

Project Code: CPA07

Client: Bratherton Park Design Consultants on behalf of Mark and Helen Towers

Planning Application No: 5/07/0634

National Grid Reference: SD 2735 7030

Date: August 2008



**Archaeological Evaluation (Phase 2) at
Colt Park, Aldingham, Ulverston, Cumbria:
Data Structure Report (Revised August 2008)**



HEADLAND
ARCHAEOLOGY Ltd

PROJECT SUMMARY SHEET (CPA07)

| | |
|---------------------------------|---|
| Client | Bratherton Park Design Consultants on behalf of Mark and Helen Towers |
| National Grid Reference | SD 2735 7030 (site centre) |
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| Schedule | |
| Fieldwork | 12 th to 16 th November 2007 |
| Report | Original December 2007 Revision August 2008 |

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Summary

An intrusive evaluation was undertaken on land at Colt Park, Aldingham in response to a planning condition applied to an application for a 9.5 hectare development scheme. Sixteen trenches were excavated throughout the development area exposing a network of field drains. The only significant discovery was a burnt mound located near the base of a small wide valley that runs north to south through the area.

To establish the full extent of the mound the initial trench was widened to the east and west. As the only purpose of this extension was to find the extent of the deposits, the surface of the mound was only fully exposed in segments along the edges. The burnt mound was largely covered by hillwash from the slopes to the north. It was sub-oval in plan and measured 13.5 by 16.5 m. A test pit was cut through the middle of the mound to retrieve dating material and to establish the depth of the deposits. The mound was relatively shallow, only 0.15 m deep and comprised fairly small fire cracked stones in a matrix of black soil.

The mound has been preserved within the development. To satisfy the archaeological planning condition a sample of charcoal retrieved from the burnt mound was submitted for radiocarbon dating. The results date the feature to the Middle Bronze Age and this report has been updated to include the results.

1. INTRODUCTION

- 1.1. During the initial stages of the planning process for a proposed development of a 26 hectare holiday park at Colt Park, Aldingham, Ulverston, Cumbria County Council's Historic Environment Service (CCCHES) advised that the applicant should provide information concerning the impact of the application on archaeological remains.
- 1.2. To comply with this request the developer commissioned Headland Archaeology Ltd to undertake an archaeological walkover and desk-based assessment of the application area and its surroundings.
- 1.3. Following the results of this assessment it was decided to carry out a targeted archaeological evaluation of the field at the south end of the development. This area was adjacent to several Bronze Age cremations recorded in the 19th century that could have formed part of a cemetery that extended into the south end of the development area. This evaluation did not uncover any significant archaeological features and suggested that any cemetery did not extend into the proposed development area.
- 1.4. When in 2007 a planning application was submitted for a revised development of a 9.5 hectare scheme, CCCHES recommend that a condition was placed on planning consent requiring an evaluation over the remainder of the proposed site. During the planning consultations part of the development lying within a field at the northwest corner of the area was excluded from the scheme. By also excluding the area evaluated during Phase 1, the area targeted for this phase of the evaluation covered some 7.6 hectares (Figure 1).
- 1.5. The work was carried out following a Written Scheme of Investigation for Archaeological Evaluation submitted by Headland Archaeology Ltd in accordance with a Brief prepared by CCCHES.
- 1.6. The work recorded a burnt mound within the development. This feature has been preserved within the development and a fragment of charcoal retrieved from it was subject to radiocarbon dating in order to satisfy the planning condition. This report was revised in August 2008 to contain the results of that dating.

2. ARCHAEOLOGICAL BACKGROUND

- 2.1. There are no known sites within the development boundary. However, three Bronze Age cremations were found at Colt Park in the 19th century (Historic Environment Record no. 2612). The discoveries were made during works to the existing road just south of the proposed development area.
- 2.2. A probable prehistoric burnt mound has recently been excavated immediately to the east of the site (HER no. 19981).
- 2.3. The area was clearly important during the medieval period with Moat Hill, a 12th century motte and bailey castle (Scheduled Monument no. 27682), and Moat Farm, medieval moated site (Scheduled Monument no. 27683) located some 400 m to the southeast. These are remains of the 12th and 13th century residences of the le Fleming family.

- 2.4. The known sites indicate Bronze Age activity in the area with a burnt mound to the northeast and two, or possibly three, cremations immediately to the south of the development area. Adding to this pattern is an Early Bronze Age flat axe found at Gleaston Castle some 1.2 km to the northwest of the site.

3. AIMS AND OBJECTIVES

- 3.1. The objective of the evaluation was to determine the location, extent, date, character, condition, significance and quality of any surviving archaeological remains liable to be threatened by the proposed development.

4. METHOD

- 4.1. Sixteen trenches were excavated using a 16-tonne JCB back-actor excavator equipped with a 2.4 m wide toothless ditching bucket. The trenches were excavated by machine under direct archaeological supervision to remove the modern cultivation soil. After the initial topsoil removal by machine, subsequent cleaning and excavation was carried out by hand.
- 4.2. The location of the trenches was specified in a WSI prepared by Headland Archaeology and approved by CCCHES. The trenches covered an area of 4100 m² that represented a sample of some 5.4% of the target area.
- 4.3. The exposed features and deposits were cleaned by hand and fully recorded using pro-forma record sheets. Colour transparencies and prints were taken of all features.
- 4.4. All trenches and features were surveyed using an EDM total station and tied to the National Grid using reference points taken from an OS map. The heights of the surveyed points were approximately linked to ordnance datum levels using the 25, 30 and 35 m contour lines.

5. RESULTS

5.1. Introduction

- 5.1.1. The application area comprises several fields used as pasture bounded by hedgerows. A small wide valley surrounded by low rounded ridges runs north to south through the area (Figure 1, Plate 1).
- 5.1.2. Sixteen trenches were excavated within the designated area (Figure 2). The trenches were between 20 and 200 m long and 2.4 m wide. Only one of these trenches, Trench 11, contained archaeological deposits.
- 5.1.3. A full description of all contexts is given in Appendix 1. The topsoil (1) in all trenches consisted of a mid brown compact loamy soil, with rare stones. The depth of the topsoil was generally 0.25 m to 0.3 m deep. The natural subsoil was a very compact mid to light grey clay.

5.2. Trench 1 (Figure 2)

- 5.2.1. Trench 1 was 102 m long and aligned north-northeast to south-southwest. It was situated on a very gentle south-facing slope on the west side of the valley. The topsoil (1) was on average

0.25 - 0.30 m deep above light brown clay hillwash (2), 0.30 m deep, over grey clay natural subsoil. The trench contained three modern field drains.

5.3. Trench 2 (Figure 2)

5.3.1. Trench 2 was 100 m long and aligned parallel with and east of Trench 1. The topsoil (1) was on average 0.25 - 0.30 m deep above light brown clay hillwash (2), 0.2 – 0.4 m deep, over grey clay natural subsoil. The trench contained two modern field drains.

5.4. Trench 3 (Figure 2)

5.4.1. Trench 3 was 20 m long and aligned north-northeast to south-southwest 32 m to the south east of Trench 2 on the west side of the valley. The topsoil (1) was on average 0.25 - 0.30 m deep above light brown clay hillwash (2), 0.3 to 0.6 m deep, over grey clay natural subsoil. No features were identified in the trench.

5.5. Trench 4 (Figure 2)

5.5.1. Trench 4 was 20 m long and situated some 6 m southeast of Trench 2. It was parallel with and located on the same side of the valley as Trench 3. The topsoil (1) was on average 0.25 - 0.30 m deep, above light brown clay hillwash (2), 0.05 to 0.2 m deep, over grey clay natural subsoil. No features were identified in the trench.

5.6. Trench 5 (Figure 2)

5.6.1. Trench 5 was 100 m long and aligned north-northwest to south-southeast parallel to a hedgerow field boundary. It cut across the shallow wide valley that ran north to south through the evaluation area. The topsoil (1) was 0.25 - 0.30 m deep on average above light brown clay hillwash (2), 0.4 – 0.7 m deep, over grey clay natural subsoil. The trench contained four modern field drains and two pits containing fragments of modern drain pipes.

5.7. Trench 6 (Figure 2)

5.7.1. Trench 6 was 160 m long and aligned north-northeast to south-southwest roughly parallel to a modern hedgerow field boundary. It cut across a wide gentle ridge at the top end of the valley. Topsoil (1) was 0.20 - 0.25 m deep on average, above light brown clay hillwash (2), 0.15 – 0.25 m deep, over grey clay natural subsoil. The trench contained twenty-seven modern field drains.

5.8. Trench 7 (Figure 2)

5.8.1. Trench 7 was 134 m long aligned northeast and cut across the same ridge as Trench 6 to the east. Topsoil (1) was 0.20 - 0.30 m deep, above light brown clay hillwash (2), 0.25 – 0.30 m deep on average, over grey clay natural subsoil. The trench contained nineteen modern field drains some of which lined up with the drains seen in Trench 6.

5.9. Trench 8 (Figure 2)

5.9.1. Trench 8 was 59 m long aligned northeast to southwest, some 18 m southeast of the south end of Trench 7. Topsoil (1) was 0.25 - 0.30 m deep, over light brown clay hillwash (2), 0.30m deep on average, over grey clay natural subsoil. The trench contained eight modern field drains.

5.10. Trench 9 (Figure 2)

5.10.1. Trench 9 was 117 m long, aligned north to south east of Trenches 7 and 8. It ran across the flat top of a small ridge at the east edge of the area. Topsoil (1) was 0.25 - 0.30 m deep on average, over light brown clay hillwash (2), 0.2 - 0.4 m deep, over grey clay natural subsoil. The trench contained seven modern field drains.

5.11. Trench 10 (Figure 2)

5.11.1. Trench 10 was 65 m long, aligned north to south, and located at the base of the valley some 80 m south of Trench 1. Topsoil (1) was 0.25 - 0.30 m deep, above light brown clay hillwash (2), 0.25 – 0.5 m deep, over grey clay natural subsoil. The trench contained two modern field drains (not illustrated).

5.12. Trench 11 (Figure 2)

5.12.1. Trench 11 was 200 m long, aligned north to south parallel with and to the east of Trench 10. It cut diagonally across the valley. Topsoil (1) was 0.25 - 0.30 m deep, over light brown silty clay hillwash (2), 0.15 – 0.4 m deep, overlying grey clay natural subsoil. The trench contained five modern field drains (not illustrated). A burnt mound was exposed in the south half of the trench, partly covered in hillwash (2).

5.12.2. The mound covered the full width of the trench over a distance of 13 m. To establish the full extent of the mound the trench was widened to the east and west leaving a baulk along the west side of the trench (Plate 2). As the only purpose of this extension was to find the extent of the deposits, the surface of the mound was only fully exposed in a 0.6 m wide trench along the east side of the baulk and in segments along the edges of the mound (Plate 3).

5.12.3. The burnt mound was situated at the valley bottom, possibly on the north side of the line of a small stream that once would have run along the valley. It was sub-oval in plan, aligned north to south and measured 13.5 m by 16.5 m. Although there was a marked slope at the edges to the east, south and west, the mound appeared not to be very high, and it was almost completely covered in hillwash (2). The mound was truncated by three modern field drains.

5.12.4. To record the thickness of the deposits and obtain dating material from the mound, a square test pit 0.6 by 0.6 m was excavated near its centre. The pit was dug through the mound deposits down to the underlying clayey subsoil. The pit confirmed that the deposits were fairly thin, up to 0.15 m deep, under a 0.16 m deep deposit of hillwash (2) with a 0.2 m deep layer of turf and topsoil (1) on top (Plate 4). There were no surviving remains of the old ground surface below the burnt mound material.

5.12.5. The burnt mound material comprised dark brown to black clayey silt, with frequent stones (~50 - 60%). The stones were angular to sub-rounded and most of them showed signs of being fire cracked. The majority of the stones were between 0.04 to 0.08 m across.

5.12.6. Before backfilling a fence post was inserted into the corner of the test pit to mark its exact position (Figure 2)

5.13. Trench 12 (Figure 2)

5.13.1. Trench 12 was 50 m long aligned northwest to southeast on the lower slopes on the east side of the valley. Topsoil (1) was 0.25 - 0.30 m deep, above light brown clay hillwash (2), 0.2 – 0.5 m deep, over grey clay natural subsoil. The trench contained five modern field drains.

5.14. Trench 13 (Figure 2)

5.14.1. Trench 13 was 155 m long, aligned north-northeast to south-southwest on a gentle south-facing slope on the east side of the valley. Topsoil (1) was 0.25 - 0.30 m deep, above light brown clay hillwash (2), 0.2 – 0.8 m deep, over grey clay natural subsoil. The trench contained three modern field drains.

5.15. Trench 14 (Figure 2)

5.15.1. Trench 14 was 167 m long, aligned roughly north to south, the east of Trench 13. Topsoil (1) was 0.25 – 0.30 m deep, over light brown clay hillwash (2), 0.3 - 0.5 m deep, over grey clay natural subsoil. The trench contained three modern field drains.

5.16. Trench 15 (Figure 2)

5.16.1. Trench 15 was 62 m long, aligned west-northwest to east-southeast, to the north of modern hedgerow field boundary and access track, south of Trenches 13 and 14. Topsoil (1) was 0.25 - 0.30 m deep on average, over light brown clay hillwash (2), 0.3 - 0.6 m deep, above grey clay natural subsoil. The trench contained two modern field drains and a plastic water pipe for a cattle feeder.

5.17. Trench 16 (Figure 2)

5.17.1. Trench 16 was 42 m long, aligned northwest to southeast, parallel with and to the south of modern hedgerow field boundary and the same access track as Trench 15. Topsoil (1) was 0.35m deep, over light brown clay hillwash (02), 0.6 – 0.7 m deep, over grey clayey sand natural subsoil. The trench contained three modern field drains.

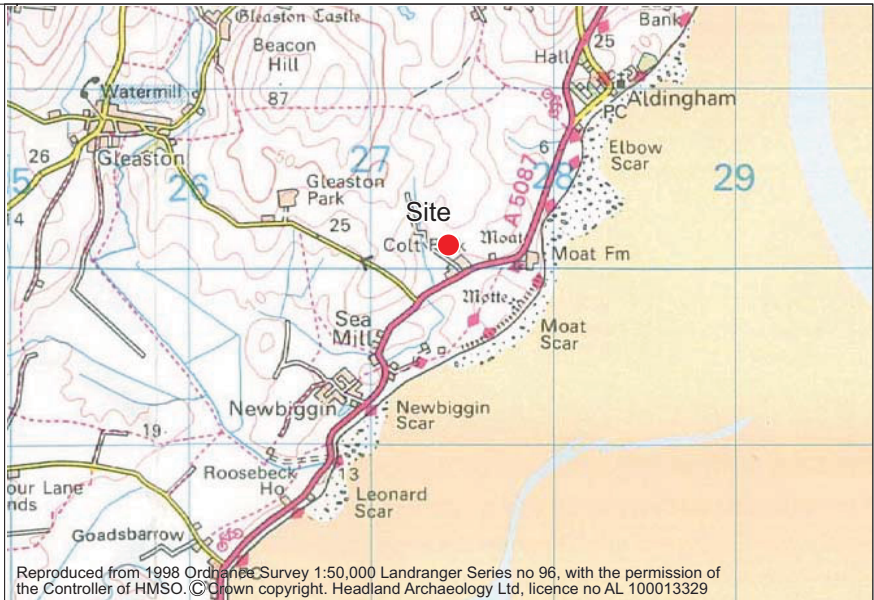
6. DISCUSSION

- 6.1. The evaluation of the area demonstrated that there is not likely to be any surviving archaeological remains on the low ridges around the edges of the development area. However, a burnt mound was uncovered at the base of the small valley that ran south to north through the area. The mound appeared to have been situated on the west side of a small stream that once ran south through the valley. Today, and presumably for several hundred years, the drainage of the valley has been channelled into drains below ground with no visible watercourse on the surface.
- 6.2. The burnt mound was thought likely to date to the Bronze Age and forms part of a small cluster of sites from this period. A second burnt mound lies on the far side of the hill, less than 900 m to the north-east and three Bronze Age urns were found on the far side of the road some 350 m to the south. One may also add the Early Bronze Age flat axe that was found at Gleaston Castle some 1.6 km to the northwest to this group.
- 6.3. The burnt mound was found in a 'classical' location next to a now drained watercourse and only some 40 m to the east of a stream that runs along the west side of the evaluation area. It had been largely covered by a layer of hillwash built up during centuries of cultivation of the areas upslope.
- 6.4. In addition to Trench 11, four other trenches (3, 5, 10, and 12) cut into or across the valley base but none of these exposed any further evidence of burnt mounds. Looking at the landscape, it is not likely to find further burnt mounds upslope.
- 6.5. A sample of the burnt mound material taken from the test pit was processed. It contained a number of charcoal fragments (oak) that provided sufficient material for AMS dating. Following discussion with the Historic Environment Officer of Cumbria County Council this was submitted for dating as part of the programme of works to satisfy the archaeological planning condition on development.
- 6.6. This report was revised in August 2008 to contain the results of AMS dating. The charcoal fragments were dated to 3090 ± 30 BP, which calibrates to between 1430 and 1290 BC at 94.3 % probability (see Appendix 6). This dates the mound to the middle of the Bronze Age and confirmed

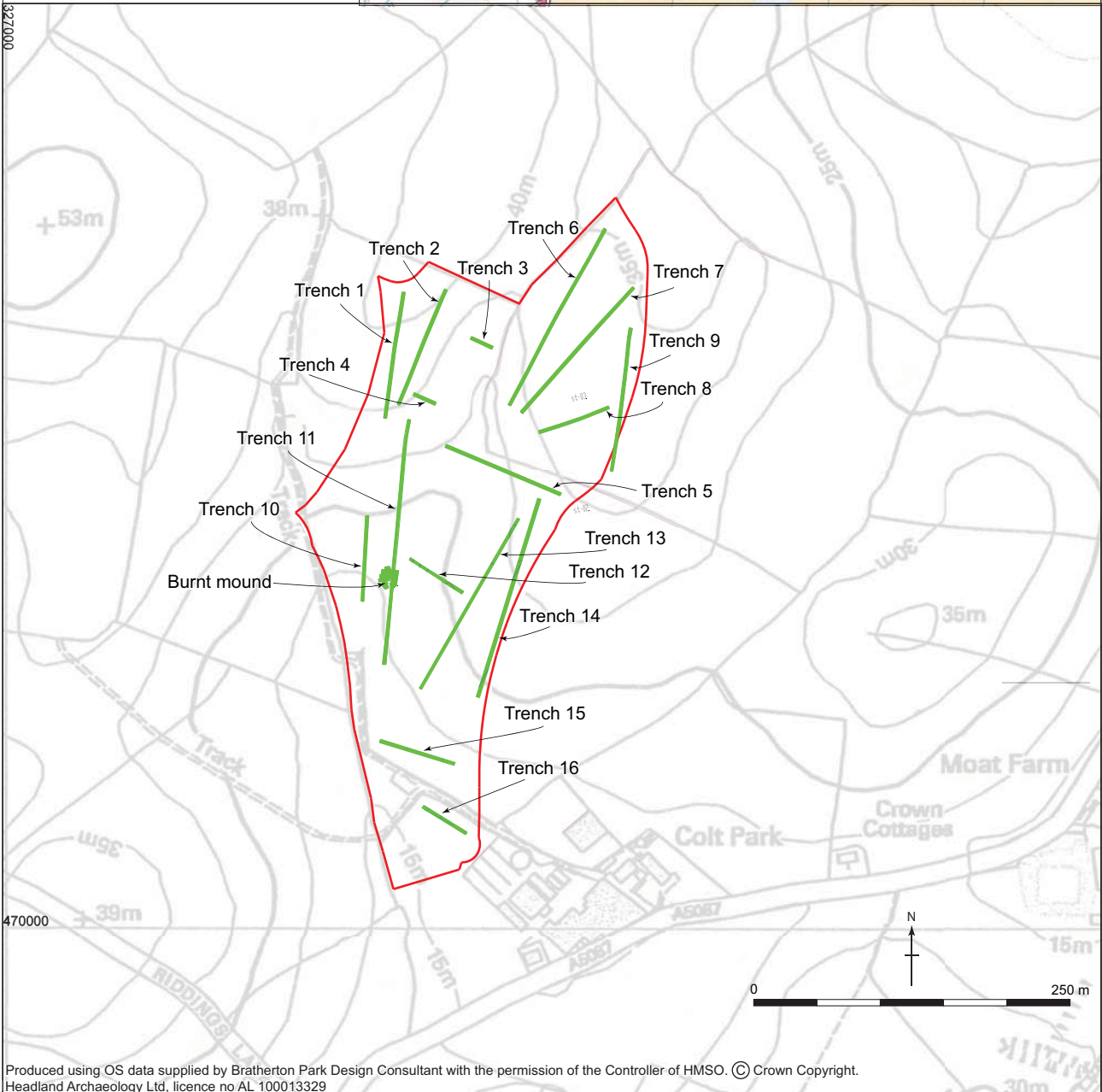
assumptions made during the fieldwork that the burnt mound represents further evidence of Bronze Age activity in this area.



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Figure 1 - CPA06: Location plan

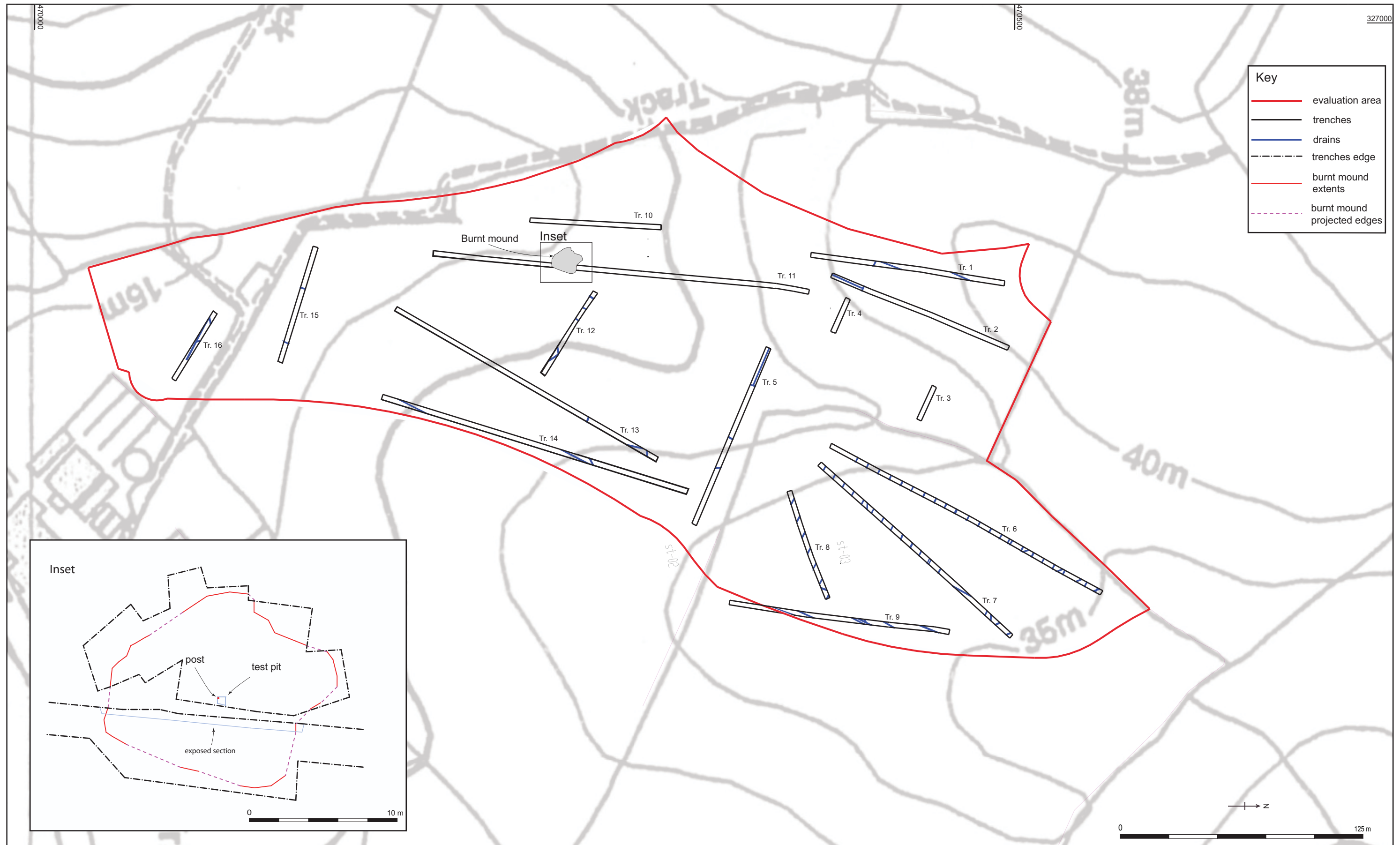


Figure 2 - CPA07: Trench locations within evaluation area

327303.39/
470271.68

327304.58/
470285.39

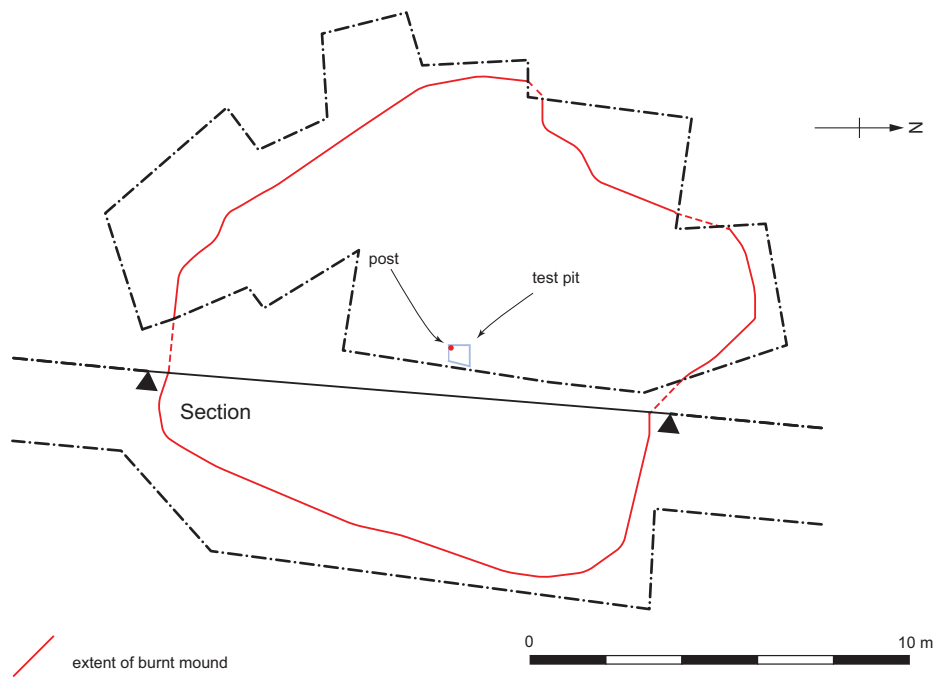
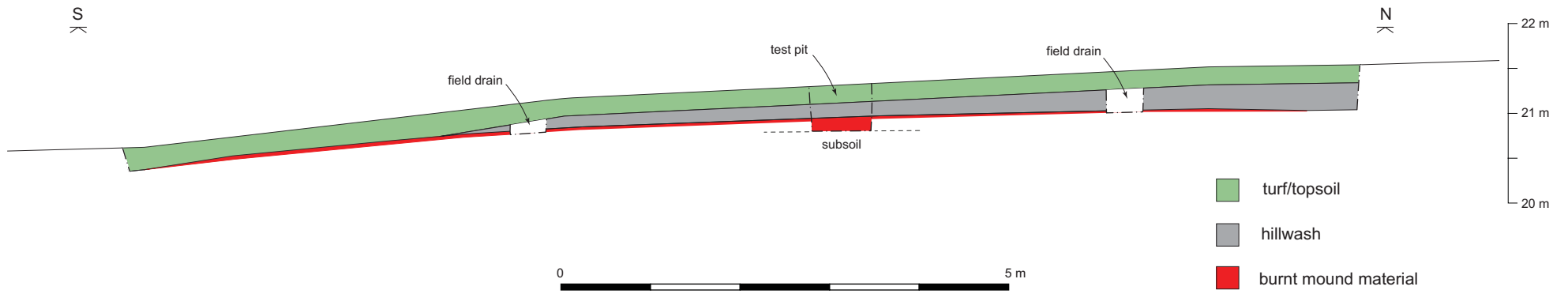


Figure 3 - CPA07: Plan and east facing section across burnt mound



Plate 1. CPA07. General view of the development area. From the south.



Plate 2. CPA07. General shot of profile across burnt mound. From the east.



Plate 3. CPA07. Burnt mound partly exposed. From the southeast.



Plate 4. CPA07. West-facing section of sondage pit into burnt mound.

APPENDIX 1: CONTEXT REGISTER

| No | Trench | Over | Description |
|----|--------|------|--|
| 1 | T1-16 | 2 | Topsoil. Mid brown compact loamy soil, with rare stones. Diffuse interface with context 02 below. Covers entire site. |
| 2 | T1-16 | 3, 4 | Hillwash. Very compact light brown stiff silty clay, with rare stones. Diffuse interface with context 01 above and clear with context 03 below. Covers entire site. 0.1 - 0.8 m thick. |
| 3 | T1-16 | | Natural subsoil. Very compact mid to light grey stiff clay. Covering entire site. Clear interface with contexts 2 and 4 above. |
| 4 | T11 | 3 | Burnt mound. Mod compact dark blackish brown to black clayey silt, with frequent stones (~50 - 60%). The stones are angular to sub-angular and fairly small from 0.02 m to 0.15 m across, on average 0.05 m. They comprise mainly grey sandstone, with the occasional fragment of red sandstone. There are several examples of fire cracked rounded beach pebbles. The mound is sub-oval in plan, aligned north to south, measures 13.5 m by 16.5 m and is up to 0.15 m thick. |

APPENDIX 2: PHOTOGRAPH REGISTER

| Shot no. | Colour Prints | Colour Slides | Digital JPG files | Direction facing | Description |
|----------|---------------|---------------|-------------------|------------------|---|
| 1 | 1 | 1 | CPA07-Pic01.jpg | N | Trench 9, general view of trench |
| 2 | 1 | 1 | CPA07-Pic02.jpg | ENE | Trench 8, general view of trench |
| 3 | 1 | 1 | CPA07-Pic03.jpg | NE | Trench 7, general view of trench |
| 4 | 1 | 1 | CPA07-Pic04.jpg | NNE | Trench 6, general view of trench |
| 5 | 1 | 1 | CPA07-Pic05.jpg | WNW | Trench 5, general view of trench |
| 6 | 1 | 1 | CPA07-Pic06.jpg | S | Trench 14, general view of trench |
| 7 | 1 | 1 | CPA07-Pic07.jpg | SSE | Trench 13, general view of trench |
| 8 | 1 | 1 | CPA07-Pic08.jpg | WNW | Trench 4, general view of trench |
| 9 | 1 | 1 | CPA07-Pic09.jpg | WNW | Trench 3, general view of trench |
| 10 | 1 | 1 | CPA07-Pic10.jpg | S | Trench 2, general view of trench |
| 11 | 1 | 1 | CPA07-Pic11.jpg | S | Trench 1, general view of trench |
| 12 | 1 | 1 | CPA07-Pic12.jpg | E | General shot of trenches 6, 7 and 8 |
| 13 | 1 | 1 | CPA07-Pic13.jpg | S | General shot of trenches 12, 13 and 14. |
| 14 | 2 | 2 | CPA07-Pic14.jpg | S | Trench 11, general view of trench. |
| 15 | 1 | 1 | CPA07-Pic15.jpg | SSE | General shot of trenches 5, 12, 13 and 14 |
| 16 | 1 | 1 | CPA07-Pic16.jpg | ESE | General shot of trenches 6, 7 and 8 |
| 17 | 1 | 1 | CPA07-Pic17.jpg | SE | Trench 12, general view of trench |
| 18 | 1 | 1 | CPA07-Pic18.jpg | S | Trench 10, general view of trench |
| 19 | 1 | 1 | CPA07-Pic19.jpg | ESE | Trench 15, general view of trench |
| 20 | 1 | 1 | CPA07-Pic20.jpg | N | General shot of trenches 10, 11 and 13 |
| 21 | 1 | 1 | CPA07-Pic21.jpg | SW | Overview of burnt mound. |
| 22 | 1 | 1 | CPA07-Pic22.jpg | SE | Overview of burnt mound. |
| 23 | 1 | 1 | CPA07-Pic23.jpg | NE | Overview of burnt mound. |
| 24 | 1 | 1 | CPA07-Pic24.jpg | N | View along slot trench across burnt mound. |
| 25 | 2 | 2 | CPA07-Pic25.jpg | NE | General view of the development area |
| 26 | 2 | 2 | CPA07-Pic26.jpg | N | General view of the development area, zoomed in |
| 27 | 1 | 1 | CPA07-Pic27.jpg | W | General shot of profile across burnt mound. |
| 28 | 1 | 1 | CPA07-Pic28.jpg | W | Close up of section across burnt mound. S end |
| 29 | 1 | 1 | CPA07-Pic29.jpg | W | Close up of section across burnt mound. S of middle |
| 30 | 1 | 1 | CPA07-Pic30.jpg | W | Close up of section across burnt mound. Middle |
| 31 | 1 | 1 | CPA07-Pic31.jpg | W | Close up of section across burnt mound. N of middle |
| 32 | 1 | 1 | CPA07-Pic32.jpg | W | Close up of section across burnt mound. N end |
| 33 | 1 | 1 | CPA07-Pic33.jpg | E | W-facing section of sondage pit into burnt mound. |

APPENDIX 3: SAMPLE REGISTER

| Sample no. | Context | Volume | Description |
|------------|---------|--------|----------------------|
| 1 | 4 | 40 l | Burnt mound material |

APPENDIX 4: DRAWING REGISTER

| Drawing no. | Scale | Description |
|-------------|-------|---|
| 01 | 1:10 | West facing section of test pit through burnt mound |

APPENDIX 5 – ENVIRONMENTAL ASSESSMENT

SJ Haston

Environmental sample report

A single 10-litre sample [001] was processed from the burnt mound deposit [04] with the goal of finding suitable material to be used for dating the burnt mound activity. The sample was processed in laboratory conditions using a standard floatation method (cf. Kenward *et al*, 1980). The sample was found to contain common amounts of cinders up to 2cm³. Occasional charcoal fragments were found in the sample, most of which were encased in cinder material. Only a rare amount of the charcoal fragments were of a size suitable for identification and/or Accelerated Mass Spectrometry (AMS) dating.

References

Kenward, H. K., Hall, A. R. and Jones, A. K. G. (1980). A tested set of techniques for the extraction of plant and animal macrofossils from waterlogged archaeological deposits. *Science and Archaeology* 22, 3-15

APPENDIX 5 – RADIOCARBON DATING CERTIFICATE



 Director: *Professor A B MacKenzie*

Scottish Universities Environmental Research Centre
 Rankine Avenue
 Scottish Enterprise Technology Park
 East Kilbride Scotland UK G75 0QF
Email: g.cook@suerc.gla.ac.uk**Telephone:** 01355 223332**Direct Dial:** 01355 270136**Fax:** 01355 229898

15 July 2008

| | |
|--|--|
| Laboratory Code | SUERC-19406 (GU-16901) |
| Submitter | Sarah-Jane Haston Headland Archaeology Ltd. 13 Jane Street Edinburgh EH6 5HE |
| Site Reference | CPA07-Colt Park, Aldingham, Ulverston, Cumbria |
| Context Reference | 4 |
| Sample Reference | 1 |
| Material | Charcoal : Quercus (oak) |
| $\delta^{13}\text{C}$ relative to VPDB | -24.2 ‰ |
| Radiocarbon Age BP | 3090 \pm 30 |

- N.B.**
1. The above ^{14}C age is quoted in conventional years BP (before 1950 AD). The error, which is expressed at the one sigma level of confidence, includes components from the counting statistics on the sample, modern reference standard and blank and the random machine error.
 2. The calibrated age ranges are determined from the University of Oxford Radiocarbon Accelerator Unit calibration program (OxCal3).
 3. Samples with a SUERC coding are measured at the Scottish Universities Environmental Research Centre AMS Facility and should be quoted as such in any reports within the scientific literature. Any questions directed to the Radiocarbon Laboratory should also quote the GU coding given in parentheses after the SUERC code.

Calibration Plot

