



CULDUTHEL FARM, INVERNESS, PHASE 9

Archaeological Excavation

for Tulloch Homes Ltd

00/00386/OUTIN

August 2012





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Project Manager Edward Bailey

Author Jürgen van Wessel
Fieldwork Jürgen van Wessel
Graphics Anna Sztromwasser

Specialists Dr Scott Timpany – Environmental Julie Franklin & Julie Lochrie – Finds

Approved by Edward Bailey – Project Manager

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North East

Headland Archaeology 13 Jane Street Edinburgh EH6 5HE 0131 467 7705 office@headlandarchaeology.com

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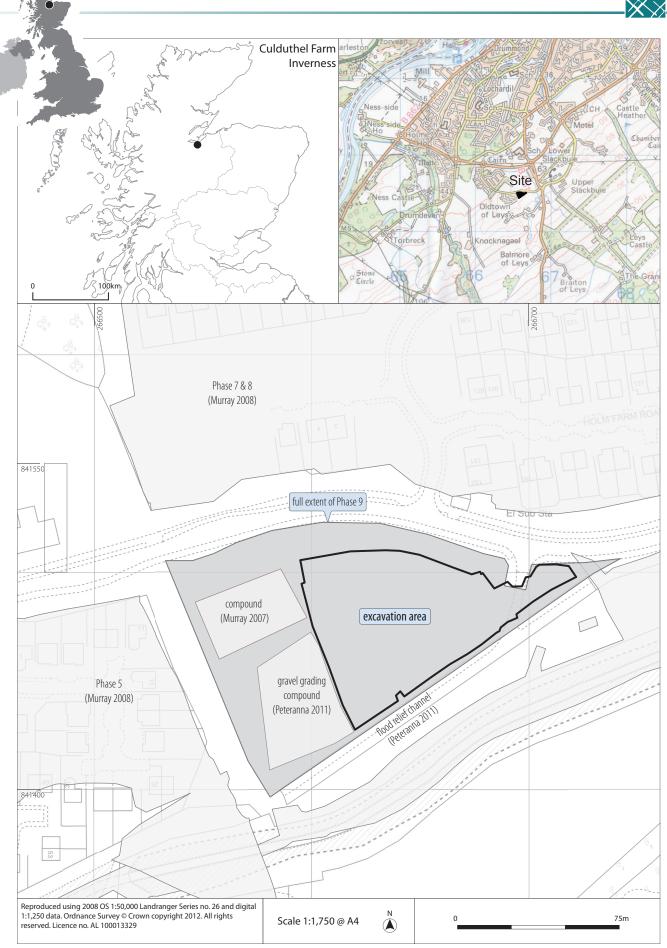
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Illus 1Site location

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CULDUTHEL FARM, INVERNESS, PHASE 9

Archaeological Excavation

Headland Archaeology (UK) Ltd was commissioned to undertake a monitored topsoil strip in advance of the Phase 9 of the housing development at Culduthel Farm, Inverness. Previous excavation at sites adjacent to the north, south and west have revealed a rich archaeological landscape with evidence for occupation and industrial activity from the Neolithic to the present day.

The excavations at Phase 9 revealed three main groups of features. The first consisted of a narrow sub-rectangular enclosure ditch, a large central pit and a number of further pits and post-holes. No firm dating evidence was retrieved from this group, although use during the Neolithic is suggested by typological comparison to similar enclosures. The other two groups were small clusters of pits and post-holes, both with artefactual evidence for Neolithic activity.

One isolated feature may represent a waste pit of Iron Age date, and indeed palaeoenvironmental analysis suggests wider activity across the site during this period, although it is possible that some of this evidence may be intrusive, and related to a substantial Iron Age settlement to the west.

1. INTRODUCTION

This report presents the results of a monitored topsoil strip at Culduthel Farm, Inverness in advance of Phase 9 of a large housing development by Tulloch Homes Ltd. The work was commissioned to meet a planning condition (ref. no.: 00/00386/OUTIN) placed by Highland Council. Headland Archaeology (UK) Ltd undertook the investigations during May–June 2012 in accordance with a specification agreed with Highland Council.

2. BACKGROUND

2.1 Situation and topography

Culduthel Farm lies at the southern outskirts of Inverness, on a sand and gravel terrace overlooking the city and the mouth of the Ness valley (Illus 1). Phase 9 comprises a 1.3ha triangular plot (Illus 2) of former grazing land bounded by Culduthel Mains Road (and Phases 7 and 8 beyond) to the north, Phase 5, to the west and a new flood relief channel to the south-east. The site occupies a local high point (between 65 and 70m OD), with the north and west sides sloping away most steeply.

2.2 Archaeological background and site history

The Culduthel area has seen a considerable increase in housing and commercial development over the past decade. As a result, a substantial volume of archaeological work has been

undertaken in recent years, including large-scale excavation on previous construction phases at Culduthel Farm (see Illus 1 for relevant report authors and dates). This work has revealed an exceptionally rich landscape with clear evidence for use from the Neolithic to the present day.

Two previous incursions had been made into Phase 9 itself; a topsoil strip in advance of compound construction in the north-west corner (Murray 2008) uncovered no archaeological remains, but an adjacent area to the south revealed 16 pits, some of which contained middle to late Neolithic pottery (Peteranna 2011, p.17–18).

3. OBJECTIVES AND METHODOLOGY

3.1 Objectives

The objectives were:

- to record any archaeologically significant features,
- to attempt to identify structures or activity areas,
- to establish the date and duration of any settlement,
- to obtain environmental (both charred plant remains and animal bone, if present) as well as artefactual evidence for any anthropomorphic activity on the site,
- to attempt to relate the results to the surrounding archaeological landscape.





Illus 2Panoramic view of site from the western edge

3.2 Method

3.2.1 Monitored topsoil strip

A monitored topsoil strip was undertaken on the remaining available land inside the Phase 9 development area. This excluded the two previously excavated areas to the west, and a substantial embankment formed during the construction of the distributer road to the north – this was to be left *in situ*. The remaining area totalled some 5.350m².

A mechanical excavator fitted with a tilting, flat-bladed ditching bucket was used to remove topsoil under direct archaeological control. Excavation continued until either the natural substratum or significant archaeological deposits were encountered. The resulting surfaces were hand-cleaned when necessary and investigated for archaeological features.

All features were hand-excavated to a level agreed with Highland Council – typically 50% of pits or post-holes (100% if they contained artefactual remains), and 10% of linear features.

3.2.2 Recording

The recording followed standards and guidance set out by the Institute *for* Archaeologists and the Highland Council Archaeology Unit. All contexts, small finds and environmental samples were given unique numbers and recorded on *pro forma* record sheets. Colour print, colour slide and digital photographs were taken of all features and of general site context. These were given unique numbers and recorded in a register. A metric scale was clearly visible in record photographs.

An overall site plan was recorded by electronic survey and related to National Grid by dGPS. Individual features were surveyed in plan and section, complemented with additional hand drawing (1:20 for plans, 1:10 for sections) where appropriate.

Finds were collected and bagged by context, and have been stored appropriately according to standard advice. All archaeologically significant deposits were sampled for environmental remains, to a minimum of ten litres if available and up to 30 litres where appropriate. Of 71 samples taken, 30 were sent for palaeoenvironmental assessment.

4. RESULTS

A total of 70 cut features were recorded (Illus 3). Three discrete groups were identified, comprising 26, 13 and 9 features respectively, with the remainder found in isolation or in smaller clusters (see the context register in Appendix 1.1) The majority were very shallow (nearly two-thirds were less than 0.2m deep) and may have been subject to heavy plough truncation. Nearly all of the features were backfilled with material derived from the surrounding sands and gravels, although often stained with silt and occasional flecks of charcoal.

The far east of the area appeared to have been substantially disturbed during construction of a recent access track and the adjacent work compound to the east.

4.1 Group 1 – Possible enclosure (Illus 4)

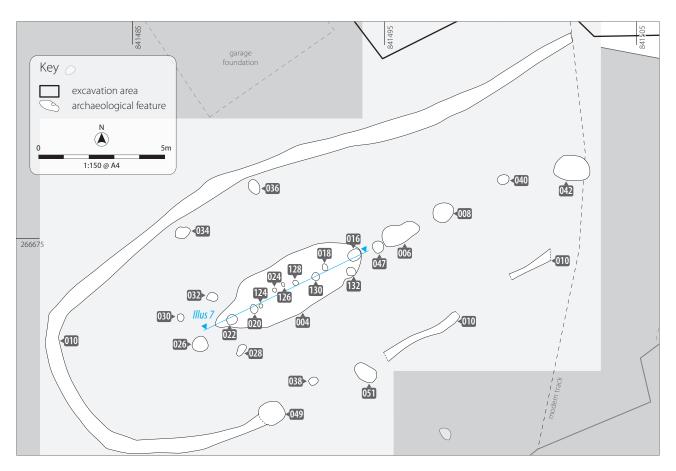
Group 1 consisted of a horseshoe-shaped ditch enclosing a long pit and twelve smaller pits and possible post-holes (Illus 5).

The ditch [010] enclosed an area of at least 24 x 10m, aligned ENE–WSW; the recent construction of an access track had removed any trace of the ENE end and so it may have extended further. Survival was in any case very poor at this end due to vertical truncation. The ditch survived to a maximum of 0.2m deep (Illus 6), and was filled with silt-stained redeposited sands and gravels with occasional flecks of charcoal ([009], sampled in individual slots as [043–048]). The ditch was broken on the south side by a probable entrance; the terminals were marked by shallow pits [049] and [051] of 0.7–0.9m diameter, filled with identical redeposited sands and gravels. A smaller pit [028] was positioned in the middle of this break, just on the inside of the enclosure.

The long pit [004] (Illus 7) was also aligned ENE–WSW and was located centrally within the enclosure. It measured 6 x 2m $\,$

Site plan and location of features from adjacent excavations





Illus 4Plan of Group 1



Illus 5





Illus 6East facing section of ditch [010] at slot [044]

and survived up to 0.23m deep. Ten post-holes were cut into the base of this pit; the most substantial of these was [016], which marked the NNE extent and was 0.5m in diameter and 0.43m deep. It was mirrored at the WSW end by [022], which was somewhat smaller at 0.3 x 0.35m and 0.15m deep. Broadly collinear between these two were seven further postholes [018], [020], [024], [124], [126], [128] and [130], between 0.12 and 0.45m in diameter and 0.1-0.35m deep. One further shallow pit [132] was located immediately south-west of [016] and measured 0.34m in diameter and 0.13m deep. It was not possible to define the relationship between [004] and the features cut into its base - they appear to have been backfilled simultaneously with silt-stained sands and gravels, with all but the fills of [124], [126] and [128] containing occasional charcoal flecks. The fill of each cut was numbered separately for sampling purposes.

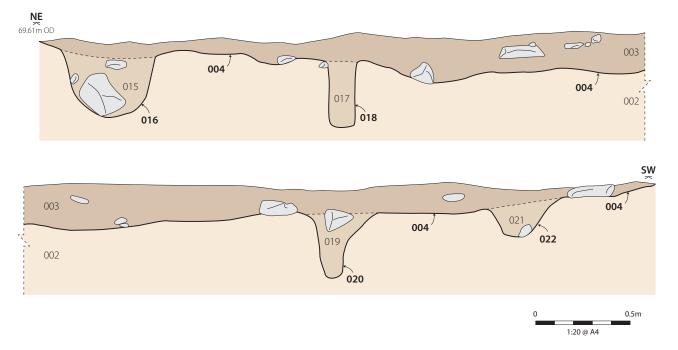
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The remaining features within the enclosure can be grouped into three clusters. Four shallow post-holes [026], [028], [030] and [032] curved around the WSW end of pit [004]. They varied from 0.3-0.6m in diameter and were 0.07-0.13m deep. Four large pits [006], [008], [040] and [097] were located along the central ENE top WSW axis immediately ENE of the long pit. The largest was [006], measuring 1.6 x 0.8m and 0.23m deep, the smallest was [040] at 0.45 x 0.38m and 0.18m deep. One further large pit [042] had been cut still further to the ENE, somewhat to the south of the main axis. It measured 1.44 x 0.93m and was 0.26m deep. Finally, two shallow pits - [034] and [036], were positioned directly opposite the entrance terminals, just inside the north edge of the enclosure ditch. Both were around 0.5m in diameter and 0.11m and 0.2m deep respectively. All of these features were filled with similar silt-stained sands and gravels, with the fills of [026], [008] and [097] containing occasional charcoal flecks.

4.2 Group 2 – Features immediately SE of Group 1 (Illus 8)

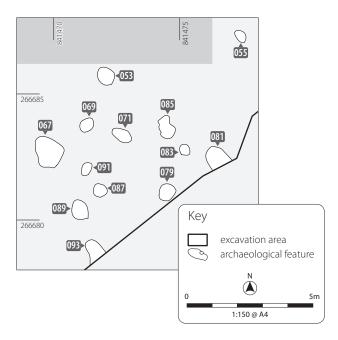
Group 2 consisted of a cluster of eleven pits/post-holes [053], [055], [067], [069], [071], [079], [083], [085], [087], [089] and [091], and two possible linear features [081] and [093] located between the enclosure (above) and the south-eastern limit of excavation. It may be significant that this cluster lies just outside the break in the enclosure ditch, and so may be associated with the use of the enclosure.

The pits/post-holes do not appear to form a clear pattern and vary considerably in both size (from 0.35m to 1.32m in diameter and 0.08–0.28m deep) and shape (circular, oval and irregular). All were backfilled with silt-stained sands and gravels; all bar [067], [071], [083] and [085] included come charcoal flecks; [080] had a higher concentration of stone than the others. The fill of [087] contained several sherds of middle-later Neolithic pottery.



Illus 7North-facing section of pit [004]





Key

archaeological feature

1:150 @ A4

138

136

170

1114

Illus 8Plan of Group 2

Illus 9Plan of Group 3

Features [081] and [093] were not fully exposed and continued beyond the south-eastern limit of excavation. Both may represent the north-western terminals of longer linear features. They were both approximately 0.7m wide and 0.2m deep and filled with similar silt-stained sands and gravels with occasional charcoal flecks; it is possible that they are two ends of the same feature.

4.3 Group 3 – Small group of pits in the south corner (Illus 9)

Group 3 consisted of nine small pits/post-holes in an isolated group near the southern limit of excavation. Pits [136] and [138] form the core of this group, being somewhat elongated ([136] may represent two intercutting but indistinguishable cuts) and collinear on a north-east to south-west alignment. Pit [136] measured 1.1 x 0.5m and 0.35m deep; [138] was slightly smaller at 0.9 x 0.5m and 0.19m deep. Both were filled with silt-stained sands and gravels – the fill of [136] contained several sherds of middle-later Neolithic pottery.

Flanking [138] to the north-west and south-east were two further pits/post-holes ([146] and [148]. Both measured approximately 0.6×0.5 m and 0.3m deep, and were filled with similar silt-stained sands and gravels (with occasional flecks of charcoal).

The remaining five small pits/post-holes were situated immediately south and east of this group. All were around 0.4m in diameter and between 0.09m and 0.16m deep, again filled with silt-stained redeposited sands and gravels.

4.4 Other features (Illus 2)

The remaining 22 features were scattered across the excavation area, and varied in size and shape. Pits [012], [101] and [122] were probably remnants of animal activity or bioturbation; [063] was a

modern pit, most likely associated with the recent construction of a garage foundation to the north of Group 1; [140], [142] and [144] were also likely to be modern as they were filled with very loose topsoil and located near the edge of a recent work compound. A small cluster of four pits [103], [105], [107] and [109] were located 13m NNW of Group 3; the largest of these [109] contained some burnt material, although there were no indications of *in situ* burning. Pit [061] was a large pit (or two smaller intercutting ones) containing some organic material. The remainder were small isolated pits measuring 0.2–0.6m in diameter and up to 0.23m deep, all filled with redeposited sands and gravels.

5. FINDS ASSESSMENT

5.1 Introduction

Culduthel Phase 9 is located within a housing development that has seen extensive archaeological investigations prior to development. The previous excavations recorded substantial remains dating to the Neolithic, Bronze Age, Iron Age and early Historic period (Murray 2007; 2008). Excavations in advance of Phase 9 revealed a rectilinear earthwork and several pit clusters of probable prehistoric date.

The assemblage includes prehistoric pottery, lithics, stone, industrial waste and glass. The pottery and lithics are Neolithic in date. The other material is likely to be Iron Age or later but it mostly comprises small pieces which may be intrusive.

5.2 Assemblage summary

The pottery numbers 93 sherds of coarseware; however most of these are small, abraded fragments. Diagnostic pieces include fingernail decorated sherds of middle to late Neolithic Impressed

Ware from pits [069] and [136]. Also of probable Neolithic date are 16 pieces of light brown flint debitage. None of the lithics are chronologically diagnostic but one piece was associated with Neolithic pottery from pit [136].

Later finds are less conclusive. The identification of the rotary quern fragment is not certain. The outer edge appears to be smoothed into a round, though not circular, shape, but the other faces are not dressed or worn. Assuming it is a quern, it can date no earlier than the Iron Age. It was found in a large pit [109] north of the Group 3 features. A very small chip of cobalt blue glass was retrieved from pit [042] and could date anywhere from the Iron Age to Modern periods.

Industrial Waste, weighing 22g, was retrieved during soil sample processing. Of this 12g from pit [004] may be natural iron rich stone. The rest consisted of small pieces of magnetic residues. Again, this would seem to date no earlier than the Iron Age, but the small size of the assemblage leaves the possibility that it is intrusive, possibly deriving from the large scale ironworking remains of the site to the west (Murray 2007).

5.3 Discussion

The only firm dating evidence from the site is provided by the middle to late Neolithic pottery, though asso ciated lithics are likely to be of a similar date. This material was concentrated in two pit clusters, Group 2 and Group 3, and suggests a date of between *c*3500 and *c*2900BC for these features.

No reliable dating evidence was provided for the Group 1 features. Low levels of magnetic residues, small pieces of flint and a chip of blue glass were found there but are inconclusive as regards dating.

6. PALAEOENVIRONMENTAL SAMPLE ASSESSMENT REPORT

6.1 Introduction

Archaeological excavation in advance of Phase 9 of a large housing development at Culduthel led to the discovery of a number of pit and post-hole features together with a rectangular ditch feature. A total of 71 samples were taken from fills of these features of which 30 samples were chosen for palaeoenvironmental assessment. The aims of the assessment were to:

- assess the presence, preservation and abundance of any palaeoenvironmental materials within the samples,
- assess the potential of the material for any indications of the use of these features,
- assess whether a proxy-date for these features can be provided based on any palaeoenvironmental materials present.

6.2 Method

Samples were processed in laboratory conditions using a standard floatation method (cf Kenward et al 1980). All plant

macrofossil samples were analysed using a stereo-microscope at magnifications of x10 and up to x100 where necessary to aid identification. Identifications were confirmed using modern reference material and seed atlases including Cappers et al (2006).

6.3 Results

The results of the sample processing are provided in Appendices 3.1 (Retent finds) and 3.2 (Floatation finds). Suitable material for AMS dating is also identified within each table. All plant remains were preserved through charring.

6.3.1 Charred Plant Remains (CPR)

Charred cereal grains were present in 21 of the samples processed (Appendices 3.1 and 3.2), with an assemblage comprised mainly of oat (Avena sp.), hulled barley (Hordeum vulgare) and barley sp. (Hordeum sp.). Smaller quantities of club/bread wheat (Triticum aestivo-compactum) were also recovered, together with indeterminate cereal grains (Cerealia indet.); grains too degraded to be able to identify to family level. Preservation of the charred cereals was observed to be good to poor, with grains showing signs of abrasion and breakage but the majority were able to be identified to family and species level. The wear on the grains would be consistent with them having been exposed prior to becoming incorporated into the deposits, such as through rolling around on the ground surface. The best preserved grain was recovered from sample 32. Here grain was found in abundant quantities suggestive of deliberate deposition, where decreased exposure of the grain had led to better preservation conditions.

A small range of wild taxa were present from the processed samples (Appendices 3.1 and 3.2). The wild taxon recovered in the largest quantity was hazel (*Corylus avellana*) nutshell fragments, which were found in 21 samples. Smaller quantities of potential arable weeds were also present in the charred plant assemblage, including: common fumitory (*Fumaria officinalis*), mustards (*Brassica/Sinapis* sp.), sedges (*Carex* sp.) and grasses (*Poaceae* sp.) together with possible spike rush (*cf Eleocharis* sp.).

Charcoal fragments were found in all of the samples processed (Appendices 3.1 and 3.2). Charcoal was present in rare to abundant quantities, with 18 samples containing charcoal of a suitable size for analysis and radiocarbon dating. Charcoal fragment size was seen to range from <0.5cm to 2.5cm (Appendices 3.1 and 3.2). Observation by eye of the charcoal fragments indicates that the majority of fragments present are representative of non-oak taxa, indicating there is potential for several taxa to have been utilised as wood fuel. Observation of the morphology of the charcoal showed 5 samples contained roundwood fragments, suggestive of the use of small branch wood and/or coppiced rods (Appendix 3.2).

6.3.2 Other finds

Together with the CPR retrieved from the processed samples a number of other materials were recovered (Appendix 3.1); an overview of these is provided here. Pottery sherds of prehistoric date were recovered from 3 samples. Worked lithics



were present in 4 samples. Glass sherds were recovered from 1 sample. Evidence of industrial waste was found with iron (Fe) slag retrieved from 1 sample and magnetic residue (mag res) present in 7 samples. Probable evidence of food debris was also recovered with small quantities of burnt bone fragments found in 15 samples (Appendix 3.1).

6.4 Discussion

The samples are discussed below by the emerging themes coming out of the samples in terms of activity at the site.

6.4.1 Agricultural activity

Charred cereal grains were present in approximately two thirds of the samples processed and were recovered from Groups 1–3, together with other features present (Appendices 3.1 and 3.2). The assessment results suggest the main cultivars at Culduthel Phase 9 were oats and hulled barley. These cereals would suggest an earliest date of Iron Age for the activity at the site, when oats became more widely used across Scotland (Boyd 1988).

The majority of contexts, which contained charred cereal grains had only small quantities (rare to occasional) of grain, which suggests this grain is likely to represent material that was not preserved *in situ* but rather was exposed for some period before being incorporated within these features. This is also suggested from the moderate to poor preservation of the grain (see above). The recovery of Neolithic pottery sherds from pit [069] in Group 2 and pit [136] in Group 3 indicates a potential early date for these groups. Thus the presence of oat and hulled barley grain from these groups (Appendx 3b) suggests grain may also be in intrusive within some contexts and possibly relates to later (Iron Age) activity. The presence of significant quantities of oat and hulled barley from, Culduthel Mains Farm (Timpany 2007), a large Iron Age site to the west is one possible external source for the grain.

The large quantity of well preserved charred cereal grain recovered from pit [061], suggests it was deliberately deposited. The presence of abundant oat and hulled barley together with abundant charred hazel nutshell and charcoal fragments suggests this pit was used as a location for the discard of food and probable hearth waste. A small quantity of burnt bone fragments were also recovered from this pit. Although no chaff was noted during the assessment there is a possibility of some small-scale crop processing having taken place from the finding of a potential rotary quern stone fragment from pit [041] in Group 2. The quern stone has been given a potential Iron Age date, which fits well with the recovered cereal assemblage.

6.4.2 Food debris

The main food debris recovered from Culduthel Phase 9, together with the charred cereal grain was charred hazel nutshell fragments, which were also present in approximately two thirds of the samples. Nutshell fragments were particularly well represented in the Group 3 samples, which all contained common to abundant quantities (Appendix 3.1). Smaller quantities were

present in the remaining samples, with the exception of those from pit [006] in Group 1, pit [081] in Group 3 and pit [061] among the other features (Appendix 3.1). Hazel nutshell fragments are frequently recovered from archaeological sites dating from the prehistoric onwards and thus are little use in proxy dating.

Small quantities of burnt bone fragments were recovered from half of the samples processed, which may be indicative of discarded food refuse. The fragments have not been identified beyond mammal for this assessment with the small size of the fragments suggesting limited potential in identification beyond this level.

6.5 Conclusion

The assessment showed the presence of charred cereal grain and charred hazel nutshell in approximately two thirds of the samples. All samples contained charcoal fragments, with the majority representative of non-oak taxa.

The presence of oat and hulled barley in the assemblage indicates an earliest date of Iron Age for the site.

The presence of abundant cereal grain and nutshell in pit [061] together with charcoal and burnt bone suggests the remains of food debris. Scattered grain was present across the site indicating agricultural activity with oats and barley the main cultivars, however, there is a possibility some of this grain may be intrusive eg in features containing prehistoric pottery.

6.6 Statement of potential

The charred cereal grain from pit [061] presents the best evidence for agrarian activity across the site, with grain recorded as being well preserved and abundant within the sample. There is suitable grain from within this sample for radiocarbon dating to provide a chronology for the cultivation activity associated with this pit, which may also aid in dating the scattered grain across the rest of the site. Assessment of the grain assemblage hypothesised that it may be Iron Age in date, which could be tested through dating. Characterisation of the agricultural practices of the Scottish Iron Age has recently been highlighted as a national research goal (Hunter & Carruthers 2012) and the assemblage from Culduthel Phase 9 has the potential to add information to this dialogue. Information may also be gathered from the charcoal fragments on former woodland composition, resourcing and woodland management.

The presence of Neolithic pottery in pits within Group 2 and 3 indicates earlier activity took place on the site. Pits from these areas contain charcoal fragments suitable for analysis that have the potential to be of similar Neolithic date. The observation of the fragments to be mainly non-oak together with the presence of roundwoods in the assemblages indicates a range of taxa may have been resourced for fuel wood and that this resourced may have been managed. Analysis of these charcoal assemblages has the potential to then inform on woodland management, former woodland composition and fuel wood resources. Such analysis has been put forward as a research goal for the recent ScARF

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Neolithic framework in gaining more information on woodland resourcing and signs of management during this period (Sheridan & Brophy 2012).

7. DISCUSSION

The survival of remains on the site has been dictated largely by the extent of later truncation; as such the distribution of features is unlikely to be a true representation of the patterns of occupation on this site. The degree of vertical truncation is also evident in the preservation of individual features, with the majority found to survive to a depth of less than 0.2m. Dating of the remains must therefore rely largely on the finds and palaeoenvironmental analyses presented above, although this evidence is also largely inconclusive. The presence of Impressed Ware in Groups 2 and 3 suggests activity during the Neolithic, while charred oat and hulled barley point to Iron Age or later occupation across the site. It is possible however that charred plant remains are intrusive in at least some contexts, possibly associated with the very extensive Iron Age activity identified at Culduthel Farm Phase 5, immediately to the west.

7.1 Group 1

Morphologically, it seems probable that the features in this group were in use broadly contemporaneously; nearly all respect the ENE–WSW alignment and were backfilled with very similar naturally derived sands and gravels. The possible postholes cut in the base of the large pit [004] certainly appeared to have been backfilled at the same time as [004]. While no stakeor post-holes survived in the base of the enclosure ditch [010], the presence of an entrance with clear terminals suggests that a palisade once surrounded the internal features, and may have been of post-in-trench construction. The presence of charred roundwood fragments in the fills of pits [006] and [026] could strengthen this argument.

Dating evidence from this group was somewhat sparse – worked flint in pits [004] and [042] does imply activity during prehistory, with the abundance of oats in the fill of ditch [010], the magnetic residues from [010] and pits [008] and [036] and blue glass from [026] suggesting a date no earlier than the Iron Age.

Several possible typological parallels may be suggested for the enclosure; however these all relate to possible mortuary activity during the Neolithic. It resembles (albeit heavily truncated and more curvilinear in plan) the early-middle Neolithic long mortuary enclosure at Inchtuthill (Barclay & Maxwell 1991). The linear arrangement of post-holes bears some similarity to the possible mortuary platform that predated the oval barrow at Pitnacree (Scott 1992, pp107–117). Excavations at Culduthel Farm Phases 6 and 7 (immediately to the north) did reveal a similarly slight linear feature (Enclosure A) with terminals which was dated by AMS to the middle Neolithic (3340–3010 cal BC, Murray 2008).

There seem to be few comparators post-dating the Neolithic period; two long enclosures were encountered in a similarly poor state of preservation at Whelphill in South Lanarkshire – these

appeared to respect the position of a roundhouse that may date to the Bronze Age (Masser 2009), although the finds evidence suggests that the enclosures may already have been in use during the Neolithic.

If the enclosure and features in this group do indeed date from the Neolithic (and thus contemporary with pottery evidence from Groups 2 and 3), the finds and palaeoenvironmental assemblage from this group must be the result of later intrusion. While a substantial source of Iron Age material can be found less than 400m to the west (Murray 2008), this does imply that the features were left open (and kept from silting up) for a very extended period. Further evidence from radiocarbon or AMS dating may help to clarify the dating of this group.

7.2 Groups 2 and 3

The cluster of pits and post-holes south of the entrance did not appear to form any recognisable structural arrangement, although it is possible that [081] and [093] were terminal ends of a larger linear feature that lay outwith the excavation area. Although the features lie close to the Group 1 enclosure, and are generally backfilled with similar redeposited sands and gravels, there is no clear evidence connecting the two groups in terms of contemporary use. Pit [069] contained several sherds of coarseware that can be dated between the middle and later Neolithic. Two pieces of flint debitage from the fill of pit [087] are not diagnostic but do not contradict the pottery evidence.

The pits and post-holes in Group 3 also do not seem to be arranged in a structural manner. The presence of several sherds of Impressed Ware in post-hole [136] again indicates middle-late Neolithic activity.

7.3 Other features

The high level of truncation across the site precludes any meaningful interpretation of the distribution of the remaining scatters of features. Several of the features were demonstrably modern or were formed by animal or plant activity (see results).

Pit [061] appears to have been used as a dump for domestic waste, most likely during the Iron Age (which would fit with the possible rotary quern fragment from pit [109]); further analysis of the palaeoenvironmental evidence from [061] may be able to provide more detailed dating for the grain across the rest of the site, and aid in the characterisation of Iron Age agricultural practices in the area.

8. REFERENCES

Barclay, GJ & Maxwell, GS 1991 'Excavation of a Neolithic Long Mortuary Enclosure within the Roman Legionary Fortress at Inchtuthil, Perthshire', *Proc Soc Antig Scot* 121, pp27–44.

Boyd, WE 1988 'Cereals in Scottish Antiquity', *Circaea 5,* 2, pp101–110.



- Cappers, RTJ, Bekker, RM & Jans, JEA 2006 *Digital Seed Atlas of the Netherlands*, Barkhuis Publishing and Groningen University Library, Groningen.
- Hunter, F & Carruthers, M (eds) 2012 'Iron Age Panel Report', Scottish Archaeological Research Framework.
- Kenward, HK, Hall, AR & Jones, AKG 1980 'A Tested Set of Techniques for the Extraction of Plant and Animal Macrofossils from Waterlogged Archaeological Deposits', Science and Archaeology 22, pp3–15.
- Masser, P 2009 Archaeological Excavation at Clyde Windfarm Substation Site Whelphill, Near Crawford, South Lanarkshire, Headland Archaeology (UK) Ltd Ltd, Unpublished Client Report.
- Murray, R 2007 *Culduthel Mains Farm, Inverness, Phase 5: Excavation of a Later prehistoric Settlement. Assessment Report,* Headland Archaeology (UK) Ltd Ltd, Unpublished Client Report.
- Murray, R 2008 Data Structure Report of an Archaeological Excavation at Culduthel Farm Phases 7 and 8, Headland Archaeology (UK) Ltd Ltd, Unpublished Client Report.
- Peteranna, M 2011 South West Inverness Flood Relief Channel Phase 3: Archaeological Watching Brief and Evaluation, RoCAS, Unpublished Client Report.
- Scott, JG 1992 'Mortuary Structures and Megaliths' in Sharples, N & Sheridan, A (eds) Vessels for the Ancestors, Edinburgh.
 - Sheridan, A & Brophy, K (eds) 2012 'ScARF Neolithic Panel Report', Scottish Archaeological Research Framework.
 - Timpany, S 2007 *The Charred Plant Remains from Culduthel Mains Farm,* Headland Archaeology (UK) Ltd Ltd, Unpublished Client Report.

APPENDICES

Appendix 1 Site registers

Appendix 1.1 Context register

Context	Group	Description
001	-	Topsoil.
002	-	Natural sands and gravels.
003	1	Single fill of [004]. Firm mid grey-brown sandy silt with occasional charcoal fragments and frequent unsorted stones (0.03–0.2m diameter), suggesting rapid backfilling. Clear interface to natural, but indistinguishable from the fills of post-holes cut into the base of [004].
004	1	Cut of large sub-oval pit. Gentle breaks of slope, gently sloping sides and a rounded base. Measures 6 \times 2m, and 0.23m deep. 10 smaller post-holes are cut into the base, but their fills cannot be distinguished from that of this pit, and so their relationships could not be identified.
005	1	Single fill of [006]. Loose mid brown-grey sandy silt with very frequent stones/gravel (0.02–0.25m diameter). Clear interface to natural. Most likely slightly dirty redeposited natural material.
006	1	Cut of sub-oval pit/post-hole. Gentle breaks of slope, gently sloping sides and an irregular base. Measures 1.6 x 0.8m, and 0.23m deep.
007	1	Single fill of [008]. Loose dark brown-grey sandy silt with very occasional charcoal flecks, and very frequent unsorted stones/gravel (0.02–0.1m diameter), suggesting rapid backfiling. Clear interface to natural.
800	1	Cut of round pit/post-hole. Gentle breaks of slope, gently sloping sides and a rounded base. Measures 0.9 x 0.9m and 0.22m deep.
009	1	Single fill of [010]. This is a general number — individual slots have been given separate fill numbers ([043–048]) for sampling purposes. Loose mid brown-grey sandy silt with very occasional charcoal flecks and very frequent stones/gravel. Possibly slightly dirty redeposited natural material.
010	1	Cut of narrow enclosure ditch. Sub-oval in plan, aligned ENE–WSW, and measuring 24 x 10m, though completely truncated at the east end by a recent road formation. Substantial horizontal truncation is also evident, particularly at the SE side. Gentle breaks of slope, gently sloping sides and a flat base. Ditch survives up to 0.5m wide and up to 0.2m deep. A break to the S side appears to be an entrance, with two terminals [049] and [051].
011	-	Single fill of [012]. Moderately loose dark grey-brown slightly sandy silt with regular sub-angular to sub-rounded stones (up to 0.06m diameter). Very diffuse interface to natural, somewhat organic feel.
012	_	Cut of irregularly shaped possible pit. Somewhat unclear breaks of slope, with irregular sides and base. Measures 1.2×0.8 m and 0.11 m deep. Several small dark patches adjacent. Most likely the result of root or animal activity.
013	-	Single fill of [014]. Loose mid-dark grey-brown sandy silt with regular small sub-angular stones and one fragment of possible burnt hazelnut shell. Moderately unclear interface to natural.
014	-	$Cut of sub-rectangular possible pit/post-hole. Moderately unclear breaks of slope, steep sides and flat-irregular base. Measures 0.5 \times 0.38 m and 0.06 m deep.\\$
015	1	Single fill of [016]. Same as [003], though the larger stones may represent collapsed post-packing.
016	1	Cut of round pit/post-hole. Gentle breaks of slope, steep sides and rounded base. Measures $0.5 \times 0.5 \mathrm{m}$ and $0.43 \mathrm{m}$ deep. Situated in the base of large pit [004] but relationship unclear due to indistinguishable fills.
017	1	Single fill of [018]. Same as [003] though slightly looser and with fewer large stones.
018	1	Cut of round pit/post-hole. Sharp breaks of slope, near vertical sides and flat base. Measures $0.26 \times 0.2 \text{m}$ and 0.35m deep. Situated in the base of large pit [004] but relationship unclear due to indistinguishable fills.
019	1	Single fill of [020]. Same as [003] though slightly looser and with fewer large stones.
020	1	Cut of round pit/post-hole. Sharp breaks of slope, near vertical sides and rounded base. Measures $0.45 \times 0.35 \text{m}$ and 0.34m deep. Situated in the base of large pit $[004]$ but relationship unclear due to indistinguishable fills.
021	1	Single fill of [022]. Same as [003] though slightly looser and with fewer large stones.
022	1	Cut of round pit/post-hole. Gentle breaks of slope, gently sloping sides and rounded base. Measures $0.35 \times 0.3 \text{m}$ and 0.15m deep. Situated in the base of large pit [004] but relationship unclear due to indistinguishable fills.
023	1	Single fill of [024]. Same as [003] but with fewer large stones.
024	1	Cut of round pit/post-hole. Sharp breaks of slope, steep sides and rounded base. Measures 0.18 x 0.14m and 0.15m deep. Situated in the

base of large pit [004] but relationship unclear due to indistinguishable fills.



Context	Group	Description
025	1	Single fill of [026]. Loose slight grey-brown sandy silt with very frequent small stones and a lens of charcoal at the centre. Clear interface to natural. Most likely slightly dirty redeposited natural material.
026	1	$Cut of round pit/post-hole. Gentle breaks of slope, gently sloping sides and irregular base. Measures 0.62 \times 0.6m and 0.11m deep. \\$
027	1	Single fill of [028]. Loose mid grey-brown sandy silt with frequent small stone. Clear interface to natural. Most likely slightly dirty redeposited natural material.
028	1	$Cut of oval pit/post-hole. Gentle breaks of slope, gently sloping sides and rounded base. Measures 0.5 \times 0.24 m and 0.13 m deep. \\$
029	1	Single fill of [030]. Loose mid grey-brown sandy silt with frequent small stones. Clear interface to natural. Most likely slightly dirty redeposited natural material.
030	1	Cut ofround pit/post-hole. Gentle breaks of slope, gently sloping sides and rounded base. Measures 0.3 x 0.3m and 0.09m deep.
031	1	Single fill of [032]. Loose mid grey-brown sandy silt with frequent small stones/gravel. Clear interface to natural. Most likely slightly dirty redeposited natural material.
032	1	$Cut of round pit/post-hole. Gentle breaks of slope, gently sloping sides and rounded base. Measures 0.44 \times 0.45 m and 0.07 m deep. \\$
033	1	Single fill of [034]. Loose mid grey-brown sandy silt with very frequent small stones. Clear interface to natural. Most likely slightly dirty redeposited natural material.
034	1	$Cut of round pit/post-hole. Gentle breaks of slope, gently sloping sides and irregular base. Measures 0.55 \times 0.5 m and 0.11 m deep. \\$
035	1	Single fill of [036]. Loose mid grey-brown sandy silt with very frequent small stones. Clear interface to natural. Most likely slightly dirty redeposited natural material.
036	1	$Cut of oval pit/post-hole. Sharp breaks of slope, steeply sloping sides and rounded base. Measures 0.6 \times 0.4 m, and 0.2 m deep. \\$
037	1	Single fill of [038]. Loose mid grey-brown sandy silt with very frequent small stones. Clear interface to natural. Most likely slightly dirty redeposited natural material.
038	1	$Cut of round pit/post-hole. Gentle breaks of slope, gently sloping sides and rounded base. Measures 0.24 \times 0.3 m and 0.1 m deep. \\$
039	1	Single fill of [040]. Loose mid grey-brown sandy silt with very frequent small stones. Clear interface to natural. Most likely slightly dirty redeposited natural material.
040	1	$Cut of sub-round pit/post-hole. Gentle breaks of slope, steeply sloping sides and irregular base. Measures 0.45 \times 0.38 m and 0.18 m deep. \\$
041	1	Single fill of [042]. Loose mid grey-brown sandy silt with very frequent unsorted stones/gravel (0.02–0.2m diameter) and one fragment of animal bone. Clear interface to natural. Most likely slightly dirty redeposited natural material, rapidly backfilled.
042	1	$Cut of oval pit/post-hole. Gentle breaks of slope, gently sloping sides and rounded base. Measures 1.44 \times 0.93 m and 0.26 m deep. \\$
043	1	Fill of [010]. Same as [009]. Depth 0.17m.
044	1	Fill of [010]. Same as [009]. Depth 0.14m.
045	1	Fill of [010]. Same as [009]. Depth 0.2m.
046	1	Fill of [010]. Same as [009]. Depth 0.1m.
047	1	Fill of [010]. Same as [009]. Depth 0.12m.
048	1	Fill of [010]. Same as [009]. Depth 0.11m.
049	1	Cut of round pit/post-hole at W terminus of [010]. Gentle breaks of slope, gently sloping sides and rouded base. Measures 0.8 x 0.9m and 0.12m deep. Relationship to [010] unclear due to indistinguishable fills.
050	1	Single fill of [049]. Same as [009].
051	1	Cut of round pit/post-hole at Eterminus of [010]. Gentle breaks of slope, gently sloping sides and rounded base. Measures 0.9 x 0.7m and 0.1m deep. Relationship with [010] unclear due to indistiguishable fills.
052	1	Single fill 0f [051]. Same as [009].
053	2	Cut of oval pit/post-hole. Gradual breaks of slope, steeply sloping sides and concave base. Measures 0.8 x 0.7m and 0.28m deep.
054	2	Single fill of [053]. Loose mid grey-brown silty sand with rare charcoal flecks, frequent small rounded-subangular stones and occasional larger stones. Clear interface to natural. Most likely slightly dirty redeposited natural material.
055	2	Cut of oval pit/post-hole. Gradual breaks of slope, steeply sloping sides and concave base. Measures 0.48 x 0.4m and 0.14m deep.
056	2	Single fill of [055]. Loose mid grey-brown silty sand with rare charcoal flecks, frequent small rounded-subangular stones and occasional larger stones. Clear interface to natural. Most likely slightly dirty redeposited natural material.

Context	Group	Description
057	-	Cut of sub-round pit/post-hole. Gentle breaks of slope, gently sloping sides and rounded base. Measures 0.68 x 0.6m and 0.19m deep.
058	-	Single fill of [057]. Loose mid grey-brown sandy silt with rare charcoal flecks, frequent small stones and occasional larger stones. Clear interface to natural. Most likely slightly dirty redeposited natural material.
059	-	Cut of round pit/post-hole. Sharp breaks of slope, steep sides and rounded-irregular base. Measures 0.6 x 0.6m and 0.21m deep.
060	-	Single fill of [059]. Loose mid grey-brown sandy silt with rare charcoal flecks, frequent small stones and occasional larger stones. Clear interface to natural. Most likely slightly dirty redeposited natural material.
061	-	Cut of kidney shaped pit. Gentle breaks of slope, gently sloping sides and rounded base. Measures 2.04 x 1m and 0.2m deep. Possibly two smaller intercutting pits but fills are indistinguishable so impossible to be sure.
062	-	Single fill of [061]. Loose mid grey-brown sandy silt with rare charcoal flecks, occasional peaty lenses, frequent stones (0.02–0.25m diameter). Clear interface to natural. Most likely slightly dirty redeposited natural material.
063	-	Cut of sub-circular pit. Clear breaks of slope, near vertical sides and concave-irregular base. Measures 1.65 x 1.4m and 0.45m deep. Unlike any nearby features in form or fill so unlikely to be contemporary. Adjacent to garage foundation so possibly modern.
064	-	Single fill of [063]. Moderately loose mid grey-brown slightly clayey silt with dark charcoal patches (especially towards the base and north side) and regular subangular stones (up to 0.06m diameter). Very diffuse interface to natural. Does not appear to represent in-situ burning.
065	-	Cut of sub-oval pit/post-hole. Unclear breaks of slope, gently sloping sides and irregular base. Measures 0.38 x 0.3m and 0.09m deep.
066	-	Single fill of [065]. Loose mid-dark grey slightly silty sand with occasional charcoal flecks. Moderately diffuse interface to natural.
067	2	Cut of sub-oval pit. Gradual breaks of slope, steeply sloping sides and concave base. Measures 1.32 x 1.15m and 0.22m deep.
068	2	Single fill of [067]. Loose mid grey-brown silty sand with frequent small-medium angular, subangular and rounded stones. Clear interface to natural. Most likely slightly dirty redeposited natural material.
069	2	Cut of oval pit/post-hole. Gradual breaks of slope, steep sides and concave base. Measures 0.6 x 0.45m and 0.18m deep.
070	2	Single fill of [069]. Loose mid grey-brown silty sand with rare charcoal flecks and frequent small rounded-subangular stones. Clear interface to natural. Most likely slightly dirty redeposited natural material.
071	2	Cut of oval pit/post-hole. Gradual breaks of slope, moderately sloping sides and flat-uneven base. Measures 0.67 x 0.5m and 0.1m deep.
072	2	Single fill of [071]. Loose mid reddish-brown silty sand with frequent small rounded and sub-angular stones. Clear interface to natural. Most likely redeposited natural material.
073	-	Cut ofcircular pit. Gentle breaks of slope, gently sloping sides and flat-rounded base. Measures 0.54 x 0.5m and 0.12m deep.
074	-	Single fill of [073]. Loose mid grey-brown sandy silt with very frequent stones. Clear interface to natural. Most likely redeposited natural material.
075	-	$Cut of oval pit. Gentle breaks of slope, irregular and gently sloping sides and irregular base. Measures 0.43 \times 0.23 m and 0.1 m deep.$
076	-	Single fill of [075]. Loose dark grey-brown sandy silt with very frequent small stones and occasional charcoal flecks. Somewhat mixed interface to natural. Most likely slightly dirty redeposited natural material.
077	-	Cut of circular pit. Gentle breaks of slope, gently sloping sides and flat-rounded base. Measures 0.7×0.63 m and 0.14 m deep.
078	-	Single fill of [077]. Loose mid grey-brown sandy silt with very frequent stones. Diffuse interface to natural. Most likely slightly dirty redeposited natural material.
079	2	Cut of oval pit/post-hole. Gradual breaks of slope, moderately sloping sides and concave-uneven base. Measures 0.65 x 0.6m and 0.14m deep.
080	2	Single fill of [079]. Loose mid greyish-brown silt with frequent angular, subangular and rounded small-medium stones. Clear interface to natural. Looks and feels different to fill of nearby pits [069] and [071]. Higher density of stones than surrounding natural.
081	2	Cut of terminal of linear feature running NW–SE out of the S LOE. Sharp breaks of slope, moderately sloping sides and concave base. Measures 0.75m wide and 0.23m deep, length unseen.
082	2	Single fill of [081]. Loose mid greyish-brown silty sand with frequent sub-angular and rounded small-medium sized stones and rare charcoal flecks. Clear interface to natural. Most likely slightly dirty redeposited natural material.
083	2	Cut of oval pit/post-hole. Gradual breaks of slope, moderately sloping sides and concave base. Measures 0.4 x 0.35m and 0.08m deep.
084	2	Single fill of 083. Loose mid greyish-brown silty sand with frequent rounded and sub-angular small-medium stones. Clear interface to natural. Most likely redeposited natural material.
085	2	Cut of oval pit/post-hole. Gradual breaks of slope, moderately sloping sides and concave-uneven base. Measures 0.48 x 0.45m and 0.08m deep.





Context	Group	Description
086	2	Single fill of [085]. Loose mid greyish-brown silty sand with frequent rounded and sub-angular small stones. Diffuse interface to natural. Most likely redeposited natural material.
087	2	Cut of oval pit/post-hole. Gradual breaks of slope, steeply sloping sides and concave base. Measures 0.5 x 0.42m and 0.18m deep.
088	2	Single fill of 087. Loose mid greyish-brown silty sand with frequent rounded and sub-angularsmall-medium stones and rare charcoal flecks Clear interface to natural. Most likely slightly dirty redeposited natural material.
089	2	$Cut of oval pit/post-hole. Gradual breaks of slope, steep-moderately sloping sides and concave base. Measures 0.7 \times 0.6 m and 0.19 m deep. \\$
090	2	Single fill of [089]. Loose dark greyish-brown silty sand with frequent rounded and sub-angular small-medium sized stones and rare charcoal flecks. Clear interface to natural. Most likely slightly dirty redeposited natural material.
091	2	Cut of oval pit/post-hole. Gradual breaks of slope, steeply sloping sides and concave base. Measures 0.5 x 0.38m and 0.18m deep.
092	2	Single fill of [091]. Loose dark greyish-brown silty sand with frequent rounded and sub-angular small-medium stones and rare charcoal flecks. Clear interface to natural. Most likely slightly dirt redeposited natural material.
093	2	Cut of oval pit or possible terminus of NW–SE running linear feature. Runs into S LOE. Gradual breaks of slope, steeply sloping sides and concave base. Measures 0.7m wide and 0.2m deep, length unseen.
094	2	Single fill of [093]. Loose dark orange-brown sand with frequent rounded and sub-angular small-medium stones and rare charcoal flecks. Clear interface to natural. Most likely slightly dirty redeposited natural material.
095	-	$Cut of oval \ pit/post-hole. \ Gradual \ breaks of slope, steeply sloping \ sides \ and \ flat-uneven \ base. \ Measures \ 0.6 \times 0.55 m \ and \ 0.15 m \ deep.$
096	-	Single fill of [095]. Loose dark brownish-grey silty sand with frequent angular and sub-angular small-medium stones and occasional charcoal fragments. Clear interface to natural. No evidence of in-situ burning. Most likely slightly dirty redeposited natural material.
097	1	Cut of circular pit/post-hole. Gentle braks of slope, irregular, gently sloping sides and rounded base. Measures 0.5 x 0.49m and 0.28m deep.
098	1	Single fill of 097. Moderately loose mid grey-brown sandy silt with very frequent small and medium stones and very occasional charocal flecks. Clear interface to natural. Most likely slightly dirty redeposited natural material.
099	-	$Cut of sub-circular pit. Gentle breaks of slope, irregular, gently sloping sides and rounded base. Measures 0.5 \times 0.5 m and 0.15 m deep.$
100	-	Single fill of [099]. Moderately loose dark grey-brown sandy silt with very frequent stones. Moderately diffuse interface to natural. Most likely slightly dirty redeposited natural material.
101	-	Cut of terminal of linear feature running NW–SE out of the S LOE. Gentle breaks of slope, gently sloping sides and flat base. Measures 0.75m wide and 0.2m deep, length unseen. Possible animal burrow.
102	-	Single fill of [101]. Moderately loose mid grey-brown sandy silt with very frequent small-medium stones. Moderately diffuse interface to natural. Most likely slightly dirty redeposited natural material.
103	-	Cut of oval pit. Gentle breaks of slope, gently sloping sides and rounded base. Measures 1.16 x 0.9m and 0.16m deep.
104	-	Single fill of [103]. Moderately loose mid grey-brown sandy silt with very frequent small stones and very occasional charcoal flecks. Clear interface to natural. Most likely slightly dirty redeposited natural material.
105	-	Cut of oval pit. Gentle breaks of slope, gently sloping sides and rounded base. Measures 0.6 x 0.5m and 0.06m deep.
106	=	Single fill of [105]. Moderately loose mid grey-brown sandy silt with very frequent small stones. Clear interface to natural. Most likely slightly dirty redeposited natural material.
107	-	Cut of oval pit. Gentle breaks of slope, gently sloping sides and rounded base. Measures 0.67 x 0.5m and 0.07m deep.
108	_	Single fill of [107]. Moderately loose mid grey-brown sandy silt with very frequent small stones. Clear interface to natural. Most likely slightly dirty redeposited natural material.
109	-	Cut of irregularly shaped pit (or possibly two intercutting pits). Gentle breaks of slope, gently sloping sides and ireegular-rounded base. Measures 16 x 1.25 and 0.4m deep.
110	-	Upper fill of [109]. Moderately loose dark grey-brown sandy silt with very frequent small stones (some burnt) and very frequent charcoal flecks/fragments. Also 3 fragments of possibly carved stone. Clear interface to [111]. 0.18m thick. No sign of in-situ burning – possible waste deposit?
111	-	Primary fill of [109]. Moderately loose mid grey-brown sandy silt with very frequent small stones. Diffuse interface to natural. Most likely redeposited natural material.
112	-	Cut of Circular pit. Gentle breaks of slope, gently sloping sides and irregular base lined with subangular medium stones. Measures 0.48 x 0.46m and 0.2m deep.
113	=	Single fill of [112]. Moderately loose mid grey-brown sandy silt with very frequent stones. Clear interface to natural. Most likely redeposited natural material.
114	3	Cut of oval pit. Gradual breaks of slope, moderately sloping sides and concave-uneven base. Measures 0.44 x 0.24m and 0.09m deep.

Context	Group	Description
115	3	Single fill of [114]. Loose mid grey-brown sand with frequent rounded and sub-angular small stones. Clear interface to natural. Similar to [117] but not [119] or [121].
116	3	$Cut of oval pit. Gradual breaks of slope, moderately sloping sides and concave-uneven base. Measures 0.4 \times 0.32 m and 0.09 m deep. \\$
117	3	Single fill of [116]. Loose mid grey-brown silty sand with frequent rounded and sub-angular stones. Clear interface to natural. Most likely redeposited natural material.
118	3	$Cut of oval pit. Gradual breaks of slope, moderately sloping sides and concave-uneven base. Measures 0.45 \times 0.38 m and 0.1 m deep. \\$
119	3	Single fill of [118]. Loose dark grey-brown silty sand with frequent rounded and sub-angular small stones. Most likely redeposited natural material.
120	3	Cut of oval pit. Gradual breaks of slope with moderately sloping sides and concave-uneven base. Measures 0.55 x 0.5m and 0.08m deep.
121	3	Single fill of [120]. Loose dark grey-brown silty sand with frequent rounded and sub-angular small stones. Clear interface to natural. Most likely redeposited natural material.
122	-	Cut of sub-rectangular pit. Sharp breaks of slope and steep sides to north and west, very gradual elsewhere; sloping base. Measures 0.73 x 0.62m and 0.23m deep. Probable animal burrow.
123	-	Single fill of [122]. Moderately loose mid grey-brown silty sand with regular sub-angular and sub-rounded small and medium stones. Diffuse interface to natural.
124	1	Cut of round post-hole. Sharp breaks of slope, steep sides and rounded base. Measures 0.17 x 0.17m and 0.14m deep. Cut into base of large pit [004].
125	1	Single fill of [124]. Firm mid grey-brown sandy silt with regular small stones and very occasional charcoal flecks. Clear interface to natural. Very similar to [003] (above).
126	1	Cut of round post-hole. Sharp breaks of slope, steep sides and rounded base. Measures 0.17×0.12 m and 0.1 m deep. Cut into base of large pit [004].
127	1	Single fill of [126]. Firm mid grey-brown sandy silt with frequent small stones and very occasional charcoal flecks. Clear interface to natural. Very similar to [003] (above).
128	1	Cut of round post-hole. Sharp breaks of slope, steep sides and rounded base. Measures 0.2 x 0.17m and 0.14m deep. Cut into base of large pit [004].
129	1	Single fill of [128]. Moderately loose mid grey-brown sandy silt with very frequent small stones. Clear interface to natural. Similar to [003] (above).
130	1	Cut of round pit/post-hole. Gentle break of slope, gently sloping sides and irregular base. Measures 0.33 x 0.3m and 0.11m deep. Cut into base of large pit [004].
131	1	Single fill of [130]. Moderately loose mid grey-brown sandy silt with very frequent small stones and very occasional charcoal flecks. Clear interface to natural. Very similar to [003] (above).
132	1	Cut of circular pit. Gentle breaks of slope, gently sloping sides and rounded base. Measures 0.34×0.33 m and 0.13 m deep. Cut into the base of large pit [004].
133	1	Single fill of [132]. Loose mid grey-brown sandy silt with very frequent stones and very occasional charcoal flecks. Diffuse interface to natural. Very similar to [003] (above).
134	3	$Cut of oval pit. Gradual \ breaks of slope, moderately sloping \ sides \ and \ concave \ base. \ Measures \ 0.5 \times 0.44 m \ and \ 0.16 m \ deep.$
135	3	Single fill of [134]. Loose mid reddish-brown silty sand with frequent rounded and sub-angular small stones. Clear interface to natural. Most likely redeposited natural material.
136	3	Cut of irregular shaped pit (likely to be two intercutting pits). Gradual breaks of slope, steeply sloping sides and concave base. Measures 1.1×0.6 m and 0.35 m deep.
137	3	Single fill of [136]. Firm dark grey-brown silty sand with freequent rounded and sub-angular small-medium stones. Clear interface to natural. Several fragments of ?neolithic pottery from south edge of pit, 0.2m deep.
138	3	Cut of oval pit. Gradual breaks of slope, steeply sloping sides and flat-uneven base. Measures 0.9 x 0.5m and 0.19m deep. On same alignment as [136] adjacent.
139	3	Single fill of [138]. Firm dark grey-brown silty sand with frequent rounded and sub-angular small-medium stones. Clear interface to natural. Most likely redeposited natural material.
140	-	$Cut of sub-rectangular possible pit. Unclear breaks of slope, steep south side and irregular base. Measures 0.5 \times 0.4 m and 0.06 m deep.$
141	-	Single fill of [140]. Moderately loose mid grey silty clay with occasional rounded small stones. Moderately clear interface to natural. Most likely topsoil infill suggesting pit was left open.



Context	Group	Description
142	-	Cut of sub-oval possible pit. Clear breaks of slope, steep sides and concave base. Measures 0.5 x 0.45m and 0.15m deep.
143	-	Single fill of [142]. Moderately loose dark grey clayey silt with regular small sub-angular stones. Clear interface to natural. Most likely topsoil infill suggesting pit was left open.
144	-	Cut of sub-circular possible pit. Moderately clear breaks of slope, steep sides and irregular base. Measures 0.5 x 0.4 m and 0.09 m deep.
145	-	Single fill of [144]. Loose dark grey clayey silt with regular angular small stones. Diffuse interface to natural. Most likely topsoil infill suggesting pit was left open.
146	3	Cut of oval pit/post-hole. Gradual breaks of slope, steeply sloping sides and concave base. Measures 0.6 x 0.55m and 0.29m deep.
147	3	Single fill of [146]. Loose dark grey-brown silty sand with frequent rounded and sub-angular small-medium stones and two larger rounded stones (0.2–0.32m diameter). Clear interface to natural. Most likely redeposited natural material.
148	3	$Cut of oval pit/post-hole. Gradual breaks of slope, steeply sloping sides and concave base. Measures 0.6 \times 0.5 m and 0.3 m deep. \\$
149	3	Single fill of [148]. Loose dark grey-brown silty sand with rounded and sub-angular small-medium stones and rare charcoal flecks. Clear interface to natural. Most likely redeposited natural material.

Appendix 1.2 Photographic register

Frame	Direction	Description
001	-	ID Shot
002	NE	General view of site after two days stripping
003	NNE	General view of site after two days stripping
004	N	General view of site after two days stripping
005	NW	General view of site after two days stripping
006	ENE	General view of E end of site
007	SSW	General view of features W of road
008	Ν	S facing section of [004]
009	NNE	SSW facing section of [012]
010	Ν	S facing section of [014]
011	S	N facing section of [016]
012	W	E facing section of [018]
013	N	S facing section of [020]
014	N	S facing section of [022]
015	S	N facing section of [024]
016	Ν	S facing section of [026]
017	NE	SW facing section of [028]
018	Ν	S facing section of [030]
019	N	S facing section of [032]
020	Ν	S facing section of [034]
021	N	S facing section of [036]
022	N	S facing section of [038]
023	NE	SW facing section of [040]
024	Е	W facing section of [042]
025	S	N facing section of [008]

Frame	Direction	Description	
026	N	View of slot [043] through [010]	
027	W	E facing section of [010] (at slot [043])	
028	W	E facing section of [010] (at slot [044])	
029	W	E facing section of [010] (at slot [045])	
030	W	E facing section of [010] (at slot [046])	
031	S	N facing section of [010] (at slot [047])	
032	Е	W facing section of [010] (at slot [048])	
033	S	N facing section of [049]	
034	S	N facing section of [051]	
035	SW	NE facing section of [053]	
036	SW	NE facing section of [055]	
037	-	ID shot	
038	N	S facing section of [057]	
039	N	S facing section of [059]	
040	NW	SE facing section of [061]	
041	NE	SW facing section of [061]	
042	SW	NE facing section of [067]	
043	SE	NW facing section of [063]	
044	S	N facing section of [065]	
045	SW	NE facing section of [069]	
046	SW	NE facing section of [071]	
047	S	N facing section of [079]	
048	SE	NW facing section of [081]	
049	SE	NW facing section of [083]	
050	S	N facing section of [085]	

Frame	Direction	Description	
051	-	Panorama from top of spoil heap (digi. only, 19 shots)	
052	NW	SE facing section of [087]	
053	SW	NE facing section of [089]	
054	SW	NE facing section of [091]	
055	Е	W facing section of [093]	
056	-	Overhead view of [109] showing possible worked stone	
057	SW	NE facing section of [095]	
058	SW	NE facing section of [109]	
059	NW	SE facing section of [107]	
060	NW	SE facing section of [105]	
061	NW	SE facing section of [103]	
062	SW	NE facing section of [101]	
063	Е	W facing section of [099]	
064	NW	SE facing section of [097]	
065	NE	SW facing section of [112]	
066	SW	Panorama of features within [010]	
067	SW	Panorama of features within [010]	
068	SW	Panorama of features within [010]	
069	SW	Panorama of features within [010]	
070	SW	NE facing section of [114]	
071	SW	NE facing section of [116]	
072	SW	NE facing section of [118]	
073	SE	NW facing section of [120]	
074	-	ID Shot	
075	N	S facing section of [124]	
076	N	S facing section of [126]	
077	N	S facing section of [128]	
078	N	S facing section of [130]	
079	N	S facing section of [132]	
080	NW	SE facing section of [134]	
081	Е	W facing section of [136]	
082	E	W facing section of [138]	
083	N	S facing section of [144]	
084	NW	SE facing section of [132]	
085	NW	SE facing section of [140]	
086	NE	SW facing section of [122]	
087	Е	W facing section of [146]	
088	NE	SW facing section of [148]	
089	E	Post-ex view of [004]	
090	W	Post-ex view of [004]	

Appendix 1.3 Drawing register

Drawing	Plan	Section	Description
001	-	1:10	Profile of overburden at east end of site
002	NTS	-	Pre-ex sketch plan of Site
003	NTS	-	Sketch plan of features within enclosure ditch [010]
004	-	1:10	North-facing section of pit [004]
005	-	1:10	North-facing section of pit [109]

Appendix 1.4 Sample register

Appeni	uix 1. 4	Sumple register	
Sample	Context	Description	
001	003	30l from fill of [004] (from octant SE of middle)	
002	005	301 from fill of [006]	
003	007	301 from fill of [008]	
004	011	3I from fill of [012]	
005	013	11 from fill of [014]	
006	003	30l from fill of [004] (from octant NW of middle)	
007	015	201 from fill of [016]	
800	017	10l from fill of [018]	
009	019	8l from fill of [020]	
010	021	3I from fill of [022]	
011	023	3I from fill of [024]	
012	025	10l from fill of [026]	
013	027	3I from fill of [028]	
014	029	3I from fill of [030]	
015	031	3I from fill of [032]	
016	033	4l from fill of [034]	
017	035	4l from fill of [036]	
018	037	3I from fill of [038]	
019	041	301 from fill of [042]	
020	039	3I from fill of [040]	
021	044	10l from fill of [010]	
022	046	10l from fill of [010]	
023	048	10l from fill of [010]	
024	050	201 from fill of [049]	
025	052	101 from fill of [051]	
026	054	10l from fill of [053]	
027	056	5l from fill of [055]	
028	064	301 from fill of [063]	
029	0660	31 from fill of [065]	
030	58	201 from fill of [057]	



Sample	Context	Description
031	060	201 from fill of [059]
032	062	301 from fill of [061]
033	074	101 from fill of [073]
034	076	10I from fill of [075]
035	078	101 from fill of [077]
036	068	301 from fill of [067]
037	070	101 from fill of [069]
038	072	31 from fill of [071]
039	080	101 from fill of [079]
040	082	10I from fill of [081]
041	084	11 from fill of [083]
042	086	31 from fill of [085]
043	088	101 from fill of [087]
044	090	10l from fill of [089]
045	092	31 from fill of [091]
046	094	51 from fill of [093]
047	096	51 from fill of [095]
048	113	5l from fill of [112]
049	098	101 from fill of [097]
050	110	25I from fill of [109]
051	104	201 from fill of [103]

Sample	Context	Description
052	106	51 from fill of [105]
053	108	51 from fill of [107]
054	115	11 from fill of [114]
055	117	11 from fill of [116]
056	119	11 from fill of [118]
057	121	11 from fill of [120]
058	125	11 from fill of [124]
059	127	11 from fill of [126]
060	129	11 from fill of [128]
061	131	11 from fill of [130]
062	133	11 from fill of [132]
063	135	31 from fill of [134]
064	137	10l from fill of [136]
065	139	31 from fill of [138]
066	123	10l from fill of [122]
067	141	21 from fill of [140]
068	143	21 from fill of [142]
069	145	21 from fill of [144]
070	147	21 from fill of [146]
071	149	21 from fill of [148]

Appendix 2 Finds catalogue

Group	Context	Sample	Material	Qty	Weight (g)	Object	Description	Spot Date	Period
1	003	6	Industrial waste	-	1	Mag Res	-	-	IA or later
1	003	1	Industrial waste	-	12	Object	Small pieces which may be natural iron pan	-	IA or later
1	003	1	Lithics	1	-	Debitage	Flint chip	-	PH
1	015	-	Industrial waste	-	1	Mag Res	-	-	IA or later
1	025	-	Industrial waste	-	1	Mag Res	-	-	IA or later
1	035	17	Industrial Waste	-	1	Mag Res	-	=	IA or later
1	041	-	Glass	1	-	Object	Small blue chip	-	IA or later
1	041	19	Lithics	1	-	Debitage	Flint flake, distal fragment	_	PH
1	044	-	Industrial waste	-	1	Mag Res	-	-	IA or later
1	050	24	Industrial waste	-	1	Mag Res	-	_	IA or later
2	056	-	Industrial waste	-	1	Mag Res	-	-	IA or later
2	070	37	Pottery (PH)	33	-	Impressed ware	Decorated rim sherd with fingernail impressions to exterior and top of squared rim; also many small abraded body sherds	3500- 2900BC	Neol
2	082	40	Industrial waste	-	1	Mag Res	-	-	IA or later
2	088	43	Lithics	2	-	Debitage	Flint	-	PH
2	094	-	Industrial waste	_	1	Mag Res	-	-	IA or later
-	110	-	Stone	1	_	Quern	Possible rotary quern fragment	_	IA or later
3	137	64	Industrial waste	-	1	Slag	Small sphere which is not magnetic	-	IA or later
3	137	64	Lithics	1	-	Debitage	Flint flake, hard hammer	-	PH
3	137	-	Pottery (PH)	2	-	Impressed ware	Two body sherds with fingernail decoration	3500- 2900BC	Neol
3	137	64	Pottery (PH)	49	_	Impressed ware	Small sherds decorated with fingernail impressions	3500- 2900BC	Neol
3	147	70	Pottery (PH)	9	_	Coarseware	Small abraded sherds and fragments	-	PH
3	149	71	Lithics	11	-	Debitage	Three flint flakes and eight chips	-	PH

Appendix 3 Palaeoenvironmental tables

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3.1 R
Appendix

Context	Context Sample Feature	Feature	Sample	Sample Ceramic Stone	Stone	Glass	=	Industrial waste	vaste	ш .	Burnt	Charred	Charcoal	_	Material	Cinders Coal	Coal	Comments
			(1)	Pottery						<u> </u>	pone	piant remains			avallable for AMS dating			
				H	Lithics	Lithics Glass Glass waste		Fe slag N	Mag	Other	Mammal		Oty	Max size (cm)				
Group 1																		
003	-	Fill of pit [004]	30	I	+	1	+	++		+	+	+	+ + +	1.1	Charcoal ++, bumt bone +	+	1	Corylus nutshell +, charcoal is non-oak
900	К	Fill of pit [006]	30	I	ı	1	I	'		+	‡	+ + +	+ + +	1 3	Burnt bone +, nutshell +, charcoal +	‡	+	Corylus nutshell +++, charcoal is oak and non-oak
200	9	Fill of pit [008]	30	I	I	I	I	+		1	+	+	+ +	0.8	I	I	I	Burnt bone not retained; Corylus nutshell +, charcoal is non-oak
015	_	Fill of pit/ post-hole [016]	20	ı	ı	1	I	ı		1	+	‡	+	<0.5	ı	ı	ı	Coylus nutshell ++, charcoal not retained
017	∞	Fill of pit/ post-hole [018]	0	I	ı	1	I	ı		1		+	+	<0.5	I	ı	ı	Corylus nutshell +, charcoal not retained
610	6	Fill of pit/ post-hole [020]	4	I	ı	1	I	ı		+	+	+	+ +	1.	Charcoal +	+	+	Corylus nutshell +, Hordeum vulgare +, charcoal is non-oak
021	01	Fill of pit/ post-hole [022]	m	I	ı	1	I	ı		1		+	+	9:0	I	+	ı	Corylus nutshell +, charcoal is non-oak
025	12	Fill of pit [026]	10	I	I	+	I	I		ı		+	+ +	0.8	I	+	1	Corylus nutshell +, charcoal is non-oak
035	17	Fill of pit [036]	4	I	I	ı	ı	+		+	+	I	+	<0.5	I	I	I	Charcoal not retained
140	19	Fill of pit [042]	30	ı	+	1	I			+	+	+++	+	4.	Charcoal +	+	ı	Con/lus nutshell ++, charcoal is non-oak

	7	1
4	4	I

Marke Mark	Context		Sample Feature	Sample	Sample Ceramic	Stone	Glass		Industrial waste	waste	B		Charred	Charcoal		Material	Cinders Coal	Coal	Comments
Hand other 10 10 10 10 10 10 10 1				(i) lov	Pottery						ō		plant remains			available for AMS dating			
21 Fill of click 10 - - + + + + + +						Lithics	Glass					lammal		Qty	Max size (cm)				
Flind dick 10 10 10 10 10 10 10 1	044	21	Fill of ditch [010]	10	ı	ı				+				+	<0.5	I	+	ı	Charcoal not retained
49 Fill of post 1 and 1	048	23	Fill of ditch [010]	10	I	I	ı	ı		,	ı		+	+	<0.5	ı	+	ı	Avenasp. +, charcoal not retained
49 Fill of pote (97) 60 Fill of post 1	050	24	Fill of western terminus [049] of ditch [010]	50	T	I	1	1		+	1		+	+	<0.5	1	‡	I	Avena sp. +, Corylus nutshell +
Fill of post	860	49	Fill of pit [097]	∞	I	I				·			+	+	0.5	ı	+	1	Con/us nutshell +, charcoal is non-oak
up 2 27 Fill of pixt 10 +++ +++ 1.3 Charcoal+ 40 Fill of pixt 10 +++ + +++ +++ 1.3 Charcoal+ ++	129	09	Fill of post- hole/pit [128]	-	ı	ı	ı	1	·		1		ı	T	ı	I	+	1	I
40. Elli of pit 5 - - - + - +	131	61	Fill of post- hole/pit [130]	-	ı	ı							ı	+ +	1.3	Charcoal +	I	I	Charcoal is oak and non-oak
27 Fill of pit 5 + + + + - + + + + + + 1 Charcoal+, From the line potential of the fill of pit 5 + + + + + + + + + +	Group 2																		
37 Fill of pit 10 +++ + + + + + + + 1 Charcoal+, ++ - + + + 1 Charcoal+, ++ - + + + + 1 Charcoal+, ++ + + + + + + 1 Charcoal+, ++ + + + + + + + + + + + + + + + + +	950	27	Fill of pit [055]	2	I	I							I	+	<0.5	ı	+	I	Charcoal not retained
40 Fill of pit 10 + + + + + + + + + + 1.5 Charcoal +, + + + + + 43 Fill of pit 5 - + + + + + + + + + + + + + + + +	070	37	Fill of pit [069]	10	‡	I	·	ı					+ +	+	-	Charcoal +, nutshell +	‡	I	Con/us nutshell ++, charcoal is non-oak
43 Fill of pit 5 - + + + - + + + <0.5 Burnt bone + 46 Fill of pit 6 + + + + 0.7 - + + + 1093]	087	40	Fill of pit [081]	10	I	I	ı						† + +	‡ ‡	1.5	Charcoal +, nutshell +	+	+	Coylus nutshell +++, charcoal is oak and non-oak
46 Fill of pit 6 + + + + 0.7 - + + + 1093]	880	43	Fill of pit [087]	2	I	+							I	+	<0.5	Burnt bone +	ı	I	Charcoal not retained
	094	46	Fill of pit [093]	9	ı	ı							+	‡	0.7	ı	+	ı	Coylus nutshell +, charcoal is non-oak

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ľ	~	Z	/	
	X	X		×
-	_	•	- 72	1

Context	Context Sample Feature	Feature	Sample vol (l)	Sample Ceramic Stone Glass vol (I) Pottery	Stone	Glass		Industrial waste	waste		Burnt bone	Charred plant remains	Charcoal		Material available for AMS dating	Cinders Coal	Comments
				Æ	Lithics	Lithics Glass Glass waste		Fe slag	Mag	Other	Mammal		Oty	Max size (cm)			
Group 3																	
135	63	Fill of pit [134]	m	I	ı	ı	1	ı	ı		ı	+ + +	+ + +	1.5	Charcoal +, nutshell +++	1	Conylus nutshell +++, charcoal is non-oak
137	2	Fill of pit [136]	10	++	+	I	ı	I	+	ı	I	+ + +	‡	1.6	Charcoal +, nutshell +++	I	Corylus nutshell +++, charcoal is non-oak
147	0/	Fill of pit [146]	2	+	I	I	ĺ	I	ı		+	+ + + +	+ + +	0.8	Nutshell ++++	+	ConJus nutshell ++++, charcoal is non-oak
149	71	Fill of pit [148]	2	I	++	I	ı	ı	ı		I	+ + +	+ + +	1.3	Charcoal +, nutshell +++	+	Conylus nutshell +++, charcoal is non-oak
Other features	atures																
062	32	Fill of pit [061]	30	I	I	ı	ı		ı		+	+ + + +	+ + + +	1.7	Charcoal ++, nutshell ++++,	+	Avena sp. +, Hordeum vulgare +, Corylus nutshell ++++, charcoal is non-oak
110	20	Fill of pit [109]	25	ı	I	ı	I	ı	ı	·	ı	ı	+ + + +	1.6	Charcoal ++	+	Charcoal is non-oak
104	51	Fill of pit [103]	30	I	I	I	I	ı	ı	ı	ı	+	+	<0.5	ı	+	Charcoal not retained
1 4	29	Fill of pit [140]	2	ı	ı	ı	ı	ı	ı	ı	ı	‡	‡	<0.5	Nutshell ++	1	Corylus nutshell ++, charcoal not retained
2	í		ĺ		i i	-	-		í								

Key: + = rare (0-5), ++ = accasional (6-15), +++ = common (15-50) and ++++ = abundant (>50) NB charcoal over 1 cm is suitable for identification and AMS dating

Appendix 3.2 Flotation sample results

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איר אומווסקקה	7.0 0.7	Hotation sample results	יו שולווווי	בשמונש									
Context		Sample Feature	Total	Cereal grain	grain				Other plant	Charcoal	Charcoal	Material	Comments
			m) (ml)	Avena sp.		Hordeum Hordeum sp. vulgare	Triticum aestivo- compactum	Cerealia indet.	remains	dı)	max size (cm)	available ror AMS dating	
Group 1													
003	-	Fill of pit [004]	40	I	I	+	+	+	ı	+ + + +	-	Charcoal +, charred grain ++	Charcoal is non-oak
900	m	Fill of pit [006]	75	+++	++	I		+	Corylus avellana +, cf. Eleocharis sp. +	+ + + +	1.3	Charcoal ++, charred grain ++	Charcoal is non-oak and includes roundwood fragments
200	9	Fill of pit [008]	40	+	+	ı	I	i	ı	+ + + +	-	Charcoal +	Charcoal is non-oak
015		Fill of pit/ posthole [016]	25	I	+	+	I	Í	1	+ + +	-	Charcoal +	Charcoal is non-oak
017	∞	Fill of pit/ posthole [018]	2	I	+		ı	ı	1	++	0.5	I	Charcoal is oak and non-oak.
019	6	Fill of pit/ posthole [020]	2	1	I	I	+	1	Fumaria officinalis +	+ + +	0.8	ı	Charcoal is non-oak
021	10	Fill of pit/ posthole [022]	2	I	I	I	1	ı	Corylus avellana +	+ + +	0.7	I	Charcoal is non-oak
025	12	Fill of pit [026]	40	ı	I	I	I		1	+ + + +	2.5	Charcoal ++	Charcoal is non-oak and includes roundwood fragments
035	17	Fill of pit [036]	10	ı	I	ı	I	ı	Fumaria officinalis +	+ + +	0.7	ı	Charcoal is oak and non-oak.
041	19	Fill of pit [042]	20	I	I	I	I	ı	1	+ + + +	4.	Charcoal +	Charcoal is non-oak
440	21	Fill of ditch [010]	20	ı	I	ı	ı	-	Fumaria officinalis +	+ + +	-	Charcoal +	Charcoal is non-oak
048	23	Fill of ditch [010]	2	+	ı	I	I		ı	+++	0.3	ı	ı
050	24	Fill of western terminus [049] of ditch [010]	25 f	1	ı	ı	T	1	Brassica/Sinapis sp. +	+ + +	0.7	1	Charcoal is non-oak
860	49	Fill of pit [097]	10	+	I	+	I		ı	+ + +	9:0	ı	Charcoal is non-oak
129	09	Fill of posthole/ pit [128]	01	+	I	I	I	1	ı	‡ ‡	0.8	I	Charcoal is non-oak
131	61	Fill of posthole/ pit [130]	22	ı	I	I	ı	ı	Conylus avellana +	+	0.5	I	Charcoal is oak and non-oak.
Group 2													



Context	Sample	Sample Feature	Total		Cereal grain				Other plant	Charcoal	Charcoal	Material	Comments
			m) (ml)	Avena sp.		Hordeum Hordeum sp. vulgare	Triticum aestivo- compactum	Cerealia indet.	remains	Διλ	max size (cm)	avallable for AMS dating	
950	27	Fill of pit [055]	2	I	+	ı	I	ı		+ + +	0.7	ı	Charcoal is non-oak
070	37	Fill of pit [069]	20	I	I	ı	I	+	1	+ + + +	←	Charcoal +	Charcoal is oak and non-oak.
087	40	Fill of pit [081]	30	ı	I	ı	I	+	Fumaria officinalis +	+ + + +		Charcoal +	Charcoal is oak and non-oak and includes roundwood fragments
088	43	Fill of pit [087]	15	+	+	I	I	ı	Fumaria officinalis +	+ + +	1.1	Charcoal +	Charcoal is non-oak
094	46	Fill of pit [093]	20	ı	I	ı	ı	ı	ı	+ + + +	8:0	ı	Charcoal is non-oak, MWD+
Group 3													
135	63	Fill of pit [134]	15	+	ı	ı	I	ı		+ + + +	1.7	Charcoal +	Charcoal is non-oak
137	4	Fill of pit [136]	25	I	ı	+	I	ı	1	+ + + +	2	Charcoal +	Charcoal is non-oak
147	70	Fill of pit [146]	25	ı	+	+	1	I	Corylus avellana ++	+ + + +	1.2	Charcoal ++, corylus avellana ++	Charcoal is non-oak
149	71	Fill of pit [148]	40	I	+	I	ı	ı	Corylus avellana +	+ + + +	8.	Charcoal ++	Charcoal is non-oak and includes roundwood fragments
Other features	atures												
062	32	Fill of pit [061]	100	+ +	I	+ + + +	I	I	Corylus avellana +, Carex sp. +	+ + + +	8.	Charcoal +++, charred grain ++++	Charcoal is non-oak and includes roundwood fragments
110	20	Fill of pit [109]	100	ı	+	ı	I	I	Brassica/Sinapis sp.+, Poaceae sp.+	+ + + +	2.3	Charcoal ++++	Charcoal is oak and non-oak.
104	51	Fill of pit [103]	10	I	ı	I	I	ı	Brassica/Sinapis sp. +	++	0.8	I	Charcoal is non-oak
141	29	Fill of pit [140]	5	I	1	I	1	ı	Corylus avellana +	++	0.5	1	Charcoal is non-oak
Kev:+=1	are (1–5). +	Kev:+ ≡ rare (1–5). ++ ≡ occasional (6–15). +++ ≡ common (16–50) and ++++ ≡ abundant	15), +++ =	commo	ר (16–50) anc	1+++ = abu	undant (>50)						

Key:+ = rare (1–5), ++ = occasional (6–15), +++ = common (16–50) and ++++ = abundant (>50) NB charcoal over 1cm is suitable for identification and AMS dating

Appendix 4 Discovery and Excavation in Scotland entry

LOCAL AUTHORITY: Highland Council

PROJECT TITLE/SITE NAME: Culduthel Farm, Inverness, Phase 9

PROJECT CODE: CDFN12

PARISH: Inverness and Bona

NAME OF CONTRIBUTOR(S): Jürgen van Wessel

NAME OF ORGANISATION: Headland Archaeology (UK) Ltd (UK) Ltd

TYPE(S) OF PROJECT: Monitored topsoil strip, excavation

NMRS NO(S):

OASIS no.: headland1-132013
SITE/MONUMENT TYPE(S): Enclosure, pits

SIGNIFICANT FINDS: Neolithic pottery, possible rotary quern fragment

NGR (2 letters, 8 or 10 figures)

START DATE (this season)

14th May 2012

END DATE (this season)

1st June 2012

PREVIOUS WORK (incl. DES ref.)

MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)

Headland Archaeology (UK) Ltd was commissioned to undertake a monitored topsoil strip in advance of the Phase 9 of the housing development at Culduthel Farm, Inverness. Previous excavation at sites adjacent to the north, south and west have revealed a rich archaeological landscape with evidence for occupation and industrial activity from the Neolithic to the present day.

The excavations at Phase 9 revealed three main groups of features. The first consisted of a narrow

sub-rectangular enclosure ditch, a large central pit and a number of further pits and post-holes. No firm dating evidence was retrieved from this group, although use during the Neolithic is suggested by typological comparison to similar enclosures. The other two groups were small clusters of pits and

post-holes, both with artefactual evidence for Neolithic activity.

One isolated feature may represent a waste pit of Iron Age date, and indeed palaeoenvironmental analysis suggests wider activity across the site during this period, although it is possible that some of this evidence may be intrusive, and related to a substantial Iron Age settlement to the west.

PROPOSED FUTURE WORK: Possible further palaeoenvironmental analysis

ARCHIVE LOCATION (intended/deposited) RCAHMS

SPONSOR OR FUNDING BODY: Tulloch Homes Ltd

ADDRESS OF MAIN CONTRIBUTOR: 13 Jane Street, Edinburgh EH6 5HE

EMAIL ADDRESS: jurgen.van-wessel@headlandarchaeology.com



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North East

Headland Archaeology 13 Jane Street Edinburgh EH6 5HE 0131 467 7705 office@headlandarchaeology.com

North West

Headland Archaeology 10 Payne Street Glasgow G4 0LF 0141 354 8100 glasgow of fice@headland archaeology.com

South & East

Headland Archaeology Technology Centre, Stanbridge Road Leighton Buzzard LU7 4QH 01525 850878 leighton.buzzard@headlandarchaeology.com

Midlands & West

Headland Archaeology Unit 1, Premier Business Park, Faraday Road Hereford HR4 9NZ 01432 364 901 hereford@headlandarchaeology.com