burial cairn is located to the west of the club house, near Hilton Beck (HER 15896).
- 2.1.2 A number of possible prehistoric settlement sites exist in the area, which could potentially date to the Iron Age or Romano-British periods. The Druidical Judgement Seat is a D-shaped enclosure, comprising an outer bank and inner ditch, with a single entrance on the northwest side (HER 1817). The earthwork occupies a natural headland on the southwest side of the moor close to a number of the Bronze Age cairns. Similar sites in Cumbria are usually interpreted as Iron Age or Romano-British farmsteads. Previous evaluation work by Appleby Archaeology Group has demonstrated occupation of the site in the Late Bronze Age/Iron Age period, as well as activity on the headland dating to the Late Neolithic/Early Bronze Age (Railton 2009b).
- 2.1.3 There are a number of archaeological features of possible Roman date in the vicinity of Coupland Beck, at the southwest corner of Brackenber Moor. The present route of the A66, to the east of Coupland Beck, is known to follow the course of the High Street Roman Road (HER 1809). William Whellan recorded the presence of a Roman encampment at Coupland Beck (Whellan 1860). The site of a camp is also illustrated on the 1st edition Ordnance Survey map of 1861, immediately to the east of Coupland Beck (HER 1815). No visible evidence for this survives, but the remains of the camp have been confirmed by geophysical survey (Railton 2009a). The same map illustrates a 'Roman Fortress' to the northwest of Coupland Beck Bridge, on the north side of the road to Appleby (HER 1816). This has also been interpreted as the site of a possible Roman signal station or motte, which survives as an earthwork in the corner of the field. Another possible Roman signal station site is recorded in the Cumbria County Historic Environment Record, situated to the southeast of the Appleby Golf Club clubhouse (HER 1819). However, no evidence for this is visible on the ground. The present evaluation site on the east side of Brackenber Moor has also been interpreted as the site of a possible Roman signal station (HER 3473), known as Brackenber Moor Signal Station (NY 7083 1982).
- 2.1.4 No confirmed medieval features are recorded on Brackenber Moor, but a number of post-medieval agricultural features have been identified on the 1st Edition Ordnance Survey map of 1861. Some of these survive as earthworks including possible stack stands (HER 3088), sand pits (HER 15875), gravel pits (HER 15876), quarries (HER 18574 & HER 25689), and a lime kiln (HER 15877).

- 2.1.5 The golf course was founded in 1903, and the greens, bunkers and fairways of the present golf course occupy a large part of Brackenber Moor, between Coupland Beck and Brackenber. One of the present fairways runs immediately to the northeast of the evaluation site. The Appleby Golf Club now manages the moor on behalf of the commoners, and holds the title of 'Lord of the Manor'.
- 2.1.6 During the First World War, parts of Brackenber Moor were used as a temporary army training camp. A photograph of 1901 shows an encampment north of Flodders Tarn (Appleby Golf Club 2003). The concrete foundations of camp buildings can still be seen near the tarn, to the northeast of the Appleby Gold Club clubhouse.

2.2 The Evaluation Site

- 2.2.1 The evaluation site lies close to the route of a Roman road across Stainmore (the present A66), linking the forts of Bowes (*Lavatris*) and Brough (*Verterae*) to Kirkby Thore (*Bravoniacvm*), which forms part of a strategically important route between York (*Brovacum*) and Carlisle (*Luguvalium*). This road may have been constructed early in the Roman occupation of northern England, perhaps during the very first campaigns, under Cerealis in the early AD 70s. A number of similar sites to the Brackenber Moor site have been identified along this route, which may have functioned as observation towers or signal stations. The site appears to be comparable to excavated sites at Johnsons Plain, North Stainmore (NY 8442 1495) and Augill Bridge, near Brough (NY 8186 1469), although both of these sites remain undated. It has been suggested that the evaluation site could have been used to signal through a natural line of sight between Castrigg near Crackenthorpe and Brough under Stainmore (Higham and Jones 1975, 49). However, the location of the site is problematic, as the visibility is restricted by nearby hills, and there are more suitable locations for a signal station nearby.
- 2.2.2 Previous authors have also suggested that the earthwork may be a prehistoric monument (Clare 2007, 2). In size and form the Brackenber Moor site is comparable to the henge monuments near Milfield in Northumberland, originally identified from air photographs. Milfield North Henge has been ploughed flat and is only visible as a crop mark. It comprises a sub-circular enclosure (internal diameter of c.15m) with two opposing entrances to the north and south. It was excavated in 1975 and 1977 and found to contain a circular arrangement of 30 small pits, varying in diameter from 0.6m to 0.2m and 0.1 to 0.4m deep immediately inside the ditch. Of these 15 were excavated, but their function was not ascertained. Within this circle were six larger pits and a possible cist for a burial, although the centre of the henge contained no visible funerary remains (Harding 1981). Other pits were identified outside of the enclosure. Possible Neolithic and Beaker sherds were recovered from the ditch, and Beaker and Food Vessel sherds from the central pits. Six barbed and tanged arrowheads were found in an external pit. Radiocarbon dates of 1851 \pm 62bc from primary silts of ditch; 1824 \pm 39bc from secondary silts and 1800 \pm 80bc from a central pit date the site to the Early Bronze Age.
- 2.2.3 Milfield South Henge was larger, with a 20-25m diameter irregular segmented ditch. Excavations in 1977-78 produced some evidence for an external bank. Much of the interior had been disturbed by ploughing but a large pit towards the west of the centre was identified containing a rectangular stone setting, and a roughly-shaped cup-

marked stone was present at the west end. Radiocarbon dating indicated an Early Bronze Age date for this phase (Harding 1981)

2.3 Previous Archaeological Work

- 2.3.1 In March 2009, Appleby Archaeology Group undertook geophysical surveys of two potential archaeological sites at Brackenber Moor, including the Brackenber Moor evaluation site, with the help of staff from North Pennines Archaeology Ltd. This work was supported by a grant from the Cumberland and Westmorland Archaeological and Antiquarian Society (CWAAS).
- 2.3.2 An earth resistance survey was undertaken at the present evaluation site, which seemed to provide evidence in support of the interpretation that the Brackenber Moor earthwork enclosure was the site of a Roman tower or signal station. The survey recorded a central mound, containing a sub-square sunken area, surrounded by a ditch and outer stone bank. The east side of the earthwork appeared to have been disturbed by the construction of a later track and sunken areas, interpreted as possible WWII fox holes, but otherwise the site appeared undisturbed. The form of this earthwork was noted to be very similar to the Roman signal station at Augill Bridge, which is the only known excavated example in the Eden Valley (Railton 2009a).
- 2.3.3 The geophysical survey detected high resistance anomalies over large parts of the outer bank and inner mound, which was expected given the construction of the earthwork. The ditch was detected as an area of anomalously low resistance. Possible entrances were detected on the north and south sides. The east side of the earthwork appeared disturbed, which was expected given that the later track and possible fox-holes had disturbed the earthwork on this side. A sub-square area of anomalously low resistance was detected at the centre of the earthwork, which measured c.6.5m across. This was interpreted as the possible foundation for a central timber platform. No post-holes were detected, however it is unlikely that these would have been identified given the relatively coarse resolution of the geophysical survey.
- 2.3.4 A shallow ditched feature was identified during the geophysical survey, immediately to the west of the earthwork. This was 8.3m long and 3.3m wide, with straight sides and rounded ends. This appeared as a high resistance anomaly in the resistance data, but was not clearly defined given the relatively coarse resolution of the survey. It was thought that this might be a WWII feature. Rows of circular ring ditches have been identified elsewhere on Brackenber Moor, which were created by soldiers excavating drainage ditches for tents. Alternatively it was thought it may have been a stack stand.
- 2.3.5 Two linear high resistance anomalies were detected, which corresponded to the locations of two banks defining the possible later track. A linear low resistance anomaly was also detected to the north of these, which may be a related feature.

3 AIMS AND METHODOLOGY

3.1 Project Aims and Objectives

- 3.1.1 Altogether Archaeology, with funding from the Heritage Lottery Fund, English Heritage and Natural England, is a community archaeology project enabling volunteers to undertake practical archaeological projects with appropriate professional supervision. As well as raising the capacity of local groups to undertake research, it will make a genuine contribution to our understanding of the generally little-studied North Pennines historic environment, thus contributing to future landscape management. The project is managed by the North Pennines AONB Partnership. Over an initial 18 month period it aims to complete a programme of ten modules covering various aspects of North Pennines archaeology, alongside a wide-ranging programme of public events with archaeological themes.
- 3.1.2 The Brackenber Moor evaluation project formed Module 5 of the Altogether Archaeology programme, directed by North Pennines Archaeology Ltd and run in close association with the Appleby Archaeology Group. One of the primary objectives of the archaeological evaluation was to establish the date and function of the earthwork, which was believed to potentially date to the Roman Period. The project consisted of an archaeological evaluation, comprising a topographic survey and the excavation of a series of archaeological trial trenches, in order to investigate the nature and date of the site. In addition this project forms part of a wider landscape study by members of Appleby Archaeology Group with the aim of developing an understanding of the history and development of Brackenber Moor from prehistoric times to the present day.
- 3.1.3 A project design for the Brackenber Moor evaluation was produced by Paul Frodsham, Historic Environment Officer, North Pennines AONB Partnership (Frodsham 2011), which was submitted to Andrew Davidson at English Heritage for approval, prior to the start of the fieldwork project. It highlighted in the project design that the earthwork forming the focus of the investigation had not been definitely identified as a signal station, or even as Roman in date. However, given its broad similarity to known signal stations in the general vicinity, and its location in relation to the nearby Roman road, it was considered that this was the most likely origin. There had also been some discussion as to the exact purpose of these sites, and the possibility has been raised that they were not used for signaling, but rather as observation towers (Vyner 2001). If Roman then it was considered that the site would be of considerable importance and should be conserved as a fascinating feature within the golf course. If not Roman then it was considered important that the origin of the earthwork should be established in order to inform appropriate future management.
- 3.1.4 Beyond characterizing the nature of the earthwork known as Brackenber Moor Signal Station, the project design identified the following research questions:
- What is the extent of the site in relation to the visible earthworks?
 - How much survives within the ground, and in what condition?
 - What was the form of the original structure on the site?

- What is the date of the original structure on the site?
- Is there evidence for more than one phase of building on the site?
- If the site is Roman, how might it relate to the wider Roman landscape, and in particular to other identified 'signal stations' on Stainmore and in the Eden Valley?
- What is the relationship between the structure and the 'track' which appears to cut its east side?
- What potential does the site offer for further investigation?
- Is there potential for low-key public interpretation of the site, either direct access or from a viewing point on an adjacent public right of way?
- Is there sufficient information available on site to attempt meaningful reconstructions of the site's appearance at different stages in its history?

3.2 Topographic Survey

- 3.2.1 *Introduction:* a topographic survey of the earthwork was undertaken at the start of the project in order to record the nature and extent of the earthwork, prior to the excavation of trial trenches at the site. The results of the topographic survey are presented in Figure 2.
- 3.2.2 *Standards and Scale:* a nominal scale of 1:500 was adopted for the survey. This scale was considered most appropriate for showing earthwork detail clearly and accurately. At this scale measurement inaccuracies of 10cm would be represented as a deviation of 0.2mm on the plot, invisible to the eye.
- 3.2.3 The survey was conducted in accordance with English Heritage guidelines (Riley & Wilson-North 2001), and corresponds to an English Heritage/RCHME Level 3 survey (RCHME 1991).
- 3.2.4 *Station Establishment:* two primary survey stations were established on the west side of the earthwork using a Trimble R8 GNSS GPS System and marked with permanent survey markers. GPS uses electronic distance measurement along radio frequencies to satellites to enable a positional fix in latitude and longitude which can be converted mathematically to Ordnance Survey National Grid Coordinates. NPA uses a Trimble R8 Base and Rover with TSC2 Controller, which can produce accuracies of up to $\pm 0.01\text{m}$. The maximum error between survey stations will be no greater than $\pm 5\text{mm}$, and less should be achievable with the equipment in use. The elevation values for the survey stations were established using this method, and were used as reference stations in the subsequent trial trench evaluation.
- 3.2.5 *Earthwork Survey:* earthworks were surveyed in plan using the Trimble R8 GNSS GPS System. The principal plan components of the earthworks were established by standard GPS measurement using a pole mounted roving receiver. Measurements were stored directly within the instrument's internal memory.

- 3.2.6 *Data processing:* survey data were downloaded onto a laptop computer for initial data processing using. The data was subsequently exported as .DXF files in order to produce a hachured plan in AutoCad 2004 (see Figure 2).

3.3 Trial Trench Evaluation

- 3.3.1 *Introduction:* the trial trench evaluation involved the excavation of three trenches (Trenches A, B and C) in order to investigate the nature and extent of identified earthworks at the site (Figure 2). Trench A was a 2m-wide L-shaped trench measuring 15m-long, aligned approximately north to south and east to west. The trench was positioned to investigate the Brackenber Moor earthwork enclosure, including a complete section across the outer bank and ditch, part of the central platform and part of a possible southern entrance. Trench B measured 1m wide and 12m long, aligned northwest to southeast, and was positioned to investigate the east side of the earthwork which appeared to have been removed by later activity, including a possible trackway. Trench C was 1m wide and 8m long, aligned north northwest to south southeast, and was positioned over a ditched feature to the west of the Brackenber Moor earthwork enclosure. The nature of this feature was unknown, but it was visible as an elongated circular ditched enclosure, which had been interpreted as a possible stack stand or WWII feature.
- 3.3.2 In summary, the main objectives of the field evaluation were:
- to establish the nature, extent and state of preservation of archaeological features associated with Brackenber Moor site;
 - to establish the character of those features in terms of cuts, structures, soil matrices and interfaces;
 - to recover artefactual material, especially that useful for dating purposes;
 - to recover palaeoenvironmental material where it survives in order to understand site and landscape formation processes;
 - to recover samples suitable for radiocarbon dating if these are present;
 - to assess the impact of later activity on the earthwork
- 3.3.3 *Field methods:* turf and topsoil were excavated by hand under close archaeological supervision, to either the top of archaeological deposits, or the natural substrate, whichever was observed first. Trenches were subsequently cleaned and all features investigated and recorded according to the North Pennines Archaeology Ltd. standard procedure as set out in the Excavation manual (Giecco 2003).
- 3.3.4 All excavated fills from cut features were sieved on site in order to maximise finds recovery. Finds were packaged and labelled as appropriate and returned to the North Pennines Archaeology Ltd offices at Nenthead for processing. Consultation with appropriate specialists was then undertaken where required.
- 3.3.5 Environmental samples taken during the work were processed under the direction of Don O'Meara, BA (Hons) MA, North Pennines Archaeology Environmental Assistant, who also processed the cremated bone.

- 3.3.6 The fieldwork programme was followed by an assessment of the data, the process being adopted as set out in the *Management of Archaeological Projects* (2nd Edition, 1991).

3.4 Health and Safety

- 3.4.1 Full consideration was given to health and safety issues during all fieldwork. North Pennines Archaeology Ltd Health and Safety Statement conform to the provisions of the Standing Conference of Archaeological Unit Managers (SCAUM) Health and Safety Manual.
- 3.4.2 A full risk assessment was undertaken to assess all real and potential hazards prior to the commencement of fieldwork. Participants on the project were given a health and safety induction prior to fieldwork commencing.

3.5 Publication

- 3.5.1 A summary of the project will be submitted to the Cumberland and Westmorland Archaeological and Antiquarian Society, for inclusion in their Newsletter. It is proposed that the final findings of the project will be published in the *Transactions of the Cumberland and Westmorland Archaeological and Antiquarian Society*, depending on the availability of funding.
- 4.5.2 One copy of this report will be deposited with the Cumbria County Council Historic Environment Record, where viewing will be available on request.
- 4.5.3 The project is also be registered with the **Online Access to the Index of archaeological InvestigationS (OASIS)**, where a digital copy of the report will be made available.

3.6 Archive

- 3.6.1 All finds belong to the Appleby Golf Course, but initially have been transferred to the North Pennines Archaeology Ltd's premises at Nenthead. Agreement will be sought for the final deposition of finds with a local specialist museum. Ultimately it is recommended that the curation of both finds and the site archive should be vested in Penrith Museum.
- 3.6.2 During and after the excavation, all recovered artefacts were stored in the appropriate conditions to ensure minimal deterioration and loss of information (this included controlled storage, correct packaging, regular monitoring of conditions, and immediate selection for conservation of vulnerable materials). All work was carried out in compliance with IFA Guidelines for Finds Work and those set by UKIC.

4 TOPOGRAPHIC SURVEY RESULTS

4.1 Introduction

- 4.1.1 The topographic survey of the Brackenber Moor earthwork was undertaken on 20th May 2011, prior to the start of the trial trench evaluation, using a differential GPS system. This equipment was used to determine the locations and extent of individual elements of the earthwork in relation to the Ordnance Survey National Grid. The results of the topographic survey are presented in Figure 2.

4.2 Earthwork enclosure

- 4.2.1 The main earthwork enclosure comprised a sub-circular central mound or platform, surrounded by a ditch and outer bank, pierced by two possible entrances to the north and south (Plates 1 & 2). The total diameter of the earthwork was *c.*23.5m when measured north to south. The monument appeared to have been damaged by later activity on the east side, where a *c.*15m long section of the outer bank and ditch were absent. The natural ground surface sloped downhill slightly to the south with elevations ranging between 157.79m OD to the north of the monument and 157.21m OD to the south.
- 4.2.2 The 30m-long western section of the outer bank survived relatively intact, with only two short sections of bank remaining on the east side of the enclosure. Two 1.2m-wide openings on the north and south sides of the enclosure, appeared to be original entrances through the bank (Plate 2). The western bank measured between 2.6m and 4.5m wide at the base, being on average 1.1m wide at the top, and up to 0.4m high. The north east section was 8.5m long, 3.8m wide and 0.2m high. The southeast section was 7m long, 3.6m wide and 0.3m high, with a narrow east end which had evidently been truncated by later activity (Plate 3).



Plate 1: The earthwork enclosure, looking east towards the Pennines

- 4.2.3 The ditch measured *c.*1m-wide at the base on the west side of the enclosure, with entrance causeways on the north and south sides of the earthwork. The ditch was not visible to the east, where it appeared to have been in-filled by later activity.



Plate 2: The southern entrance into the earthwork enclosure, looking north



Plate 3: Two linear banks on the west side of the earthwork, looking north towards the fairway

- 4.2.4 The central circular platform measured *c.*13m in diameter, being approximately 0.3m high, in relation to the southern enclosure entrance. The platform comprised two moderately level areas to the east and west, with an irregular central sunken area, measuring approximately 5m in diameter, at the centre. A 1.3m-wide opening on the

south side appeared to be the original entrance onto the platform, and with further 0.3m-wide opening on the north side. Two circular depressions on the west side of the platform, each measuring *c.*2.5m in diameter, were previously interpreted as possible WWII fox holes (Plate 4). A number of smaller depressions were also present within the interior, which were evidently also later intrusions into the monument.



Plate 4: Two circular depressions on the east side of the earthwork platform, looking southeast

4.3 Linear Banks

- 4.3.1 A linear bank was identified immediately to the southeast of the enclosure, aligned north to south. This bank was 22.5m long, 3.4m wide at the base and 0.2m high. The bank appeared to be stratigraphically later than the earthwork enclosure, as the north end of the bank was in the location of the missing enclosure bank. This bank was interpreted as a possible later field boundary bank (Plate 3).
- 4.3.2 Two parallel ridges were identified at distances of 2.5m and 7.5m to the east of the linear bank, both being aligned north to south. The western ridge was 2.5m wide and 0.1m high, and the eastern ridge was up to 5m wide and up to 0.3m high. Both ridges appeared to terminate immediately to the east of the earthwork enclosure in the area of the fairway, but continued for a considerable distance to the south. The ridges are also visible on air photographs of the area, and are interpreted as cultivation ridges of medieval or post-medieval date.

4.4 Ditched feature

- 4.4.1 To the west of the earthwork enclosure was an elongated ditched feature, measuring 8.8m long and 3.8 wide with straight north and south sides, and rounded ends. The ditch was 0.4m wide and 0.3m deep, defining a level internal platform. No other topographic features were visible and the nature of the earthwork was uncertain.

5 TRIAL TRENCH EVALUATION RESULTS

5.1 Introduction

- 5.1.1 The trial trench evaluation was undertaken between the 21st and 29th May 2011, and comprised the excavation of three trenches at the site (Trenches A-C). Trench A was L-shaped in plan and incorporated the west side of the southern earthwork enclosure entrance, part of the central internal platform and a complete section across the west side of the earthwork bank and ditch (Figure 2). Trench B was positioned to examine the truncated east side of the earthwork, and two linear banks to the east. Trench C was positioned to investigate a ditched feature to the west of the main earthwork enclosure.
- 5.1.2 All of the excavation work was undertaken by hand and all excavated deposits were sieved for finds on site. Bulk soil samples were also taken from excavated features for environmental assessment (see Section 7). At the completion of the evaluation, the trenches were backfilled with the excavated material, and the turf re-laid by hand.
- 5.1.3 Context numbers for archaeological features and deposits are included in the following text. Square brackets [] refer to the cuts of archaeological features, whilst round brackets () refer to fills and archaeological deposits.



Plate 5: Working shot, showing the excavation of Trench A, looking west

5.2 Trench A

- 5.2.1 Following the removal of turf and topsoil (100) by hand, Trench A was cleaned to reveal a section of the internal platform, outer bank and ditch of the earthwork enclosure (Figure 3). The south and west ends of Trench A extended outside of the earthwork and were excavated to reveal the natural orange sand (131) at a depth of 0.3m below ground level, beneath which was the undisturbed orange sandstone bedrock. A 1m-wide section was subsequently excavated through the outer bank and ditch in the western arm of Trench A (Plate 6 and Section 1, Figure 4).
- 5.2.2. **Earthwork bank and ditch:** the western enclosure ditch [102], was revealed cutting the natural sand (131) in the western arm of Trench A. The ditch was c.2m wide, with a rounded profile and base, being no more than 0.25m deep. The upper layer of sand lining the bottom and sides of the ditch (119) was blackened and compacted as though it had been burned. A sample was taken of this layer for environmental assessment (Sample 3). Above this layer was a 0.1m-deep layer of grey silty sand (118), containing occasional rounded cobbles measuring between 0.11m and 0.25m in diameter. This layer was interpreted as relating to the natural silting up of the ditch, and was also sampled for environmental assessment (Sample 2). Above this layer was a further 0.12m-deep layer of dark grey/black silty sand (103), containing occasional rounded cobbles, which was also sampled (Sample 1).
- 5.2.3 Immediately to the west of the ditch [102], overlying the natural sand (131), was the outer bank of the enclosure, which was c.3m wide and 0.6m high, with a rounded profile. No evidence for an early topsoil or turf was present beneath the bank, suggesting that the area had been stripped of soil prior to its construction. A number of small flecks of charcoal were noted within the layer of sand beneath the bank, which may relate to this activity. Alternatively, it is also possible that these were wind-blow fragments.



Plate 6: Section through the bank and ditch of the enclosure Trench A, looking northwest

- 5.2.4 The bank material comprised a 0.45m-deep deposit of yellow/orange sand (132), containing occasional rounded pebbles, within which layering was evident. This material was almost certainly re-deposited sand removed from the adjacent enclosure ditch. Above this deposit, covering the top and sides of the bank, was a 0.07m-deep layer of black silty sand (104), which also showed evidence of burning.
- 5.2.5 Covering the top of the enclosure bank and ditch, in the western arm of Trench A, was a layer of light grey/brown silty sand subsoil (101) which varied between 0.05m and 0.1m deep. Above this was a 0.03m-deep burnt layer, interpreted as evidence for the burning heather for moorland management. Above this layer was a 0.05m-deep layer of topsoil and turf (100).
- 5.2.6 The southern terminus of the western ditch [108] was revealed cutting the natural sand in the southern arm of Trench A. The 0.6m-deep ditch terminus was sub-rectangular in plan, measuring *c.*1.2m wide north to south, and 0.8m-wide east to west, with an irregular outer edge (Figure 3). The northern edge of the ditch terminus was difficult to ascertain, as the rounded cut [137] for a stone setting was present on its north side, measuring *c.*0.5m in diameter and *c.*0.3m deep. A boulder, which exactly fit the shape of this cut, was revealed sitting within the enclosure ditch (Plate 7). This stone had almost certainly flanked the southern entrance to the enclosure, before falling into the ditch.
- 5.2.7 In section the ditch terminus [108] had a steep straight northern side, a more gradual sloping south side, and an irregular base (Section 3, Figure 4). The bottom of the ditch terminus was filled by a 0.35m-deep deposit of yellow/grey silty sand (133). Above this was a 0.3m-deep layer of orange/brown silty sand, containing two large boulders, one of which had clearly been displaced from the enclosure entrance. Above this, on the south side of the ditch terminus, was a 0.03m-deep burnt layer, interpreted as evidence for the burning heather. Overlying this was a 0.1m-deep layer of light yellow sand (145), above which was topsoil and turf (100).



Plate 7: Section through the southern ditch terminus [108] in Trench A, looking west

- 5.2.8 The southern terminus of the western bank was revealed immediately to the south of ditch terminus in Trench A (Figure 3). This comprised a 1.9m-long, 1.2m-wide and 0.4m-deep deposit of dark brown/black silty sand (110), containing occasional rounded cobbles and pieces of white quartz, up to 0.15m in diameter. The bank was very eroded, but clearly terminated in the southern extent of Trench A, forming an entrance into the enclosure.
- 5.2.9 A similar deposit was present c.1m to the east of this bank, forming the southern terminus of the eastern enclosure bank. This bank was not fully revealed in Trench A, but was evident as a 0.9m-wide, 0.2m deep deposit of brown/black silty sand (111) in the eastern trench section (Section 2, Figure 4). Covering the top of this bank and the entrance to the enclosure was a blackened and compacted layer of sand (119) similar to that seen in the western extent of Trench A, suggesting that this area had also been subjected to burning.
- 5.2.10 The rounded cut [137] for a possible pit, was seen in the eastern section of Trench A (Section 2, Figure 4). This cut through the burnt layer of sand (119) and was 0.3m wide and 0.2m deep with rounded sides, and base. The cut was filled with orange/brown silty sand (138). The nature of this feature was uncertain.
- 5.2.11 Above these features, filling the southern end of Trench A, was a 0.3m-deep deposit of light grey/brown silty sand subsoil (101). Above this was a 0.03m-deep burnt layer (134) (interpreted as evidence for the burning heather), and a 0.05m-deep layer of topsoil and turf (100).
- 5.2.12 **Earthwork interior:** the earthwork interior comprised a raised circular area measuring approximately 13m in diameter. The elevation of the interior was between 0.5m and 0.6m higher than the natural ground surface to the south and west of the earthwork, indicating that the earthwork may have been positioned to take advantage of a natural hill, which had been further enhanced by mounding up the sand from the immediate area. Overlying the natural orange sand (131) within the interior was a layer of fine orange silty sand (106), measuring between 0.15m and 0.25m thick, becoming thinner towards the centre of the earthwork. A low bank was identified running around the edge of the earthwork platform. This comprised a 2.6m-wide, 0.18m-deep deposit of dark orange silty sand (105) in the western extent of Trench A, containing occasional angular stones. A similar bank (107) was identified in the southern extent of Trench A, which served to enhance the prominence of the internal platform. The internal silty sand surface (106) was hard and compacted, appearing black in places, as though it had been subjected to intense heat. Cutting this surface (106), and the natural sand beneath it (131), was a series of rounded pits and shallow hollows, measuring between 0.3m and 0.6m in diameter (Figure 3 and Plate 8).
- 5.2.13 **Pits:** the deepest of the excavated pits was situated close to the southern entrance of the enclosure. The cut of this pit [112] measured 0.45m in diameter and 0.65m deep, with almost vertical sides and a rounded base (Section 4, Figure 5). The pit was filled by a deposit of dark orange/brown silty sand containing large quantities of charcoal and cremated bone, including some large fragments. The majority of the bone was collected from the base of the pit (Plate 9). However, a pocket of bone was also present near the top of the pit, sealed by a deposit of charcoal (141). It was evident that the pit had been used to deposit material from at least one, or possibly two, separate cremations. The fill material was collected in bulk as Sample 13.



Plate 8: The earthwork interior, showing a series of excavated pits and hollows, looking west



Plate 9: Cremation pit [112] near the southern enclosure entrance, showing cremated bone deposited at its base, facing east

- 5.2.14 A cluster of seven closely-spaced pits were revealed near the centre of the earthwork within Trench A, which were easily identified by their charcoal-rich fills. All of these appeared to have been truncated to some degree. The first pit [114] measured was oval in plan, being 0.5m long, 0.4m wide and 0.27m deep with near-vertical sides and a flat base (Section 5, Figure 5 and Plate 10). The pit was filled by a single deposit of dark orange/brown silty sand (115) containing frequent fragments of charcoal. A bulk sample was collected from the fill for environmental assessment (Sample 7).



Plate 10: Half-excavated pit [114] with charcoal-rich fill in Trench A, looking south



Plate 11: Half-excavated pit [116] containing a cremation vessel (120) in the eastern section of Trench A, looking west

- 5.2.15 Situated immediately to the south of this pit [114], in the eastern section of Trench A, was another shallow circular pit containing a cremation vessel (Plate 11). The cut of this pit [116] was 0.5m in diameter, being only 0.18m deep, with sloping sides and a slightly rounded base (Section 10, Figure 4). The pit was filled with a deposit of dark orange/black silty sand (117), containing frequent pieces of charcoal. At the centre of the pit was the complete rim of an inverted vessel containing burnt bone and charcoal (120). The base of this vessel was missing, the top of this pit having clearly been truncated in the past. The cremation vessel was matted with roots due to its close proximity to the turf layer (100), and was lifted whole to allow for excavation under

laboratory conditions. The fill of this pit was sampled as Sample 5, with the vessel forming Sample 6 (see Section 6 and Section 7).

- 5.2.16 Two further cremation pits were revealed to the west of these features. The first comprised an oval pit [123] measuring 0.6m long, 0.4m wide and 0.3m deep, with near vertical sides and an irregular base (Section 7, Figure 5 and Plate 12). This was filled by a deposit of grey/black silty sand (124) containing frequent inclusions of charcoal and a conglomerate of burnt bone in the upper edge of the pit. This material was collected for assessment as Sample 8. The second was a sub-circular pit [139] measuring 0.4m in diameter and only 0.1m deep, with sloping sides and a flat base (Section 9, Figure 5). This pit was filled with a single deposit of dark brown silty sand (140) which contained frequent inclusions of charcoal and burnt bone. It was clear that this pit had also been truncated, but the remaining material was collected for assessment (Sample 12).



Plate 12: Half-excavated pit [123] in Trench A, looking east

- 5.2.17 A further two cremation pits were revealed to the north of these. The first was a circular pit [135] measuring 0.4m in diameter and 0.4m deep, with a rounded base and sides (Section 8, Figure 5). This pit was filled a deposit of black silty sand (136), containing frequent inclusions of burnt bone and charcoal, which was sampled (Sample 10). The second was an oval pit [121] measuring 0.5m long, 0.4m wide and 0.15m deep, with straight sloping sides and a flat base (Section 9, Figure 5 and Plate 13). This pit was filled a dark brown/black deposit of silty sand (140) containing frequent charcoal inclusions (Sample 9).
- 5.2.18 The final excavated pit was only partially revealed within the northern section of Trench A. The pit [125] was 0.25m wide (where visible) and 0.1m deep with a rounded base and sides (Section 1, Figure 4). The pit was filled with dark brown silty sand (126) containing occasional pieces of charcoal, and appeared severely truncated. Several irregular hollows were also excavated adjacent to this pit, but were found to be shallow features of little archaeological interest.



Plate 13: Half-excavated pit [121] on the east side of Trench A, looking west

- 5.2.19 A further potential pit [129]/(130) was initially identified outside of the earthwork enclosure in the southern extent of Trench A, but this was later found to be non-archaeological.
- 5.2.20 **Cairn material:** covering part of the interior surface of the earthwork (106), and sealing the cremation pit near the entrance to the enclosure, was a stone deposit, interpreted as the remains of a stone cairn (Figure 3 and Plate 14). This material appeared to be present as a band of stone running around of the edge of the central platform, but was absent from the centre of the earthwork, suggesting that the material was intentionally laid down to form a ring cairn, or had been removed from the centre of the monument in a later period.



Plate 14: Cairn material (128) overlying a cremation pit in Trench A, looking north

- 5.2.21 In the western portion of Trench A the cairn material comprised a 1.8m-wide 0.2m-deep deposit of rounded cobbles and boulders (127) within a light yellow/grey sandy subsoil matrix (Section 1, Figure 4). These stones lay immediately within, and to the east of, the inner bank of the earthwork (105), and appeared to be set within a shallow cut [142]. The context of this cut was uncertain however, as the interior of the earthwork appeared to be dish-shaped, and this may have been intentional. This stone layer was immediately above the burnt surface of the earthwork (119).
- 5.2.22 In the southern portion of Trench A, the cairn material comprised a similar 2.1m-wide 0.15m-deep deposit of rounded cobbles and boulders (128) within a light yellow/grey sandy subsoil matrix, covering pit [112] and blocking the southern entrance into the enclosure. This deposit was also immediately adjacent to, and north of, the shallow inner bank of the earthwork (107). The northern edge of the cairn material was very irregular, and a possible cut [143] was seen in the eastern trench section (Section 2, Figure 4) suggesting that these stones had been robbed out. A similar cut in the northern trench section (Section 1, Figure 4), may indicate that this material originally covered the centre of the enclosure but has since been removed. This may relate to a later period of activity, which also included the truncation of the central cluster of cremation pits.
- 5.2.23 Within this central part of the monument the pits were sealed by a 0.05m-deep layer of dark brown/black silty sand (144). This layer, and the cairn material in both sections of Trench A, was in turn sealed by a 0.5m-deep layer of light grey/brown silty sand subsoil (101), a 0.03m-deep burnt layer, interpreted as evidence for the burning heather, and a 0.05m-deep layer of topsoil and turf (100).

5.3 Trench B

- 5.3.1 Following the removal of turf and topsoil (100) Trench B was cleaned to reveal the remains of a linear bank, two possible cultivation ridges, and a section of the truncated eastern enclosure bank and ditch (Figure 6 and Plate 15). The banks and ditch were subsequently half-sectioned.
- 5.3.2 **Earthwork bank and ditch:** the natural orange sand (215) was revealed at a depth of 0.3m in Trench B. Cutting the natural sand at the west end of Trench B was a section of the eastern enclosure ditch [201]. This section of ditch was 1.4m wide and 0.6m deep within the trench, with a curving west side and a flat base (Section 11, Figure 7 and Plate 16). The natural sandstone bedrock was revealed at the bottom of the ditch. This bedrock, and an upper layer of sand lining the bottom and sides of the ditch (217), was blackened and compacted as though it had been burned, similar to a layer (119) covering the earthwork in Trench A.
- 6.3.3 Filling the bottom of the enclosure ditch [210] was a 0.14m-deep layer of dark grey silty sand (214) which contained a number of rounded cobbles and some larger boulders. A sample was taken from this deposit for environmental assessment (Sample 4). Immediately to the east of the enclosure ditch was a truncated deposit of material forming the eastern enclosure bank. This comprised a 1.45m-wide 0.24m-high deposit of orange silty sand (203) which was probably re-deposited natural sand, which had been removed from the adjacent enclosure ditch. The east side of the bank appeared very irregular and may have been cut by later ploughing or other activity. The secondary fill of the enclosure ditch [210], which also overlay the enclosure bank

(203) comprised a 0.2m-deep layer of grey/black silty sand (202), above which was a 0.2m-deep layer of light grey sand (200). A fragment of an early golf ball was recovered from the upper layer of sand (200) dating to the early 20th century (see Section 7).



Plate 15: Linear bank in Trench B following topsoil removal, looking east



Plate 16: Section across the enclosure ditch and outer bank in the west end of Trench B, looking north

- 5.3.4 **Field Boundary:** immediately to the east of the enclosure ditch and bank in Trench B was a low linear bank, aligned north to south, interpreted as a possible former field boundary bank or cultivation ridge (Plate 15). This comprised a 2.2m-wide 0.2m-deep layer of dark brown silty sand (207) containing frequent small angular stones and some rounded pebbles. Between the boundary bank (207) and the enclosure bank (203) was a possible plough furrow [212], which measured 1m-wide and 0.05m-deep filled by a layer of grey silty sand (213). Overlying these features was a 0.03m-deep layer of black silty sand (216), interpreted as possible evidence for the burning of heather, above which was topsoil and turf (100).
- 5.3.5 **Ridge and furrow cultivation:** a possible cut feature [208] was identified at the eastern end of Trench B, filled by light yellow sand (209). However, upon investigation this was interpreted as a colour variation in the natural sand subsoil (215). Above the natural sand at the east end of the trench was a low ridge, aligned north to south. This comprised a 2.2m-wide, 0.1m-high deposit of brown silty sand (206) containing frequent angular stones, interpreted as a plough ridge. Above this was a 0.03m-deep layer of black silty sand (216), previously interpreted as possible heather burning.
- 5.3.6 Cutting the west side of the plough ridge (206) and the west side of the linear bank (207), was a shallow feature, interpreted as a possible plough furrow [204] or eroded track way. This was 3.6m-wide and 0.1m deep, filled by a single deposit of orange silty sand (205), containing occasional rounded pebbles.
- 5.3.7 A sub-square feature was identified cutting the orange silty sand (205) at the centre of Trench B. the cut [210] was 0.5m wide and 0.1m deep, with vertical sides and a flat base. The feature was filled with a single deposit of black silty sand (211) containing frequent angular stones. This is believed to be a relatively recent feature, possibly associated with the adjacent fairway.



Plate 17: Excavated section through the interior of the ditched feature in Trench C, looking west

5.4 Trench C

- 5.4.1 Following the removal of turf and topsoil (100) by hand, Trench C was cleaned to reveal a 1m-wide section of the central platform and ditch of the ditched feature to the east of the main enclosure. The full excavation of this feature was not completed due to time limitations. However, the excavation permitted an examination of a sample section through this feature (Figure 8 and Plate 17). The natural orange sand (131) was revealed at a depth of 0.25m below ground level at the north end of Trench C, and 0.2m at the south end.



Plate 18: Section through the northern bank and ditch in Trench C, looking west



Plate 19: Section through the southern bank and ditch in Trench C, looking west

- 5.4.2 Cutting the natural sand at the north end of the trench was a section of the northern ditch [302]. This ditch was 0.8m wide and 0.15m deep with a u-shaped profile, and rounded sides and base (Plate 18). The ditch section was filled with dark/black silty sand (303) containing occasional rounded pebbles and small stones. To the north of the ditch was a 0.1m-deep layer of orange/brown silty sand (306), containing occasional rounded stones, which is interpreted as the eroded material that had been excavated from the ditch. Above this was a further 0.05m-deep deposit of dark brown silty sand (301).
- 5.4.3 Cutting the natural sand at the south end of the trench was a section of the southern ditch [304]. This ditch was c.0.8m wide and 0.1m deep with a similar u-shaped profile, and rounded sides and base (Plate 19). The ditch section was filled with dark/black silty sand (305) containing occasional rounded pebbles and small stones, similar to the northern section. To the south of the ditch was a 0.1m-deep compacted layer of dark/black silty sand (308), containing occasional rounded stones, above which was a 0.8m-wide 0.25m-high deposits of brown silty sand (307) forming a low bank. The northern edge of this bank was revetted with several rounded cobbles up to 0.15m in diameter.
- 5.4.4 The centre of the ditched feature comprised a deposit of orange/brown silty sand (300) containing frequent rounded cobbles and small stones, which formed a level oval platform (Plate 17). Overlying the platform was a 0.5m-deep layer of light grey/brown silty sand subsoil (101), a 0.03m-deep burnt layer (134), interpreted as evidence for the burning heather, and a 0.05m-deep layer of topsoil and turf (100), which was similar to the sequence seen elsewhere at the site.
- 5.4.5 No finds were recovered with which to date this feature, apart from an unstratified find from the topsoil, and no deposits were deemed suitable for environmental analysis.

5.5 Discussion

- 6.5.1 The earthwork enclosure, whilst morphologically similar to both Roman signal station sites on Stainmore and some henge monument sites, does not conform to either of these site types. The excavated evidence indicates that the primary purpose of the enclosure was to define an area for cremation burials. The site would therefore more accurately be described as an embanked cremation cemetery.
- 5.5.2. In total eight pits were revealed in Trench A, the majority of which contained cremated remains. The central pits appear to have been truncated to a high degree, the best preserved of the burial pits being an isolated example near to the southern enclosure entrance [112]. Of the central pit cluster four pits contained obvious deposits of burnt bone, and one the remains of a cremation vessel. The pit near to the southern enclosure entrance contained the greatest concentration of bone and large quantities of charcoal. This was sealed by a stone deposit, and appears to have escaped later disturbance.
- 5.5.3 At the end of the site's use as a cremation cemetery, the interior of the enclosure was apparently sealed by a layer of stone, to form a cairn. This cairn may have originally covered the whole of the interior, or may possibly have taken the form of a ring cairn.

- 5.5.4 This stone appears to have been removed from the centre of the enclosure at a later date, possibly by antiquarian investigations, which are known to have taken place at other sites nearby. The centre of the enclosure saw significant disturbance and it appears that the upper layers of the central cremation pits were removed at this time.
- 5.5.5 The ditched feature remains something of an enigma. However, similar features have been excavated elsewhere, including on Fylingdales Moor, where they are associated with prehistoric round houses. Field survey identified around 10 gullied features on Stoup Brow Moor after a fire had removed vegetation in 2003. These features comprised a shallow gully, around 0.35 to 0.40 m wide, enclosing sub-rectangular area ranging in size from 2 m square to 8 m by 4 m. A number of interpretations for their function have been put forward, ranging from tent sites and peat and turf stack stands to the foundation trenches of prehistoric timber structures (Vyner 2005, 21-22). The features are notable for the apparent absence of any entrance break across the gullies, although they are narrow enough to have been readily crossed. Excavation has recently been undertaken of one of these structures, but no definite dating evidence has yet been obtained (*pers. com.* Blaise Vyner).

6 THE FINDS

6.1 Introduction

- 6.1.1 All of the finds recovered during the evaluation were labelled on site, and returned to the North Pennines Archaeology Ltd offices at Nenthead for assessment. All finds were labelled by context. The excavated fills of archaeological features were sieved for finds on site, or taken as bulk samples for assessment at the office. The cremation vessel was lifted whole, and returned to the company's offices for excavation under controlled conditions.
- 6.1.2 During and after the excavation, all recovered artefacts were stored in the appropriate conditions to ensure minimal deterioration and loss of information (this included controlled storage, correct packaging, regular monitoring of conditions, and immediate selection for conservation of vulnerable materials). The finds were subsequently sent to the appropriate specialists for assessment.

6.2 Pottery

By Blaise Vyner

- 6.2.1 Pottery was recovered which related to three individual vessels (Vessels 1-3) recovered during the excavation of Trench A. These comprised the rim of a Bronze Age collared urn revealed during the excavation of pit [116] and taken whole as Sample 6. Fragments of two accessory vessels were also recovered from the bulk soil sample (Sample 13) taken from pit [112], located near the southern entrance to the enclosure. Two further sherds were recovered from the same pit as the collared urn which may be from the same vessel.
- 6.2.2 ***Vessel 1 (Context (120) Sample 6):*** Vessel 1 was a collared urn, the rim surviving complete since the vessel was buried inverted, but little of the vessel body was present. The surfaces and fabric were reddish-brown, mixed with small grits including limestone. The collar thickness was typically 8mm, and wall thickness typically 10mm. The collar exterior was decorated with a somewhat perfunctorily-impressed lattice of impressed cord lines with no upper or lower border (Plates 20 & 21).
- 6.2.3 The vessel rim external diameter was approximately 140mm. The rim upper surface was plain, and it is not known whether or not the vessel body had any decoration. An associated group of sherds, with interior surface spalled, probably from the same vessel, are mostly from the base, one had a finger-nail impression. The vessel was of Longworth Secondary Series North-West style (Longworth 1984).
- 6.2.4 Also recovered from the fill (117) of pit [116] were two sherds of coarseware, with red-brown surfaces and fabric, with occasional small limestone grits. The wall thickness was 10 mm. Both sherds may be from a collared urn. One was a body sherd with spalled exterior surface, the other was a small damaged piece from a rim with slightly expanded upper surface. It had a fine transverse cord impression on the exterior surface. It is likely this was from a collared urn, but if so, possibly not from Vessel 1 as the cord impression on this was finer.

- 6.2.5 Also from this context was a small fragment of slag, adhering to a fine-grained stone or ceramic fragment, possibly from a mould or perhaps more likely, debris from a cremation fire.



Plate 20 : Collared urn during excavation, showing cremated bone deposit



Plate 21 : Rim of a collared urn (inverted) following excavation

- 6.2.6 ***Vessel 2 (Context (112), Sample 13):*** Vessel 2 was an accessory vessel, of which approximately 25% was present. It had buff-orange surfaces, dark grey fabric, and mixed small and medium-sized grits including angular pieces of limestone. The wall thickness was variable, typically 8 mm, with a small concave base. The vessel overall height was 35mm (Plate 22).

- 6.2.7 A small bi-conical vessel, this had a slightly inverted thinned rim, perhaps 60mm in diameter and was decorated with two cordons of fine twisted cord around the rim exterior. This vessel belongs to Longworth's contracted-mouth class of accessory cups (1967), and is similar to recently excavated examples from the West Yorkshire Pennines to the south (Richardson and Vyner in press).
- 6.2.8 **Vessel 3 (Context (112), Sample 13):** Vessel 3 was also an accessory vessel, of which approximated 20% was present. It had grey-buff surfaces, dark grey fabric with small pieces of limestone grit, and a wall thickness of 7mm. The everted rim was slightly bevelled inwards, its surface decorated with three concentric rings of impressed cord, with an estimated rim diameter of 70mm. The vessel upper shoulder also had three concentric cordons of cord impressions, although it is not clear whether or not this decoration extended further down the vessel.
- 6.2.9 The form of the vessel was not fully clear. In Cumbria small accessory vessels appear to be a feature of Early Bronze Age funerary assemblages from Furness and the Eden Valley and while the majority are of biconical form, other forms are present. The shape of the present vessel was unclear, the rim shape and decoration suggests that it may be represent a miniature Food Vessel.



Plate 22 : Part of an accessory vessel (Vessel 2) recovered from Sample 13

- 6.2.10 **Discussion:** this pottery is likely all to have been associated with cremation burials. Collared urns are frequently the receptacle for cremations, while small accessory vessels frequently accompany cremations. Although there are few useful radiocarbon dates for accessory vessels, the currency of collared urns is now being refined (Brindley 2007). The recently discovered burial assemblage from Stanbury, West Yorkshire, has a collared urn associated with an accessory vessel and other early Bronze Age items with a suggested date range of 1900-1750 cal BC (Richardson and Vyner in press), and this currently remains the suggested date range for collared urns in the north of England (Vyner in press) and the vessels from Brackenber would belong in this period.

- 6.2.11 Early Bronze Age burials are variably distributed in Cumbria, there are concentrations on the Furness peninsula and at several locations around the coast to the north, but the greatest concentration occurs in the Eden valley (Barrowclough 2010, fig. 88). Brackenber thus conforms to an established pattern which suggests that both Neolithic and Early Bronze Age populations preferred areas of lighter soil (Bewley 1994), although this should not be taken to imply continuity of settlement.
- 6.2.12 A variety of burial monument forms are present in Cumbria (Barrowclough 2010 154-55), but many are essentially flat cemeteries which may or may not be embanked, and which, like Ewanrigg (Bewley *et al.* 1992), on occasion make use of natural features to enhance the prominence of their location. On the basis of the present excavation evidence the Brackenber earthwork would appear to represent an embanked cremation cemetery, a type of funerary monument which is more commonly found in the Pennines than anywhere else. Understanding of these sites is limited by the small number of examples where good evidence is available, one recently excavated probable example is the burial assemblage from Stanbury, West Yorkshire, noted above, although here also firm information on the structure of any monument is lacking.

6.3 Lithics

By David Jackson

- 6.3.1 **Introduction:** a small assemblage of unmodified lithic material was recovered during the evaluation, all of the material coming from Trench A. The material is shown in Table 1, below.
- 6.3.2 The methodology used in recording all variables was modified after Ashton (1998) and Isaac (1977). All lithic artefacts were analysed macroscopically only.

Context	Material	Number
104	Flint	2
105	Chert	1
110	Chert/Flint	2
127	Chert	1

Table 1: Lithic material recovered during the evaluation

- 6.3.3 **Results:** The lithic assemblage recovered during the evaluation comprised six chunks. Three of the chunks were identified as flint with the remaining three pieces being identified as chert. No evidence of human action was identified during the analysis.
- 6.3.4 All three pieces of flint displayed a significant amount of surface cortex (one was purely cortex), indicating that part of the raw material was originally sourced from pebble flint.
- 6.3.5 Only one piece of chert displayed a white surface patina. However, all six pieces were heavily rolled indicating a significant amount of post-depositional movement.
- 6.3.6 **Raw Material:** the assemblage was comprised of two pieces of dull white flint, a single piece of heavily cortical tan flint, a single chunk of greyish blue chert and two

chunks of reddish brown chert. The distinction between fresh (chalk) flint and derived (beach pebble/gravel) flint is often difficult to determine. However, lithic assemblages produced from derived flint generally retain a greater percentage of cortex, which is apparent within the flint component of the Brackenber assemblage. This indicates that the flint was procured from a beach pebble/gravel source, the nearest source being the west coast of Cumbria. The remaining cherts were probably procured from small pockets which occur locally.

- 6.3.7 **Discussion:** although the lithic assemblage retained no evidence of human action, it is highly probable that the raw material was originally brought to the area as a result of human intervention. This is due to the scarcity of raw material sources within the vicinity of Brackenber Moor; the only known sources of workable stone in the area being small pockets of local cherts, with unpredictable amounts of beach flint occurring on the West Cumbrian coast and other workable stone within the Cumbrian area, including volcanic tufts in the Central Lake District (Cherry & Cherry 1987 and 2002). This strongly indicates that the assemblage was originally procured from local sources.

- 6.3.8 As no diagnostic pieces were present, it is impossible to provide a date for the assemblage. However, other lithic assemblage recovered from the Brackenber Moor area have principally been attributed to the Late Neolithic/Early Bronze Age periods, although these assemblages are generally predominated by chalk flint, probably from sources along the east coast of Yorkshire. However, there are inherent difficulties in attempting to firmly interpret such a small lithic assemblage, especially when the assemblage retains no diagnostic elements. Therefore, all interpretations regarding the analysed lithic material must remain speculative.

6.4 Other Finds

- 6.4.1 An internal-screw beer bottle stopper was recovered from the topsoil in Trench C, made from a Bakelite-like material and labelled Albert Wistle & Sons Appleby Brewery. The bottle stopper is late 19th century or 20th century in date, and is almost certainly a casual loss.
- 6.4.2 A small fragment of an early golf ball was recovered from a deposit of sand (200) in Trench B. The fragment has a square mesh dimple which probably dates the golf ball to the early 20th century.

7 ENVIRONMENTAL SAMPLES

By Don O'Meara

7.1 Introduction

- 7.1.1 During the course of an archaeological evaluation thirteen samples were taken. Samples were taken to extract material that may aid the understanding of the depositional history of the excavated contexts. This could include evidence of human activity that may have left preserved archaeological material during the prehistoric or historic periods. As well as anthropogenic evidence the remains of wild plants may allow inferences to be made regarding the local environment. In particular, due to the artefactual assemblage collected from this area, evidence of activity during the Bronze Age period was considered possible in the soil samples processed.
- 7.1.2 The methodology employed required that the whole earth samples be broken down and split into their various different components: the flots, the residue, the clay-silt and the sand-silt. The sample was manually floated and sieved through a 'Siraf' style flotation tank. In this case the residue and the flots are retained while the sand-silt-clay components are filtered out. The sample was floated over a 1mm plastic mesh, into which the residue was collected, then air-dried and sorted by eye for any material that may aid our understanding of the deposit. This included charred plant remains, bones, pottery, burnt clay and charcoal. Charcoal fragments larger than 1cm x 1cm were retained for later analysis or for use in radiometric dating. The residue samples were also scanned with a hand magnet to retrieve forms of magnetic material. This was done to retrieve residues of metallurgical activity, in particular hammer scale, spheroid hammer scale, fuel-ash slag and vitrified material which might be indicative of other high temperature non-metallurgical processes. Processing procedures and nomenclature follows the conventions set out by the Archaeological Datasheets of the Historical Metallurgical Society (1995) and the English Heritage Centre for Archaeological Guidelines publication (2001).
- 7.1.3 An experienced environmental archaeologist examined all of the dried residues. The washover was dried slowly and scanned at x40 magnification for charred and uncharred botanical remains. Identification of these was undertaken by comparison with filamentous reference material held in the Environmental Laboratory at North Pennines Archaeology and by reference to relevant literature (Cappers et al. 2010, Berggren 1981 and Jacomet 2006). Plant taxonomic nomenclature follows Stace (Stace 2010).
- 7.1.4 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, thus enabling assessment of anthropogenic activity, seasonality and climate and elements of the economy associated with the features from which the samples are removed. In this case the sandy, well-drained, base rich nature of the soil would be suitable for the preservation of charred plant remains and bone (should mineral replacement occur to offset the leeching of calcium from deposited bones material).
- 7.1.5 Sample numbers appear in brackets thus < >, whilst context numbers appear in brackets thus () for all analysis and discussion below.

- 7.1.6 For material from the residue the relative abundance is based on a scale from 1 (lowest) to 3 (highest). Cereals are counted in terms of the number of individuals counted. The other plant remains have been recorded on a scale from A-E. This is calculated as; A=1, B=2-10, C=11-30, D=30-100, E=c.100+. The exception being unidentified seeds, where the numbers of unidentified species is given, rather than their relative abundance.
- 7.1.7 For the purposes of clarity the references to ‘seeds’ identified here refer to the seed or fruit structures unless otherwise stated; that is to say the propagule or disseminule structures. Cereal grain was recovered in a charred condition and where mentioned refers to the charred caryopsis. Chaff fragments are specified in the text as being rachis, paleas, lemmas, glumes, awns or culms and culm nodes. Carex nutlets are classed as either lenticular or trigonus, though further identification was not undertaken. As these plants did not occur with particularly high frequency, and as they generally indicated wet environments it was not thought that a more detailed examination would improve our knowledge of the context in which these remains occur.

7.2 Results

- 7.2.1 All samples were predominantly limited to a mixture of modern fibrous roots and stones/gravel/sand. The only variations were charcoal, pottery and cremated bone found in many, but not all, of the deposits. The table below lists the environmental analysis giving the variability of anthropogenic inclusions from the cremation activities (Table 2).

Table 2: Environmental samples

Sample	1	2	3	4	5	6	6	7	8	9	10	11	12	13
Context	10	11	11	21	11	12	12	11	12	12	12	14	14	11
	3	8	9	4	7	0	0	5	4	2	0	0	0	3
<i>Volume processed (litres)</i>														
<i>Volume of retent(ml)</i>		50 00	50 0	35 00	25 00	70 0	60 0	15 00	22 00	70 0	50 0	30 00	40 00	25 00
<i>Weight of flot (grams)</i>	27	16	2	5	7	6	4	39	80	7	10	22	9	25 5
<i>Samples suitable for radiocarbon dating</i>														
<u>Residue contents (relative abundance)</u>														
Bone/teeth, burnt bone					2	2	2		2		2	2	2	2
Charcoal			3	1	1	1		2	2	2	2	1		3
Magnetic Residue					1			1	1				1	
Fibrous roots	1	2	2	2	2	2	2	1	1	2	2	1	1	2
Pottery					1	2	2							1
Stones/gravel	2	2	2	2	2	3	3	3	3	2	3	3	3	2
Sand	3	3	2	3	3	2	2			3	2			2
<u>Flot matrix (relative abundance)</u>														
Charcoal	3	2	3	2	2	1		3	3	3	3	3	3	3
Fibrous roots	2	3	2	3	3	3	3	2	2	2	2	2	2	2
Insect remains				1										
Bone/teeth, burnt bone						2	2		1			1		2

(c: cereal types, x: wide niche) Relative abundance is based on a scale from 1 (lowest) to 3 (highest) where 0 is not present.

- 7.2.2 The table contains two sub-samples described as <6> (120), namely Sample A and Sample B. A macro-excavation from the collared urn recovered from context (120) was undertaken providing two separate sub-samples. Sample A is the spit taken from the upper rim section of the pot. Sample B is from the lower mid section of the pot. The bottom of the pot was not present, as this had been removed by activity at the site prior to the excavation.

7.3 Discussion of the Plant Remains

- 7.3.1 No botanical remains apart from the charcoal were registered during this study. It appears the nature of the deposits denied the formation of even a background of botanical remains from the surrounding ecology. It is considered that the limited ritualistic use of the site has prevented much anthropogenic inclusions.
- 7.3.2 The macro-plant remains recovered from the flotation of the samples from this site are thus limited to charcoal. This is somewhat consistent with previous research from Bronze Age funerary sites. Indeed in their review of Bronze Age sites from the northern region Hall and Huntley point out that almost all of them relate to excavations of funerary monuments, and are virtually all concerned with charcoal (Hall and Huntley 2007, 31). This includes an early report on Broomrigg, between Carlisle and Penrith (Orr 1950) and Ewanrigg near Maryport (Huntley 1992). The site at Ewanrigg consisted of a series of cremation pits and a storage pit. The archaeobotanical remains from the former consisted of charcoal only, while the later contained charred cereal grains.
- 7.3.3 An important consideration here is the intense heat that would be generated by a funerary pyre. When charred plant remains are recovered on archaeological sites the charring represents heat which was capable of driving off the moisture content of the grain and converting its carbohydrate content into carbon, but not completely burning the grain to ash (which would not be recovered through flotation). Experiments have shown that there is interplay between the temperature of the fire and the length of time the material has been exposed (Boardman and Jones 1990). In the case of a funerary pyre, even if large numbers of plant remains were deposited with the corpse these would likely be lost in the intense heat of the pyre (as opposed to lightly charred in the case of material from near a domestic fire). Later, as the cremated skeletal remains and charcoal were recovered and placed in their urn some more material of archaeobotanical significance may have been lost. In this case the material from the edge of the fire would be a likely area for the recovery of charred non-woody plant remains, as opposed to the centre of the pyre where the corpse was placed, and the heat of the pyre would have been at its most intense. Thus, when investigating funerary remains archaeobotanically there are two major taphonomic pathways that may be acting against the recovery of material other than larger pieces of charcoal and bone; pyre temperature and the method of recovery of material being deposited in the urn.

7.4 Discussion of the Heavy Residues

- 7.4.1 **Bone:** Burnt bone fragments were found in varying amounts throughout eight of the samples, and were extracted. In the table below (Table 3) weights of cremated bones are given for each context.
- 7.4.2 **Charcoal:** Ten of the thirteen samples also contained charcoal in varying degrees. It is recommended that samples be submitted for radiocarbon dating, particularly those from cremation pits associated with the funerary vessels recovered.

Table 3: Burnt bone and charcoal residues

Sample	1	2	3	4	5	6 (A)	6 (B)	7	8	9	10	11	12	13	Total	
Context	103	118	119	214	117	120	120	115	124	122	120	140	140	113		
<u>Burnt human bone (weight grams)</u>						219	2		78		437		29	125	1173	1865
<u>Charcoal fragments (weight grams)</u>			5	1	2	1	142		24	7	90	2	8	125	308	

- 7.4.3 **Pottery:** Two of the thirteen samples contained pottery, with dimensions less than 1.5cm. Sample <6> (120) accounted for one of the samples containing pottery with sample <5> (117) being the second. The pottery remains within the two sub-samples of context (120) is readily accounted for, as they derive from inside the micro excavated pot. The pottery recovered is all less than 1.5 cm in size and appears identical to the Bronze Age material recorded, therefore no further work on this material is suggested.

7.5 Conclusions

- 7.5.1 The samples recovered from the excavation produced charcoal but no other botanical remains. This charcoal is of a size that makes it suitable for species identification. It is recommended that identification of some of this material be undertaken.
- 7.5.2 The total absence of other archaeobotanical material is notable. Low numbers of seeds such as *Chenopodium* species or *Urtica* species (goosefoots and nettle) are commonly found as modern intrusions in samples from archaeological sites. In this case the complete absence of other seeds suggests these deposits are well sealed, and may have been since the original deposition.
- 7.5.3 The significant quantities of burnt human bone offer potential for detailed osteological work. It was outside the scope of the present report to provide detailed analysis of the cremated bone recovered, but it is recommended that further work be undertaken on this material.

8 CONCLUSIONS AND RECOMMENDATIONS

8.1 Conclusions

- 8.1.1 Volunteers of the Altogether Archaeology Project, and members of Appleby Archaeology Group, have completed an archaeological evaluation of an earthwork on Brackenber Moor, Appleby-in-Westmorland, under the supervision of staff from North Pennines Archaeology Ltd. The work formed part of the Altogether Archaeology Project (Fieldwork Module 5) run by the North Pennines AONB Partnership. One of the primary objectives of the archaeological evaluation was to establish the date and function of the earthwork enclosure, which had previously been interpreted as the site of a Roman Signal Station or prehistoric monument. The evaluation has revealed that the earthwork was the focus of prehistoric funerary activity and would appear to have been constructed in the Early Bronze Age as an embanked cremation cemetery.
- 8.1.2 From the excavated evidence it is evident that a slightly elevated platform of land was cleared of vegetation in this period and further enhanced by the creation of a circular bank and ditch, with entrances on the north and south sides, at least one of which may have been flanked by large boulders. The interior of the monument was subsequently used for the deposition of cremated human remains. Trench A revealed quantities of burnt bone and charcoal, which were deposited in a series of small pits, clustered towards the centre of the monument, with a further pit near the southern entrance. Two of the excavated pits contained funerary vessels including an Early Bronze Age collared urn and two accessory vessels which are believed to date to 1900-1750 cal BC. The surface of the monument was also subjected to intense heat, possibly as a result of a funerary pyre, after which it was covered by a stone cairn to symbolically 'close' the cremation cemetery.
- 8.1.3 Later activity at the site includes medieval or post-medieval ridge and furrow cultivation, which appears to have removed the outer bank on the east side of the monument. The monument has also been disturbed, possibly as a result of antiquarian investigation. Much of the stone cairn appears to have been removed from the centre of the monument, and the central pit cluster was severely truncated in the process. Most of the pit containing the inverted collared urn was removed, along with the base of the vessel, which was revealed during the evaluation almost immediately beneath the turf layer. Some later disturbance of the earthwork may also be due to activity associated with the Appleby Golf Course, which was established in 1903. An upper layer of sand filling the enclosure ditch in Trench B, may be associated with the golf course operations.
- 8.1.4 A ditched feature was also investigated to the west of the earthwork enclosure, which may also be prehistoric. A single trench (Trench C) was excavated across this feature which revealed shallow banks and ditches, enclosing an oval interior. Although no dating evidence was recovered from this feature, similar structures have recently been revealed on Fylingdales Moor in North Yorkshire, where they were associated with Iron Age round houses.

8.2 Recommendations

- 8.2.1 This report presents the results of an archaeological evaluation, the results of which have largely fulfilled the project objectives, including establishing the nature, extent and state of preservation of archaeological features associated with the earthwork enclosure. Despite the apparent truncation of archaeological features within the centre of the enclosure, it is very likely that further cut features survive at the site, similar to the cremation pits revealed in Trench A. The environmental work has shown that despite being truncated, the cremation deposits are well sealed, and may have been since their original deposition.
- 8.2.2 The earthwork appears to belong to a tradition of circular monuments, incorporating burials and later sealed by funerary or ring cairns, which appear to have been a relatively common form in the North during the Later Neolithic and Early Bronze Age, although very few of these sites have been excavated and radiocarbon dated in Cumbria. The Archaeological Research Framework for North West England has identified the need for the characterisation of Bronze Age funerary monuments in the region in order to understand the changing character of burial and depositional traditions (Brennand 2007). An open-area excavation at the site could potentially provide further information regarding the nature of Early Bronze Age activity at the site, and thus contribute to wider research themes. Further excavation is also recommended of the ditched feature which may be associated. Excavation of 50% of the interiors of these earthworks, as well as further sampling of the enclosure ditch and entrances, is recommended.
- 8.2.3 The pottery recovered has the potential to make an important contribution to the small but growing collection of Early Bronze Age funerary vessels recovered from the region. Collared urns are frequently the receptacle for cremations, while small accessory vessels appear to accompany them. There are very few useful radiocarbon dates for accessory vessels, and the currency of collared urns is now being refined. Radiocarbon dating of the charcoal samples recovered with these vessels could therefore contribute to the formation and regional typology and chronology of ceramic sequences, which is one of the initiatives of the Archaeological Research Framework for North West England. It is recommended that the rim of the collared urn is re-constructed, and that it is ultimately deposited with the site archive at a local specialist museum. No further work is recommended on the lithic assemblage.
- 8.2.4 A significant quantity of human bone was recovered during the evaluation which has been collected and weighed but has not been assessed. It is recommended that this be undertaken by a suitably-qualified osteologist and that this work is published in the Transactions of the Cumberland and Westmorland Antiquarian Society, along with the final results of the project and an appropriate scheme of radiocarbon dating.

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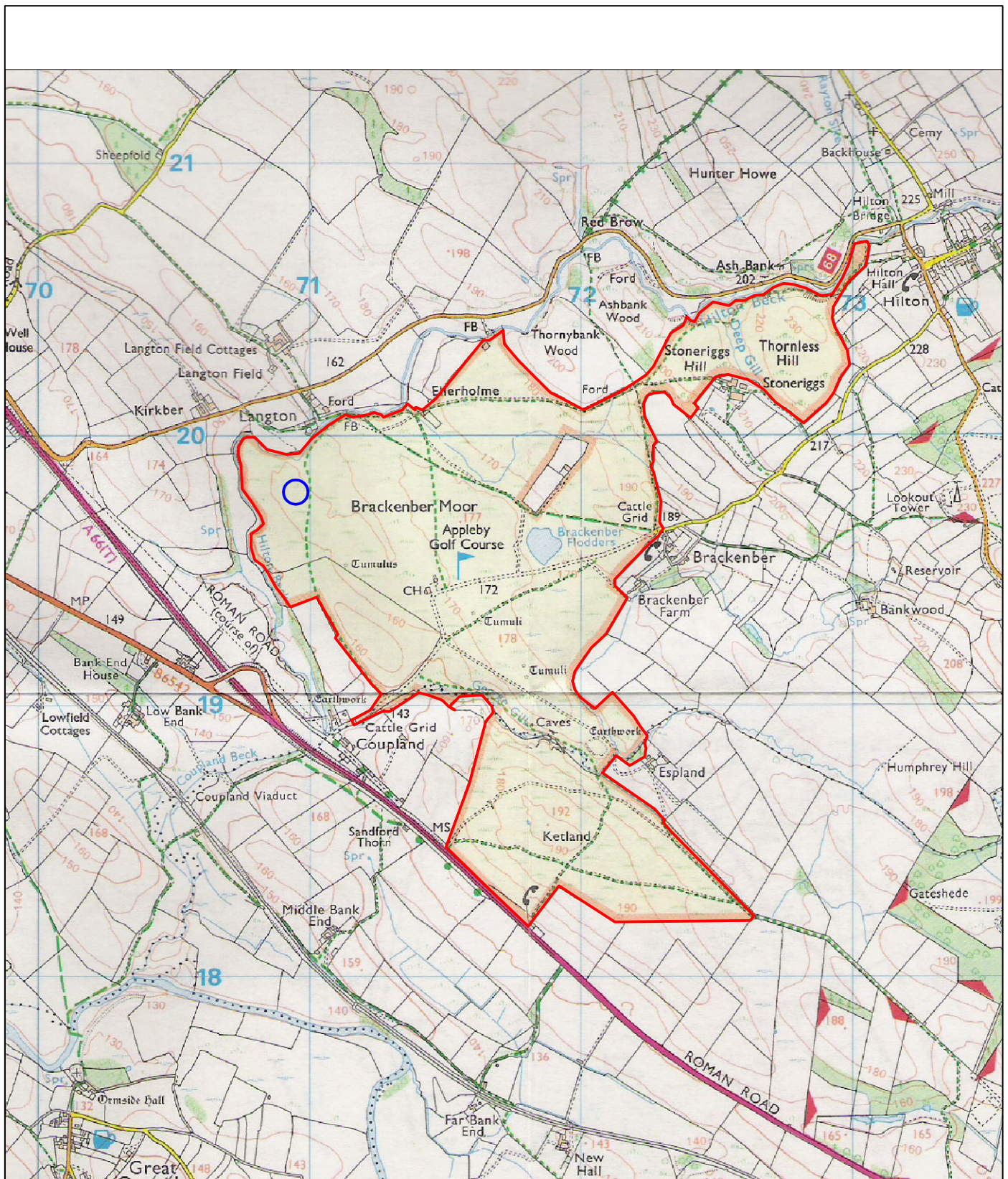
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APPENDIX I: ILLUSTRATIONS



North Pennines Archaeology Ltd
2011

PROJECT: Brackenber Moor Cremation Cemetery

SCALE: 1:20,000 at A4



REPORT No:CP 1245/11

WITH: North Pennines AONB Partnership

DRAWN BY: MDR

DATE: June 2011

FIGURE No: 1

-  outline of Brackenber Moor
-  location of site



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Figure 1 : Location map

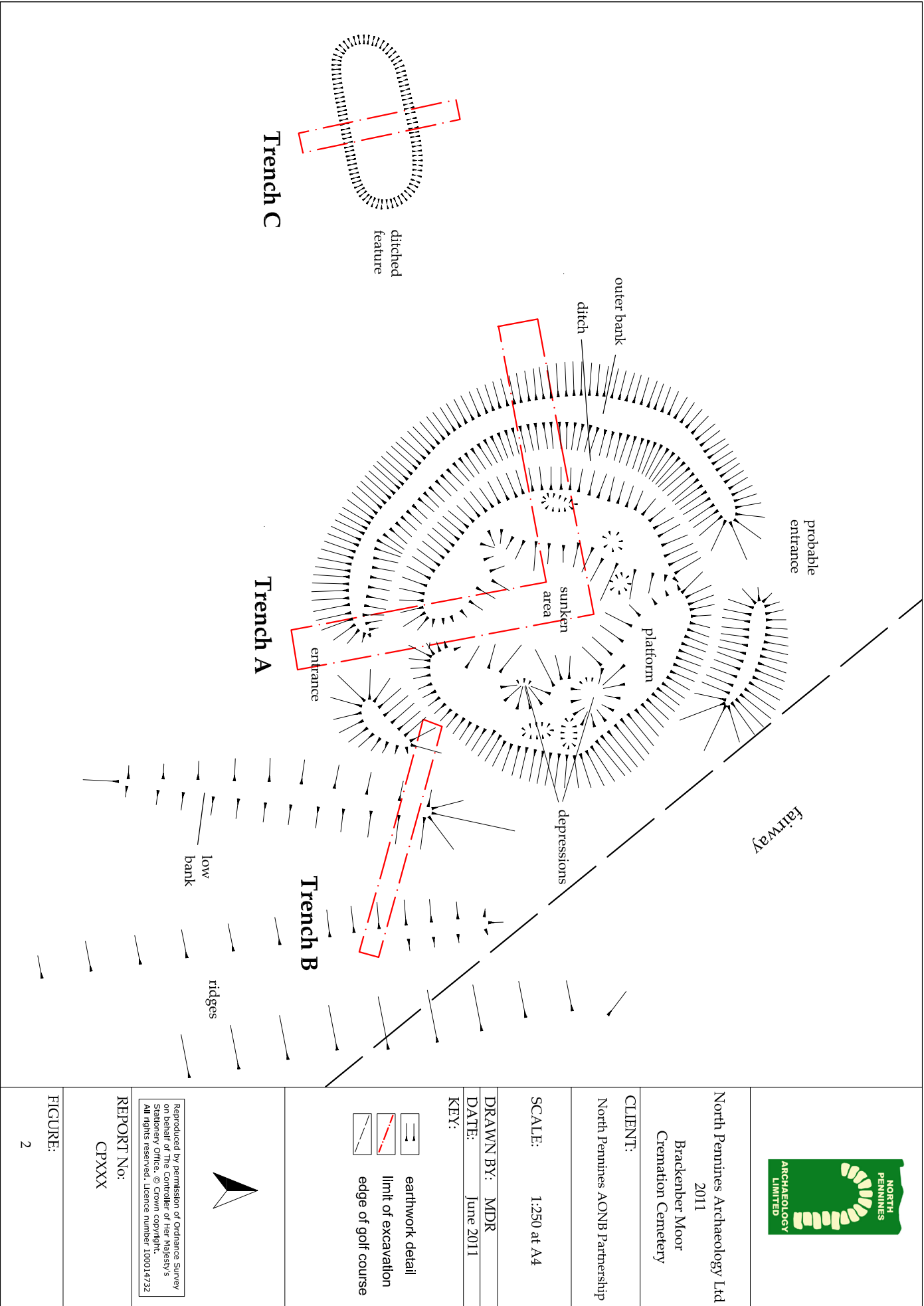
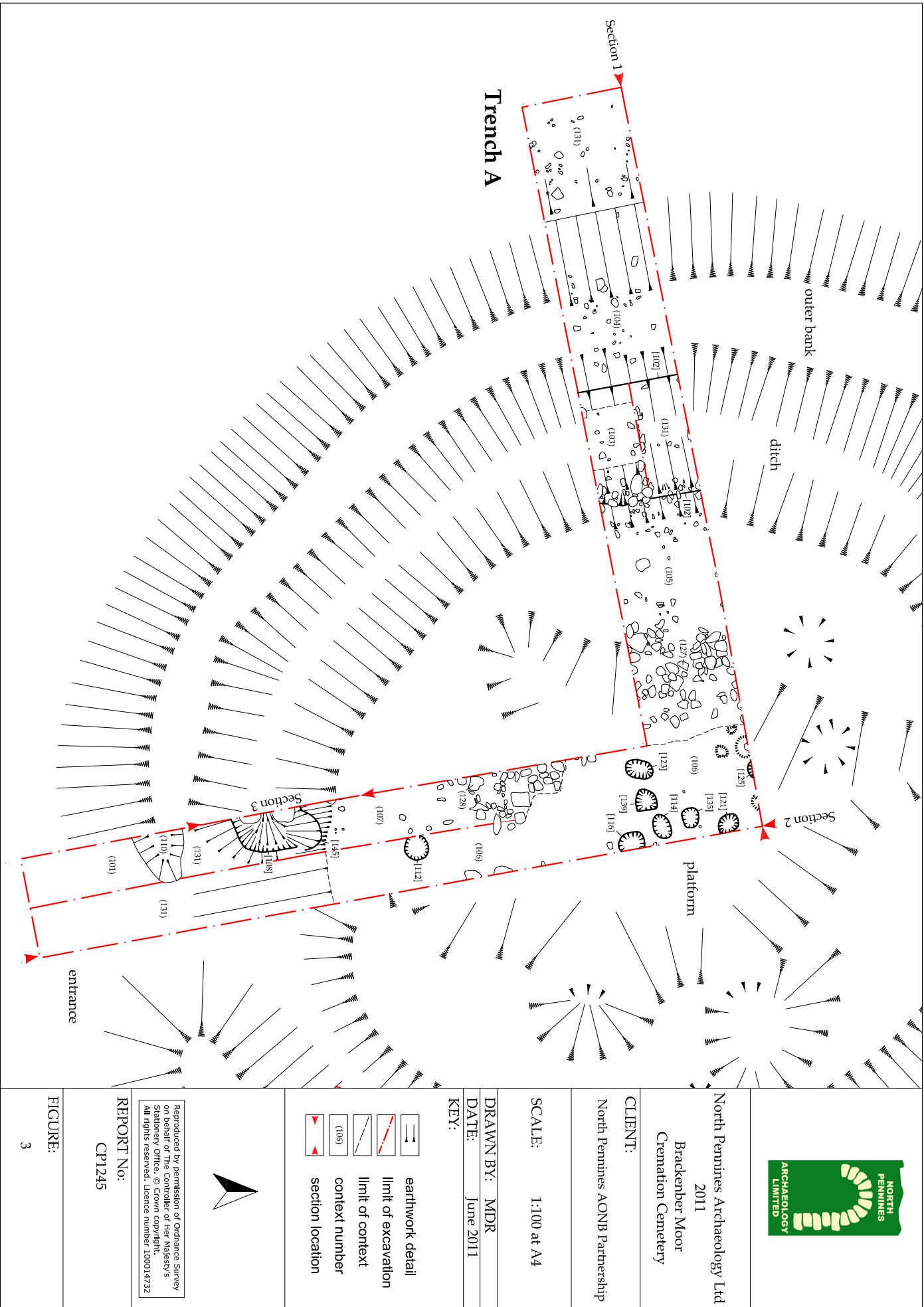


Figure 2 : Topographic survey showing the evaluation trench locations



North Pennines Archaeology Ltd

2011

Brackenbier Moor
Cremation Cemetery

CLIENT:

North Pennines AONB Partnership

SCALE: 1:100 at A4

DRAWN BY: MDR

DATE: June 2011

KEY:

- earthwork detail
- limit of excavation
- limit of context
- context number
- section location



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REPORT No:

CP1245

FIGURE:

3



North Pennines Archaeology Ltd
2011




Brackenber Moor
Cremation Cemetery

CLIENT:
North Pennines AONB Partnership

SCALE: 1:75 at A4

DRAWN BY: MDR
DATE: June 2011

KEY:

-  limit of excavation
-  limit of context (?)
-  context number



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REPORT No:
CP1245

FIGURE:
4

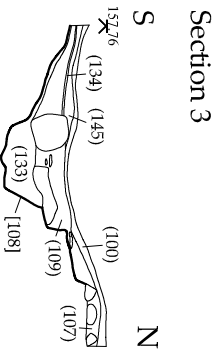
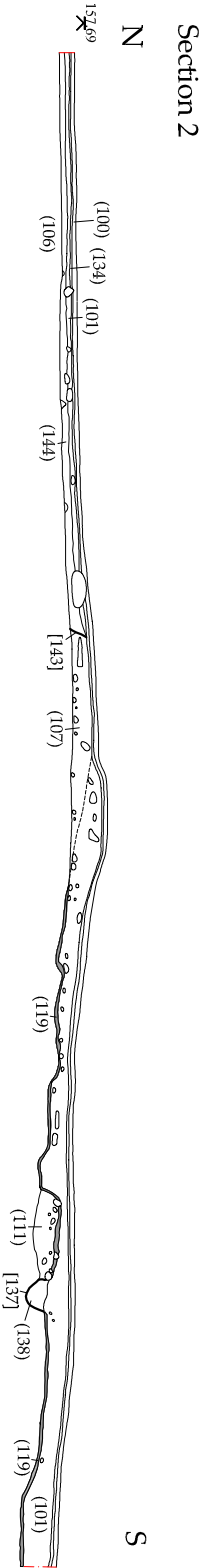
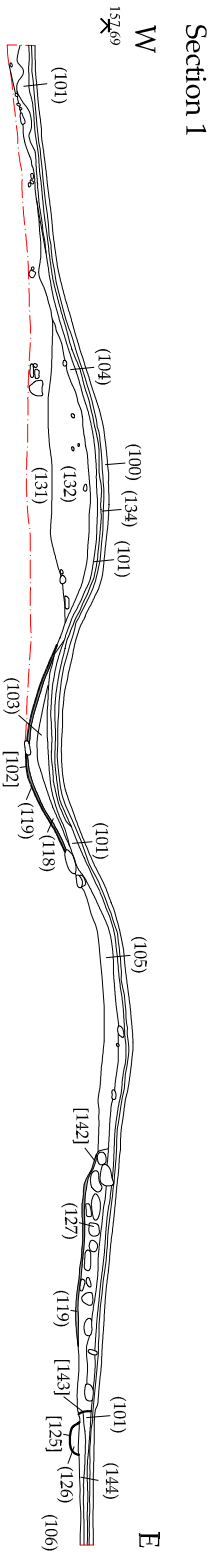


Figure 4 : Trench A sections

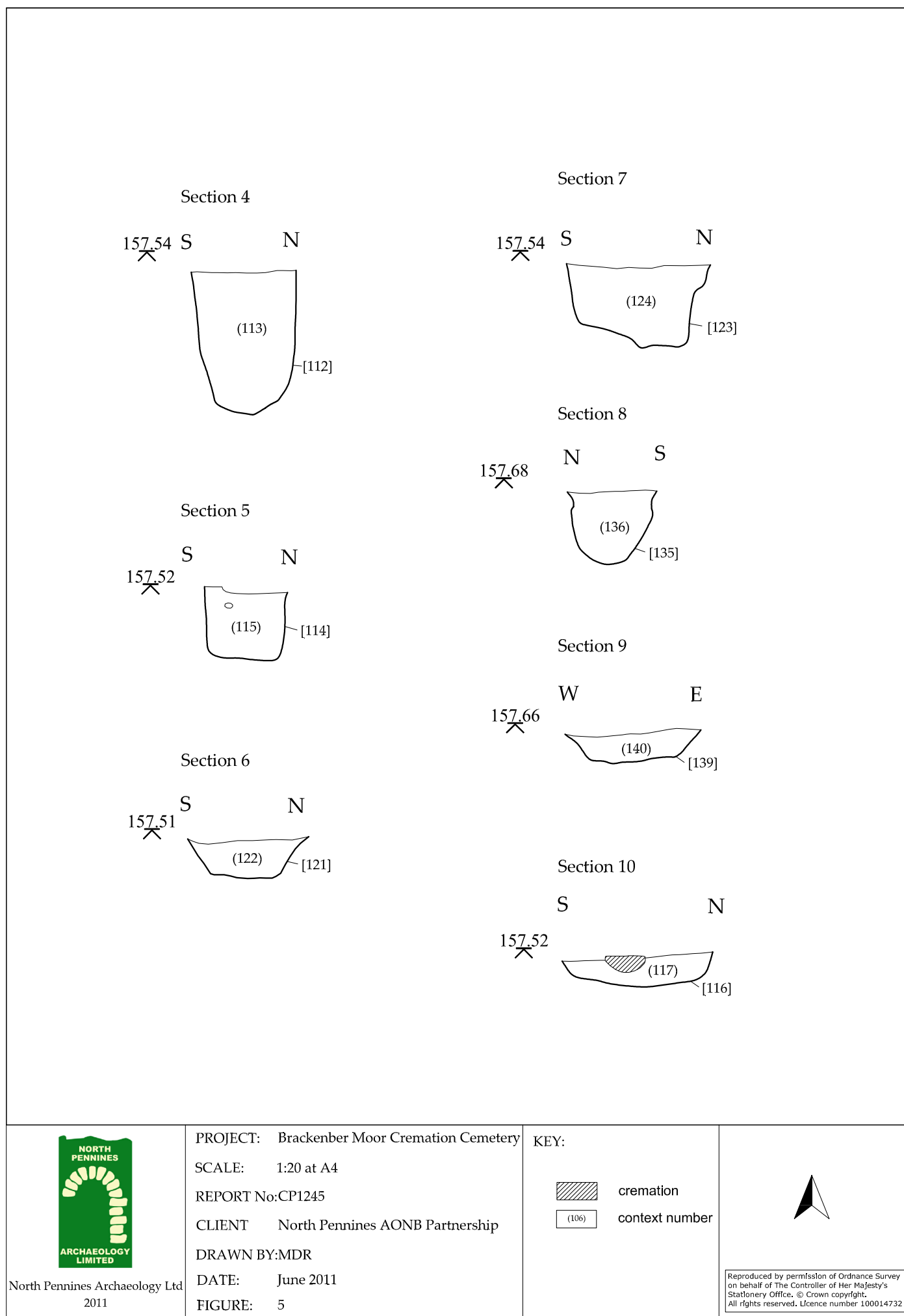


Figure 5 : Sections through post holes and pits in Trench A

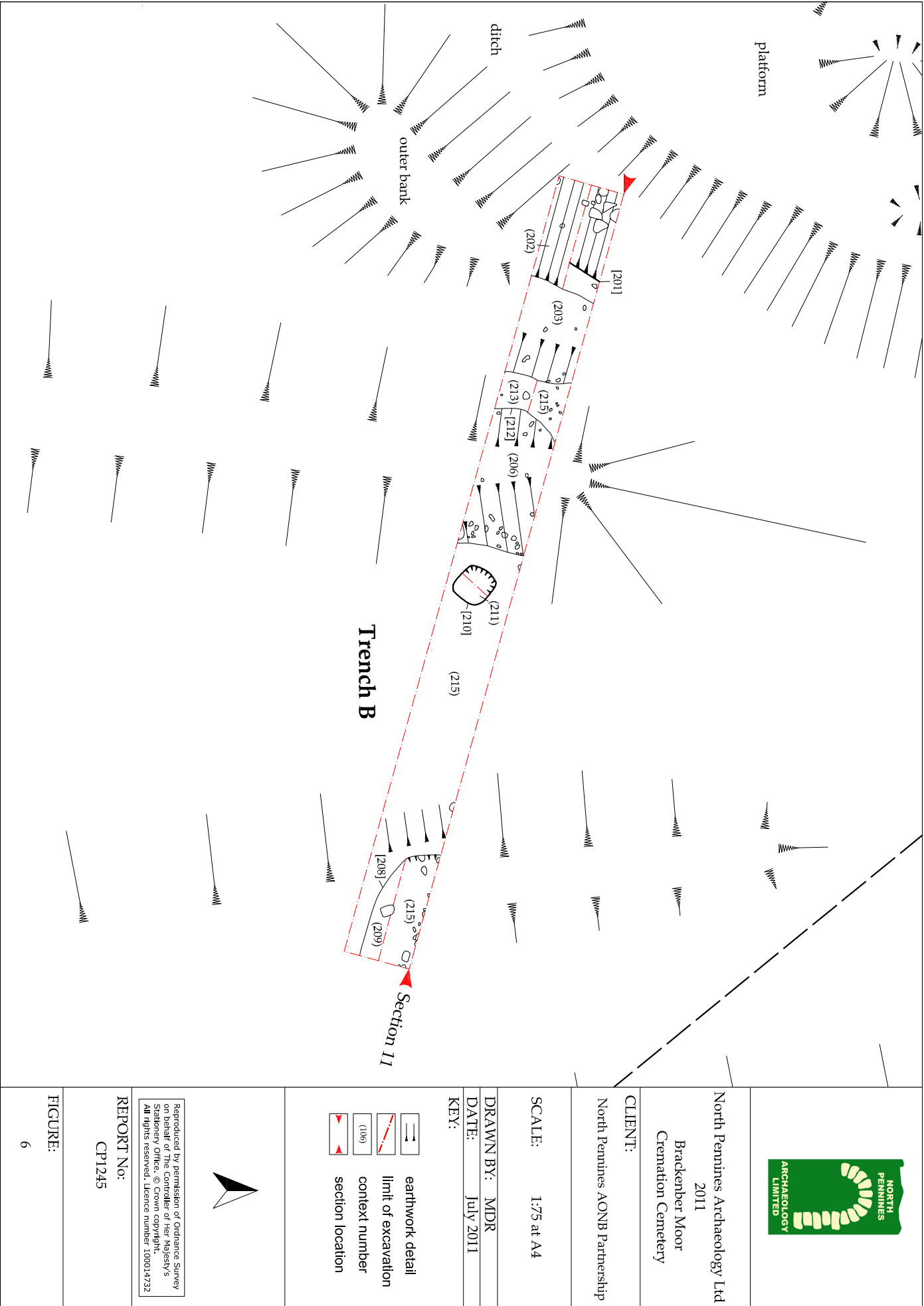
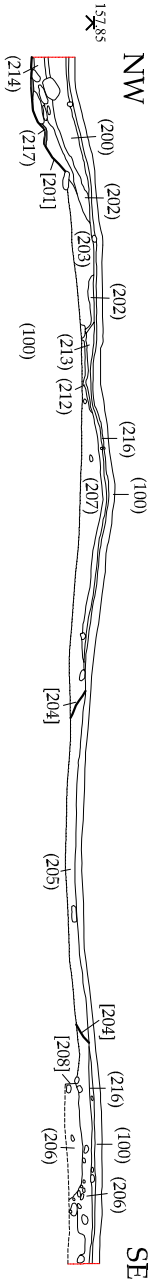


Figure 6 : Plan of excavated features within Trench B



Section 11







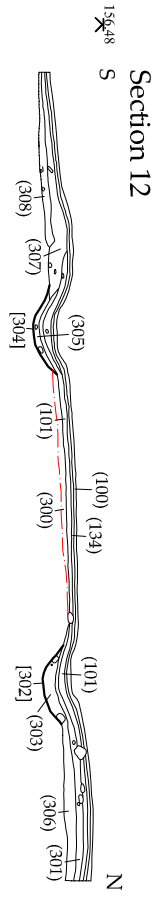
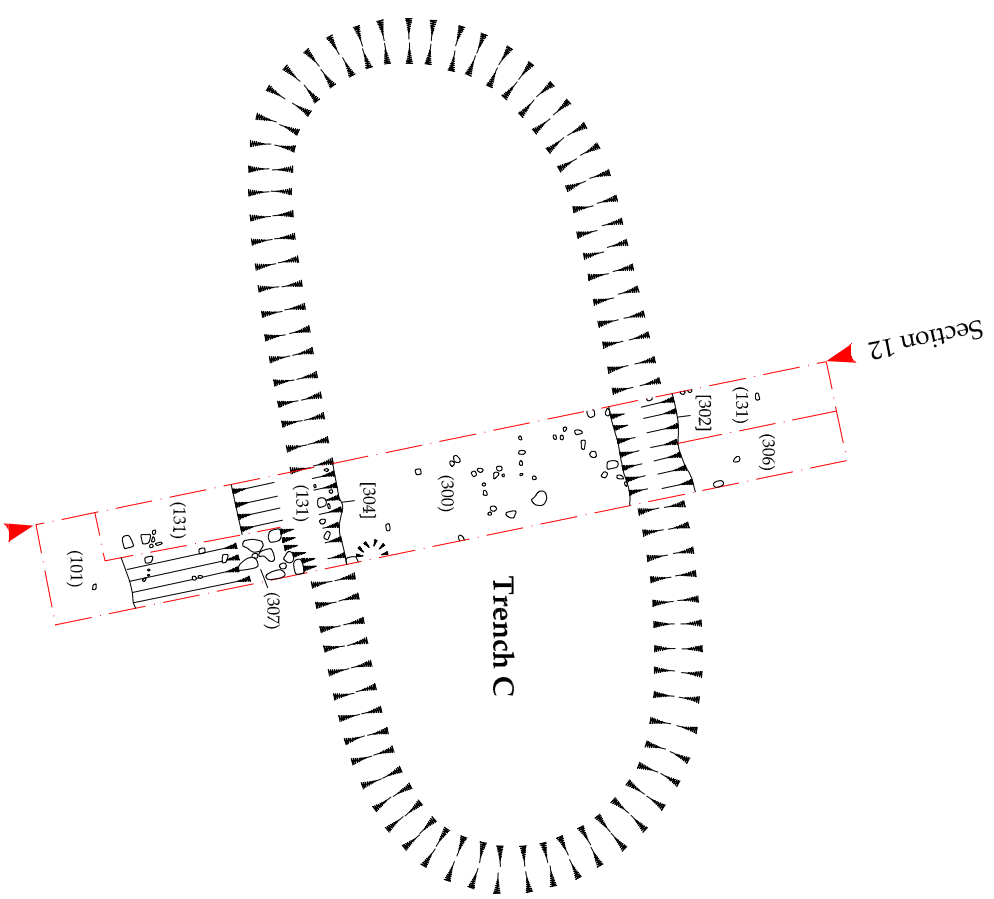
<p>North Pennines Archaeology Ltd 2011 Brackenber Moor Cremation Cemetery</p>	
CLIENT:	North Pennines AONB Partnership
SCALE:	1:75 at A4
DRAWN BY:	MDR
DATE:	June 2011
KEY:	<div> <div> limit of excavation</div> <div> limit of context (?)</div> <div> context number</div> </div>
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Figure 7 : Trench B section






North Pennines Archaeology Ltd
2011
Brackenber Moor
Cremation Cemetery

CLIENT:
North Pennines AONB Partnership

SCALE: 1:75 at A4

DRAWN BY: MDR
DATE: June 2011

KEY:

-  limit of excavation
-  limit of context (?)
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Figure 8 : Trench C plan and section