



ROSS & CROMARTY ARCHAEOLOGICAL SERVICES

South West Inverness Flood Relief Channel Phase 3 Archaeological Watching Brief and Excavation



Data structure report

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South West Inverness Flood Relief Channel Phase 3 Archaeological Watching Brief and Excavation Data Structure Report

Summary

This report summarises the results of the desk-based assessment and archaeological watching brief were conducted in December 2010 and January 2011 on behalf of Global Construction Ltd during groundworks on the site of the Phase 3 Inverness Flood Relief Channel development. The site was located on the SW side of Inverness in Culduthel, an area with a wealth of archaeological sites, many of which have been uncovered during development in recent years. Twenty-seven features of archaeological interest, including a hearth, pits and evidence for an old ground surface, were identified during the watching brief. Sixteen of these features were located in a discrete area of the site and required one extra week of excavation, the results of which produced pits containing Neolithic pottery (both Early-to-Middle Neolithic-style and Late Neolithic grooved ware) and associated lithics.

1.0 INTRODUCTION

1.1 General information

A desk-based assessment and archaeological watching brief were conducted between December 9, 2010 and February 1, 2011 at the site of the Phase 3 Inverness Flood Relief Channel in Culduthel, south-west of Inverness in the Highlands of Scotland. The work was commissioned by Global Construction Ltd.

There were twenty-seven features of archaeological interest uncovered during the site clearance, sixteen of which were located in a discrete area which was cleared for a gravel grading compound. One week of excavation was required to evaluate the features within the gravel grading compound.

1.2 Planning background

The Highland Council Planning Department brief IN-06-787 outlined the requirement for an archaeological watching brief due to the situation of the development within an area of high archaeological potential. Previous phases of construction of the Inverness Flood Relief Channel identified areas of archaeological interest and archaeological sites of national importance have been recently uncovered in the area immediately north of the development.

A Written Scheme of Investigation (WSI)¹ was produced by the Ross and Cromarty Archaeological Services prior to the start of groundworks based upon information supplied by the Highland Council Archaeology Unit (HCAU) and Global Construction.

2.0 AIMS AND OBJECTIVES

The purpose of the archaeological watching brief was to identify and record any features or finds of archaeological interest within the site prior to its development in order to minimise any delays or disruptions to the project. The *Scottish Planning Policy 2010* describes how archaeology

¹ Peteranna, 2010.

should be managed when considering planning decisions and determining conditions for developments that have an impact on the historic environment².

The specific objectives were:

- To establish the presence or absence of archaeological remains within the proposed development area
- To remove by hand any overburden in order to expose the archaeological deposits
- To record and excavate all features and recover any artefacts prior to their destruction
- To sample deposits for post-excavation work, including environmental analysis and dating

3.0 SITE LOCATION, TOPOGRAPHY AND GEOLOGY

3.1 The development site is located between Ordnance Survey National Grid Reference NH 66451 41300 and NH 66880 41542 to the south of Inverness near the west end of the B8082 Southern Distributor Road, on the south side of Culduthel Mains avenue (see Fig. 1 and Fig. 2).

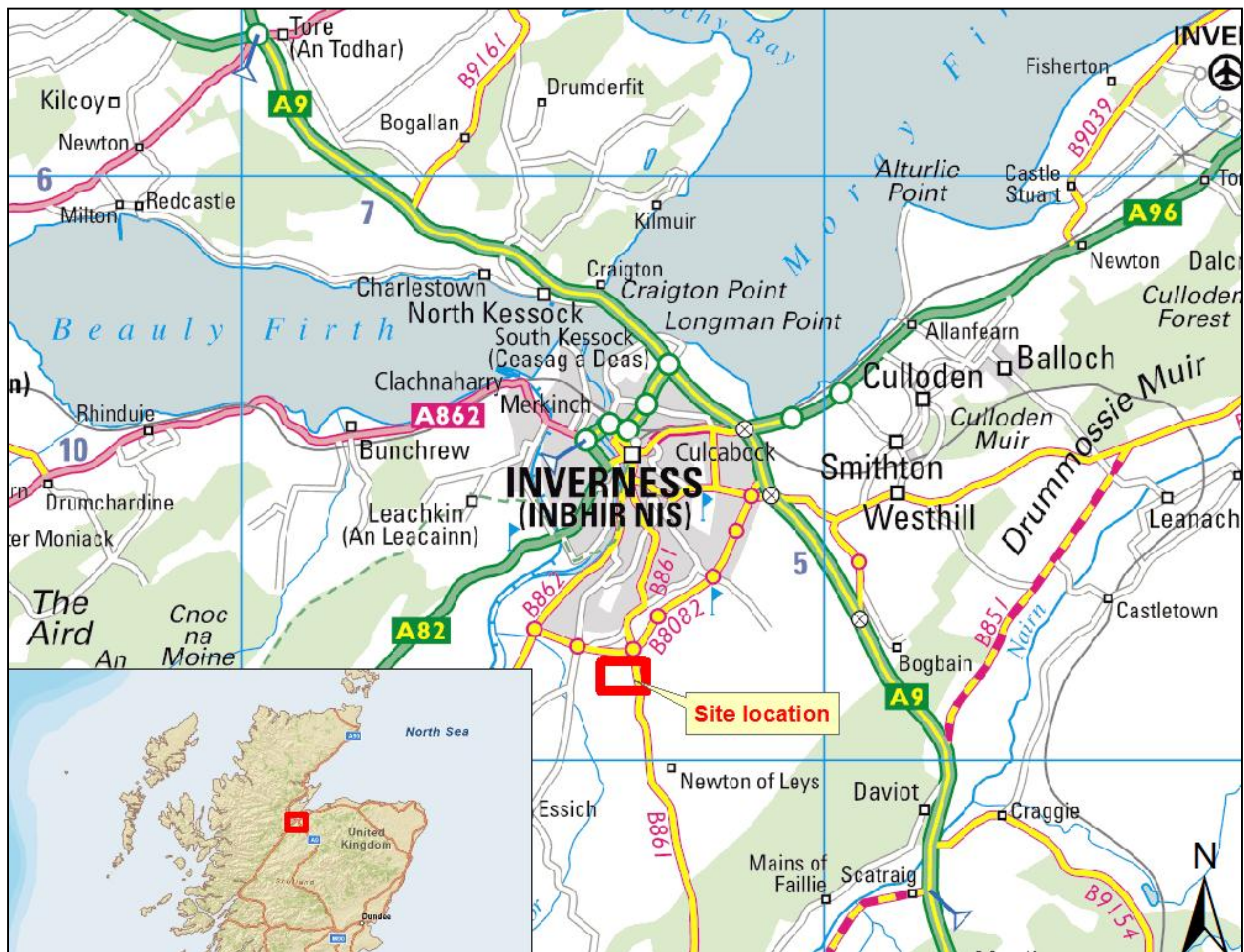


Figure 1 Site location map

² The Scottish Government, 2010.



Figure 2 Locations of the archaeological watching brief³

- 3.2 Prior to the watching brief, the land had been used for agricultural purposes, as both arable and pasture fields, with modern housing development located to the north of the flood relief channel. The land is gently undulating and rises from north to south. A small area of watching brief was conducted approximately 1km northeast of the main groundworks on land used as a golf course.
- 3.3 The underlying geology consists of Devensian glacial till and the bedrock comprises Middle Old Red sandstones dating to the Mid Devonian⁴.

4.0 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

- 4.1 The proposed development site was of archaeological interest due to its close proximity to extensive known sites of prehistoric age. Archaeological evaluations by GUARD ahead of this development in 2009 and 2010 identified prehistoric features within an area adjacent to the west end of the Phase 3 site. These features consisted of remains of palaeo-river channel deposits, postholes, pits, linear features and areas of burning with finds that included prehistoric pottery and worked flint⁵. Approximately nine of these features were radiocarbon dated to the Neolithic period⁶.
- 4.2 Between 2005 and 2007, archaeological evaluations at Culduthel Mains Farm uncovered significant and extensive prehistoric remains to the north of the development site. A high-status

³ Copyright of Microsoft Bing Maps and ESRI (World Imagery basemap)

⁴ British Geological Society (BGS)

⁵ Kilpatrick, 2010

⁶ Pers. comm., John Atkinson, 2-9-11

Iron Age metal-working site contained numerous well-preserved roundhouses, iron-smelting furnaces and associated finds which included glass beads, iron weapons and a Romano-British brooch⁷. Adjacent to the Iron Age site, and located to the northwest side of the proposed development, was the remains of an oval-shaped palisaded enclosure with a central ring ditch feature.

- 4.3 The remains of a ring cairn are located approximately 600m northwest of the site and numerous other archaeological evaluations ahead of development have uncovered extensive prehistoric remains across Culduthel and Slackbuie to the east. In the more distant past, two burial cists containing high status objects have been found in the area (see section 6.1.2).

5.0 METHODOLOGY

5.1 Desk-based assessment

A desk-based assessment was conducted prior to commencement of the evaluation in order to assess the archaeological potential of the area based on previously recorded sites and any historical documentation.

The drawings of the area, as supplied by the client, were checked in detail against the Ordnance Survey 1:25000 Map, the Highland Council's Historic Environment Record (HHER), the National Monuments Record of Scotland (NMRS), the Highland Council Archives and Historic Scotland's records of scheduled monuments and listed buildings. ESRI imagery basemaps (copyright of Microsoft Bing Maps) were consulted and the map collections of the National Library of Scotland (NLS) were studied. Other literary sources were also consulted.

5.2 Watching brief and excavation

- 5.2.1 Site clearance was conducted under archaeological supervision in order to monitor all areas of groundworks. The topsoil was removed to the surface of the subsoil or to the first archaeological horizon, whichever was encountered first. Areas were then cleared using a drawhoe to check for the presence of archaeological features.
- 5.2.2 Features were excavated fully and samples were taken when appropriate. Each archaeological feature was drawn at a scale of 1:20 and feature section drawings were drawn at a scale of 1:10. Area plan drawings, at a scale of 1:20, were also produced to record discrete groupings of features.
- 5.2.3 The watching brief area and all archaeological features were plotted on ArcPad GIS software on a handheld Windows Mobile-based computer using GPS with 0.2-0.5m accuracy at the time of fieldwork. The site was recorded using high resolution digital photography throughout the watching brief in order to record the overall evaluation as well as the features of interest.
- 5.2.4 All fieldwork was conducted in accordance with *Institute for Archaeologists' Code of Conduct*⁸ and on-site recording was carried out according to standard IfA procedures⁹, using written records and drawn plans.

⁷ Murray, 2007

⁸ IfA, 2010

⁹ IfA, 2008

6.0 RESULTS

6.1 Desk-based assessment

A desk-based assessment was carried out in order to assess the archaeological potential of the area and to locate any historical documentation about the known sites within the proposed development area. Aerial photographs and historical mapping were consulted online.

6.1.1 The area was already known to be full of archaeological sites. Development in Culduthel over the last decade has uncovered numerous prehistoric sites spanning at least the Neolithic Age to the Iron Age. The major iron-working site at Culduthel excavated by Headland Archaeology has highlighted the importance of this area, rich in prehistoric activity. Reports of previous fieldwork within the areas surrounding the development site were consulted prior to the watching brief. They are highlighted in section 6.1.2 below.

6.1.2 Highland Historic Environment Record (HHER) / Canmore

A full search of the Highland Historic Environment Record (HHER) and Canmore produced the following results relating to known archaeological sites immediately surrounding the development area:

MHG 3099 / 3100 Evaluation, Inverness SWFRC NH 66248 41892
EHG 3540

In 2009 and 2010, GUARD conducted an archaeological watching brief during construction works for the flood relief channel. A total of 24 features were encountered including 21 pits and 3 postholes. Four pits contained fragments of pot, one of which has been dated to the Late Bronze Age, while others contained burnt material including charcoal fragments, hazelnut shells and bone.

MHG 1344 / 2916 / 51630 Culduthel Farm Phase 7 & 8 NH 66630 41630
Canmore ID 269069

An excavation took place in advance of Phases 7 and 8 of housing development at Culduthel Farm, Inverness following a 5% evaluation conducted in 2005. A total of 5.2ha was stripped in 2007, uncovering over 300 prehistoric features including a cremation burial, a possible inhumation, three roundhouses, part of an enclosure, part of a palisade, the remains of a small bowl furnace for iron smelting/smithing, and a cobbled work surface. Approximately 980 sherds of pottery were recovered from these features, dating from the middle Neolithic to Bronze Age. Other finds recovered included several saddle querns, c280 pieces of flint, a decorated copper alloy pin, c20kg of iron slag and several iron objects including a small knife blade. An alignment of 19 pits, two of which were stone-lined, was found on the highest part of the site and appear to be associated with post-medieval agricultural activity.

MHG 48627 Culduthel Farm Road NH 66290 41510

A watching brief was undertaken in December 2003 as part of work on a new road for proposed housing. A single deposit of cremated animal bone was dated to 5910±35 BP.

MHG 3782 /40902 Short Cist, Culduthel Mains NH 66390 41890

A Bronze Age short cist was discovered in 1928 in a sandpit in a gravel knoll near the farm steading of Culduthel. It contained a crouched female skeleton, a necklace or girdle of jet, including a V-perforated toggle (since made up into a necklace), a small flake of obsidian a fragment of a bronze awl, and pieces of charcoal.

MHG 3787 Ring cairn, Culduthel NH 66190 41760

The very degraded remains of a Clava-type cairn was built on a small natural rise in Culduthel. It has been so completely robbed that only a few stones of the peristalith remain in situ and a few more stones lie where they have fallen outwards from their original positions.

Canmore ID 13519 Cist, Culduthel NH 6662 42240

A small Bronze Age square cist, containing a skeleton, beaker, eight flint arrowheads, bone toggle, amber bead, and a rare stone arm-bracer mounted with four large gold caps measuring about a quarter of an inch across their heads was found on a school building site in 1975.

Canmore 221384 Southern Distributor Road NH 672 424 to 657 419

A watching brief in April and May 2001 within agricultural land on the SE outskirts of Inverness, conducted during the topsoil removal phase of the construction of the Southern Distributor Road, led to the recording of a total of 128 archaeological features. The majority were fire-pits or cooking pits containing heated stones, charcoal and occasionally, in situ structural stonework.

MHG 32413 Oldtown of Leys, palisaded enclosure NH 66400 41400
MHG 36080

An oval-shaped palisaded enclosure with a possible ring-ditch within the interior. A putative entrance may be seen either to the west or north-east. There are possible cremation pits within.

EHG 1356 / 2890 Upper Slackbuie, evaluation NH 67240 41470

An archaeological evaluation of five fields (Phases J, K, L, N and P) to the S of Inverness was undertaken during February and March 2006. The excavations revealed a variety of features and worked flints dating to the prehistoric period. The site contained numerous truncated pits and postholes associated with a probable burnt mound, although only the central trough has survived later agricultural activities. The trough appeared to have been wood-lined and hearths lay adjacent.

MHG 51720 / 54071 Prehistoric settlement, Slackbuie NH 67100 41900

Excavation of two separate areas of archaeological interest, Areas A and B, was undertaken as part of a programme of works at Slackbuie. Within Area A (centred on NH 67119 41947) a complex series of pits and postholes were exposed, representing the possible remains of several structures including a round-house set around a central roof support. Several probable storage pits were also excavated. Finds included two worked flint blades and sherds of coarse pottery dating to the mid to late Bronze Age. In Area B (centred on NH 674 420), a small number of pit or posthole features and a large pit containing large quantities of stones and slight indications of heating/burning were uncovered. Small quantities of iron slag were recovered.

6.2 Archaeological Watching Brief

Weather conditions:

The fieldwork was conducted during a very cold period of weather in mid-late December and late January when snow and deep ground frost made excavation challenging. The frost also affected the appearance of features in photographs. Conditions in mid-January were considerably cold and rainy on most days.

Twenty-eight features were excavated and recorded during the fieldwork (see Fig. 4). Detailed lists of the contexts and features and associated samples and finds can be found in the Appendices.

Twelve features of archaeological interest were identified across the area cleared for development of the flood relief channel. Sixteen further features were uncovered in a close grouping on a flat terrace where the development's gravel grading compound was sited, to the north of the flood relief channel. These were excavated during the final week of the watching brief (see 6.2.4 below).

6.2.1 Flood Relief Channel: Pits, a hearth and a posthole

Various pits, a hearth and a posthole were uncovered within the area cleared for the flood relief channel. None of the features appeared to share any structural or stratigraphical relationships, and some of them are believed to be natural pits infilled with slopewash deposits.

- 6.2.1.1 Feature 2 was a subcircular post hole, half a metre wide, cut 30cm into the subsoil (Fig. 3). The fill contained large packing stones, some of which had been placed to line the sides of the cut. There were no finds recovered from the fill and it appeared to be an isolated feature.
- 6.2.1.2 An amorphous pit, Feature 3, was uncovered during digging of a small area to the west of the site compound and to the north of the flood relief channel. The feature appeared at the base of a gentle slope under 1.2m of topsoil, just above the topsoil-subsoil transition. It survived to a depth of 15cm deep and measured over one metre across (Fig. 3). The pit contained large quantities of charcoal fragments and some fire-cracked stone and has been tentatively interpreted as the remains of a hearth or fire-pit.
- 6.2.1.3 Feature 4 was a suboval pit cut into the subsoil, measuring 50cm wide by 55cm long. It contained a light brown stony silt fill (Context 105) which was difficult to distinguish from the subsoil, but appeared to run to a depth of 30cm (Fig. 3). The fill, which contained one unretouched flint flake (SF01), was identical in colour and texture to the upper fill of Features 5 and 6: a light brown silt containing small-medium stones and some small charcoal flecks (Contexts 108 and 110).
- 6.2.1.4 Before excavation, Feature 5 appeared to be a subcircular pit. During sectioning the edges of the upper fill (Context 108) were difficult to define but it appeared to overlie a mid brown clay-silt deposit containing charcoal flecks (Context 122) which undercut what appeared to be the natural subsoil (Fig. 3). This layer may have been an old soil horizon or vegetation layer which was covered by a slopewash deposit.

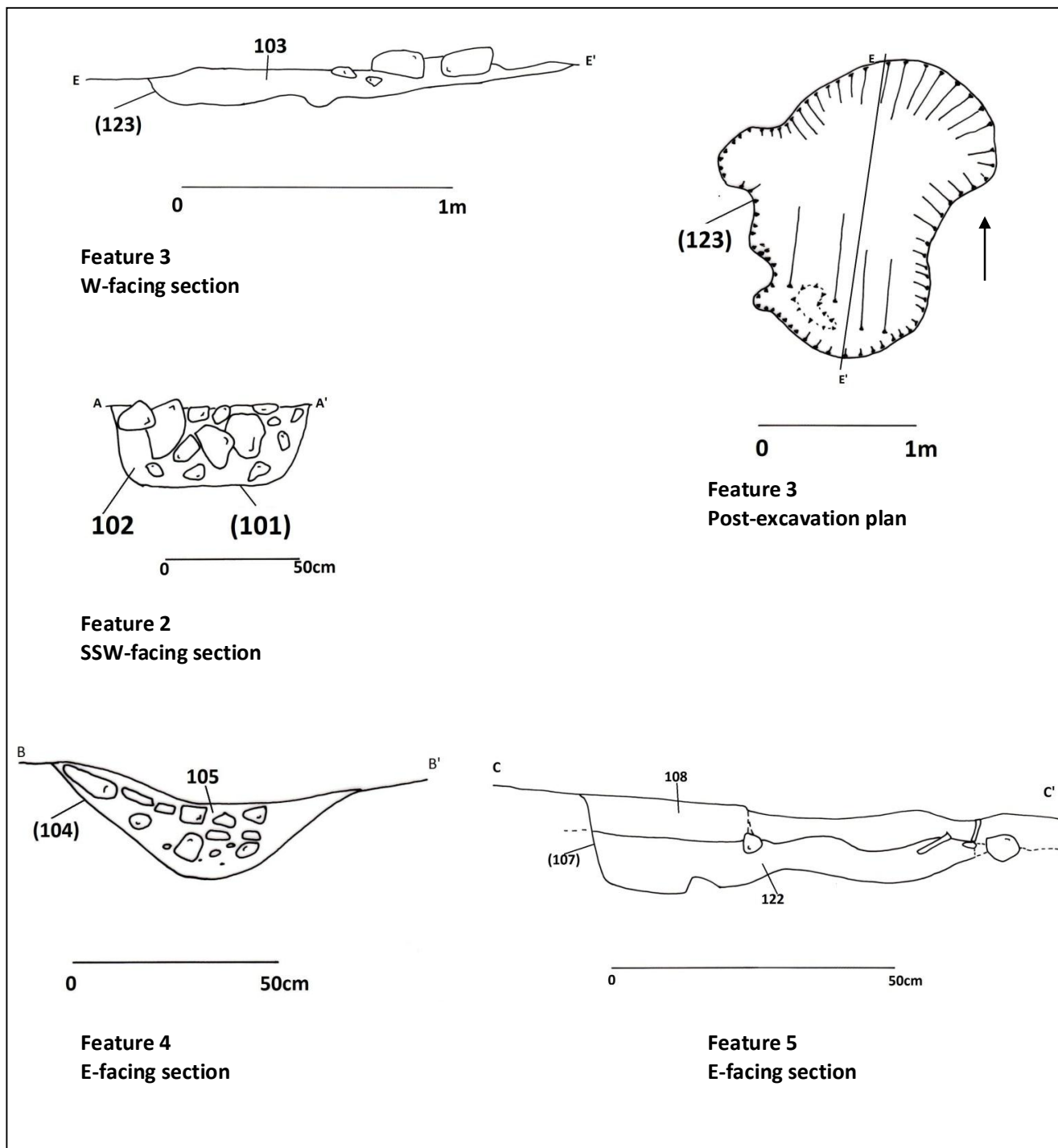


Figure 3 Sections and post-excavation plans of Features 2-5

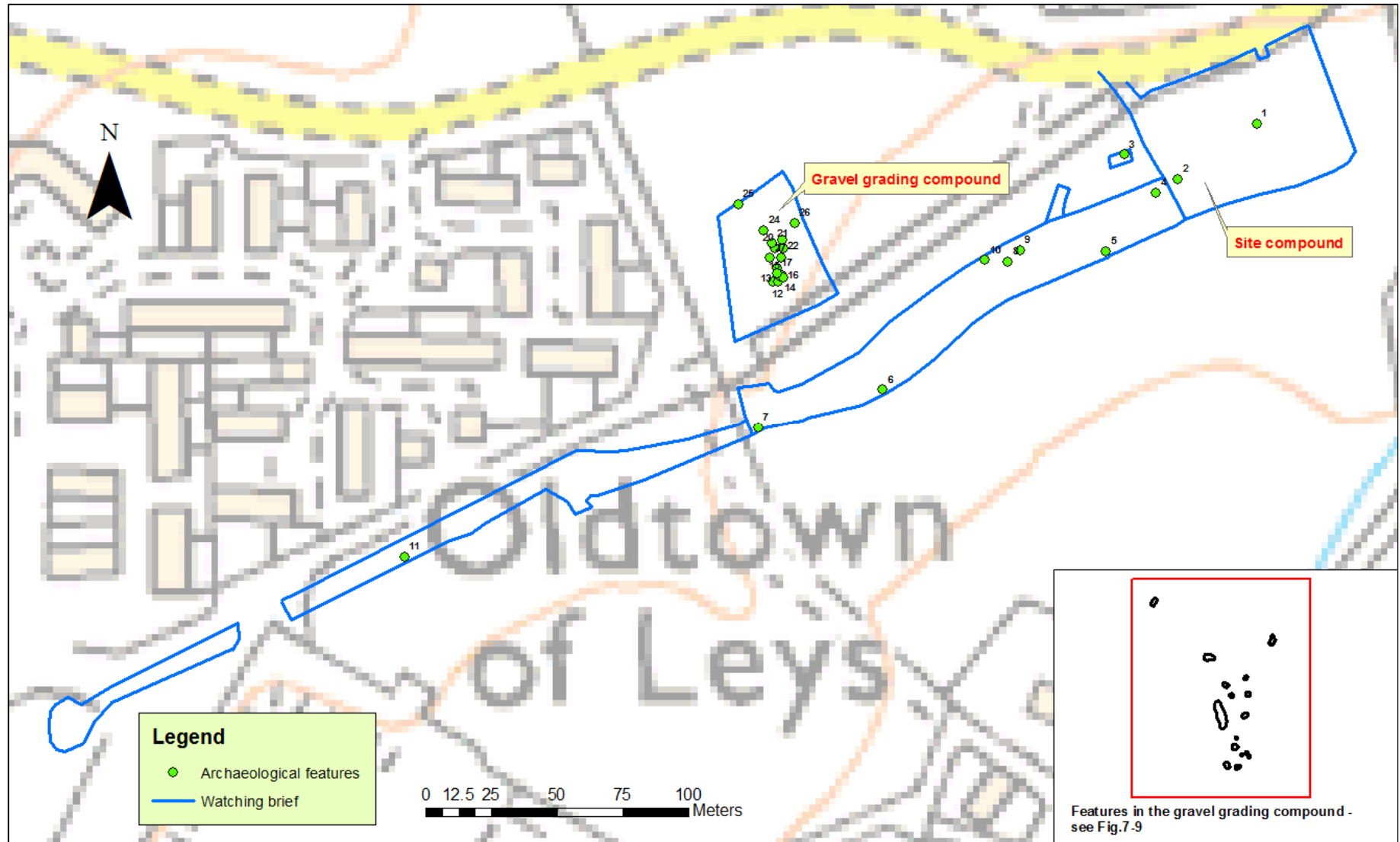


Figure 4 Location of the archaeological features

6.2.1.4 Features 6 and 7 were two subcircular pits (Fig. 5) both isolated from other features at the centre of the flood relief channel (see Fig. 4). The upper fill of Feature 6 appeared to be similar to the upper fill of Feature 5 (light brown, charcoal-flecked stony silt) overlying a primary deposit similar to the natural subsoil but with flecks of charcoal (Context 111). Feature 7, however, was a very shallow pit containing mid brown stony soil with few charcoal flecks and a fragment of burnt bone. The function of both pits is unknown, although one possibility is that both were natural pits infilled with slopewash deposits (in Feature 6) or redeposited topsoil (in Feature 7).

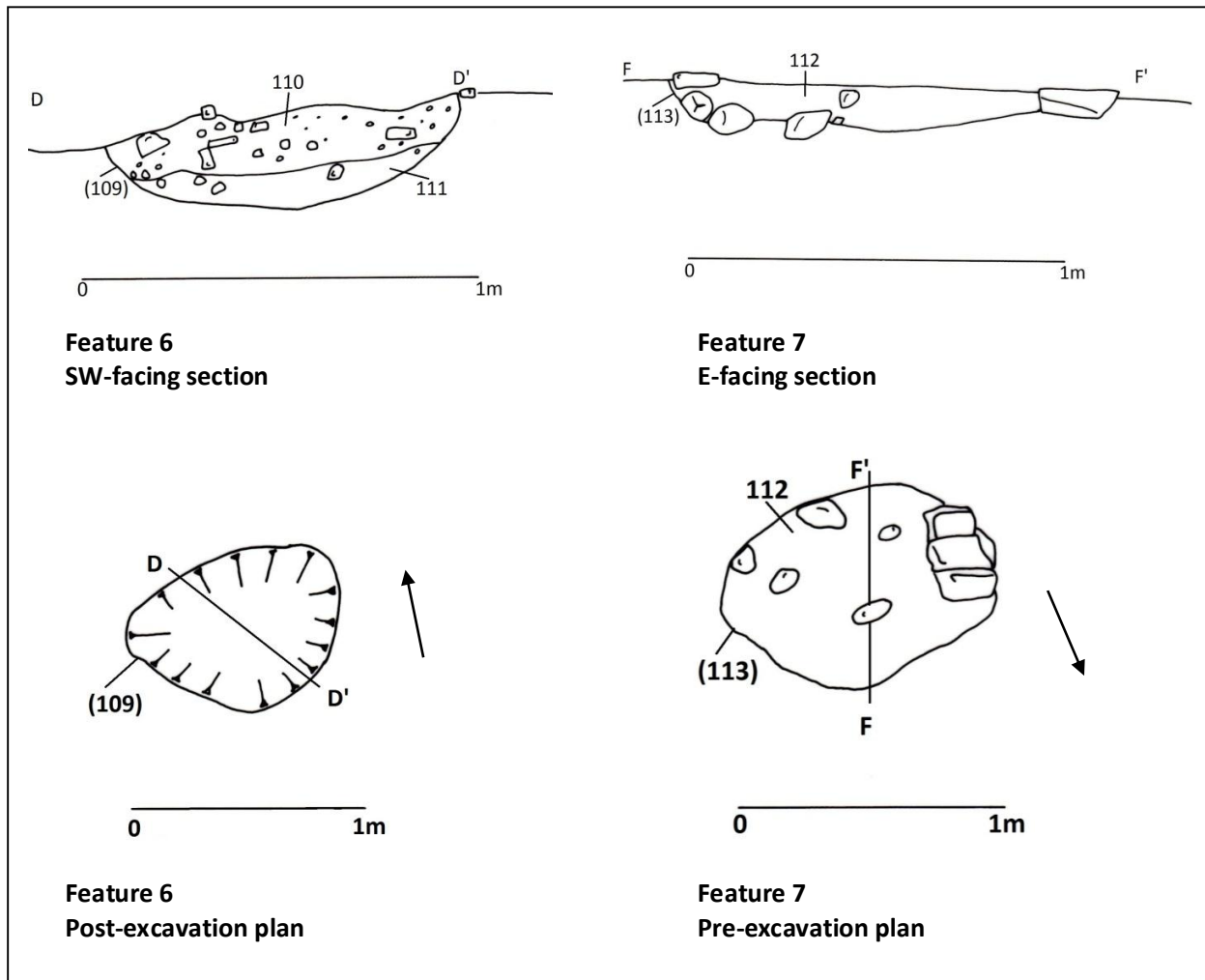


Figure 5 Plan and section drawings of Features 6 and 7

6.2.1.6 Features 8, 9 and 10, uncovered within a close grouping, were amorphous pits yielding no conclusive evidence of function. Feature 8 was similar in size to Feature 7, although a possible stakehole at the south end (Fig. 6) suggests it may have had a structural use. However, the excavator did not identify a separate cut for the stakehole and he remains unconvinced about the stakehole. The feature contained a homogenous mid brown silty soil fill with charcoal flecks, which was slightly more compact and stonier in the possible stakehole.

Feature 9 (Fig. 6), on the other hand, appeared to be an elongated pit which contained an upper fill of mid brown gravelly silt with charcoal flecks (Context 116). It partially undercut the natural

and partially overlaid a possible old soil or vegetation horizon (Context 117) similar to that recorded in Feature 5 (Context 122). This soil horizon was also overlain by a light brown charcoal-flecked gravelly silt (Context 119)-a possible 'slopewash' deposit similar to the upper fills of Features 4-6.

Feature 10 was similar in shape to Feature 9, approximately 1m long with a sloping base to one side (Fig. 6), although the homogenous mid brown soil fill contained no charcoal.

6.2.1.7 Feature 11 comprised two connected subcircular shallow pits (Fig. 6) with a charcoal-rich soil fill. The function and use is unknown.

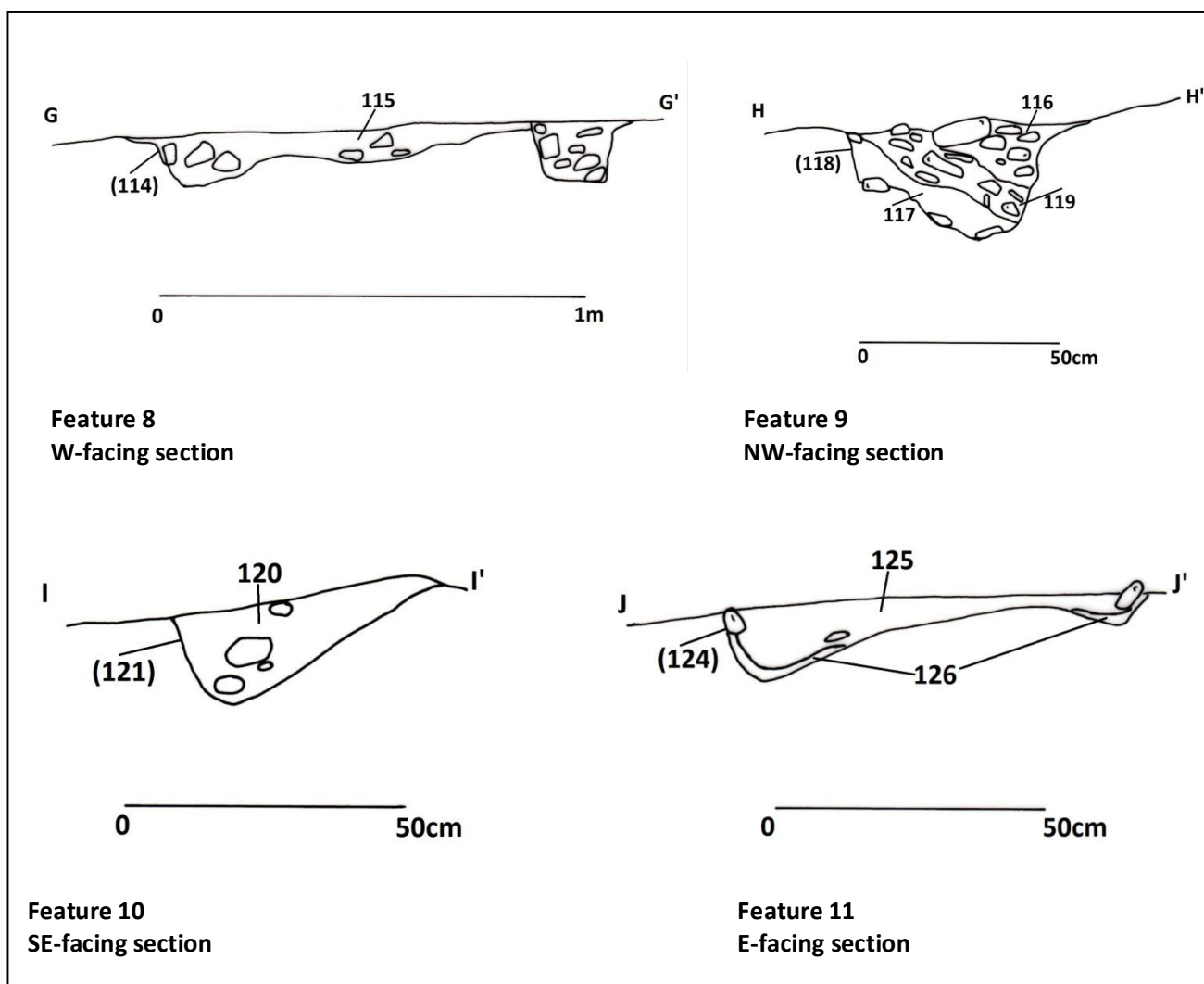


Figure 6 Section drawings of Features 8-11

6.2.2 'Slopewash' deposit and possible soil/vegetation horizon

Features 4, 5, 6 and 9 may have been the result of natural pitting in the subsoil or natural stone holes infilled with a slopewash deposit. The excavation of two of the pits, Features 4 and 9, further revealed a depositional sequence suggesting that remnants of an old and possibly

prehistoric ground surface survived below the upper context. In both cases, the lower deposits, a mid-dark brown clayey soil horizon, undercut the upper fill into what appeared to be the natural subsoil, which was probably slopewashed natural. The fact that the fill of Feature 4, Context 105, was similar in texture and appearance to the upper fills of Features 5, 6 and 9 does support the likelihood of similar deposition. It is possible that these pits were hollows in the natural, which were later infilled by colluvial action, often depositing over the remains of earlier soil or vegetation horizons. Previous archaeological fieldwork adjacent to the site by GUARD in 2009-2010 yielded similar findings¹⁰.

The sloping nature of the site, rising from north to south, does support the possibility of deposition by downslope colluvial action. The depth of the topsoil, 0.7-1.2m, and the glacial till subsoil on site are likely the main reason as to why pockets of this deposit remains *in situ* after a long history of farming on the site.

6.3 Gravel grading compound

An area located to the north of the flood relief channel was cleared for use as a compound for gravel grading. A group of sixteen pit features was uncovered below the topsoil layer at 67-68m OD and consisted of pits of various shapes and depths. Six of the pits (Features 13 and 19-23) are certainly related, based on the artefacts recovered from the deposits, and are probably related to five other features within the group, based on morphology and spatial distribution. These eleven features appear to have been constructed during the Neolithic period (4,000-2,500 BC). One small deposit in this grouping, Feature 18, was determined after excavation not to be a feature.

A further four features (Features 24, 25, 26, 27) uncovered on the gravel grading compound were larger pits or ditches where no artefactual or environmental evidence was found to connect them to the eleven pits of interest.



Plate 1 Pre-excavation photograph (facing N) of the pits exposed on the gravel grading compound

¹⁰ Kilpatrick, 2010

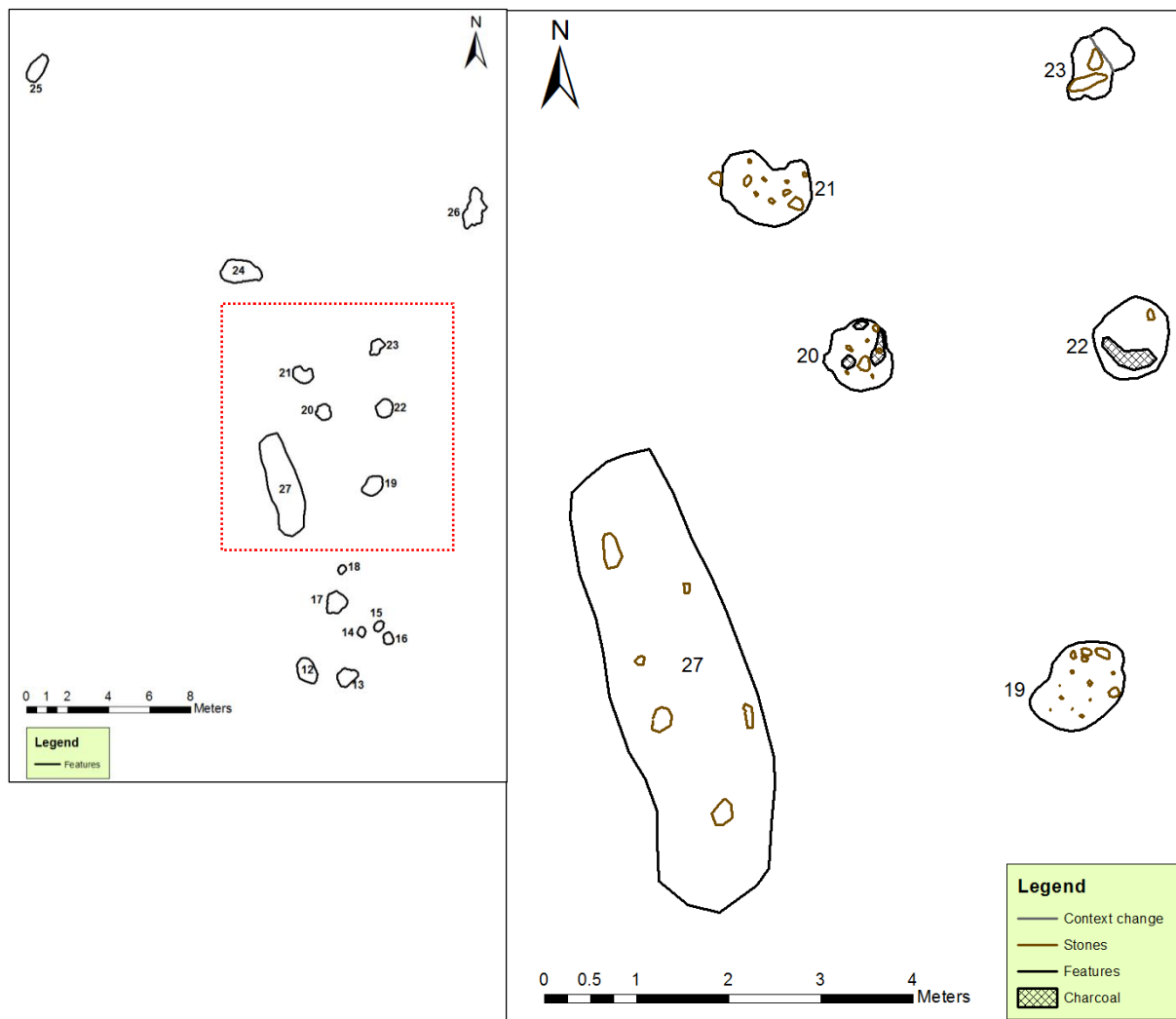


Figure 7 Features in the gravel grading compound (top left) and close-up of pre-excitation plan of Neolithic pits (Features 19-23) and Feature 27

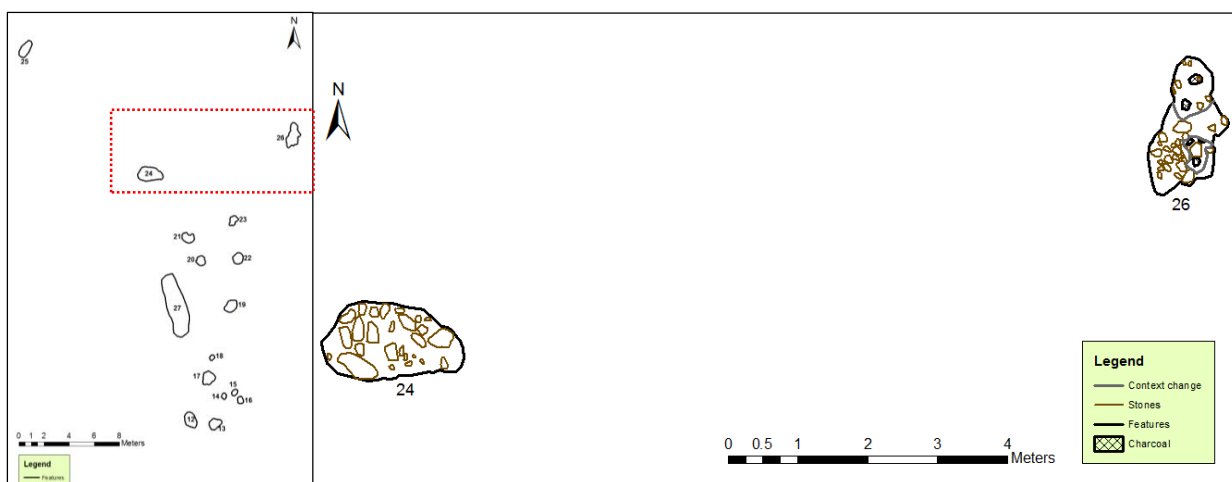


Figure 8 Features in the gravel grading compound (top left) and close-up of pre-excitation plan of Features 24 and 26

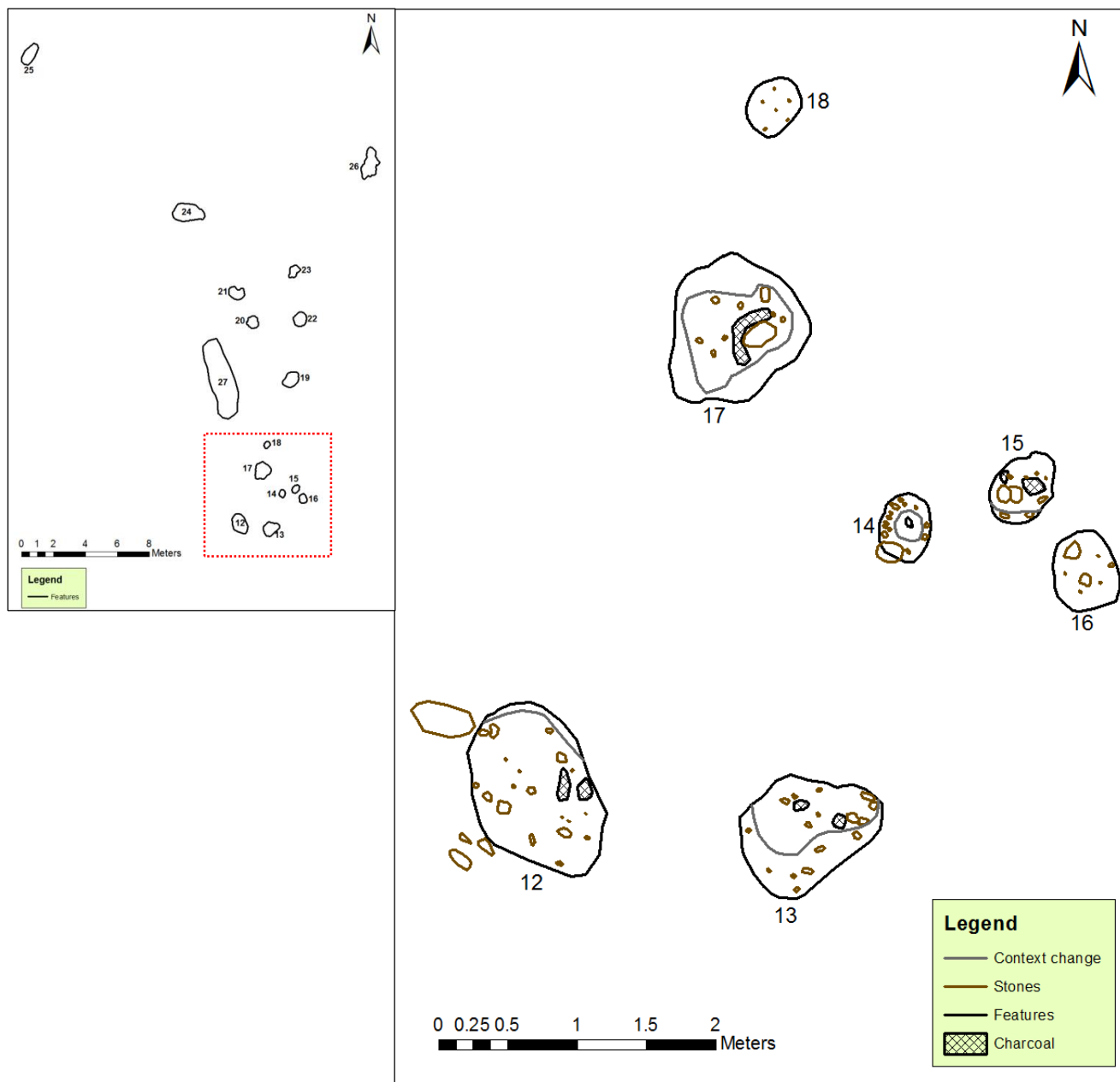


Figure 9 Features in the gravel grading compound (top left) and close-up of pre-excavation plan of Features 12-18

6.3.1 Six Neolithic pits

Neolithic pottery, struck flints and two stone tools were recovered from six pits, Features 13, 19, 20, 21, 22 and 23 (Plate 3). Given the shallow depth of the pits, it is certain that they had been truncated during past agricultural activities. The depth of the topsoil on site, over 1m in places, most likely accounts for their later survival (see Table 1 below for more details on the contexts).

6.3.1.1 Feature 20 contained the largest quantity of pottery (representing four separate pots, Pots 4-7)¹¹, comprising the degraded remains of what appeared to be two large sherds that had been placed side by side in a pit (see Plate 2) overlying other smashed pieces. Like Feature 21 and Feature 22, Feature 20 was a shallow, amorphous-shaped pit (Fig. 10) with a soil fill that contained struck flint flakes in addition to the pottery. The fill (Context 148) was a dark brown-black sticky ashy-silt with small stones intermixed with mid brown-grey silt, and several very small fragments of burnt bone and charcoal fragments.

The pot sherds recovered from Feature 20 (SF9, 10, 24, 25, 27), represented three pots decorated in the Late Neolithic Grooved Ware tradition (Pots 5-7) and one undecorated pot (Pot 4) interpreted as belonging to the same tradition by association¹²; all four pots had been flattened in the base of the pit. A charcoal sample from the fill of the pit was dated to 4365±30 BP (3090–2900 cal BC at 2σ)¹³.



Plate 2 Feature 20: Pot 4 sherds (SF24) *in situ* (left), and (right) remains of the truncated pit during excavation

¹¹ Sheridan 2011, Appendix 1

¹² Sheridan 2011, Appendix 1

¹³ SUERC-34576 (GU-24097)

6.3.1.2 Feature **21** was a shallow amorphous pit (Fig. **10**) located approximately 2m north of Feature 20. It survived only to a depth of 10cm, and was probably similar in size and shape to Feature 20, but had been further truncated. Several very small flecks of burnt bone and one sherd of coarse pottery with incised linear decoration (SF05 - Pot 5) were recovered from the pit.

6.3.1.3 Similarly, Feature **22** survived to 10cm deep (Fig. **10**) and contained an upper dark brown stony soil (Context 155) overlying a mid brown stony soil (Context 156). The pot sherds (SF18, 20, 21), recovered from the thin layer of upper fill, were decorated with whipped cord 'maggot' impressions¹⁴ probably belonging to a Middle Neolithic-style, and formed at least one pot (Pot 3)¹⁵.

6.3.1.4 Feature **23** was an amorphous pit located 3m north of Feature 22 which contained multiple small sherds of degraded pottery (SF14, 15) and flint flakes, including two flint tools (SF13e and SF16c), a fragment of a polished stone axe (SF16d), one half of a stone ball (SF12) and a possible fragment from an anvil stone (SF11)¹⁶. In contrast to the related pits, it survived up to 40cm deep (Fig. **10**).

Parts of five pots (Pots 2 and 8-11) were found in Feature 23. Pot 2, belonging to the 'modified Carinated Bowl' tradition (Early-to-Middle Neolithic-style) differs from Grooved Ware (late Neolithic) pots (Pots 8-11) from this pit¹⁷. A charcoal sample from the fill was dated to 4335±30 BP (3030–2890 cal BC at 2σ)¹⁸.



Pre-excitation photo of Feature 20 (top left) and Feature 22 (bottom right)



Feature 23 (facing N)

¹⁴ Sheridan 2011, Appendix 1

¹⁵ Sheridan 2011, Appendix 1

¹⁶ Saville, Appendix 2

¹⁷ Sheridan 2011, Appendix 1

¹⁸ SUERC-34575 (GU-24096)



Feature 22 section (facing S)



Feature 13 section (facing NE)



Feature 19 post-excavation (facing E)



Feature 23 post-excavation (facing W)

Plate 3 Pre-, mid- and post-excavation photographs of Neolithic pits

6.3.1.5 Feature **19** was a subcircular pit (Fig. **10**) containing mid-dark brown stony soil and one coarse sherd of pottery (SF23) from a large, coarseware pot (Pot 13)¹⁹. It was recovered from the upper pit fill, Context 158.

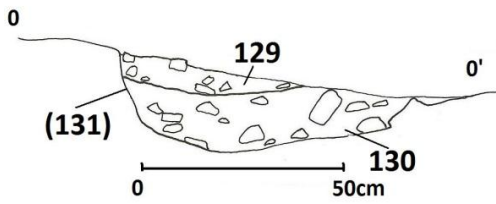
6.3.1.6 Feature **13** was an amorphous pit, measuring 1.0m across and surviving to 20cm deep (Fig. **10**). The cut, steep-sided to the north, was shallow and gently sloping to the south side. It contained a dark brown-black stony soil with charcoal flecks overlying a mid brown stony soil with charcoal flecks. One sherd of pottery (SF06), a rim fragment from a small, uncarinated pot (Pot 1)²⁰, was recovered from the lower fill.

¹⁹ Sheridan 2011, Appendix 1

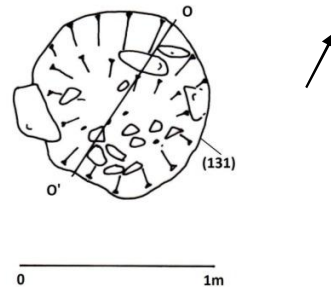
²⁰ Sheridan 2011, Appendix 1

Table 1 List of contexts in the six Neolithic pits

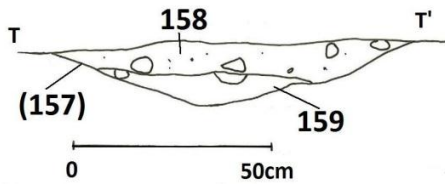
Feature	Context	Type	Description
13	129	Deposit	Dark brown-black soil containing small stones and charcoal flecks, secondary fill of (131) in Feature 13
13	130	Deposit	Mid brown silty soil containing small to medium stones, charcoal flecks and 1 pot sherd (SF06); primary fill of (131) in Feature 13
13	131	Cut	Steep-sided amorphous cut of Feature 13; 0.9m wide by 1.0m E-W, 20cm deep
19	157	Cut	Cut for subcircular pit, Feature 19; 0.88m wide by 0.96m NE-SW, 16cm deep
19	158	Deposit	Mid-dark brown sandy soil with small stones and flecks of charcoal and 1 x pot sherd (SF23); secondary fill of (157) in Feature 19
19	159	Deposit	Mid brown gravelly soil containing 5% sand and pea gravel; primary fill of (157) in Feature 19
20	147	Cut	Cut of subcircular pit, Feature 20; 0.72m by 0.78m N-S, 14cm deep
20	148	Deposit	Dark brown-black ashy silt with small stone mixed with mid brown-grey silty clay; contained pot sherds (SF09-10, 24-27) and flint flakes (SF08, 26); fill of (147), Feature 20
21	145	Deposit	Mid to dark brown sandy soil with some charcoal flecks, some burnt bone flecks and 1 coarse pot sherd (SF05); fill of (146) in Feature 21
21	146	Cut	Cut of shallow amorphous pit, Feature 21; 0.58m by 0.95m E-W, 10cm deep
22	154	Cut	Cut of shallow, subcircular pit, Feature 22; 0.84m in diameter, 10cm deep
22	155	Deposit	Dark brown stony soil with charcoal, 1 flint flake (SF19) and pot sherds (SF18, 20, 21); upper fill of (154) in Feature 22
22	156	Deposit	Mid brown sandy soil with 1 flint tool (SF17); primary fill of (154) in Feature 22
23	149	Cut	Cut of amorphous pit, Feature 23; 0.5m by 0.7m NE-SW, 40cm deep
23	150	Deposit	Mid to dark brown gravelly soil with charcoal flecks and large stones and containing pot sherds, lithics (SF11-16); secondary fill of (149) in Feature 23
23	151	Deposit	Light brown silty soil fill with charcoal flecks and medium stones, primary fill of Feature 23



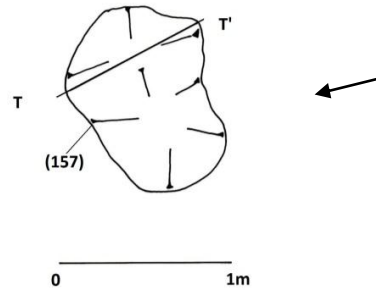
Feature 13
W-facing section



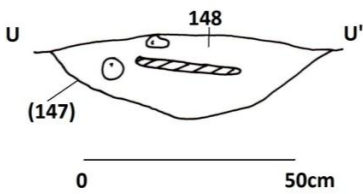
Feature 13
Post-excavation plan



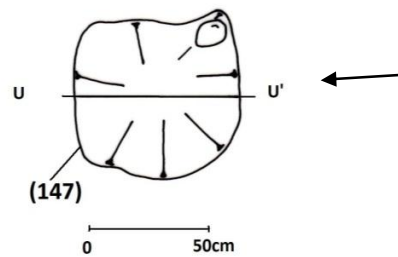
Feature 19
W-facing section



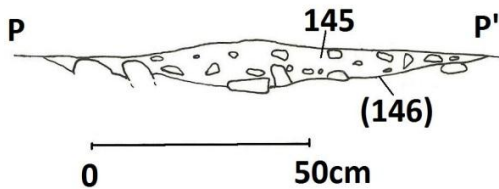
Feature 19
Post-excavation plan



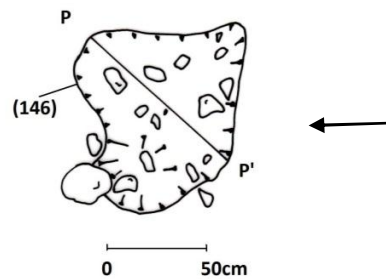
Feature 20
W-facing section



Feature 20
Post-excavation plan



Feature 21
NW-facing section



Feature 21
Post-excavation plan

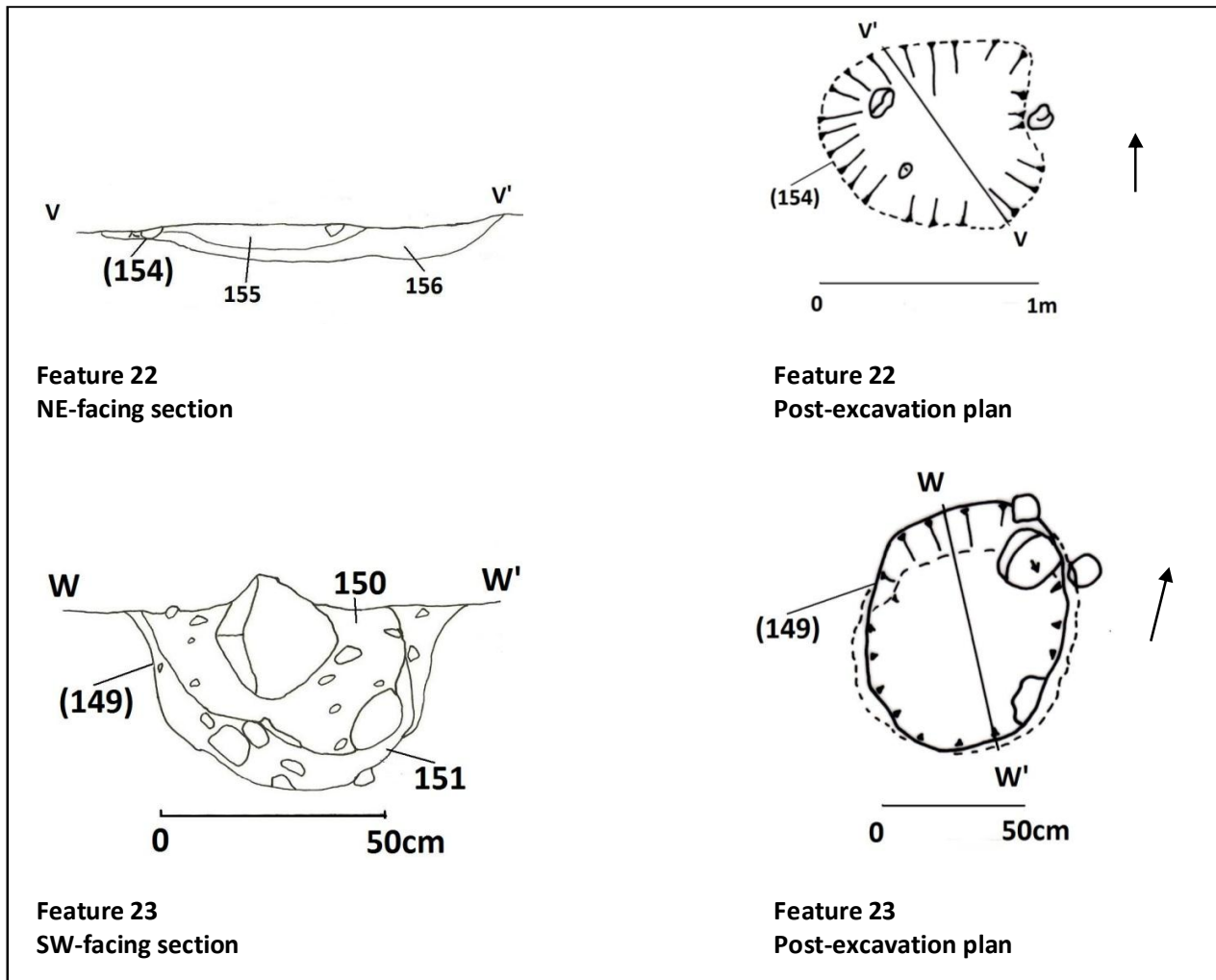


Figure 10 Plan and section drawings of six Neolithic pits

6.3.2 Five pits possibly related to the Neolithic pits

6.3.2.1 Feature 12 was an amorphous pit with steep sides to north, east and south and a shallow west side (Fig. 11 and Plate 4). The pit, which did not contain any artefacts, contained three fills. The primary fill (Context 138) and the secondary fill (Context 137) were similar in texture and content, both contained charcoal and there was a darker colour transition between the lower and the middle fill. Context 137 also contained fire-cracked stone. The upper fill, Context 139, was confined to the north half of the pit and was rich in charcoal and fire-cracked stone. The pit, which measured 1m wide by 1.2m long, survived to a depth of 39cm below the subsoil and, although its function is uncertain, appears to have contained redeposited hearth or fire-pit material.

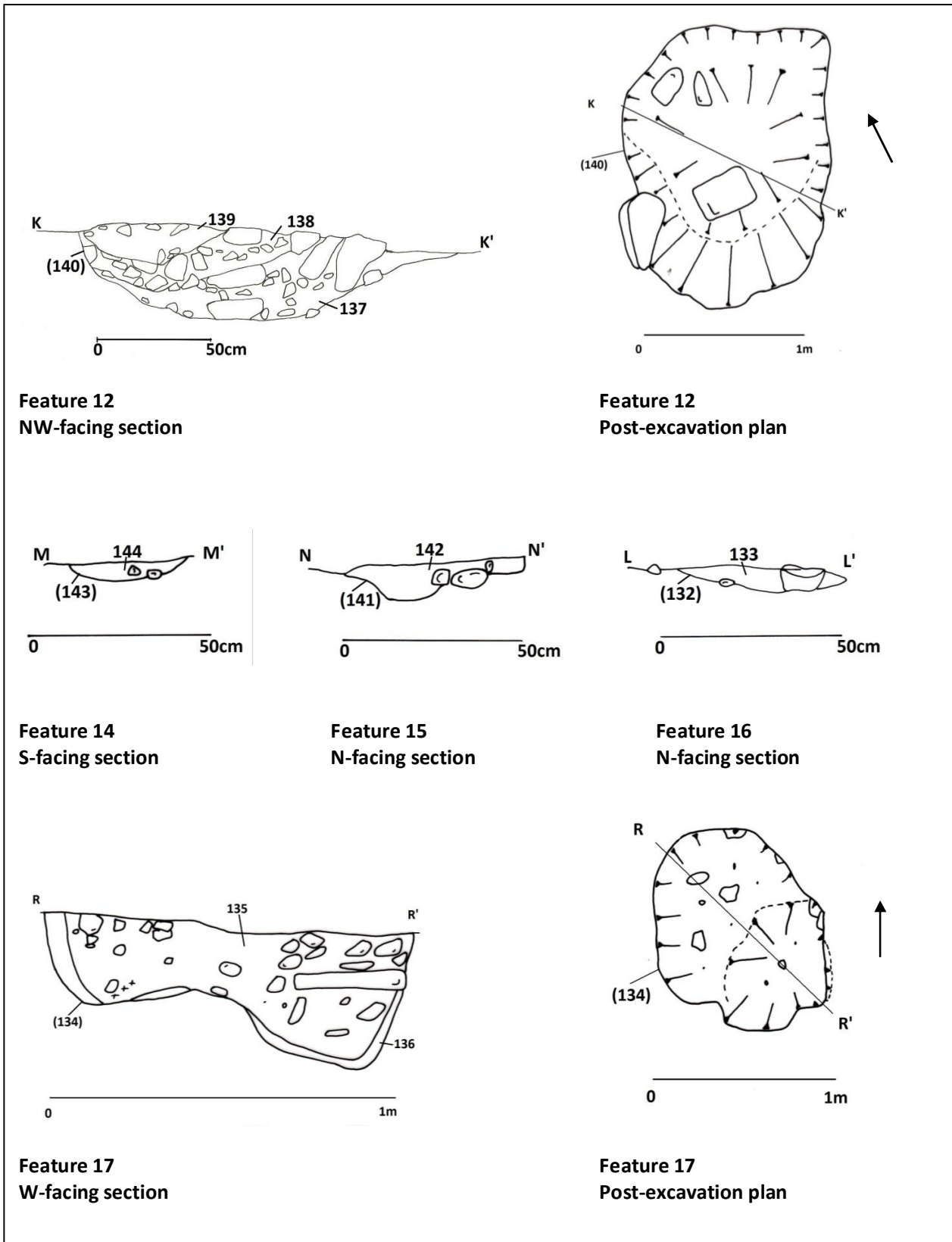


Figure 11 Plan and section drawings of Features 12, 14-17

6.3.2.2 Features **14**, **15** and **16** were three small, shallow pits which were roughly circular in appearance (see Fig. 9). Features 14 and 15 measured 40cm in diameter and Feature 16 was slightly larger measuring 48cm by 68cm; they survived 5-10cm deep into the subsoil (Fig. 11). Features 15 and 16 both contained significant quantities of charcoal. The size, shape and position of the pits, which certainly have been truncated, may suggest they were related but their use is unknown.

Table 2 List of contexts in Features 14-16

Feature	Context	Type	Description
14	143	Cut	Shallow, subcircular cut of Feature 14; small pit 40cm diameter, 5cm deep
14	144	Deposit	Dark red-brown stony soil fill of Feature 14
15	141	Cut	Subcircular cut of Feature 15; small pit 40cm diameter, 10cm deep
15	142	Deposit	Dark brown sandy soil with charcoal flecks and blackened small stones
16	132	Cut	Subcircular cut of Feature 16; small pit 48cm wide by 58cm long, 10cm deep
16	133	Deposit	Dark brown-black soil fill with charcoal and some stones

6.3.2.3 Feature **17** was an amorphous pit measuring 1.0m across and surviving up to 40cm deep (Fig. 11 and Plate 4). The cut comprised two connected pits with a mid brown silty soil (Context 136) lining the base and sides of the cut and a homogenous upper fill. The upper fill, a dark brown-black gravelly soil (Context 135), contained a small amount of charcoal and a large amount of fire-cracked stone and stone slabs. Some of the slabs appeared to line the pit. It has been interpreted as a possible degraded fire-pit filled with redeposited hearth material. There were no finds recovered from the feature.



Feature 12 section (facing S)



Feature 17 section (facing W)

Plate 4 Mid-excavation photographs of Features 12 and 17

6.3.3 Four further pits

Features 24-27 were four further features within the gravel grading compound that differed notably from the other features in the grouping: larger size and fills which contained more loosely compacted stony soil. There were no finds recovered from the features.

- 6.3.3.1 Feature **24** was a suboval pit measuring 1.0m by 1.8m E-W and 15cm deep (Fig. 12). It contained loosely compacted brown gravelly soil with medium-large stones (Context 153). Its use is unknown.
- 6.3.3.2 Feature **25** was an amorphous pit measuring 0.45m by 0.8m N-S and surviving to 13cm deep. It contained a mid grey-brown stony soil with a small amount of animal bone. Its use is unknown.
- 6.3.3.3 Feature **26** was an elongated amorphous pit or ditch (0.74m by 1.7m N-S, 26cm deep-Fig. 12) containing a dark-mid brown soil with charcoal at the north end and a mid yellow-brown compact silty clay with small stones at the south end (Plate 5). It may be related to the prehistoric features, but it lacked any morphological similarities to them.
- 6.3.3.4 Feature **27** was a long, linear pit or ditch (1.3m by 5.5m N-S, 26cm deep-Fig. 12) containing loosely compacted mid-dark brown soil and small-medium stones (Plate 5). Its function is uncertain, but it may have been associated with agricultural activities.



Feature 26 section (facing NE)



Feature 27 section Z1-Z2 (facing S)

Plate 5 Mid-excavation photographs of Features 26 and 27

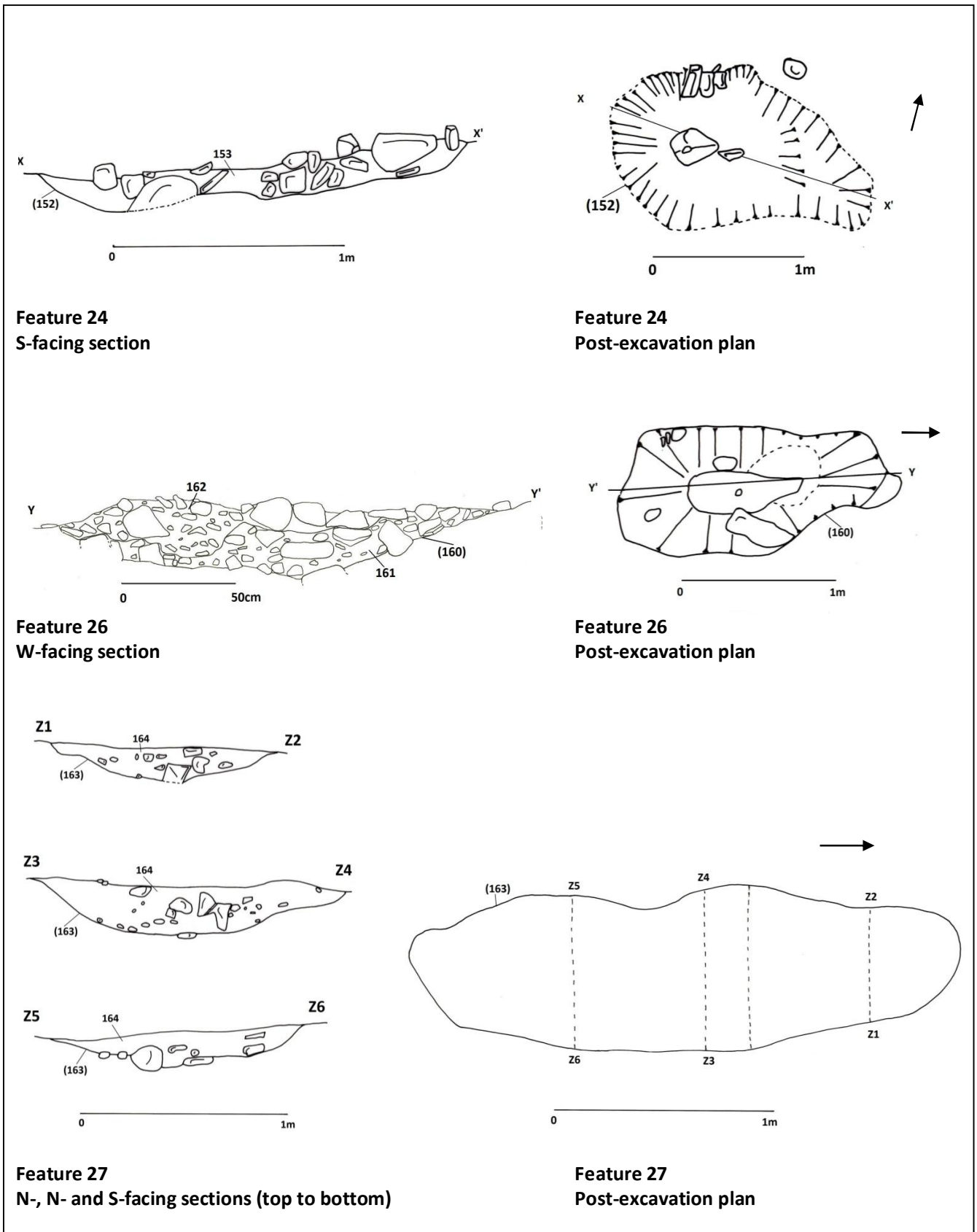


Figure 12 Plan and section drawings of Features 24, 26, 27

7.0 SMALL FINDS ASSESSMENT

Apart from one unretouched flint flake (SF01) from a pit (Feature 4) in the flood relief channel, the entire assemblage of small finds were recovered from pits in the gravel grading compound. Based on typological analysis of the ceramics and flints, these pits are believed to date to the Neolithic period. Two of the pits containing prehistoric pottery and lithics have been radiocarbon-dated using charcoal. The Neolithic dates support the detailed assessment of the finds by specialists (see Appendices 1 and 2). Recommended pieces have been illustrated by Alan Braby.

7.1 Ceramics

*Note: The term *Pit* followed by a number also refers to a Feature

Although there were no fully intact ceramic vessels recovered from the features, there was an unusual mixture of styles (representing at least 13 pots) belonging to both the Middle (and Early-to-Middle) Neolithic-style and to the Late Neolithic Grooved Ware tradition²¹. The photographs on the front cover are two of the decorated sherds from Pot 3, probably of a Middle Neolithic-style.

Feature 20 contained the greatest amount of pottery sherds in the 14cm of fill remaining in this truncated feature. The pieces represent four separate pots (Pots 4-7), associated with the Late Neolithic Grooved Ware tradition²², found smashed at the base of the pit (see Plate 2 above).

Parts of five pots were recovered from Feature 23, a pit which survived to a depth of c.40cm. Intriguingly, Pot 2 belonged to the 'modified Carinated Bowl' tradition (Middle Neolithic) in contrast to the other Late Neolithic Grooved Ware pots (Pots 8, 9, 10 and 11) from this pit²³. Sheridan (2011) reports that until now there are no definite cases of Grooved Ware being found in direct association with pottery from another tradition. A charcoal sample from the fill was dated to 4335±30 BP (3030–2890 cal BC at 2σ)²⁴.

The rim sherd from Feature 13 (SF06 - Pot 1) was a single sherd from the Carinated Bowl ceramic tradition, which may resemble a pot found during the 2006 excavations at Culduthel Farm, and could be of a Middle Neolithic date²⁵.

The other pot sherds from Features 21 and 19, representing Pot 12 and Pot 13, respectively, pertain to the Late Neolithic Grooved Ware tradition.

Sheridan's detailed assessment on the ceramic assemblage is in Appendix 1.

²¹ Sheridan 2011, Appendix 1

²² Sheridan 2011, Appendix 1

²³ Sheridan 2011, Appendix 1

²⁴ SUERC-34575 (GU-24096)

²⁵ Sheridan, forthcoming

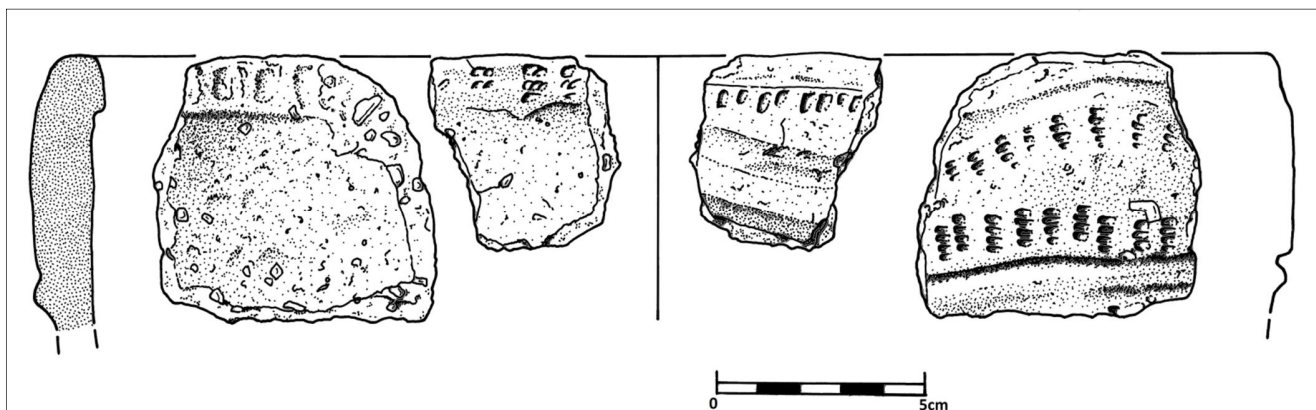


Plate 6 Pot 3 from Pit 22

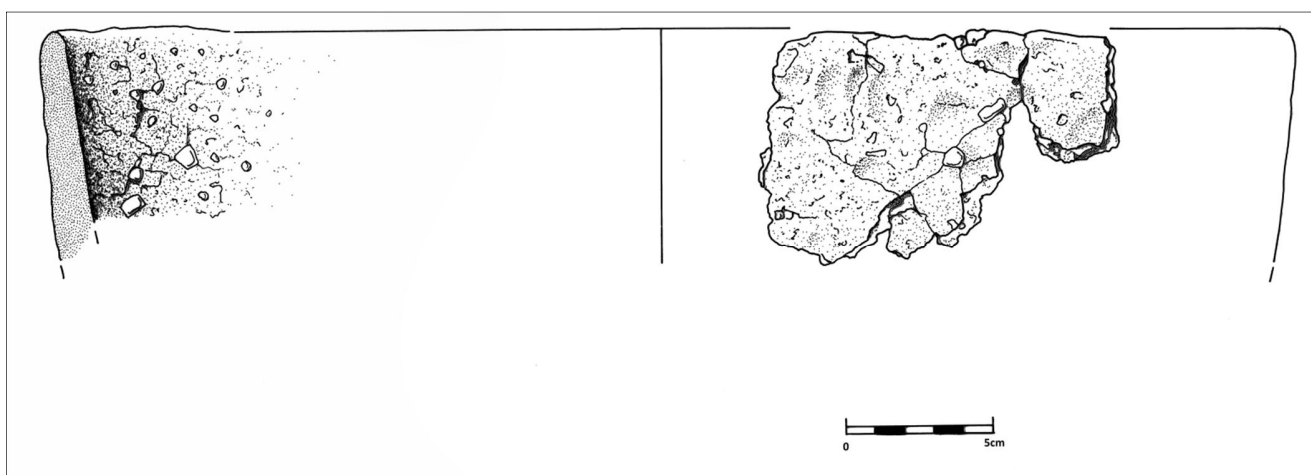


Plate 7 Pot 4 from Pit 20

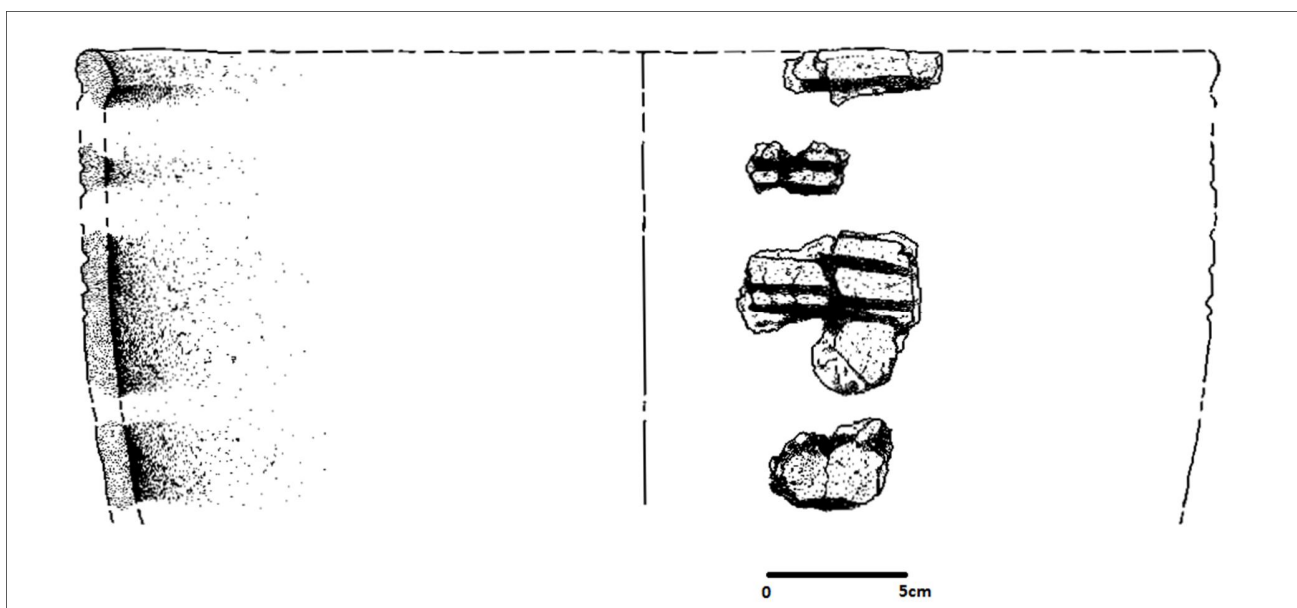


Plate 8 Pot 5 from Pit 20

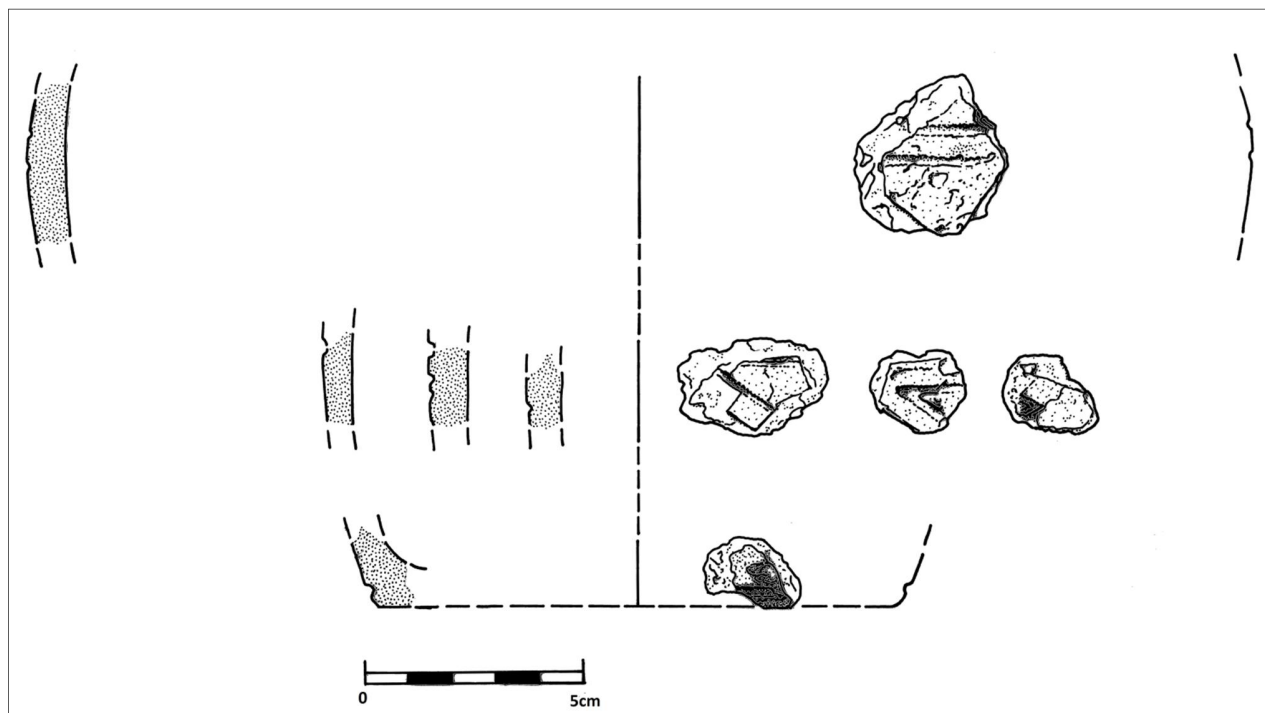


Plate 9 Pot 6 From Pit 20

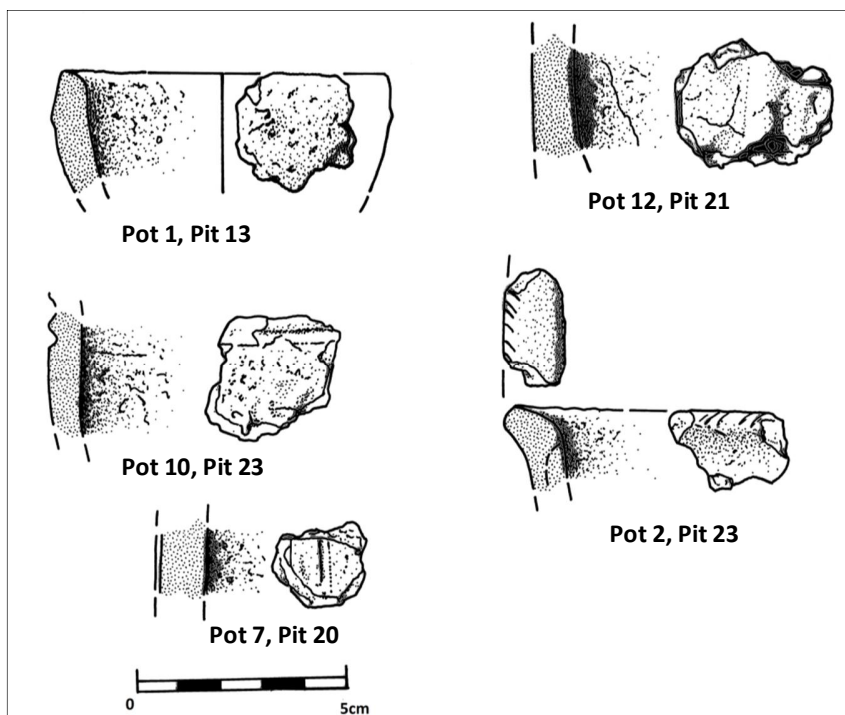


Plate 10 Pots 1, 2, 7, 10 and 12 from Pits 13, 20, 21 and 23

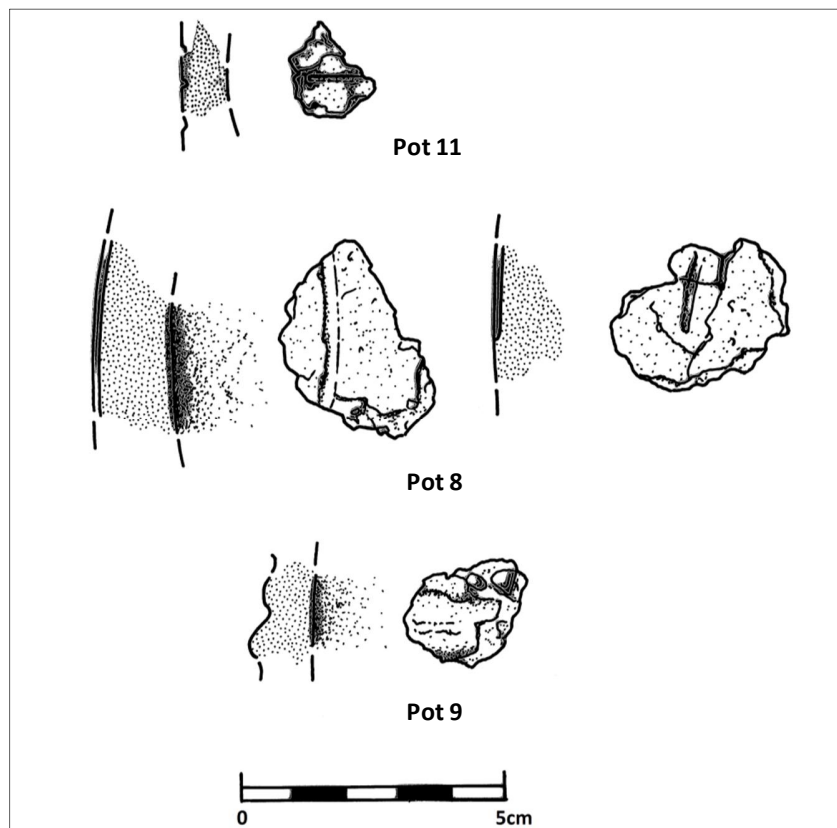


Plate 11 Pots 8, 9 and 11 from Pit 23

7.2 Lithics

Twenty-five struck flint flakes were submitted for specialist analysis. With the exception of one unretouched flake from Feature 4, all of the flints were recovered from three of the six Neolithic pits (Features 20, 22 and 23) discussed above. One end scraper and two retouched flakes were recovered from Feature 23 and one serrated-edge flake was recovered from Feature 22. The remaining flints were unretouched flakes (see Table 3). The diagnostic pieces, recovered from pits with Neolithic pottery, support the Neolithic dates²⁶.

7.3 Stone tools

Six stone fragments were submitted for analysis, four of which were natural, unmodified pieces. These two stone artefacts were recovered from Feature 23, the best surviving pit from within the cluster of Neolithic pits, and also substantiates the radiocarbon dates. SF12 is a stone ball fragment and SF16d is a fragment of a polished axehead from a stone of grey-green colour. Both items were probably discarded in the pit after breakage. Saville's detailed assessment of the lithics can be found in Appendix 2.

Table 3 Classification of flint and stone artefacts²⁷

Type	Material	Number
Unretouched flakes/fragments	Flint	21 (including 7 burnt pieces)
End scraper (SF13e)	Flint	1
Serrated-edge flake (SF17)	Flint	1
Miscellaneous retouched flakes (SF 13c and SF16c)	Flint	2
Flake from polished axehead (SF16d)	Stone	1
'Ball' fragment (SF12)	Stone	1
Natural, unmodified pieces	Stone	4
Total		31

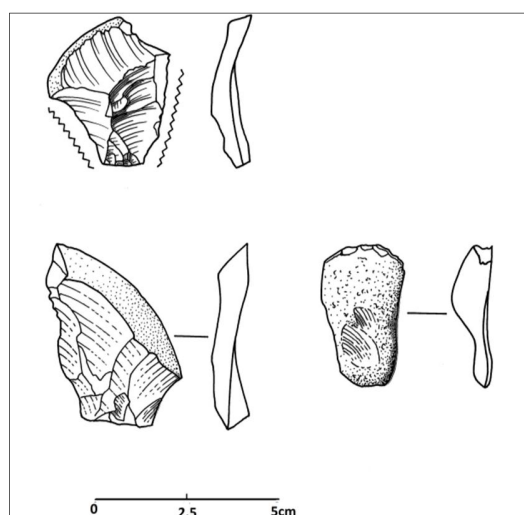


Plate 12 SF17 (top), SF16d (bot left), SF13e (bot right)

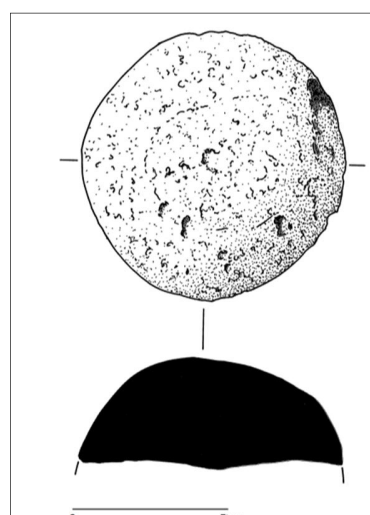


Plate 13 SF12 (stone ball)

²⁶ See Saville, Appendix 2

²⁷ See Saville, Appendix 2

8.0 DISCUSSION

- 8.1 The group of features uncovered below the topsoil in the gravel grading compound must have been truncated during past agricultural work on the site. The shallow depth of the features (10cm in the shallowest), which contained significant pottery and lithics artefacts, certainly supports this. The present depth of the topsoil on the site is likely the only reason that the lowest part of these pits remained *in situ* during the past 5,000 years. However, due to the truncation of the pits, there was a complete lack of stratigraphical relationships between the features.
- 8.2 The group of eleven pits are associated based on their spatial distribution, morphology and contents. It appears that at least one of the pits may have been a fire-pit, and this feature along with a second pit may have contained hearth material. The fact that six of the pits contained Neolithic pottery and three contained lithics suggests that they were primarily pits which were later disused and backfilled.
- 8.3 The function of the pits remains unknown, although Sheridan provided some clues. Primarily, she notes that the burnt condition of some of the sherds, along with the presence of an organic encrusted residue on Pot 13, suggests that many of the ceramics were used in the preparation and consumption of foodstuffs. Secondly, she reports that the pottery appears to have been made locally, noting also the similarity of the inclusions in the pottery to the inclusions from the ceramics recovered during the 2006 Culduthel excavations. Finally, her analysis supports the likelihood of there being 2-3 different traditions of Neolithic pottery amongst the grouping of pits on the gravel grading compound-thus suggesting a 'palimpsest' of Neolithic activity on the site.
- 8.4 In Saville's report, he notes that the mixture of both burnt and unburnt flints in Contexts 148 (Feature 20) and 150 (Feature 23) may support a mixed origin of the fills. The deposits in the pits included broken pots, flints and charcoal fragments which could support intermittent occupation of the site.
- 8.5 The poor survival of the pits and lack of stratigraphical relationships unfortunately means that interpretation of the features remains uncertain, although the results from Sheridan and Saville are intriguing and suggest there may have been a lengthy Neolithic occupation on the site. Earlier phases of work on the adjacent site (GUARD in 2009-2010) produced similar results where the function of many of the pits proved inconclusive. However, Neolithic radiocarbon dates which resulted from the GUARD fieldwork does support the present report's suggestion of occupation of the Culduthel area during the late Neolithic period.
- 8.6 Further environmental analysis of sediments from these Neolithic pits could provide more evidence to suggest a function. Certainly two additional radiocarbon dates from Feature 13 and Feature 22 are required to address the question of multiple phases of activity described by Sheridan in her report on the pottery assemblage from the site.

9.0 CONCLUSION

The work within Phase 3 of the South West Inverness Flood Relief Channel has added important evidence to the corpus of recent archaeological fieldwork results in Culduthel and the surrounding landscape.

The finds, excavation data and specialists' assessments have added to the body of information and will assist in the greater understanding of this very important prehistoric landscape on the south side of Inverness and the Great Glen, particularly to our understanding of Early to Middle and Late Neolithic pottery in the area.

The programme of post-excavation analysis has ensured that this conclusive evidence for Neolithic occupation on the site will be published for use in future studies.

10.0 PUBLISHING

The results of the fieldwork will be published in a *British Archaeological Reports (BAR)* volume in production by Headland Archaeology Ltd on the excavations in Culduthel.

An article will also be published in the *Prehistoric Society* journal and a summary of fieldwork will be submitted to *Discovery and Excavation in Scotland (DES)* in 2012.

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Appendix 1

Pottery from Culduthel (South-West Inverness Flood Relief Channel Phase 3, IFR10)

Dr. Alison Sheridan, National Museums Scotland

The small assemblage of prehistoric pottery from this site comprises 140 sherds and *c* 45 fragments (i.e. pieces less than 10 mm in their greatest dimension), weighing 740 g overall, and belonging to at least 13 pots. No more than around 10% of any individual pot is present, and in several cases (eg Pot 1) the pot is represented by just a single sherd. The pottery was found in pits 13, 19, 20, 21, 22 and 23, with most (around 80% by sherd total and around 70% by weight) coming from Pit 20, where parts of four pots were present (Pots 4–7). Parts of five pots (Pots 2 and 8–11) were present in Pit 23, while the remaining pits each contained the remains of a single pot. While there are some similarities between some pots found in different pits, there is no firm evidence for there being sherds from the same pot distributed in more than one pit. As will be discussed below, the pottery offers an intriguing mixture of styles, with some pots apparently of Middle (and Early to Middle) Neolithic style, while others are attributable – with varying degrees of certainty – to the Grooved Ware tradition.

A description of each of the pots is presented below.

Middle (and Early-to-Middle) Neolithic-style pottery

Pot 1 (Pl.10; SF 6, Pit 13, context 130) A single, small sherd (27 x 28 x 7 mm, rounded to the nearest mm) from a small, uncarinated cup, with an estimated rim diameter of *c* 75 mm; its curvature indicates that it had almost certainly been round-based, and its estimated original height is *c* 46 mm. The surfaces are uneven, due to the protruding angular inclusions of quartz/ite that had been used as a filler. The sherd has moderate to heavy edge abrasion.

Pot 2 (Pl.10; SF 14, Pit 23, context 150) Rimsherd, rounded and everted, from a large, probably carinated bowl; the sherd is too small (at 29 x 21 x 8 mm) to allow a reliable estimate of the rim diameter, but it may have exceeded 300 mm. The outer edge of the rim is decorated with diagonal finger- or thumbnail impressions, with a single impression running in the opposite direction below. The surfaces have been fairly carefully smoothed, and inclusions are generally small (but up to 5.5 x 3 mm) and sparse (at a density of *c* 3%); they comprise angular fragments of a speckled, white and black crystalline stone, whose black mineral component is shiny. The sherd has moderate edge abrasion, and had probably broken along a ring joint.

Pot 3 (Pl. 6; SF 18, 20, 21, Pit 22, context 155) Two rimsherds and a lower belly or (probably) base sherd from a large decorated pot of a gritty fabric, with an estimated rim diameter of around, or just over, 300 mm. (The largest rimsherd, SF 18, measures 70 x 63 x 14.5 mm.) If, as seems likely, the third sherd comes from the base, this indicates a narrow base, only around 70 mm in diameter. The rim is squarish and slightly inturned, its interior facet being decorated with fat ‘maggot’ whipped cord impressions around 5 mm wide. Whether the upper part of the body had been vertical, as shown in Pl. 6, or tilted inwards, is unclear. The decoration on the exterior of the two rimsherds differs and raises the question of whether we are dealing with a single pot with a variable design, or with two very similar pots; the latter possibility cannot be excluded. On the larger rimsherd, SF 18, the decoration consists of a shallow, meandering incised line around 7 mm wide, running immediately below the rim, with below this a row of vertical ‘maggots’, following its curvature. A little way below that is a roughly horizontal row of vertical ‘maggots’, above a deep horizontal groove; the clay beneath this has been pinched up to form a cordon. Beneath this there are hints that there had been another row of maggots. On the smaller rimsherd SF 20, the rim top is narrower and the incised line beneath it on the exterior is narrower, deeper and horizontal. Immediately beneath this is a set of short, roughly horizontal ‘maggots’ (or individual stab impressions), and a little way below these are two broad, shallow wavy lines. The interior of the rimsherds, and much of the base sherd, is red and the fabric is slightly soft and abraded, as though the pot has been burnt or scorched. The inclusions consist of angular fragments of the speckled stone as seen in Pot 2, up to *c* 6 x 6 mm in size and at a density of 15–20%.

Late Neolithic Grooved Ware pottery

Pot 4 (Pl. 7; SF 24, 25, 27, Pit 20, context 148) Numerous sherds – including one large rim- and upper body sherd (114 x 79 x 14 mm), broken *in situ*, found lying with its inner face upwards and beside other sherds from the same pot (Plate 2, Pot 4 *in situ*) – from a large, undecorated coarseware pot. Its rim is rounded and its estimated rim diameter (assuming that the large sherd had not been flattened in the pit) is *c* 410 mm. A small spall from among SF 24 indicates that the pot had been flat-

based, and the presence of a lower body sherd giving an estimated diameter at this point of *c* 240 mm indicates that it would have been bucket-shaped, with splaying walls. The surfaces are uneven and the fabric is friable, breaking with a hackly fracture; the exterior may have been covered in a slip, but this is less likely on the interior, and numerous large lithic inclusions protrude through that surface. The inclusions are mostly angular fragments (up to 10 x 10 mm) of the speckled stone as seen in Pots 2 and 3, but there are also angular fragments of quartz/ite, plus some subangular fragments of a dull grey-brown stone; the overall inclusion density is 25–30%. Where the fracture surfaces are not recent, the sherds show a minor degree of edge abrasion.

Pot 5 (Pl. 8; SF 9, 10, Pit 20, context 148) Sixteen sherds and six fragments from the rim and body of a large, probably tub-shaped pot, decorated on the upper part of its exterior with roughly horizontal incised lines, some slightly curved. The rim is upright and rounded and the upper body appears to swell out very slightly before curving in towards the base. The estimated rim diameter is *c* 310 mm, and the largest sherd – formed from three conjoining upper body sherds – measures 58 x 52 x 9 mm; for a vessel of this size, the wall is relatively thin. The surfaces had been carefully smoothed and either slipped or wet-smoothed. Inclusions are sparse (3–5%) and mostly small, but ranging up to 7 x 4 mm; they are angular fragments of the same white and black speckled rock as noted in most of the other pots. The sherds have slight to moderate edge abrasion.

Pot 6 (Pl. 9.; SF 24, Pit 20, context 148) Eight sherds – and possibly others, since some of the other sherds and spalls from SF 24 and from SF 25 and 29 (all Pit 20) might also belong – from a flat-based pot, possibly a large open bowl of a kind well known from other early Scottish Grooved Ware assemblages (e.g. Balfarg Riding School: Henshall 1993, illus 27 and 28). The small base sherd shows that the wall splays gently, and there is one sherd that may be from the rim area, its top missing; if it is indeed from this area, it indicates that the rim had been gently pointed and very slightly inturned, and that the pot's diameter immediately below the rim had been *c* 280 mm. The pot is relatively thin-walled, at 8.5–9 mm, and the surfaces had been carefully smoothed. The pot's exterior had been decorated by incision, some of it deep and forming areas of false relief. Not enough of the pot survives to establish the overall decorative design, but it is clear that it included bifurcating lines or lozenge designs – a motif common on large open Grooved Ware bowls. The use of false relief makes some of these appear as raised, strap-defined ?lozenges. The possible rim sherd has two horizontal lines, with a diagonal line below; and it is clear that the decoration extended to the bottom of the wall. The fabric is fairly fine, with fairly sparse (*c* 3%) angular fragments of clear quartz and white quartz/ite with mica, up to 10 x 6 mm in size. The condition of the sherds is similar to that noted for Pot 5.

Pot 7 (Pl.10; SF 25, Pit 20, context 148) This is represented by a single decorated body sherd, although it is possible that other sherds among SF 25, 24 and 9 from Pit 20 may also belong. The sherd measures 22 x 20 x 13.5 mm and has a single, presumably vertical incised line on its exterior, terminating in a gently pointed end. (One cannot, however, rule out the possibility that the line had been horizontal.) The surfaces had been smoothed and possibly slipped. The pot had probably been large, but the sherd is too small to reveal its overall size and shape. Lithic inclusions include angular fragments (up to 5 x 3 mm) of the speckled stone as seen in other pots, plus silvery mica platelets, at a density of *c* 5%. There is moderate to heavy edge abrasion.

Pot 8 (Pl. 11; SF 14, Pit 23, context 150) Four body sherds (plus three fragments which conjoin with one of the sherds) from a large, fairly coarse, very friable pot with either vertical or horizontal incised line decoration; it looks to be a larger, thicker version of Pot 7 from Pit 20. The largest intact sherd is 28 x 38 x 16 mm, but it is too small to reveal the pot's overall size and shape. The surfaces had been smoothed and may have a thin slip. The friable texture and pale colour of the sherds suggest that this pot had probably been burnt. Lithic inclusions comprise small angular fragments of quartz/ite plus the speckled stone seen in other pots; there is also a subangular fragment of a dull brown stone, 5 x 3 mm – the largest of the inclusions. The overall density is 3–5%. The sherd breaks are fresh, due to the friable texture of the pot.

Pot 9 (Pl. 11; SF 14, Pit 23, context 150) Body sherds from another large, coarse, friable pot, albeit thinner-walled than Pot 8 (with a maximum thickness of 13.5 mm). It is hard to determine how many sherds belong, since similar-looking sherds from Pit 23 seem to vary in their inclusions and it is unclear whether this represents intra-vessel variability, or indicates that further vessels are present. Three sherds, plus a possible fourth, have been included. One sherd has a probably horizontal incised line, with what may be applied horizontal cordons below and above it. The pot would have been large, but again its overall size and shape cannot be estimated. The surviving surfaces are slightly uneven and had probably been slipped. The lithic inclusions comprise angular and subangular fragments of a dull grey-brown stone, up to 7.5 x 8 mm and at a density of 15–20%; one sherd – the 'possible' candidate mentioned above – also contains one fragment of the speckled stone noted in other pots. The fracture surfaces are hackly and where they have not resulted from recent breakage, they show a moderate degree of abrasion.

Pot 10 (Pl.10; SF 15, Pit 23, context 150) This is represented by one body sherd with a horizontal incised line, from a relatively thin-walled pot, whose diameter at this point cannot be estimated; it is possible that other sherds from SF 15 and SF 14 belong, but the pieces are too small to allow certainty. The sherd with the incised line is 9 mm thick; most of the exterior has spalled off, but the interior (which is slightly uneven) may well have been slipped. The lithic inclusions appear to

comprise angular and subangular fragments of dull brown stone, scarcely distinguishable from the clay (thus making density estimation hard). There is a medium amount of edge abrasion.

Pot 11 (Pl. 11; SF 14, Pit 23, context 150) This is represented by one very small body sherd (16 x 17 x 9 mm) with one horizontal incised line and the hint of a second; five other sherds from SF 14 have tentatively been grouped with this, but their association is uncertain. The decorated sherd is from a relatively thin-walled pot; the only feature which differentiates this from Pot 10 is the presence of mica, not seen in Pot 10. (The inclusions are small and subangular; the sherd is too small to allow a meaningful estimate of inclusion density.) The sherd is not heavily abraded.

Pot 12 (Pl. 10; SF 5, Pit 21, context 145) Single body sherd, possibly from near the wall-base junction of a large, coarseware pot, with an estimated diameter at this point of *c* 200 mm. The sherd measures 38 x 30 x 11 mm, and its light pinkish-buff colour throughout may well indicate that it has been burnt. The exterior has a gently 'corrugated' appearance as though a finger had been used to smooth the surface vertically; on the interior is a horizontal finger-smoothing hollow. The fracture surfaces are hackly and fresh, and the sherd is friable. Lithic inclusions consist of angular fragments, up to 9 x 5 mm, of the speckled stone noted in several other pots.

Pot 13 (SF 23, Pit 19, context 158) Single body sherd, again possibly from near the wall-base junction of a large, coarseware pot, but clearly a different pot from Pot 12. The sherd measures 44 x 34.5 x 11.5 mm and the pot's diameter at this point is *c* 330 mm. The surfaces are uneven and have been slipped; there is a thin layer of blackish organic encrustation on the interior and this, plus the salmon-pink colour of the sherd's exterior, suggests that the pot had been used for cooking. Lithic inclusions comprise large angular fragments of dull grey-brown stone, plus some quartz/ite and mica; the largest inclusion is 13 x 11+ mm, and the density is 15–20%. The fracture surfaces are hackly and, although ancient, are fairly unweathered.

Discussion

The discovery of small parts of several pots in pits – together with the presence of organic encrustation on Pot 13, and the burnt condition of some of the sherds – suggests that we are probably dealing with waste from the preparation and consumption of foodstuffs, irrespective of whether these activities were connected with everyday settlement or with more special occasions. The degree of abrasion noted on some sherds could indicate that they had lain around for a while before being deposited in the pits. The fact that the same kinds of lithic inclusion have been noted in pottery belonging to different traditions – and indeed that similar inclusions have been noted in other pottery from earlier excavations at Culduthel (Sheridan forthcoming a) – suggests that the pottery is likely to have been made locally.

The apparent presence of two (or perhaps even three) different traditions of pottery raises the question of whether we may be dealing with a palimpsest of activities; this can only be investigated further through radiocarbon dating of organic material from Pits 13 and 22. Under such a scenario, the juxtaposition of the Early-to-Middle Neolithic-style Pot 2 with Grooved Ware in Pit 23 could be explained as the incorporation of residual material. Hitherto there have been no definite cases of where Grooved Ware has been found directly associated with pottery of a different tradition, at least as far as Scotland is concerned (and, to the author's knowledge, elsewhere in Britain and Ireland).

Regarding the non-Grooved Ware pottery, the small cup (Pot 1) is of a form known from the repertoire of the Carinated Bowl (CB) ceramic tradition (Sheridan 2007), being found both in the earliest examples of that tradition, dating to the early fourth millennium (e.g. at Warren Field, Crathes, Aberdeenshire: Sheridan 2009, fig. 41.25) and among the so-called 'modified Carinated Bowl' pottery that developed therefrom (e.g. at Bantaskine, Stirlingshire: Cowie 1993, illus 7.3). Indeed, among the material excavated at Culduthel Farm in 2006, less than 200 metres to the north of the present site, the Early to Middle Neolithic assemblage dating to 3600–3300 BC included uncarinated globular vessels, with one (Pot 27) not much bigger than the vessel in question (Sheridan forthcoming a). The relatively coarse appearance of Pot 1 suggests that it is unlikely to date to the earlier fourth millennium, and a date of 3600–3300 BC is possible. However, that the currency of plain hemispherical cups had extended into the Middle Neolithic is indicated by a find (P188) from Meadowend Farm, Clackmannanshire, datable to the time range *c* 3350–2900 BC (Sheridan forthcoming b), so it is conceivable that Pot 1 could be of Middle Neolithic date.

Pot 2 – which may well have been a carinated bowl – also belongs to the CB tradition and can be classified as ‘modified Carinated Bowl’ pottery on the grounds of its decoration. (See Sheridan 2007 for a discussion of the difference between ‘modified’ and ‘traditional’ CB pottery.) No close parallel was found during the earlier excavations at Culduthel, but a date range of 3600–3300 BC is a not unreasonable guess; it is unclear whether pots such as this would have continued to be made after *c* 3300 BC.

Pot 3’s closest parallels lie with the decorated collared bowls and jars of the ‘Impressed Ware’ tradition that date to the Middle Neolithic (as seen, for example, in a major and well-dated assemblage from the aforementioned Meadowend Farm: Sheridan forthcoming b), and in particular to a variant known as ‘Fengate Ware’, with a particularly close parallel being provided by a pot recently excavated at Clynnog, north-west Wales (Frances Lynch pers comm. See also MacSween 2007 for a discussion of Scottish Impressed Ware in general). As discussed in the Meadowend Farm report, this pottery appears to date to between *c* 3350 and *c* 2950 BC. Even though wavy line decoration is found on Grooved Ware (e.g. at Balfarg Riding School, Fife: Henshall 1993, illus 30.63), Pot 3 is unlikely to belong to the Grooved Ware tradition, on the grounds of: i) its overall shape, with a heavy collar and narrow base; ii) the angular rim form and presence of impressed decoration on the internal rim facet; and iii) the use of whipped cord ‘maggot’ impressions, which is not a characteristic feature of the Grooved Ware tradition.

The Grooved Ware (Pots 4–13) appears to comprise a range of vessel shapes, sizes and fabrics, from relatively fine open bowls (Pot 6) to large coarseware pots of tub- or bucket-shape (e.g. Pots 4, 8) and finer versions thereof (e.g. Pot 5). Had the plain, bucket-shaped coarseware Pot 4 been found on its own, it is questionable whether it would have been recognised as Grooved Ware, but the presence of decorated Pots 5–7 in the same pit confirm that it is indeed likely to be an undecorated kind of Grooved Ware. The use of incised decoration is characteristic of early assemblages of Grooved Ware (cf. Cowie & MacSween 1999; MacSween 2007; Schulting *et al.* 2010), and this accords with the radiocarbon dates of 4335±30 BP (SUERC-34575, 3030–2890 cal BC at 2σ) and 4365±30 BP (SUERC-34576, 3090–2900 cal BC at 2σ) obtained for birch and hazel charcoal from Pits 23 and 20 respectively. If we accept that these dates are likely to date the use of the Grooved Ware, then in theory there is a slight possibility that it was deposited around the same time as Pots 1 and 3 although it seems more likely – at least to the author – that we are dealing with separate episodes of activity, more spread out in time.

Pots 4–13 add to a small but growing body of Grooved Ware from the old county of Inverness, the other finds coming from the 2006 excavations at Culduthel (three or four pots: Sheridan forthcoming a); from the Northern Constabulary Headquarters site in Inverness (Kenworthy 1997); from Raigmore (Simpson 1996; 1999); and from Milton of Leys (Connolly & MacSween 2003). In no case is there a close match with Pots 4–13, although one of the 2006 Culduthel finds (Pot 43, a jar with an estimated rim diameter between 130 and 170 mm) has horizontal incised decoration reminiscent of that seen on Pot 5, and incised horizontal lines feature in the Raigmore assemblage. Two of the other Culduthel 2006 Grooved Ware pots were found in a pit with calcined bone – possibly a funerary context – and are associated with a radiocarbon date of 4215±35 BP (SUERC-20308, 2900–2680 cal BC at 2σ), making them slightly later than the Culduthel 2011 pots. One of these (Pot 40) is a tall, narrow, undecorated jar; the other (Pot 41) is a small, cylindrical pot with horizontal incised lines below the rim on the exterior and a sub-rim slashed cordon on the interior. The fourth Grooved Ware candidate, Pot 42, is a large pot with horizontal incised lines on its exterior and a single line of impressed twisted cord below the rim on the interior; as explained in the pottery report, the alternative possibility that this could be domestic Beaker pottery cannot be ruled out. Impressed twisted cord was also noted on a putative Grooved Ware pot, undated, from the Northern Constabulary HQ (Kenworthy 1997). The Raigmore assemblage comprised at least 35 pots, ranging in diameter from 140 mm to 460 mm, and seems to have been associated with pits (including one containing cremated human remains), with a timber structure reminiscent of that seen at Littleour (Barclay & Maxwell 1998), and with a kerbed platform cairn. The decoration here consisted mostly of incision, with two examples of finger- or thumbnail impressions and one pot with applied vertical cordons. Leaving aside a fourth millennium date relating to earlier activity in Pit 41, the three Raigmore radiocarbon dates (all from charcoal) span the second and third quarters of the third millennium. Further dating, particularly of the cremated human bone – an option not available to Derek Simpson – is required to clarify the date range of the Raigmore material. Finally, the assemblage from Milton of Leys appears, to this author, to represent another example of where Middle Neolithic pottery has been deposited in the close vicinity of Grooved Ware. Only one of the illustrated pots (Vessel 1)

resembles 'classic' Grooved Ware; the rest makes more sense as a Middle Neolithic assemblage, and indeed this reading of the evidence accords with the radiocarbon dates of c 3350–2900 BC, which would be remarkably early for a mainland assemblage of Grooved Ware.

In short, the small assemblage from Culduthel 2011 provides a valuable addition to our understanding of Early to Middle and Late Neolithic pottery in the area, but further dating is required to address the question of multi-phase activity on the site.

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Appendix 2

Report on flint and stone artefacts

By: Alan Saville

A small collection of 31 lithic items recovered during this project was submitted for examination. Each item was examined, if necessary using a binocular microscope, and listed in a catalogue (see archive). Classification of the pieces can be summarized as in Table 1.

Table 1

Type	Material	Number
Unretouched flakes/fragments	Flint	21 (including 7 burnt pieces)
End scraper	Flint	1
Serrated-edge flake	Flint	1
Miscellaneous retouched flakes	Flint	2
Flake from polished axehead	Stone	1
'Ball' fragment	Stone	1
Natural, unmodified pieces	Stone	4
Total		31

Apart from one small unburnt and unretouched flint flake from Feature 4, and two natural stone fragments from Feature 26, all the other pieces came from a tightly clustered group of three small pits/scoops (Features 20, 22, 23; see Table 2), where they were associated with fragments of Neolithic pottery. Insofar as any of the lithic artefacts are diagnostic, they are wholly in accord with a Neolithic dating.

Table 2

Feature	Context	Artefact Type	Number
20	148	Unretouched flint flakes	14 (5 burnt)
20	148	Natural fragment, stone	1
22	155	Unretouched flint flake	1 (burnt)
22	156	Serrated-edge flint flake	1
23	150	Unretouched flint flakes	5 (1 burnt)
23	150	Unretouched stone flake from polished implement	1
23	150	Flint end scraper	1
23	150	Miscellaneous retouched flint flakes	2
23	150	Stone ball fragment	1
23	150	Large stone cobble fragment	1

The flint raw material exploited is mixed. The few pieces with cortex indicate the use of derived pebbles with both smooth and chatter-marked surfaces. The internal surfaces of the flints indicate a range from a matt, 'cherty' flint to a translucent, 'opalesque' variety, and in the case of one of the miscellaneous retouched pieces a clear-structured high-quality darker flint which must have an origin in England. Five of the burnt flints, which are all struck pieces which have become burnt rather than being fragments of potboilers, are from Feature 20 (context 148), one is from Feature 22 (context 155) and one from Feature 23 (context 150). The mixture of burnt and unburnt flints in contexts 148 and 150 suggests a mixed origin for the infills in which they are contained.

The unretouched flints are mostly small and offer little for further comment, other than, as with the retouched pieces, that there are indications from them of different reduction strategies involving plain and faceted striking

platforms. Two flakes have indications of derivation from a discoidal core, another that it is from a bipolar anvil-struck core.

The end scraper (SF13e, Feature 23, Context 150; Fig.00) is a simple type on a primary flake with a distal convex scraping edge, which is markedly overhung. The serrated-edge flake (SF17, Feature 22, Context 156; Fig.00) is broken at the distal tip, truncating the serrated edge down the right-hand side of the flake; there are some indications that the left-hand edge was also utilized. One of the miscellaneous retouched pieces (SF13c, Feature 23, Context 150), the one on 'exotic' flint, is a fragment from the retouched edge of a finely fashioned implement but is too small to be classified. The other miscellaneous piece (SF16c, from the same context as SF13c), is the proximal fragment of an implement with a small zone of bifacial retouch, but is unlikely to be from an arrowhead. One of the unretouched flakes (SF26c, Feature 20, Context 148) has possible signs of utilization on its lateral edges.

The flake from a polished implement (SF16d, Feature 23, Context 150; Fig.00), presumably an axehead to judge by the curvature of the polished zone, is of an unidentified grey-green stone with a structure which readily allows flaking. Struck from a well-formed semi-faceted striking platform, the dorsal surface has the negative scars of several previous removals. The remaining polished area is at the distal edge of the flake, where it forms a convex strip just 50 x 10 mm. There is no obvious indication that this flake has been utilized. It is quite common for flint and stone axeheads to be reworked after breakage, in order to fashion a smaller axehead, to exploit a broken piece as a core, or, it is sometimes argued, to decommission or nullify a formerly powerful ritual object.

The 'ball' is a hemi-spherical slice of stone, of maximum dimension 84.4mm, with an outer surface modified by pecking (SF 12, Feature 23, Context 150; Fig.00). It is likely to derive from a plain stone ball, an artefact category which is relatively common as a chance find in Scotland, but which does occasionally occur in Neolithic contexts (see Clarke 2006, 60-62), though without clues as to any obvious function.

Of the natural stone pieces, one is a large irregular chunk (162 mm maximum dimension) of a very large cobble with a smooth, water-worn surface (SF11, Feature 23, Context 150). Given its presence in this context in association with other worked artefacts it is possible that it derives from a cobble which had some use, perhaps as an anvil, weight, or support.

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Appendix 3

List of Features

Feature	Type	Dimensions (m)	Plan drwgs	Section drwgs	Photos	Contexts	Samples	Small Finds	Comments
1	N/A	N/A	-	-	12, 13	-	-	-	Thought to be a stake hole, determined after excavation to be natural root action and staining
2	Posthole	0.45 x 0.50, 30cm deep	2	5	16-18, 35, 36	102, 103	-	-	Subcircular post-hole approx 30cm deep, containing dark brown stony soil fill with large stones placed to line the cut
3	Hearth	1.4 x 1.1, 15cm deep	1, 15	1, 11	24-26	103, 123	2, 13, 14	-	Amorphous pit containing charcoal-rich soil and fire-cracked stones; located at the base of gentle slope under 1.2m of topsoil : probable hearth or fire-pit
4	Pit	0.55 x 0.50, 30cm deep	3, 4	2	27	104, 105	1	1	Suboval pit in subsoil - very faint change between fill and natural subsoil; fill contained stones (5-10cm) & 1 x unretouched flint flake (SF01)
5	Pit	Spread 1.5 x 0.75, 15-20cm deep	5	3, 10	28, 29, 37, 38, 42	107, 108, 122	3, 10	-	Pit containing slopewash with charcoal flecks and revealing early soil/vegetation horizon in section
6	Pit	0.90 x 0.90, 18cm deep	6, 7	4	39-41	109, 110, 111	4	-	Subcircular pit containing charcoal in the upper fill and silty soil w/ charcoal in the lower fill
7	Pit	1.0 x 0.90, 10cm deep	8, 9	6	-	112, 113	5, 6	2	Shallow pit with mid brown stony soil fill, flecks of charcoal; very shallow sides & uneven base
8	Pit and poss. stakehole	0.10 diameter (stakehole), 19cm deep	10, 14	7	147, 148	114, 115	-	-	Amorphous scoop with mid brown, charcoal-flecked soil fill; a possible small post or stake-hole at S end
9	Possible pit	1.1m (NW-SE) by 0.25cm, 20cm deep	11, 14	8	145, 146	116, 117, 118, 119	9, 11, 12	-	Elongated pit with upper light-mid brown charcoal-flecked gravelly silt and underlying orange/brown sediment with charcoal flecks, some stone

Feature	Type	Dimensions (m)	Plan drwgs	Section drwgs	Photos	Contexts	Samples	Small Finds	Comments
10	Pit / ditch	1.0m long x 0.40m wide, 30cm deep	12, 13, 14	9	-	120, 121	-	-	Curvilinear feature with sloping base; mid-brown clay-rich fill with few stones & no charcoal; very shallow N end
11	Pits	0.90 x 0.95, 5cm deep	16, 17	12	-	124, 125, 126	15	-	Two joined, shallow circular pits with mid-dark brown charcoal-rich soil upper fill and residual grey silty lower fill with flecks of charcoal
12	Pit	1.0 x 1.2, 39cm deep	19, 21	17	58-61, 85, 86, 89	137, 138, 139, 140	22, 24, 25	-	Steep-sided amorphous pit with dark brown-black gravelly soil containing charcoal (possible redeposited hearth material); SW-most feature of the group
13	Pit	0.9 x 1.0, 20cm deep	19, 20	14	58-60, 62, 63, 81, 90	129, 130, 131	16, 17, 18	6	Pit with dark brown soily fill over mid brown silty soil fill; excavation revealed it to be amorphous in shape with steep-sided cut to N side
14	Shallow pit	0.4 x 0.4, 5cm deep	19, 24	19	58-60, 64, 65, 93, 94	143, 144	-	-	Small subcircular, shallow pit with sloping sides and flat base
15	Shallow pit	0.4 x 0.4, 10cm deep	19, 23	18	58-60, 64, 65, 83, 84	141, 142	23	-	Small subcircular, shallow pit with sloping sides and flat base; located between Features 14 and 16
16	Shallow pit	0.48 x 0.58, 10cm deep	19, 33	15	58-60, 64, 65, 106	132, 133	21	-	Small subcircular, shallow pit with sloping sides and flat base
17	Pit	1.0 x 1.0, 32-40cm deep	19, 22, 34	16	58-60, 66, 87, 88, 92	134-136	19, 20	-	Large, amorphous pit NW of Feature 14: degraded fire-pit containing hearth rubbish
18	N/A	0.17 x 0.10, 8cm deep	19	-	58, 67, 91, 114	N/A	-	-	Shallow pit N of Feature 17 with mid brown stony fill-determined not to be an archaeological feature
19	Pit	0.96 x 0.88, 16cm deep	19	25	58, 68, 110, 115	157, 158, 159	33, 34	23	Subcircular pit with mid-dark brown stony soil and 1x fragment of pot

Feature	Type	Dimensions (m)	Plan drwgs	Section drwgs	Photos	Contexts	Samples	Small Finds	Comments
20	Pit	0.72 x 0.78, 14cm deep	19, 29, 30	27	58, 69, 70, 98-102	147, 148	20, 35-37	3, 4, 8-10, 24-27	Subcircular pit with dark brown-black silty soil fill containing charcoal, flint and pot (S of Feature 21)
21	Pit	0.58 x 0.95, 10cm deep	19, 25	20	58, 71, 73, 95, 96	145, 146	19	5	Shallow scoop-pit (N of Feature 20) with mid brown sandy soil containing charcoal, few small fragments of burnt bone and 1 x fragment of pot
22	Pit	0.84 x 0.84, 10cm deep	19, 28	24	58, 69, 70, 108, 109, 113	154-156	20, 29, 30	17-21	Pit with dark brown gravelly soil with charcoal fill (S of Feature 22) containing pot sherds and 1 x flint
23	Pit	0.7 x 0.5, 40cm deep	19, 27	21, 23	58, 71, 72, 103, 104, 107	149, 150, 151	26, 27	11-16	Pit with dark brown gravelly soil and large stones and charcoal (N of Feature 22); pot sherds and lithics recovered from the fill
24	Pit	1.8 x 1.0, 15cm deep	19, 26	22	58, 74, 75, 97, 105	152, 153	-	-	Large suboval pit with mid-dark brown soily silty gravel and large/medium stones (S of Feature 25)
25	Pit	0.8 x 0.45, 13cm deep	18, 19	13	58, 76, 77, 82	127, 128	-	7	Small suboval pit with degraded animal bone in mid-grey-brown stony soil
26	J-shaped ditch	0.74 x 1.70, 26cm deep	19, 31	26	58, 78-80, 112, 117, 122, 123	160, 161, 162	28, 31, 32	22	Elongated, oval, J-shaped pit/ditch with dark-mid brown soil fill with charcoal frags at N end and light brown-yellow compact silty clay with stone at S end (E of Feature 24)
27	Elongated pit/ditch	1.2-1.3m wide x 5.5m long, 26cm deep	32	28, 29, 30	58, 125-128	163, 164	-	-	Long, linear pit or ditch with mid-dark brown soil with 10% small-medium stone (3.3m west of W edge of Feature 19)

Appendix 4

List of Finds

No.	Type	Description	Date recovered	Context	Feature
1	Lithic	1 x unretouched flint flake	10/01/2001	115	4
2	Bone	1 x small piece burnt bone	13/01/2011	112	7
3	Lithic	1 x flint flake, 1 x flint snapped blade	27/01/2011	148	20
4	Lithic	1 x flake	27/01/2011	148	20
5	Ceramic	1 x coarse body sherd from a large coarseware pot w/ light pink-buff faces and matrix w/ angular stone inclusions (Pot 12)	27/01/2011	145	21
6	Ceramic	1 x fine rim sherd w/ mid brown outer face, black inner face from Pot 1	28/01/2011	130	13
7	Bone	Several frags of degraded, broken bone	28/01/2011	128	25
8	Lithic	1 x white flint flake, 8 x opaque flakes	31/01/2011	148	20
9	Ceramic	Small degraded, blackened body sherds (smoothed faces and fine matrix) from a large tub-shaped pot w/ horizontal incised linear decoration (Pot 5)	31/01/2011	148	20
10	Ceramic	Decorated pot sherds w/ light brown-orange outer faces and black inner faces (smoothed), and blackened, fine matrix; comprises 1 x rim sherd , 3 x decorated body sherds (degraded fragments) of a large tub-shaped pot w/ horizontal incised linear decoration (Pot 5)	31/01/2011	148	20
11	Stone	Possible anvil stone or weight/support stone	31/01/2011	150	23
12	Stone	Stone ball fragment	31/01/2011	150	23

No.	Type	Description	Date recovered	Context	Feature
13	Lithic	5 x flint flakes and 1 end scraper (SF13e); SF13c is 'exotic' flint frag from unknown finely fashioned implement	31/01/2011	150	23
14	Ceramic	4 x body sherds w/ pale brown-orange faces and angular granitic and stone inclusions from a large, coarse pot w/ incised linear decoration (Pot 8); 3 x body sherds from a large coarse pot w/ pale brown-orange faces and stone inclusions and possible linear incision (Pot 9); 1x small body sherd with 1 incised line and small, subangular inclusions from a pot (Pot 11) similar to Pot 10; 1 x large rim sherd w/ orange, smoothed outer face and finger/thumb impressions-probably from a carinated bowl (Pot 2)	31/01/2011	150	23
15	Ceramic	1 x body sherd and fragments of body sherds similar to SF14; a relatively thin-walled pot with subangular stone inclusions (Pot 10)	31/01/2011	150	23
16	Lithic	1 flake (SF16d) from polished stone tool (axehead); and flint flakes x 4 (SF16c is flint frag from an unknown implement w/ bifacial retouch)	31/01/2011	150	23
17	Lithic	Flint flake with serrated edge, broken at distal tip; 5cm by 4cm	01/02/2011	156	22
18	Ceramic	1 x thick rim sherd: orange/red (inner) and black (outer face); incised linear and vertical impressed 'maggot' decoration (Pot 3)	01/02/2011	155	22
19	Lithic	1 x small burned flint flake, now white in colour	01/02/2011	155	22

No.	Type	Description	Date recovered	Context	Feature
20	Ceramic	1 x pot sherd w/ orange/red (inner) and black (outer) faces w/ linear incision and impressed horizontal 'maggot' decoration (Pot 3); similar to SF18 and found at interface between 155, 156	01/02/2011	155	22
21	Ceramic	1 x body sherd w/ yellow-brown outer face with white, angular inclusions (Pot 3); found at interface between 155, 156	01/02/2011	155	22
22	Stone	Possible struck flakes of pebble, sharp edges	01/02/2011	162	26
23	Ceramic	1 x coarse body sherd, orange-pink one face and blackened one face w/ matrix of granitic and large stone inclusions, from a large coarseware pot (Pot 13)	01/02/2011	158	19
24	Ceramic	3 x large pot sherds from a large undecorated coarseware pot w/ orange outer face, black inner face and black core with angular stone and quartzite inclusions (Pot 4); 1 x pot sherd and multiple small fragments of broken sherds with brown outer and black inner faces and a fine matrix - from grooved ware bowl w/ incised linear designs (Pot 6)	31/01/2011	148	20
25	Ceramic	1 x large pot sherd, orange outer/black inner face w/ smoothed surfaces and matrix w/ some angular stone and quartzite inclusions (Pot 7); Several small very degraded, broken fragments of a large undecorated coarseware pot (Pot 4)	31/01/2011	148	20
26	Lithic	3 x flint flakes	31/01/2011	148	20
27	Ceramic	Large body sherds, orange outer/black inner face with angular stone and quartzite inclusions (Pot 4)	31/01/2011	148	20

Appendix 5

List of Contexts

No.	Type	Description	Over	Under	Fill of	Filled by	Cut by	Feature	Samples	Plans	Section	Finds	Interpretation
100	Deposit	Topsoil	Various					-				-	
101	Cut	Subcircular cut, 45x55cm		102		102		2		2	1	-	Cut for posthole
102	Fill	Fill - Dark brown-grey silty soil with large stones		100	101			2		2	1	-	Fill of post-hole (poss.) - stones lined the face of the cut
103	Deposit	Deposit - dark brown-black silty soil with intense charcoal, concentrated at centre of deposit - large stones, some small stones, some firecracked		100	123			3	2, 13, 14	1, 15	11	-	Poss. Hearth deposit - 1 frag burnt bone, intense charcoal some firecracked stone
104	Cut	Cut for possible pit - oval shape approx 50x35cm		104		105		4		3	2	-	Cut - Pit, appears to be an oval - scoop with redeposited natural - like 108
105	Deposit	Fill - light brown silty sand with medium (6-10cm) stones; like subsoil but slightly browner; small amount of charcoal flecks		100	104			4	1	3	2	1	Looks same as redeposited natural 108 - Old Ground Surface?
106	Subsoil	Subsoil - varies, brown, gravelly/large stones/sand with patches of pale brown clayey sand & areas of small gravel		100				-		-		-	Natural subsoil

No.	Type	Description	Over	Under	Fill of	Filled by	Cut by	Feature	Samples	Plans	Section	Finds	Interpretation
107	Cut	Amorphous cut of pit		108		108		5		5		-	Possible cut with charcoal flaked natural-looking fill
108	Deposit	Fill - light brown silty sand with scattered charcoal flecks, large stones (10-15cm) at base of fill, scattered stones within fill	122	100	107			5	3	5	3	-	Redeposited fill, probably redeposited ground surface
109	Cut	Cut for suboval pit		111		110, 111		6		6		-	Cut - pit
110	Deposit	Fill - mid brown with charcoal flecks & tightly packed small stones	111	100	109			6		6		-	Upper fill of pit
111	Deposit	Basal fill - mid grey-orangey-brown with some charcoal flecks	109	110	109			6	4	6, 7	4	-	Basal fill of pit
112	Deposit	Dark brown silty soil fill of Feature 7 with small flecks of charcoal, frequent medium and small stones	113	100	113			7	5,6	8, 9	6	2	Fill of pit
113	Cut	Cut for shallow pit, roughly oval, uneven base		112		112		7		8, 9	6	-	Shallow pit
114	Cut	Cut of amorphous pit		115		115		8		10	7	-	Stake-hole (poss.), w/ natural scoop/pit to side
115	Deposit	Mid brown soil with charcoal flecks and medium to small stone	114	100	114			8			7	-	Fill of stakehole/pit

No.	Type	Description	Over	Under	Fill of	Filled by	Cut by	Feature	Samples	Plans	Section	Finds	Interpretation
116	Deposit	Mid-dark brown, charcoal-rich soily silt with small to medium sized stone	117	100	118			9	7, 9, 11, 12	11	8	-	Upper fill of elongated pit (upper fill) - appeared to be 2 deposits side by side of charcoal
117	Deposit	Mid-brown/orange silt with charcoal flecks	118	116, 119	118			9			8	-	Lower fill of elongated pit (lower/primary fill)
118	Cut	Cut of elongated pit, steep sloping sides & base		117		116, 117, 119		9		11	8	-	Possible cut of pit, or scoop with redeposit
119	Deposit	Wedge of natural-looking material overlying (117) with stone, pale brown & charcoal flecks	117	100	118			9			8	-	Natural slope - wash/redeposited fill - same as C.106
120	Deposit	Mid-dark brown, clayey stony soil fill of feature, few stones, no charcoal	121	100	121			10	8	12, 13	9	-	Stony soil fill
121	Cut	Long narrow cut with sloping base, shallow to N		120		120		10		12, 13	9	-	Long narrow pit of unknown use
122	Deposit	Mid grey-brown claggy clay with charcoal flecking, with some larger lumps of charcoal - depth & thickness vary about 1-5cm		106, 108				5	10			-	Old soil horizon-- approx 20cm below natural-like deposit; Appeared undercutting [5] below natural, like C.117
123	Cut	Cut for hearth/fire-pit, some clayey ash at base of deposit (103)		103		103		3		15	11	-	Cut for fire-pit [3] or hearth

No.	Type	Description	Over	Under	Fill of	Filled by	Cut by	Feature	Samples	Plans	Section	Finds	Interpretation
124	Cut	Cut for Feature 11, fish-shaped cut, very shallow at E end		126		125, 126		11		16, 17	12	-	Shallow elongated cut
125	Deposit	Upper fill, Feature 11, dark brown charcoal-rich soil with abundant flecks of charcoal	126	100	124			11	15	16, 17	12	-	Upper fill of Feature 11
126	Deposit	Grey clayey deposit with flecks of charcoal underlying context 125		125	124			11		16, 17	12	-	Lower fill of Feature 11
127	Cut	Shallow cut of Feature 25; oval-shaped long axis E-W 1.3m by 0.6m		128		128		25		18		-	Shallow suboval cut with 1-2 bones thrown in with topsoil
128	Deposit	Grey-brown soil fill of (127) Feature 25, with small stones and bone		100	127			25		18		7	Topsoil fill of shallow scoop
129	Deposit	Dark brown-black soil containing small stones and charcoal flecks, secondary fill of (131) in Feature 13	130	100	131			13	16		19	-	Secondary fill of pit
130	Deposit	Mid brown silty soil containing small to medium stones, charcoal flecks and 1 pot sherd (SF06); primary fill of (131) in Feature 13	131	129	131			13	17, 18		19	6	Primary fill of pit
131	Cut	Steep-sided amorphous cut of Feature 13; 0.9m wide by 1.0m E-W, 20cm deep		130		129, 130		13		20	19	-	Cut of subcircular pit of unknown use
132	Cut	Subcircular cut of Feature 16; small pit 48cm wide by 58cm long, 10cm deep		133		133		16		19	15	-	Truncated cut of pit of unknown use

No.	Type	Description	Over	Under	Fill of	Filled by	Cut by	Feature	Samples	Plans	Section	Finds	Interpretation
133	Deposit	Dark brown-black soil fill with charcoal and some stones		100	132			16	21	19	15	-	Pit filled with charcoally soil
134	Cut	Cut of amorphous pit		136		135, 136		17		19	16	-	Cut of amorphous pit, fire-pit
135	Deposit	Dark brown-black sandy soil with 40% fire-cracked stone, stones and slabs (5-20cm long)	136	100	134			17	19	19	16	-	Upper pit fill, rubbish from hearth?
136	Deposit	Mid brown soily silt filling base and sides of pit	134	135	134			17	20	19	16	-	Lining of pit, primary fill
137	Deposit	Light brown, loose sediment with med to large stones and some charcoal flecks	140	138	140			12		19, 21	17	-	Primary fill of pit
138	Deposit	Mid brown silty soil with charcoal flecks and some fire-cracked stone	137	139	140			12	24	19	17	-	Secondary fill of pit
139	Deposit	Dark brown-black soily silt with charcoal lumps and fire-cracked stone, and small stone clasts	138		140			12	22, 25	19	17	-	Upper fill of pit
140	Cut	Cut of amorphous-shaped pit		137		137, 138, 139		12		19	17	-	Cut of amorphous-shaped pit
141	Cut	Subcircular cut of Feature 15; small pit 40cm diameter, 10cm deep		142		142		15		23	18	-	Truncated cut of pit
142	Deposit	Dark brown sandy soil with charcoal flecks and blackened small stones	141	100	141			15	23		18	-	Burned material, fill of shallow cut

No.	Type	Description	Over	Under	Fill of	Filled by	Cut by	Feature	Samples	Plans	Section	Findings	Interpretation
143	Cut	Shallow, subcircular cut of Feature 14; small pit 40cm diameter, 5cm deep		144		144		14			19	-	Truncated cut of pit
144	Deposit	Dark red-brown stony soil fill of Feature 14	143	100	143			14		24	19	-	Fill of small pit
145	Deposit	Mid to dark brown sandy soil with some charcoal flecks, some burnt bone flecks and 1 coarse pot sherd (SF05); fill of (146) in Feature 21		146		146		21	19	25	21	5	Fill of scoop
146	Cut	Cut of shallow amorphous pit, Feature 21; 0.58m by 0.95m E-W, 10cm deep		145		145		21		25	21	-	Truncated cut of pit
147	Cut	Cut of subcircular pit, Feature 20; 0.72m by 0.78m N-S, 14cm deep		148		148		20				-	Truncated cut of pit
148	Deposit	Dark brown-black ashy silt with small stone -mixed with mid brown-grey silty clay; contained pot sherds (SF08-10, 24-27); fill of (147), Feature 20	147	100	147			20	35-37			3, 4, 8-10, 24-26	Black sticky ashy soil with mixed mid-brown-grey silty ashy soil, some burnt bone and gravel
149	Cut	Cut of amorphous pit, Feature 23; 0.5m by 0.7m NE-SW, 40cm deep		151		150, 151		23		27	23	-	Cut of oval pit
150	Deposit	Mid to dark brown gravelly soil with charcoal flecks and large stones and containing pot sherds, lithics (SF11-16); secondary fill of (149) in Feature 23	151	100	149			23	26, 27		23	11-16	Secondary fill of pit

No.	Type	Description	Over	Under	Fill of	Filled by	Cut by	Feature	Samples	Plans	Section	Finds	Interpretation
151	Deposit	Light brown silty soil fill with charcoal flecks and medium stones, primary fill of Feature 23	149	150	149			23			23	-	Primary fill of pit
152	Cut	Large, long oval cut, Feature 24		153		153		24		26	22	-	Large oval pit with stones
153	Deposit	Mid brown stony fill of Feature 24	152	100	152			24	28	26	22	-	Large oval pit with stones
154	Cut	Cut of shallow, subcircular pit, Feature 22; 0.84m in diameter, 10cm deep		156		155, 156		22				-	Truncated cut of pit
155	Deposit	Dark brown stony soil with charcoal, 1 flint flake (SF19) and pot sherds (SF18, 20, 21); upper fill of (154) in Feature 22	156	100	154			22	29			18-21	Secondary fill of pit
156	Deposit	Mid brown sandy soil with 1 flint tool (SF17); primary fill of (154) in Feature 22	154	155	154			22	30			17	Primary fill of pit
157	Cut	Cut for subcircular pit, Feature 19; 0.88m wide by 0.96m NE-SW, 16cm deep		159		158, 159		19				-	Truncated cut of pit of unknown use
158	Deposit	Mid-dark brown sandy soil with small stones and flecks of charcoal and 1 x pot sherd (SF23); secondary fill of (157) in Feature 19	159		157			19	33, 34			23	Upper fill of pit
159	Deposit	Mid brown gravelly soil containing 5% sand and pea gravel; primary fill of (157) in Feature 19	157	158	157			19				-	Lower fill of pit-mixed, not a lining

No.	Type	Description	Over	Under	Fill of	Filled by	Cut by	Feature	Samples	Plans	Section	Finds	Interpretation
160	Cut	Cut for elongated pit		161		161, 162		26			26	-	Cut of pit
161	Deposit	Light brown, sandy silt with charcoal flecks; primary fill of Feature 26	160	162	160			26			26	-	Primary fill with small to medium stones
162	Deposit	Mid brown silty clay with charcoal and small-medium stone, secondary fill of Feature 26	161	100	160			26	31, 32		26	22	Secondary fill of pit with charcoal lumps and flecks
163	Cut	Cut, elongated, oval and shallow S terminal; stone and pea gravel in base of cut		164		164		27		32	28, 29, 30	-	Ditch
164	Deposit	Mid brown gravelly silty soil with small-medium stones and few charcoal flecks	163	100	163			27		32	28, 29, 30	-	Ditch

Appendix 6

List of Samples

No.	Context	Feature	Volume / type	Sample Justification	Taken by	Date
1	105	4	1 x charcoal frag	Charcoal - upper fill of cut - possible dating, ID	MKP	10/01/2011
2	103	3	Charcoal frags	Charcoal - upper fill of deposit - ID	MKP	10/01/2011
3	108	5	Charcoal frags	Charcoal - scattered in fill	MKP	11/01/2011
4	110	6	Charcoal frags	Charcoal - scattered in fill	LF	12/01/2011
5	112	7	Charcoal frags	Charcoal - scattered in fill	LGJ	13/01/2011
6	112	7	500ml	Soil sample - ID & possible dating	LGJ	13/01/2011
7	116	9	Charcoal frags	Charcoal-rich upper fill of pit. ID & possible C14 Dating	SB	13/01/2011
8	120	10	500ml	Soil sample - ID	LGJ	13/01/2011
9	116	9	500ml	Sediment sample - dark, charcoal-rich fill	SB	13/01/2011
10	122	5	500ml	Charcoal flecked deposit in [5]	LM	14/01/2011
11	116	9	500ml	Charcoal-rich soil/fill in [9] - sediment analysis	MKP	14/01/2011
12	116	9	2 packets of charcoal	Dating charcoal, ID: 'A' from S side of deposit, 'B' from N side of deposit	MKP/ LGJ	14/01/2011
13	103	3	Grab	Sediment analysis - dark soil, charcoal-rich	LM	14/01/2011
14	103	3	Charcoal frags	ID - RC dating lower fill in the deposit	LM	14/01/2011
15	125	11	500ml	Charcoal-rich upper fill of feature	LGJ	25/01/2011
16	129	13	500ml	Charcoal-rich secondary fill of feature	SB	28/01/2011
17	130	13	500ml	Secondary fill of pit with charcoal and pot sherd	SB	28/01/2011
18	130	13	Charcoal frags	Secondary fill of pit with pot sherd	SB	28/01/2011
19	145	21	Charcoal frags	Primary fill of shallow scoop	SB	31/01/2011
20	148	20	1 L	Very black fill of pit containing pot sherds	MKP	31/01/2011
19	135	17	1 L	Rich soil fill of pit with charcoal frags	MKP	28/01/2011

No.	Context	Feature	Volume / type	Sample Justification	Taken by	Date
20	136	17	Charcoal frags	Charcoal ID, dating	MKP	28/01/2011
21	133	16	500ml	Charcoal fleck in fill	LM	28/01/2011
22	139	12	Charcoal frags	Charcoal ID, dating	SB	28/01/2011
23	142	15	500ml	Charcoal fleck in fill	LM	31/01/2011
24	138	12	500ml	Charcoal fleck in fill	SB	31/01/2011
25	139	12	500ml	Charcoal-rich fill	SB	31/01/2011
26	150	23	Charcoal frags	Charcoal ID, dating	SB	31/01/2011
27	150	23	1 L	Charcoal and pot in fill	SB	31/01/2011
28	153	26	1 L	Sediment sample of unknown feature	LM	31/01/2011
29	155	22	500ml	Dark soil, possibly burned?	LM	01/02/2011
30	155	22	1 L	Flint find in fill	LM	01/02/2011
31	162	26	500 ml	Charcoal-rich mid brown fill	SB	01/02/2011
32	162	26	Charcoal frags	Charcoal ID, dating	SB	01/02/2011
33	158	19	500 ml	Soil sample with charcoal flecks	MKP	01/02/2011
34	158	19	Charcoal frags	Charcoal ID, dating	MKP	01/02/2011
35	148	20	Charcoal frags	Charcoal ID, dating	MKP	31/01/2011
36	148	20	1 L	Soil sample from pit, almost entire fill (pot sherds in fill)	MKP	31/01/2011
37	148	20	1 L	Soil and fragmented degraded pot sherds	MKP	31/01/2011

Appendix 7

List of Drawings

Plan No.	Section No.	Dir. facing	Scale	Description	Context	Feature	Drawn By	Date
1	-	-	1:20	Pre-ex plan	103, 123	3	MKP	16/12/2010
2	-	-	1:20	Pre-ex plan	101, 102	2	LF	16/12/2010
3	-	-	1:20	Pre-ex plan	105	4	MKP	10/01/2011
-	1	SSW	1:10	SSW-facing section	101, 102	3	LM	10/01/2011
-	2	E	1:10	E-facing section, B-B'	104, 105	4	MKP	10/01/2011
4	-	-	1:20	Post-ex plan	105	4	MKP	11/01/2011
5	-	-	1:20	Pre-ex plan	107, 108	5	MKP	11/01/2011
-	3	E	1:10	E-facing section	107, 108	5	MKP	11/01/2011
6	-	-	1:20	Pre-ex	109, 110	6	LF	12/01/2011
-	4	SW	1:10	SW-facing section, D-D'	109, 110, 111	6	LF	12/01/2011
7	-	-	1:20	Post-ex	109	6	LF	12/01/2011
-	5	SSW	1:10	SSW-facing section, A-A'	101, 102	2		16/12/2010
8	-	-	1:20	Pre-ex plan	112, 113	7	LGJ	13/01/2011
-	6	E	1:20	Post-ex section, F-F'	112, 113	7	LGJ	13/01/2011
9	-	-	1:20	Post-ex plan	112, 113	7	LGJ	13/01/2011
10	-	-	1:20	Post-ex	114	8	SB	13/01/2011
-	7	W	1:10	W-facing section, G-G'	114, 115	8	SB	13/01/2011
11	-	-	1:20	Part excavated/sectioned	116, 118	9	SB	13/01/2011
-	8	NW	1:10	NW-facing section, H-H'	116, 117, 118, 119	9	SB	13/01/2011
12	-	NE	1:20	Pre-ex Plan	120, 121	10	LGJ	13/01/2011
-	9	NW	1:10	SE facing section, I-I'	120, 121	10	LGJ	13/01/2011
13	-	NE	1:20	Post-ex plan	120, 121	10	LGJ	13/01/2011
-	10	NE	1:10	Extended section showing extent of (122) to the North, C-C'	108,122	5	LM	14/01/2011
14	-	-	1:50	Sketch to show relationship between features 8, 9, 10	-	8,9,10	LM	14/01/2011
15	-	-	1:20	Post-ex plan	103	3	LM	14/01/2011
-	11	W	1:10	W-facing section, E-E'	103	3	LM	14/01/2011
16	-	-	1:20	Pre-excavation plan	125	11	LGJ	25/01/2011

Plan No.	Section No.	Dir. facing	Scale	Description	Context	Feature	Drawn By	Date
-	12	E	1:10	Section showing show fills of feature, J-J'	125, 126	11	LGJ	25/01/2011
17	-	-	1:20	Post-ex plan	125	11	LGJ	25/01/2011
18	-	-	1:20	Pre-ex plan	127, 128	25	LM	28/01/2011
-	13	S	1:10	S-facing section, Q-Q'	127, 128	25	LM	28/01/2011
-	14	W	1:10	W-facing section of pit, O-O'	129, 130, 131	13	SB	28/01/2011
19 A-C	-	-	1:20	Overall area plan of Features 12-26	Various	12-26	MKP	28/01/2011
20	-	-	1:20	Post-ex plan	129, 130, 131	13	SB	28/01/2011
-	15	E	1:10	E-facing section, L-L'	132, 133	16	LM	28/01/2011
-	16	W	1:10	W-facing section, R-R'	134, 135, 136	17	MKP	28/01/2011
-	17	NW	1:10	NW-facing section, K-K'	137, 138, 139, 140	12	SB	28/01/2011
-	18	S	1:10	S-facing section, N-N'	141, 142	15	LM	31/01/2011
21	-	-	1:20	Post-ex plan	140	12	SB	31/01/2011
22	-	-	1:20	Post-ex plan	134	17	MKP	31/01/2011
23	-	-	1:20	Post-ex plan	141	15	LM	31/01/2011
-	19	N	1:10	N-facing section, M-M'	143, 144	14	LM	31/01/2011
-	20	NW	1:10	NW-facing section, P-p'	145, 146	21	SB	31/01/2011
24	-	-	1:20	Post-ex plan	143	14	LM	31/01/2011
25	-	-	1:20	Post-ex plan showing scoop	145, 146	21	SB	31/01/2011
-	21	VOID	VOID	VOID	VOID	VOID	VOID	VOID
-	22	N	1:10	N-facing section, X-X'	152, 153	24	LM	31/01/2011
-	23	SW	1:10	SW-facing section, W-W'	149, 150, 151	23	SB	31/01/2011
26	-	-	1:20	Post-ex plan	152	24	LM	31/01/2011
-	24	NE	1:10	NE-facing section, V-V'	154, 155, 156	22	LM	01/02/2011
27	-	-	1:20	Post-ex plan	149	23	SB	01/02/2011
-	25	W	1:10	W-facing section, T-T'	157, 158, 159	19	MKP	01/02/2011
28	-	-	1:20	Post-ex plan	154	22	LM	01/02/2011
-	26	W	1:10	W-facing section, Y-Y'	160, 161, 162	26	SB	01/02/2011

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Plan No.	Section No.	Dir. facing	Scale	Description	Context	Feature	Drawn By	Date
29	-	-	1:20	Plan showing pit location	147, 148	20	MKP	31/01/2011
-	27	W	1:10	W-facing section, U-U'	147, 148	20	MKP	31/01/2011
30	-	-	1:20	Post-ex plan	147	20	MKP	31/01/2011
31	-	-	1:20	Post-ex plan	160	26	MKP	01/02/2011
32	-	-	1:20	Plan of Feature 27	163, 164	27	MKP	01/02/2011
-	28	N	1:10	N-facing section, Z1-Z2	163, 164	27	LM	01/02/2011
-	29	S	1:10	S-facing section, Z5-Z6	163, 164	27	LM	01/02/2011
-	30	N	1:10	N-facing section, Z3-Z4	163, 164	27	LM	01/02/2011
33	-	-	1:20	Post-ex plan	132	16	LM	31/01/2011
34	-	-	1:20	Post-ex plan	134	17	MKP	31/01/2011
35	-	-	1:20	Post-ex plan	157	19	MKP	01/02/2011

Appendix 8

List of Photographs

No.	Direction Facing	Feature No.	Notes	Taken By	Date
1	SW	-	Development site prior to topsoil clearance	MKP	25/11/2010
2	W	-	Development site prior to topsoil clearance	MKP	25/11/2010
3	E	-	Development site prior to topsoil clearance	MKP	25/11/2010
4	SSE	-	Post-topsoil stripping of entrance to site works compound, showing the red-brown silty gravel subsoil	MKP	08/12/2010
5	SSE	-	Post-topsoil stripping of entrance to site works compound, showing the red-brown silty gravel subsoil	MKP	08/12/2010
6	ENE	-	North half of site works compound after topsoil stripping, showing the red-brown silty gravel subsoil	MKP	09/12/2010
7	WSW	-	North half of site works compound after topsoil stripping, showing the red-brown silty gravel subsoil	MKP	09/12/2010
8	S	-	Pre-excavation of possible feature; determined to be natural soil deposit	LF	13/12/2010
9	N	-	Post-topsoil stripping of NE corner of site compound area	LF	13/12/2010
10	ENE	-	Post-topsoil stripping of N side of site compound area	LF	14/12/2010
11	NE	-	Post-topsoil stripping of central portion of site compound area	LF	14/12/2010
12	S	1	Pre-excavation of possible feature	LF	15/12/2010
13	NE	1	Post-excavation of natural feature: soil and natural stone deposit	LF	15/12/2010
14	W	-	Post-topsoil stripping of central portion of site compound area	LF	15/12/2010
15	NE	-	Stripping topsoil of S side of site compound area	LF	16/12/2010
16	ENE	2	Pre-excavation of pit Feature 2	LF	16/12/2010
17	NNE	2	Post-excavation of stone-filled pit of unknown use	LF	16/12/2010
18	NNE	2	Post-excavation of stone-filled pit of unknown use	LF	16/12/2010
19	ENE	-	Following snow shower at east end of development area	LF	16/12/2010
20	N	-	Snow-covered land to west of site compound area, prior to topsoil clearance	MKP	20/12/2010
21	ENE	-	Post-topsoil stripping of N side of site compound area	MKP	20/12/2010
22	ENE	-	Post-topsoil stripping of N side of site compound area	MKP	20/12/2010
23	W	-	Post-topsoil stripping of N side of site compound area	MKP	20/12/2010
24	S	3	Stone and charcoal-rich pit Feature 3, prior to excavation	MKP	20/12/2010
25	S	3	Stone and charcoal-rich pit feature, prior to excavation	MKP	20/12/2010

No.	Direction Facing	Feature No.	Notes	Taken By	Date
26	S	3	Stone and charcoal-rich pit feature, prior to excavation	MKP	10/01/2011
27	NNW	4	Small pit, Feature 4, post-excitation	MKP	10/01/2011
28	N	5	Pre-excitation of Feature 5	MKP	10/01/2011
29	S	5	Pre-excitation of Feature 5	MKP	10/01/2011
30	WSW	-	Post-topsoil stripping of eastern half of flood relief channel	JGJ	13/01/2011
31	WSW	-	Post-topsoil stripping of eastern half of flood relief channel	JGJ	13/01/2011
32	W	-	Recording the location of Feature 3 in frozen conditions	JGJ	13/01/2011
33	W	-	Post-topsoil stripping of central area of flood relief channel	JGJ	13/01/2011
34	WSW	-	Post-topsoil stripping of central area of flood relief channel	JGJ	13/01/2011
35	NE	2	Post-excitation of Feature 2 section, showing profile of deposits with the shallow pit	MKP	13/01/2011
36	NE	2	Post-excitation of Feature 2 section, showing profile of deposits with the shallow pit	MKP	13/01/2011
37	NW	5	Pre-excitation of Feature 5	LF	10/01/2011
38	NW	5	Pre-excitation of Feature 5	LF	10/01/2011
39	SSE	6	Pre-excitation of Feature 6	LF	12/01/2011
40	SW	6	Post-excitation of a Feature 6 section showing the mix of natural and probable slopewash deposits	LF	12/01/2011
41	SW	6	Post-excitation of Feature 6, showing the probable slopewash overlying an possibly early ground surface extending beyond the pit	LF	12/01/2011
42	NE	5	Post-excitation of the Feature 5 deposits showing the natural stone underlying the mixed natural and slopewash deposits-not actually a subcircular pit	LF	12/01/2011
43	W	-	General shot of site compound area at east end of development area	LF	20/01/2011
44	NE	-	General shot of central portion of flood relief channel during development	LF	20/01/2011
45	W	-	General shot of central portion of flood relief channel during development	LF	20/01/2011
46	W	-	General shot of central west portion of flood relief channel, post-topsoil stripping	LF	20/01/2011
47	NNE	-	General shot of central west end of flood relief channel, during topsoil stripping	LF	20/01/2011
48	NW	-	Soil marks' in subsoil	LF	20/01/2011
49	ESE	-	Section of soil deposit	LF	20/01/2011
50	NW	-	Fairways-site clearance pre-topsoil stripping	LF	20/01/2011

No.	Direction Facing	Feature No.	Notes	Taken By	Date
51	NNW	-	Fairways-site clearance pre-topsoil stripping; hydro cable area	LF	20/01/2011
52	NW	-	Post-topsoil stripping of Fairways site area	LF	21/01/2011
53	W	-	Post-topsoil stripping of Fairways site area	LF	21/01/2011
54	E	-	Post-topsoil stripping of west end of flood relief channel	LF	22/01/2011
55	SW	-	Post-topsoil stripping at west end of flood relief channel	LF	22/01/2011
56	WSW	-	Post-topsoil stripping at west end of flood relief channel	LF	29/01/2011
57	NW	-	Winter sunrise over Culduthel	LF	22/12/2010
58	N	12-26	Photo overlooking the scattered black pits, Features 12-26, in the gravel grading compound	MKP	27/01/2011
59	N	12-17	Cluster of five pits, Features 12-17, at the south end of the gravel grading compound	MKP	27/01/2011
60	N	12-27	Photo overlooking the scattered black pits, Features 12-26, in the gravel grading compound; the dark suboval patch in centre of photo is Feature 27	MKP	27/01/2011
61	N	12	Suboval pit with dark brown-black gravelly soil fill, SW-most feature in the gravel grading compound area	MKP	27/01/2011
62	N	13	Amorphous pit with dark brown soily fill; Feature 12 in top left	MKP	27/01/2011
63	N	13	Amorphous pit with dark brown soily fill; Feature 12 in top left	MKP	27/01/2011
64	NE	14-16	Three small subcircular pits with dark brown-black fill located to S end of gravel grading compound	MKP	27/01/2011
65	NNW	14-16	Three small subcircular pits with dark brown-black fill located to S end of gravel grading compound	MKP	27/01/2011
66	NE	17	Large subcircular pit with dark brown-black gravelly soil fill; located to NW of Features 14-16	MKP	27/01/2011
67	NE	18	Small pit with soil, a possible feature, located N of Feature 17	MKP	27/01/2011
68	NNW	19	Subcircular pit with mid-dark brown stony soil fill	MKP	27/01/2011
69	NNE	20, 22	Feature 20, subcircular pit with mid-dark brown-black gravelly soil fill; Feature 22 to bottom right of photo	MKP	27/01/2011
70	NW	20, 22	Feature 22, subcircular pit with dark brown-black gravelly soil fill, in bottom centre of photo; Feature 20 shown in top right of photo	MKP	27/01/2011
71	N	21, 23	Circular pit with dark brown-black gravelly soil fill, Feature 23; Feature 21 shown in top centre of photo	MKP	27/01/2011

No.	Direction Facing	Feature No.	Notes	Taken By	Date
72	N	23	Circular pit with dark brown-black gravelly soil fill, Feature 23	MKP	27/01/2011
73	N	21	Suboval shallow pit with dark brown-black stony soil fill, Feature 21	MKP	27/01/2011
74	WNW	24	Suboval elongated pit contained mid-dark brown stony soil fill, Feature 24	MKP	27/01/2011
75	WNW	24	Suboval elongated pit contained mid-dark brown stony soil fill, Feature 24	MKP	27/01/2011
76	N	25	Small suboval pit with mid-grey-brown stony soil fill, Feature 25	MKP	27/01/2011
77	N	25	Small suboval pit with mid-grey-brown stony soil fill, Feature 25	MKP	27/01/2011
78	S	26	Elongated, oval, J-shaped pit/ditch with dark-mid brown soily fill with charcoal frags at N end, Feature 26	MKP	27/01/2011
79	NNE	26	Elongated, oval, J-shaped pit/ditch with dark-mid brown soily fill with charcoal frags at N end, Feature 26	MKP	27/01/2011
80	N	26	Elongated, oval, J-shaped pit/ditch with dark-mid brown soily fill with charcoal frags at N end, Feature 26	MKP	27/01/2011
81	NE	13	Post-excavation of Feature 13 section	MKP	28/01/2011
82	WNW	25	Post-excavation of section of Feature 25, showing very shallow deposit of stony soil	MKP	28/01/2011
83	S	15	Post-excavation photo of section of small, shallow pit Feature 15	MKP	28/01/2011
84	SSW	15	Post-excavation photo of section of small, shallow pit Feature 15	MKP	28/01/2011
85	S	12	Post-excavation of section of Feature 12, showing very dark charcoal-rich upper deposit overlying dark brown stony soil	SB	28/01/2011
86	S	12	Post-excavation of section of Feature 12, showing very dark charcoal-rich upper deposit overlying dark brown stony soil	SB	28/01/2011
87	W	17	Post-excavation photo of section of amorphous pit containing charcoal-rich stony soil, Feature 17	MKP	28/01/2011
88	W	17	Post-excavation photo of section of amorphous pit containing charcoal-rich stony soil, Feature 17	MKP	28/01/2011
89	E	12	Post-excavation photo of large subcircular pit	MKP	31/01/2011
90	E	13	Post-excavation photo of Feature 13	MKP	31/01/2011
91	S	18	Post-excavation photo of Feature 18	MKP	31/01/2011
92	E	17	Post-excavation of amorphous pit, Feature 17	MKP	31/01/2011

No.	Direction Facing	Feature No.	Notes	Taken By	Date
93	S	14	Post-excavation photo of section of shallow pit, Feature 14	MKP	31/01/2011
94	E	14	Post-excavation photo of shallow pit, Feature 14	MKP	31/01/2011
95	E	21	Post-excavation photo of shallow pit Feature 21	MKP	31/01/2011
96	E	21	Post-excavation photo of shallow pit Feature 21	MKP	31/01/2011
97	N	24	Post-excavation photo of section of stony soil-filled elongated pit, Feature 24	MKP	31/01/2011
98	W	20	Very degraded pottery sherds from shallow pit, Feature 20	MKP	31/01/2011
99	E	20	Very degraded pottery sherds from shallow pit, Feature 20	MKP	31/01/2011
100	N	20	Very degraded pottery sherds from shallow pit, Feature 20	MKP	31/01/2011
101	N	20	Very degraded pottery sherds from shallow pit, Feature 20	MKP	31/01/2011
102	N	20	Very degraded pottery sherds from shallow pit, Feature 20	MKP	31/01/2011
103	W	23	Post-excavation of possible posthole	MKP	31/01/2011
104	W	23	Post-excavation of possible posthole	MKP	31/01/2011
105	N	24	Post-excavation photo of pit, Feature 24	MKP	31/01/2011
106	W	16	Post-excavation of small shallow pit, Feature 16	MKP	31/01/2011
107	W	23	Post-excavation photo of subcircular pit, possible posthole, Feature 23	MKP	31/01/2011
108	S	22	Post-excavation photo of section of shallow pit, Feature 22	MKP	01/02/2011
109	N	22	Small pottery fragment within fill of Feature 22	MKP	01/02/2011
110	E	19	Post-excavation photo of section of Feature 19, shallow pit	MKP	01/02/2011
111	W	-	Excavation in progress on gravel grading compound	MKP	01/02/2011
112	NE	26	Post-excavation photo of section of Feature 26, J-shaped pit containing stony soil fill	MKP	01/02/2011
113	N	22	Post-excavation photo of shallow pit, Feature 22	MKP	01/02/2011
114	S	18	Post-excavation of section of non-feature, Feature 18	MKP	01/02/2011
115	E	19	Post-excavation photo of shallow pit, Feature 19	MKP	01/02/2011
116	N	-	NE corner of gravel grading compound, recording in progress	MKP	01/02/2011
117	N	26	NE corner of gravel grading compound, recording of Feature 26 in progress	MKP	01/02/2011
118	N	-	Gravel grading compound, excavation and recording of features in progress	MKP	01/02/2011

No.	Direction Facing	Feature No.	Notes	Taken By	Date
119	NE	-	Gravel grading compound, excavation and recording of features in progress; Feature 27 sectioning in progress, centre left	MKP	01/02/2011
120	SW	-	W end of flood relief channel, post-topsoil stripping	MKP	01/02/2011
121	WSW	-	W end of flood relief channel, post-topsoil stripping	MKP	01/02/2011
122	E	26	Feature 26, elongated pit, post-excavation photo	MKP	01/02/2011
123	N	26	Feature 26, elongated pit, post-excavation photo	MKP	01/02/2011
124	N	27	Feature 27, post-excavation of sections of elongated soil/stone-filled pit	MKP	01/02/2011
125	S	27	Stony/gravelly soil-filled central section of Feature 27	MKP	01/02/2011
126	N	27	Stony/gravelly soil-filled S section of Feature 27	MKP	01/02/2011
127	S	27	Stony/gravelly soil-filled N section of Feature 27	MKP	01/02/2011
128	W	27	Recording of Feature 27 in progress	MKP	01/02/2011
129	-	-	SF20, decorated pottery sherd from Feature 22	MKP	04/02/2011
130	-	-	SF20, decorated pottery sherd from Feature 22	MKP	04/02/2011
131	-	-	SF20, decorated pottery sherd from Feature 22	MKP	04/02/2011
132	-	-	SF10, decorated pottery sherds with linear design from Feature 20	MKP	04/02/2011
133	-	-	SF10, decorated pottery sherds with linear design from Feature 20	MKP	04/02/2011
134	-	-	SF18, decorated pottery sherd from Feature 22	MKP	04/02/2011
135	-	-	SF18, decorated pottery sherd from Feature 22	MKP	04/02/2011
136	-	-	SF18, decorated pottery sherd from Feature 22	MKP	04/02/2011
137	-	-	SF18, decorated pottery sherd from Feature 22	MKP	04/02/2011
138	-	-	SF23, pottery sherd from Feature 19	MKP	04/02/2011
139	-	-	SF23, pottery sherd from Feature 19	MKP	04/02/2011
140	-	-	SF11, possible pebble tool/whetstone(?) from Feature 23	MKP	04/02/2011
141	-	-	SF11, possible pebble tool/whetstone(?) from Feature 23	MKP	04/02/2011
142	-	-	SF17, medium flint flake with clear bulb of percussion and striking; 5cm by 4cm; recovered from Feature 22	MKP	04/02/2011
143	-	-	SF26, possible flint knife from Feature 20	MKP	04/02/2011
144	-	-	SF26, possible flint knife from Feature 20	MKP	04/02/2011
145	W	9	Post-excavation of section of Feature 9 showing the mixing of old ground surface with natural subsoil	SB	14/01/2011
146	S	9	Post-excavation of section of Feature 9 showing the mixing of old ground surface with natural subsoil	SB	14/01/2011
147	N	8	Deposit of probable old ground surface to left of small stakehole	SB	14/01/2011
148	E	8	Deposit of probable old ground surface around small stakehole	SB	14/01/2011