

WEST PITKERRO, DUNDEE  
ARCHAEOLOGICAL EVALUATION  
DATA STRUCTURE REPORT



PROJECT 2883

carried out  
on behalf of  
Dundee City Council

**GUARD**  
Glasgow University Archaeological Research Division

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*Cover Plate:*  
*General shot of evaluation site.*

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This report is one of a series published  
by GUARD, Gregory Building,  
Lilybank Gardens, Glasgow, G12 8QQ



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DATA STRUCTURE REPORT

PROJECT 2883

by  
Heather F James

This document has been prepared in accordance with GUARD standard operating procedures.

Approved by: ..... Date: 22 January 2010  
Dr John Atkinson



Project 2883  
**West Pitkerro, Dundee**  
 Archaeological Evaluation

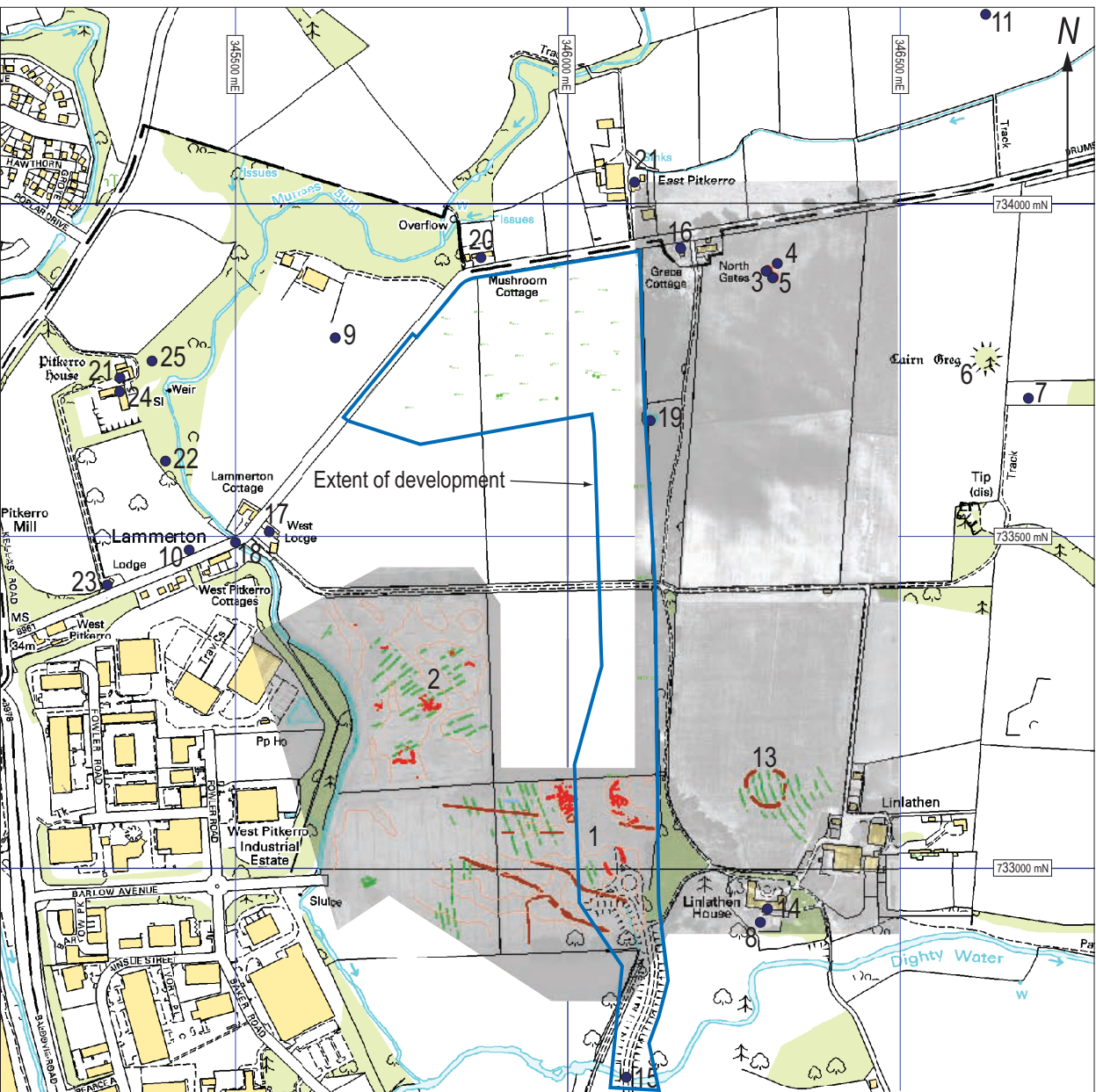


Figure 1: Site location.

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## 1.0 Executive Summary

Pre-determination archaeological works took place at West Pitkerro, Dundee, due to the presence of archaeological cropmarks in close proximity to the proposed development. The archaeological works consisted of a watching brief during test pitting, subsequent evaluation trenching, followed by a watching brief of the backfilling of the evaluation trenches that contained archaeological features. Four moderately significant areas of archaeological remains were found, one in the NE of the development area and three others in the S in the vicinity of a slight rise in the topography. These areas consisted of a possible corn-drying kiln, a boulder surface, a group of pits and finally a group of ash spreads and ash filled hollows of indeterminate date.

If the design of the proposed cemetery development is flexible at this stage it may be possible to avoid each of the four moderately significant (ie no more than locally important) archaeological remains discovered during the evaluation phase of work, by creating buffer zones around each discrete cluster of archaeological features. If this is not possible, an additional phase or phases of work, potentially incorporating full excavation, may be designed in a supplementary document or documents after further consultation with Dundee City Council, in accordance with the agreed Method Statement.

## 2.0 Introduction

GUARD were commissioned to undertake archaeological works in advance of the proposed cemetery development at West Pitkerro to the north of Dundee (Figure 1). This was carried out as the initial part of a mitigation strategy to deal with any archaeological resources which might survive within the boundaries of the development area. The planning context for this work is Pre-Determination.

An archaeological watching brief during the excavation of 37 Geological Site Investigation test pits across the development area was undertaken on 5 October 2009 (Figure 2). An archaeological evaluation, which comprised the excavation of 129 trenches totalling area of 13,419 m<sup>2</sup> or just over 8% of the 16.5 ha of available land within the proposed development area, was undertaken between 12 October and 29 October 2009 (Figure 2). A watching brief was undertaken during the backfilling of all trenches containing archaeological features on 29 October 2009.

## 3.0 Site Location, Topography and Geology

The site is located at West Pitkerro, Dundee (Centred NGR: NO 4594 3381). The site consisted of three gently undulating fields with a general slope towards the south-west. There is a slight mound near the south eastern corner of the southern field, north of the newly-built roundabout.

The underlying drift geology consists of Glacial meltwater deposits of sand and gravel, while the solid geology consists of Lower Devonian cross-bedded sandstone (British Geological Survey (1978 & 1980)).

## 4.0 Archaeological Background

Prior to the archaeological fieldwork, a desk-based assessment was carried out by GUARD to assess the archaeological potential of the development area and its surrounding landscape, the results of which, outlined below and illustrated in Figure 1, were incorporated into the Method Statement (Toolis 2009).

### 4.1 *Prehistoric Sites*

Assessment of vertical aerial photographs, conducted as part of the desk-based assessment, identified no evidence, in the form of cropmarks, for prehistoric remains within the proposed cemetery in the northern part of the development layout (Figure 1). However, there are potential archaeological remains previously recorded within the southern part of the cemetery access road route (Figure 3). These comprise a large simple souterrain (NO 46076 33103) with a scatter of pits and truncated bedding trenches at its south end marking the location of a possible round house. The scatter of pits extended to the south and to the south-south-east (NO 46100 33072) where there is possibly a further building. Towards the centre of the field (NO 46069 33008) there are two rather ambiguous marks that may be souterrains. These features form part of a wider scatter of probable Iron Age unenclosed round houses, souterrains and pits (Site 1; Linlathen Cropmarks NO43SE 498; MDH2615) recorded by RCAHMS as cropmarks on oblique aerial





photographs (Figure 1). Lying in the field to the west-north-west of Linlathen House, the archaeological cropmarks are coincident with areas of shallow soils, broken by deeper soils that are not responsive.

To the west of the development area there is a further scatter of at least five souterrains, possible round houses, pits and rig which have been recorded as cropmarks (Site 2; West Pitkerro Cropmarks NO43SE 499; MDH2616).

There are also significant prehistoric remains in the wider vicinity of the proposed development area including a Scheduled Ancient Monument to the east (Site 3; North Gates Souterrain NO43SE 64; MDH926; SAM 6527), which is bounded by a rectilinear enclosure (Site 4; North Gate crop-mark enclosure NO43SE 50; MDH921) and an oval enclosure (Site 5; North Gate crop-mark enclosure NO43SE 506; MDH2636). Another Scheduled Ancient Monument, a Bronze Age Cairn, lies further to the east (Site 6; Cairn Greg NO43SE 1; MDH 891; SAM 2889). This cairn was opened up in 1834 and within it a cist was found containing a bronze dagger, a beaker and a Pictish decorated slab (Stuart 1868, 98-103). There were numerous other cairns within a mile of Cairn Greg marking other burials (Miller 1845, 546), but the stones from these were used in the construction of field drains (Stuart 1868, 100). One of these was a large cairn known as the 'Black Cairn', reported to have been removed from an unspecified location in the vicinity of the proposed development area (Ordnance Survey 1859, 13). Two possible standing stones (Site 7) and a cinerary urn findspot (Site 8; Linlathen House NO43SE 19) located east and south-east of the proposed development area also survive as prehistoric elements within the landscape.

This evidence indicated that there was a distinct possibility that prehistoric archaeological remains could be encountered during the archaeological watching brief and evaluation of the proposed development area.

## 4.2 *Medieval Sites*

There are no recorded medieval sites within the proposed development area and the assessment of vertical aerial photographs, conducted as part of this desk-based assessment, identified no evidence, in the form of cropmarks, for medieval remains within the proposed development area.

There are, however, remains of possible early medieval remains within the surrounding landscape. These remains include the site of a stone cist grave to the north-west (Site 9; Pitkerro House Cist NO43SE 4; MDH892), discovered in September 1906 during excavations for road-making purposes. The cist, lying east/west, measured 5ft 10ins by 15ins, and contained some fragments of human bones but no other artefacts (Hutcheson 1909, 318-19). The discovery of this cist followed the earlier discovery of another stone cist (Site 10; Pitkerro House Cist NO43SE 5), unearthed in December 1902 by workmen digging a drain from a new lodge at the south entrance to Pitkerro House. The cist was formed of thin slabs and measured 5ft 7½ins by 18ins at the head (on the west) and 8ft only at the foot (Hutcheson 1909, 317-318).

The significance of the locality in the Pictish period is also attested by the place name Pitkerro, which includes the 'pit' element that refers to a portion, a share, or a farm, indicative that the area belonged to a significant farm in the Pictish period.

There is further evidence for Pictish activity in the area in the form of a Pictish sculptured stone (Stuart 1868, 98-103) found within Cairn Greg (Site 6). This site is significant in that it was a substantial Bronze Age burial cairn which appears to have been re-used in the Pictish period for the deposition of the sculptured slab, and perhaps for a secondary burial, tradition associating this cairn with the burial place of a Pictish king. The Chronicle of the Kings of Alba includes *Giric* who ruled at the end of the 9<sup>th</sup> century AD, but who was supposedly was buried on Iona (Skene 1867).

Documentary evidence relating to Medieval Dundee, however, is minimal and little detail is known of the history of the city and its surrounding area during this period (Fouracre 2007, 9). The Medieval settlement of Dundee appears to have been clustered around the church and the castle and it is thus likely that the proposed development area was located at some distance from the city, but within its rural hinterland (Fouracre 2007, 9). The site of the discovery of a crotal bell of copper-alloy (Site 11; Hillock Farm Bell NO43SE 65) of possible 13<sup>th</sup> century date (Zealand 1992, 74) to the north-east of the proposed development area indicates later medieval activity within the surrounding landscape.

Early cartographic representations of the area (Pont 1580) are very stylistic in nature and mark only the larger settlements and towns. 'Pitharrow' is shown in roughly the same location as Pitkerro House (Site 12; NO43SE 6; HB No 25895), an A Listed house built by the Durham family in the late 16<sup>th</sup> century, while the proposed development area is depicted as unoccupied land to the south. It is probable therefore

that the proposed development area was used simply as farmland in the later medieval period (Fouracre 2007, 9).

While it seemed unlikely that later medieval remains may survive, there was a possibility that early medieval remains could be encountered during the archaeological watching brief and evaluation works within the proposed development area.

### 4.3 *Post-Medieval and Modern Sites*

The only post-medieval remains apparent within the proposed development area are the scatters of rig and furrow, trackways and field boundaries (Site 1) previously recorded within the southern part of the cemetery access road route. The rig here, which measures up to 18 m between furrows, extends across most of the field, visible intermittently because of varying soil depth. Two roughly parallel trackways extend from south-east to north-west and other linear cropmarks recorded may be fragments of field boundaries. More rig (Site 2), is visible intermittently across the field to the south-west of the cemetery layout, measuring about 14 m between furrows and extending from north-east to south-west.

Further evidence of post-medieval cultivation in the vicinity of the proposed development area includes a ploughed out circular plantation bank and rig and furrow (Site 13; Linlathen NO43SE 505) to the south-east.

Edward's map of 1687 depicts 'Patkaro' and, for the first time 'Lumlethin'. Moll's map of the mid 18<sup>th</sup> century depicts 'Patkaro', but does not show 'Lumlethin', although Linlathen House (Site 14; NO43SE 18.00) was built for David Graham in 1705 (Fouracre 2007, 9). Roy's Military survey of Scotland (1747-55) depicts the farms of 'Pitkerran', 'Lammerton', and 'Lumlayton' with areas of rig and furrow to the east of 'Pitkerran' which approximate to the location of the current development area. This shows that the land in the vicinity of the development had been brought into cultivation before the mid-18<sup>th</sup> century. Ainslie's map of 1794 shows the mansion house of Linlathen (although it was named Fintry at the time) as the property of Graham Esq. The area of the proposed development now formed part of the Linlathen estates parkland, which was occupied by a small number of trees along the northern boundary and stands of trees in the area to the east and south-east, presumably corresponding with Cairn Greg and perhaps other areas of stones. John Thomson's map of 1832 also depicts the stands of trees to the east of the development area.

There are a number of sites associated with the Linlathen Estate around the proposed development area, including an A listed bridge (Site 15; West Bridge NO43SE 18.02; HB No 25893) likely constructed following the extension of Linlathen House for Thomas Erskine by William Sterling in circa 1830. This bridge carries the western (apparently principal) approach drive to Linlathen House (Site 14) across the Dighty Water to the SW of the House. At the same time was constructed North Lodge (Site 16, NO43SE 18.04, HB No 17461) a C(s) listed building. The lodge is shown on the 1827 estate map of Linlathen as the western of two north lodges (Fouracre 2007, 10). Slightly later was built at Lammerton the West Lodge (Site 17; NO43SE 439; HB No 25889) another C(s) Listed Building, established by Thomas Erskine of Linlathen House as a school mainly for the benefit of estate children. Lammerton School was still depicted on maps in 1905 (Ordnance Survey 1907). Close to this is Lammerton Road Bridge (Site 18; NO43SE 402; HB No 25890), a B Listed Structure dated 1783 and 1856. Knox's map of 1850 depicts the property of Linlathen House in the ownership of Erskine Esq. This map, and the Ordnance Survey First Edition six inch map (1865), depict the boundary trees surrounding the area of the development, but there are no other features within it. The First Edition six inch map (1865) also shows a small circular pond (Site 19) located on the eastern boundary of the development area, still extant on modern maps. To the north, Mushroom Cottages (Site 20) and the farm of East Pitkerro (Site 21) had been built by the mid-19<sup>th</sup> century. Around this time, it was noted that Linlathen was a large mansion on the banks of the Dighty and the residence of Thomas Erskine (Miller 1845, 548), who in addition to his interests in philosophy and literature, was also interested in antiquities and in 1864 was party to the re-opening of Cairn Greg (Site 6) and the removal of its Pictish symbol stone to Linlathen House (Fouracre 2007, 10). The central portion of Linlathen House itself was demolished in the 1980s and the remaining wings appear to be wholly of late 18<sup>th</sup> – 19<sup>th</sup> century date. The house is now Linlathen House Nursing Home.

There are also sites associated with the estate of Pitkerro to the west of the proposed development area. These include Pitkerro House (Site 12), an A Listed Building whose southern wing is 16<sup>th</sup> century, the door lintel in the tower bearing the date 1593, while the remainder of the house is modern. Associated with this are a ruined Dovecot (Site 22, NO43SE 6.4; HB No 25895), an A Listed Structure, Pitkerro House Lodge (Site 23, NO42SE 6.1; HB No 25894) another A Listed Building, Pitkerro House Stables

(Site 24; NO43SE 6.2; HB No 25896), a C(s) Listed Building and Pitkerro House Cottage (Site 25; NO43SE 6.3; HB No 25897), a C(S) Listed former generator/battery house built in connection with the electricity supply for Pitkerro House when the latter was extended by Sir Robert Lorimer in 1902.

Between the First Edition one-inch map (Ordnance Survey 1888), the Second Edition one-inch map (Ordnance Survey 1896), the Third Edition one-inch map (Ordnance Survey 1907) and the 'Popular' Edition one-inch map (1927), the proposed development area shows no change from the enclosed field system established by the mid-19<sup>th</sup> century. Examination of vertical aerial photographs from 1946 to 1995 (Table 1), conducted as part of this desk-based assessment, also showed no change, the fields being used mainly for arable agriculture. The only change apparent is the removal of an east/west aligned field boundary across the eastern of the fields over which the cemetery layout is proposed, at some point between 1963 and 1988. This field boundary is apparent thereafter as a linear cropmark which bounds the southern edge of the cemetery layout and is not deemed especially significant.

There was a possibility therefore that post-medieval cultivation remains could be encountered during the archaeological watching brief and evaluation works within the proposed development area.

## 5.0 Aims and Objectives

The project objectives are:

- to establish whether or not significant archaeological remains survive within the proposed development area boundaries

and, if present:

- to establish so far as possible, their condition, structure, survival, significance and date.

All works were to comply with the Institute for Archaeology's Standards and Policy Statements and Code of Conduct and the Dundee City Council Archaeology Service's Standard Conditions.

## 6.0 Methodology

### 6.1 *Watching Brief*

Due to the requirement of Site Investigation works to first establish through trial pits if the underlying geology was suitable for the proposed cemetery, a watching brief (Stage 1) was conducted during the machine excavation of the trial pits (Figure 2) to ensure that no significant archaeological remains were disturbed, without first being recorded. The watching brief included the monitoring of all topsoil and/ or over-burden stripping operations by machine and excavation and recording of any feature encountered. The machine used for trial pit excavation was a back-acting excavator fitted with a c 2 m wide flat-bladed (toothless) ditching bucket.

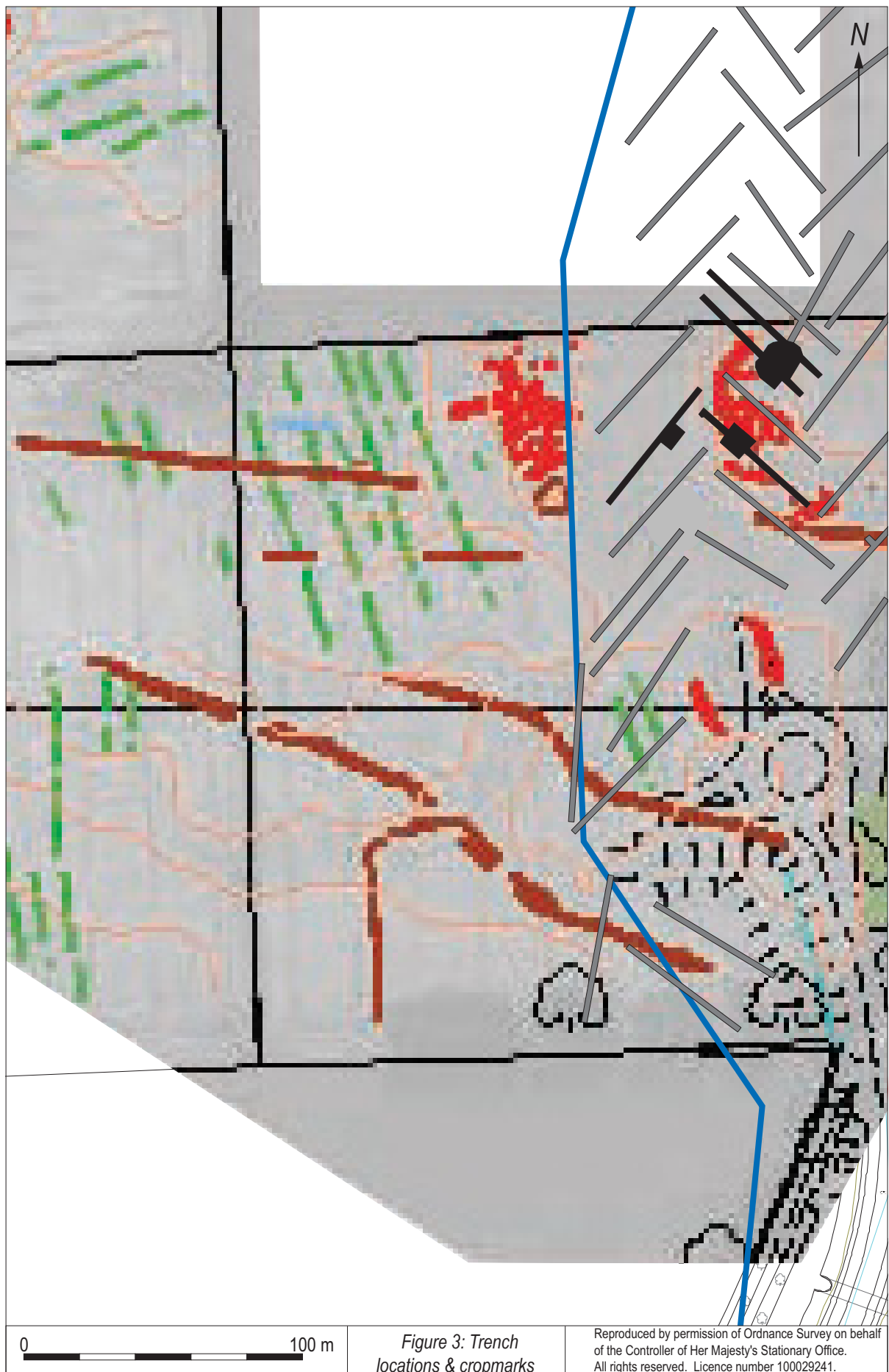
The full details of the watching brief methodology are outlined in Appendix 12.6.

### 6.2 *Evaluation*

The evaluation (Stage 2) comprised a total of 129 trial trenches, amounting to a total of just over 8% of the available land within the proposed development area. The trenches were evenly distributed across the proposed development area (Figure 2). There was an overhead power line in the northern part of the southern field and so a buffer zone of 15 m was left beneath the power line.

The trenches were opened using a mechanical excavator operating under the instruction and constant supervision of a suitably qualified archaeologist. The mechanical excavator removed the topsoil and any other modern made-ground deposits to the level of the natural subsoil or the first significant archaeological horizon, whichever was encountered first. The back-acting mechanical excavator was fitted with c 2 m wide flat-bladed (toothless) ditching bucket during all trench opening operations.

Areas of potential archaeological interest within each trench were cleaned by hand. Any archaeological remains encountered were recorded and excavated insofar as to determine the character, extent, quality, date and complexity of the features/deposits present. Where potentially highly significant archaeological features/deposits fell outwith the limits of the evaluation trench, the trenches were extended in an attempt



to fully define the extent of the archaeology present. The more pronounced linear features were excavated with slots, while others, which were thought to be either natural hollows or cultivation furrows were recorded with a sketch plan and photography, but not excavated.

The written record of all archaeological features, deposits and finds were by means of conventional *pro forma* sheets. Scaled hand-drawn plans were made at 1:20 and sections at 1:10. Black and white and colour record photographs were also be taken, along with digital images.

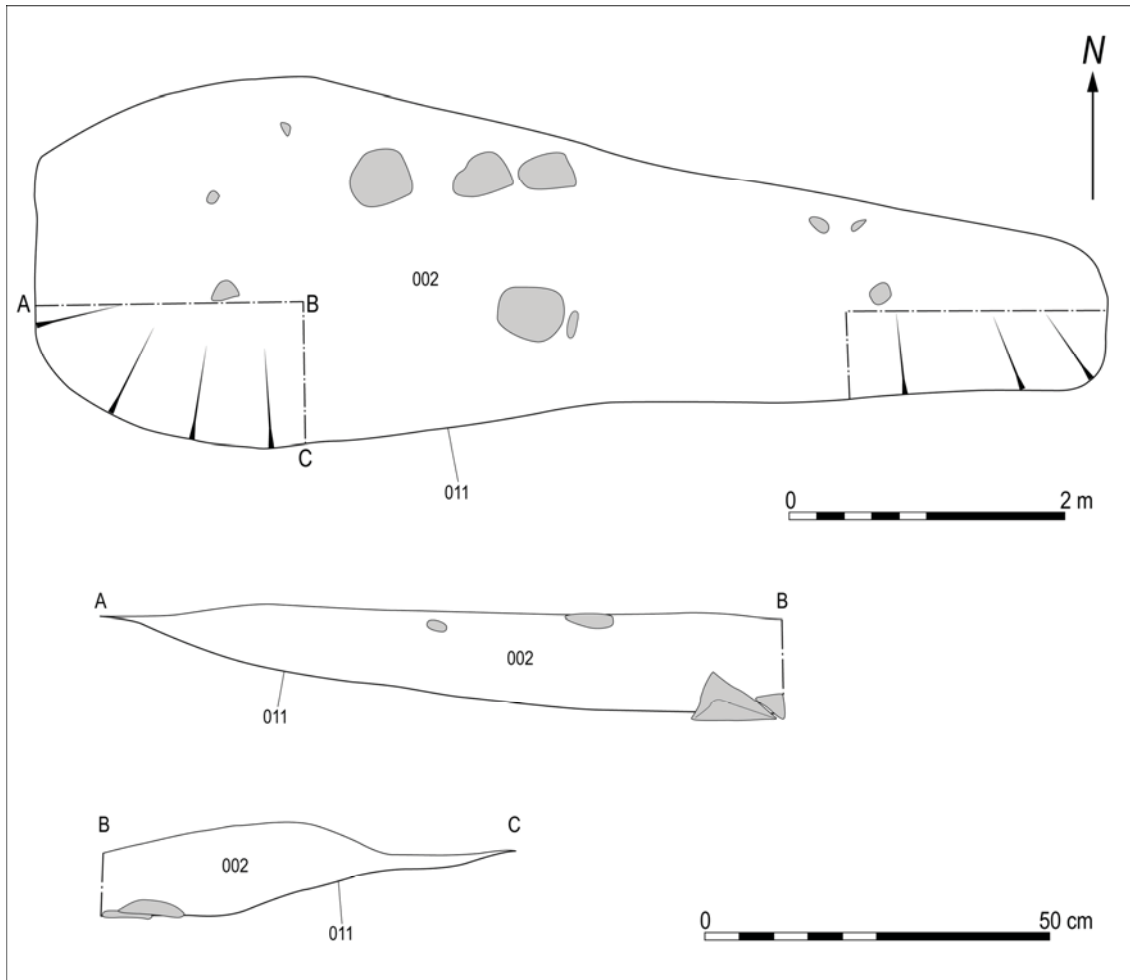


Figure 4: Plan and sections through feature 002.

All trenches were surveyed with a sub-centimetre GPS in order to tie them to the OS grid. The trenches were reinstated through the course of the works, although trenches where significant archaeology was encountered were left open to allow Dundee City Council Archaeology Service appropriate inspection. The trenches with significant archaeological remains were finally reinstated after agreement with Dundee City Council Archaeology Service, after the covering of the archaeological features with terram, and under archaeological supervision in the form of a watching brief.

The full details of the evaluation methodology are outlined in Appendix 12.6.

## 7.0 Results

### 7.1 Test Pit Watching Brief

A total of 37 test pits were monitored by an archaeologist on 5 October 2009. The test pits measured 2 m by 3 m and varied in depth between 0.4 m and 1.0 m. No archaeological features were noted and no finds were retrieved.



## 7.2 Evaluation

### 7.2.1 Significant Archaeology

Of the 129 trenches excavated, four trenches contained moderately significant archaeology (Figure 3 & Table 1).



*Plate 1:*

*Possible corn-drying kiln, Trench 026.*

#### *Trench 26 – Possible Corn-drying Kiln*

Towards the east side of the proposed cemetery area there was a bottle-shaped feature (002) which measured 3.7 m long and 1.4 m wide cut into subsoil (Figure 4 and Plate 1). It was filled with a mid brown silty loam with charcoal flecks. The trench was widened to reveal its full extent. Two slots were excavated into the fill of this feature, which revealed it to be a shallow hollow (0.15 m deep) with gently sloping sides. The base of the feature was compact but had not been heat reddened. There was charcoal noted in the fill but carbonised grains were not visible. This feature has been severely plough truncated.

An area measuring 15 m by 15 m, centred on this feature, was stripped of topsoil to see if there were any other archaeological features in the vicinity, but none were found.



*Plate 2:*

*Boulder surface, Trench 111.*

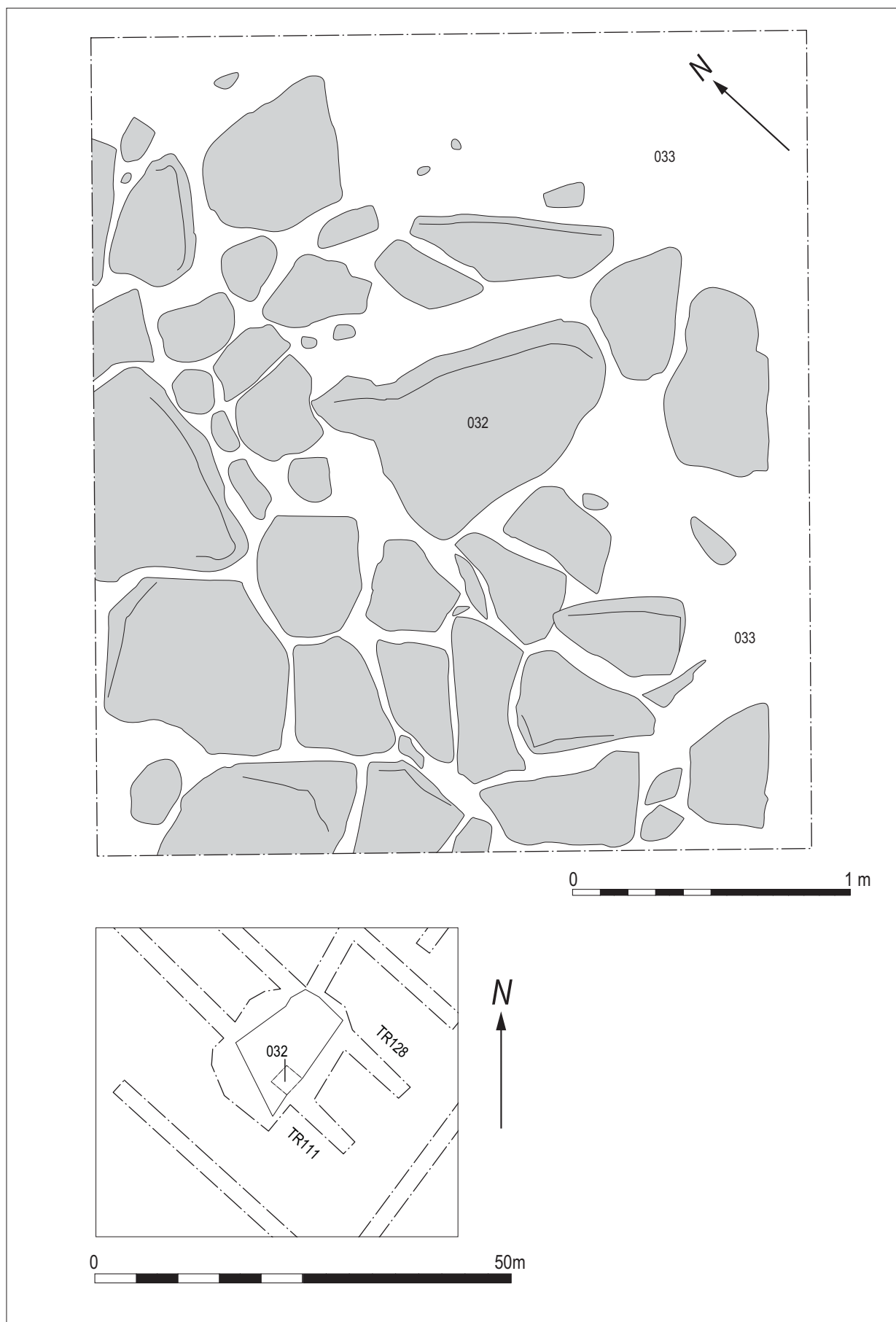


Figure 5: Plan of stone surface 032.

*Trench 111 & 128 - Boulder Surface*

A surface of large, flat-topped boulders was revealed immediately below 0.4 m of topsoil. The trench was extended to reveal the extent of the surface which was found to measure about 11.5 m by 9 m. A small area of this surface was cleaned and planned (Figure 5 and Plate 2). The soil immediately above the surface did not contain any pottery or other artefacts. Two stones were lifted and the surface was found to be sitting on sand and gravel (040) which did not contain any artefacts and appeared to be natural subsoil.



*Plate 3:*

*Group of pits, Trench 113.*



*Plate 4:*

*Pits 025 & 027, partly excavated, Trench 113.*

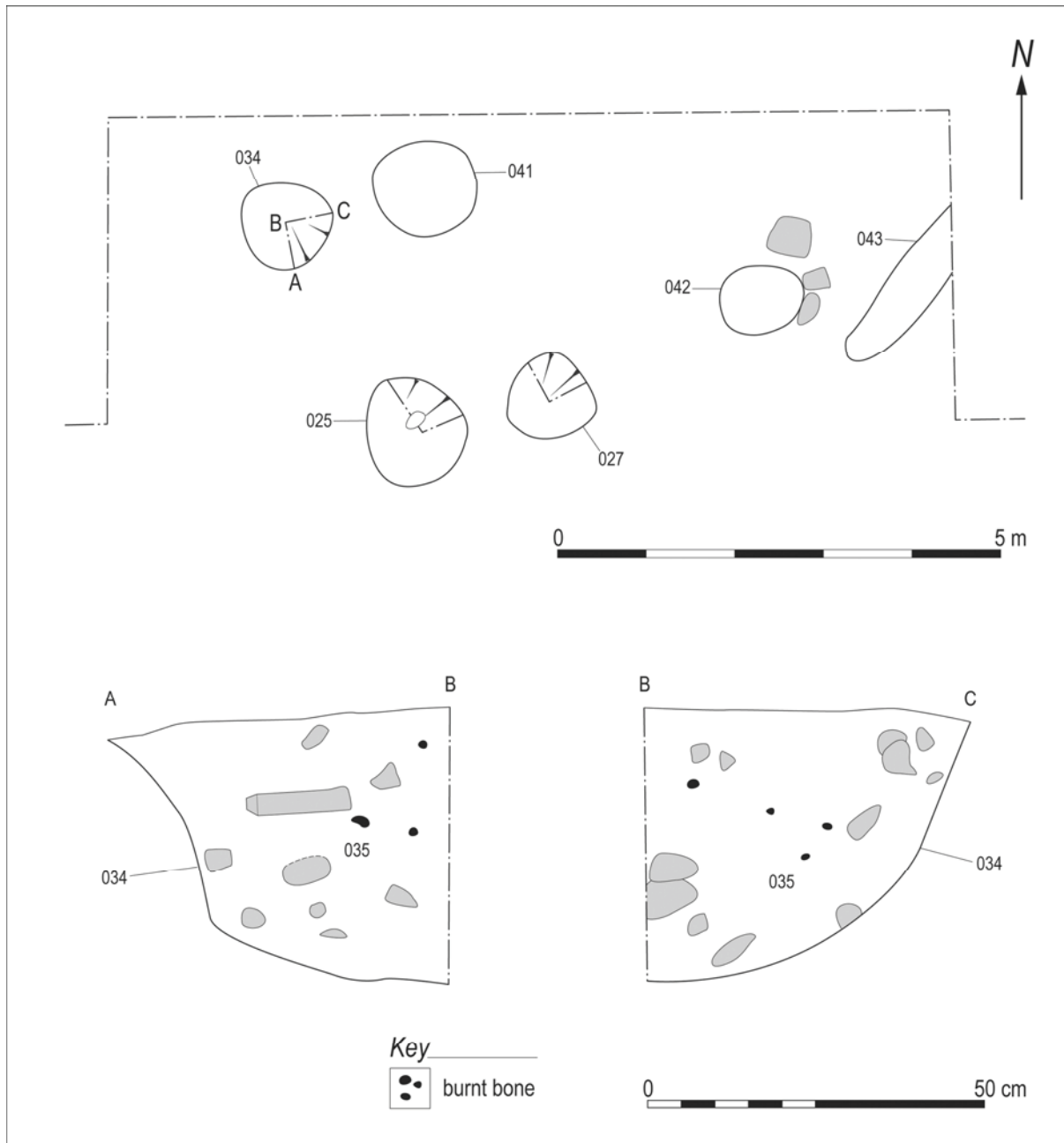


Figure 6: Plan of pits  
and section through pit 034.

#### *Trench 113 – Five Circular Pits and a Linear Feature*

Initially two circular features were observed within Trench 113 and so the trench was extended around these features to 9 m by 9 m (Figure 6). In total, five circular features (025, 027, 034, 041 & 042) and one linear feature (043), cut into subsoil, were revealed in this trench (Plates 3 & 4). These features ranged between 0.8 m and 1.2 m in diameter. Quadrants of three of these features were excavated and the depths ranged from 0.30 m to 0.46 m. The fills (026, 028, 035, 041 & 042) were all dark brown in colour and contained charcoal. The fill (035) of pit 034 also contained burnt bone (some of which is antler (SF 6)) and possibly fire-cracked stones. The fill (026) of pit 025 contained a fragment of a thin sheet of copper alloy (SF 4) and other carbonised material (SF 5). No pottery or other dating evidence was retrieved. While not fully excavated, the NE/SW aligned linear feature (043) was at least 0.48 m long and was filled with dark brown clayey silt.





*Plate 5:  
Ash spreads 022 & 023, Trench 118.*



*Plate 6:  
Hollow with orange ash 024, Trench 118.*

#### *Trench 118 – Three Ash Spreads*

Three orange and black ash spreads were found within Trench 118 (Plates 5 & 6). Initially a lens of ash (022) and a hollow filled with orange ash (024) were seen on the side of the trench at a depth of 0.8 m below the surface, cut into a dark clay loam, 0.3 m above the natural subsoil. Once the trench was expanded a further hollow filled with ash (023) was revealed about 0.2 m to the east of (022). The trench was expanded to 3 m by 8 m, but no other features were observed.

The remains of the ash spread (022) was semi-circular in shape, 0.1 m deep and formed a slight mound. There was a large flat stone just south of it lying at the same horizon. The ash deposit (022) sat within a



roughly circular hollow with an uneven base. The orange ash (024) filled a possibly oval-shaped hollow 0.2 m deep and 0.48 m wide.

### 7.2.2 *Non-significant Archaeology*

There were several other oval or circular features within four trenches, which were not considered archaeologically significant as they either contained modern pottery or had similar fills to those features that contained modern pottery. These included pit 001 (Trench 26), pit 012 (Trench 7), pit 030 (Trench 030) and pit 031 (Trench 129).

There was a possible post-hole 006 in Trench 23. This appeared to be an isolated feature and there was no dating evidence to suggest that it was prehistoric.



*Plate 7:*

*Linear feature with horse skull, Trench 114.*



*Plate 8:*

*Drystone wall, Trench 47.*

There were several shallow linear features aligned N/S, about 0.3 m-0.5 m wide, which were probably remnants of rig and furrow. These included ditch 003 (Trench 25), ditch 005 (Trench 14), ditch 007 (Trench 27), ditch 018 (Trench 88) and ditch 029 (Trench 117). The fill of these features was very similar to the topsoil.

Other ditches were aligned NW/SE. These included ditch 013 (SF 2, Trench 40), ditch 014 (Trench 61), ditch 036 (Trench 108) and ditch 038 (Trench 108). There was a single ditch aligned NE/SW, ditch 020 (Trench 114) which contained a horse skull (SF 3), probably modern (Plate 7), but no other finds. There was one ditch aligned E/W, ditch 016 (Trench 60).

In the W field, in Trench 47, there were the remains of a demolished drystone wall (Plate 8). This had a very shallow foundation of a slight cut (1 m wide) cut into the natural subsoil. The stones consisted of rough angular slabs and boulders which had been disturbed. The trench was expanded 7 m by 7 m and the alignment of the wall was found to be N/S. There were no artefacts associated with the walling, and it was sealed by only topsoil which contained modern pottery. This wall does not match with the field boundaries on the First Edition map (Ordnance Survey 1865) and is therefore likely to be slightly earlier, perhaps late 18<sup>th</sup> century in date.

The remaining features which were examined consisted of natural spreads, animal burrows or tree roots (004 (Trench 13), 008 & 009 (Trench 34) and 010 (Trench 73)).

Plough marks, aligned E/W, were common features across most of the evaluation trenches indicating that modern cultivation has been deep and extensive.

*Table 1: Evaluation Trenches*

<i>Trench</i>	<i>Area m<sup>2</sup></i>	<i>Topsoil</i>	<i>B Horizon</i>	<i>Subsoil</i>	<i>Subsoil depth (m)</i>	<i>Details</i>
1	106	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	No significant archaeology
2	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.5	No significant archaeology
3	102	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.5	No significant archaeology
4	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.5	No significant archaeology
5	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	No significant archaeology
6	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	No significant archaeology
7	295	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.6	Modern pit 012, no significant archaeology
8	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	No significant archaeology
9	106	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	No significant archaeology
10	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.5	No significant archaeology
11	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.5	No significant archaeology
12	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.5	No significant archaeology
13	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	No significant archaeology
14	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	Linear feature 005, ditch or furrow. No significant archaeology
15	104	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	No significant archaeology
16	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	No significant archaeology

<i>Trench</i>	<i>Area m<sup>2</sup></i>	<i>Topsoil</i>	<i>B horizon</i>	<i>Subsoil</i>	<i>Subsoil depth (m)</i>	<i>Details</i>
17	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.5	No significant archaeology
18	100	Mid brown silty loam with stones	-	Grey/orange brown sand & gravel	0.4	No significant archaeology
19	100	Mid brown silty loam with stones	-	Grey/orange brown sand & gravel	0.4	No significant archaeology
20	100	Mid brown silty loam with stones	-	Grey/orange brown sand & gravel	0.6	No significant archaeology
21	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	No significant archaeology
22	100	Mid brown silty loam with stones	-	Light brown silty gravel	0.4	No significant archaeology
23	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	Possible post-hole, feature 006. No significant archaeology
24	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	No significant archaeology
25	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.3	Linear feature 003, ditch or furrow. No significant archaeology
26	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	Oval shaped feature, possible corn-drying kiln (002)
27	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	Linear feature 007, ditch or furrow. No significant archaeology
28	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	No significant archaeology
29	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.5	No significant archaeology
30	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	No significant archaeology
31	100	Mid brown silty loam with stones	-	Light brown silty gravel	0.6	No significant archaeology
32	100	Mid brown silty loam with stones	Dark brown silty clay	Light brown silty gravel	1.0	No significant archaeology
33	100	Mid brown silty loam with stones	-	Light brown silty gravel	0.6	No significant archaeology
34	100	Mid brown silty loam with stones	Light orange brown silty clay	Orange brown sand & gravel	0.6	Natural features 008 & 009. No significant archaeology
35	100	Mid brown silty loam with stones	-	Red brown gravel & weathered bedrock	0.3	No significant archaeology
36	100	Mid brown silty loam with stones	-	Red brown gravel & weathered bedrock	0.4	No significant archaeology
37	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.5	No significant archaeology
38	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.5	No significant archaeology
39	100	Mid brown silty loam with stones	Red brown silty gravel	Red brown gravel & weathered bedrock	1.0	Tree roots. No significant archaeology
40	100	Mid brown silty loam with stones	-	Red brown gravel & weathered bedrock	0.4	Patches of charcoal (013) & modern pottery. No significant archaeology
41	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	No significant archaeology

<i>Trench</i>	<i>Area m<sup>2</sup></i>	<i>Topsoil</i>	<i>B horizon</i>	<i>Subsoil</i>	<i>Subsoil depth (m)</i>	<i>Details</i>
42	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.5	No significant archaeology
43	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	No significant archaeology
44	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	No significant archaeology
45	100	Mid brown silty loam with stones	Red brown silty gravel	Orange brown sand & gravel	0.6	No significant archaeology
46	100	Mid brown silty loam with stones	Red brown silty gravel	Orange brown sand & gravel	0.5	No significant archaeology
47	149	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.5	Collapsed Post-medieval drystone wall. No significant archaeology
48	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	No significant archaeology
49	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.6	No significant archaeology
50	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.5	No significant archaeology
51	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.5	No significant archaeology
52	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.5	No significant archaeology
53	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.6	No significant archaeology
54	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.5	No significant archaeology
55	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	No significant archaeology
56	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.6	No significant archaeology
57	100	Mid brown silty loam with stones	-	Red brown sand & gravel	0.5	No significant archaeology
58	100	Mid brown silty loam with stones	-	Red brown sand & gravel	0.4	No significant archaeology
59	100	Mid brown silty loam with stones	-	Red brown sand & gravel	0.4	No significant archaeology
60	104	Mid brown silty loam with stones	-	Red brown sand & gravel	0.4	Shallow linear feature, aligned E-W, feature 016. No significant archaeology
61	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	Linear feature aligned NW-SE, feature 014. Ditch /furrow. No significant archaeology
62	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.5	No significant archaeology
63	102	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.5	Tree roots. No significant archaeology
64	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	No significant archaeology
65	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.5	No significant archaeology
66	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.5	No significant archaeology
67	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	No significant archaeology
68	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	No significant archaeology

<i>Trench</i>	<i>Area m<sup>2</sup></i>	<i>Topsoil</i>	<i>B horizon</i>	<i>Subsoil</i>	<i>Subsoil depth (m)</i>	<i>Details</i>
69	100	Mid brown silty loam with stones	Red brown silty gravel	Orange brown sand & gravel	0.8	No significant archaeology
70	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.5	No significant archaeology
71	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	No significant archaeology
72	108	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.5	Linear feature, aligned N-S, ditch /furrow. No significant archaeology
73	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	Tree root (010). No significant archaeology
74	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.5	No significant archaeology
75	100	Mid brown silty loam with stones	-	Orange brown sand & gravel with weathered bedrock	0.5	Linear feature, aligned N-S, ditch /furrow. No significant archaeology
76	100	Mid brown silty loam with stones	-	Orange brown sand & gravel with weathered bedrock	0.5	No significant archaeology
77	100	Mid brown silty loam with stones	-	Orange brown sand & gravel with weathered bedrock	0.4	No significant archaeology
78	100	Mid brown silty loam with stones	-	Orange brown sand & gravel with weathered bedrock	0.4	No significant archaeology
79	100	Mid brown silty loam with stones	-	Orange brown sand & gravel with weathered bedrock	0.4	No significant archaeology
80	100	Mid brown silty loam with stones	-	Orange brown sand & gravel with weathered bedrock	0.5	No significant archaeology
81	100	Mid brown silty loam with stones	-	Orange brown sand & gravel with weathered bedrock	0.4	No significant archaeology
82	100	Mid brown silty loam with stones	-	Orange brown sand & gravel with weathered bedrock	0.4	No significant archaeology
83	100	Mid brown silty loam with stones	-	Orange brown sand & gravel with weathered bedrock	0.4	Linear feature, aligned N-S, ditch /furrow. No significant archaeology
84	100	Mid brown silty loam with stones	-	Orange brown sand & gravel with weathered bedrock	0.4	No significant archaeology
85	100	Mid brown silty loam with stones	-	Orange brown sand & gravel with weathered bedrock	0.4	No significant archaeology
86	100	Mid brown silty loam with stones	-	Orange brown sand & gravel with weathered bedrock	0.5	No significant archaeology
87	100	Mid brown silty loam with stones	-	Orange brown sand & gravel with weathered bedrock	0.5	No significant archaeology



<i>Trench</i>	<i>Area m<sup>2</sup></i>	<i>Topsoil</i>	<i>B horizon</i>	<i>Subsoil</i>	<i>Subsoil depth (m)</i>	<i>Details</i>
88	100	Mid brown silty loam with stones	-	Orange brown sand & gravel with weathered bedrock	0.5	Linear feature (018), aligned N-S, ditch /furrow. No significant archaeology No significant archaeology
89	100	Mid brown silty loam with stones	-	Orange brown sand & gravel with weathered bedrock	0.5	No significant archaeology
90	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.5	No significant archaeology
91	100	Mid brown silty loam with stones	Orange brown silty gravel	Orange brown sand & gravel with weathered bedrock	0.6	Linear feature, aligned NE-SW, ditch /furrow. No significant archaeology.
92	100	Mid brown silty loam with stones	Orange brown silty gravel	Orange brown sand & gravel with weathered bedrock	0.7	No significant archaeology
93	100	Mid brown silty loam with stones	Orange brown silty gravel	Orange brown sand & gravel with weathered bedrock	0.6	No significant archaeology
94	100	Mid brown silty loam with stones	Dark brown silty clay	Orange sandy gravel & dark organic patches	1.2	Linear feature, aligned N-S, ditch /furrow. No significant archaeology
95	100	Mid brown silty loam with stones	-	Orange brown sand & gravel with weathered bedrock	0.6	Linear feature, aligned N-S, ditch /furrow. No significant archaeology
96	100	Mid brown silty loam with stones	-	Orange brown sand & gravel with weathered bedrock	0.5	Linear feature, aligned N-S, ditch /furrow. No significant archaeology
97	100	Mid brown silty loam with stones	-	Orange brown sand & gravel with weathered bedrock	0.8	No significant archaeology
98	100	Mid brown silty loam with stones	-	Orange brown sand & gravel with weathered bedrock	0.6	No significant archaeology
99	100	Mid brown silty loam with stones	Dark brown silty clay	Orange sandy gravel & dark organic patches	1.0	Linear feature, aligned N-S, ditch /furrow. No significant archaeology
100	100	Mid brown silty loam with stones	-	Orange brown sand & gravel with weathered bedrock	0.5	No significant archaeology
101	100	Mid brown silty loam with stones	-	Orange brown sand & gravel with weathered bedrock	0.5	No significant archaeology
102	100	Mid brown silty loam with stones	-	Orange brown sand & gravel with weathered bedrock	0.8	Linear feature, aligned N-S, ditch /furrow. No significant archaeology
103	100	Mid brown silty loam with stones	-	Orange brown sand & gravel with weathered bedrock	0.5	Linear feature, aligned N-S, ditch /furrow. No significant archaeology

<i>Trench</i>	<i>Area m<sup>2</sup></i>	<i>Topsoil</i>	<i>B horizon</i>	<i>Subsoil</i>	<i>Subsoil depth (m)</i>	<i>Details</i>
104	100	Mid brown silty loam with stones	-	Orange brown sand & gravel with weathered bedrock	0.5	No significant archaeology
105	100	Mid brown silty loam with stones	Dark brown silty clay	Orange brown sand & gravel with weathered bedrock	1.1	No significant archaeology
106	100	Mid brown silty loam with stones	Dark brown silty clay	Orange sandy gravel & dark organic patches	1.25	Demolished old field wall. No significant archaeology
107	100	Mid brown silty loam with stones	Dark brown silty clay	Orange brown sand & gravel	0.9	No significant archaeology
108	100	Mid brown silty loam with stones	Dark brown silty clay	Orange brown sand & gravel	1.2	Linear features (036& 038), aligned N-S, ditches /furrows. No significant archaeology
109	58	Mid brown silty loam with stones	Dark brown silty clay	Orange brown sand & gravel	0.9	No significant archaeology
110	100	Mid brown silty loam with stones	Dark brown silty clay	Orange brown sand & gravel	1.0	No significant archaeology
111	280	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	Boulder surface (032)
112	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.6	No significant archaeology
113	181	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.4	Five circular pits (025, 034, 027, 041, 042) and a linear feature (043).
114	100	Mid brown silty loam with stones	Dark brown silty clay	Orange brown sand & gravel	1.2	Liner feature aligned E-W, with horses head. No significant archaeology
115	100	Mid brown silty loam with stones	Dark brown silty clay	Mid brown silty clay gravel	1.5	No significant archaeology
116	100	Mid brown silty loam with stones	Dark brown silty clay	Orange brown sand & gravel	1.2	No significant archaeology
117	100	Mid brown silty loam with stones	Dark brown silty clay	Orange brown sand & gravel	1.1	Linear feature (029), aligned N-S, ditch /furrow. No significant archaeology
118	124	Mid brown silty loam with stones	Dark brown silty clay	Orange brown sand & gravel	1.1	Three patches of ash & charcoal (022, 023 & 024).
119	100	Mid brown silty loam with stones	Dark brown silty clay	Orange brown sand & gravel	1.1	Linear features, aligned E-W, ditch /furrow. No significant archaeology
120	100	Mid brown silty loam with stones	Dark brown silty clay	Orange brown sand & gravel with weathered bedrock	0.9	Shallow pit. No significant archaeology
121	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.5	Linear features, aligned E-W, ditch /furrow. No significant archaeology
122	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.5	Linear feature, aligned N-S, ditch /furrow. No significant archaeology

<i>Trench</i>	<i>Area m<sup>2</sup></i>	<i>Topsoil</i>	<i>B horizon</i>	<i>Subsoil</i>	<i>Subsoil depth (m)</i>	<i>Details</i>
123	100	Mid brown silty loam with stones	Dark brown silty clay	Orange brown sand & gravel	0.5	No significant archaeology
124	100	Mid brown silty loam with stones	Dark brown silty clay	Green/yellow sandy gravel	1.0	Linear feature, aligned N-S, ditch /furrow. No significant archaeology
125	100	Mid brown silty loam with stones	Dark brown silty clay	Yellow brown sandy gravel	1.0	No significant archaeology
126	100	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.7	Linear feature, aligned N-S, ditch /furrow. No significant archaeology
127	100	Mid brown silty loam with stones	Dark brown silty clay	Yellow brown sand & gravel	1.0	Linear feature, aligned E-W, ditch /furrow. No significant archaeology
128	110	Mid brown silty loam with stones	Dark brown silty clay	Orange brown sand & gravel	1.1	No significant archaeology
129	90	Mid brown silty loam with stones	-	Orange brown sand & gravel	0.6	Oval shaped feature (031). No significant archaeology

## 8.0 Discussion

### 8.1 *Interpretation of Evaluation Results*

The natural subsoil deposits are glacial meltwater deposits of sand and gravel which appears to have formed a slightly mounded landscape. A deep agricultural topsoil (0.4 m – 0.5 m thick) has built up over these natural deposits, although plough marks in the subsoil indicate that deep ploughing has taken place. On the tops of these mounds the ploughsoil is generally 0.4 m to 0.5 m deep. However, within the hollows there are deposits up to 1.5 m deep, which consist of ploughsoil over a deep ‘B’ horizon, which lies occasionally over a natural thin dark spread. The deeper deposits are generally found in the south field, to the north and south of the slight rise (centred on Trench 113 – Figure 2).

The evaluation found four areas of moderately significant archaeology. These included:

- a possible corn-drying kiln in Trench 26;
- a boulder surface in Trench 111 and 128;
- a group of five pits and a linear feature in Trench 113 and;
- a group of ash spreads and hollows in Trench 118.

While no dating evidence was recovered from the limited sample excavation of these features during the evaluation, the absence of post-medieval and modern material indicates that it is feasible that these are potentially prehistoric in date, given the proximity of prehistoric cropmarks.

The bottle-shaped feature in Trench 26 has been interpreted as a potential corn-drying kiln primarily because of its shape and the presence of charcoal, though it should be noted that while the base of the feature was compact it had not been heat reddened, and that while charcoal was observed in the fill, carbonised grains were not visible. Despite this, the shape of this severely plough-truncated feature is consistent with a bowl-shaped kiln, over which the grain would be laid, with a linear flue drawing in hot air from a fire to dry the grain. Medieval corn-drying kilns are generally lined with stones and associated with medieval pottery (Gibson 1989; James & Bowles 2007; James *et al* 2008) and so this example may be early historic or prehistoric in date.

The boulder surface in Trenches 111 and 128 was roughly made, with no special edging stones and there was no direct evidence for its purpose or date. However, this surface could be a possible agricultural

working surface, perhaps a threshing floor or hay stack stance, which might leave no archaeological finds. The presence of only topsoil above it might suggest that it was fairly recent in date, but its location within the general vicinity of souterrains and groups of pits (Figures 1 & 3) may indicate a much earlier, perhaps late Iron Age date, especially given the parallels with the Iron Age unenclosed settlement and Early Historic metalworking area at Hawkhill in Angus (Rees 2009, 22-72), which, along with a souterrain and groups of pits, contained two areas of rough paving, one associated with a roundhouse while at the other no structure was detected.

The group of pits in Trench 113 contained charcoal, unidentified burnt material, burnt bone including some antler and a fragment of a copper sheet. In terms of function, the pits were probably dug for the disposal of burnt debris. This assemblage, however, is fairly undiagnostic and could be of any date, although the lack of post-medieval and modern material might again suggest that they are prehistoric, given their proximity to the prehistoric cropmarks at West Pitkerro and the ubiquity of pits containing burnt material generally associated with prehistoric settlement.

A single unstratified flint flake (SF 9) was found in the vicinity of Trench 99. This has been identified as a primary bi-polar flake in orange flint (fine-grained) from a pebble. While there was no modification or use wear and it is undiagnostic (pers.comm. Torben Bjarke Ballin), this might nevertheless suggest a low level prehistoric presence.

The ash spreads evident in Trench 118 are difficult to interpret. They could be evidence of more extensive settlement, perhaps associated with the pits, although equally they could be more recent in date.

There were other features which were not considered archaeologically significant. Two demolished drystone field walls were found within the development area. One aligned N/S in Trench 47 is thought to be late 18<sup>th</sup> century in date. Another demolished wall, aligned E/W, was noted in Trenches 106, 110, and as a linear feature with no visible stones in Trench 128. This feature corresponds with a wall which used to extend across this field as depicted on the First Edition map (Ordnance Survey 1865) and is therefore 19<sup>th</sup> century in date. Several other linear features were interpreted as cultivation furrows of no archaeological significance.

## 8.2 *Discussion of Archaeological Features within Wider Context of Previously Recorded Cropmarks*

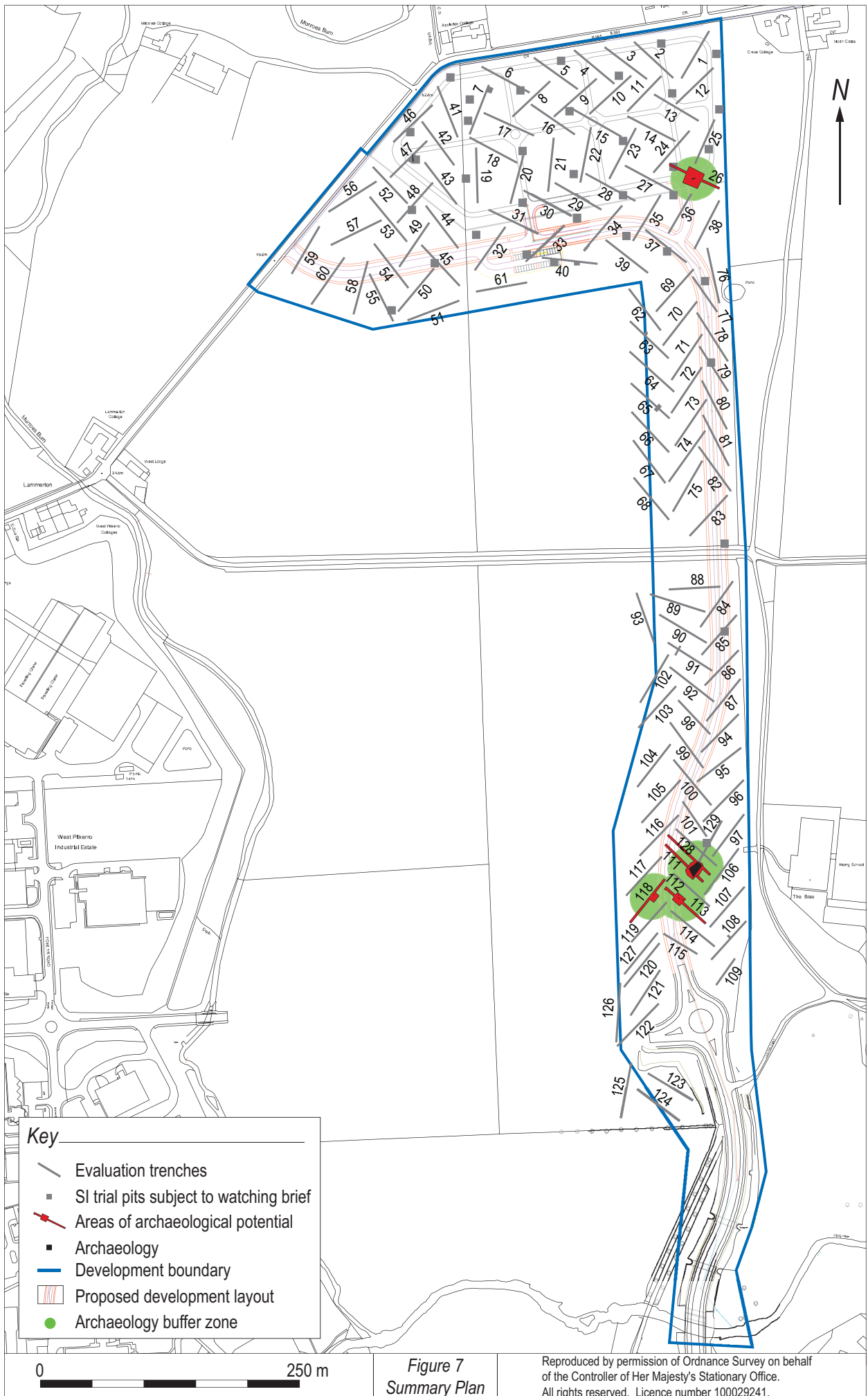
There were three types of cropmark features identified in the desk-based assessment undertaken prior to the fieldwork (Figures 1 & 3).

### *Pits and Possible Souterrains* (red features in Figure 3)

A cluster of features was noted on aerial photographs prior to this evaluation and interpreted as a possible souterrain, scattered pits and a possible round house (Site 1; NO43SE 498). This cluster (marked in red) corresponds with the summit of a slight rise. The evaluation revealed evidence for a group of pits (Trench 113) on the summit of this rise. Although the pits were seen in an area measuring about 9 m by 4 m, the linear feature associated with these features was not fully revealed and the extent of the cropmark would suggest that the activity associated with these pits is fairly extensive, although no other features were noted in other trenches. The boulder surface found in Trenches 111 and 128 is located on the northern slope of the slight rise and therefore does not correspond with a cropmark.

### *Wide Linear Features* (brown features in Figure 3)

The wide linear features, aligned NW/SE, were crossed by five trenches. The results from these trenches were variable and not unequivocal. The most northerly of the linear cropmarks was crossed by two trenches. This is thought to be a modern ditch as it was very straight and contained a horse skull (Trench 114). This skull was in poor condition, but given the soil conditions, it would have decayed completely if it had been in the ground for very long. No trace of the feature was seen in Trench 108, the only feature here being aligned N/S. The two southerly, slightly curving, linear cropmarks were crossed by three trenches. In Trench 126 there was a linear feature 1.0 m wide and 0.2 m deep with a topsoil-like fill, which possibly relates to it. In Trench 125 there was a deep hollow 13 m wide which was interpreted as a palaeo-channel and in Trench 122 there was no evidence. These features may therefore be a result of a combination of natural palaeo-channels and modern drainage.





NW/SE Aligned Cropmarks (green features in Figure 3)

Two trenches crossed these particular cropmarks, Trenches 121 and 122. Both had evidence for linear features aligned N/S which were investigated with small slots (no context numbers were given). These were found to be about 1.0 m wide and were only about 0.1 m deep and contained a soil similar to topsoil but which contained no finds. These, as well as the several other examples of N/S aligned ditches, are probably pre-modern cultivation furrows.

## 9.0 Mitigation

If the design of the proposed cemetery development is flexible at this stage it may be possible to avoid each of the four moderately significant (ie no more than locally important) archaeological remains discovered during the evaluation phase of work, either by creating c. 20 m diameter buffer zones around each discrete cluster of archaeological features or not penetrating subsoils. If this is not possible, an additional phase or phases of work, potentially incorporating full excavation, may be designed in a supplementary document or documents after further consultation with Dundee City Council, in accordance with the agreed Method Statement (Toolis 2009, section 5.2).

As the Method Statement outlines, should significant archaeological remains be identified during the evaluation fieldwork (Stage 2), and which cannot be preserved in situ, Stage 3 will involve the implementation of appropriate archaeological mitigation measures, which may consist of further evaluation and/or excavation and recording of features that will be destroyed by development works, or watching brief activity, or a combination of the above. Stage 4 will include suitable post-excavation analysis, reporting, and publication of discovered archaeological remains, if appropriate. Further details of Stages 3 and 4 of the work programme cannot be developed until such time as the Stage 2 evaluation report has been approved by Dundee City Council.

## 10.0 Acknowledgements

The initial and final watching briefs were carried out by Kevin Mooney and Ross Cameron respectively. The evaluation was directed by Heather James assisted by Maureen Kilpatrick and Fiona Jackson. The project was managed for GUARD by Ronan Toolis. Thanks go to Torben Bjarke Ballin for identification of the flint and to Eduard Masson-MacLean for identification of the horse skull and antler bone.

The project was commissioned by Macleod Consulting, acting on behalf of Dundee City Council, and was monitored by Tom Rees, Archaeological Advisor to Dundee City Council.

This report was edited by Ronan Toolis and desktop published by Jen Cochrane.

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## 12.0 Appendices

### 12.1 *List of Contexts*

<i>Context</i>	<i>Trench</i>	<i>Description</i>	<i>Interpretation/Relationships</i>
001	026	Circular feature, fill is like topsoil, contained modern pottery	Modern feature
002	026	Mid brown silty loam with charcoal flecks within a bottle - shaped feature 3.7 m long, 1.4 m wide and 0.15 m deep.	Within cut 011, possible corn-drying kiln
003	025	Linear feature aligned N-S, 0.35 m wide 0.07 m deep. Fill is a stony grey brown sandy silt, similar to topsoil	Ditch/furrow
004	013	Oval-shaped feature 0.45 m by 0.30 m, & 0.10 m deep, filled with grey brown silty loam and a few stones.	Animal burrow
005	014	Linear feature, 0.3 m wide, 0.05 m deep, aligned N-S filled with grey brown silty loam.	Ditch/furrow
006	023	Circular feature 0.3 m in diameter, & 0.15 m deep, filled with dark brown silty gravel & occasional charcoal frags and numerous small stones.	Post-hole
007	027	Linear feature 0.3 m wide, 0.10 m deep, aligned N-S, filled with mid brown silty gravel.	Ditch/furrow
008	034	Area of rounded cobbles and angular stones	Over layer 009
009	034	Dark grey silt within a hollow 0.03 m deep	Natural
010	073	Irregular patch of dark brown greasy silt, 0.5 m by 0.3 m by 0.07 m deep.	Tree root
011	026	Shallow, bottle shaped cut.	Filled with 002. Truncated corn-drying kiln.
012	007	Oval shaped feature, 2.8 m by 0.4 m by 0.18 m deep. Filled with mid brown sandy silt and stones. Contained modern pottery.	Modern pit
013	040	Linear feature 4.6 m long and 0.08 m deep, filled with dark brown clay silt & charcoal flecks. Contains modern pottery. Aligned NW-SE.	Modern linear feature
014	061	Linear feature 0.65 m wide & 0.33 m deep. Aligned NW-SE filled with a mid-brown clay silt	Ditch/furrow
015	061	Cut for linear feature 014, rounded base	Cut for 014, ditch
016	060	Linear feature. 1.9 m long by 0.5 m wide & c. 0.15 m deep. Aligned E-W. Fill a dark brown silt	Ditch/furrow, fills 017
017	060	Cut for 016	Truncated ditch/furrow, cut for 016
018	088	Linear feature, 0.3 m wide, 0.08 m deep. Aligned N-S, filled with mid brown silt and pebbles.	Ditch/furrow, fills 019
019	088	Truncated linear feature, Shallow U-shaped cut.	Cut for 018
020	114	Linear ditch, aligned NE-SW, 0.7 m wide, 0.32 m deep. Filled with loose mid brown silt, large flat slab and a horse skull.	Fill of 021

<i>Context</i>	<i>Trench</i>	<i>Description</i>	<i>Interpretation/Relationships</i>
021	114	Round bottomed ditch	Cut for 020, modern ditch
022	118	Layer of charcoal and orange ash. Extends for 0.5 m by 0.5 m and 0.08 m deep.	Hearth spread
023	118	Patch of orange ash within an irregular shaped hollow. Measures 0.5 m by 0.4 m by 0.10 m deep.	Hearth spread
024	118	Orange ash within a circular shaped feature. 0.5 m in diameter and 0.2 m deep.	Ash pit.
025	113	Cut for circular pit, 1.2 m in diameter and 0.3 m deep.	Pit, filled with 026
026	113	Dark brown greasy silt, with small stones. Charcoal and burnt bone, small Cu object and burnt material.	Fill of Pit 025
027	113	Cut for circular pit, 0.97 m in diameter and 0.32 m deep.	Pit, filled with 028
028	113	Dark brown silty gravel, some charcoal	Fill of Pit 027
029	117	Linear feature 0.3 m wide aligned N-S, filled with mid brown sandy gravel	Ditch/furrow
030	120	Circular feature 0.6 m in diameter & 0.10 m deep. Mid brown clay loam, small stones & occasional flecks of charcoal.	Shallow pit
031	129	Oval shaped feature 1.0 m by 0.6 m and 0.16 m deep. Mid brown clay loam with occasional charcoal fragments. No finds.	Shallow pit
032	111	Large boulders forming a rough flat surface. Measures about 11.5 m by 9 m. Boulders set into sand & gravel.	Working surface/threshing floor/hay stack stance? Sealed by 033, lying over 040.
033	111	Layer of orange brown clay silt and gravel, with numerous small gravelly stones.	Layer above boulders surface 032. Sealed by topsoil
034	113	Cut for sub-circular pit 0.95 m in diameter and 0.46 m deep.	Pit, filled with 035
035	113	Mid/dark-brown silty loam with flecks of burnt bone and possibly fire-cracked stones	Fill of Pit 034
036	108	Linear feature aligned NW-SE 0.77 m wide and 0.11 m deep, flat bottomed. Filled with 037	Ditch/furrow
037	108	Orange brown clay silt.	Fill of 036
038	108	Linear feature aligned NW-SE, 0.56 m wide & 0.17 m deep.	Ditch/furrow
039	108	Dark brown clay silt, with sea shells and unburnt animal bone.	Fill of 038
040	111	Dark brown clay silt & gravel	Sealed by boulder surface 032. Possibly natural subsoil
041	113	Sub-circular-shaped feature, 0.93 m by 0.80 m. Not excavated.	Pit One of group including pits 025, 027 & 034
042	113	Sub-circular-shaped feature, 0.8 m by 0.7 m. Dark brown clay silt fill. Not excavated.	Pit To east of group of pits 025, 027, 034 & 041

<i>Context</i>	<i>Trench</i>	<i>Description</i>	<i>Interpretation/Relationships</i>
043	113	Linear feature, 0.48 m long orientated NE-SW, filled with dark brown clay silt. Not excavated.	Ditch/furrow, near to Pit 042.

## 12.2 *List of Finds*

<i>Trench</i>	<i>Find No</i>	<i>Context No</i>	<i>No of Pieces</i>	<i>Material</i>	<i>Description</i>
7	1	012	2	Ceramic	Modern pottery
40	2	013	1	Ceramic	Modern pottery
114	3	021	1	Bone	Horse skull
113	4	026	3	Cu	Fragments of thin sheet with charcoal
113	5	026	2		Carbonsied material
113	6	026	Several	Bone	Cremated bone, including antler
108	7	039	Frgs	Bone	Fragments
026	8	001	4	Ceramic	Modern pottery
TR 099	9	u/s	1	Flint	Orange primary bi-polar flake, undiagnostic

## 12.3 *List of Samples*

<i>Trench</i>	<i>Sample No</i>	<i>Context No</i>	<i>Size</i>	<i>Reason for Sampling</i>					<i>Application</i>
				<i>Pot</i>	<i>Bone</i>	<i>Lithics</i>	<i>Botanics</i>	<i>Other</i>	
026	1	002	S				X		
013	2	004	S				X		
014	3	005	S				X		
023	4	006	S				X		
027	5	007	S				X		
034	6	009	S				X		
073	7	010	S				X		
026	8	002	2xl				X		
040	9	013	L				X		
061	10	014	L				X		
060	11	016	L				X		
114	12	021	2xl				X		
113	13	026	3xl		X		X		
113	14	028	3xl				X		
118	15	022	L				X		
118	16	023	L				X		
118	17	024	L				X		
117	18	029	S				X		
120	19	030	S				X		
129	20	031	S				X		
088	21	019	S				X		
111	22	033	3xs				X		



<i>Trench</i>	<i>Sample No</i>	<i>Context No</i>	<i>Size</i>	<i>Reason for Sampling</i>					<i>Application</i>
				<i>Pot</i>	<i>Bone</i>	<i>Lithics</i>	<i>Botanics</i>	<i>Other</i>	
113	23	035	L				X		
113	24	035	L				X		
108	25	037	L				X		
108	26	039	L				X		
111	27	033	L				X		
114	28	021	L				X		

#### 12.4 *List of Drawings*

<i>Drawing No</i>	<i>Sheet No</i>	<i>Trench</i>	<i>Subject</i>	<i>Contexts</i>	<i>Scale</i>
1	1	26	S facing section	002, 011	1:10
2	1	26	E facing section	002, 011	1:10
3	1	26	S facing section	002, 011	1:10
4	3	026	Plan of possible kiln	002, 011	1:20
5	3	026	Plan of possible kiln, within trench	002, 011	1:50
6	1	040	Section through linear feature	013	1:10
7	1	061	SE facing section	014, 015	1:10
8	1	040	SE facing section	016, 017	1:10
9	1	114	SW facing section	020, 021	1:10
10	1	114	Plan of linear feature with horse skull	021, 020	1:10
11	2	113	SE facing section	025, 026	1:10
12	2	113	NE facing section	025, 026	1:10
13	2	113	SE facing section	027, 028	1:10
14	2	113	NW facing section	027, 028	1:10
15	4	118	Plan of features	022, 023, 024	1:20
16	2	112	S facing section		1:10
17	2	112	Stone slab		1:10
18	3	111	Post-ex plan of section of boulder surface	032, 033	1:20
19	3	111	SE facing section	034, 035	1:10
20	3	111	SW facing section	034, 035	1:10
21	3	111	Plan of circular features	025, 027, 034, 041, 042, 043	1:50
22	4	118	Section	022, 024	1:20

#### 12.5 *List of Photographs*

##### *Watching Brief of Test Pits*

<i>Trench</i>	<i>Number</i>	<i>Subject</i>
TP6	PA500001	Test Pit
TP14	PA500002	Test Pit
TP21	PA500003	Test Pit
TP3	PA500004	Test Pit
TP10	PA500005	Test Pit
TP17	PA500006	Test Pit
TP24	PA500007	Test Pit
TP24	PA500008	Test Pit
TP30	PA500009	Test Pit
TP5	PA500010	Test Pit
TP13	PA500011	Test Pit
TP20	PA500012	Test Pit
TP29	PA500013	Test Pit

<i>Trench</i>	<i>Number</i>	<i>Subject</i>
TP2	PA500014	Test Pit
TP9	PA500015	Test Pit
TP16	PA500016	Test Pit
TP23	PA500017	Test Pit
TP4	PA500018	Test Pit
TP12	PA500019	Test Pit
TP19	PA500020	Test Pit
TP27	PA500021	Test Pit
TP1	PA500022	Test Pit
TP8	PA500023	Test Pit
TP15	PA500024	Test Pit
TP22	PA500025	Test Pit
TP	PA500026	General view
TP	PA500027	General view
TP	PA500028	General view
TP	PA500029	General view
TP1 ext	PA500030	Test Pit
TP7	PA500031	Test Pit
TP11	PA500032	Test Pit
TP18	PA500033	Test Pit
TP26	PA500034	Test Pit
TP32	PA500035	Test Pit
TP3	PA500036	Test Pit
TP3	PA500037	Test Pit
TP28	PA500038	Test Pit
TP33	PA500039	Test Pit
TP34	PA500040	Test Pit
TP34	PA500041	Test Pit
TP25	PA500042	Test Pit

*Trenches*

<i>Trench</i>	<i>Number</i>	<i>Context No</i>	<i>Subject</i>
001	PA120001	-	Trench ID
001	PA120002	-	Section
001	PA120003	-	Trench
002	PA120004	-	Trench ID
002	PA120005	-	Section
002	PA120006	-	Section
002	PA120007	-	Trench
-	PA120008	-	General view
003	PA120009	-	Trench ID
003	PA120010	-	Section
003	PA120011	-	Trench
004	PA120012	-	Trench ID
004	PA120013	-	Section
004	PA120014	-	Trench
005	PA120015	-	Trench ID
005	PA120016	-	Section
005	PA120017	-	Trench
006	PA120018	-	Trench ID
006	PA120019	-	Section
006	PA120020	-	Trench
007	PA120021	-	Trench ID
007	PA120022	-	Section
007	PA120023	-	Trench
008	PA120024	-	Trench
009	PA120025	-	Trench ID

<i>Trench</i>	<i>Number</i>	<i>Context No</i>	<i>Subject</i>
009	PA120026	-	Section
009	PA120027	-	Trench
010	PA120028	-	Trench ID
010	PA120029	-	Section
010	PA120030	-	Trench
011	PA120031	-	Trench ID
011	PA120032	-	Section
011	PA120033	-	Trench
-	PA120034	-	General, view
012	PA120035	-	Trench ID
012	PA120036	-	Section
012	PA120037	-	Trench
009	PA120038	-	Trench ID
009	PA120039	-	Tree roots
009	PA120040	-	Tree roots
008	PA120041	-	Trench ID
008	PA120042	-	Section
008	PA120043	-	Trench
007	PA120044	-	Trench ID
007	PA120045	-	Possible feature
007	PA120046	-	Possible feature
007	PA120047	-	Possible feature
007	PA120048	-	Possible feature
007	PA120049	-	Possible feature
007	PA120050	-	Possible feature
-	PA120051	-	General view
-	PA120052	-	General view
-	PA120053	-	General view
013	PA130054	-	Trench ID
013	PA130055	-	Section
013	PA130056	-	Trench
014	PA130057	-	Trench ID
014	PA130058	-	Section
014	PA130059	-	Trench
014	PA130060	005	Linear feature
015	PA130061	-	Trench ID
015	PA130062	-	Section
015	PA130063	-	Trench
016	PA130064	-	Trench ID
016	PA130065	-	Section
016	PA130066	-	Trench
017	PA130067	-	Trench ID
017	PA130068	-	Section
017	PA130069	-	Trench
018	PA130070	-	Trench ID
018	PA130071	-	Section
018	PA130072	-	Trench
019	PA130073	-	Trench ID
019	PA130074	-	Section
019	PA130075	-	Trench
020	PA130076	-	Trench ID
020	PA130077	-	Section
020	PA130078	-	Trench
021	PA130079	-	Trench ID
021	PA130080	-	Section
021	PA130081	-	Trench
022	PA130082	-	Trench
023	PA130083	-	Trench ID

<i>Trench</i>	<i>Number</i>	<i>Context No</i>	<i>Subject</i>
023	PA130084	-	Section
023	PA130085	-	Trench
024	PA130086	-	Trench ID
024	PA130087	-	Section
024	PA130088	-	Trench
-	PA130089	-	General view
-	PA130090	-	General view
025	PA130091	-	025
025	PA130092	-	025
025	PA130093	-	025
026	PA140094	-	Trench ID
026	PA140095	-	Section
026	PA140096	-	Trench
027	PA140097	-	Trench ID
027	PA140098	-	Section
027	PA140099	-	Trench
028	PA140100	-	Trench ID
028	PA140101	-	Section
028	PA140102	-	Trench
029	PA140103	-	Trench ID
029	PA140104	-	Section
029	PA140105	-	Trench
030	PA140106	-	Trench ID
030	PA140107	-	Section
030	PA140108	-	Trench
030	PA140109	-	Large stone in subsoil- natural
031	PA140110	-	Trench ID
031	PA140111	-	Section
031	PA140112	-	Trench
032	PA140113	-	Trench ID
032	PA140114	-	Section
032	PA140115	-	Trench
033	PA140116	-	Trench ID
033	PA140117	-	Section
033	PA140118	-	Trench
-	PA140119	-	General view
034	PA140120	-	Trench ID
034	PA140121	-	Section
034	PA140122	-	Trench
035	PA140123	-	Trench ID
035	PA140124	-	Section
035	PA140125	-	Trench
036	PA140126	-	Trench ID
036	PA140127	-	Section
036	PA140128	-	Trench
037	PA140129	-	Trench ID
037	PA140130	-	Section
037	PA140131	-	Trench
038	PA140132	-	Trench ID
038	PA140133	-	Section
038	PA140134	-	Trench
039	PA150143	-	Trench ID
039	PA150144	-	Section
039	PA150145	-	Section
039	PA150146	-	Trench
040	PA150147	-	Trench ID
040	PA150148	-	Section
040	PA150149	-	Trench

<i>Trench</i>	<i>Number</i>	<i>Context No</i>	<i>Subject</i>
041	PA150150	-	Trench ID
041	PA150151	-	Section
041	PA150152	-	Trench
041	PA150153	-	Linear feature - modern
042	PA150154	-	Trench ID
042	PA150155	-	Section
042	PA150156	-	Trench
043	PA150157	-	Trench ID
043	PA150158	-	Section
043	PA150159	-	Trench
044	PA150160	-	Trench ID
044	PA150161	-	Section
044	PA150162	-	Trench
045	PA150163	-	Trench ID
045	PA150164	-	Section
045	PA150165	-	Trench
046	PA150166	-	Trench ID
046	PA150167	-	Section
046	PA150168	-	Trench
047	PA150169	-	Trench ID
047	PA150170	-	Section
047	PA150171	-	Trench
047	PA150172	-	Drystone wall
047	PA150173	-	Drystone wall
047	PA150174	-	Drystone wall
047	PA150175	-	Trench
032	PA150176	-	Trench ID
032	PA150177	-	Dark spread
032	PA150178	-	Dark spread, with slot, natural
-	PA150179	-	General view
034	PA150180	-	Trench ID
034	PA150181	-	Dark spread with stones, natural
034	PA150182	-	Dark spread with stones, natural
048	PA160183	-	Trench ID
048	PA160184	-	Section
048	PA160185	-	General view
048	PA160186	-	General view
048	PA160187	-	Section
048	PA160188	-	Stone outcropping – natural
048	PA160189	-	Stone outcropping – natural
048	PA160190	-	Trench
049	PA160191	-	Trench ID
049	PA160192	-	Section
049	PA160193	-	Trench
050	PA160194	-	Trench ID
050	PA160195	-	Section
050	PA160196	-	Trench
051	PA160197	-	Trench ID
051	PA160198	-	Section
051	PA160199	-	Trench
052	PA160200	-	Trench
053	PA160201	-	Trench ID
053	PA160202	-	Section
053	PA160203	-	Trench
054	PA160204	-	Trench ID
054	PA160205	-	Section
054	PA160206	-	Trench
055	PA160207	-	Trench ID



<i>Trench</i>	<i>Number</i>	<i>Context No</i>	<i>Subject</i>
055	PA160208	-	Section
055	PA160209	-	Trench
-	PA160210	-	General view
056	PA160211	-	Trench ID
056	PA160212	-	Section
056	PA160213	-	Trench
057	PA160214	-	Trench ID
057	PA160215	-	Section
057	PA160216	-	Trench
009	PA160217	-	Trench ID
009	PA160218	005	Furrow, not significant
023	PA160220	006	Pre-ex, post-hole?
023	PA160221	006	Half section post-hole
027	PA160222	007	Linear feature, furrow
027	PA160223	007	Linear feature, furrow
026	PA160224	002	Possible kiln, pre-ex
026	PA160225	002	002
026	PA160226	002	002
026	PA160227	002	002
029	PA160228	-	Trench ID
029	PA160229	-	Linear feature, modern
058	PA190230	-	Trench ID
058	PA190231	-	Section
058	PA190232	-	Trench
059	PA190233	-	Trench ID
059	PA190234	-	Section
059	PA190235	-	Trench
060	PA190236	-	Trench ID
060	PA190237	-	Section
060	PA190238	-	Trench
061	PA190239	-	Trench ID
061	PA190240	-	Section
061	PA190241	-	Trench
062	PA190242	-	Trench ID
062	PA190243	-	Section
062	PA190244	-	Trench
063	PA190245	-	Trench ID
063	PA190246	-	Section
063	PA190247	-	Trench
064	PA190248	-	Trench ID
064	PA190249	-	Section
064	PA190250	-	Trench
064	PA190251	-	Natural rock outcrop
065	PA190252	-	Trench ID
065	PA190253	-	Section
065	PA190254	-	Trench
066	PA190255	-	Trench
067	PA190256	-	Trench ID
067	PA190257	-	Section
067	PA190258	-	Trench
068	PA190259	-	Trench ID
068	PA190260	-	Section
068	PA190261	-	Trench
034	PA190262	-	Trench ID
034	PA190263	008	Rounded cobbles – natural
034	PA190264	008	Rounded cobbles – natural
034	PA190265	009	Dark spread - natural
069	PA200266	-	Trench ID

<i>Trench</i>	<i>Number</i>	<i>Context No</i>	<i>Subject</i>
069	PA200267	-	Section
069	PA200268	-	Trench
070	PA200269	-	Trench ID
070	PA200270	-	Section
070	PA200271	-	Trench
071	PA200272	-	Trench ID
071	PA200273	-	Section
071	PA200274	-	Trench
072	PA200275	-	Trench
073	PA200276	-	Trench ID
073	PA200277	-	Trench
074	PA200278	-	Trench ID
074	PA200279	-	Section
074	PA200280	-	Trench
075	PA200281	-	Trench ID
075	PA200282	-	Section
075	PA200283	-	Trench
076	PA200284	-	Trench ID
076	PA200285	-	Section
076	PA200286	-	Trench
077	PA200287	-	Trench ID
077	PA200288	-	Section
077	PA200289	-	Trench
078	PA200290	-	Trench ID
078	PA200291	-	Section
078	PA200292	-	Trench
079	PA200293	-	Trench ID
079	PA200294	-	Section
079	PA200295	-	Trench
080	PA200296	-	Trench ID
080	PA200297	-	Section
080	PA200298	-	Trench
081	PA200299	-	Trench ID
081	PA200300	-	Section
081	PA200301	-	Trench
082	PA200302	-	Trench ID
082	PA200303	-	Section
082	PA200304	-	Trench
083	PA200305	-	Trench ID
083	PA200306	-	Section
083	PA200307	-	Trench
072	PA200308	-	Trench ID
072	PA200309	-	Linear feature
073	PA200310	-	Trench ID
073	PA200311	010	Dark patch, pre-ex
073	PA200312	010	Dark patch, post-ex, tree root
075	PA200313	-	Trench ID
075	PA200314	-	Linear feature
083	PA200315	-	Trench ID
083	PA200316	-	Linear feature
083	PA200317	-	Linear feature
084	PA210318	-	Trench ID
084	PA210320	-	Section
084	PA210321	-	Trench
085	PA210322	-	Trench ID
085	PA210323	-	Section
085	PA210324	-	Trench
086	PA210325	-	Trench ID

<i>Trench</i>	<i>Number</i>	<i>Context No</i>	<i>Subject</i>
086	PA210326	-	Section
086	PA210327	-	Trench
087	PA210328	-	Trench ID
087	PA210329	-	Section
087	PA210330	-	Trench
088	PA210331	-	Trench ID
088	PA210332	-	Section
088	PA210333	-	Trench
089	PA210335	-	Trench ID
089	PA210336	-	Section
089	PA210337	-	Trench
090	PA210338	-	Trench ID
090	PA210339	-	Section
090	PA210340	-	Trench
091	PA210341	-	Trench ID
091	PA210342	-	Section
091	PA210343	-	Trench
092	PA210344	-	Trench ID
092	PA210345	-	Section
092	PA210346	-	Trench
065	PA210347	-	Trench ID
065	PA210348	-	Linear feature
093	PA210350	-	Trench ID
093	PA220351	-	Section
093	PA220352	-	Trench
094	PA220353	-	Trench ID
094	PA220354	-	Section
094	PA220355	-	Section
094	PA220356	-	Trench
095	PA220357	-	Trench ID
095	PA220358	-	Section
095	PA220359	-	Trench
096	PA220360	-	Trench ID
096	PA220361	-	Section
096	PA220362	-	Trench
097	PA220363	-	Trench ID
097	PA220364	-	Section
097	PA220365	-	Section
097	PA220366	-	Trench
098	PA220367	-	Trench
099	PA220368	-	Trench ID
099	PA220369	-	Section
099	PA220370	-	Section
099	PA220371	-	Trench
100	PA220372	-	Trench ID
100	PA220373	-	Section
100	PA220374	-	Trench
101	PA220375	-	Trench ID
101	PA220376	-	Section
101	PA220377	-	Trench
102	PA220378	-	Trench ID
102	PA220379	-	Section
102	PA220380	-	Trench
103	PA220381	-	Trench ID
103	PA220382	-	Section
103	PA220383	-	Trench
104	PA230384	-	Trench ID
104	PA230385	-	Section

<i>Trench</i>	<i>Number</i>	<i>Context No</i>	<i>Subject</i>
104	PA230386	-	Trench
105	PA230387	-	Trench ID
105	PA230388	-	Section
105	PA230389	-	Section
105	PA230390	-	Trench
106	PA230391	-	Trench ID
106	PA230392	-	Section
106	PA230393	-	Section
106	PA230395	-	Trench
106	PA230396	-	Stone wall
106	PA230397	-	Stone wall
106	PA230398	-	Stone wall
106	PA230399	-	Trench
106	PA230400	-	Trench
107	PA230402	-	Trench ID
107	PA230403	-	Section
107	PA230404	-	Trench
108	PA230405	-	Trench ID
108	PA230406	-	Section
108	PA230407	-	Linear feature
108	PA230408	-	Trench
108	PA230409	-	Section
108	PA230410	-	Trench
109	PA230411	-	Trench ID
109	PA230412	-	Section
110	PA230413	-	Trench ID
110	PA230414	-	Section
110	PA230415	-	Section
110	PA230416	-	Trench
111	PA230417	-	Boulder surface
111	PA230418	-	Boulder surface
112	PA230419	-	Trench ID
112	PA230420	-	Section
112	PA230421	-	Trench
113	PA230422	-	Trench ID
113	PA230423	-	Section
113	PA230424	-	Trench
114	PA230425	-	Trench ID
114	PA230426	-	Section
114	PA230427	-	Linear feature with horse skull
114	PA230428	-	horse skull
114	PA230429	-	horse skull
114	PA230430	-	horse skull
114	PA230431	-	horse skull, detail of teeth
115	PA260432	-	Trench ID
115	PA260434	-	Section
115	PA260435	-	Trench
116	PA260436	-	Trench ID
116	PA260437	-	Section
116	PA260438	-	Trench
117	PA260439	-	Trench ID
117	PA260440	-	Section
117	PA260441	-	Linear feature
117	PA260442	-	Linear feature
117	PA260443	-	Linear feature
117	PA260444	-	Trench
118	PA260445	-	Trench ID
118	PA260446	-	Section

<i>Trench</i>	<i>Number</i>	<i>Context No</i>	<i>Subject</i>
118	PA260447	-	Trench
119	PA260448	-	Trench ID
119	PA260449	-	Section
119	PA260450	-	Trench
120	PA270451	-	Trench ID
120	PA270452	-	Section
120	PA270453	-	Trench
121	PA270454	-	Trench ID
121	PA270455	-	Section
121	PA270456	-	Linear feature
121	PA270457	-	Trench
122	PA270458	-	Trench ID
122	PA270459	-	Section
122	PA270460	-	Trench
123	PA270461	-	Trench ID
123	PA270462	-	Section
123	PA270463	-	Trench
124	PA270464	-	Trench ID
124	PA270465	-	Section
124	PA270466	-	Trench
125	PA270467	-	Trench ID
125	PA270468	-	Section
125	PA270469	-	Trench
125	PA270470	-	Trench
125	PA270471	-	Trench
125	PA270472	-	Trench
126	PA270473	-	Trench ID
126	PA270474	-	Section
126	PA270475	-	Trench
126	PA270476	-	Trench
127	PA280477	-	Trench ID
127	PA280478	-	Section
127	PA280479	-	Linear feature, pre-ex
127	PA280480	-	Linear feature, slot
127	PA280481	-	Linear feature, slot detail
127	PA280482	-	Trench
128	PA280484	-	Trench ID
128	PA280485	-	Section
128	PA280486	-	Trench
128	PA280487	-	Trench
128	PA280488	-	Trench
128	PA280489	-	Trench
129	PA280490	-	Trench ID
129	PA280491	-	Section
129	PA280492	-	Trench
118	PA280493	022 & 023	Patches of ash & charcoal, pre-ex
118	PA280494	022 & 023	Patches of ash & charcoal, pre-ex
118	PA280495	022	Patch of ash & charcoal, pre-ex
118	PA280496	022	Patch of ash & charcoal, pre-ex
118	PA280497	022 & 023	Patches of ash & charcoal, half-sectioned
118	PA280498	022 & 023	Patches of ash & charcoal, half-sectioned
118	PA280499	023	Patch of ash & charcoal, half-sectioned
118	PA280500	022 & 023	Patches of ash & charcoal, half-sectioned
118	PA280501	024	Patch of ash & charcoal, pre-ex
118	PA280502	024	Patch of ash & charcoal, pre-ex
118	PA280503	024	Patch of ash & charcoal, pre-ex
118	PA280504	024	Patch of ash & charcoal, pre-ex
118	PA280505	022 & 023	Patches of ash & charcoal, half-sectioned



<i>Trench</i>	<i>Number</i>	<i>Context No</i>	<i>Subject</i>
118	PA280506	024	Patch of ash & charcoal, half-sectioned
120	PA280507	030	Circular patch
120	PA280508	030	Context number ID
120	PA280509	030	Circular patch
129	PA280510	031	Trench ID
129	PA280511	031	Oval shaped feature, pre-ex
129	PA280512	031	Oval shaped feature, quarter removed
129	PA280513	031	Oval shaped feature
129	PA280514	031	Oval shaped feature
113	PA290515		Oval shaped features
047	PA290516		Drystone wall , machine trench across it
047	PA290517		Drystone wall , machine trench across it
047	PA290518		Drystone wall
047	PA290519		Drystone wall
026	PA290520		Area 15 m by 15 m cleared of topsoil
026	PA290521		Area 15 m by 15 m cleared of topsoil
026	PA290522		Area 15 m by 15 m cleared of topsoil
026	PA290523		Stone in subsoil , natural
026	PA290524		Stone in subsoil , natural
026	PA290525		Area around feature 002
026	PA290526		Feature covered with terram
118	PA290527	022, 023 & 024	Topsoil removed around features
118	PA290528		Terram covering features
113	PA290529		Features being excavated
113	PA290530		Features being excavated
113	PA290531		Features being excavated
113	PA290532		Features being excavated
113	PA290533		Features being excavated
113	PA290534		Features being excavated
113	PA290535		Features being excavated
113	PA290536	-	Features being excavated
113	PA290537	-	Features being excavated
113	PA290538	-	Features being excavated
111	PA290539	-	Terram down over boulders surface
111	PA290540	-	Terram down over boulders surface
111	PA290541	-	Terram down over boulders surface
111	PA290542	-	Trench
111	PA290543	-	Terram down over boulders surface
111	PA290544	-	Terram down over boulders surface
111	PA290545	-	Terram down over boulders surface
111	PA290546	-	Trench
-	PA290547	-	General view
-	PA290548	-	General view
118	PA290549	-	Terram in place before backfilling

*Excavated Features*

<i>Trench</i>	<i>Number</i>	<i>Context No</i>	<i>Subject</i>	<i>Taken From</i>
026	PA140135	001	Circular feature, pre-ex	SW
026	PA140136	001	Circular feature, post-ex	SE
026	PA140137	002	Feature next to section edge, pre-ex	NW
026	PA140138	002	Feature next to section edge, half sectioned	SE
025	PA140139	003	Linear feature, pre-ex	S
025	PA140140	003	Linear feature, with slot	S
013	PA140141	004	Circular feature, pre-ex	S
013	PA140142	004	Circular feature, half-sectioned, animal burrow	-
026	PA260001	002	Trench extended to expose feature	W

<i>Trench</i>	<i>Number</i>	<i>Context No</i>	<i>Subject</i>	<i>Taken From</i>
026	PA260002	002	Trench extended to expose feature	W
026	PA260003	002	Trench extended to expose feature	N
026	PA260004	002	Trench extended to expose feature	E
026	PA260005	002	Feature part-excavated	W
026	PA260006		Dark patch beside 002	
002	PA260007	002	Slot through 002	S
002	PA260008	002	Slot through 002	W
002	PA260009	002	Slot through 002	S
007	PA260010	012	Oval shaped feature	W
007	PA260011	012	Oval shaped feature	
007	PA260012	012	Oval shaped feature	W
007	PA260013	012	Oval shaped feature	S
040	PA260014	013	Patch of dark soil, pre-ex	SE
040	PA270016	013	Patch of dark soil, post-ex	SW
040	PA270017	014	Post excavation of charcoal linear feature	SE
016	PA270020	014	South-east facing section through linear feature	SE
060	PA270021	016	Pre-excavation of charcoal feature	W
060	PA270022	016	Post-excavation of charcoal feature	W
060	PA270023	016	South-east facing section through charcoal feature	SE
065	PA270024	-	Pre-excavation of feature (not archaeological)	E
088	PA270025	018, 019	Pre-excavation of linear feature (probable agricultural related)	N
088	PA270026	018, 019	South-east facing section through linear feature	N
114	PA280027	020, 021	Linear ditch with animal skull	SE
114	PA280028	020, 021	Close-up of animal skull	S
114	PA280029	020, 021	South-west facing section through linear ditch	SW
114	PA280030	020, 021	Linear ditch with animal skull	SW
114	PA280031	020, 021	Post-excavation of ditch	SW
113	PA280032	025, 027	Pre-excavation of two pits	NE
113	PA280033	025, 026	Post-excavation of eastern pit	NE
113	PA280034	025, 026	South-west facing section through eastern pit	NE
113	PA280035	025, 026	South-east facing section through eastern pit	NW
113	PA280036	027, 028	Post-excavation of western pit	NE
113	PA280037	027, 028	East facing section through western pit	E
113	PA280038	027, 028	North facing section through western pit	N
113	PA280039	025, 027	Post-excavation of two pits	E
112	PA280042	-	Pre-excavation shot of stone slab (non-archaeological)	W
112	PA280043	-	Post-excavation shot and removal of stone slab	W
112	PA280044	-	Stones in south facing section of trench 112	N
112	PA280045	-	Topsoil contained in natural depression in subsoil (non-archaeological)	E
111	PA290046	032, 033	Cleaned area of stone surface (north-west quad)	E
111	PA290047	032, 033	Cleaned area of stone surface (north-west quad)	N
111	PA290048	032, 033	Cleaned area of stone surface (north-west quad)	S
113	PA290049	034, 035	Pre-excavation of pit	S
111	PA290050	032, 033	Stone surface	S
111	PA290051	032, 033	Stone surface	N
111	PA290052	032, 033	Stone surface	W
111	PA290053	032, 033	Stone surface	S
111	PA290054	032, 033	Stone surface	SE
108	PA290055	035, 036	Pre-excavation of linear ditch	NW
108	PA290056	037, 038	Pre-excavation of linear ditch	NW
108	PA290057	035, 036	South-east facing section of ditch	SE
108	PA290058	037, 038	South-east facing section of ditch	SE

<i>Trench</i>	<i>Number</i>	<i>Context No</i>	<i>Subject</i>	<i>Taken From</i>
113	PA290059	034, 035	Post-excavation shot of pit	S
113	PA290060	034, 035	South-east facing section of pit	SE
113	PA290061	034, 035	South-west facing section of pit	SW
111	PA290062	032	Deposit below stone surface	E
113	PA290063	025, 027, 034, 041, 042, 043	Partial excavation of pits and linear feature	W
113	PA290064	025, 027, 034, 041, 042, 043	Partial excavation of pits and linear feature	E
113	PA290065	025, 027, 034, 041, 042, 043	Partial excavation of pits and linear feature	N
113	PA290066	025, 027, 034, 041, 042, 043	Partial excavation of pits and linear feature	S
113	PA290067	025, 027, 034, 041, 042, 043	Partial excavation of pits and linear feature	SW

## 12.6 *Method Statement*

### 1.0 Non-Technical Summary

This Method Statement sets out a scheme to effect an archaeological watching brief and evaluation of a 16.5 ha site proposed for development at West Pitkerro in Dundee as part of a mitigation strategy to deal with any archaeological resources which might survive within the boundaries of the development area, and meet the requirements of Dundee City Council. The planning context for this work is Pre-Determination.

This document outlines the archaeological background to the site and establishes actions and products required to achieve Stages 1 and 2 of a potentially four-stage process, all of which may be required to fulfil the archaeological planning condition, Stage 3 being any further work, including fieldwork arising from the archaeological evaluation which may be deemed necessary by the planning authority, such as the development and implementation of a mitigation strategy to deal with any significant archaeology identified or recovered during the evaluation work, and Stage 4 being the further analysis of any materials recovered during the field work in either or all Stages 1, 2 and 3 and/or the preparation of a final report on all works constituting preservation by record for publication, as appropriate.

### 2.0 Site Location

The proposed development area, comprising a cemetery layout and access road is centred around NGR: NO 4594 3381 to the north-east of Dundee and is surrounded by a number of archaeological sites (Figure 1).

### 3.0 Desk-Based Assessment

#### 3.1 *Prehistoric Sites*

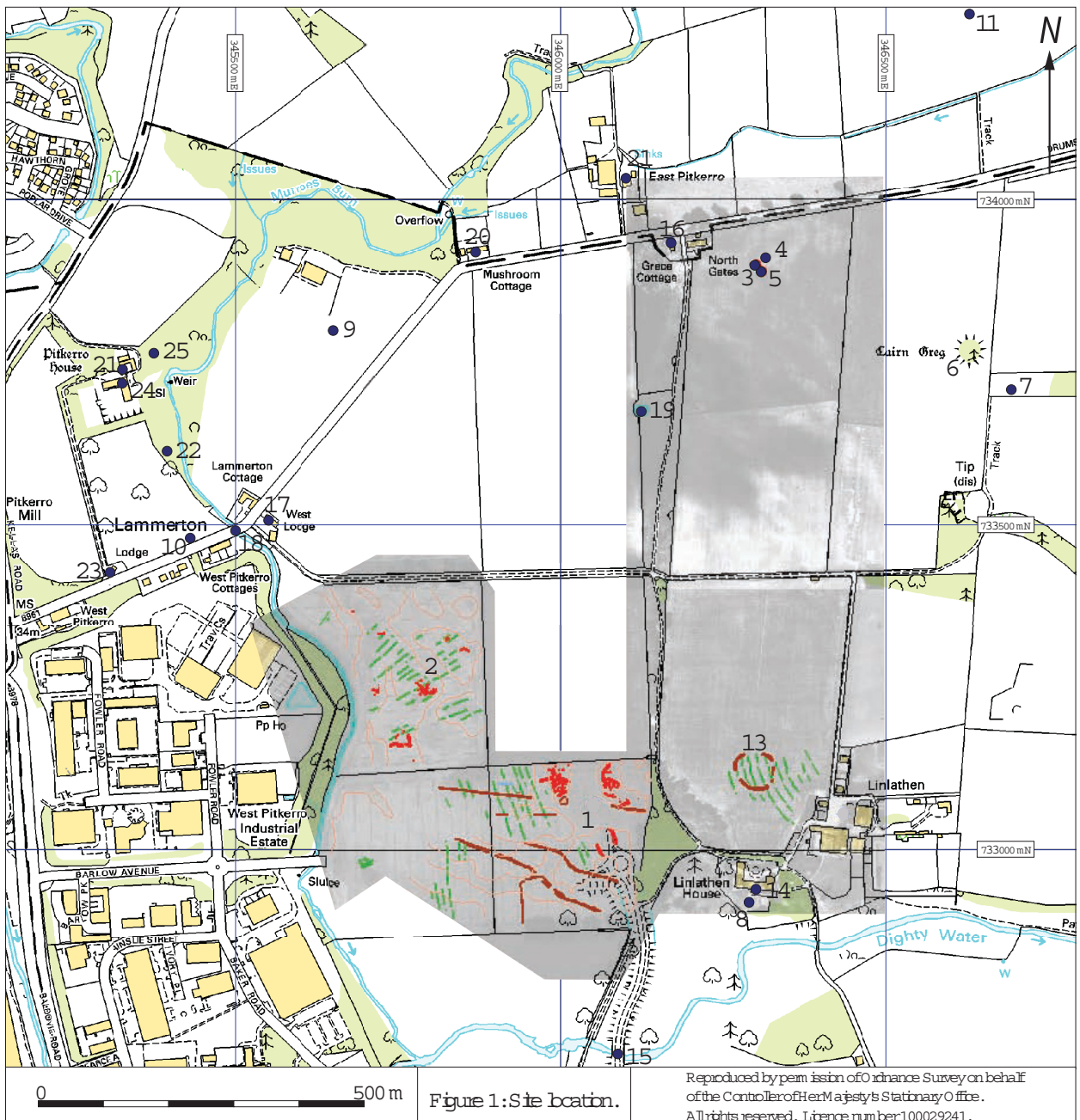
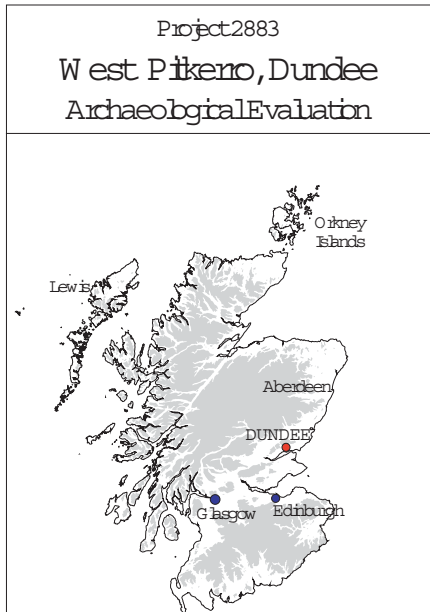
Assessment of vertical aerial photographs (Table 1), conducted as part of this desk-based assessment, identified no evidence, in the form of cropmarks, for prehistoric remains within the proposed cemetery layout.

However, while there are no prehistoric remains previously recorded within the main northern part of the proposed development area, there are potential archaeological remains previously recorded within the southern part of the cemetery access road route. These comprise a large simple souterrain (NO 46076 33103) with a scatter of pits and truncated bedding trenches at its south end marking the location of a possible round house. The scatter of pits extends to the south and to the south-south-east (NO 46100 33072) where there is what may be a further building. Towards the centre of the field (NO 46069 33008) there are two rather ambiguous marks that may be souterrains. These features form part of a wider scatter of probable Iron Age unenclosed round houses, souterrains and pits (**Site 1**; Linlathen Cropmarks NO43SE 498; MDH2615) recorded by RCAHMS as cropmarks on oblique aerial photographs. Lying in the field to the west-north-west of Linlathen House, the archaeological cropmarks are coincident with areas of shallow soils, broken by deeper soils that are not responsive.

A scatter of at least five souterrains, possible round houses, pits and rig have also been recorded as cropmarks (**Site 2**; West Pitkerro Cropmarks NO43SE 499; MDH2616), close to the south-west boundary of the proposed development area. This group of probable Iron Age cropmarks includes towards the south edge of the field in which it lies (NO 45759 33166) one souterrain, which has been recorded in fine detail, including an ancillary chamber, and another whose attribution is less certain, lying amongst a scatter of pits which might be the remains of a round house. Towards the centre of the field (NO 45791 33247) there are one souterrain and a possible second beside a scatter of pits that might be a round house. At the west of the field (NO 45716 33248) there is a possible souterrain and a scatter of pits that may be a round house. Two further possible souterrains and clusters of pits that may indicate the sites of round houses lie in the east (NO 45849 33310) and north (NO 45724 33333) of the field.

There are also significant prehistoric remains in the wider vicinity of the proposed development area including a Scheduled Ancient Monument to the east (**Site 3**; North Gates Souterrain NO43SE 64; MDH926; SAM 6527), which is bounded by a rectilinear enclosure (**Site 4**; North Gate crop-mark enclosure NO43SE 50; MDH921) and an oval enclosure (**Site 5**; North Gate crop-mark enclosure NO43SE 506; MDH2636). Another Scheduled Ancient Monument, a Bronze Age Cairn, lies further to the east (**Site 6**; Cairn Greg NO43SE 1; MDH 891; SAM 2889). This cairn was opened up in 1834 and within it a cist was found containing a bronze dagger, a beaker and a Pictish decorated slab (Stuart 1868,







98-103). There were numerous other cairns within a mile of Cairn Greg marking other burials (Miller 1845, 546), but the stones from these were used in the construction of field drains (Stuart 1868, 100). One of these was a large cairn known as the 'Black Cairn', reported to have been removed from an unspecified location in the vicinity of the proposed development area (Ordnance Survey 1859, 13). Two possible standing stones (**Site 7**) and a cinerary urn findspot (**Site 8**; Linlathen House NO43SE 19) located east and south-east of the proposed development area also survive as prehistoric elements within the landscape.

This evidence indicates that there is distinct possibility that prehistoric archaeological remains may be encountered during the archaeological watching brief and evaluation of the proposed development area.

### 3.2 *Medieval Sites*

There are no recorded medieval sites within the proposed development area and the assessment of vertical aerial photographs (Table 1), conducted as part of this desk-based assessment, identified no evidence, in the form of cropmarks, for medieval remains within the proposed development area.

There are, however, remains of possible early medieval remains within the surrounding landscape. These remains include the site of a stone cist grave to the north-west (**Site 9**; Pitkerro House Cist NO43SE 4; MDH892), discovered in September 1906 during excavations for road-making purposes. The cist, lying east/west, measured 5ft 10ins by 15ins, and contained some fragments of human bones but no other artefacts (Hutcheson 1909, 318-19). The discovery of this cist followed the earlier discovery of another stone cist (**Site 10**; Pitkerro House Cist NO43SE 5), unearthed in December 1902 by workmen digging a drain from a new lodge at the south entrance to Pitkerro House. The cist was formed of thin slabs and measured 5ft 7½ins by 18ins at the head (on the west) and 8ft only at the foot (Hutcheson 1909, 317-318).

The significance of the locality in the Pictish period is also attested by the place name Pitkerro, which includes the 'pit' element that refers to a portion, a share, or a farm, indicative that the area belonged to a significant farm in the Pictish period.

There is further evidence for Pictish activity in the area in the form of a Pictish sculptured stone (Stuart 1868, 98-103) found within Cairn Greg (**Site 6**). This site is significant in that it was a substantial Bronze Age burial cairn which appears to have been re-used in the Pictish period for the deposition of the sculptured slab, and perhaps for a secondary burial, tradition associating this cairn with the burial place of a Pictish king. The Chronicle of the Kings of Alba includes *Giric* who ruled at the end of the 9<sup>th</sup> century AD, but who was supposedly was buried on Iona (Skene 1867).

Documentary evidence relating to Medieval Dundee, however, is minimal and little detail is known of the history of the city and its surrounding area during this period (Fouracre 2007, 9). The Medieval settlement of Dundee appears to have been clustered around the church and the castle and it is thus likely that the proposed development area was located at some distance from the city, but within its rural hinterland (Fouracre 2007, 9). The site of the discovery of a crotal bell of copper-alloy (**Site 11**; Hillock Farm Bell NO43SE 65) of possible 13<sup>th</sup> century date (Zealand 1992, 74) to the north-east of the proposed development area indicates later medieval activity within the surrounding landscape.

Early cartographic representations of the area (Pont 1580) are very stylistic in nature and mark only the larger settlements and towns. 'Pitharrow' is shown in roughly the same location as Pitkerro House (**Site 12**; NO43SE 6; HB No 25895), an A Listed house built by the Durham family in the late 16<sup>th</sup> century, while the proposed development area is depicted as unoccupied land to the south. It is probable therefore that the proposed development area was used simply as farmland in the later medieval period (Fouracre 2007, 9).

While it seems unlikely that later medieval remains may survive, there is a possibility that early medieval remains may be encountered during archaeological watching brief and evaluation works within the proposed development area.

### 3.3 *Post-Medieval and Modern Sites*

The only post-medieval remains apparent within the proposed development area are the scatters of rig and furrow, trackways and field boundaries (**Site 1**) previously recorded within the southern part of the cemetery access road route. The rig here, which measures up to 18 m between furrows, extends across most of the field, visible intermittently because of varying soil depth. Two roughly parallel trackways

extend from south-east to north-west and other linear cropmarks recorded may be fragments of field boundaries. More rig (**Site 2**), is visible intermittently across the field to the south-west of the cemetery layout, measuring about 14 m between furrows and extending from north-east to south-west.

Further evidence of post-medieval cultivation in the vicinity of the proposed development area includes a ploughed out circular plantation bank and rig and furrow (**Site 13**; Linlathen NO43SE 505) to the south-east.

Edward's map of 1687 depicts 'Patkaro' and, for the first time 'Lumlethin'. Moll's map of the mid 18<sup>th</sup> century depicts 'Patkaro', but does not show 'Lumlethin', although Linlathen House (**Site 14**; NO43SE 18.00) was built for David Graham in 1705 (Fouracre 2007, 9). Roy's Military survey of Scotland (1747-55) depicts the farms of 'Pitkarran', 'Lammerton', and 'Lumlayton' with areas of rig and furrow to the east of 'Pitkerran' which approximate to the location of the current development area. This shows that the land in the vicinity of the development had been brought into cultivation before the mid-18<sup>th</sup> century. Ainslie's map of 1794 shows the mansion house of Linlathen (although it was named Fintry at the time) as the property of Graham Esq. The area of the proposed development now formed part of the Linlathen estates parkland, which was occupied by a small number of trees along the northern boundary and stands of trees in the area to the east and south-east, presumably corresponding with Cairn Greg and perhaps other areas of stones. John Thomson's map of 1832 also depicts the stands of trees to the east of the development area.

There are a number of sites associated with the Linlathen Estate around the proposed development area, including an A listed bridge (**Site 15**; West Bridge NO43SE 18.02; HB No 25893) likely constructed following the extension of Linlathen House for Thomas Erskine by William Sterling in circa 1830. This bridge carries the western (apparently principal) approach drive to Linlathen House (**Site 14**) across the Dighty Water to the SW of the House. At the same time was constructed North Lodge (**Site 16**, NO43SE 18.04, HB No 17461) a C(s) listed building. The lodge is shown on the 1827 estate map of Linlathen as the western of two north lodges (Fouracre 2007, 10). Slightly later was built at Lammerton the West Lodge (**Site 17**; NO43SE 439; HB No 25889) another C(s) Listed Building, established by Thomas Erskine of Linlathen House as a school mainly for the benefit of estate children. Lammerton School was still depicted on maps in 1905 (Ordnance Survey 1907). Close to this is Lammerton Road Bridge (**Site 18**; NO43SE 402; HB No 25890), a B Listed Structure dated 1783 and 1856. Knox's map of 1850 depicts the property of Linlathen House in the ownership of Erskine Esq. This map, and the Ordnance Survey First Edition six inch map (1865), depict the boundary trees surrounding the area of the development, but there are no other features within it. The First Edition six inch map (1865) also shows a small circular pond (**Site 19**) located on the eastern boundary of the development area, still extant on modern maps. To the north, Mushroom Cottages (**Site 20**) and the farm of East Pitkerro (**Site 21**) had been built by the mid-19<sup>th</sup> century. Around this time, it was noted that Linlathen was a large mansion on the banks of the Dighty and the residence of Thomas Erskine (Miller 1845, 548), who in addition to his interests in philosophy and literature, was also interested in antiquities and in 1864 was party to the re-opening of Cairn Greg (**Site 6**) and the removal of its Pictish symbol stone to Linlathen House (Fouracre 2007, 10). The central portion of Linlathen House itself was demolished in the 1980s and the remaining wings appear to be wholly of late 18<sup>th</sup> - 19<sup>th</sup> century date. The house is now Linlathen House Nursing Home.

There are also sites associated with the estate of Pitkerro to the west of the proposed development area. These include Pitkerro House (**Site 12**), an A Listed Building whose southern wing is 16<sup>th</sup> century, the door lintel in the tower bearing the date 1593, while the remainder of the house is modern. Associated with this are a ruined Dovecot (**Site 22**, NO43SE 6.4; HB No 25895), an A Listed Structure, Pitkerro House Lodge (**Site 23**, NO42SE 6.1; HB No 25894) another A Listed Building, Pitkerro House Stables (**Site 24**; NO43SE 6.2; HB No 25896), a C(s) Listed Building and Pitkerro House Cottage (**Site 25**; NO43SE 6.3; HB No 25897), a C(S) Listed former generator/battery house built in connection with the electricity supply for Pitkerro House when the latter was extended by Sir Robert Lorimer in 1902.

Between the First Edition one-inch map (Ordnance Survey 1888), the Second Edition one-inch map (Ordnance Survey 1896), the Third Edition one-inch map (Ordnance Survey 1907) and the 'Popular' Edition one-inch map (1927), the proposed development area shows no change from the enclosed field system established by the mid-19<sup>th</sup> century. Examination of vertical aerial photographs from 1946 to 1995 (Table 1), conducted as part of this desk-based assessment, also showed no change, the fields being used mainly for arable agriculture. The only change apparent is the removal of an east/west aligned field boundary across the eastern of the fields over which the cemetery layout is proposed, at some point

between 1963 and 1988. This field boundary is apparent thereafter as a linear cropmark which bounds the southern edge of the cemetery layout and is not deemed especially significant.

There is a possibility that post-medieval cultivation remains may be encountered during archaeological watching brief and evaluation works within the proposed development area.

Sortie	Frames	Date
106G/Scot/UK1	6463-6466	10 April 1946
106G/Scot/UK6	3372-3375	14 April 1946
CAE/SCOT/UK.211	5224-5227	16 June 1947
OS.63.108	034-036	29 May 1963
OS.63.123	028-030	1 June 1963
JASAIR	51788194-5	24 June 1988
Zeiss 630 304.797	179-181 & 014-016	22 June 1995

*Table 1: Vertical Aerial Photographs of Proposed Development Area held by RCAHMS*

#### 4.0 Project Objectives

The project objectives are:

- to establish whether or not significant archaeological remains survive within the proposed development area boundaries

and, if present:

- to establish so far as possible, their condition, structure, survival, significance and date.

All works will comply with the Institute for Archaeology's Standards and Policy Statements and Code of Conduct and the Dundee City Council Archaeology Service's Standard Conditions.

#### 5.0 Methodology

##### 5.1 Watching Brief

Due to the requirement of Site Investigation works to first establish through trial pits if the underlying geology is suitable for the proposed cemetery, a watching brief (Stage 1) will be conducted during the machine excavation of the trial pits to ensure that no significant archaeological remains are disturbed, without first being recorded. The watching brief will include the monitoring of all topsoil and/ or overburden stripping operations by machine and excavation and recording of any feature encountered.

The number of watching brief archaeologists required during this initial Site Investigation operation will be dependent on the number of machines employed at any one time (one watching brief archaeologist per machine). All machines used for trial pit excavation will be back-acting excavators fitted with a c. 2 m wide flat-bladed (toothless) ditching buckets.

The topsoil will be removed in spits to the first archaeological horizon or, where none was found, to the required level for site investigation. Any archaeological features encountered will be cleaned by hand by the Watching Brief Archaeologist to determine the date of the deposits, their character and extent. Such features will be recorded by written description on *pro forma* recording sheets, by photograph and by measured drawing.

Any significant archaeological features encountered will be dealt with by the on-site Archaeologist. Should negative-cut features be encountered they will be 50% excavated in order to determine their significance, date and function. In the event that they are deemed to be important discoveries, they will be fully excavated. Recording will include *pro forma* sheets, drawings and photographs.

Suitable down time will be provided to the Watching Brief Archaeologist in order to fully recover any archaeological evidence encountered on site. If any archaeology encountered is sufficiently significant or complex to require more than one day to excavate and record, the GUARD Project Manager will consult with Macleod Consulting and Dundee City Council Archaeology Service to agree appropriate mitigation measures.

All archaeological finds will be dealt with by the on-site Archaeologist. The general practice will be to bulk recover all artefacts by context.

All excavated feature fills and horizons will be sampled, using bulk soil samples, for palaeo-environmental evidence. This may also include micromorphological sampling in order to address key issues on soil development at the site.

A representative section will be recorded denoting depth of topsoil, any stratigraphy present and the nature of the soil. This information will be logged in the day book together with a sketch drawn to scale and a photographic record of deposits.

The results of the watching brief will be assessed with regard to the location of the proposed evaluation trenches (Figure 2) and if appropriate and with the advance agreement of Dundee City Council Archaeology Service, the location of the proposed evaluation trenches may be altered accordingly. The result of the watching brief will also be incorporated into the evaluation report (Section 6 below).

## 5.2 Evaluation

The evaluation (Stage 2) will comprise a series of trial trenches, amounting to a total of 8% of the available land within the proposed development area. In this case the available land is the entire area within the proposed development site boundaries, with the caveat that certain very localised areas within the site boundaries may need to be avoided if it is determined on site that the conditions encountered represent a safety hazard with respect to the operation of heavy machinery. The available land for evaluation is consequently 16.5 ha, therefore requiring some 13,200 m<sup>2</sup> of trenches to be opened. The evaluation has consequently been designed to open the equivalent of 132 (50 x 2 m) trenches (Figure 2), though the actual dimensions of trenches employed may vary, according to topographic and other constraining considerations, together with archaeological considerations, such as location of trenches of appropriate size in areas of higher potential, such as the southern part of the access route and the need for operational efficiency. The capacity to extend trenches in reaction to discoveries in the field will remain an important option for the duration of the evaluation fieldwork but will not entail additional overall trenching beyond 8% of the available land.

As a general rule, the trenches will be evenly distributed across the proposed development area, though trench density has been increased in specific target areas where the archaeological potential appears, from the desk-based assessment (Section 3 above) or watching brief (see 5.1 above), to be higher than average. No area within the available land, even those perceived to have only moderate or low archaeological potential, will be left unexamined.

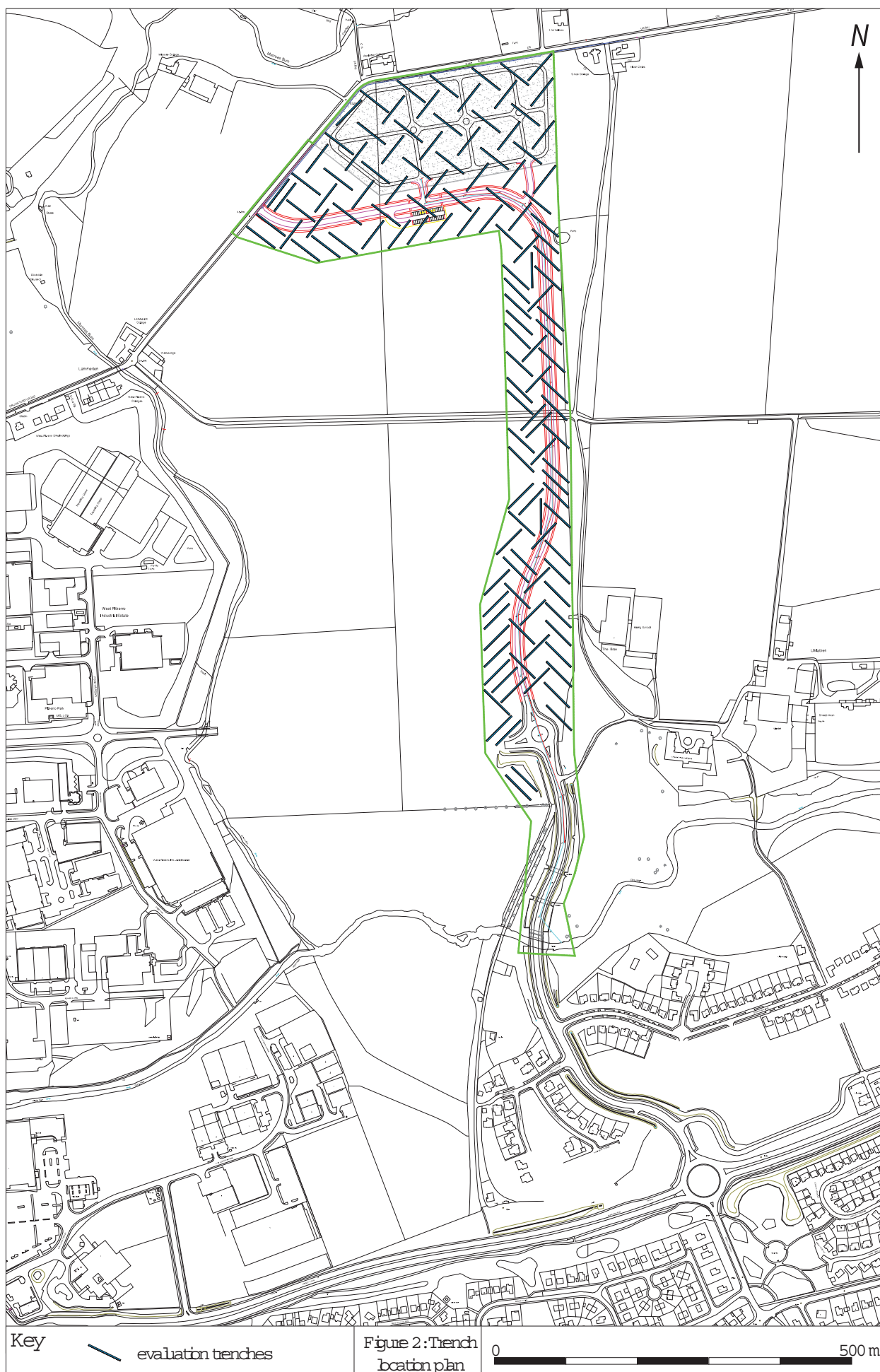
Trenches will be opened using mechanical excavators each operating under the instruction and constant supervision of a suitably qualified archaeologist or archaeologists. The mechanical excavator will remove the topsoil and any other modern made-ground deposits to the level of the natural subsoil or the first significant archaeological horizon, whichever is encountered first. The back-acting mechanical excavators will be fitted with c. 2 m wide flat-bladed (toothless) ditching buckets, during all trench opening operations.

Areas of potential archaeological interest within each trench will be cleaned by hand. Should archaeological remains be encountered during trial trenching operations, features and deposits will be recorded but not excavated, except insofar as excavation is necessary to determine the character, extent, quality, date and complexity of the features/deposits present. In cases where potentially highly significant archaeological features/deposits appear to fall largely outwith the limits of any evaluation trench, where feasible trenches will be extended in an attempt to fully define the extent of the archaeology present. All discoveries of significant archaeology will be reported by the site director to the GUARD project manager immediately. The manager will in turn inform Macleod Consulting and Dundee City Council Archaeology Service, in order to allow any necessary discussion and planning for appropriate actions arising to take place.

The written record of all archaeological features, deposits and finds will be by means of conventional *pro forma* sheets. Scaled hand-drawn plans will also be made at 1:20 and sections at 1:10. Black and white and colour record photographs will also be taken, along with digital images.

By the close of the evaluation the locations and dimensions of all trenches will be recorded in such a way as to tie them to the OS grid. Trenches will be reinstated through the course of the works, though trenches where significant archaeology is encountered will be left open to allow Dundee City Council Archaeology Service appropriate inspection. Any trenches where significant archaeological remains are







encountered will only be reinstated upon agreement of Dundee City Council Archaeology Service and under archaeological supervision.

If features of archaeological significance are found within the development area, then further phases of work to mitigate the archaeologically adverse effects of the development may be required to fully comply with the requirements of Dundee City Council. Dundee City Council will be the judge of the need for implementation of further stages of the proposed archaeological programme.

If the design of the proposed development is flexible at this stage it may be possible to avoid any archaeological remains discovered during the evaluation phase of work. If this is not possible, an additional phase or phases of work, potentially incorporating full excavation, would be designed in a supplementary document or documents. This/these would be prepared after further consultation with Dundee City Council.

Should significant archaeological remains be identified during the evaluation fieldwork (Stage 2), Stage 3 will involve the implementation of appropriate archaeological mitigation measures, which may consist of further evaluation and/or excavation and recording of features that will be destroyed by development works, or watching brief activity, or a combination of the above. Stage 4 will include suitable post-excavation analysis, reporting, and publication of discovered archaeological remains, if appropriate. Further details of Stages 3 and 4 of the work programme cannot be developed until such time as the Stage 2 evaluation has taken place.

This document details the methodology to be employed in implementing the Stage 2 evaluation. The detailed methodology to be employed during any Stage 3 mitigation works and Stage 4 post excavation analysis and publication, would if required be specified in *addenda* to this document, to be called *project designs* for any proposed fieldwork at Stage 3, and *post- excavation research designs* for work required at Stage 4. These *addenda*, if required, will be submitted for the agreement of Dundee City Council, prior to the commencement of any archaeological work, which may be specified in the *addenda* documents.

## 5.2 Human Remains

Should human remains be encountered, these will be left *in-situ* and GUARD will notify the local police and Dundee City Council Archaeology Service immediately and thereafter follow prescribed procedure for their treatment, in accordance with the Historic Scotland publication 'The Treatment of Human Remains in Archaeology' (2003 version).

## 5.3 Monitoring

Dundee City Council Archaeology Service will have a formal monitoring role on behalf of Dundee City Council and may elect to visit the site during archaeological work as part of that role.

GUARD will supply sufficient notice of on-site works to facilitate monitoring. It is envisaged that 10 working days notice will be given of the commencement of on-site works. At this time a specific work schedule will be supplied. GUARD will ensure works are conducted in a manner which enables monitoring to be undertaken.

GUARD will furthermore notify Dundee City Council Archaeology Service and Macleod Consulting immediately of any unexpectedly significant or complex discoveries, or other unexpected occurrences which might significantly affect the archaeological work and/or the development. In that event, all finds and features will be left *in situ* until arrangements have been agreed for safeguarding or recording them.

It will be important to ensure that all formal communication, requests (including any proposed amendments to on-site strategies) and contacts be made, ultimately in writing and in the first instance to the project manager (as opposed to the site director or other members of the on-site team), to ensure organisational, administrative and financial efficiency.

Any site visitors will also be required to conform to the health and safety regime in place during the fieldwork programme.

Where intermittent on-site works are undertaken GUARD will keep detailed and accurate records of what on-site works were undertaken when. This inventory will form an element of the relevant site report.

## 6.0 Reporting, Archive & Small Finds Arrangements

The watching brief (Stage 1) and evaluation (Stage 2) results will be prepared in accordance with standard Dundee City Council reporting requirements (text and illustrations as an integrated single document) submitted in digital form (Adobe PDF; Microsoft Word) and will take the form of a data structure report. The report will make appropriate reference to the curatorial role of the Archaeology Service in facilitating the archaeological works.

A draft of this report will require to be sent for approval by the Dundee City Council Archaeologist prior to formal dissemination. This draft report will be submitted in a manner that permits digital editing while the final version will be uneditable prior to resubmission to the Archaeology Service and Dundee City Council.

This report will enable Dundee City Council to determine whether there is a requirement for further work on the development site and it is at this stage that – if appropriate - any further project designs would require to be prepared, in consultation with Dundee City Council Archaeology Service.

The illustrated report will outline the main results of the watching brief and evaluation fieldwork and incorporate lists of all features, finds, samples, photographs and drawings. It will be produced in-house by GUARD as a desk-top published document and disseminated, along with other required products specified in the Dundee City Council standard reporting requirements, in hard copy and digital formats. The report will also include recommendations for further mitigation measures appropriate to the remains encountered. Implementation of any recommendations offered would however be conditional on meeting the approval of Dundee City Council. Final decisions on the need for further work, and on the detailed specification of the character of that work, rest with Planning Authority.

A short report detailing the results will also be submitted for publication in *Discovery and Excavation in Scotland*. This summary report will be agreed with Dundee City Council Archaeology Service through inclusion as an appendix in the data structure report.

The project will also be reported through OASIS Scotland. A digital copy of the data structure report will be uploaded as grey literature on to the OASIS website.

Copies of the data structure report, in addition to the copies required by Dundee City Council, will be provided to Macleod Consulting and to the National Monuments Record for Scotland. Further copies will be distributed to other recipients if requested and specified.

GUARD will ensure that the project archive is prepared and ready for submission within six months of the completion of all fieldwork or post-excavation work (as appropriate). The resultant site archive will be deposited with the National Monuments Records for Scotland.

*The laws relating to Treasure Trove and Bona Vacantia in Scotland apply to all finds where the original owner cannot be identified. This includes all material recovered during archaeological fieldwork. Accordingly, all assemblages recovered from archaeological fieldwork are claimed automatically by the Crown and must be reported to the Scottish Archaeological Finds Allocation Panel through its secretariat, the Treasure Trove Unit. In the event of the discovery of small finds at West Pitkerro, a filled-out copy of the form "Declaration of an Archaeological Assemblage from Fieldwork" and two copies of the pertinent Data Structure Report will be submitted to the Panel at the conclusion of the fieldwork. The Panel will then be responsible for recommending to the Queen's and Lord Treasurer's Remembrancer (QLTR) which museum should be allocated the finds.*

All artefacts will be stored temporarily by GUARD until a decision has been made by the Panel regarding the museum which will be allocated the finds for permanent curation. All finds will be transferred to the appropriate museum within six months of completion of the fieldwork, if no post-excavation work is required, or at the end of the latest finishing post-excavation programme.

In the event that unallocated finds recovered from the site require to be removed from Scotland, for the purposes of post-excavation analysis, GUARD will be legally required to obtain the consent of the QLTR, in the form of a loan agreement. Initially, an indication of intent would be registered with the Treasure Trove Secretariat at the National Museums of Scotland, after which formal consent would be applied for using the form "Application for authority to borrow unallocated Treasure Trove for research purposes". A consent form, signed by the QLTR and specifying conditions (such as the period during which finds may be held outside Scotland) would then be issued. GUARD will require to be in receipt of this signed consent form before items may be removed from the country.

The results of the evaluation may lead to a requirement for further archaeological work (ie beyond the evaluation fieldwork and report), either to further fieldwork (Stage 3) and/or to a requirement for post-excavation analysis and publication of results (Stage 4), in order to fully fulfil the planning condition. In either case further documents specifying that work will require to be prepared and approved in advance of implementation by Dundee City Council. A post-excavation strategy, including timescales and cost implications can only be prepared following the completion of all archaeological field work (ie if there is to be Stage 3 work, it will not be possible prior to its completion to specify, cost or time Stage 4 work).

## 7.0 Timetable

Week 1: 3-7 August 2009 (Set Up)

Week 2: 10-14 August 2009 (Watching Brief)

Weeks 3-6: 17 August - 8 September 2009 (Evaluation)

Week 7: 14-18 September 2009 (Report preparation starts)

Week 9: 28-30 September 2009 (Reporting to draft & submission of draft for approval)

\*Week 10: 5-9 October 2009 (Any edits required and preparation of final copies)

\*Week 11: 12 – 16 October 2009 (Dissemination of report copies)

\* These dates are provisional and subject to factors such as the duration of the initial site investigation works and the return of reports from the local authority within the timescale indicated

This timetable does not include any provision for any Stage 3 or Stage 4 work which might be required.

## 8.0 Personnel

GUARD's dedicated project manager for all the works outlined above is Mr Ronan Toolis and he will be the first point of contact for any project-related liaison with Dundee City Council Archaeology Service and Macleod Consulting for all formal logistical, administrative and financial aspects of the project.

GUARD's dedicated Project Director for all the works outlined above is Heather James and she will be on-site for the vast majority of the archaeological project. Heather has substantial professional experience at supervising archaeological watching briefs, evaluations and excavations. If requested Heather's CV can be forwarded to Dundee City Council Archaeology Service for approval prior to the commencement of archaeological works.

## 9.0 Health and Safety

The project will be conducted in line with the IFA approved SCAUM document "Health and Safety in Field Archaeology". Prior to fieldwork commencing a risk assessment of the project, collectively or as separate project components, as appropriate would be undertaken, giving rise to a project-specific safety plan or project component-specific safety plans. The responsibility for providing up to date service location plans and site security will remain with the Main Contractor and GUARD accepts no liability for the disturbance of services or site security as a result of the evaluation works.

## 10.0 Bibliography

### *Documentary References*

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Stuart, J 1868 'Account of the recent examination of a cairn called 'Cairnreg' o the Estate of Linlathen' *Proc Soc Antiq Scot* 6, 1864-6, 98-103.

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#### *Cartographic References*

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Roy 1747-55 *Military Survey of Scotland*.

Ainslie J 1794 *Map of the County of Forfar or Shire of Angus*

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Ordnance Survey 1907 *Arbroath, Sheet 49*, Third Edition one-inch to the mile.

Ordnance Survey 1927 *Dundee & St Andrews*, 'Popular' Edition one-inch to the mile map.

12.7 *Discovery and Excavation in Scotland Report*

<b>LOCAL AUTHORITY:</b>	Dundee City Council
<b>PROJECT TITLE/SITE NAME:</b>	West Pitkerro
<b>PROJECT CODE:</b>	2883
<b>PARISH:</b>	Dundee
<b>NAME OF CONTRIBUTOR:</b>	Heather James
<b>NAME OF ORGANISATION:</b>	GUARD
<b>TYPE(S) OF PROJECT:</b>	Watching briefs & Evaluation
<b>NMRS NO(S):</b>	NO43SE 498
<b>SITE/MONUMENT TYPE(S):</b>	Cropmarks
<b>SIGNIFICANT FINDS:</b>	Pit group, boulders surface, ash spreads, possible corn-drying kiln
<b>NGR</b> (2 letters, 8 or 10 figures)	NO 4594 3381
<b>START DATE</b> (this season)	5 October 2009
<b>END DATE</b> (this season)	29 October 2009
<b>PREVIOUS WORK</b> (incl. DES ref.)	-
<b>MAIN (NARRATIVE) DESCRIPTION:</b> (May include information from other fields)	Pre-determination archaeological works were undertaken by GUARD at West Pitkerro, Dundee, due to the presence of archaeological cropmarks in close proximity to the proposed cemetery development. The archaeological works consisted of a watching brief during test pitting, a subsequent 8% evaluation, followed by a watching brief of the backfilling of the evaluation trenches that contained archaeological features. Four moderately significant areas of archaeological remains were found, one in the north-east of the development area and three others in the south in the vicinity of a slight rise in the topography. These areas consisted of a possible corn-drying kiln, a boulder surface, a group of pits and finally a group of ash spreads and ash filled hollows, all of indeterminate date.
<b>PROPOSED FUTURE WORK:</b>	Mitigation strategy
<b>CAPTION(S) FOR ILLUSTRS:</b>	---
<b>SPONSOR OR FUNDING BODY:</b>	Dundee City Council
<b>ADDRESS OF MAIN CONTRIBUTOR:</b>	Gregory Building, Lilybank Gardens, University of Glasgow, G12 8QQ
<b>EMAIL ADDRESS:</b>	h.james@archaeology.gla.ac.uk
<b>ARCHIVE LOCATION</b> (intended/deposited)	NMRS